0.1 Introduction

This is the PDF version of the documentation for the Xojo (Real Studio) Plug-in from Monkeybread Software Germany. Plugin part: MBS DynaPDF Plugin

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- 3.34.583 PageLinkEx(PosX as Double, PosY as Double, Width as Double, Height as Double, DestType as Integer, DestPage as Integer, a as Double, b as Double, c as Double, d as Double) as Integer
- 3.34.584 PageStatistic(page as Integer = -1) as DynaPDFPageStatisticMBS
- 3.34.585 ParseContent(ParseInterface as DynaPDFParseInterfaceMBS, flags as Integer) as boolean
- 3.34.586 PlaceImage(ImgHandle as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean
- 3.34.587 PlaceSigFieldValidateIcon(SigField as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean
- 3.34.588 PlaceTemplate(TmplHandle as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean
- 3.34.589 PlaceTemplateEx(TmplHandle as Integer, PosX as Double, ScaleWidth as Double, ScaleHeight as Double) as Boolean
- 3.34.590 PolygonAnnot(Vertices() as DynaPDFPointMBS, LineWidth as Double, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer
- 3.34.591 PolygonAnnotAnsi(Vertices() as DynaPDFPointMBS, LineWidth as Double, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer
- 3.34.592 PolyLineAnnot(Vertices() as DynaPDFPointMBS, LineWidth as Double, StartLineEndStyle as Integer, EndLineEndStyle as Integer, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer
- 3.34.593 PolyLineAnnotAnsi(Vertices() as DynaPDFPointMBS, LineWidth as Double, StartLineEndStyle as Integer, EndLineEndStyle as Integer, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer
- 3.34.594 PrintGetDevMode as String
- 3.34.595 PrintGetDevNames(byref Driver as String, byref Device as String, byref Output as String, byref DefaultFlag as Integer) as Boolean
- 3.34.596 PrintPDFFile(TmpDir as FolderItem, DocName as string, DCHandle as integer, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean
- 3.34.597 PrintPDFFile(TmpDir as FolderItem, DocName as string, PrinterName as String, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean
- 3.34.598 PrintPDFFileWithDialog(TmpDir as FolderItem, DocName as string, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil, parentWindow as Window = nil) as Boolean
3.34.599 PrintPDFPage(PageNum as Integer, DocName as string, DCHandle as integer, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean

3.34.600 PrintPDFPage(PageNum as Integer, DocName as string, PrinterName as String, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean

3.34.601 PrintPDFPageWithDialog(PageNum as Integer, DocName as string, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil, parentWindow as Window = nil) as Boolean

3.34.602 PrintSetDevMode(data as MemoryBlock) as Boolean

3.34.603 PrintSetDevMode(data as String) as Boolean

3.34.604 PrintSetDevNames(Driver as String, Device as String, Output as String, DefaultFlag as Integer) as Boolean

3.34.605 ReadImageFormat(FileName as folderitem, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean

3.34.606 ReadImageFormat2(FileName as folderitem, Index as Integer, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean

3.34.607 ReadImageFormatEx(hBitmap as Integer, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean

3.34.608 ReadImageFormatFromBuffer(Buffer as memoryblock, Index as Integer, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean

3.34.609 ReadImageFormatFromBuffer(Buffer as string, Index as Integer, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean

3.34.610 ReadImageResolution(FileName as folderitem, Index as Integer, byref ResX as Integer, byref ResY as Integer) as Boolean

3.34.611 ReadImageResolutionEx(Buffer as Memoryblock, Index as Integer, byref ResX as Integer, byref ResY as Integer) as Boolean

3.34.612 ReadImageResolutionEx(Buffer as string, Index as Integer, byref ResX as Integer, byref ResY as Integer) as Boolean

3.34.613 Rectangle(PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

3.34.614 ReEncryptPDF(File as folderitem, PwdType as Integer, InPwd as string, OpenPwd as string, OwnerPwd as string, KeyLen as Integer, Restrict as Integer) as Integer

3.34.615 ReEncryptPDFAnsi(Path as string, PwdType as Integer, InPwd as string, OpenPwd as string, OwnerPwd as string, KeyLen as Integer, Restrict as Integer) as Integer

3.34.616 RenameSpotColor(Colorant as string, NewName as string) as Integer

3.34.617 RenderAnnotOrField(Handle as UInt32, IsAnnot as boolean, State as Integer, Matrix as DynaPDFMatrixMBS, Flags as Integer, PixFmt as Integer, Filter as Integer, byref Out as DynaPDFBitmapMBS) as Integer

3.34.618 RenderPagePicture(PageNum as Integer) as picture

3.34.619 RenderPagePicture(PageNum as Integer, Width as Integer, Height as Integer, DefScale as Integer = 2, matrix as DynaPDFMatrixMBS = nil) as picture
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- 3.34.620 RenderPageToImage(PageNumber as UInt32, OutFile as folderitem, Resolution as UInt32, Width as UInt32, Height as UInt32, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean 401
- 3.34.621 RenderPageToImageMT(PageNumber as UInt32, OutFile as folderitem, Resolution as UInt32, Width as UInt32, Height as UInt32, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean 403
- 3.34.622 RenderPageToPicture(PageNum as integer, pic as picture, DefScale as integer = 2, matrix as DynaPDFMatrixMBS = nil, RenderWithAlpha as boolean = false) as boolean 404
- 3.34.623 RenderPDFFile(OutFile as folderitem, Resolution as UInt32, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean 405
- 3.34.624 RenderPDFFileEx(OutFile as folderitem, Resolution as UInt32, Width as Integer, Height as Integer, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean 406
- 3.34.625 RenderPDFFileExMT(OutFile as folderitem, Resolution as UInt32, Width as Integer, Height as Integer, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean 407
- 3.34.626 RenderPDFFileMT(OutFile as folderitem, Resolution as UInt32, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean 408
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- 3.34.628 ReplaceFont(PDFFontRef as Integer, Name as string, Style as integer = 0, NameIsFamilyName as boolean = true) as integer 409
- 3.34.629 ReplaceFontAnsi(PDFFontRef as Integer, Name as string, Style as integer = 0, NameIsFamilyName as boolean = true) as integer 409
- 3.34.630 ReplaceFontEx(PDFFontRef as Integer, FontFile as FolderItem, Embed as boolean = true) as integer 409
- 3.34.631 ReplaceFontEx(PDFFontRef as Integer, FontFilePath as string, Embed as boolean = true) as integer 410
- 3.34.632 ReplaceFontExAnsi(PDFFontRef as Integer, FontFilePath as string, Embed as boolean = true) as integer 410
- 3.34.633 ReplaceICCProfile(ColorSpace as Integer, ICCFile as folderitem) as Integer 411
- 3.34.634 ReplaceICCProfileEx(ColorSpace as integer, ICCFileData as MemoryBlock) as integer 411
- 3.34.635 ReplaceICCProfileEx(ColorSpace as integer, ICCFileData as String) as integer 411
- 3.34.636 ReplaceImage(ImageToReplace as DynaPDFImageMBS, ImageFile as FolderItem, Index as Integer = 1, ColorSpace as Integer = 0, CSHandle as Integer = -1, Flags as Integer = 0) as Boolean 412
- 3.34.637 ReplaceImageEx(ImageToReplace as DynaPDFImageMBS, ImageData as MemoryBlock, Index as Integer = 1, ColorSpace as Integer = 0, CSHandle as Integer = -1, Flags as Integer = 0) as Boolean 413
- 3.34.638 ReplacePageText(text as string, stack as DynaPDFStackMBS) as boolean 413
- 3.34.640 ReplacePageTextEx(text as string, stack as DynaPDFStackMBS) as boolean 414
* 3.34.641 ReplacePageTextExAnsi(text as string, stack as DynaPDFStackMBS) as boolean
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* 3.34.643 ResetLineDashPattern as Boolean
* 3.34.644 RestoreGraphicState as Boolean
* 3.34.645 RGB(R as Integer, G as Integer, B as Integer) as Integer
* 3.34.646 RofRGB(RGB as Integer) as Integer
* 3.34.647 RotateCoords(alpha as Double, OriginX as Double, OriginY as Double) as Boolean
* 3.34.648 RotateTemplate(OldTemplate as Integer, Rotation as Integer, RotateCoords as boolean = true) as Integer
* 3.34.649 RoundRect(PosX as Double, PosY as Double, Width as Double, Height as Double, Radius as Double, FillMode as Integer) as Boolean
* 3.34.650 RoundRectEx(PosX as Double, PosY as Double, Width as Double, Height as Double, rWidth as Double, rHeight as Double, FillMode as Integer) as Boolean
* 3.34.651 SaveGraphicState as Boolean
* 3.34.652 ScaleCoords(sx as Double, sy as Double) as Boolean
* 3.34.653 SelfTest as Boolean
* 3.34.654 Set3DAnnotProps(Annot as Integer, ActType as Integer, DeActType as Integer, InstType as Integer, DeInstType as Integer, DisplayToolbar as boolean, DisplayModelTree as boolean) as boolean
* 3.34.655 Set3DAnnotScriptAnsi(Annot as Integer, Value as string) as boolean
* 3.34.656 SetAllocBy(Value as Integer) as Integer
* 3.34.657 SetAnnotBorderEffect(Handle as Integer, BorderEffect as Integer) as Boolean
* 3.34.658 SetAnnotBorderStyle(Handle as Integer, BorderStyle as Integer) as boolean
* 3.34.659 SetAnnotBorderWidth(Handle as Integer, LineWidth as Double) as boolean
* 3.34.660 SetAnnotColor(Handle as Integer, ColorType as Integer, PDFColorSpace as Integer, ColorValue as Integer) as boolean
* 3.34.661 SetAnnotHighlightMode(Handle as Integer, HighlightMode as Integer) as boolean
* 3.34.662 SetAnnotFlagEx(Handle as Integer, Flags as Integer) as boolean
* 3.34.663 SetAnnotIcon(Handle as Integer, AnnotIcon as Integer) as boolean
* 3.34.664 SetAnnotLineDashPattern(Handle as UInt32, dash as memoryblock, NumValues as integer) as Boolean
* 3.34.665 SetAnnotLineDashPattern(Handle as UInt32, dash() as single) as Boolean
* 3.34.666 SetAnnotLineEndStyle(Handle as UInt32, StartLineStyle as Integer, EndLineStyle as Integer) as boolean
* 3.34.667 SetAnnotMigrationState(Handle as Integer, State as Integer, Name as string) as Integer
* 3.34.668 SetAnnotMigrationStateAnsi(Handle as Integer, State as Integer, Name as string) as Integer
* 3.34.669 SetAnnotOpacity(Handle as Integer, opacity as Double) as Boolean
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- 3.34.671 SetAnnotOpenState(Handle as Integer, Open as Boolean) as boolean 423
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- 3.34.673 SetAnnotQuadPoints(Handle as UInt32, points() as DynaPDFPointMBS) as boolean 424
- 3.34.674 SetAnnotString(Handle as Integer, StringType as Integer, Value as string) as boolean 425
- 3.34.675 SetAnnotStringAnsi(Handle as Integer, StringType as Integer, Value as string) as boolean 425
- 3.34.676 SetAnnotSubject(Handle as Integer, Value as string) as Boolean 425
- 3.34.677 SetAnnotSubjectAnsi(Handle as Integer, Value as string) as Boolean 425
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- 3.34.679 SetBidiMode(BidiMode as Integer) as Boolean 426
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- 3.34.681 SetBookmarkDest(ABmk as Integer, DestType as Integer, a as Double, b as Double, c as Double, d as Double) as Boolean 426
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- 3.34.685 SetCheckBoxChar(CheckBoxChar as Integer) as Boolean 427
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- 3.34.687 SetCheckBoxState(Field as Integer, Checked as Boolean) as Boolean 427
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- 3.34.693 SetColorMask(ImageHandle as Integer, Mask() as Integer) as boolean 429
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- 3.34.695 SetColorSpace(ColorSpace as Integer) as Boolean 429
- 3.34.696 SetColSortField(ColField as Integer, AscendingOrder as boolean) as boolean 430
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- 3.34.700 SetContent(buffer as string) as Boolean 431
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- 3.34.747 SetFloatPrecision(NumTextDecDigits as UInt32, NumVectDecDigits as UInt32) as boolean
- 3.34.748 SetFont(Name as string, Style as Integer = 0, Size as Double = 12, Embed as boolean = true, CP as Integer = & h27) as Integer
- 3.34.749 SetFontAnsi(Name as string, Style as Integer = 0, Size as Double = 12, Embed as boolean = true, CP as Integer = & h27) as Integer
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- 3.34.768 SetLineAnnotParms(Handle as UInt32, FontHandle as Integer, FontSize as Double, Params as DynaPDFLineAnnotParameterMBS) as boolean
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- 3.34.770 SetLineDashPattern(Dash as string, Phase as Integer) as Boolean
- 3.34.771 SetLineDashPatternEx(dash as memoryblock, NumValues as Integer, Phase as Integer) as Boolean
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- 3.34.775 SetLinkHighlightMode(Mode as Integer) as Boolean
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* 3.34.777 SetMatrix(Matrix as DynaPDFMatrixMBS) as Boolean
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* 3.34.780 SetMetaConvFlags(Flags as Integer) as Boolean
* 3.34.781 SetMetadata(ObjType as Integer, Handle as Integer, Buffer as Memoryblock) as Boolean
* 3.34.782 SetMetadata(ObjType as Integer, Handle as Integer, Buffer as String) as Boolean
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* 3.34.785 SetNumberFormat(TxtField as Integer, Sep as Integer, DecPlaces as Integer, NegStyle as Integer, CurrStr as string, Prepend as boolean) as Boolean
* 3.34.786 SetOCGContUsage(Handle as UInt32, Value as DynaPDFOCGContUsageMBS) as Boolean
* 3.34.787 SetOCGState(Handle as UInt32, On as Boolean, SaveState as Boolean) as Boolean
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* 3.34.791 SetPageCoords(PageCoords as Integer) as Boolean
* 3.34.792 SetPageFormat(Value as Integer) as Boolean
* 3.34.793 SetPageHeight(value as Double) as Boolean
* 3.34.794 SetPageLayout(Layout as Integer) as Boolean
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* 3.34.840 SquareAnnotAnsi(\(\text{PosX as Double, PosY as Double, Width as Double, Height as Double, LineWidth as Double, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Comment as string} \) as Integer) 473
* 3.34.841 StampAnnot(\(\text{SubType as Integer,PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Subject as string, Comment as string} \) as Integer) 473
* 3.34.842 StampAnnotAnsi(SubType as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Subject as string, Comment as string) as Integer

* 3.34.843 StrokePath as Boolean

* 3.34.844 TestGlyphs(FontHandle as Integer, Text as string) as Integer

* 3.34.845 TestGlyphsAnsi(FontHandle as Integer, Text as string) as Integer

* 3.34.846 TextAnnot(PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Text as string, Icon as Integer, Open as boolean) as Integer

* 3.34.847 TextAnnotAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Text as string, Icon as Integer, Open as boolean) as Integer

* 3.34.848 TranslateCoords(OriginX as Double, OriginY as Double) as Boolean

* 3.34.849 TranslateRawCode(IFont as Integer, text as string, byref Width as Double, byref Decoded as boolean, CharSpacing as double, WordSpacing as double, TextScale as Double) as string

* 3.34.850 TranslateRawCode(IFont as integer, text as string, textOffset as Integer, byref Width as double, byref Decoded as boolean, CharSpacing as double, WordSpacing as double, TextScale as Double, byref count as integer) as string

* 3.34.851 TranslateString(IFont as Integer, text as string, flags as Integer) as string

* 3.34.852 TranslateString(stack as DynaPDFStackMBS, flags as Integer) as string

* 3.34.853 Triangle(x1 as Double, y1 as Double, x2 as Double, y2 as Double, x3 as Double, y3 as Double, FillMode as Integer) as Boolean

* 3.34.854 UnLockLayer(layer as UInt32) as boolean

* 3.34.855 WatermarkAnnot(PosX as Double, PosY as Double, Width as Double, Height as Double) as Integer

* 3.34.856 WebLink(PosX as Double, PosY as Double, Width as Double, Height as Double, aText as string) as Integer

* 3.34.857 WebLinkAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, aText as string) as Integer

* 3.34.858 WeightFromStyle(s as Integer) as Integer

* 3.34.859 WeightToStyle(s as Integer) as Integer

* 3.34.860 WidthFromStyle(s as Integer) as Integer

* 3.34.861 WidthToStyle(s as Integer) as Integer

* 3.34.862 WriteAngleText(aText as string, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean

* 3.34.863 WriteAngleText(glyphs() as Integer, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean

* 3.34.864 WriteAngleTextAnsi(aText as string, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean

* 3.34.865 WriteAngleTextDirect(aText as string, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean

* 3.34.866 WriteAngleTextDirect(glyphs() as Integer, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean

* 3.34.867 WriteFText(Align as Integer, aText as string) as Boolean

* 3.34.868 WriteFText(Align as Integer, glyphs() as Integer) as Boolean
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* 3.34.869 WriteFTextAnsi(Align as Integer, aText as string) as Boolean
* 3.34.870 WriteFTextDirect(Align as Integer, aText as string) as Boolean
* 3.34.871 WriteFTextDirect(Align as Integer, glyphs() as Integer) as Boolean
* 3.34.872 WriteFTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, aText as string) as Boolean
* 3.34.873 WriteFTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, glyphs() as Integer) as Boolean
* 3.34.874 WriteFTextExAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, aText as string) as Boolean
* 3.34.875 WriteFTextExDirect(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, aText as string) as Boolean
* 3.34.876 WriteFTextExDirect(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, glyphs() as Integer) as Boolean
* 3.34.877 WriteStyledText(Align as Integer, StyledText as StyledText) as Boolean
* 3.34.878 WriteStyledText(Align as Integer, TextArea as TextArea) as Boolean
* 3.34.879 WriteStyledTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, StyledText as StyledText) as Boolean
* 3.34.880 WriteStyledTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, TextArea as TextArea) as Boolean
* 3.34.881 WriteText(PosX as Double, PosY as Double, aText as string) as Boolean
* 3.34.882 WriteText(PosX as Double, PosY as Double, glyphs() as Integer) as Boolean
* 3.34.883 WriteTextAnsi(PosX as Double, PosY as Double, aText as string) as Boolean
* 3.34.884 WriteTextDirect(PosX as Double, PosY as Double, aText as string) as Boolean
* 3.34.885 WriteTextDirect(PosX as Double, PosY as Double, glyphs() as Integer) as Boolean
* 3.34.886 WriteTextMatrix(Matrix as DynaPDFMatrixMBS, glyphs() as Integer) as Boolean
* 3.34.887 WriteTextMatrix(Matrix as DynaPDFMatrixMBS, Text as string) as Boolean
* 3.34.888 WriteTextMatrixAnsi(Matrix as DynaPDFMatrixMBS, Text as string) as Boolean
* 3.34.889 WriteTextMatrixDirect(Matrix as DynaPDFMatrixMBS, glyphs() as Integer) as Boolean
* 3.34.890 WriteTextMatrixDirect(Matrix as DynaPDFMatrixMBS, Text as string) as Boolean
* 3.34.891 YofCMYK(CMYK as UInt32) as Integer
* 3.34.893 DynaPDFVersion as String
* 3.34.894 Handle as Integer
* 3.34.895 ImportFlags as Integer
* 3.34.896 ImportFlags2 as Integer
* 3.34.897 JasperVersion as String
* 3.34.898 PageCoords as Integer
* 3.34.899 PageGraphics as Graphics
* 3.34.900 PageGraphicsPicture as Picture
* 3.34.901 TIFFVersion as String
* 3.34.902 TraceFile as Folderitem
* 3.34.903 TraceHandle as Integer
* 3.34.904 ValidateTextEncodings as Boolean
* 3.34.905 zlibVersion as String
* 3.34.907 EnumDocFont(Font as DynaPDFFontMBS, FontInfo as DynaPDFFontInfoMBS, Type as Integer, BaseFont as string, Fontname as string, Embedded as boolean, IsFormFont as boolean, Flags as Integer, FontRef as Integer) as Integer
* 3.34.908 EnumHostFont(FamilyName as string, PostScriptName as string, Style as Integer) as Integer
* 3.34.909 EnumHostFontEx(FamilyName as string, PostScriptName as string, Style as Integer, BaseType as Integer, Embeddable as boolean, Flags as Integer, FilePath as string) as Integer
* 3.34.910 Error(ErrorCode as Integer, ErrorMessage as string, ErrorType as Integer) as Integer
* 3.34.911 InitProgress(ProgType as Integer, MaxCount as Integer)
* 3.34.912 NextPage(g as graphics)
* 3.34.913 OnFontNotFound(PDFFontRef as Integer, FontName as string, Style as Integer, StdFontIndex as Integer, IsSymbolFont as boolean) as Integer
* 3.34.914 OnReplaceICCProfile(Type as Integer, ColorSpace as Integer) as Integer
* 3.34.915 PageBreak(LastPosX as Double, LastPosY as Double, PageBreak as boolean) as Integer
* 3.34.916 Progress(ActivePage as Integer) as Integer
* 3.34.917 RasterShowText(MatrixBefore as DynaPDFMatrixMBS, MatrixAfter as DynaPDFMatrixMBS, TextBuffers() as DynaPDFTextRecordAMBS, Texts() as String, Width as Double, Vertical as boolean, FontRef as Integer, textScaling as Double)
* 3.34.919 kadAnnotation = 0
* 3.34.920 kadCatalog = 1
* 3.34.921 kadField = 2
* 3.34.922 kadImage = 3
* 3.34.923 kadPage = 4
* 3.34.924 kadTemplate = 5
* 3.34.925 kaeExport = 1
* 3.34.926 kaePrint = 2
* 3.34.927 kaeView = 4
* 3.34.928 kaffFormFields = & h00000010
* 3.34.929 kaffKeepFileAttach = & h00002000
* 3.34.930 kaffKeepLinkAnnots = & h00001000
* 3.34.931 kaffKeepTextAnnots = & h00004000
* 3.34.932 kaffMarkupAnnots = 2
* 3.34.933 kaffNone = 0
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* 3.34.935 kaffNonPDFA_2 = 8
* 3.34.936 kaffPreserveZOrder = & h00400000
* 3.34.937 kaffUseFieldViewState = & h00000020
* 3.34.938 kaffUseViewState = 1
* 3.34.939 kaffHidden = 2
* 3.34.940 kaffInvisible = 1
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* 3.34.942 kafLockedContents = & h00000200
* 3.34.943 kafNone = 0
* 3.34.944 kafNoRotate = & h00000010
* 3.34.945 kafNoView = & h00000020
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* 3.34.949 kafToggleNoView = & h00000100
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* 3.34.955 kaiNote = 5
* 3.34.956 kaiParagraph = 6
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* 3.34.963 kasAuthor = 0
* 3.34.964 kasCancelled = 3
* 3.34.965 kasCompleted = 4
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* 3.34.967 kasCreateReply = 5
* 3.34.968 kasName = 2
* 3.34.969 kasNone = 0
* 3.34.970 kasRejected = 2
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* 3.34.972 kasRichText = 5
* 3.34.973 kasSubject = 3
* 3.34.974 kat3D = & h00000013
* 3.34.975 kat3D_AppDefault = 0
* 3.34.976 kat3D_Explicit = 3
* 3.34.977 kat3D_PageOpen = 1
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* 3.34.1021 katTrapNet = & h0000001E
* 3.34.1022 katUnderline = & h00000010
* 3.34.1023 katUnknown = & h00000018
* 3.34.1024 katURI = & h0000000F
* 3.34.1025 katWatermark = & h00000017
* 3.34.1026 katWebLink = & h00000011
* 3.34.1027 katWidget = & h00000012
* 3.34.1028 kavDirectionL2R = 8
* 3.34.1029 kavDirectionR2L = & h00000010
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* 3.34.1032 kavNonFullScrUseOC = & h00000400
* 3.34.1033 kavNonFullScrUseOutlines = 2
* 3.34.1034 kavNonFullScrUseThumbs = 4
* 3.34.1035 kavViewPrintArtBox = & h00000020
* 3.34.1036 kavViewPrintBleedBox = & h00000040
* 3.34.1037 kavViewPrintCropBox = & h00000080
* 3.34.1038 kavViewPrintMediaBox = & h00000100
* 3.34.1039 kavViewPrintTrimBox = & h00000200
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* 3.34.1041 kAV_VIEW_PRINT_MASK = 5
* 3.34.1042 kAV_VIEW_PRINT_MASK = & h0000003E
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* 3.34.1044 kcpcCaptionBelow = 2
* 3.34.1045 kcpcCaptionLeft = 5
* 3.34.1046 kcpcCaptionOnly = 0
* 3.34.1047 kcpcCaptionOver = 6
* 3.34.1048 kcpcCaptionRight = 4
* 3.34.1049 kcpcImageOnly = 1
* 3.34.1050 kbeCloudy1 = 1
* 3.34.1051 kbeCloudy2 = 2
* 3.34.1052 kbeMacExpert = 2
* 3.34.1053 kbeMacRoman = 1
* 3.34.1054 kbeSolid = 0
* 3.34.1055 kbeStandard = 3
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* 3.34.1058 kbmColorBurn = 3
* 3.34.1059 kbmColorDodge = 4
* 3.34.1060 kbmDarken = 5
* 3.34.1061 kbmDifference = 6
* 3.34.1062 kbmExclusion = 7
* 3.34.1063 kbmHardLight = 8
* 3.34.1064 kbmHue = 9
* 3.34.1065 kBMK_ADD_CHILDREN = & h40000000
* 3.34.1066 kBMK_INSERT = & h20000000
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* 3.34.1068 kbmLighten = & h0000000A
* 3.34.1069 kbmLuminosity = & h0000000B
* 3.34.1070 kbmMultiply = & h0000000C
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* 3.34.1075 kbmRightToLeft = 1
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* 3.34.1080 kbmNormal = 0
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* 3.34.1085 kbsInset = 2
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* 3.34.1087 kbsSolid = 0
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* 3.34.1089 kbsUp = 0
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* 3.34.1091 kbtArt = 0
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* 3.34.1095 kbtCaption = 5
* 3.34.1096 kbtCode = 6
* 3.34.1097 kbtDiv = 7
* 3.34.1098 kbtDocument = 8
* 3.34.1099 kbtFigure = 9
* 3.34.1100 kbtForm = & h0000000A
* 3.34.1101 kbtFormula = & h0000000B
* 3.34.1102 kbtH = & h0000000C
* 3.34.1103 kbtH1 = & h0000000D
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* 3.34.1104 kbtH2 = & h0000000E
* 3.34.1105 kbtH3 = & h0000000F
* 3.34.1106 kbtH4 = & h00000010
* 3.34.1107 kbtH5 = & h00000011
* 3.34.1108 kbtH6 = & h00000012
* 3.34.1109 kbtIndex = & h00000013
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* 3.34.1111 kbtList = & h00000015
* 3.34.1112 kbtListElem = & h00000016
* 3.34.1113 kbtListText = & h00000017
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* 3.34.1116 kbtPart = & h0000001A
* 3.34.1117 kbtQuote = & h0000001B
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* 3.34.1119 kbtSection = & h0000001D
* 3.34.1120 kbtSpan = & h0000001E
* 3.34.1121 kbtTable = & h0000001F
* 3.34.1122 kbtTableDataCell = & h00000020
* 3.34.1123 kbtTableHeader = & h00000021
* 3.34.1124 kbtTableRow = & h00000022
* 3.34.1125 kbtTOC = & h00000023
* 3.34.1126 kbtTOCEntry = & h00000024
* 3.34.1127 kcbChecked = 1
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* 3.34.1129 kcbNone = 0
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* 3.34.1131 kcbfParseAllImages = & h0000000E
* 3.34.1132 kcbfParseColorImages = 8
* 3.34.1133 kcbfParseGrayImages = 4
* 3.34.1134 kcbfToGrayAdjust = 2
* 3.34.1135 kcbUnknown = 0
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* 3.34.1148 kcfCCITT3 = 2
* 3.34.1149 kcfCCITT4 = 3
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* 3.34.1183 kcoApplyExportState = & h00020000
* 3.34.1184 kcoApplyPrintState = & h00040000
* 3.34.1185 kcoCheckImages = & h00800000
* 3.34.1186 kcoDefault = & h0010FFFF
* 3.34.1187 kcoDeleteActionsAndScripts = 8
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* 3.34.1188 kcoDeleteAlternateImages = & h00000800
* 3.34.1189 kcoDeleteAppEvents = & h00008000
* 3.34.1190 kcoDeleteDamagedImages = & h01000000
* 3.34.1191 kcoDeleteEmbeddedFiles = & h00000080
* 3.34.1192 kcoDeleteHalftones = & h00100000
* 3.34.1193 kcoDeleteInvRenderingIntent = & h00000010
* 3.34.1194 kcoDeleteMultiMediaContents = 4
* 3.34.1195 kcoDeleteOPIComments = & h00000100
* 3.34.1196 kcoDeletePostscript = & h00000400
* 3.34.1197 kcoDeletePresentation = & h00400000
* 3.34.1198 kcoDeleteReplies = & h00800000
* 3.34.1199 kcoDeleteSignatures = & h00002000
* 3.34.1200 kcoDeleteTransferFuncs = 2
* 3.34.1201 kcoEmbedSubsets = 1
* 3.34.1202 kcoFlattenFormFields = & h00000020
* 3.34.1203 kcoFlattenLayers = & h00200000
* 3.34.1204 kcoFlushPages = & h00000000
* 3.34.1205 kcoMakeLayerVisible = & h00004000
* 3.34.1206 kcoNoFontEmbedding = & h00000000
* 3.34.1207 kcoReComprJPEG2000Images = & h00010000
* 3.34.1208 kcoRepairDamagedImages = & h02000000
* 3.34.1209 kcoReplaceV4ICCProfiles = & h00000400
* 3.34.1210 kcoReplCCITT FaxWithFlate = & h00010000
* 3.34.1211 kcoResolveOverprint = & h00020000
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* 3.34.1226 kcp1264 = & h0000001C
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* 3.34.1228 kcp1266 = & h0000001E
* 3.34.1229 kcp1267 = & h0000001F
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* 3.34.1272 kcpGlyphIndexes = & h00000041
* 3.34.1273 kcpInline = 0
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* 3.34.1275 kcpMacRoman = & h0000003E
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* 3.34.1281 kcpWansung = & h0000003C
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* 3.34.1284 kcsDeviceGray = 2
* 3.34.1285 kcsDeviceRGB = 0
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* 3.34.1287 kcsSquareCap = 2
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* 3.34.1290 kctPDFA_2b = 2
* 3.34.1291 kctPDFA_3b = 3
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* 3.34.1293 kctZUGFeRD_Comfort = 5
* 3.34.1294 kctZUGFeRD_Extended = 6
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* 3.34.1296 kddCounterClockwise = 0
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* 3.34.1303 kdfASCIIXHexDecode = 2
* 3.34.1304 kdfCCITTFaxDecode = 3
* 3.34.1305 kdfDCTDecode = 4
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* 3.34.1307 kdfD_MMM = 4
* 3.34.1308 kdfD_MMM_YY = 5
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* 3.34.1310 kdfJBIG2Decode = 6
* 3.34.1311 kdfJPXDecode = 7
* 3.34.1312 kdfILZWDecode = 8
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* 3.34.1315 kdfMMM_D_YYYY = & h0000000A
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* 3.34.1338 kdiPDFX_Ver = 7
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* 3.34.1344 kdmFillStroke = 2
* 3.34.1345 kdmFillStrokeClip = 6
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* 3.34.1351 kdpmFlipShortEdge = 2
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* 3.34.1362 kdt3D_PageInvisible = 2
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* 3.34.1369 kdtFitV_Left = 3
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* 3.34.1375 keflChild = 0
* 3.34.1376 keflChildAnnot = 1
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* 3.34.1392 kemValueError = 2
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* 3.34.1398 kesDeviceN = & h0000000A
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* 3.34.1402 kesLab = 5
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* 3.34.1408 kE_FONT_ERROR = & h10000000
* 3.34.1409 kE_SYNTAX_ERROR = & h04000000
* 3.34.1410 kE_VALUE_ERROR = & h08000000
* 3.34.1411 kE_WARNING = & h02000000
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* 3.34.1414 kfaiPushPin = 2
* 3.34.1415 kfaiTag = 3
* 3.34.1416 kfbtDisabled = 4
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* 3.34.1422 kfcBorderColor = 1
* 3.34.1423 kfcTextColor = 2
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* 3.34.1425 kffCommitOnSelCh = & h04000000
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* 3.34.1458 kfmFillStrokeEvOddNoClose = 9
* 3.34.1459 kfmFillStrokeNoClose = 2
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* 3.34.1471 kfsDemiBold = & h25800000
* 3.34.1472 kfsExpanded = & h00000700
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* 3.34.1475 kfsExtraExpanded = & h00000800
* 3.34.1476 kfsExtraLight = & h0C800000
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* 3.34.1482 kfsRegular = & h19000000
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* 3.34.1488 kfsUltraCondensed = & h00000100
* 3.34.1489 kfsUltraExpanded = & h00000900
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* 3.34.1496 kftListBox = 4
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* 3.34.1502 kftType0 = 2
* 3.34.1503 kftType1 = 3
* 3.34.1504 kftType3 = 4
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* 3.34.1508 kgfNativeBlackWhite = 4
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* 3.34.1510 kgfNoImageDuplCheck = & h000000100
* 3.34.1511 kgfNoObjCompression = & h00000200
* 3.34.1512 kgfRealPassThrough = & h00000040
* 3.34.1513 kgfRealTopDownCoords = 2
* 3.34.1514 kgfRestorePageCoords = 1
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* 3.34.1517 khmNone = 0
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* 3.34.1519 khmPush = 3
* 3.34.1520 khmPushUpd = 4
* 3.34.1521 khtDetached = 0
* 3.34.1522 khtSHA1 = 1
* 3.34.1523 kicfDefault = 0
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* 3.34.1524 kicfIgnoreOpenAction = 1
* 3.34.1525 kicfIgnorePageLayout = 2
* 3.34.1526 kicmBPCompensation = 1
* 3.34.1527 kicmCheckBlackPoint = 2
* 3.34.1528 kicmDefault = 0
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* 3.34.1534 kicUseCCITT4 = 1
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* 3.34.1537 kif2MergeLayers = 1
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* 3.34.1540 kif2Normalize = 2
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* 3.34.1543 kifAllAnnots = & h009F0000
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* 3.34.1551 kifEmbeddedFiles = & h00200000
* 3.34.1552 kifEnumFonts = & h20000000
* 3.34.1553 kifFileCollections = & h00400000
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* 3.34.1555 kifFreeText = & h00010000
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* 3.34.1563 kifmJPEG = 1
* 3.34.1564 kifmPNG = 2
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* 3.34.1698 koeOnPageInVisible = & h0000000E 611
* 3.34.1699 koeOnPageOpen = & h0000000F 611
* 3.34.1700 koeOnPageVisible = & h0000000D 611
* 3.34.1701 koeOnValidate = & h0000000C 611
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* 3.34.1703 kofCompressWithJBIG2 = & h00004000 612
* 3.34.1704 kofConvertAllColors = 2 612
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* 3.34.1712 kofIgnoreICCBased = 4 613
* 3.34.1713 kofIgnoreZeroLineWidth = & h00001000 613
* 3.34.1714 kofInMemory = 1 613
* 3.34.1715 kofNewLinkNames = & h00000020 614
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* 3.34.1719 kofSkipMaskedImages = & h00000010 614
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* 3.34.1723 koiView = 4 615
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* 3.34.1727 kooImage = 2 615
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* 3.34.1732 kotAnnotation = 1 616
* 3.34.1733 kotBookmark = 2 616
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* 3.34.1767 kPDF_FUCHSIA = & h00FF00FF
* 3.34.1768 kPDF_GRAY = & h00808080
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* 3.34.1780 kPDF_Olive = & h00008080
* 3.34.1781 kPDF_PURPLE = & h00800080
* 3.34.1782 kPDF_RED = & h000000FF
* 3.34.1783 kPDF_SILVER = & h00C0C0C0
* 3.34.1784 kPDF_SKYBLUE = & h00F0CAA6
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* 3.34.1786 kPDF_TEAL = & h00808000
* 3.34.1787 kPDF_WHITE = & h00FFFFFF
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* 3.34.1795 kpfConvImagesToGray = & h00000010
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* 3.34.1813 kpfDIN_C4 = 7
* 3.34.1814 kpfDIN_C5 = 8
* 3.34.1815 kpfDIN_C6 = 9
* 3.34.1816 kpfDIN_C65 = & h00000020
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* 3.34.1819 kpfDIN_E5 = &h0000000D
* 3.34.1820 kpfDIN_E6 = &h0000000E
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* 3.34.1823 kpfDIN_M65 = &h00000011
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* 3.34.1834 kpfPrintAsImage = 8
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* 3.34.1837 kpfImageInfoOnly = &h00000080
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* 3.34.1839 kpfNone = 0
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* 3.34.1841 kpfUS_Letter = &h00000013
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* 3.34.1844 kplfLowercaseLetters = 4
* 3.34.1845 kplfLowercaseRoman = 2
* 3.34.1846 kplfNone = 5
* 3.34.1847 kplfUppercaseLetters = 3
* 3.34.1848 kplfUppercaseRoman = 1
* 3.34.1849 kplOneColumn = 1
* 3.34.1850 kplSinglePage = 0
* 3.34.1851 kplTwoColumnLeft = 2
* 3.34.1852 kplTwoColumnRight = 3
* 3.34.1853 kplTwoPageLeft = 4
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  - 3.58.17 NumPaths as Integer
  - 3.58.18 NumPatterns as Integer
  - 3.58.19 NumRectangles as Integer
  - 3.58.20 NumRestoreGState as Integer
  - 3.58.21 NumSaveGState as Integer
  - 3.58.22 NumShadings as Integer
  - 3.58.23 NumSoftMasks as Integer
  - 3.58.24 NumTextRecords as Integer
  - 3.58.25 PageSpace as DynaPDFMatrixMBS
  - 3.58.26 UpdateOnImageCoverage as Single
  - 3.58.27 UpdateOnPathCount as Integer
  - 3.58.28 Yield as Boolean
  - 3.58.30 UpdateWindow(r as DynaPDFRectMBS, pic as Variant) as Integer
  - 3.58.32 kpsFitBest = 2
  - 3.58.33 kpsFitHeight = 1
  - 3.58.34 kpsFitWidth = 0
  - 3.58.35 krfClipToArtBox = 4
  - 3.58.36 krfClipToBleedBox = 8
  - 3.58.37 krfClipToTrimBox = &h00000010
  - 3.58.38 krfCompositeWhite = &h00001000
  - 3.58.39 krfDefault = 0
* 3.58.40 krfDisableAAClipping = & h00200000
* 3.58.41 krfDisableAAText = & h00400000
* 3.58.42 krfDisableAAVector = & h00800000
* 3.58.43 krfDisableAntiAliasing = & h00E00000
* 3.58.44 krfDisableBiLinearFilter = & h01000000
* 3.58.45 krfExclAnnotations = & h00000020
* 3.58.46 krfExclButtons = & h00004000
* 3.58.47 krfExclCheckBoxes = & h00008000
* 3.58.48 krfExclComboBoxes = & h00010000
* 3.58.49 krfExclFormFields = & h00000040
* 3.58.50 krfExclListBoxes = & h00020000
* 3.58.51 krfExclPageContent = & h00002000
* 3.58.52 krfExclSigFields = & h00080000
* 3.58.53 krfExclTextFields = & h00040000
* 3.58.54 krfIgnoreCropBox = 2
* 3.58.55 krfInitBlack = & h00000800
* 3.58.56 krfRenderInvisibleText = & h02000000
* 3.58.57 krfRotate180 = & h00000200
* 3.58.58 krfRotate270 = & h00000400
* 3.58.59 krfRotate90 = & h00000100
* 3.58.60 krfScaleToBBox = & h00000040
* 3.58.61 krfScaleToMediaBox = 1
* 3.58.62 krfSkipUpdateBG = & h00000800

– 3.59.1 class DynaPDFRasterizerMBS

* 3.59.3 Abort
* 3.59.4 AddRasImage(Filter as Integer) as boolean
* 3.59.5 AttachImageBuffer(Pic as Picture, RenderWithAlpha as boolean = false) as boolean
* 3.59.6 AttachImageBuffer(Rows as Memoryblock, Buffer as Memoryblock, Width as UInt32, Height as UInt32, ScanlineLen as Int32, PixelFormat as UInt32) as boolean
* 3.59.7 Constructor(PDF as DynaPDFMBS, DeviceContextHandle as Integer, Width as UInt32, Height as UInt32, PixFmt as UInt32)
* 3.59.8 Constructor(PDF as DynaPDFMBS, Pic as Picture, RenderWithAlpha as boolean = false)
* 3.59.9 Constructor(PDF as DynaPDFMBS, Rows as Memoryblock, Buffer as Memoryblock, Width as UInt32, Height as UInt32, ScanlineLen as Int32, PixelFormat as UInt32)
* 3.59.10 Constructor(PDF as DynaPDFMBS, Width as Integer, Height as Integer)
* 3.59.11 Redraw(DeviceContextHandle as Integer, DestX as Integer, DestY as Integer)
* 3.59.12 RenderPage(page as DynaPDFPageMBS, options as DynaPDFRasterImageMBS) as boolean
* 3.59.13 RenderPageEx(DeviceContextHandle as Integer, byref DestX as Integer, byref DestY as Integer, page as DynaPDFPageMBS, options as DynaPDFRasterImageMBS) as boolean
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* 3.59.14 RenderPageMT(page as DynaPDFPageMBS, options as DynaPDFRasterImageMBS)
  as boolean 748
* 3.59.15 ResizeBitmap(DeviceContextHandle as Integer, Width as Integer, Height as Integer)
  as boolean 749
* 3.59.17 Handle as Integer 749
* 3.59.18 Height as Integer 749
* 3.59.19 PDF as DynaPDFMBS 749
* 3.59.20 Pic as Picture 750
* 3.59.21 PixelFormat as Integer 750
* 3.59.22 ScanlineLen as Integer 750
* 3.59.23 TempBuffer as Ptr 750
* 3.59.24 TempPixelFormat as Integer 750
* 3.59.25 TempScanlineLen as Integer 751
* 3.59.26 Width as Integer 751
* 3.59.28 kpxf1Bit = 0 751
* 3.59.29 kpxfABGR = 7 751
* 3.59.30 kpxfARGB = 6 751
* 3.59.31 kpxfBGR = 3 751
* 3.59.32 kpxfBGRA = 5 752
* 3.59.33 kpxfCMYK = 9 752
* 3.59.34 kpxfCMYKA = &h0000000A 752
* 3.59.35 kpxfGray = 1 752
* 3.59.36 kpxfGrayA = 8 752
* 3.59.37 kpxfRGB = 2 752
* 3.59.38 kpxfRGBA = 4 752

– 3.60.1 class DynaPDFRawImageMBS 753
  * 3.60.3 setBuffer(data as MemoryBlock) 753
  * 3.60.4 setBuffer(data as MemoryBlock, size as Int64) 753
  * 3.60.5 setBuffer(data as Ptr) 754
  * 3.60.6 setBuffer(data as Ptr, size as Int64) 754
  * 3.60.7 setBuffer(data as string) 754
  * 3.60.8 setBuffer(data as string, size as Int64) 755
  * 3.60.10 BitsPerComponent as Integer 755
  * 3.60.11 Buffer as Ptr 755
  * 3.60.12 BufSize as Int64 755
  * 3.60.13 CS as Integer 756
  * 3.60.14 CSHandle as Integer 756
  * 3.60.15 HasAlpha as Boolean 756
  * 3.60.16 Height as Integer 756
  * 3.60.17 IsBGR as Boolean 756
  * 3.60.18 Memory as MemoryBlock 756
  * 3.60.19 MinIsWhite as Boolean 757
* 3.60.20 NumComponents as Integer
* 3.60.21 Stride as Integer
* 3.60.22 String as String
* 3.60.23 Width as Integer

- 3.61.1 class DynaPDFRectMBS
  * 3.61.3 Constructor(left as Double = 0.0, top as Double = 0.0, right as Double = 0.0, bottom as Double = 0.0)
  * 3.61.5 Bottom as Double
  * 3.61.6 Left as Double
  * 3.61.7 Right as Double
  * 3.61.8 Top as Double
  * 3.61.9 Width as Double

- 3.62.1 class DynaPDFRelFileNodeMBS
  * 3.62.3 Constructor
  * 3.62.5 EF as DynaPDFFileSpecMBS
  * 3.62.6 Name as String
  * 3.62.7 NextNode as DynaPDFRelFileNodeMBS

- 3.63.1 class DynaPDFResetFormActionMBS
  * 3.63.3 Constructor
  * 3.63.4 Fields(index as Integer) as DynaPDFFieldExMBS
  * 3.63.6 FieldsCount as Integer
  * 3.63.7 Include as Boolean
  * 3.63.8 NextAction as Integer
  * 3.63.9 NextActionType as Integer

- 3.64.1 class DynaPDFSigDictMBS
  * 3.64.3 Cert as String
  * 3.64.4 ContactInfo as String
  * 3.64.5 Contents as String
  * 3.64.6 Filter as String
  * 3.64.7 Location as String
  * 3.64.8 Name as String
  * 3.64.9 PropAuthTime as Integer
  * 3.64.10 PropAuthType as String
  * 3.64.11 Reason as String
  * 3.64.12 Revision as Integer
  * 3.64.13 SignTime as String
  * 3.64.14 SubFilter as String
  * 3.64.15 Version as Integer

- 3.65.1 class DynaPDFSigParmsMBS
  * 3.65.3 ContactInfo as String
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- 3.65.4 Encrypt as Boolean 766
- 3.65.5 HashType as Integer 766
- 3.65.6 KeyLen as Integer 766
- 3.65.7 Location as String 767
- 3.65.8 OpenPwd as String 767
- 3.65.9 OwnerPwd as String 767
- 3.65.10 PKCS7ObjLen as Integer 767
- 3.65.11 Range1 as String 767
- 3.65.12 Range1Length as Integer 768
- 3.65.13 Range2 as String 768
- 3.65.14 Range2Length as Integer 768
- 3.65.15 Reason as String 768
- 3.65.16 Restrict as Integer 768
- 3.65.17 Signer as String 769

- 3.66.1 class DynaPDFStackMBS 770
  - 3.66.3 KerningAdvance(index as UInt32) as Double 770
  - 3.66.4 KerningLength(index as UInt32) as Integer 770
  - 3.66.5 KerningText(index as UInt32) as string 770
  - 3.66.6 KerningWidth(index as UInt32) as Double 770
  - 3.66.7 RawKernAdvance(index as UInt32) as Double 770
  - 3.66.8 RawKernLength(index as UInt32) as Integer 771
  - 3.66.9 RawKernText(index as UInt32) as string 771
  - 3.66.11 CharSP as Double 771
  - 3.66.12 CIDFont as Boolean 771
  - 3.66.13 ConvColors as Boolean 771
  - 3.66.14 ctm as DynaPDFMatrixMBS 772
  - 3.66.15 DeleteKerningAt as Integer 772
  - 3.66.16 DestSpace as Integer 772
  - 3.66.17 DrawMode as Integer 773
  - 3.66.18 Embedded as Boolean 773
  - 3.66.19 FillColor as Integer 773
  - 3.66.20 FillCS as Integer 773
  - 3.66.21 Font as DynaPDFFontMBS 774
  - 3.66.22 FontFlags as Integer 774
  - 3.66.23 FontHandle as Integer 774
  - 3.66.24 FontInfo as DynaPDFFontInfoMBS 774
  - 3.66.25 FontSize as Double 775
  - 3.66.26 HScale as Double 775
  - 3.66.27 KerningCount as Integer 775
  - 3.66.28 Leading as Double 775
  - 3.66.29 LineWidth as Double 775
* 3.66.30 SpaceWidth as Double
* 3.66.31 StrokeColor as Integer
* 3.66.32 StrokeCS as Integer
* 3.66.33 Text as String
* 3.66.34 TextLen as Integer
* 3.66.35 TextRise as Double
* 3.66.36 TextWidth as Double
* 3.66.37 tm as DynaPDFMatrixMBS
* 3.66.38 WordSP as Double
* 3.66.39 x as Double
* 3.66.40 y as Double

- 3.67.1 class DynaPDFSubmitFormActionMBS
  * 3.67.3 Constructor
  * 3.67.4 Fields(index as Integer) as DynaPDFFieldExMBS
  * 3.67.6 CharSet as String
  * 3.67.7 FieldsCount as Integer
  * 3.67.8 Flags as Integer
  * 3.67.9 NextAction as Integer
  * 3.67.10 NextActionType as Integer
  * 3.67.11 URL as String

- 3.68.1 class DynaPDFSysFontMBS
  * 3.68.3 Constructor
  * 3.68.4 NextFont as DynaPDFSysFontMBS
  * 3.68.6 BaseType as Integer
  * 3.68.7 CIDOrdering as String
  * 3.68.8 CIDRegistry as String
  * 3.68.9 CIDSupplement as UInt32
  * 3.68.10 DataOffset as UInt32
  * 3.68.11 FamilyName as String
  * 3.68.12 FilePath as String
  * 3.68.13 FileSize as UInt32
  * 3.68.14 Flags as Integer
  * 3.68.15 FullName as String
  * 3.68.16 Index as Integer
  * 3.68.17 IsFixedPitch as Boolean
  * 3.68.18 Length1 as UInt32
  * 3.68.19 Length2 as UInt32
  * 3.68.20 PostScriptName as String
  * 3.68.21 Style as Integer
  * 3.68.22 UnicodeRange1 as UInt32
  * 3.68.23 UnicodeRange2 as UInt32
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* 3.68.24 UnicodeRange3 as UInt32
* 3.68.25 UnicodeRange4 as UInt32
* 3.68.27 kurAlphabeticPresentationForms = & h40000000
* 3.68.28 kurAncientGreekNumbers = & h00000040
* 3.68.29 kurAncientSymbols = & h00800000
* 3.68.30 kurArabic = & h00002000
* 3.68.31 kurArabicPresentationFormsA = & h80000000
* 3.68.32 kurArabicPresentationFormsB = 8
* 3.68.33 kurArmenian = & h00000400
* 3.68.34 kurArrows = & h00000020
* 3.68.35 kurBalinese = & h08000000
* 3.68.36 kurBasicLatin = 1
* 3.68.37 kurBengali = & h00010000
* 3.68.38 kurBlockElements = & h00001000
* 3.68.39 kurBopomofo = & h00080000
* 3.68.40 kurBoxDrawing = & h00000800
* 3.68.41 kurBraillePatterns = & h00040000
* 3.68.42 kurBuginese = 1
* 3.68.43 kurCarian = & h02000000
* 3.68.44 kurCham = & h00400000
* 3.68.45 kurCherokee = & h00001000
* 3.68.46 kurCJKCompatibility = & h00800000
* 3.68.47 kurCJKStrokes = & h20000000
* 3.68.48 kurCJKSymbolsAndPunctuation = & h00010000
* 3.68.49 kurCJKUnifiedIdeographs = & h08000000
* 3.68.50 kurCombDiacritMarksForSymbols = 4
* 3.68.51 kurCombiningDiacriticalMarks = & h00000400
* 3.68.52 kurCombiningHalfMarks = 1
* 3.68.53 kurControlPictures = & h00000100
* 3.68.54 kurCoptic = & h00000100
* 3.68.55 kurCountingRodNumerals = & h00008000
* 3.68.56 kurCuneiform = & h00004000
* 3.68.57 kurCurrencySymbols = 2
* 3.68.58 kurCypriotSyllabary = & h00000800
* 3.68.59 kurCyrillic = & h00000200
* 3.68.60 kurDeseret = & h00800000
* 3.68.61 kurDevanagari = & h00008000
* 3.68.62 kurDingbats = & h00008000
* 3.68.63 kurDominoTiles = & h04000000
* 3.68.64 kurEnclosedAlphanumerics = & h00000400
* 3.68.65 kurEnclosedCJKLettersAndMonths = & h00400000
* 3.68.66 kurEthiopic = & h00000800
* 3.68.67 kurGeneralPunctuation = \& h80000000
* 3.68.68 kurGeometricShapes = \& h00002000
* 3.68.69 kurGeorgian = \& h04000000
* 3.68.70 kurGlagolitic = 2
* 3.68.71 kurGothic = \& h00400000
* 3.68.72 kurGreekandCoptic = \& h00000080
* 3.68.73 kurGreekExtended = \& h40000000
* 3.68.74 kurGujarati = \& h00040000
* 3.68.75 kurGurmukhi = \& h00020000
* 3.68.76 kurHalfwidthAndFullwidthForms = \& h00000010
* 3.68.77 kurHangulCompatibilityJamo = \& h00100000
* 3.68.78 kurHangulJamo = \& h10000000
* 3.68.79 kurHangulSyllables = \& h01000000
* 3.68.80 kurHebrew = \& h00000080
* 3.68.81 kurHiragana = \& h00020000
* 3.68.82 kurIPAExtensions = \& h00000010
* 3.68.83 kurKannada = \& h00400000
* 3.68.84 kurKatakana = \& h00040000
* 3.68.85 kurKayahLi = \& h00100000
* 3.68.86 kurKharoshthi = \& h00001000
* 3.68.87 kurKhmer = \& h00010000
* 3.68.88 kurLao = \& h02000000
* 3.68.89 kurLatin1Supplement = 2
* 3.68.90 kurLatinExtendedA = 4
* 3.68.91 kurLatinExtendedAdditional = \& h20000000
* 3.68.92 kurLatinExtendedB = 8
* 3.68.93 kurLepcha = \& h00020000
* 3.68.94 kurLetterlikeSymbols = 8
* 3.68.95 kurLimbu = \& h20000000
* 3.68.96 kurLinearBSyllabary = \& h00000020
* 3.68.97 kurMalayalam = \& h00800000
* 3.68.98 kurMathematicalAlphanumeric = \& h02000000
* 3.68.99 kurMathematicalOperators = \& h00000040
* 3.68.100 kurMiscellaneousSymbols = \& h00000400
* 3.68.101 kurMiscellaneousTechnical = \& h00000080
* 3.68.102 kurMongolian = \& h00020000
* 3.68.103 kurMusicalSymbols = \& h01000000
* 3.68.104 kurMyanmar = \& h00000400
* 3.68.105 kurNewTaiLue = \& h80000000
* 3.68.106 kurNKo = \& h00000400
* 3.68.107 kurNonPlane0 = \& h02000000
* 3.68.108 kurNumberForms = \& h00000010
* 3.68.109 kurOgham = & h00004000
* 3.68.110 kurOlChiki = & h00040000
* 3.68.111 kurOldItalic = & h00200000
* 3.68.112 kurOldPersian = & h00000100
* 3.68.113 kurOpticalCharacterRecognition = & h00000200
* 3.68.114 kurOriya = & h00080000
* 3.68.115 kurOsmanya = & h00000400
* 3.68.116 kurPhagsPa = & h00200000
* 3.68.117 kurPhaistosDisc = & h01000000
* 3.68.118 kurPhoenician = & h04000000
* 3.68.119 kurPrivateUseAreaPlane0 = & h10000000
* 3.68.120 kurPrivateUsePlane15 = & h04000000
* 3.68.121 kurRejang = & h00200000
* 3.68.122 kurRunic = & h00008000
* 3.68.123 kurSaurashtra = & h00080000
* 3.68.124 kurShavian = & h00000200
* 3.68.125 kurSinhala = & h00000200
* 3.68.126 kurSmallFormVariants = 4
* 3.68.127 kurSpacingModifierLetters = & h00000020
* 3.68.128 kurSpecials = & h00000020
* 3.68.129 kurSundanese = & h00010000
* 3.68.130 kurSuperscriptsAndSubscripts = 1
* 3.68.131 kurSylotiNagri = & h00000010
* 3.68.132 kurSyriac = & h00000080
* 3.68.133 kurTagalog = & h00010000
* 3.68.134 kurTags = & h10000000
* 3.68.135 kurTaiLe = & h40000000
* 3.68.136 kurTaiXuanJingSymbols = & h00002000
* 3.68.137 kurTamil = & h00100000
* 3.68.138 kurTelugu = & h00200000
* 3.68.139 kurThaana = & h00000100
* 3.68.140 kurThai = & h01000000
* 3.68.141 kurTibetan = & h00000040
* 3.68.142 kurTifinagh = 4
* 3.68.143 kurUgaritic = & h00000080
* 3.68.144 kurUnifiedCanadianAboriginal = & h00002000
* 3.68.145 kurVai = & h00001000
* 3.68.146 kurVariationSelectors = & h08000000
* 3.68.147 kurVerticalForms = 2
* 3.68.148 kurYijingHexagramSymbols = 8
* 3.68.149 kurYiSyllables = & h00080000

– 3.69.1 class DynaPDFTableMBS
* 3.69.3 AddColumn(left as boolean, width as Double) as Integer
* 3.69.4 AddRow(height as Double = 0.0) as Integer
* 3.69.5 AddRows(count as UInt32, height as Double) as Integer
* 3.69.6 ClearColumn(Col as Integer, Types as Integer)
* 3.69.7 ClearContent(Types as Integer)
* 3.69.8 ClearRow(Row as Integer, Types as Integer)
* 3.69.9 Constructor
* 3.69.10 DeleteColumn(column as UInt32)
* 3.69.11 DeleteRow(row as UInt32)
* 3.69.12 DeleteRows
* 3.69.13 DrawTable(x as Double, y as Double, MaxHeight as Double = 0.0) as Double
* 3.69.14 GetFirstRow as Integer
* 3.69.15 GetFlags(Row as Integer, Column as Integer) as Integer
* 3.69.16 GetNextHeight(MaxHeight as Double, byref NextRow as Integer) as Double
* 3.69.17 GetNextRow as Integer
* 3.69.18 GetNumCols as Integer
* 3.69.19 GetNumRows as Integer
* 3.69.20 GetTableHeight as Double
* 3.69.21 GetTableWidth as Double
* 3.69.22 HaveMore as boolean
* 3.69.23 SetBackColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
* 3.69.24 SetBackColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean
* 3.69.25 SetBackColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
* 3.69.26 SetBackColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean
* 3.69.27 SetBackColorValue(Row as Integer, Column as Integer, TPDFColorSpace as Integer, ColorValue as UInt32) as boolean
* 3.69.28 SetBorderColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
* 3.69.29 SetBorderColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean
* 3.69.30 SetBorderColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
* 3.69.31 SetBorderColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean
* 3.69.32 SetBorderColorValue(Row as Integer, Column as Integer, TPDFColorSpace as Integer, ColorValue as UInt32) as boolean
* 3.69.33 SetBorderWidth(Row as Integer, Column as Integer, left as Double, top as Double, right as Double, bottom as Double) as boolean
* 3.69.34 SetCellAction(Row as Integer, Column as Integer, ActionHandle as UInt32, Mode as Integer) as boolean
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- 3.69.35 SetCellImage(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as FolderItem, index as Integer = 0) as boolean
- 3.69.36 SetCellImage(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as string, index as Integer = 0) as boolean
- 3.69.37 SetCellImageAnsi(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as string, index as Integer = 0) as boolean
- 3.69.38 SetCellImageData(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, ImageData as MemoryBlock, index as Integer = 0) as boolean
- 3.69.39 SetCellImageData(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, ImageData as string, index as Integer = 0) as boolean
- 3.69.40 SetCellOrientation(Row as Integer, Column as Integer, Orientation as Integer) as boolean
- 3.69.41 SetCellPadding(Row as Integer, Column as Integer, left as Double, top as Double, right as Double, bottom as Double) as boolean
- 3.69.42 SetCellSpacing(Row as Integer, Column as Integer, left as Double, top as Double, right as Double, bottom as Double) as boolean
- 3.69.43 SetCellTable(Row as Integer, Column as Integer, HAlign as Integer, VAlign as Integer, SubTable as DynaPDFTableMBS) as boolean
- 3.69.44 SetCellTemplate(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, TmplHandle as Integer, Width as Double = 0, Height as Double = 0) as boolean
- 3.69.45 SetCellText(Row as Integer, Column as Integer, HAlign as Integer, VAlign as Integer, text as string) as boolean
- 3.69.46 SetCellTextAnsi(Row as Integer, Column as Integer, HAlign as Integer, VAlign as Integer, text as string) as boolean
- 3.69.47 SetColWidth(column as UInt32, Width as Double, ExtTable as Boolean) as boolean
- 3.69.48 SetFlags(Row as Integer, Column as Integer, Flags as Integer) as boolean
- 3.69.49 SetFont(Row as Integer, Column as Integer, name as string, Style as Integer, Embed as Boolean, CodePage as Integer) as boolean
- 3.69.50 SetFontAnsi(Row as Integer, Column as Integer, name as string, Style as Integer, Embed as Boolean, CodePage as Integer) as boolean
- 3.69.51 SetFontSelMode(Row as Integer, Column as Integer, value as Int32) as boolean
- 3.69.52 SetFontSize(Row as Integer, Column as Integer, size as Double) as boolean
- 3.69.53 SetGridHorizontalColor(channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
- 3.69.54 SetGridHorizontalColorFloat(channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
- 3.69.55 SetGridHorizontalColorFloat(paramarray channels as Double) as boolean
- 3.69.56 SetGridHorizontalColorFloat(paramarray channels as Double) as boolean
* 3.69.57 SetGridHorizontalColorValue(TPDFColorSpace as Integer, ColorValue as UInt32) as boolean
* 3.69.58 SetGridVerticalColor(channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
* 3.69.59 SetGridVerticalColor(paramarray channels as Integer) as boolean
* 3.69.60 SetGridVerticalColorFloat(channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
* 3.69.61 SetGridVerticalColorFloat(paramarray channels as Double) as boolean
* 3.69.62 SetGridVerticalColorValue(TPDFColorSpace as Integer, ColorValue as UInt32) as boolean
* 3.69.63 SetGridWidth(h as Double, v as Double) as boolean
* 3.69.64 SetImageColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
* 3.69.65 SetImageColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean
* 3.69.66 SetImageColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
* 3.69.67 SetImageColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean
* 3.69.68 SetImageColorValue(Row as Integer, Column as Integer, TPDFColorSpace as Integer, ColorValue as UInt32) as boolean
* 3.69.69 SetPDF(pdf as DynaPDFMBS)
* 3.69.70 SetRowHeight(Row as Integer, value as Double) as boolean
* 3.69.71 SetTableWidth(Value as single, AdjustType as Integer, MinColWidth as single)
* 3.69.72 SetTextColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
* 3.69.73 SetTextColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean
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Chapter 3

DynaPDF

3.1 class DynaPDFAnnotationExMBS

3.1.1 class DynaPDFAnnotationExMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for extended annotation information.

**Example:**

```vba
dim pdf as DynaPDFMBS ' your instance

dim c as Integer = pdf.GetAnnotCount

for i as Integer = 0 to c-1
    dim a as DynaPDFAnnotationExMBS = pdf.GetAnnotEx(i)

    MsgBox str(a.Type)
next
```

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.1.2 Methods

3.1.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.
3.1.4 DashPattern(index as UInt32) as single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The dash pattern. **Notes:** If BorderStyle is kbsDashed.

3.1.5 InkList(index as UInt32) as Single()

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The ink list. **Notes:**

Ink annotations only. Array of array.
Index is from 0 to InkListCount-1.

3.1.6 QuadPoints(index as UInt32) as single

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Gets a quad point value. **Notes:**

Index from 0 to QuadPointsCount-1.
Highlight, Link, and Redact annotations only.

3.1.7 Vertices(index as UInt32) as single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The vertices array. **Notes:** Line, PolyLine, and Polygon annotations only.

3.1.8 Properties

3.1.9 AnnotFlags as UInt32

Plugin Version: 9.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The flags for this annotation. **Notes:**

You can use this constants:
3.1. CLASS DYNAPDFANNOTATIONEXMBS

kafNone = & h0000000
kafInvisible = & h0000001
kafHidden = & h0000002
kafPrint = & h0000004
kafNoZoom = & h0000008
kafNoRotate = & h0000010
kafNoView = & h0000020
kafReadOnly = & h0000040

(Read only property)

3.1.10 Author as String

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation’s author.

**Notes:**
This string is either an unicode encoded string or an ASCII encoded string.
(Read only property)

3.1.11 BackColor as UInt32

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Background color.

**Notes:** (Read only property)

3.1.12 BBox as DynaPDFRectMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Bounding box in bottom-up coordinates.

**Notes:** (Read only property)

3.1.13 BorderColor as UInt32

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Border color.

**Notes:** (Read only property)
3.1.14 BorderEffect as Integer

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The border effect. **Notes:**

Circle, Square, FreeText, and Polygon annotations. (Read only property)

3.1.15 BorderStyle as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Border style. **Notes:** (Read only property)

3.1.16 BorderWidth as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Border width. **Notes:** (Read only property)

3.1.17 Caption as Boolean

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the annotation string Content is used as caption. **Notes:**

The string is shown in a PopUp annotation otherwise. (Read only property)

3.1.18 CaptionOffsetX as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Horizontal offset of the caption from its normal position. **Notes:** (Read only property)

3.1.19 CaptionOffsetY as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Vertical offset of the caption from its normal position.
3.1. CaptionPos as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The position where the caption should be drawn if present.
**Notes:** (Read only property)

3.1.21 Content as String

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation’s contents.
**Notes:**
This string is either an unicode encoded string or an ASCII encoded string.
(Read only property)

3.1.22 CreateDate as String

Plugin Version: 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creation Date ->Optional
**Notes:** (Read only property)

3.1.23 DashPatternCount as UInt32

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of values in the array.
**Notes:** (Read only property)

3.1.24 Deleted as Boolean

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Is this annotation marked as deleted?
**Notes:** (Read only property)
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3.1.25 DestFile as String

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destination file. **Notes:**
For File link or web link annotations.

(Read only property)

3.1.26 DestPage as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destination page. **Notes:**
For Page link annotations only.

(Read only property)

3.1.27 DestPos as DynaPDFRectMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destination position. **Notes:**
For Page link annotations only.

(Read only property)

3.1.28 DestType as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destination type. **Notes:**
For Page link annotations only.

(Read only property)
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### 3.1.29 EmbeddedFileHandle as Integer

**Plugin Version:** 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The handle for the embedded file.

**Notes:**
For FileAttach annotations only. Use the handle with the GetEmbeddedFile function.
(Read only property)

### 3.1.30 Grouped as Boolean

**Plugin Version:** 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Meaningful only if Parent <>-1 and Type <>katPopUp.

**Notes:**
If true, the annotation is part of an annotation group. Properties like Content, CreateDate, ModDate, BackColor, Subject, and Open must be taken from the parent annotation.
(Read only property)

### 3.1.31 Handle as Integer

**Plugin Version:** 12.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The internal object reference.

**Notes:** (Read only property)

### 3.1.32 HighlightMode as Integer

**Plugin Version:** 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Visual effect.

**Notes:** (Read only property)

### 3.1.33 Icon as Integer

**Plugin Version:** 9.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The icon type for this annotation.

**Notes:**
The Icon type depends on the annotation type. If the annotation type is atText then the Icon is of type TAnnotIcon. If the annotation type is atFileAttach then it is of type kTFileAttachIcon. If the annotation type is atStamp then the Icon is the stamp type (kTRubberStamp). For any other annotation type this value is not set (-1).
3.1.34 InkListCount as Integer

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of ink arrays.
**Notes:** (Read only property)

3.1.35 Intent as String

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Markup annotations only.
**Notes:**
The intent allows to distinguish between different uses of an annotation. For example, line annotations have two intents: LineArrow and LineDimension.
(Read only property)

3.1.36 LE1 as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Style of the start point ->Line and PolyLine annotations only.
**Notes:** (Read only property)

3.1.37 LE2 as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Style of the end point ->Line and PolyLine annotations only.
**Notes:** (Read only property)

3.1.38 LeaderLineExtend as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional leader line extend beyond the leader line.
**Notes:** (Read only property)
3.1.39 LeaderLineLen as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the leader lines (positive or negative)
**Notes:** (Read only property)

3.1.40 LeaderLineOffset as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Amount of space between the endpoints of the annotation and the leader lines.
**Notes:** (Read only property)

3.1.41 MarkupAnnot as Boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the annotation is a markup annotation.
**Notes:**
Markup annotations can be flattened separately, see FlattenAnnots function.
(Read only property)

3.1.42 ModDate as String

Plugin Version: 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Modification Date
- Optional
**Notes:** (Read only property)

3.1.43 Name as String

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation’s name.
**Notes:**
This string is either an unicode encoded string or an ASCII encoded string.
(Read only property)
3.1.44 OC as Integer

Plugin Version: 15.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Handle of an OCG or OCMD or -1 if not set.

**Notes:**
Annotations can be part of an Optional Content Group (OCG) or Optional Content Membership Dictionary (OCMD). If OC is greater -1 an OCG or OCMD handle was set. To determine whether an OCG handle was set, check whether the value is smaller & h40000000.
(Read only property)

3.1.45 Opacity as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The annotation's opacity.

**Notes:**
Opacity = 1.0 = Opaque, Opacity <1.0 = Transparent, Markup annotations only
(Read only property)

3.1.46 Open as Boolean

Plugin Version: 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Meaningful only for annotations which have a corresponding PopUp annotation.

**Notes:** (Read only property)

3.1.47 PageIndex as UInt32

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The page index is used to sort form fields.

**Notes:**
See SortFieldsByIndex().
(Read only property)

3.1.48 PageNum as UInt32

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Page on which the annotation appears.

**Notes:** (Read only property)
3.1.49 Parent as Integer

Plugin Version: 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Parent annotation handle of a PopUp Annotation or the parent annotation if this annotation represents a state of a base annotation.

**Notes:**
In this case, the annotation type is always atText and only the following members should be considered:

- **State** The current state
- **StateModel** Marked, Review, and so on
- **CreateDate** Creation Date
- **ModDate** Modification Date
- **Author** The user who has set the state
- **Content** Not displayed in Adobe’s Acrobat...
- **Subject** Not displayed in Adobe’s Acrobat...

The PopUp annotation of a text annotation which represent an Annotation State must be ignored. (Read only property)

3.1.50 PopUp as Integer

Plugin Version: 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Handle of the corresponding PopUp annotation if any.

**Notes:** (Read only property)

3.1.51 QuadPointsCount as UInt32

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of quad points.

**Notes:**
Highlight, Link, and Redact annotations only. (Read only property)

3.1.52 RD as DynaPDFRectMBS

Plugin Version: 16.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The rectangular difference between the annotations bounding box and the content area.

**Notes:**
Caret, Circle, Square, and FreeText annotations.  
(Read only property)

### 3.1.53 RichStyle as String

**Function:** Optional default style string.  
**Notes:**  
For FreeText annotations.  
(Read only property)

### 3.1.54 RichText as String

**Function:** Optional rich text string (RC key).  
**Notes:**  
For Markup annotations.  
(Read only property)

### 3.1.55 Rotate as Integer

**Function:** The rotation for caret annotations.  
**Notes:**  
Caret annotations only. Must be zero or a multiple of 90. This key is not documented in the specs.  
(Read only property)

### 3.1.56 StampName as String

**Function:** The stamp name.  
**Notes:**  
Set only, if Icon property is rsUserDefined.  
(Read only property)
3.1.57 State as String

Plugin Version: 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The state of the annotation.  
**Notes:** (Read only property)

3.1.58 StateModel as String

Plugin Version: 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The state model (Marked, Review, and so on).  
**Notes:** (Read only property)

3.1.59 Subject as String

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation’s subject.  
**Notes:**  
This string is either an unicode encoded string or an ASCII encoded string.  
(Read only property)

3.1.60 Subtype as String

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The subtype.  
**Notes:**  
Set only, if Type = katUnknownAnnot.  
(Read only property)

3.1.61 Type as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation type.  
**Notes:**  
See at* constants.  
(Read only property)
3.1.62 VerticesCount as UInt32

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of values in the vertices array.

**Notes:**

This is the raw number of floating point values. Since a vertex requires always two coordinate pairs, the number of vertices or points is VerticeCount divided by 2.

(Read only property)
3.2.1 class DynaPDFAnnotationMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for annotation information.

**Example:**

```vba
dim pdf as DynaPDFMBS // your instance

dim c as Integer = pdf.GetAnnotCount

going for i as Integer = 0 to c-1
dim a as DynaPDFAnnotationMBS = pdf.GetAnnot(i)

MsgBox str(a.Type)
next
```

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.2.2 Methods

3.2.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.2.4 Properties

3.2.5 Author as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation’s author.

**Notes:**

This string is either an unicode encoded string or an ASCII encoded string. (Read only property)
3.2.6 BackColor as UInt32

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Background color.  
**Notes:** (Read only property)

3.2.7 BBox as DynaPDFRectMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Bounding box in bottom-up coordinates.  
**Notes:** (Read only property)

3.2.8 BorderColor as UInt32

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Border color.  
**Notes:** (Read only property)

3.2.9 BorderStyle as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Border style.  
**Notes:** (Read only property)

3.2.10 BorderWidth as Single

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Border width.  
**Notes:** (Read only property)

3.2.11 Content as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation's contents.  
**Notes:**  
This string is either an unicode encoded string or an ASCII encoded string.  
(Read only property)
3.2. CLASS DYNAPDFANNOTATIONMBS

3.2.12 Deleted as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Is this annotation marked as deleted?
**Notes:** (Read only property)

3.2.13 Handle as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation handle.
**Notes:** (Read only property)

3.2.14 HighlightMode as Integer

**Notes:**
See hm* constants.
(Read only property)

3.2.15 Name as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation’s name.
**Notes:**
This string is either an unicode encoded string or an ASCII encoded string.
(Read only property)

3.2.16 PageNum as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Page on which the annotation appears.
**Notes:** (Read only property)

3.2.17 Subject as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation’s subject.
**Notes:**
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This string is either an unicode encoded string or an ASCII encoded string.
(Read only property)

3.2.18 Type as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Annotation type.
**Notes:**
See at* constants.
(Read only property)
3.3. CLASS DYNAPDFBARCODEMBS

3.3 class DynaPDFBarcodeMBS

3.3.1 class DynaPDFBarcodeMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for detail information on barcode fields.

3.3.2 Properties

3.3.3 Caption as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional, the caption.
**Notes:** (Read and Write property)

3.3.4 ECC as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The error correction code.
**Notes:**
0..8 for PDF417, or 0..3 for QRCode
(Read and Write property)

3.3.5 Height as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Height in inches.
**Notes:** (Read and Write property)

3.3.6 nCodeWordCol as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of codewords per barcode column.
**Notes:**
Required for PDF417.
(Read and Write property)
### 3.3.7 nCodeWordRow as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of codewords per barcode row.  
**Notes:**  
Required for PDF417.  
(Read and Write property)

### 3.3.8 Resolution as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The resolution.  
**Notes:**  
Required. Should be 300.  
(Read and Write property)

### 3.3.9 Symbology as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The symbology.  
**Notes:**  
PDF417, QRCode, or DataMatrix.  
(Read and Write property)

### 3.3.10 Version as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The version of this object.  
**Notes:**  
Should be 1  
(Read and Write property)

### 3.3.11 Width as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Width in inches.  
**Notes:** (Read and Write property)
3.3. CLASS DYNAPDFBARCODEMBS

3.3.12 XSymHeight as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The vertical distance between two barcode modules, measured in pixels.

**Notes:**

Only needed for PDF417.
The ratio XSymHeight/XSymWidth shall be an integer value. For PDF417, the acceptable ratio range is from 1 to 4. For QRCODE and DataMatrix, this ratio shall always be 1.
(Read and Write property)

3.3.13 XSymWidth as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Required. The horizontal distance, in pixels, between two barcode modules.

**Notes:** (Read and Write property)
3.4 class DynaPDFBitmapMBS

3.4.1 class DynaPDFBitmapMBS

Plugin Version: 14.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a bitmap in DynaPDF.

**Notes:**
Currently only used for RenderAnnotOrField function.
This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.4.2 Methods

3.4.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.4.4 Properties

3.4.5 Buffer as Memoryblock


**Notes:**
To avoid problems, this is a copy of the image data.
(Read and Write property)

3.4.6 BufSize as Integer


**Notes:** (Read and Write property)

3.4.7 DestX as Integer

Plugin Version: 14.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** x-coordinate in the main image (the rendered page)
3.4. CLASS DYNAPDFBITMAPMBS

Notes: (Read and Write property)

3.4.8 DestY as Integer

Plugin Version: 14.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** y-coordinate in the main image (the rendered page)

Notes: (Read and Write property)

3.4.9 Height as Integer


Notes: (Read and Write property)

3.4.10 Stride as Integer


Notes: (Read and Write property)

3.4.11 Width as Integer


Notes: (Read and Write property)
3.5 class DynaPDFBookmarkMBS

3.5.1 class DynaPDFBookmarkMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for bookmark information. **Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.5.2 Methods

3.5.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.5.4 Properties

3.5.5 ColorValue as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Bookmark color (PDF 1.4). **Notes:** (Read and Write property)

3.5.6 DestPage as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Destination page. **Notes:** (Read and Write property)

3.5.7 DestPos as DynaPDFRectMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Destination position. **Notes:** (Read and Write property)
3.5. CLASS DYNAPDFBOOKMARKMBS

3.5.8 DestType as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Destination type. **Notes:** (Read and Write property)

3.5.9 Handle as Integer

Plugin Version: 18.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The bookmark handle. **Notes:**

Index from 0 to GetBookmarkCount-1. (Read and Write property)

3.5.10 Open as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** True if the bookmark appears open. **Notes:** (Read and Write property)

3.5.11 Parent as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Parent bookmark if any or -1. **Notes:** (Read and Write property)

3.5.12 Style as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Text style (PDF 1.4). **Notes:** (Read and Write property)

3.5.13 Title as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The title string. **Notes:**
This string is either an unicode encoded string or an ASCII encoded string.
(Read and Write property)

3.5.14 TitleLen as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The title length.
**Notes:** (Read and Write property)
3.6. class DynaPDFChoiceValueMBS

3.6.1 class DynaPDFChoiceValueMBS

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for choice values in a PDF.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.6.2 Methods

3.6.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.6.4 Properties

3.6.5 ExpValue as String


**Notes:** (Read and Write property)

3.6.6 Selected as Boolean

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the choice value is selected.

**Notes:** (Read and Write property)

3.6.7 Value as String

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The value.

**Notes:** (Read and Write property)
3.7 class DynaPDFCIDMetricMBS

3.7.1 class DynaPDFCIDMetricMBS


**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.7.2 Methods

3.7.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.7.4 Properties

3.7.5 Width as Double


**Notes:** (Read and Write property)

3.7.6 x as Double


**Notes:** (Read and Write property)

3.7.7 y as Double


**Notes:** (Read and Write property)
3.8.1 class DynaPDFCMapMBS

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a character map in DynaPDF.

**Notes:**
This class contains several duplicate fields because CMap files contain usually a DSC comment section which provides Postscript specific initialization code. With exception of DSCResName the strings in the DSC section should not differ from their CMap counterparts. The Identity mapping of a character collection should contain the DSC comment "% % BeginResource: CMap (Identity)". Otherwise the string should be set to the CMap name.
This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.8.2 Methods

3.8.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.8.4 Properties

3.8.5 BaseCMap as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If set, this base cmap is required when loading the cmap.
**Notes:** (Read only property)

3.8.6 CIDCount as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The ID count.
**Notes:**
0 if not set.
(Read only property)
3.8.7 CMapName as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The CMap name. **Notes:** (Read only property)

3.8.8 CMapType as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The CMap type. **Notes:**
Should be 1!
(Read only property)

3.8.9 CMapVersion as Double

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The CMap version. **Notes:** (Read only property)

3.8.10 DSCBaseCMap as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** DSC comment. **Notes:** (Read only property)

3.8.11 DSCCMapVersion as Double

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The DSC CMap version. **Notes:** (Read only property)

3.8.12 DSCResName as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** DSC comment. **Notes:**
If the CMap uses an Identity mapping this string should be set to Identity. (Read only property)
3.8. CLASS DYNAPDFCMAPMBS

3.8.13 DSCTitle as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The DSC title.  
**Notes:**
DSC comment ->DSC CMap name + Registry + Ordering + Supplement, e.g. "GB-EUC-H Adobe GB1 0"  
(Read only property)

3.8.14 FileName as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The file name.  
**Notes:**
The file name and CMap name should be identical!  
(Read only property)

3.8.15 FilePath as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The file path.  
**Notes:** (Read only property)

3.8.16 Ordering as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The ordering.  
**Notes:**
CIDSystemInfo ->The Character Collection, e.g. Japan1.  
(Read only property)

3.8.17 Registry as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The registry string.  
**Notes:**
CIDSystemInfo ->The registrant of the Character Collection is usually Adobe.  
(Read only property)
3.8.18 Supplement as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Supplement number.

**Notes:**
CIDSystemInfo -> The Supplement number should be supported in the used PDF Version.
(Read only property)

3.8.19 WritingMode as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The writing mode.

**Notes:**
0 == Horizontal, 1 == Vertical
(Read only property)
3.9. class DynaPDFColorProfilesExMBS

3.9.1. class DynaPDFColorProfilesExMBS

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A set of ICC profiles for color management.

**Notes:**

In general, the DefInXXX profiles are used if no other profile is available for the color space. Possible sources are DefaultGray, DefaultRGB, DefaultCMYK, and the Rendering Intents.

The SoftProof profile emulates the output device. This is typically a printer profile or a default CMYK profile. If no profile is set then no device will be emulated. What you see is maybe not what you get on a printer.

To disable color management set the parameter Profiles of InitColormanagement() to nil.

Please use DynaPDFColorProfilesExMBS when you have profiles in memory and DynaPDFColorProfilesMBS when you have them as files.

3.9.2. Properties

3.9.3. DefInCMYK as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The CMYK Profile.

**Notes:**

Optional, CMYK colors are the problematic ones. The other profiles can be created on demand but this is not possible with a CMYK profile. So, this is the most important input profile.

(Read and Write property)

3.9.4. DefInGray as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The gray profile.

**Notes:**

Optional

(Read and Write property)
3.9.5 DefInRGB as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The RGB profile.

**Notes:**
Optional, sRGB is the default.
(Read and Write property)

3.9.6 DeviceProfile as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The output device profile.

**Notes:**
Optional, the output profile must be compatible with the output color space.
At this time only Gray or RGB profiles are supported. This is the monitor profile! Default is sRGB.
(Read and Write property)

3.9.7 SoftProof as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The proofing profile.

**Notes:**
Optional but very important. This profile emulates the output device.
(Read and Write property)
3.10.1 class DynaPDFColorProfilesMBS


**Notes:**

In general, the DefInXXX profiles are used if no other profile is available for the color space. Possible sources are DefaultGray, DefaultRGB, DefaultCMYK, and the Rendering Intents. The SoftProof profile emulates the output device. This is typically a printer profile or a default CMYK profile. If no profile is set then no device will be emulated. What you see is maybe not what you get on a printer. To disable color management set the parameter Profiles of InitColormanagement() to nil.

Please use DynaPDFColorProfilesExMBS when you have profiles in memory and DynaPDFColorProfilesMBS when you have them as files.

3.10.2 Properties

3.10.3 DefInCMYK as FolderItem

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The CMYK Profile.

**Notes:**

Optional, CMYK colors are the problematic ones. The other profiles can be created on demand but this is not possible with a CMYK profile. So, this is the most important input profile.
(Read and Write property)

3.10.4 DefInGray as FolderItem

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The gray profile.

**Notes:**

Optional
(Read and Write property)
3.10.5 DefInRGB as FolderItem

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The RGB profile. 
**Notes:**
Optional, sRGB is the default.  
(Read and Write property)

3.10.6 DeviceProfile as FolderItem

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The output device profile. 
**Notes:**
Optional, the output profile must be compatible with the output color space.  
At this time only Gray or RGB profiles are supported. This is the monitor profile! Default is sRGB. 
(Read and Write property)

3.10.7 SoftProof as FolderItem

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The proofing profile. 
**Notes:**
Optional but very important. This profile emulates the output device. 
(Read and Write property)
3.11. class DynaPDFColorSpaceMBS

3.11.1 class DynaPDFColorSpaceMBS

Notes: This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.11.2 Methods

3.11.3 BlackPoint(index as Integer) as Double

Notes: If set, the array contains exactly 3 values. (index 0 to 2)

3.11.4 Colorants(index as Integer) as string

Example:

Sub DrawSomething(pdf as DynaPDFMBS)
    // draw all colorants with their own color
    Dim MyX, MyY as Double
    MyX = 10
    MyY = 100
    // set a font
    call pdf.SetFont "Times", pdf.kfsItalic, 10.0, true, pdf.kcp1252
    // loop over all color spaces
    dim Colorcount as Integer = pdf.GetColorSpaceCount
    For j as Integer = 0 to Colorcount-1
        MyX = 10
        dim MyColourSpace as DynaPDFColorSpaceMBS = PDF.GetColorSpaceObj(j)
        dim ColorantsCount as Integer = MyColourSpace.ColorantsCount
        dim c as Integer = MyColourSpace.NumInComponents
        Call pdf.SetExtColorSpace j
        // draw name of each colorant
End Sub
for i as Integer = 0 to c-1

    // build array with colors and set 100% for the one color we need
    dim values() as Double
    redim values(c-1)
    values(i) = 1.0

    // get name
    dim name as string = "# " + str(i)
    if i <= ColorantsCount then
        name = MyColourSpace.Colorants(i)
    end if

    // seew name
    Call pdf.SetFillColor(values)
    call pdf.WriteText(MyX, MyY, name)

    // next
    MyX = MyX + pdf.GetTextWidth(name) + 20
next

    // next
    MyY = MyY+20
next
End Sub

Notes:
This array contains ColorantsCount strings.
The plugin marks the string as UTF-8 and it should contain UTF-8. Be we saw PDF files form other applications which put here WindowsANSI or MacRoman strings.

3.11.5 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.11.6 Gamma(index as Integer) as Double

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The gamma values. **Notes:** If set, one value per component.
3.11. CLASS DYNAPDFCOLORSPACEMBS

3.11.7 Matrix(index as Integer) as Double

**Notes:** If set, the array contains exactly 9 values.

3.11.8 Range(index as Integer) as Double

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The range values. 
**Notes:** min/max for each component or for the .a and .b components of a Lab color space. Index is zero based.

3.11.9 WhitePoint(index as Integer) as Double

**Notes:** If set, the array contains exactly 3 values. (index 0 to 2)

3.11.10 Properties

3.11.11 Alternate as DynaPDFColorSpaceMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The alternative color space. 
**Notes:** Only set if the color space contains an alternate or base color space. 
(Read only property)

3.11.12 AlternateType as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Alternate color space or base space of an Indexed or Pattern color space. 
**Notes:** (Read only property)

3.11.13 Buffer as string

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Contains either an ICC profile or the color table of an Indexed color space.
3.11.14 BufferSize as Integer

Notes: (Read only property)

3.11.15 ColorantsCount as Integer

Example:
Sub DrawSomething(pdf as DynaPDFMBS)
// draw all colorants with their own color
Dim MyX, MyY as Double

MyX = 10
MyY = 100

// set a font
call pdf.SetFont "Times", pdf.kfsItalic, 10.0, true, pdf.kcp1252

// loop over all color spaces
dim Colorcount as Integer = pdf.GetColorSpaceCount
For j as Integer = 0 to Colorcount - 1
MyX = 10
dim MyColourSpace as DynaPDFColorSpaceMBS = PDF.GetColorSpaceObj(j)
dim ColorantsCount as Integer = MyColourSpace.ColorantsCount
dim c as Integer = MyColourSpace.NumInComponents
Call pdf.SetExtColorSpace j

// draw name of each colorant
for i as Integer = 0 to c - 1

// build array with colors and set 100% for the one color we need
dim values() as Double
redim values(c - 1)
values(i) = 1.0

// get name
dim name as string = "# " + str(i)
if i <= ColorantsCount then
name = MyColourSpace.Colorants(i)
end if

// seaw name
Call pdf.SetFillColor(values)
call pdf.WriteText(MyX,MyY, name)

// next
MyX = MyX + pdf.GetTextWidth(name) + 20
next

// next
MyY = MyY + 20
Next
End Sub

Notes: (Read only property)

3.11.16 Description as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The description text for color space. Notes:
For color spaces with valid ICC profile only.
(Read only property)

3.11.17 DeviceNAttributes as DynaPDFDeviceNAttributesMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Optional attributes of DeviceN or NChannel color spaces. Notes: (Read only property)

3.11.18 Handle as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The internal handle for this color space object. Notes: (Read only property)
3.11.19 HasBlackPoint as Boolean

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the black point array has values. 
**Notes:** (Read only property)

3.11.20 HasGamma as Boolean

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the gamma array has values. 
**Notes:** (Read only property)

3.11.21 HasMatrix as Boolean

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the matrix array has values. 
**Notes:** (Read only property)

3.11.22 HasRange as Boolean

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the range array has values. 
**Notes:** (Read only property)

3.11.23 HasWhitePoint as Boolean

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the white point array has values. 
**Notes:** (Read only property)

3.11.24 Index as Integer

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The index in the color space list for current document. 
**Notes:**

Can be -1 if not known by plugin. 
In that case you would need to get list of all colorspaces and compare handle values to see which entry you
3.11. Class DynaPDFColorSpaceMBS

got.
(Read only property)

### 3.11.25 Manufacturer as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The manufacturer text for color space.  
**Notes:**  
For color spaces with valid ICC profile only.  
(Read only property)

### 3.11.26 MetaData as string

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional XMP metadata stream -> ICCBased only.  
**Notes:** (Read only property)

### 3.11.27 MetadataSize as Integer

**Notes:** (Read only property)

### 3.11.28 Model as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The model text for color space.  
**Notes:**  
For color spaces with valid ICC profile only.  
(Read only property)

### 3.11.29 Name as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The name of the color space.  
**Notes:**
For color spaces with valid ICC profile only.
The plugin picks name from Model, Description and Manufacturer properties.
(Read only property)

3.11.30 NumColors as Integer

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of colors in this color space.
**Notes:**
HiVal + 1 as specified in the color space. Indexed color space only.
(Read only property)

3.11.31 NumInComponents as Integer

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of input components.
**Notes:** (Read only property)

3.11.32 NumOutComponents as Integer

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of output components.
**Notes:** (Read only property)

3.11.33 Type as Integer

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of this color space.
**Notes:** (Read only property)

3.11.34 TypeString as String

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type as string for viewing in debugger.
**Notes:** (Read only property)
3.12. CLASS DYNAPDFDEVICENATTRIBUTESMBS

3.12 class DynaPDFDeviceNAttributesMBS

3.12.1 class DynaPDFDeviceNAttributesMBS

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for information about a Device N.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.12.2 Methods

3.12.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.12.4 ProcessColorants(index as Integer) as string

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns process colorants with the given index.

**Notes:**
- Raises out of bounds exceptions on bad index or if object does not have such an array.
- Index is zero based.

3.12.5 Separations(index as Integer) as DynaPDFColorSpaceMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional array of separation color spaces.

**Notes:**
- Raises out of bounds exceptions if used with wrong index parameter.
- Index is zero based.
3.12.6 Properties

3.12.7 ProcessColorantsCount as Integer

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of process colorants in the array or zero if not set.
**Notes:** (Read and Write property)

3.12.8 ProcessColorSpace as DynaPDFColorSpaceMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The process color space.
**Notes:** (Read and Write property)

3.12.9 SeparationsCount as Integer

**Notes:** (Read and Write property)
3.13. class DynaPDFEditTextMBS

3.13.1 class DynaPDFEditTextMBS

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The text editor. **Notes:** If you have problems with asian characters, please make sure you use SetCMapDir and load the CMAPs.

3.13.2 Methods

3.13.3 Constructor(PDF as DynaPDFMBS)

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Initializes the edit text class with the given PDF instance.

3.13.4 Destructor

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destructor.

3.13.5 FindPattern(text as string) as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Searches the text on the current PDF page for the given text. **Notes:** Returns the number of occurrences.

If you have problems with asian characters, please make sure you use SetCMapDir and load the CMAPs.

3.13.6 ReplacePattern(NewText as string)

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces the text with a new one or deletes it if the new string is an empty string. **Notes:** Use the PrepareWrite event.
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If you have problems with asian characters, please make sure you use SetCMapDir and load the CMAPs.

3.13.7 Properties

3.13.8 Parent as DynaPDFMBS

**Notes:** (Read only property)

3.13.9 Events

3.13.10 PrepareWrite(M as DynaPDFMatrixMBS, text as string, FillCS as Integer, FillColor as UInt32, StrokeCS as Integer, StrokeColor as UInt32, FontSize as Double, x as Double, y as Double, w as Double, h as Double, font as DynaPDFFontMBS) as boolean

Plugin Version: 12.5, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The event called before replace function writes.  
**Notes:**

Changed font, text size or color here.  
If you return true, the text is not written.  
Like if you draw it yourself or delete it.

Add new parameters for fill color, stroke color, font size, rectangle and font information in version 17.0.
3.14. class DynaPDFEmbFileNodeMBS

3.14.1 class DynaPDFEmbFileNodeMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for an embedded file node.
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.14.2 Methods

3.14.3 Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.14.4 Properties

3.14.5 EF as DynaPDFFileSpecMBS

**Notes:** (Read only property)

3.14.6 Name as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The name.
**Notes:**
UTF-8 encoded name. This key contains usually a 7 bit ASCII string.
(Read only property)

3.14.7 NextObject as DynaPDFEmbFileNodeMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Next node if any.
**Notes:** (Read only property)
3.15 class DynaPDFErrorMBS

3.15.1 class DynaPDFErrorMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for an entry in the error log. **Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.15.2 Methods

3.15.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.15.4 Properties

3.15.5 Message as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The error message **Notes:** (Read and Write property)

3.15.6 ObjNum as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Object Number. **Notes:**
-1 if not available
(Read and Write property)

3.15.7 Offset as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The offset. **Notes:**
-1 if not available
(Read and Write property)
3.15. **CLASS DYNAPDFERRORMBS**

### 3.15.8 SrcFile as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The source file. **Notes:** (Read and Write property)

### 3.15.9 SrcLine as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Source Line. **Notes:** (Read and Write property)
3.16  class DynaPDFExtGState2MBS

3.16.1 class DynaPDFExtGState2MBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The extended graphics state class.

3.16.2 Methods

3.16.3 BlendMode(index as Integer) as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The blend modes. **Notes:** See bm* constants.

3.16.4 Properties

3.16.5 AlphaIsShape as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The AlphaIsShape property. **Notes:** PDF_MAX_INT if not set. (Read and Write property)

3.16.6 AutoStrokeAdjust as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The AutoStrokeAdjust property. **Notes:** PDF_MAX_INT if not set. (Read and Write property)

3.16.7 BlackGen as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function handle or 0.
3.16. CLASS DYNAPDFEXTGSTATE2MBS

Notes: (Read and Write property)

3.16.8 BlackGen2 as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function handle or 0. Notes: (Read and Write property)

3.16.9 BlendModeCount as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The blend mode count. Notes: (Read and Write property)

3.16.10 FillAlpha as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The fill alpha. Notes:
-1.0 if not set.
(Read and Write property)

3.16.11 FlatnessTol as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The FlatnessTol property. Notes:
-1.0 if not set.
(Read and Write property)

3.16.12 Halftone as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The halftone handle or 0. Notes: (Read and Write property)
3.16.13 OverPrintFill as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The OverPrintFill property.  
**Notes:**  
PDF_MAX_INT if not set.  
(Read and Write property)

3.16.14 OverPrintMode as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The OverPrintMode property.  
**Notes:**  
PDF_MAX_INT if not set.  
(Read and Write property)

3.16.15 OverPrintStroke as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The OverPrintStroke property.  
**Notes:**  
PDF_MAX_INT if not set.  
(Read and Write property)

3.16.16 RenderingIntent as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The rendering intent.  
**Notes:**  
riNone if not set  
(Read and Write property)

3.16.17 SmoothnessTol as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The SmoothnessTol property.  
**Notes:**
3.16.18  SoftMask as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Soft mask handle.
**Notes:** (Read and Write property)

3.16.19  SoftMaskNone as Boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the softmask must be disabled.
**Notes:** (Read and Write property)

3.16.20  StrokeAlpha as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The stoke alpha value.
**Notes:**
-1.0 if not set.
(Read and Write property)

3.16.21  TextKnockout as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The TextKnockout property.
**Notes:**
PDF_MAX_INT if not set.
(Read and Write property)
3.17 class DynaPDFExtGStateMBS

3.17.1 class DynaPDFExtGStateMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The extended graphics state class.

3.17.2 Properties

3.17.3 AlphaIsShape as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The AlphaIsShape property. **Notes:** PDF_MAX_INT if not set. (Read and Write property)

3.17.4 AutoStrokeAdjust as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The AutoStrokeAdjust property. **Notes:** PDF_MAX_INT if not set. (Read and Write property)

3.17.5 BlendMode as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The blend mode. **Notes:** See bm* constants. Default bmNotSet. (Read and Write property)

3.17.6 FillAlpha as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The fill alpha. **Notes:**
3.17. CLASS DYNAPDFEXTGSTATEMBS

-1.0 if not set.
(Read and Write property)

3.17.7 FlatnessTol as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The FlatnessTol property.
**Notes:**
-1.0 if not set.
(Read and Write property)

3.17.8 OverPrintFill as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The OverPrintFill property.
**Notes:**
PDF_MAX_INT if not set.
(Read and Write property)

3.17.9 OverPrintMode as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The OverPrintMode property.
**Notes:**
PDF_MAX_INT if not set.
(Read and Write property)

3.17.10 OverPrintStroke as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The OverPrintStroke property.
**Notes:**
PDF_MAX_INT if not set.
(Read and Write property)
3.17.11 RenderingIntent as Integer

Notes:
riNone if not set
(Read and Write property)

3.17.12 SmoothnessTol as Double

Notes:
-1.0 if not set.
(Read and Write property)

3.17.13 SoftMask as Integer

Notes: (Read and Write property)

3.17.14 SoftMaskNone as Boolean

Notes: (Read and Write property)

3.17.15 StrokeAlpha as Double

Notes:
-1.0 if not set.
(Read and Write property)
3.17.16 TextKnockout as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The TextKnockout property.

**Notes:**

PDF_MAX_INT if not set.

(Read and Write property)
3.18 class DynaPDFFieldExMBS

3.18.1 class DynaPDFFieldExMBS

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for extended field information.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.18.2 Methods

3.18.3 Close

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destructor.

**Notes:** You can call close to release all values now or simply let it go automatically later.

3.18.4 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.18.5 Kids(index as Integer) as DynaPDFFieldExMBS

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Array of child fields.

3.18.6 Properties

3.18.7 Action as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Action handle or -1 if not set.

**Notes:**
This action is executed when the field is activated.
(Read only property)
3.18. **CLASS DYNAPDFIELDEXMBS**

### 3.18.8 *ActionType as Integer*

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of action. **Notes:**

- See kat* constants.
- Meaningful only, if Action >= 0.
- (Read only property)

### 3.18.9 *BackColor as UInt32*

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Background color. **Notes:** (Read only property)

### 3.18.10 *BackColorSP as Integer*

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Color space of the background color. **Notes:** (Read only property)

### 3.18.11 *Barcode as DynaPDFBarcodeMBS*

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If present, this field is a barcode field. **Notes:**

- The field type is set to kftText since barcode fields are extended text fields.
- (Read only property)

### 3.18.12 *BBox as DynaPDFRectMBS*

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Bounding box of the field in bottom-up coordinates. **Notes:** (Read only property)
3.18.13 BorderColor as UInt32

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Border color. **Notes:** (Read only property)

3.18.14 BorderColorSP as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Color space of the border color. **Notes:** (Read only property)

3.18.15 BorderStyle as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Border style. **Notes:** (Read only property)

3.18.16 BorderWidth as Single

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Border width. **Notes:** (Read only property)

3.18.17 CaptionPos as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Where to position the caption. **Notes:**

Use constants kbcpCaptionAbove, kbcpCaptionBelow, kbcpCaptionLeft, kbcpCaptionOnly, kbcpCaptionOver, kbcpCaptionRight or kbcpImageOnly. (Read only property)

3.18.18 CharSpacing as Single

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The char spacing. **Notes:**

Text fields only. (Read only property)
3.18.19 **CheckBoxChar as Integer**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The ZapfDingbats character that is used to display the on state. **Notes:** (Read only property)

3.18.20 **Checked as Boolean**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The check value. **Notes:**
Check boxes only
(Read only property)

3.18.21 **DefState as Integer**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The default state. **Notes:**
Check boxes only
(Read only property)

3.18.22 **DefValue as String**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional default value. **Notes:** (Read only property)

3.18.23 **Deleted as Boolean**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the field was marked as deleted by DeleteField(). **Notes:** (Read only property)
3.18.24  DownCaption as String

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** Caption of the down state.
**Notes:** (Read only property)

3.18.25  DownImage as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** Image handle of the down state.
**Notes:**
You can use this image handle with GetImageObj to get the image.
(Read only property)

3.18.26  EditFont as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** Postscript name of the editing font.
**Notes:** (Read only property)

3.18.27  Events as DynaPDFObjEventMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The events for this fields.
**Notes:** (Read only property)

3.18.28  ExpValCount as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** Combo and list boxes only.
**Notes:**
The values can be accessed with GetFieldExpValueEx().
(Read only property)
3.18.29 ExpValue as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The exp value.  
**Notes:**  
Check boxes only.  
(Read only property)

3.18.30 FieldFlags as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Field flags.  
**Notes:** (Read only property)

3.18.31 FieldFont as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Postscript name of the font.  
**Notes:** (Read only property)

3.18.32 FieldName as String

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The field name.  
**Notes:**  
Note that children of a field group or radio button have no name.  
(Read only property)

3.18.33 FieldType as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Field type.  
**Notes:** (Read only property)

3.18.34 FontSize as Double

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Font size. 0.0 means auto font size.  
**Notes:** (Read only property)
3.18.35  GroupType as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If GroupType <> FieldType the field is a terminal field of a field group.  
**Notes:** (Read only property)

3.18.36  Handle as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Field handle.  
**Notes:** (Read only property)

3.18.37  HighlightMode as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Highlight mode.  
**Notes:** (Read only property)

3.18.38  IEditFont as DynaPDFFontMBS

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The edit font object.  
**Notes:**  
The object is created on demand the first time you access and cached.  
(Read only property)

3.18.39  IEditFontInfo as DynaPDFFontInfoMBS

**Notes:**  
The object is created on demand the first time you access and cached.  
(Read only property)

3.18.40  IFieldFont as DynaPDFFontMBS

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The field font object.
3.18. CLASS DYNAPDFIELDEXMBS

Notes:
The object is created on demand the first time you access and cached.
(Read only property)

3.18.41 IFieldFontInfo as DynaPDFFontInfoMBS

**Notes:**
The object is created on demand the first time you access and cached.
(Read only property)

3.18.42 IsCalcField as Boolean

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the OnCalc event of the field is connected with a JavaScript action.
**Notes:** (Read only property)

3.18.43 KidCount as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of fields in the Kids array.
**Notes:** (Read only property)

3.18.44 MapName as String

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional unique mapping name of the field.
**Notes:** (Read only property)

3.18.45 MaxLen as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The maximum text length.
**Notes:**
Text fields only -> zero means not restricted.
(Read only property)

3.18.46  ModDate as String

Plugin Version: 13.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Modification date. **Notes:** (Read only property)

3.18.47  OC as Integer

Plugin Version: 15.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Handle of an OCG or OCMD or -1. **Notes:**
Fields can be part of an Optional Content Group (OCG) or Optional Content Membership Dictionary (OCMD). If OC is greater -1 an OCG or OCMD handle was set. To determine whether an OCG handle was set, check whether the value is smaller & h40000000. (Read only property)

3.18.48  PageIndex as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Array index to change the tab order. **Notes:**
see SortFieldsByIndex(). (Read only property)

3.18.49  PageNum as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Page on which the field is used or -1. **Notes:** (Read only property)

3.18.50  RollCaption as String

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Caption of the rollover state.
3.18. **CLASS DYNAPDFFIELDEXMBS**

**Notes:** (Read only property)

### 3.18.51 RollImage as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Image handle of the roll over state.

**Notes:**

You can use this image handle with GetImageObj to get the image.

(Read only property)

### 3.18.52 Rotate as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Rotation angle in degrees.

**Notes:** (Read only property)

### 3.18.53 Signature as DynaPDFSigDictMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The signature details.

**Notes:**

Signature fields only. Present only for imported signature fields which which have a value. That means the file was digitally signed. Signed signature fields are always marked as deleted!

(Read only property)

### 3.18.54 TextAlign as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The text align.

**Notes:**

Text fields only.

(Read only property)
3.18.55 **TextColor as UInt32**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Text color.  
**Notes:** (Read only property)

3.18.56 **TextColorSP as Integer**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Color space of the field’s text.  
**Notes:** (Read only property)

3.18.57 **TextScaling as Single**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The text scaling.  
**Notes:**  
Text fields only.  
(Read only property)

3.18.58 **ToolTip as String**

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The tooltip text.  
**Notes:**  
Optional tool tip.  
(Read only property)

3.18.59 **UniqueName as String**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional unique name (NM key).  
**Notes:** (Read only property)

3.18.60 **UpCaption as String**

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Caption of the up state.
3.18. CLASS DYNAPDDFIELDDEXMBS

Notes: (Read only property)

3.18.61 UpImage as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Image handle of the up state.

Notes:
You can use this image handle with GetImageObj to get the image.
(Read only property)

3.18.62 Value as String

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The value of the field.

Notes: (Read only property)

3.18.63 WordSpacing as Single

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The word spacing.

Notes:
Text fields only.
(Read only property)
3.19 class DynaPDFFieldMBS

3.19.1 class DynaPDFFieldMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for field information. **Deprecated:** This item is deprecated and should no longer be used. You can use DynaPDFFieldExMBS instead. **Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.19.2 Methods

3.19.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.19.4 Properties

3.19.5 BackColor as UInt32

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Background color. **Notes:** (Read only property)

3.19.6 BackCS as UInt32

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Color space of background / border color. **Notes:** (Read only property)

3.19.7 BBox as DynaPDFRectMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Bounding box. **Notes:** (Read only property)
3.19.8 BorderColor as UInt32

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Border color.  
**Notes:** (Read only property)

3.19.9 Checked as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Only set if the field is a check box.  
**Notes:** (Read only property)

3.19.10 Deleted as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the field was deleted.  
**Notes:** (Read only property)

3.19.11 FieldName as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Field name.  
**Notes:** May be unicode or ASCII encoded.  
(Read only property)

3.19.12 FieldNameLen as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Field name length in characters.  
**Notes:** (Read only property)

3.19.13 FieldType as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Field type (see ft* constants)  
**Notes:** (Read only property)
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3.19.14 Font as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Used font by the field (PostScript name).
**Notes:** (Read only property)

3.19.15 FontSize as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Font size.
**Notes:** (Read only property)

3.19.16 Handle as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Field handle.
**Notes:** (Read only property)

3.19.17 KidCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Greater zero if the field has childs.
**Notes:** (Read only property)

3.19.18 Parent as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Parent field handle if any.
**Notes:** (Read only property)

3.19.19TextColor as UInt32

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Text color.
**Notes:** (Read only property)
3.19. CLASS DYNAPDFFIELDMBS

3.19.20 TextCS as UInt32

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Color space of text color.  
**Notes:** (Read only property)

3.19.21 ToolTip as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Tool tip if any.  
**Notes:**
Unicode or ASCII encoded.  
(Read only property)

3.19.22 Value as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Field value.  
**Notes:**
Unicode or ASCII encoded.  
(Read only property)
3.20 class DynaPDFFileSpecExMBS

3.20.1 class DynaPDFFileSpecExMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for an extended file specification.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.20.2 Methods

3.20.3 Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.20.4 Properties

3.20.5 AFRelationship as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The relationship.  
**Notes:**  
PDF 2.0  
(Read and Write property)

3.20.6 ColItem as Ptr

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If <>nil the embedded file contains a collection item with user defined data.  
**Notes:**  
This entry can occur in PDF Collections only (PDF 1.7). See ”PDF Collections” in the help file for further information.  
(Read and Write property)
3.20. **CLASS DYNAPDFFILESPECEXMBS**

### 3.20.7 Description as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional description string.  
**Notes:** (Read and Write property)

### 3.20.8 DOS as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional DOS file name.  
**Notes:** (Read and Write property)

### 3.20.9 EmbFileNode as DynaPDFEmbFileNodeMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The embedded file node for embedded file.  
**Notes:** (Read and Write property)

### 3.20.10 FileName as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** File name as 7 bit ASCII string.  
**Notes:** (Read and Write property)

### 3.20.11 FileNameIsURL as Boolean

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, FileName contains a URL.  
**Notes:** (Read and Write property)

### 3.20.12 ID1 as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional file ID.  
**Notes:** Meaningful only if FileName points to a PDF file.  
(Read and Write property)
3.20.13 ID2 as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional file ID.  
**Notes:**  
Meaningful only if FileName points to a PDF file.  
(Read and Write property)

3.20.14 IsVolatile as Boolean

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the file changes frequently with time.  
**Notes:** (Read and Write property)

3.20.15 Mac as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional Mac file name.  
**Notes:** (Read and Write property)

3.20.16 Thumb as DynaPDFImageMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional thumbnail image.  
**Notes:** (Read and Write property)

3.20.17 UFileName as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The file name.  
**Notes:**  
PDF 1.7. Same as FileName but Unicode is allowed.  
(Read and Write property)

3.20.18 Unix as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional Unix file name.
3.20. \textit{CLASS DYNAPDFFILESPECEXMBS}

\textbf{Notes:} (Read and Write property)
3.21 class DynaPDFFileSpecMBS

3.21.1 class DynaPDFFileSpecMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A class for information about an embedded file.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.21.2 Methods

3.21.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.21.4 Properties

3.21.5 Buffer as String

**Notes:** (Read and Write property)

3.21.6 BufferSize as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Buffer size in bytes.  
**Notes:** (Read and Write property)

3.21.7 Checksum as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** 16 byte MD5 digest if set.  
**Notes:** (Read and Write property)
3.21. CLASS DYNAPDIFFLESPECMBS

3.21.8 ColItem as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Pointer to user defined collection item.
**Notes:** (Read and Write property)

3.21.9 Compressed as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Should be false if Decompress was true.
**Notes:** (Read and Write property)

3.21.10 CreateDate as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creation date as string.
**Notes:** (Read and Write property)

3.21.11 Description as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Description.
**Notes:** This string is either an unicode encoded string or an ASCII encoded string.
(Read and Write property)

3.21.12 FileName as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** File name as 7 bit ASCII string.
**Notes:** (Read and Write property)

3.21.13 FileSize as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Decompressed stream size or zero if not known.
**Notes:** (Read and Write property)
3.21.14  IsURL as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, FileName contains a URL.
**Notes:** (Read and Write property)

3.21.15  MIMEType as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** MIME media type name (RFC 2046).
**Notes:**
See also MimeTypeToFileExtensionMBS function.
(Read and Write property)

3.21.16  ModDate as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Modification date as string.
**Notes:** (Read and Write property)

3.21.17  Name as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Name of the file specification in the name tree.
**Notes:**
This string is either an unicode encoded string or an ASCII encoded string.
This value is always present.
(Read and Write property)

3.21.18  UnicodeFileName as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Same as FileName but Unicode is allowed.
**Notes:**
PDF 1.7.
This string is either an unicode encoded string or an ASCII encoded string.
(Read and Write property)
3.22. class DynaPDFFontInfoMBS

3.22.1 class DynaPDFFontInfoMBS

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for DynaPDF font info.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.22.2 Methods

3.22.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.22.4 HorzWidths(index as UInt32) as Single

**Notes:** Index from 0 to HorzWidthsCount -1.

3.22.5 VertWidths(index as UInt32) as DynaPDFCIDMetricMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Vertical glyph widths array.

3.22.6 Properties

3.22.7 Ascent as Single

**Notes:** (Read only property)
3.22.8  AvgWidth as Single


**Notes:** (Read only property)

3.22.9  BaseEncoding as Integer


**Notes:**
Valid only if HaveEncoding is true.
Can be kbeWinAnsi, kbeStandard, kbeMacRoman or kbeMacExpert.
(Read only property)

3.22.10  BaseFont as String

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** PostScript Name or Family Name.

**Notes:** (Read only property)

3.22.11  CapHeight as Single


**Notes:** (Read only property)

3.22.12  CharSet as String

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The charset describes which glyphs are present in the font.

**Notes:** (Read only property)

3.22.13  CharSetSize as UInt32

3.22. CLASS DYNAPDFFONTINFOMBS

Notes: (Read only property)

### 3.22.14 CIDOrdering as String


Notes: (Read only property)

### 3.22.15 CIDRegistry as String


Notes: (Read only property)

### 3.22.16 CIDSet as MemoryBlock

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** CID fonts only.

Notes:

This is a table of bits indexed by CIDs.  
(Read only property)

### 3.22.17 CIDSetSize as UInt32


Notes: (Read only property)

### 3.22.18 CIDSupplement as UInt32


Notes: (Read only property)
3.22.19 CIDToGIDMap as MemoryBlock

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Allowed for embedded TrueType based CID fonts only.  
**Notes:** (Read only property)

3.22.20 CIDToGIDMapSize as UInt32

**Notes:** (Read only property)

3.22.21 CMapBuf as MemoryBlock

**Notes:** Only available if the CMap was embedded.  
(Read only property)

3.22.22 CMapBufSize as UInt32

**Notes:** (Read only property)

3.22.23 CMapName as String

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** CID fonts only external CMap name or encoding.  
**Notes:** (Read only property)

3.22.24 Descent as Single

**Notes:** (Read only property)
3.22. **CLASS DYNAPDFONTINFOMBS**

3.22.25 **Encoding as MemoryBlock**

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Unicode mapping 0..255.

**Notes:**

not available for CID fonts.

(Read only property)

3.22.26 **FirstChar as UInt32**

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** First char (simple fonts only).

**Notes:** (Read only property)

3.22.27 **Flags as UInt32**


**Notes:**

See DynaPDF manual.

The font flags describe certain properties of the font. The most important flags are the following:

* 1 Fixed pitch font
* 2 Serif style
* 4 Symbol font
* 8 Script style
* & h20 Non-symbolic font
* & h40 Italic style
* & h40000 Force Bold (Type1 fonts only)

The full set of available flags can be found in the PDF Reference.

(Read only property)

3.22.28 **FontBBox as DynaPDFRectMBS**

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This is the size of the largest glyph in this font.
3.22.29  FontBuffer as MemoryBlock

**Notes:**
Available if the font was embedded or loaded from a buffer.
(Read only property)

3.22.30  FontBufSize as UInt32

**Notes:** (Read only property)

3.22.31  FontFamily as String

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional Font Family (Family Name).
**Notes:** (Read only property)

3.22.32  FontFilePath as String

**Notes:**
Only available for system fonts.
(Read only property)

3.22.33  FontFileType as Integer

**Notes:**
Can be:
kffsType1C, kffsOpenTypeC, kffsOpenType, kffsNoSubtype, kffsCIDFontType2 or kffsCIDFontType0C.
(Read only property)
3.22.34 FontName as String

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Font name (should be the same as BaseFont).  
**Notes:** (Read only property)

3.22.35 FontStretch as String

**Notes:**  
Optional ->Condensed, and so on.  
(Read only property)

3.22.36 FontType as Integer

**Notes:**  
If ftType0 the font is a CID font.  
(Read only property)

3.22.37 FontWeight as Single

**Notes:** (Read only property)

3.22.38 FullName as String

**Notes:**  
System fonts only.  
(Read only property)
3.22.39 HaveEncoding as Boolean

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether encoding is known.

**Notes:**
If true, BaseEncoding was set from the font’s encoding.
(Read only property)

3.22.40 HorzWidthsCount as UINT32

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of horizontal widths in the array.

**Notes:** (Read only property)

3.22.41 Imported as Boolean

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether font is imported.

**Notes:**
If true, the font was imported from an external PDF file.
(Read only property)

3.22.42 ItalicAngle as Single


**Notes:** (Read only property)

3.22.43 Lang as String

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional language code defined by BCP 47.

**Notes:** (Read only property)
3.22.44 LastChar as UInt32

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Last char (simple fonts only).
**Notes:** (Read only property)

3.22.45 Leading as Single

**Notes:** (Read only property)

3.22.46 Length1 as UInt32

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the clear text portion of a Type1 font.
**Notes:** (Read only property)

3.22.47 Length2 as UInt32

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the encrypted portion of a Type1 font program.
**Notes:** (Read only property)

3.22.48 Length3 as UInt32

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the fixed-content portion of a Type1 font program.
**Notes:** (Read only property)

3.22.49 MaxWidth as Single

**Notes:** (Read only property)
3.22.50Metadata as MemoryBlock

**Notes:** (Read only property)

3.22.51MetadataSize as UInt32

**Notes:** (Read only property)

3.22.52MisWidth as Single

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Missing width (default = 0.0).
**Notes:** (Read only property)

3.22.53Panose as MemoryBlock

**Notes:**
CID fonts only.
(Read only property)

3.22.54PostScriptName as String

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** System fonts only.
**Notes:** (Read only property)

3.22.55SpaceWidth as Single

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Space width in font units.
**Notes:**
A default value is set if the font contains no space character.
(Read only property)

### 3.22.56 StemH as Single

**Plugin Version:** 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The thickness of horizontal stems.
**Notes:** (Read only property)

### 3.22.57 StemV as Single

**Plugin Version:** 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The thickness of vertical stems.
**Notes:** (Read only property)

### 3.22.58 ToUnicode as MemoryBlock

**Plugin Version:** 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** ToUnicode CMap.
**Notes:**
Only available for imported fonts.
(Read only property)

### 3.22.59 ToUnicodeSize as UInt32

**Plugin Version:** 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** ToUnicode CMap size in bytes.
**Notes:** (Read only property)

### 3.22.60 VertDefPos as DynaPDFPointMBS

**Plugin Version:** 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Default vertical displacement vector.
**Notes:** (Read only property)
3.22.61 VertWidthsCount as UInt32

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of vertical widths in the array. **Notes:** (Read only property)

3.22.62 WMode as UInt32

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Writing Mode. **Notes:**

0: Horizontal
1: Vertical.
(Read only property)

3.22.63 XHeight as Single

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The height of lowercase letters measured from the baseline. **Notes:** (Read only property)
3.23. CLASS DynaPDFFontMBS

3.23 class DynaPDFFontMBS

3.23.1 class DynaPDFFontMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A class for pdf font information.
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.23.2 Methods

3.23.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.23.4 Encoding(Index as Integer) as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Unicode mapping 0..255 if set.
**Notes:** Index from 0 to 255.

3.23.5 Widths(Index as Integer) as single

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Glyph widths.
**Notes:** Index from 0 to WidthsCount-1.

3.23.6 Properties

3.23.7 Ascent as Single

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The ascent of this font.
**Notes:** (Read and Write property)
CHAPTER 3. DYNAPDF

3.23.8 BaseFont as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** PostScript Name or Family Name.
**Notes:** (Read and Write property)

3.23.9 CapHeight as Single

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Cap height.
**Notes:** (Read and Write property)

3.23.10 DefWidth as Single

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Default character widths ->CID fonts only.
**Notes:** (Read and Write property)

3.23.11 Descent as Single

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Descent.
**Notes:** (Read and Write property)

3.23.12 FirstChar as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The first character.
**Notes:** (Read and Write property)

3.23.13 Flags as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Font flags.
**Notes:** (Read and Write property)

3.23.14 FontFamily as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional Font Family (Family Name).
3.23. CLASS DYNAPDFONTMBS

Notes:

Unicode or ASCII encoded.
(Read and Write property)

3.23.15 FontFile as Memoryblock


Notes:

Only imported fonts are returned.
(Read and Write property)

3.23.16 FontFileType as Integer

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The font file subtype.

Notes:

See kffs* constants like those:

<table>
<thead>
<tr>
<th>Name</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>kffsType1C</td>
<td>0</td>
<td>CFF based Type1 font</td>
</tr>
<tr>
<td>kffsCIDFontType0C</td>
<td>1</td>
<td>CFF based Type1 CID font</td>
</tr>
<tr>
<td>kffsOpenType</td>
<td>2</td>
<td>TrueType based OpenType font</td>
</tr>
<tr>
<td>kffsOpenTypeC</td>
<td>3</td>
<td>CFF based OpenType font</td>
</tr>
<tr>
<td>kffsCIDFontType2</td>
<td>4</td>
<td>TrueType based CID Font</td>
</tr>
<tr>
<td>kffsNoSubtype</td>
<td>9</td>
<td>The font file is in the format of FontType</td>
</tr>
</tbody>
</table>

(Read and Write property)

3.23.17 FontName as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Font name.

Notes: (Read and Write property)

3.23.18 FontType as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The font type.

Notes:
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If ftType0 the font is a CID font.
(Read and Write property)

### 3.23.19 ItalicAngle as Single

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Italic angle.  
**Notes:** (Read and Write property)

### 3.23.20 LastChar as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Last char.  
**Notes:** (Read and Write property)

### 3.23.21 Length1 as Integer

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the clear text portion of the Type1 font, or the length of the entire font program if FontType <>kffType1.  
**Notes:** (Read and Write property)

### 3.23.22 Length2 as Integer

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the encrypted portion of the Type1 font program (Type1 fonts only).  
**Notes:** (Read and Write property)

### 3.23.23 Length3 as Integer

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the fixed-content portion of the Type1 font program or zero if not present.  
**Notes:** (Read and Write property)

### 3.23.24 SpaceWidth as Single

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Space width in font units or default value.
3.23. CLASS DYNAPDFONTMBS

Notes: (Read and Write property)

3.23.25 WidthsCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Number of widths in the array. Notes: (Read and Write property)

3.23.26 XHeight as Single

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The x-height. Notes: (Read and Write property)
3.24 class DynaPDFGlyphOutlineMBS

3.24.1 class DynaPDFGlyphOutlineMBS

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for glyph outline.
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.24.2 Methods

3.24.3 Constructor


3.24.4 Outline(index as Integer) as DynaPDFPointMBS

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries point with given index.
**Notes:** Index from 0 to OutlineCount-1.

3.24.5 Outlines as DynaPDFPointMBS()

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries array with all points.

3.24.6 Properties

3.24.7 AdvanceX as Single

**Notes:** (Read only property)
3.24. **CLASS DYNAPDFGLYPHOUTLINEMBS**

### 3.24.8 AdvanceY as Single


**Notes:** (Read only property)

### 3.24.9 BBox as DynaPDFRectMBS


**Notes:** (Read and Write property)

### 3.24.10 HaveBBox as Boolean

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, BBox was computed.

**Notes:** (Read and Write property)

### 3.24.11 Lsb as Integer

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Left side bearing (already applied, info only).

**Notes:** (Read and Write property)

### 3.24.12 OriginX as Single


**Notes:** (Read only property)

### 3.24.13 OriginY as Single


**Notes:** (Read only property)
3.24.14 OutlineCount as Integer

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of points.  
**Notes:** (Read and Write property)

3.24.15 Tsb as Integer

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Top side bearing (already applied, info only).  
**Notes:** (Read and Write property)
3.25. **CLASS DYNAPDFGOTOACTIONMBS**

3.25  class DynaPDFGoToActionMBS

3.25.1  class DynaPDFGoToActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for details on a GoTo action.
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.25.2  Methods

3.25.3  Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.25.4  DestPos(index as Integer) as Single

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Destination position.
**Notes:**
Array of 4 floating point values if set.
Index from 0 to 3.

3.25.5  Properties

3.25.6  DestFile as DynaPDFFileSpecExMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destination file.
**Notes:** (Read only property)

3.25.7  DestName as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional named destination that shall be loaded when opening the file.
**Notes:** (Read only property)
3.25.8 DestPage as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Destination page (the first page is denoted by 1).
**Notes:** (Read only property)

3.25.9 DestType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Destination type.
**Notes:** (Read only property)

3.25.10 NewWindow as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether to open a new window.
**Notes:**
Meaningful only if the destination file points to a PDF file.
-1 = viewer default, 0 = false, 1 = true.
(Read only property)

3.25.11 NextAction as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The index of the action.
**Notes:**
-1 or next action handle to be executed if any.
(Read only property)

3.25.12 NextActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the action.
**Notes:**
Only set if NextAction is >= 0.
(Read only property)
3.26. CLASS DYNAPDFHIDEACTIONMBS

3.26 class DynaPDFHideActionMBS

3.26.1 class DynaPDFHideActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a hide action.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.26.2 Methods

3.26.3 Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.26.4 Fields(index as Integer) as DynaPDFFieldExMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Array of fields.

3.26.5 Properties

3.26.6 FieldsCount as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of fields in the array.

**Notes:** (Read only property)

3.26.7 Hide as Boolean

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A flag indicating whether to hide or show the fields in the array.

**Notes:** (Read only property)
3.26.8 NextAction as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The handle of the next action to use.

**Notes:**
-1 or next action handle to be executed if any.
(Read only property)

3.26.9 NextActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the next action.

**Notes:**
Only set if NextAction is >= 0.
(Read only property)
3.27. **CLASS DYNAPDFIMAGEMBS**

### 3.27 class DynaPDFImageMBS

#### 3.27.1 class DynaPDFImageMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A class for dynapdf for passing image data.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

#### 3.27.2 Methods

#### 3.27.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

#### 3.27.4 Decode as Single()

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The decode array.  
**Notes:**  
If set, samples must be decoded. The array contains 2 * NumComponents values.  
The decode array is never set if the image is returned decompressed since it is already applied during decompression.

#### 3.27.5 MaskImage(Flags as UInt32 = 0) as DynaPDFImageMBS

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the image details on the soft mask for this image.  
**Notes:**  
If set, a 1 bit image is used as a transparency mask.  
Plugin calls GetImageObjEx with the given flags to decode the image.

#### 3.27.6 PictureData(ImageFormat as Integer = 0, ImageFilter as Integer = 0) as String

Plugin Version: 16.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Requests images in the given format.
Notes:
Default for ImageFormat is Tiff (kifmTIFF is zero) and default Image Filter is flate (kcfFlate is zero).
You can pass different constants.
If you request JPEG or JPEG 2000 and the image is already in that format, we pass through.
Else we recompress image.

3.27.7 SoftMask(Flags as UInt32 = 0) as DynaPDFImageMBS

details on the soft mask for this image.
Notes:
If set, a grayscale image is used as alpha channel.
Plugin calls GetImageObjEx with the given flags to decode the image.

3.27.8 Properties

3.27.9 BitsPerPixel as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Bit depth of the
image buffer.
Notes:
Possible values are 1, 2, 4, 8, 24, 32, and 64.
(Read only property)

3.27.10 Buffer as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The buffer for the
image data as a string.
Notes:
Each scanline is aligned to a full byte.
(Read only property)

3.27.11 BufferPtr as Ptr

image data.
3.27. **CLASS DYNAPDFIMAGEMBS**

**Notes:**

Each scanline is aligned to a full byte.
(Read only property)

---

### 3.27.12 BufferSize as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The size of the image buffer in bytes.

**Notes:** (Read only property)

---

### 3.27.13 ColorCount as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of colors in the color table.

**Notes:** (Read only property)

---

### 3.27.14 ColorMask as Memoryblock


**Notes:**

The array contains ranges in the form min/max (2 values per component) for each component before decoding.
(Read only property)

---

### 3.27.15 ColorSpace as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The color space refers either to the image buffer or to the color table if set.

**Notes:**

Note that 1 bit images can occur with and without a color table.

(Read only property)
3.27.16 ColorSpaceObject as DynaPDFColorSpaceMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The original color space.
**Notes:** (Read only property)

3.27.17 ColorTable as Memoryblock

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The color table or nil.
**Notes:** (Read only property)

3.27.18 Filter as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Required decode filter if the image is compressed.
**Notes:**
Required decode filter if the image is compressed.
Possible values are dfDCTDecode (JPEG), dfJPXDecode (JPEG2000), and dfJBIG2Decode. Other filters are already removed by DynaPDF since a conversion to a native file format is then always required.
(Read only property)

3.27.19 Height as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Image height in pixel.
**Notes:** (Read only property)

3.27.20 IMaskImageHandle as Integer

Plugin Version: 16.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The index of the mask image.
**Notes:**
This is the index to use with DynaPDFMBS.GetImageObj function.
(Read only property)
3.27. CLASS DYNAPDFIMAGEMBS

3.27.21 InlineImage as Boolean

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the image is an inline image. 
**Notes:** (Read only property)

3.27.22 Intent as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The rendering intent. 
**Notes:**
Default riNone. 
(Read only property)

3.27.23 Interpolate as Boolean

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, image interpolation should be performed. 
**Notes:** (Read and Write property)

3.27.24 ISoftMaskHandle as Integer

Plugin Version: 16.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The index of the soft mask image. 
**Notes:**
This is the index to use with DynaPDFMBS.GetImageObj function. 
(Read only property)

3.27.25 JBIG2Globals as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional global page 0 segment (kJBIG2Decode filter only). 
**Notes:** (Read only property)
3.27.26 JBIG2GlobalsSize as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The size of the bit stream in bytes.  
**Notes:** (Read only property)

3.27.27 Measure as DynaPDFMeasureMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional measure dictionary.  
**Notes:** (Read only property)

3.27.28 Metadata as String

**Notes:** (Read only property)

3.27.29 MetadataSize as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of Metadata in bytes.  
**Notes:** (Read only property)

3.27.30 MinIsWhite as Boolean

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the colors of 1 bit images are reversed.  
**Notes:** (Read only property)

3.27.31 NumComponents as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of components stored in the image buffer.  
**Notes:** (Read only property)
3.27. **CLASS DYNAPDFIMAGEMBS**

### 3.27.32 OCG as Integer

Plugin Version: 15.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Handle of an OCG or OCMD or -1.

**Notes:**
Images can be part of an Optional Content Group (OCG) or Optional Content Membership Dictionary (OCMD). If OC is greater -1 an OCG or OCMD handle was set. To determine whether an OCG handle was set, check whether the value is smaller & h40000000.

(Read only property)

### 3.27.33 OrgFilter as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The image was compressed with this filter in the PDF file.

**Notes:**
This info is useful to determine which compression filter should be used when creating a new image file from the image buffer.

(Read only property)

### 3.27.34 PDF as DynaPDFMBS

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The reference to the parent DynaPDF object.

**Notes:** (Read and Write property)

### 3.27.35 PtData as DynaPDFPointDataDictionaryMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Point Data dictionary.

**Notes:** (Read only property)

### 3.27.36 ResolutionX as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Image resolution on the x-axis.

**Notes:** (Read only property)
3.27.37 ResolutionY as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Image resolution on the y-axis.  
**Notes:** (Read only property)

3.27.38 ScanLineLength as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The length of a scanline in bytes.  
**Notes:** (Read only property)

3.27.39 SMaskInData as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The SMaskInData value.  
**Notes:**  
JPXDecode only, PDF_MAX_INT if not set. See PDF Reference for further information.

(Read only property)

3.27.40 Transparent as Boolean

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The transparent mode.  
**Notes:**  
The meaning is different depending on the bit depth and whether a color table is available. If the image is a 1 bit image and if no color table is available, black pixels must be drawn with the current fill color. If the image contains a color table ColorMask contains the range of indexes in the form min/max index which appears transparent. If no color table is present ColorMask contains the transparent ranges in the form min/max for each component.

(Read only property)

3.27.41 Width as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Image width in pixel.
3.27. **CLASS DYNAPDFIMAGEMBS**

**Notes:** (Read only property)
3.28 class DynaPDFImportDataActionMBS

3.28.1 class DynaPDFImportDataActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for an import data action.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.28.2 Methods

3.28.3 Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.28.4 Properties

3.28.5 Data as DynaPDFFileSpecExMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The data or file to be loaded.

**Notes:** (Read only property)

3.28.6 NextAction as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The handle to the next action.

**Notes:**

-1 or next action handle to be executed if any
(Read only property)

3.28.7 NextActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the next action.

**Notes:**
Only set if NextAction is \( \geq 0 \).
(Read only property)
3.29 class DynaPDFJavaScriptActionMBS

3.29.1 class DynaPDFJavaScriptActionMBS

Notes: This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.29.2 Methods

3.29.3 Constructor


3.29.4 Properties

3.29.5 NextAction as Integer

Notes:
-1 or next action handle to be executed if any
(Read only property)

3.29.6 NextActionType as Integer

Notes:
Only set if NextAction is >= 0.
(Read only property)
3.29.7 Script as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The script. **Notes:** (Read only property)
3.30  class DynaPDFLaunchActionMBS

3.30.1  class DynaPDFLaunchActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The class for details on a launch action.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.30.2  Methods

3.30.3  Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The private constructor.

3.30.4  Properties

3.30.5  AppName as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** Optional. The name of the application that should be launched.  
**Notes:** (Read only property)

3.30.6  DefDir as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** Optional default directory.  
**Notes:** (Read only property)

3.30.7  File as DynaPDFFileSpecExMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The file specification for the launch.  
**Notes:** (Read only property)
3.30.8 NewWindow as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether to launch in new window.  
**Notes:**  
-1 = viewer default, 0 = false, 1 = true.  
(Read only property)

3.30.9 NextAction as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The handle to the next action.  
**Notes:**  
-1 or next action handle to be executed if any  
(Read only property)

3.30.10 NextActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the next action.  
**Notes:**  
Only set if NextAction is >= 0.  
(Read only property)

3.30.11 Operation as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional string specifying the operation to perform (open or print).  
**Notes:** (Read only property)

3.30.12 Parameter as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional parameter string that shall be passed to the application (AppName).  
**Notes:** (Read only property)
3.31 class DynaPDFLayerGroupMBS

3.31.1 class DynaPDFLayerGroupMBS

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a DynaPDF Layer Group.  
**Notes:**  
Used to link layers in hierarchies.  
This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.31.2 Methods

3.31.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.31.4 Properties

3.31.5 Handle as Integer

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The internal object reference.  
**Notes:** (Read only property)

3.31.6 Owner as DynaPDFMBS

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The link to the parent DynaPDF object.  
**Notes:** (Read only property)
3.32. CLASS DYNAPDFLINEANNOTPARAMETERMBS

3.32  class DynaPDFLineAnnotParameterMBS

3.32.1  class DynaPDFLineAnnotParameterMBS

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for line annotation parameters.

3.32.2  Properties

3.32.3  Caption as Boolean

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Specifies whether the parameter Content of the function LineAnnot should be used as caption of the measure line. **Notes:** (Read and Write property)

3.32.4  CaptionOffsetX as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Horizontal offset of the caption from its normal position. **Notes:** (Read and Write property)

3.32.5  CaptionOffsetY as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Vertical offset of the caption from its normal position. **Notes:** (Read and Write property)

3.32.6  CaptionPos as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The position where the caption should be drawn if present. **Notes:** (Read and Write property)

3.32.7  LeaderLineExtend as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional leader line extend beyond the leader line (must be a positive value or zero).
Notes: (Read and Write property)

3.32.8 LeaderLineLen as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the leader lines (positive or negative).
**Notes:** (Read and Write property)

3.32.9 LeaderLineOffset as Single

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Amount of space between the endpoints of the annotation and the leader lines (must be a positive value or zero).
**Notes:** (Read and Write property)
3.33. CLASS DYNAPDFMATRIXMBS

3.33 class DynaPDFMatrixMBS

3.33.1 class DynaPDFMatrixMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a DynaPDF matrix structure.  
**Notes:** in the documentation known as TCTM struct.

3.33.2 Methods

3.33.3 Constructor

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a new matrix and sets it to identity.  
**Example:**

```vbnet
dim m as new DynaPDFMatrixMBS
MsgBox m
```

See also:

- 3.33.4 Constructor(a as Double, b as Double, c as Double, d as Double, x as Double, y as Double) 225
- 3.33.5 Constructor(other as DynaPDFMatrixMBS) 226

3.33.4 Constructor(a as Double, b as Double, c as Double, d as Double, x as Double, y as Double)

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a new instance with setting values to the given parameters.  
**Example:**

```vbnet
dim m as new DynaPDFMatrixMBS(1,2,3,4,5,6)
MsgBox m
```

See also:

- 3.33.3 Constructor 225
- 3.33.5 Constructor(other as DynaPDFMatrixMBS) 226
3.33.5 Constructor(other as DynaPDFMatrixMBS)

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a matrix object with copying the values.

**Example:**

```vba
dim m as new DynaPDFMatrixMBS(1,2,3,4,5,6)
dim n as new DynaPDFMatrixMBS(m)
MsgBox n
```

See also:

- 3.33.3 Constructor

- 3.33.4 Constructor(a as Double, b as Double, c as Double, d as Double, x as Double, y as Double)

3.33.6 GetRotationAngle as Double

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Calculates the rotate angle.

**Example:**

```vba
dim m as DynaPDFMatrixMBS = DynapdfMatrixMBS.Identity
m.Rotate 0.1

MsgBox str(m.GetRotationAngle) // shows 0.1
```

**Notes:** In radians from -pi to pi.

3.33.7 GetScaleFactor as Double

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Calculates the scale factor.

**Example:**

```vba
dim m as DynaPDFMatrixMBS = DynapdfMatrixMBS.Identity
m.Scale 3.0, 4.0

MsgBox str(m.GetScaleFactor) // shows 3.535534
```
3.33. **CLASS DYNAPDFMATRIXMBS**

3.33.8 **Identity as DynaPDFMatrixMBS**

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates new object with identity matrix.

**Example:**

```vbnet
dim m as DynaPDFMatrixMBS = DynapdfMatrixMBS.Identity
MsgBox m // shows [1.000000 0.000000 0.000000 1.000000 0.000000 0.000000 ]
```

3.33.9 **Invert**

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Inverts the matrix.

**Example:**

```vbnet
dim m as new DynaPDFMatrixMBS
m.Invert
MsgBox m // shows [1.000000 -0.000000 -0.000000 1.000000 0.000000 0.000000 ]
```

3.33.10 **IsIdentity as boolean**

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Checks whether matrix is the identity matrix.

**Example:**

```vbnet
dim m as new DynaPDFMatrixMBS
MsgBox str(m.IsIdentity)
m.a = 3.0
MsgBox str(m.IsIdentity)
```

**Notes:** Returns true if a = 1, b = 0, c = 0, d = 1, x = 0 and y = 0.
3.33.11 LeftMultiply(a as Double, b as Double, c as Double, d as Double, x as Double, y as Double)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Multiplies both matrix where self is on the left side.
See also:

- 3.33.12 LeftMultiply(other as DynaPDFMatrixMBS)

3.33.12 LeftMultiply(other as DynaPDFMatrixMBS)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Multiplies both matrix where self is on the left side.
**Example:**

```
  dim m1 as new DynaPDFMatrixMBS
  dim m2 as new DynaPDFMatrixMBS

  m1.Rotate 0.1
  m2.Scale 2.0, 3.0

  dim m3 as new DynaPDFMatrixMBS(m1)
  m3.LeftMultiply(m2)

  MsgBox m1.Str+EndOfLine+m2.Str+EndOfLine+m3.Str
```

See also:

- 3.33.11 LeftMultiply(a as Double, b as Double, c as Double, d as Double, x as Double, y as Double)

3.33.13 Operator_Compare(other as DynaPDFMatrixMBS) as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Compares two matrix objects whether they have same values.
**Example:**

```
  dim m1 as new DynaPDFMatrixMBS
  dim m2 as new DynaPDFMatrixMBS

  if m1 = m2 then
    MsgBox "Equal, same values."
  else
    MsgBox "Not equal ->Bug in Plugin."
```
end if

if m1 is m2 then
MsgBox "Equal -> Bug in Xojo."
else
MsgBox "Not equal, different objects."
end if

3.33.14 Operator_Convert as string

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Converts matrix into a string for displaying in log files.

**Example:**

```vba
Dim m as new DynaPDFMatrixMBS
MsgBox m  // shows [ 1.000000 0.000000 0.000000 1.000000 0.000000 0.000000 ]
```

**Notes:** Added for debugging.

3.33.15 Operator_Multiply(other as DynaPDFMatrixMBS) as DynapdfMatrixMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Multiplies both matrix where self is on the left side.

**Example:**

```vba
Dim m1 as new DynaPDFMatrixMBS
Dim m2 as new DynaPDFMatrixMBS
m1.Rotate 0.1
m2.Scale 2.0, 3.0

Dim m3 as DynaPDFMatrixMBS = m1*m2

MsgBox m1.Str+EndOfLine+m2.Str+EndOfLine+m3.Str
```
3.33.16  **Operator_MultiplyRight**(other as DynaPDFMatrixMBS) as DynaPDFMatrixMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Multiplies both matrix where self is on the right side.

3.33.17  **RightMultiply**(a as Double, b as Double, c as Double, d as Double, x as Double, y as Double)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Multiplies both matrix where self is on the right side.
See also:

- 3.33.18 RightMultiply(other as DynaPDFMatrixMBS)

3.33.18  **RightMultiply**(other as DynaPDFMatrixMBS)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Multiplies both matrix where self is on the right side.
See also:

- 3.33.17 RightMultiply(a as Double, b as Double, c as Double, d as Double, x as Double, y as Double)

3.33.19  **Rotate**(angle as Double)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Rotates matrix with the given angle.

**Example:**

```csharp
dim m as new DynaPDFMatrixMBS

const pi = 3.14159265

dim angle as Double = 30.0/180.0*pi

m.Rotate(angle)

MsgBox m // shows [ 0.866025 0.500000 -0.500000 0.866025 0.000000 0.000000 ]
```

**Notes:** Angle in radians: 2*pi = 360 degree
3.33. CLASS DYNAPDFMATRIXMBS

3.33.20 Scale(sx as Double, sy as Double)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Scales the matrix.

**Example:**
```vba
dim m as new DynaPDFMatrixMBS

m.Scale 2.0, 3.0

MsgBox m // [ 2.000000 0.000000 0.000000 3.000000 0.000000 0.000000 ]
```

3.33.21 SetIdentity

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets values back to the identity matrix.

**Example:**
```vba
dim m as new DynaPDFMatrixMBS

m.Scale 2.0, 3.0 // modify values
m.SetIdentity // and reset

MsgBox m // [ 1.000000 0.000000 0.000000 1.000000 0.000000 0.000000 ]
```

3.33.22 SetValues(a as Double, b as Double, c as Double, d as Double, x as Double, y as Double)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets all the values in one method

**Example:**
```vba
dim m as new DynaPDFMatrixMBS

m.SetValues 1,2,3,4,5,6

MsgBox m
3.33.23 Str as string

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Converts matrix into a string for displaying in log files.

**Example:**

```vbnet
dim m as new DynaPDFMatrixMBS
MsgBox m.Str // shows [ 1.000000 0.000000 0.000000 1.000000 0.000000 0.000000 ]
```

**Notes:** Added for debugging.

3.33.24 Transform(byref x as Double, byref y as Double)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Applies the matrix to the given point.

**Example:**

```vbnet
dim m as new DynaPDFMatrixMBS

const pi = 3.14159265
dim angle as Double = 30.0/180.0*pi
m.Rotate(angle)
m.Translate 2.0, 3.0

dim x as Double = 100.0
dim y as Double = 100.0
m.Transform x,y
MsgBox str(x) + “ “ + str(y) // 36.83459 140.2006
```

3.33.25 TransformInv(byref x as Double, byref y as Double)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Applies the matrix to the given point in inverse mode.

**Example:**

```vbnet
dim m as new DynaPDFMatrixMBS

const pi = 3.14159265
dim angle as Double = 30.0/180.0*pi
m.Rotate(angle)
```
3.33. CLASS DYNAPDFMATRIXMBS

m.Translate 2.0, 3.0

\[ \text{dim } x \text{ as Double } = 100.0 \]
\[ \text{dim } y \text{ as Double } = 100.0 \]

// transform
m.Transform x,y

MsgBox str(x) + " " + str(y) // 36.83459 140.2006

// transform back
m.TransformInv x,y

MsgBox str(x) + " " + str(y) // 100 100#

Notes: Like you have a point and want to know whether it was before the matrix was applied.

3.33.26 Translate(x as Double, y as Double)


Example:

\[ \text{dim } m \text{ as new DynaPDFMatrixMBS} \]

m.Translate 2,3

MsgBox m // shows \[ 1.000000 0.000000 0.000000 1.000000 2.000000 3.000000 \]

3.33.27 Properties

3.33.28 a as Double


Notes: (Read and Write property)
3.33.29  b as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the matrix properties.
**Notes:** (Read and Write property)

3.33.30  c as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the matrix properties.
**Notes:** (Read and Write property)

3.33.31  d as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the matrix properties.
**Notes:** (Read and Write property)

3.33.32  x as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the matrix properties.
**Notes:** (Read and Write property)

3.33.33  y as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the matrix properties.
**Notes:** (Read and Write property)
3.34. CLASS DYNAPDFMBS

3.34 class DynaPDFMBS

3.34.1 class DynaPDFMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The dynapdf class.

**Notes:**

A pdf library to create, modify, import pdf files.
You need a separate dynapdf license key for this class.

Please note that all constants have the prefix k. In the dynapdf_help.pdf file, the constants don’t have a k prefix. And the C functions there have IPDF parameters which the plugin automatically passes for you. So

```c
SI32 pdfSetPageCoords(const void* IDPF, TPageCoord PageCoords)
```

translates in Xojo to

```xojo
function SetPageCoords(PageCoords as Integer) as Integer
```

and you call it like this:

```xojo
call pdf.SetPageCoords pdf.kpcTopDown
```

where in this sample the DynaPDF object is named pdf.

Pro license is required for the following functions:

- BeginTransparencyGroup
- ConvertColors
- Create3DAnnot
- CreateSoftMask
- FlattenForm
- GetPageText
- ImportPage and ImportPageEx
- ParseContent
- RenderAnnotOrField
• RenderPage
• SetCMapDir
• SetExtColorSpace, SetExtFillColorSpace and SetExtStrokeColorSpace.
• SetUseGlobalImpFiles

Lite is required for:

• AddRenderingIntent and AddRenderingIntentEx
• CreateFormFields
• CloseFileEx
• ConvertEMFSpool
• CreateCollection
• CreateExtGState
• InsertMetafile and InsertMetafileEx
• OpenImportBuffer, OpenImportFile and OpenImportStream
• SetPDFVersion for PDF/A and PDF/X

And all functions relaying on those functions internally.

3.34.2 Methods

3.34.3 AddActionToObj(ObjType as Integer, theEvent as Integer, ActHandle as Integer, ObjHandle as Integer) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function adds an action to a PDF object.
See also AddActionToObj function in DynaPDF manual.

3.34.4 AddAnnotToPage(PageNum as UInt32, Handle as UInt32) as boolean

Notes:
3.34. CLASS DYNAPDFMBS

With exception of PopUp annotations all annotation types can be drawn on multiple pages. Watermark or Stamp annotations are typical annotations which can be placed on multiple pages. Returns true on success. See also AddAnnotToPage function in DynaPDF manual.

3.34.5 AddArticle(PosX as Double, PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function creates a new article and adds it to the currently open article thread that must be created with CreateArticleThread() beforehand. See also AddArticle function in DynaPDF manual.

3.34.6 AddBookmark(title as String, parent as Integer, DestPage as Integer, Open as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function adds a bookmark to the global outline tree of the document. Notes: The title parameter is converted to unicode. See also AddBookmark function in DynaPDF manual.

3.34.7 AddBookmarkAnsi(title as String, parent as Integer, DestPage as Integer, Open as boolean) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function adds a bookmark to the global outline tree of the document. Notes: The title parameter is converted to ANSI. See also AddBookmark function in DynaPDF manual.

3.34.8 AddBookmarkEx(title as String, parent as Integer, NamedDest as Integer, Open as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function adds a bookmark to the global outline tree of the document. Notes: The title parameter is converted to unicode. See also AddBookmarkEx function in DynaPDF manual.
3.34.9 AddBookmarkEx2(title as String, parent as Integer, NamedDest as String, unicode as boolean, Open as boolean) as Integer

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function adds a bookmark to the global outline tree of the document. **Notes:** If unicode is true, the plugin passes NamedDest as unicode, else as Windows ANSI text. See also AddBookmarkEx2 function in DynaPDF manual.

3.34.10 AddBookmarkEx2Ansi(title as String, parent as Integer, NamedDest as String, unicode as boolean, Open as boolean) as Integer

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function adds a bookmark to the global outline tree of the document. **Notes:** If unicode is true, the plugin passes NamedDest as unicode, else as Windows ANSI text. See also AddBookmarkEx2 function in DynaPDF manual.

3.34.11 AddBookmarkExAnsi(title as String, parent as Integer, NamedDest as Integer, Open as boolean) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function adds a bookmark to the global outline tree of the document. **Notes:** The title parameter is converted to ANSI. See also AddBookmarkEx function in DynaPDF manual.

3.34.12 AddButtonImage(BtnHandle as Integer, State as Integer, Caption as string, ImgFile as Folderitem) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function adds an image to a push button to one or more of the three different states of a button. See also AddButtonImage function in DynaPDF manual.

3.34.13 AddButtonImageEx(BtnHandle as Integer, State as Integer, Caption as string, hbitmap as Integer) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function adds a memory bitmap to a push button in the same ways as AddButtonImage() but accepts a HBITMAP handle as input image. See also AddButtonImageEx function in DynaPDF manual.
3.34. **CLASS DYNAPDFMBS**

3.34.14 **AddContinueText**(text as string) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function prints a single text line and adds a line feed. **Notes:** The text string is converted to Unicode. See also AddContinueText function in DynaPDF manual.

3.34.15 **AddContinueTextAnsi**(text as string) as boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function prints a single text line and adds a line feed. **Notes:** The text string is converted to ANSI. See also AddContinueText function in DynaPDF manual.

3.34.16 **AddDeviceNProcessColorants**(DeviceNCS as Integer, Colorants() as string, ProcessCS as Integer, Handle as Integer) as boolean

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds DeviceN process colorants. **Notes:** Returns true on success and false on failure. See also AddDeviceNProcessColorants function in DynaPDF manual.

3.34.17 **AddDeviceNSeparations**(DeviceNCS as Integer, Colorants() as string, SeparationCS() as Integer) as boolean

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds device N seperations. **Notes:**

Same as AddDeviceNSeparationsAnsi, but here the Xojo colorant strings are converted to UTF-8 encoding before they are passed to the DynaPDF library.

ubound(Colorants) must be ubound(SeparationCS). Returns true on success and false on failure.

Currently limited to 100 colorants on the plugin side. See also AddDeviceNSeparations function in DynaPDF manual.
3.34.18  AddDeviceNSeparationsAnsi(DeviceNCS as Integer, Colorants() as string, SeparationCS() as Integer) as boolean

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds device N seperations.

**Notes:**
Same as AddDeviceNSeparations, but here the Xojo colorant strings are converted to ANSI encoding before they are passed to the DynaPDF library.

ubound(Colorants) must be ubound(SeparationCS).
Returns true on success and false on failure.

Currently limited to 100 colorants on the plugin side.
See also AddDeviceNSeparations function in DynaPDF manual.

3.34.19  AddFieldToFormAction(Action as Integer, Field as Integer, Include as Boolean) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a field to a form action.
See also AddFieldToFormAction function in DynaPDF manual.

3.34.20  AddFieldToHideAction(HideAct as Integer, Field as Integer) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function adds a field to a hide action.
See also AddFieldToHideAction function in DynaPDF manual.

3.34.21  AddFileComment(Text as string) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds one or more comments to the end of the PDF file.

**Notes:** The text parameter is converted to unicode.
See also AddFileComment function in DynaPDF manual.
### 3.34.22 AddFileCommentAnsi(Text as string) as boolean

- **Plugin Version:** 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  
**Function:** Adds one or more comments to the end of the PDF file.  
**Notes:** The text parameter is converted to ANSI.  
See also AddFileComment function in DynaPDF manual.

### 3.34.23 AddFontSearchPath(path as folderitem, recursive as boolean = true) as Integer

- **Plugin Version:** 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  
**Function:** This function adds a search path to the list of available font search paths.  
**Example:**

```pascal
dim d as new DynaPDFMBS
if TargetLinux then
call d.AddFontSearchPath ”/usr/share/fonts/truetype”, true
else
  // on Mac and Windows we use system fonts.
end if
```

**Notes:**  
This function adds a search path to the list of available font search paths. An arbitrary number of search paths can be added at runtime. Subdirectories are included recursively if the parameter Recursive is true.  
DynaPDF requires no separate metric files for Type1 fonts.

The list of search directories can be cleared at runtime with the function ClearHostFonts().

If system fonts are enabled (default) DynaPDF adds the default font directories of the operating system automatically to the list of font search paths (Windows and Mac OSX only, see SetUseSystemFonts() for further information). On Windows this is the % Windows% /Fonts directory as well as fonts listed in the Registry and linked fonts.

On Mac OSX the following directories are added to the list of font search paths (in this order):

- users font folder in  
  textasciitilde /Library/Fonts
- /Library/Fonts
- /System/Library/Fonts
If the function succeeds the function returns the number of found font files (this is maybe not the number of available fonts, because the list is cleared each time all fonts in the list are processed during font selection). If the function fails a negative error code is returned.

Please call this method on Linux to get fonts loaded from your font folder.
See also \texttt{AddFontSearchPath} function in DynaPDF manual.

See also:

- \texttt{3.34.24 AddFontSearchPath(path as string, recursive as boolean = true) as Integer}

\texttt{3.34.24 AddFontSearchPath(path as string, recursive as boolean = true) as Integer}

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. \textbf{Function:} This function adds a search path to the list of available font search paths.

\textbf{Example:}

\begin{verbatim}
  dim d as new DynaPDFMBS
  if TargetLinux then
    call d.AddFontSearchPath ”/usr/share/fonts/truetype”, true
  else
    // on Mac and Windows we use system fonts.
  end if
\end{verbatim}

\textbf{Notes:}

This function adds a search path to the list of available font search paths. An arbitrary number of search paths can be added at runtime. Subdirectories are included recursively if the parameter Recursive is true. DynaPDF requires no separate metric files for Type1 fonts.

This function is implemented in an ANSI and Unicode compatible version. However, Unicode file paths are converted back to ANSI on Windows. On non-Windows operating systems the path is converted to UTF-8 and passed to the ANSI version of the function.

The list of search directories can be cleared at runtime with the function \texttt{ClearHostFonts}().

If system fonts are enabled (default) DynaPDF adds the default font directories of the operating system automatically to the list of font search paths (Windows and Mac OSX only, see \texttt{SetUseSystemFonts}() for further information). On Windows this is the \% Windows\% /Fonts directory as well as fonts listed in the Registry and linked fonts.

On Mac OSX the following directories are added to the list of font search paths (in this order):
3.34. **CLASS DYNAPDFMBS**

- users font folder in 
  textasciitilde /Library/Fonts
- /Library/Fonts
- /System/Library/Fonts

If the function succeeds the function returns the number of found font files (this is maybe not the number of 
available fonts, because the list is cleared each time all fonts in the list are processed during font selection). 
If the function fails a negative error code is returned.

Please call this method on Linux to get fonts loaded from your font folder.
See also AddFontSearchPath function in DynaPDF manual.
See also:

- 3.34.23 AddFontSearchPath(path as folderitem, recursive as boolean = true) as Integer

### 3.34.25 AddImage(Filter as Integer, Flags as Integer, Image as DynaPDFImageMBS) as boolean

**Function:** Adds an image to the current image file.

**Notes:**
For the filter you use one of the kcf* constants.
For the flags you use either kicNone of kicUseCCITT4.

TIFF is the only format that supports different compression filters. The Filter parameter of the function 
AddImage() is ignored if the image format supports only one specific compression filter.
Note that images are automatically converted to the nearest supported color space if the image format does 
not support the color space of the image.
See also AddImage function in DynaPDF manual.

### 3.34.26 AddInkList(InkAnnot as UInt32, points() as DynaPDFPointMBS) as boolean

**Function:** Adds an array of points or path to an Ink Annotation.

**Notes:**
The function must be called within an open page.
An ink annotation can contain an arbitrary number of paths. The points will be connected by curves to 
achieve a smooth transition between points. The coordinates are treated in current user space. Any trans-
formation that was applied on the coordinate system will be taken into account.
If the number of points is zero then all paths will be deleted from the annotation.

Returns true on success.
See also AddInkList function in DynaPDF manual.

### 3.34.27 AddJavaScript(Name as string, Script as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function adds a global JavaScript to the PDF file.
**Notes:** The script parameter is converted to unicode.
See also AddJavaScript function in DynaPDF manual.

### 3.34.28 AddJavaScriptAnsi(Name as string, Script as string) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function adds a global JavaScript to the PDF file.
**Notes:** The script parameter is converted to ANSI.
See also AddJavaScript function in DynaPDF manual.

### 3.34.29 AddLayerToDisplTree(parent as DynaPDFLayerGroupMBS, layer as UInt32, Title as string) as DynaPDFLayerGroupMBS

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a layer to the display tree.
See also AddLayerToDisplTree function in DynaPDF manual.

### 3.34.30 AddLayerToDisplTreeAnsi(parent as DynaPDFLayerGroupMBS, layer as UInt32, Title as string) as DynaPDFLayerGroupMBS

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a layer to the display tree.
See also AddLayerToDisplTree function in DynaPDF manual.
3.34.31  **AddMaskImage(BaseImage as Integer, Buffer as MemoryBlock, Stride as UInt32, BitsPerPixel as UInt32, Width as UInt32, Height as UInt32) as boolean**

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function adds an image mask to a base image.

**Notes:**

Please note that this function can be called with Ptr or Memoryblock.
See also AddMaskImage function in dynapdf_help.pdf manual.
See also AddMaskImage function in DynaPDF manual.
See also:

- 3.34.32  **AddMaskImage(BaseImage as Integer, Buffer as Ptr, BufSize as UInt32, Stride as UInt32, BitsPerPixel as UInt32, Width as UInt32, Height as UInt32) as boolean**

3.34.32  **AddMaskImage(BaseImage as Integer, Buffer as Ptr, BufSize as UInt32, Stride as UInt32, BitsPerPixel as UInt32, Width as UInt32, Height as UInt32) as boolean**

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function adds an image mask to a base image.

**Notes:**

Please note that this function can be called with Ptr or Memoryblock.
See also AddMaskImage function in dynapdf_help.pdf manual.
See also AddMaskImage function in DynaPDF manual.
See also:

- 3.34.31  **AddMaskImage(BaseImage as Integer, Buffer as MemoryBlock, Stride as UInt32, BitsPerPixel as UInt32, Width as UInt32, Height as UInt32) as boolean**

3.34.33  **AddObjectToLayer(OCG as UInt32, ObjType as Integer, Handle as Integer) as boolean**

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function adds an object to an Optional Content Group (OCG) or Optional Content Membership dictionary (OCMD).

**Notes:**

If the function succeeds the return value is true. If the function fails the return value is false.

For ObjectType use the constants: kooAnnotation, kooField, kooImage and kooTemplate.
See also **AddObjectToLayer** function in DynaPDF manual.
3.34.34 AddOCGToAppEvent(Handle as UInt32, Events as Integer, Categories as Integer) as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds an Optional Content Group (OCG) to an application event.
**Notes:** See dynapdf_help.pdf manual for details.
See also AddOCGToAppEvent function in DynaPDF manual.

3.34.35 AddOutputIntent(ICCFile as folderitem) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function adds an ICC color profile to the PDF file that should be used to render device dependent colors.
**Notes:**
This function was named AddRenderingIntent before.
Requires DynaPDF Lite license.
See also AddOutputIntent function in DynaPDF manual.

3.34.36 AddOutputIntentEx(buffer as Memoryblock) as Integer

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function adds an ICC color profile to the PDF file that should be used to render device dependent colors.
**Notes:**
This function was named AddRenderingIntentEx before.
Requires DynaPDF Lite license.
See also AddOutputIntentEx function in DynaPDF manual.
See also:

- 3.34.37 AddOutputIntentEx(buffer as string) as Integer

3.34.37 AddOutputIntentEx(buffer as string) as Integer

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function adds an ICC color profile to the PDF file that should be used to render device dependent colors.
**Notes:**
This function was named AddRenderingIntentEx before.
Requires DynaPDF Lite license.
See also AddOutputIntentEx function in DynaPDF manual.
See also:

- 3.34.36 AddOutputIntentEx(buffer as Memoryblock) as Integer
3.34. CLASS DYNAPDFMBS

3.34.38 AddPageLabel(StartRange as UInt32, PageLabelFormat as Integer, Value as string, FirstPageNum as Int32) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a page label object. **Notes:** The Value string is converted to Unicode internally. See also AddPageLabel function in DynaPDF manual.

3.34.39 AddPageLabelAnsi(StartRange as UInt32, PageLabelFormat as Integer, Value as string, FirstPageNum as Int32) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a page label object. **Notes:** The Value string is converted to Windows ANSI internally. See also AddPageLabel function in DynaPDF manual.

3.34.40 AddValToChoiceField(Field as Integer, ExpValue as string, Value as string, Selected as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function adds a value to a choice field. **Notes:** The Value string is converted to Unicode. See also AddValToChoiceField function in DynaPDF manual.

3.34.41 AofLAB(LAB as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns A of a LAB color value. **Example:**

```vbnet
dim lab as Integer = DynaPDFMBS.LAB(1,2,3)
MsgBox str(DynaPDFMBS.AofLAB(lab)) // shows 2
```

3.34.42 Append as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function appends an empty page to the document. **Example:**

dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean

// Create a new page
bBool=pdf.Append

See also Append function in DynaPDF manual.

3.34.43 ApplyAppEvent(TOCApplEvent as Integer, SaveResult as Boolean) as boolean

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The visibility state of optional content groups (OCGs) can be dynamically changed in application events like Export, View, or Print.

Notes:
DynaPDF loads the view state when rendering PDF pages by default. The function can be used to apply the visibility state of another event if necessary. The result can optionally be stored in the PDF file but note that this has only an effect in PDF viewers which support layers but no application events since the events will not be deleted from the PDF file. It is also possible to delete the events with DeleteAppEvents().

If the function succeeds the return value is true. If the function fails the return value is false.

See also ApplyAppEvent function in DynaPDF manual.

3.34.44 ApplyPattern(PattHandle as Integer, ColorMode as Integer, ColorValue as Integer) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function sets a tiling pattern as current fill, stroke or fill, and stroke color.

See also ApplyPattern function in DynaPDF manual.

3.34.45 ApplyShading(ShadHandle as Integer) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function applies a shading to the current clipping path, or if no clipping is active, to the entire page.

See also ApplyShading function in DynaPDF manual.
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3.34.46 **AssociateEmbFile(DestObject as Integer, DestHandle as Integer, Relationship as Integer, EmbFile as UInt32) as boolean**

Plugin Version: 13.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function associates an embedded file with a PDF object.  
**Notes:**
The parameter DestHandle must be a valid handle of a PDF object. If destination object type is a page, then the page number must be used as handle. The first page is denoted by one. If the destination object is the documents catalog then the parameter DestHandle is ignored. Set the parameter to zero or -1 in this case.  
The parameter EmbFile must be a valid handle of an embedded file. See AttachFile() or AttachFileEx() for further information.

Associated files are supported since PDF 2.0 and in PDF/A 3 files. In PDF/A 3 files all embedded files must be associated with a PDF object.

If the function succeeds the return value is true. If the function fails the return value is false.  
See also **AssociateEmbFile** function in DynaPDF manual.

3.34.47 **AttachFile(File as folderitem, Description as string, Compress as boolean) as Integer**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function attaches a file to the document.  
**Notes:** On Windows, the description parameter is converted to unicode.  
See also **AttachFile** function in DynaPDF manual.

3.34.48 **AttachFileEx(Buffer as Memoryblock, Filename as string, Description as string, Compress as boolean) as Integer**

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function attaches a file to the document in the same way as AttachFile() but accepts a file buffer instead of a file path.  
See also **AttachFileEx** function in DynaPDF manual.  
See also:
- 3.34.49 AttachFileEx(Buffer as string, Filename as string, Description as string, Compress as boolean) as Integer
3.34.49  **AttachFileEx** (Buffer as string, Filename as string, Description as string, Compress as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function attaches a file to the document in the same way as AttachFile() but accepts a file buffer instead of a file path.

**Example:**

```vba
dim pdf as DynaPDFMBS // your dynapdf object

// add embedded file to PDF
const Compressed = true
call pdf.AttachFileEx("This is hidden text in an attached file.", "attachment.txt", ",", Compressed)
```

See also **AttachFileEx** function in DynaPDF manual.
See also:

- 3.34.48 **AttachFileEx** (Buffer as Memoryblock, Filename as string, Description as string, Compress as boolean) as Integer

3.34.50  **AutoTemplate**(Templ as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** To insert a template automatically on newly created pages, use the function AutoTemplate().

See also **AutoTemplate** function in DynaPDF manual.

3.34.51  **BeginContinueText**(PosX as Double, PosY as Double) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function prepares the output of multiple text lines which use the graphics state parameter Leading as line height, or the font size if Leading is not set.

See also **BeginContinueText** function in DynaPDF manual.

3.34.52  **BeginLayer**(OCG as UInt32) as boolean

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function opens a layer in the current open page or template.

**Notes:**

If the function succeeds the return value is true. If the function fails the return value is false.
### 3.34.53 BeginPageTemplate

**Function:** Creates a new page template with given name.

**Notes:**
This function creates or opens a page template for editing. Page templates are hidden pages which can be added to the document or overlaid on existing pages via JavaScript.

The usage of the function is like Append() or EditPage(). If the template does already exist then it will be opened for editing. Page templates support form fields and annotations but it is not allowed to add article beads to them.

See also `BeginPageTemplate` function in DynaPDF manual.

### 3.34.54 BeginPattern

**Function:**
This function creates a new tiling pattern.

See also `BeginPattern` function in DynaPDF manual.

### 3.34.55 BeginTemplate

**Function:**
Begins a new template.

See also `BeginTemplate` function in DynaPDF manual.

### 3.34.56 BeginTemplateEx

**Function:**
Begins a new template.

**Notes:**
The plugin passes nil to the library for the bbox or the matrix parameter if they are nil.
3.34.57 BeginTransparencyGroup(x1 as Double, y1 as Double, x2 as Double, y2 as Double, Isolated as Boolean, Knockout as Boolean, CS as Integer, CCHandle as Int32) as Int32


**Notes:**

CS: color space, pass ke*s* constants.

Requires DynaPDF Pro license.
See also BeginTransparencyGroup function in DynaPDF manual.

3.34.58 Bezier_1_2_3(x1 as Double, y1 as Double, x2 as Double, y2 as Double, x3 as Double, y3 as Double) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a bezier path to the pdf.
See also Bezier_1_2_3 function in DynaPDF manual.

3.34.59 Bezier_1_3(x1 as Double, y1 as Double, x3 as Double, y3 as Double) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a bezier path to the pdf.
See also Bezier_1_3 function in DynaPDF manual.

3.34.60 Bezier_2_3(x2 as Double, y2 as Double, x3 as Double, y3 as Double) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a bezier path to the pdf.
See also Bezier_2_3 function in DynaPDF manual.

3.34.61 BofLAB(LAB as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns B of a LAB color value.

**Example:**

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```vba
dim lab as Integer = DynaPDFMBS.LAB(1,2,3)
MsgBox str(DynaPDFMBS.BofLAB(lab)) // shows 3
```

### 3.34.62 BofRGB(RGB as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns B of a RGB color value.

**Example:**

```vba
dim rgb as Integer = DynaPDFMBS.RGB(1,2,3)
MsgBox str(DynaPDFMBS.BofRGB(rgb)) // shows 3
```

### 3.34.63 BuildFamilyNameAndStyle(IFont as Integer, byref name as string, byref style as Integer) as boolean

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Builds a family name and style from a font object.

See also `BuildFamilyNameAndStyle` function in DynaPDF manual.

### 3.34.64 CalcWidthHeight(OrgWidth as Double, OrgHeight as Double, ScaledWidth as Double, ScaledHeight as Double) as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function calculates the scaled width or height of a given size in the same way as InsertImage() or PlaceTemplate().

See also `CalcWidthHeight` function in DynaPDF manual.

### 3.34.65 CaretAnnot(PosX as Double, PosY as Double, Width as Double, Height as Double, ColorValue as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a caret annotation.

**Notes:**

This type of annotation is typically used to mark a position on a page where a user should add or edit text. If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the bounding rectangle. If the coordinate system is top-down it defines the upper left corner.

This annotation type has an associated PopUp annotation that displays the string Content in a floating
window. The initial window state of the associated PopUp annotation is closed by default but the state can be changed with SetAnnotOpenState if necessary.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code.
See also CaretAnnot function in DynaPDF manual.

3.34.66 CaretAnnotAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, ColorValue as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer

Notes:
This type of annotation is typically used to mark a position on a page where a user should add or edit text. If the coordinate system is bottom-up the point PosX, PosY defines the lower left corner of the bounding rectangle. If the coordinate system is top-down it defines the upper left corner. This annotation type has an associated PopUp annotation that displays the string Content in a floating window. The initial window state of the associated PopUp annotation is closed by default but the state can be changed with SetAnnotOpenState if necessary.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code.
See also CaretAnnot function in DynaPDF manual.

3.34.67 ChangeAnnotName(Handle as Integer, Name as string) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function changes or deletes the optional name of an annotation.
Notes: The Name parameter is converted to unicode.
See also ChangeAnnotName function in DynaPDF manual.

3.34.68 ChangeAnnotNameAnsi(Handle as Integer, Name as string) as boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function changes or deletes the optional name of an annotation.
Notes: The Name parameter is converted to ANSI.
See also ChangeAnnotName function in DynaPDF manual.
3.34.69  **ChangeAnnotPos(Handle as Integer, PosX as Double,PosY as Double, Width as Double, Height as Double) as boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function changes the position and size of an annotation.
See also ChangeAnnotPos function in DynaPDF manual.

3.34.70  **ChangeBookmark(ABmk as Integer, Text as string, Parent as Integer, DestPage as Integer, Open as Boolean) as boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function changes an existing bookmark.
**Notes:** The text parameter is converted to unicode.
See also ChangeBookmark function in DynaPDF manual.

3.34.71  **ChangeBookmarkAnsi(ABmk as Integer, Text as string, Parent as Integer, DestPage as Integer, Open as Boolean) as boolean**

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function changes an existing bookmark.
**Notes:** The text parameter is converted to ANSI.
See also ChangeBookmark function in DynaPDF manual.

3.34.72  **ChangeFont(Handle as Integer) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function changes or sets the font to the one defined by the parameter AHandle.
See also ChangeFont function in DynaPDF manual.

3.34.73  **ChangeFontSize(size as Double) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function changes the font size of the current font.
See also ChangeFontSize function in DynaPDF manual.
3.34.74  ChangeFontStyle(Style as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** This function changes the style of the current font. See also ChangeFontStyle function in DynaPDF manual.

3.34.75  ChangeFontStyleEx(Style as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The function changes the font style of a font like ChangeFontStyle() but it accepts also the font styles fsBold and fsItalic. See also ChangeFontStyleEx function in DynaPDF manual.

3.34.76  ChangeJavaScript(Handle as Integer, Text as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The function replaces a global JavaScript with a new one.  
**Notes:** The text parameter is converted to unicode. See also ChangeJavaScript function in DynaPDF manual.

3.34.77  ChangeJavaScriptAction(Handle as Integer, Text as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The function replaces the script of a JavaScript action with a new one.  
**Notes:** The text parameter is converted to unicode. See also ChangeJavaScriptAction function in DynaPDF manual.

3.34.78  ChangeJavaScriptActionAnsi(Handle as Integer, Text as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The function replaces the script of a JavaScript action with a new one.  
**Notes:** The text parameter is converted to ANSI. See also ChangeJavaScriptAction function in DynaPDF manual.

3.34.79  ChangeJavaScriptAnsi(Handle as Integer, Text as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The function replaces a global JavaScript with a new one.
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Notes: The text parameter is converted to ANSI.
See also ChangeJavaScript function in DynaPDF manual.

3.34.80 ChangeJavaScriptName(Handle as Integer, Text as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function changes the name of a global JavaScript.
Notes: The text parameter is converted to unicode.
See also ChangeJavaScriptName function in DynaPDF manual.

3.34.81 ChangeJavaScriptNameAnsi(Handle as Integer, Text as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function changes the name of a global JavaScript.
Notes: The text parameter is converted to ANSI.
See also ChangeJavaScriptName function in DynaPDF manual.

3.34.82 ChangeLinkAnnot(Handle as Integer, URL as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function changes the link of a file link or web link annotation.
See also ChangeLinkAnnot function in DynaPDF manual.

3.34.83 ChangeSeparationColor(CSHandle as UInt32, NewColor as UInt32, AlternateExtColorSpace as Integer, AltHandle as Integer = -1) as boolean


Example:

// your instance
dim pdf as DynaPDFMBS

// Create new separation color
dim ColorSpaceHandle as Integer = pdf.CreateSeparationCS(“test”, DynaPDFMBS.kcsDeviceCMYK,-1,DynaPDFMBS.CMYK(0,0,0,100))
call pdf.SetExtColorSpace(ColorSpaceHandle)

call pdf.SetfillColor(255) // 100% of the separation color test
call pdf.DrawCircle(193,389,66, pdf.kfmFill)
// change it to red
call pdf.ChangeSeparationColor(ColorSpaceHandle, 255, DynaPDFMBS.kcsDeviceRGB, -1)

Notes:
The new color value must be defined in the alternate color space. The alternate color space can be any
device or ICC based color space including Lab. If a non-device color space is used, the parameter AltHandle
must be set to the color space handle of the alternate color space.

Returns true on success or false on failure.
See also ChangeSeparationColor function in DynaPDF manual.

3.34.84 CheckCollection as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function:
The function checks whether user defined data fields in embedded files are consistently defined with
collection fields.
See also CheckCollection function in DynaPDF manual.

3.34.85 CheckConformance(ConformanceType as Integer, CheckOptions as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The functions checks
whether the PDF file is compatible to a specific PDF standard or PDF version depending the parameter
Type and modifies anything that is required to get the file compatible to the standard depending on the
check options.
See also CheckConformance function in DynaPDF manual.

3.34.86 CheckFieldNames as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function checks
all currently defined interactive form fields for invalid duplicate field names.
See also CheckFieldNames function in DynaPDF manual.
3.34.87 CircleAnnot(PoSX as Double, PosY as Double, Width as Double, Height as Double, LineWidth as Double, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Comment as string) as Integer

Plugin Version: 13.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function draws a circle annotation on the current open page.

**Notes:**

If the parameters Width and Height are equal the function draws a circle, an ellipse otherwise. If the annotation should be drawn without a border, set the parameter LineWidth to zero or StrokeColor to the special constant kNO_COLOR.

If the interior should be transparent set FillColor to the special constant kNO_COLOR.

Although the line width can be set to any positive floating point value, Adobe’s Acrobat or Reader restrict the line width to 0 through 12 units. The line width should be restricted in the same way to avoid issues in Adobe viewer products.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails, the return value is a negative error code.

See also CircleAnnot function in DynaPDF manual.

3.34.88 CircleAnnotAnsi(PoSX as Double, PosY as Double, Width as Double, Height as Double, LineWidth as Double, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Comment as string) as Integer

Plugin Version: 13.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function draws a circle annotation on the current open page.

**Notes:**

If the parameters Width and Height are equal the function draws a circle, an ellipse otherwise. If the annotation should be drawn without a border, set the parameter LineWidth to zero or StrokeColor to the special constant kNO_COLOR.

If the interior should be transparent set FillColor to the special constant kNO_COLOR.

Although the line width can be set to any positive floating point value, Adobe’s Acrobat or Reader restrict the line width to 0 through 12 units. The line width should be restricted in the same way to avoid issues in Adobe viewer products.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails, the return value is a negative error code.

See also CircleAnnot function in DynaPDF manual.
3.34.89 ClearAutoTemplates as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes the array of templates which are automatically added to newly created pages.
See also ClearAutoTemplates function in DynaPDF manual.

3.34.90 ClearErrorLog

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Clears the error log.
See also ClearErrorLog function in DynaPDF manual.

3.34.91 ClearHostFonts as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes the array of fonts included in all currently defined font search paths.
See also ClearHostFonts function in DynaPDF manual.

3.34.92 ClearPageGraphics

Plugin Version: 19.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Clears the page graphics objects.
**Notes:**
This method clears graphics object.
As the graphics object keeps a reference to DynaPDFMBS object and the DynaPDF object references the graphics object, this call may be required to make sure the circular reference is cleared.
Automatically called in Append, EndPage, CloseFile, ImportPDFFile, ImportPDFPage and CloseFileEx.

3.34.93 ClipPath(ClipMode as Integer, FillMode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function marks the current path as clipping path.
See also ClipPath function in DynaPDF manual.
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CloseAndSignFile(CertFile as folderitem, Password as string, Reason
as string, Location as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function
finishes the PDF file, digitally signs it, and frees all used resources if the file was not created in memory.
See also CloseAndSignFile function in DynaPDF manual.

3.34.95

CloseAndSignFileEx(OpenPwd as string, OwnerPwd as string, KeyLen
as Integer, Restrict as Integer, CertFile as folderitem, Password as
string, Reason as string, Location as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function
finishes the PDF file, encrypts it, digitally signs it, and frees all used resources if the file was not created in
memory.
See also CloseAndSignFileEx function in DynaPDF manual.

3.34.96

CloseAndSignFileExt(SigParams as DynaPDFSigParmsMBS) as boolean

closes the PDF file and returns either the file hash or the byte ranges to be signed by an external signature
handler.
See also CloseAndSignFileExt function in DynaPDF manual.

3.34.97

CloseAndSignPDFFile(OutputFile as FolderItem, CertificateData as String,
Password as String, ContactInfo as String = ””, Location as String =
””, Reason as String = ””) as boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: No, Win: Yes, Linux: No. Function: Closes and signs
file.
Notes:
This uses pdf_signature.cpp example code from DynaPDF.
The function will on Windows use functions from Crypt DLL on Windows.
Internally calls CloseAndSignFileExt, OpenOutputFile and FinishSignature.
Returns true on success and false on failure.
Loads certificate from provided certificate file data.
Version 15.1 allows OutputFile to be nil.


3.34.98 CloseAndSignPDFFileWithDialog(OutputFile as FolderItem, StoreName as String = "MY", ContactInfo as String = "", Location as String = "", Reason as String = ") as boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: No, Win: Yes, Linux: No. **Function:** Closes and signs file.

**Notes:**

Picks a certificate from the given certificate store on Windows.

This uses pdf_signature.cpp example code from DynaPDF. The function will on Windows use functions from Crypt DLL on Windows. Internally calls CloseAndSignFileExt, OpenOutputFile and FinishSignature. Returns true on success and false on failure.

Version 15.1 allows OutputFile to be nil.

3.34.99 CloseFile as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function finishes the PDF file and frees all used resources if the file was not created in memory.

**Example:**

```dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean
bBool=pdf.CloseFile```

See also CloseFile function in DynaPDF manual.

3.34.100 CloseFileEx(OpenPwd as string, OwnerPwd as string, KeyLen as Integer, Restrict as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function finishes the PDF file, encrypts it, and frees all used resources if the file was not created in memory.

**Notes:** Requires DynaPDF Lite license.

See also CloseFileEx function in DynaPDF manual.
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### 3.34.101 CloseImage as boolean

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Closes the current open image. See also `CloseImage` function in DynaPDF manual.

### 3.34.102 CloseImportFile as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function closes an open import file that was be opened by `OpenImportFile()` or `OpenImportBuffer()`.

**Example:**

```vba
dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean

bBool=pdf.CloseImportFile
```

See also `CloseImportFile` function in DynaPDF manual.
3.34.103  **CloseImportFileEx(Handle as Integer) as boolean**

Plugin Version: 13.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function closes a specific import file and deletes the corresponding parser instance.  
**Notes:**

The parameter Handle must be a valid file handle that was returned by OpenImportFile() or OpenImportBuffer(). See OpenImportFile() for further information in dynapdf_help.pdf.  
If the function succeeds the return value is true. If the function fails the return value is false.  
See also CloseImportFileEx function in DynaPDF manual.

3.34.104  **ClosePath(FillMode as Integer) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Closes the current path.  
See also ClosePath function in DynaPDF manual.

3.34.105  **CloseTag as boolean**

See also CloseTag function in DynaPDF manual.

3.34.106  **CMYK(C as Integer, M as Integer, Y as Integer, K as Integer) as UInt32**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Builds a CMYK color value based on the given component values.  
**Example:**

```pseudocode
dim cmyk as Integer = DynaPDFMBS.CMYK(1,2,3,4)
MsgBox hex(cmyk)
```

**Notes:** Returns different values on BigEndian and LittleEndian systems.

3.34.107  **CofCMYK(CMYK as UInt32) as Integer**

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns C of a CMYK color value.  
**Example:**
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```vbscript
dim cmyk as Integer = DynaPDFMBS.CMYK(1, 2, 3, 4)
MsgBox str(DynaPDFMBS.CofCMYK(cmyk)) // shows 1
```

**Notes:** Returns different values on BigEndian and LittleEndian systems.

### 3.34.108 `ComputeBBox(Flags as Integer) as DynaPDFRectMBS`

Plugin Version: 8.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Computes the bounding box.

See also `ComputeBBox` function in DynaPDF manual.

### 3.34.109 `ConvColor(Colors() as Double, SourceColorSpaceHandle as Integer, DestColorSpace as Integer) as Integer`

Plugin Version: 9.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Converts a color from one ColorSpace to another.

**Example:**

```vbscript
// setup Environment
dim dy as new DynaPDFMBS
call dy.CreateNewPDF(nil)

// create a simple RGB colorspace
dim whitePoint as MemoryBlock = NewMemoryBlock(12)
whitePoint.SingleValue(0)=1.0
whitePoint.SingleValue(4)=1.0
whitePoint.SingleValue(8)=1.0

dim BlackPoint as MemoryBlock = nil // default
dim Gamma as MemoryBlock = nil // default
dim Matrix as MemoryBlock = nil // default

dim h as Integer = dy.CreateCIEColorSpace(dy.kesCalRGB, WhitePoint, BlackPoint, Gamma, Matrix)

// do we have one?
if dy.GetColorSpaceCount=0 then
    MsgBox "No color space!"
    Return
else
    MsgBox str(dy.GetColorSpaceCount)+" Colorspace defined"
end if
```
Now get the colorspace information including the Object reference:

```vba
dim c as DynaPDFColorSpaceMBS = dy.GetColorSpaceObj(h)

dim d(-1) as Double = array(0.3,0.5,0.7)
dim IColorSpace as Integer = c.Handle
dim DestCS as Integer = DynaPDFMBS.kesDeviceCMYK

// convert a color
dim n as Integer = dy.ConvColor(d, IColorSpace, DestCS)
```

MsgBox hex(n)

**Notes:**
Colors: The array of color values. 3 values for RGB, 4 values for CMYK and one value for Gray.
IColorSpaceSource: The source color space object reference.
DestCS: The destination color space. One of the kes* constants.
See also ConvColor function in DynaPDF manual.

### 3.34.110 ConvertColors(Flags as Integer) as Boolean

Plugin Version: 8.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Converts the colors.
**Notes:** Requires DynaPDF Pro license.
See also ConvertColors function in DynaPDF manual.

### 3.34.111 ConvertEMFSpool(File as folderitem, LeftMargin as Double, TopMargin as Double, Flags as Integer = 0) as Integer

Plugin Version: 13.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function converts an EMF spool file to PDF.
**Notes:**
See dynapdf_help.pdf file.
Pass kspc* flags.
Requires DynaPDF Lite license.
See also ConvertEMFSpool function in DynaPDF manual.

### 3.34.112 ConvertstyledText(StyledText as StyledText) as String

Plugin Version: 16.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Converts styled text to formatting commands.
Example:

```vbnet
Public Function Convert(s as StyledText) as string
    dim d as new DynaPDFMBS

    // create dummy in memory pdf
    call d.CreateNewPDF(nil)

    // create dummy page
    call d.Append

    // convert
    Return d.ConvertStyledText(s)

    // destructor will cleanup
End Function
```

Notes:

You can use the result with WriteFText, WriteFTextEx or DynaPDFTableMBS.SetCellText functions. Needs an open page as it loads fonts for you. May cause error events if fonts are not found.

### 3.34.113 CopyChoiceValues(Source as UInt32, Dest as UInt32, Share as Boolean) as Boolean

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Copies the list items, default value, and value of the source field to the destination field.

**Notes:**

The source and destination field can be combo and list boxes. It is allowed to copy the list items of a list box to a combo box or vice versa.

If Share is true, the function adds just a reference to the list item so that both fields share the same list items. This is still the case if more list items will be added to such a field. If Share is false, the list items will be copied to the destination field. Both fields contain independent list items in this case.

Already existing list items of the destination field will be deleted.
See also CopyChoiceValues function in DynaPDF manual.

### 3.34.114 Create3DAnnot(PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Name as string, U3DFile as string, Image as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a 3D annotation from a U3D file.
See also Create3DAnnot function in DynaPDF manual.

3.34.115 Create3DAnnotAnsi(PosX as double, PosY as double, Width as double, Height as double, Author as string, Name as string, U3DFile as string, Image as string) as integer

See also Create3DAnnot function in DynaPDF manual.

3.34.116 Create3DBackground(IView as Integer, BackColor as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function creates a background dictionary for a 3D annotation that is used to change the annotation’s background color.
See also Create3DBackground function in DynaPDF manual.

3.34.117 Create3DGotoViewAction(Base3DAnnot as Integer, IView as Integer, Named as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: A go to 3D view action can be used to dynamically change the view of a 3D annotation.
See also Create3DGotoViewAction function in DynaPDF manual.

3.34.118 Create3DProjection(IView as Integer, ProjType as Integer, ScaleType as Integer, Diameter as Double, FOV as Double) as Boolean

See also Create3DProjection function in DynaPDF manual.

3.34.119 Create3DView(Base3DAnnot as Integer, Name as string, SetAsDefault as boolean, Matrix as memoryblock, CamDistance as Double, RenderingMode as Integer, LightingSheme as Integer) as Integer

Notes: The plugin passes nil for the matrix if the matrix memoryblock parameter is nil.
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See also Create3DView function in DynaPDF manual.

3.34.120 CreateAnnotAP(annot as Integer) as Integer

Notes:
Returns the new annotation handle.
You can draw to this template directly.
You must close it with EndTemplate.

This method helps you to create a custom stamp or change different annotation appearance.
See also CreateAnnotAP function in DynaPDF manual.

3.34.121 CreateArticleThread(ThreadName as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function creates a new article thread.
Notes: ThreadName string is converted to Unicode.
See also CreateArticleThread function in DynaPDF manual.

3.34.122 CreateArticleThreadAnsi(ThreadName as string) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function creates a new article thread.
Notes: ThreadName string is converted to ANSI.
See also CreateArticleThread function in DynaPDF manual.

3.34.123 CreateAxialShading(sX as Double, sY as Double, eX as Double, eY as Double, SCenter as Double, SColor as Integer, EColor as Integer, Extend1 as Boolean, Extend2 as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Axial shadings define a color blend that varies along a linear axis between two endpoints and extends indefinitely perpendicular to that axis.
See also CreateAxialShading function in DynaPDF manual.
3.34.124 **CreateBarcodeField** (Name as string, Parent as Integer,PosX as Double,PosY as Double, Width as Double, Height as Double, Barcode as DynaPDFBarcodeMBS) as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a barcode field.

**Notes:**
Note that users require either the full version of Adobe’s Acrobat or a separate license of Adobe’s Barcodes Paper Forms Solutions to enable the usage of barcode fields in Adobe’s Reader.
See also CreateBarcodeField function in DynaPDF manual.

3.34.125 **CreateButton** (Name As String, Caption as string, Parent as Integer,PosX as Double,PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a push button.

**Notes:** The Caption parameter is converted to unicode.
See also CreateButton function in DynaPDF manual.

3.34.126 **CreateButtonAnsi** (Name As String, Caption as string, Parent as Integer,PosX as Double,PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a push button.

**Notes:** The Caption parameter is converted to ANSI.
See also CreateButton function in DynaPDF manual.

3.34.127 **CreateCheckBox** (Name as string, ExpValue as string, Checked as boolean, Parent as Integer,PosX as Double,PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a check box.
See also CreateCheckBox function in DynaPDF manual.
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3.34.128 CreateCIEColorSpace(Base as Integer, WhitePoint as memoryblock, BlackPoint as memoryblock, Gamma as memoryblock, Matrix as memoryblock) as Integer

Plugin Version: 8.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a CIE based color space.
See also CreateCIEColorSpace function in DynaPDF manual.

3.34.129 CreateColItemDate(EmbFile as Integer, Key as string, Value as Integer, Prefix as string) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a user defined collection item which accepts a date time value.
See also CreateColItemDate function in DynaPDF manual.

3.34.130 CreateColItemNumber(EmbFile as Integer, Key as string, Value as Double, Prefix as string) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a user defined collection item which accepts an arbitrary number as value.
See also CreateColItemNumber function in DynaPDF manual.

3.34.131 CreateColItemString(EmbFile as Integer, Key as string, Value as string, Prefix as string) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a user defined collection item which accepts an arbitrary string as value.
**Notes:** The value and prefix parameters are converted to unicode.
See also CreateColItemString function in DynaPDF manual.

3.34.132 CreateColItemStringAnsi(EmbFile as Integer, Key as string, Value as string, Prefix as string) as boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a user defined collection item which accepts an arbitrary string as value.
**Notes:** The value and prefix parameters are converted to ANSI.
See also CreateColItemString function in DynaPDF manual.
3.34.133 CreateCollection(View as Integer) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function marks the current PDF file in memory as PDF collection, also known as PDF Package.
**Notes:** Requires DynaPDF Lite license.
See also CreateCollection function in DynaPDF manual.

3.34.134 CreateCollectionField(ColType as Integer, Column as Integer, Name as String, Key as string, Visible as boolean, Editable as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a user defined collection field.
**Notes:** The name parameter is converted to unicode.
See also CreateCollectionField function in DynaPDF manual.

3.34.135 CreateCollectionFieldAnsi(ColType as Integer, Column as Integer, Name as String, Key as string, Visible as boolean, Editable as boolean) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a user defined collection field.
**Notes:** The name parameter is converted to ANSI.
See also CreateCollectionField function in DynaPDF manual.

3.34.136 CreateComboBox(Name as string, Sort as boolean, Parent as Integer,PosX as Double, PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a combo box.
See also CreateComboBox function in DynaPDF manual.

3.34.137 CreateDeviceNColorSpace(Colorants() as string, PostScriptFunc as string, AlternateColorSpace as Integer, Handle as Integer) as Integer

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a new colorspace using the given color names.
**Notes:**
Strings are passed as UTF-8 Strings in this function to the library. Currently the function is limited to 100 colorants on the plugin side. See also CreateDeviceNColorSpace function in DynaPDF manual.

### 3.34.138 CreateDeviceNColorSpaceAnsi(Colorants() as string, PostScriptFunc as string, AlternateColorSpace as Integer, Handle as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a new colorspace using the given color names. **Notes:** Strings are passed as Windows ANSI Strings in this function to the library. Currently the function is limited to 100 colorants on the plugin side. See also CreateDeviceNColorSpace function in DynaPDF manual.

### 3.34.139 CreateExtGState(e as DynaPDFExtGStateMBS) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates an extended graphics state dictionary from the structure e. **Example:**

```
dim h as Integer // handle
dim pdf as DynaPDFMBS
dim state as new DynaPDFExtGStateMBS

' get pdf, set state properties
h=pdf.CreateExtGState(state)
call pdf.SetExtGState(h)
```

**Notes:** Requires DynaPDF Lite license. See also CreateExtGState function in DynaPDF manual.

### 3.34.140 CreateGoToAction(DestType as Integer, PageNum as Integer, a as Double, b as Double, c as Double, d as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A go-to action changes the view to a specific destination (page, location, and magnification factor).
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See also `CreateGoToAction` function in DynaPDF manual.
See also:

- 3.34.141 CreateGoToAction(NamedDest as Integer) as Integer

3.34.141 CreateGoToAction(NamedDest as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a `goTo` action which uses a named destination to open the target page.
See also `CreateGoToAction` function in DynaPDF manual.
See also:

- 3.34.140 CreateGoToAction(DestType as Integer, PageNum as Integer, a as Double, b as Double, c as Double, d as Double) as Integer

3.34.142 CreateGoToEAction(Location as Integer, Source as string, SrcPage as Integer, Target as string, DestName as string, DestPage as Integer, NewWindow as boolean) as Integer

Plugin Version: 13.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates an embedded GoTo action.
**Notes:** See also CreateGoToEAction function in dynapdf_help.pdf manual.
See also `CreateGoToEAction` function in DynaPDF manual.

3.34.143 CreateGoToRAction(File as folderitem, PageNum as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a go to remote action.
See also `CreateGoToRAction` function in DynaPDF manual.
See also:

- 3.34.144 CreateGoToRAction(FilePath as String, PageNum as integer) as integer

3.34.144 CreateGoToRAction(FilePath as String, PageNum as integer) as integer

Plugin Version: 18.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a go to remote action.
See also `CreateGoToRAction` function in DynaPDF manual.
See also:
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- 3.34.143 CreateGoToRAction(File as folderitem, PageNum as Integer) as Integer

3.34.145 CreateGoToRActionEx(File as folderitem, DestName as String, NewWindow as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: The function creates a go-to-remote action that opens a named destination in an external PDF file.
See also CreateGoToRActionEx function in DynaPDF manual.
See also:

- 3.34.146 CreateGoToRActionEx(FilePath as String, DestName as String, NewWindow as boolean) as integer

3.34.146 CreateGoToRActionEx(FilePath as String, DestName as String, NewWindow as boolean) as integer

Plugin Version: 18.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: The function creates a go-to-remote action that opens a named destination in an external PDF file.
See also CreateGoToRActionEx function in DynaPDF manual.
See also:

- 3.34.145 CreateGoToRActionEx(File as folderitem, DestName as String, NewWindow as boolean) as Integer

3.34.147 CreateGoToRActionExU(File as folderitem, DestName as String, NewWindow as boolean) as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: The function creates a go-to-remote action that opens a named destination in an external PDF file.
See also:

- 3.34.148 CreateGoToRActionExU(FilePath as String, DestName as String, NewWindow as boolean) as integer

3.34.148 CreateGoToRActionExU(FilePath as String, DestName as String, NewWindow as boolean) as integer

Plugin Version: 18.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: The function creates a go-to-remote action that opens a named destination in an external PDF file.
See also:

- 3.34.147 CreateGoToRActionExU(File as folderitem, DestName as String, NewWindow as boolean) as Integer
3.34.149 CreateGroupField(Name as string, Parent as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a group field.
See also CreateGroupField function in DynaPDF manual.

3.34.150 CreateHideAction(Field as Integer, Hide as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A hide action hides or shows one or more interactive form fields on screen by setting or clearing their hidden flags.
See also CreateHideAction function in DynaPDF manual.

3.34.151 CreateICCBasedColorSpace(File as folderitem) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates an ICC based color space.
**Notes:** Use the value returned for the SetExtColorSpace method.
See also CreateICCBasedColorSpace function in DynaPDF manual.

3.34.152 CreateICCBasedColorSpaceEx(Buffer as Memoryblock) as Integer

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a new ICC based color space from ICC file content in a string buffer.
**Notes:** Returns the color space handle.
See also:

- 3.34.153 CreateICCBasedColorSpaceEx(Buffer as string) as Integer

3.34.153 CreateICCBasedColorSpaceEx(Buffer as string) as Integer

Plugin Version: 12.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a new ICC based color space from ICC file content in a string buffer.
**Notes:** Returns the color space handle.
See also:

- 3.34.152 CreateICCBasedColorSpaceEx(Buffer as Memoryblock) as Integer
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**3.34.154 CreateImage(file as folderitem, format as Integer) as boolean**

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates an image file with the given image format.  
**Notes:**

For the format parameter use the kifm* constants.

See also *CreateImage* function in DynaPDF manual.

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**3.34.155 CreateImpDataAction(DataFile as folderitem) as Integer**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** An import data action imports PDF data into the document’s interactive form.  
**Notes:** Also check the dynapdf manual on the pdfCreateImpDataActionA function (pdfCreateImpDataActionW on Windows).

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**3.34.156 CreateIndexedColorSpace(Base as Integer, Handle as Integer, ColorTable as memoryblock, NumColors as Integer) as Integer**

Plugin Version: 8.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates an indexed color space which can be used for vector graphics and text output.  
**Notes:** Use the value returned for the SetExtColorSpace method.  
See also *CreateIndexedColorSpace* function in DynaPDF manual.

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**3.34.157 CreateJSAction(Script as string) as Integer**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a JavaScript action.  
**Notes:** The script parameter is converted to unicode.  
See also *CreateJSAction* function in DynaPDF manual.

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**3.34.158 CreateJSActionAnsi(Script as string) as Integer**

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a JavaScript action.  
**Notes:** The script parameter is converted to ANSI.  
See also *CreateJSAction* function in DynaPDF manual.
3.34.159 CreateLaunchAction(OP as Integer, FileName as folderitem, DefDir as string, Param as string, NewWindow as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A launch action launches an application or opens or prints a document. 
See also CreateLaunchAction function in DynaPDF manual.

3.34.160 CreateLaunchActionEx(FileName as folderitem, NewWindow as boolean) as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a launch link. 
See also CreateLaunchActionEx function in DynaPDF manual.

3.34.161 CreateListBox(Name as string, Sort as boolean, Parent as Integer,PosX as Double,PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a list box. 
See also CreateListBox function in DynaPDF manual.

3.34.162 CreateNamedAction(Action as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a named action. 
See also CreateNamedAction function in DynaPDF manual.

3.34.163 CreateNamedDest(Name as string, DestPage as Integer, DestType as Integer, a as Double, b as Double, c as Double, d as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a named destination that can be accessed from external PDF files. 
**Notes:** The name parameter is converted to unicode. 
See also CreateNamedDest function in DynaPDF manual.
3.34.164 CreateNamedDestAnsi(Name as string, DestPage as Integer, DestType as Integer, a as Double, b as Double, c as Double, d as Double) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a named destination that can be accessed from external PDF files. **Notes:** The name parameter is converted to ANSI. See also CreateNamedDest function in DynaPDF manual.

3.34.165 CreateNewPDF(OutPDF as folderitem = nil) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a new PDF file. **Example:**

```favorite
Dim dest As FolderItem // where to save?
Dim pdf As DynaPDFMBS // your DynaPDF object
Dim bBool As Boolean

// create new pdf
bBool = pdf.CreateNewPDF(dest)
If bBool = False Then
    MsgBox "Failed to create pdf file " + dest.AbsolutePath
    Return
End If
```

See also CreateNewPDF function in DynaPDF manual.

3.34.166 CreateOCG(name as string, DisplayInUI as boolean, Visible as boolean, Intent as Integer) as Integer

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates an Optional Content Group (OCG). **Notes:** CreateOCG stores the name in unicode encoding and CreateOCGAnsi in Windows ANSI encoding. See also CreateOCG function in DynaPDF manual.
3.34.167 CreateOCGAnsi(name as string, DisplayInUI as boolean, Visible as boolean, Intent as Integer) as Integer

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates an Optional Content Group (OCG).
**Notes:** CreateOCG stores the name in unicode encoding and CreateOCGAnsi in Windows ANSI encoding. See also CreateOCG function in DynaPDF manual.

3.34.168 CreateOCMD(Visibility as Integer, OCGs() as Integer) as Integer

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates an Optional Content Membership Dictionary (OCMD).
**Notes:** For Visibility use the constants kovAllOff, kovAllOn, kovAnyOff, kovAnyOn and kovNotSet. See also CreateOCMD function in DynaPDF manual.

3.34.169 CreateRadialShading(sX as Double, sY as Double, R1 as Double, eX as Double, eY as Double, R2 as Double, SCenter as Double, SColor as Integer, EColor as Integer, Extend1 as boolean, Extend2 as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Radial shadings define a color blend that varies between two circles. See also CreateRadialShading function in DynaPDF manual.

3.34.170 CreateRadioButton(Name as string, ExpValue as string, Checked as boolean, Parent as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A radio button field is a set of related toggle controls (check boxes), at most one of which may be on at any given time; selecting any one of the button automatically deselects all others. See also CreateRadioButton function in DynaPDF manual.

3.34.171 CreateResetAction as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A reset form action resets all or specific fields of an interactive form to their default values. See also CreateResetAction function in DynaPDF manual.
3.34.172 CreateSeparationCS(Colorant as string, Alternate as Integer, Handle as Integer, ColorValue as Integer) as Integer

Plugin Version: 8.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a Separation color space. **Notes:** This function passes colorant string in UTF-8 encoding to the library. See also CreateSeparationCS function in DynaPDF manual.

3.34.173 CreateSeparationCSAnsi(Colorant as string, Alternate as Integer, Handle as Integer, ColorValue as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a Separation color space. **Notes:** This function passes colorant string in Windows ANSI encoding to the library. See also CreateSeparationCS function in DynaPDF manual.

3.34.174 CreateSetOCGStateAction(On() as UInt32, Off() as UInt32, Toggle() as UInt32, PreserveRB as boolean) as Integer

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a SetOCGState action that can be used to change the visibility state of certain Optional Content Groups (OCGs). See also CreateSetOCGStateAction function in DynaPDF manual.

3.34.175 CreateSigField(Name as string, Parent as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates an empty signature field which can be used to digitally sign the PDF file. See also CreateSigField function in DynaPDF manual.

3.34.176 CreateSigFieldAP(SigField as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a signature appearance template in the exact size of the base signature field. See also CreateSigFieldAP function in DynaPDF manual.
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3.34.177 CreateSoftMask(TranspGroup as UInt32, MaskType as Integer, BackColor as UInt32) as Integer


**Notes:**
- MaskType: pass ksmtAlpha or ksmtLuminosity constants.
- Requires DynaPDF Pro license.
- See also CreateSoftMask function in DynaPDF manual.

3.34.178 CreateStdPattern(Pattern as Integer, LineWidth as Double, Distance as Double, LineColor as Integer, BackColor as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a hatch pattern.

See also CreateStdPattern function in DynaPDF manual.

3.34.179 CreateStructureTree as boolean

Plugin Version: 8.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a structure tree.

See also CreateStructureTree function in DynaPDF manual.

3.34.180 CreateSubmitAction(Flags as Integer, URL as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A submit form action submits the field values of an interactive form to a web server.

See also CreateSubmitAction function in DynaPDF manual.

3.34.181 CreateTable(AllocRows as UInt32, NumCols as UInt32, width as Double, DefRowHeight as Double) as DynaPDFTableMBS

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a table with the given size.

**Notes:** Returns a new table object.

See also CreateTable function in DynaPDF manual.
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3.34.182 CreateTextField(Name as string, Parent as Integer, Multiline as boolean, MaxLen as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function creates a text field.
See also CreateTextField function in DynaPDF manual.

3.34.183 CreateURIAction(URL as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function:
A uniform resource identifier (URI) is a string that identifies (resolves to) a resource on the internet - typically a file that is the destination of a hyperlink, although it can also resolve to a query or other entity.
Notes:
A URI action causes a URI to be resolved. The parameter URL must be 7Å | bit ASCII string.
See also CreateURIAction function in DynaPDF manual.

3.34.184 DecryptPDF(File as folderitem, PwdType as Integer, Password as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function decrypts a PDF file by using the supplied password to decrypt the file.
See also DecryptPDF function in DynaPDF manual.

3.34.185 DecryptPDFAnsi(Path as string, PwdType as Integer, Password as string) as Integer

Plugin Version: 12.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function decrypts a PDF file by using the supplied password to decrypt the file.
Notes: Same as DecryptPDF, but takes path name in Windows ANSI encoding.
See also DecryptPDF function in DynaPDF manual.
3.34.186  **DeleteAcroForm**

Plugin Version: 9.8, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Deletes an acrobat reader form.
See also DeleteAcroForm function in DynaPDF manual.

3.34.187  **DeleteActionFromObj(ObjType as Integer, ActHandle as Integer, ObjHandle as Integer) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes an action from a PDF object.
See also DeleteActionFromObj function in DynaPDF manual.

3.34.188  **DeleteActionFromObjEx(ObjType as Integer, ObjHandle as Integer, ActIndex as Integer) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to delete an action from an object without using an action handle.
See also DeleteActionFromObjEx function in DynaPDF manual.

3.34.189  **DeleteAnnotation(Handle as Integer) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes an annotation.
See also DeleteAnnotation function in DynaPDF manual.

3.34.190  **DeleteAnnotationFromPage(PageNum as UInt32, Handle as UInt32) as boolean**

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Deletes an annotation from a page.
See also DeleteAnnotationFromPage function in DynaPDF manual.
3.34.191 DeleteAppEvents(ApplyEvent as Boolean, TOCApplEvent as Integer) as Integer

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function deletes all application events if any.

**Notes:**

The function can optionally apply the visibility state of an event before the application events will be deleted. The new visibility state will be stored in the PDF file. To apply the visibility state of a specific event without deletion call ApplyAppEvent() instead.

If the function succeeds and if application events were deleted the return value is 1. If the no application events were defined the return value is 0. If the function fails the return value is a negative error code.

See also DeleteAppEvents function in DynaPDF manual.

3.34.192 DeleteBookmark(ABmk as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes a bookmark.

See also DeleteBookmark function in DynaPDF manual.

3.34.193 DeleteEmbeddedFile(handle as Integer) as boolean

Plugin Version: 8.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Deletes the embedded file with the given handle.

See also DeleteEmbeddedFile function in DynaPDF manual.

3.34.194 DeleteField(Field as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes an interactive form field.

See also DeleteField function in DynaPDF manual.

3.34.195 DeleteFieldEx(URL as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes an interactive form field by using its full qualified name, that is the name of any parent group field separated by a period (.) plus the field name.
See also `DeleteFieldEx` function in DynaPDF manual.

### 3.34.196 DeleteJavaScrpits(DelJavaScriptActions as boolean)

Plugin Version: 9.8, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Deletes java scripts. See also `DeleteJavaScrpits` function in DynaPDF manual.

### 3.34.197 DeleteOCGFromAppEvent(Handle as UInt32, Events as Integer, Categories as Integer, DelCategoryOnly as Boolean) as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Deletes an OCG or layer from one or more application events, or it deletes only one or more categories from an application event in which the OCG was found (if DelCategoryOnly is true). **Notes:**

If DelCategoryOnly is true, and if no more categories are left in the application event, then the event will be deleted. See also `AddOCGToAppEvent()` and `SetOCGContUsage()` for further information.

If the function succeeds the return value is true. If the function fails the return value is false. See also `DeleteOCGFromAppEvent` function in DynaPDF manual.

### 3.34.198 DeleteOutputIntent(Index as Integer) as Integer

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Can be used to delete a specific or all output intents. **Notes:**

A PDF file can contain more than one output intent. Call `GetOutputIntentCount` to determine the number of available output intents. If the parameter Index is set to -1 all output intents will be deleted.

If the function succeeds the return value is the remaining number of output intents. If the function fails the return value is a negative error code. See also `DeleteOutputIntent` function in DynaPDF manual.

### 3.34.199 DeletePage(PageNum as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes a page. See also `DeletePage` function in DynaPDF manual.
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3.34.200 DeletePageLabels

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function deletes all page labels contained in the current open document, if any. See also DeletePageLabels function in DynaPDF manual.

3.34.201 DeleteSeparationInfo(AllPages as boolean) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function deleted the separation of the current open page or of all pages if the parameter AllPages is set to true. See also DeleteSeparationInfo function in DynaPDF manual.

3.34.202 DeleteTemplate(handle as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes a template. See also DeleteTemplate function in DynaPDF manual.

3.34.203 DeleteTemplateEx(index as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function deletes a template by using an index instead of a template handle. See also DeleteTemplateEx function in DynaPDF manual.

3.34.204 DeleteXFAForm

Plugin Version: 9.8, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Deletes XFA Form. See also DeleteXFAForm function in DynaPDF manual.

3.34.205 DrawArc(PosX as Double, PosY as Double, Radius as Double, StartAngle as Double, EndAngle as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function draws an arc by using a start and end angle. See also DrawArc function in DynaPDF manual.
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3.34.206 DrawArcEx(PosX as Double, PosY as Double, Width as Double, Height as Double, StartAngle as Double, EndAngle as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function draws an elliptical arc.

**Example:**

```vba
dim pdf as new DynaPDFMBS
dim f as FolderItem = SpecialFolder.Desktop.Child("Create PDF.pdf")

pdf.SetLicenseKey "Starter" // For this example you can use a Starter, Lite, Pro or Enterprise License

// create new PDF
call pdf.CreateNewPDF f

// We want to use top-down coordinates
call pdf.SetPageCoords pdf.kpcTopDown

// new page
call pdf.Append

// black
call pdf.SetStrokeColor 0

// draw an arc
call pdf.DrawArcEx 100,100,100,100, 90,180
call pdf.StrokePath

// and a second one
call pdf.DrawArcEx 200,200,100,100, 0,90
call pdf.StrokePath

// and a third one. 0 to 0 gives a full circle
call pdf.DrawArcEx 300,300,100,100, 0,0
call pdf.StrokePath

// finish page
call pdf.EndPage

// Close file
call pdf.CloseFile

// open PDF
f.Launch
```

See also **DrawArcEx** function in DynaPDF manual.
3.34.207 DrawChord(PosX as Double, PosY as Double, Width as Double, Height as Double, StartAngle as Double, EndAngle as Double, FillMode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function draws an elliptical chord (a region bounded by the intersection of an ellipse and a line segment, called a secant). See also DrawChord function in DynaPDF manual.

3.34.208 DrawCircle(PosX as Double, PosY as Double, Radius as Double, FillMode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function draws a circle.

**Example:**

```vbnet
dim pdf as new DynaPDFMBS
dim f as FolderItem = SpecialFolder.Desktop.Child("Create PDF with Line.pdf")
pdf.SetLicenseKey "Starter" // For this example you can use a Starter, Lite, Pro or Enterprise License

// Create a new PDF
call pdf.CreateNewPDF f

// We want to use top-down coordinates
call pdf.SetPageCoords pdf.kpcTopDown

// Add a page
call pdf.Append

// a circle, filled
call pdf.SetFillColor pdf.RGB(0,255,0) // green
call pdf.DrawCircle(100, 100, 100, pdf.kfmFill)

// a circle, stoked
call pdf.SetStrokeColor pdf.RGB(255,0,0) // red
call pdf.DrawCircle(200, 200, 100, pdf.kfmStroke)

// end page
call pdf.EndPage

// Close page
call pdf.CloseFile
```
// Open PDF
f.Launch

See also DrawCircle function in DynaPDF manual.

### 3.34.209 DrawPie(PosX as Double, PosY as Double, Width as Double, Height as Double, StartAngle as Double, EndAngle as Double, FillMode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function draws a pie-shaped wedge bounded by the intersection of an ellipse and two angles. See also DrawPie function in DynaPDF manual.

### 3.34.210 EditPage(PageNum as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function prepares a page for editing.

**Example:**

```
dim pdf as DynaPDFMBS // your dynapdf instance

// edit page 1
call pdf/EditPage(1)
// set a font
call pdf.SetFont( "Times New Roman",pdf.kfsNone,46,True,pdf.kcp1252 )
// set a color
call pdf.SetFillColor(0)

// now add a text annotation
call pdf.FreeTextAnnot( 100, 100, 100, 100, "author", "test", 0 )

// end page
call pdf/EndPage
```

See also EditPage function in DynaPDF manual.
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3.34.211 EditTemplate(index as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function prepares a template for editing. See also EditTemplate function in DynaPDF manual.

3.34.212 EditTemplate2(handle as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prepares the template for editing. See also EditTemplate2 function in DynaPDF manual.

3.34.213 Ellipse(PosX as Double, PosY as Double, Width as Double, Height as Double, FillMode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function draws an ellipse. See also Ellipse function in DynaPDF manual.

3.34.214 EnableMutex(Value as boolean)

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether to enable mutex or not.

3.34.215 EncryptPDF(File as folderitem, OpenPwd as string, OwnerPwd as string, KeyLen as Integer, Restrict as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function encrypts a PDF file. See also EncryptPDF function in DynaPDF manual.

3.34.216 EncryptPDFAnsi(Path as string, OpenPwd as string, OwnerPwd as string, KeyLen as Integer, Restrict as Integer) as Integer

Plugin Version: 12.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function encrypts a PDF file. **Notes:** Same as EncryptPDF, but takes path name in Windows ANSI encoding.
3.34.217 EndContinueText as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function finishes a continue text block that was created with the function BeginContinueText() beforehand. **Deprecated:** This item is deprecated and should no longer be used.

3.34.218 EndLayer as boolean

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function closes a layer that was opened by BeginLayer. **Notes:**
If the function succeeds the return value is true. If the function fails the return value is false.

See also EndLayer function in DynaPDF manual.

3.34.219 EndPage as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function closes an open page that was opened by Append() or EditPage().
**Example:**
```vbnet
dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean

bBool=pdf.EndPage
```

See also EndPage function in DynaPDF manual.

3.34.220 EndPattern as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function closes an open pattern that was opened by BeginPattern() or CreateStdPattern().
See also EndPattern function in DynaPDF manual.
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3.34.221 EndTemplate as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function closes an open template that was opened by BeginTemplate(), EditTemplate() or EditTemplate2(). See also EndTemplate function in DynaPDF manual.

3.34.222 EnumDocFonts as Integer


3.34.223 EnumDocFontsCount as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function enumerates all fonts used in the current PDF document and returns the count. Notes: Returns the number of fonts found. Does not call the event.

3.34.224 EnumHostFonts as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function enumerates all fonts found in the search directories by passing the font names to a callback function. Deprecated: This item is deprecated and should no longer be used. You can use GetSysFontInfos instead. Notes: Calls the EnumHostFont event. See also EnumHostFonts function in DynaPDF manual.

3.34.225 EnumHostFontsCount as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function enumerates all fonts found in the search directories. Deprecated: This item is deprecated and should no longer be used. You can use GetSysFontInfos instead. Notes: Returns the number of fonts found. Does not call the event.

3.34.226 EnumHostFontsEx as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function enumerates all fonts found in the search directories in the same way as EnumHostFonts().
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**Deprecated:** This item is deprecated and should no longer be used. You can use GetSysFontInfos instead.

**Notes:** Calls the EnumHostFontEx event.

See also `EnumHostFontsEx` function in DynaPDF manual.

---

### 3.34.227  EnumHostFontsExCount as Integer

**Plugin Version:** 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The function enumerates all fonts found in the search directories in the same way as `EnumHostFontsCount()`.

**Deprecated:** This item is deprecated and should no longer be used. You can use GetSysFontInfos instead.

**Notes:** Returns the number of fonts found. Does not call the event.

---

### 3.34.228  ExchangeBookmarks(Bmk1 as Integer, Bmk2 as Integer) as Boolean

**Plugin Version:** 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** This function exchanges two bookmarks.

See also `ExchangeBookmarks` function in DynaPDF manual.

---

### 3.34.229  ExchangePages(first as Integer, second as Integer) as Boolean

**Plugin Version:** 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** The function exchanges two pages.

See also `ExchangePages` function in DynaPDF manual.

---

### 3.34.230  ExtractPageText(RemoveText as boolean = false) as String

**Plugin Version:** 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes.  **Function:** Extracts text of current open page.

**Notes:**

This is a convenience function so you don’t need to use DynaPDFStackMBS class yourself.

Returns the text of the page. Use EditPage() to open a page and than EndPage() to close it.

If you have problems with asian characters, please make sure you use SetCMapDir and load the CMAPs.

Requires DynaPDF Pro license.
3.34. CLASS DYNAPDFMBS

3.34.231 ExtractPageTextRect(Left as Double, Top as Double, Right as Double, Bottom as Double, RemoveText as boolean = false) as String


**Notes:**

Text that starts within the given rectangle is captured.
Be aware that PDF coordinates start on bottom left of page with 0/0.

This is a convenience function so you don’t need to use DynaPDFStackMBS class yourself.
Returns the text of the page. Use EditPage() to open a page and than EndPage() to close it.

If you have problems with asian characters, please make sure you use SetCMapDir and load the CMAPs.
Requires DynaPDF Pro license.

3.34.232 ExtractText(PageNum as Integer, Flags as Integer, rect as DynaPDFRectMBS = nil, byref text as string) as Boolean

Plugin Version: 18.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Extracts the text of the page PageNum.

**Notes:**

The first page is denoted by 1.

Text lines can be sorted in x- and y-direction. The flag ktefDeleteOverlappingText causes that identical text records which are placed on the same position (with a tolerance of 2 units) will be deleted. The records must occur one after the other in order to detect them.

The optional parameter Area can be set to restrict the text extraction to that rectangle. The rectangle must be defined according to the current coordinate system. That means either in bottom up or top down coordinates, see SetPageCoords() for further information. Note also that the function considers the orientation of the page. The width and height of the rectangle must be exchanged if the orientation is 90, -90, 270, or -270 degrees.

If the function succeeds the return value is true. If the function fails the return value is false.
See also ExtractText function in DynaPDF manual.
3.34.233 FileAttachAnnot(PosX as Double, PosY as Double, Icon as Integer, Author as string, Desc as string, File as folderitem, Compress as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts a file attachment annotation on the current open page.

**Notes:** On Windows, the Desc and the Author parameters are converted to unicode. See also FileAttachAnnot function in DynaPDF manual.

3.34.234 FileAttachAnnotEx(PosX as double, PosY as double, Icon as integer, Author as string, Desc as string, Filename as String, FileBuffer as MemoryBlock, Compress as boolean) as Integer

Plugin Version: 18.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a file attachment annotation exactly in the same way as FileAttachAnnot() but accepts a file buffer as input.

**Notes:**
See FileAttachAnnot() for further information. The parameter FileName is required. It should contain the file name including extension, e.g. "MyImage.jpg".

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code.
See also FileAttachAnnotEx function in DynaPDF manual.
See also:

- 3.34.235 FileAttachAnnotEx(PosX as double, PosY as double, Icon as integer, Author as string, Desc as string, Filename as String, FileBuffer as String, Compress as boolean) as Integer

3.34.235 FileAttachAnnotEx(PosX as double, PosY as double, Icon as integer, Author as string, Desc as string, Filename as String, FileBuffer as String, Compress as boolean) as Integer

Plugin Version: 18.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a file attachment annotation exactly in the same way as FileAttachAnnot() but accepts a file buffer as input.

**Notes:**
See FileAttachAnnot() for further information. The parameter FileName is required. It should contain the file name including extension, e.g. "MyImage.jpg".

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code.
See also FileAttachAnnotEx function in DynaPDF manual.
See also:
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- 3.34.234 FileAttachAnnotEx(PosX as double, PosY as double, Icon as integer, Author as string, Desc as string, Filename as String, FileBuffer as MemoryBlock, Compress as boolean) as Integer

3.34.236 FileLink(PosX as Double, PosY as Double, Width as Double, Height as Double, FileLink as string) as Integer

Plugin Version: 12.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a file link annotation.  
**Notes:** Here you can pass a string which may be a relative file path like simply the file name of other pdf file in same folder.  
See also FileLink function in DynaPDF manual.

3.34.237 FileLinkAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, FileLink as string) as Integer

Plugin Version: 12.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a file link annotation.  
**Notes:** Here you can pass a string which may be a relative file path like simply the file name of other pdf file in same folder.  
See also FileLink function in DynaPDF manual.

3.34.238 FindBookmark(DestPage as Integer, Text as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function searches for a bookmark in the document outline tree.  
**Notes:** The text parameter is converted to unicode.  
See also FindBookmark function in DynaPDF manual.

3.34.239 FindBookmarkAnsi(DestPage as Integer, Text as string) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function searches for a bookmark in the document outline tree.  
**Notes:** The text parameter is converted to ANSI.  
See also FindBookmark function in DynaPDF manual.
3.34.240  FindEmbeddedFile(Name as string) as Integer

Plugin Version: 16.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Searches for the embedded file Name and returns the handle of it when it can be found. **Notes:**
The file can then be extracted with GetEmbeddedFile().

If the function succeeds the return value is an embedded file handle, a value greater or equal zero. If the file cannot be found the return value is -1.
See also FindEmbeddedFile function in DynaPDF manual.

3.34.241  FindField(Name as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function searches for an interactive form field by using the fully qualified field name. **Notes:** The Name parameter is converted to unicode.
See also FindField function in DynaPDF manual.

3.34.242  FindFieldAnsi(Name as string) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function searches for an interactive form field by using the fully qualified field name. **Notes:** The Name parameter is converted to ANSI.
See also FindField function in DynaPDF manual.

3.34.243  FindLinkAnnot(URL as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function searches for a file link or web link annotation. See also FindLinkAnnot function in DynaPDF manual.

3.34.244  FindNextBookmark as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function searches for the next bookmark with the same search parameters which were used by a previous call of FindBookmark(). See also FindNextBookmark function in DynaPDF manual.
3.34. FinishSignature(PKCS7 as Memoryblock) as boolean

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function writes the PKCS# 7 signature object to the PDF file and writes finally the finish PDF file to disk and frees all used resources if the file was not created in memory.

**Notes:**

If the file was created in memory GetBuffer() can now be called to obtain the finish PDF buffer. CloseAndSignFileExt() must be called prior this function can be called.

Return values: If the function succeeds the return value is true. If the function fails the return value is false. See also **FinishSignature** function in DynaPDF manual.

See also:

- 3.34.246 FinishSignature(PKCS7 as string) as boolean

3.34. FinishSignature(PKCS7 as string) as boolean

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function writes the PKCS# 7 signature object to the PDF file and writes finally the finish PDF file to disk and frees all used resources if the file was not created in memory.

**Notes:**

If the file was created in memory GetBuffer() can now be called to obtain the finish PDF buffer. CloseAndSignFileExt() must be called prior this function can be called.

Return values: If the function succeeds the return value is true. If the function fails the return value is false. See also **FinishSignature** function in DynaPDF manual.

See also:

- 3.34.245 FinishSignature(PKCS7 as Memoryblock) as boolean

3.34. FlattenAnnots(AnnotFlattenFlags as Integer = 0) as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Flattens the annotations.

**Notes:**

By default all annotations which have an appearance stream and which have the print flag set are flattened. All annotations are deleted when the function returns with the exception of file attachment annotations. If you want to flatten the view state then set the flag affUseViewState.

Annotation flags:
kaffNone 0  Printable annotations independent of the type
kaffUseViewState 1  If set, annotations which are visible in a viewer become flattened.
kaffMarkupAnnots 2  If set, markup annotations are flattened only. Link, Sound, or FileAttach
annotations are no markup annotations. These types will be left intact.

See also FlattenAnnots function in DynaPDF manual.

### 3.34.248 FlattenForm as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function converts all fields of an Interactive Form to native PDF vector graphics and deletes the form after all fields are converted, incl. all JavaScript actions which are connected with form fields, pages, or the catalog object, and global JavaScript functions.  
**Notes:** Requires DynaPDF Pro license.  
See also FlattenForm function in DynaPDF manual.

### 3.34.249 FlushPageContent(stack as DynaPDFStackMBS) as boolean

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function replaces the content stream of a page or template that was changed with the function ReplacePageText() or ReplacePageTextEx() beforehand.  
**Notes:**  
The function must be called after all changes are made. See GetPageText() for an example application.  
Return values:  
If the function succeeds the return value is true. If the function fails the return value is false.  
See also FlushPageContent function in DynaPDF manual.

### 3.34.250 FlushPages(Flags as Integer = 0) as boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Flushes pages.  
**Notes:** Do not use FlushPages and SetUseSwapFile together. Use one function.  
See also FlushPages function in DynaPDF manual.
3.34. **CLASS DYNAPDFMBS**

3.34.251 **FreeImageBuffer**

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Frees the current image buffer.  
See also **FreeImageBuffer** function in DynaPDF manual.

3.34.252 **FreeImageObj(Handle as UInt32) as boolean**

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function releases memory that was allocated by GetImageObj to decompress the image.  
**Notes:** If the function succeeds the return value is true. If the function fails the return value is false.  
See also **FreeImageObj** function in DynaPDF manual.

3.34.253 **FreePDF as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function frees all used resources except the font cache.  
See also **FreePDF** function in DynaPDF manual.

3.34.254 **FreeTextAnnot(PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Text as string, Align as Integer) as Integer**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function creates a free text annotation.  
**Example:**

```plaintext
dim pdf as DynaPDFMBS // your dynapdf instance

// edit page 1
call pdf.EditPage(1)
// set a font
call pdf.SetFont( "Times New Roman",pdf.kfsNone,46,True,pdf.kcp1252 )
// set a color
call pdf.SetFillColor(0)

// now add a text annotation
call pdf.FreeTextAnnot( 100, 100, 100, 100, "author", "test", 0 )

// end page
call pdf.EndPage
```
Notes: The Name and Author parameters are converted to unicode. See also FreeTextAnnot function in DynaPDF manual.

3.34.255 FreeTextAnnotAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Text as string, Align as Integer) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function creates a free text annotation. Notes: The Name and Author parameters are converted to ANSI. See also FreeTextAnnot function in DynaPDF manual.

3.34.256 Get3DAnnotStream(Annot as UInt32, byref Data as String, byref SubType as String) as Boolean

Plugin Version: 18.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Retrieves the data stream of a 3D annotation. Notes: At time of publication, PDF supports U3D and PRC files. Check the value of the string SubType to determine the file type. The default format is U3D. SubType can be "" in this case. For PRC files, SubType is required to be present.

Returns true on success and false on failure. See also Get3DAnnotStream function in DynaPDF manual.

3.34.257 GetActionCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function returns the number of actions contained in a document. See also GetActionCount function in DynaPDF manual.
3.34.258 GetActionHandle(ObjType as Integer, ObjHandle as UInt32, ActIndex as UInt32) as Integer

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the handle of an action.

**Notes:**
To determine the number of available actions of a specific object call GetObjActionCount. Since the Catalog object contains no handle, the parameter ObjHandle will be ignored for this object type.

If the function succeeds the return value is the action handle, a value greater or equal zero. If the function fails the return value is a negative error code.
See also GetActionHandle function in DynaPDF manual.

3.34.259 GetActionType(ActHandle as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the type of an annotation.
See also GetActionType function in DynaPDF manual.

3.34.260 GetActionTypeEx(ObjType as Integer, ObjHandle as Integer, ActIndex as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the action type of an action used by a specific PDF object.
See also GetActionTypeEx function in DynaPDF manual.

3.34.261 GetActiveFont as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the handle of the active font or 1 if no font is set.
See also GetActiveFont function in DynaPDF manual.

3.34.262 GetAllocBy as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the pre allocated buffer size of page content streams in bytes.
See also GetAllocBy function in DynaPDF manual.
3.34.263  GetAnnot(ahandle as Integer) as DynaPDFAnnotationMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function retrieves the most important properties of an annotation.

**Example:**

```vbnet
dim pdf as DynaPDFMBS // your instance

dim c as Integer = pdf.GetAnnotCount

for i as Integer = 0 to c-1
    dim a as DynaPDFAnnotationMBS = pdf.GetAnnot(i)
    MsgBox str(a.Type)
next
```

**Deprecated:** This item is deprecated and should no longer be used. You can use GetAnnotEx instead.

3.34.264  GetAnnotBBox(ahandle as Integer) as DynaPDFRectMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function retrieves the bounding box of an annotation measured in bottom up coordinates. See also GetAnnotBBox function in DynaPDF manual.

3.34.265  GetAnnotCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of annotations currently used in the document. See also GetAnnotCount function in DynaPDF manual.

3.34.266  GetAnnotEx(ahandle as Integer) as DynaPDFAnnotationExMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function retrieves the most important properties of an annotation.

**Example:**

```vbnet
dim pdf as DynaPDFMBS // your instance

dim c as Integer = pdf.GetAnnotCount

for i as Integer = 0 to c-1
    dim a as DynaPDFAnnotationExMBS = pdf.GetAnnotEx(i)
```
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MsgBox str(a.Type)
next

See also *GetAnnotEx* function in DynaPDF manual.

### 3.34.267 GetAnnotFlags as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the default flags used for newly created annotations. See also *GetAnnotFlags* function in DynaPDF manual.

### 3.34.268 GetAnnotLink(Handle as Integer) as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function returns the URL or file path of a file link annotation. See also *GetAnnotLink* function in DynaPDF manual.

### 3.34.269 GetAnnotType(Handle as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the type of a specific annotation. See also *GetAnnotType* function in DynaPDF manual.

### 3.34.270 GetAscent as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the ascender of the active font. See also *GetAscent* function in DynaPDF manual.

### 3.34.271 GetBBox(boundary as Integer) as DynaPDFRectMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns a bounding box of a PDF page. See also *GetBBox* function in DynaPDF manual.
3.34.272 GetBidiMode as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A new function in dynapdf which is not documented. See also `GetBidiMode` function in DynaPDF manual.

3.34.273 GetBookmark(ahandle as Integer) as DynaPDFBookmarkMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function returns the properties of a bookmark. See also `GetBookmark` function in DynaPDF manual.

3.34.274 GetBookmarkCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of bookmarks defined in the document. See also `GetBookmarkCount` function in DynaPDF manual.

3.34.275 GetBorderStyle as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the global border style which is used for newly created Interactive Form fields. See also `GetBorderStyle` function in DynaPDF manual.

3.34.276 GetBuffer as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns a pointer to the buffer of a memory based PDF file. **Notes:** The result string has no encoding set. See also `GetBuffer` function in DynaPDF manual.

3.34.277 GetBufferMemory as Memoryblock

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns a pointer to the buffer of a memory based PDF file. **Notes:** The result string has no encoding set.
3.34. **CLASS DYNAPDFMBS**

### 3.34.278 GetCapHeight as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the cap height of the active font.

See also GetCapHeight function in DynaPDF manual.

### 3.34.279 GetCharacterSpacing as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current character spacing.

See also GetCharacterSpacing function in DynaPDF manual.

### 3.34.280 GetCheckBoxChar as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the character used for newly created check boxes.

See also GetCheckBoxChar function in DynaPDF manual.

### 3.34.281 GetCheckBoxCharEx(Field as Integer) as Integer

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the check box character for the given field.

See also GetCheckBoxCharEx function in DynaPDF manual.

### 3.34.282 GetCheckBoxDefState(Field as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function returns the default state of a check box, that is 1 == checked or 0 == unchecked.

See also GetCheckBoxDefState function in DynaPDF manual.

### 3.34.283 GetCMap(index as Integer) as DynaPDFCMapMBS

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the CMap object with the given index.

See also GetCMap function in DynaPDF manual.
3.34.284  GetCMapCount as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the number of character maps.
See also GetCMapCount function in DynaPDF manual.

3.34.285  GetColorSpace as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the active color space.
See also GetColorSpace function in DynaPDF manual.

3.34.286  GetColorSpaceCount as Integer

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of color spaces.

**Example:**

```txt
Sub DrawSomething(pdf as DynaPDFMBS)
    // draw all colorants with their own color
    Dim MyX, MyY as Double

    MyX = 10
    MyY = 100

    // set a font
    call pdf.SetFont "Times", pdf.kfsItalic, 10.0, true, pdf.kcp1252

    // loop over all color spaces
    Dim Colorcount as Integer = pdf.GetColorSpaceCount
    For j as Integer = 0 to Colorcount-1
        MyX = 10
        Dim MyColourSpace as DynaPDFColorSpaceMBS = PDF.GetColorSpaceObj(j)
        Dim ColorantsCount as Integer = MyColourSpace.ColorantsCount
        Dim c as Integer = MyColourSpace.NumInComponents
        Call pdf.SetExtColorSpace j

        // draw name of each colorant
        For i as Integer = 0 to c-1
            // build array with colors and set 100% for the one color we need
            Dim values() as Double
            Redim values(c-1)
```
values(i) = 1.0

// get name
dim name as string = "#" + str(i)
if i <= ColorantsCount then
    name = MyColourSpace.Colorants(i)
end if

// set name
Call pdf.SetFillColor(values)
call pdf.WriteText(MyX, MyY, name)

// next
MyX = MyX + pdf.GetTextWidth(name) + 20
next

// next
MyY = MyY + 20
Next
End Sub

See also GetColorSpaceCount function in DynaPDF manual.

3.34.287 GetColorSpaceObj(index as Integer) as DynaPDFColorSpaceMBS

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries a ColorSync Profile for the given index. **Notes:** Index from 0 to GetColorSpaceCount-1. See also GetColorSpaceObj function in DynaPDF manual.

3.34.288 GetCompressionFilter as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the standard compression filter for images. See also GetCompressionFilter function in DynaPDF manual.

3.34.289 GetCompressionLevel as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the active compression level.
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See also GetCompressionLevel function in DynaPDF manual.

3.34.290 GetContent as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function returns a pointer to the content stream of the currently open page or template.
**Notes:** The result string has no encoding set.
See also GetContent function in DynaPDF manual.

3.34.291 GetDefBitsPerPixel as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns default color depth in bits per pixel, which determines whether images should be down sampled.
See also GetDefBitsPerPixel function in DynaPDF manual.

3.34.292 GetDescent as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the descender of the active font.
See also GetDescent function in DynaPDF manual.

3.34.293 GetDocInfo(dinfo as Integer) as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves a document info entry as Unicode string.
**Notes:** The result is an unicode string.
See also GetDocInfo function in DynaPDF manual.

3.34.294 GetDocInfoCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of document info entries defined in the document.
See also GetDocInfoCount function in DynaPDF manual.
3.3.4. CLASS DYNAPDFMBS

3.3.4.295 GetDocInfoEx(index as Integer, byref DInfo as Integer, byref key as string, byref value as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns a document info entry.
**Notes:** Key is an ascii string and value an unicode string.
See also GetDocInfoEx function in DynaPDF manual.

3.3.4.296 GetDocumentColorSpaces as DynaPDFColorSpaceMBS()

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries Colorspace objects for all colorspaces in the current working document.

3.3.4.297 GetDocUsesTransparency(Flags as UInt32 = 0) as boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Checks whether this document uses transparency.
**Notes:**
Checks whether a PDF file uses native PDF Transparency (PDF 1.4). The file uses transparency when it contains soft masks, blend modes other than Normal, or fill or stroke alpha values smaller than 1.0.
The function checks all pages, templates, extended graphics states, images, annotations, and form fields.
If the file uses transparency the return value is true. If it uses no transparency the return value is false.
See also GetDocUsesTransparency function in DynaPDF manual.

3.3.4.298 GetDrawDirection as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the actual draw direction for closed vector graphics such as rectangles, circles, ellipses and so on.
See also GetDrawDirection function in DynaPDF manual.

3.3.4.299 GetDynaPDFVersion as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the version string of DynaPDF.
**Notes:** Result is an ASCII string.
See also GetDynaPDFVersion function in DynaPDF manual.
3.34.300 GetEmbeddedFile(Handle as Integer, byref FileSpec as DynaPDFFileSpecMBS, Decompress as boolean) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the most important properties of an embedded file as well as a pointer to the file buffer.

**Example:**

```vba
// new PDF Environment
dim pdf as new MyDynaPDFMBS
call pdf.CreateNewPDF nil

dataf as FolderItem = SpecialFolder.Desktop.Child("Create PDF with hidden data.pdf")
call pdf.SetImportFlags(pdf.kifImportAll + pdf.kifImportAsPage)
call pdf.OpenImportFile(f)
call pdf.ImportPDFFile(1)

data = "get embedded file count"

// walk over list of embedded files and get their data
dim c as Integer = pdf.GetEmbeddedFileCount
for i as Integer = 0 to c-1
  dim e as DynaPDFFileSpecMBS
  if pdf.GetEmbeddedFile(i, e, true) then
    data = e.Buffer
  end if
next

// cleanup
call pdf.CloseFile
```

See also GetEmbeddedFile function in DynaPDF manual.

3.34.301 GetEmbeddedFileCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of embedded files available in the PDF file.

**Example:**

```vba
// new PDF Environment
dim pdf as new MyDynaPDFMBS
call pdf.CreateNewPDF nil

dataf as FolderItem = SpecialFolder.Desktop.Child("Create PDF with hidden data.pdf")
```
3.34. CLASS DYNAPDFMBS

call pdf.SetImportFlags(pdf.kifImportAll + pdf.kifImportAsPage)
call pdf.OpenImportFile(f)
call pdf.ImportPDFFile(1)

// walk over list of embedded files and get their data
dim c as Integer = pdf.GetEmbeddedFileCount
for i as Integer = 0 to c-1
dim e as DynaPDFFileSpecMBS
if pdf.GetEmbeddedFile(i, e, true) then
dim data as string = e.Buffer
Break
end if
next

// cleanup
call pdf.CloseFile

See also GetEmbeddedFileCount function in DynaPDF manual.

3.34.302 GetEMFPatternDistance as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A new function in dynapdf which is not documented.
See also GetEMFPatternDistance function in DynaPDF manual.

3.34.303 GetErrLogMessage(index as Integer) as DynaPDFErrorMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the error message details for the given index.
**Notes:** Index from 0 to GetErrLogMessageCount-1.
See also GetErrLogMessage function in DynaPDF manual.

3.34.304 GetErrLogMessageCount as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the number of error log messages.
See also GetErrLogMessageCount function in DynaPDF manual.
3.34.305 GetErrorMessage as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the last error message as a string, or "" if no error occurred.
See also GetErrorMessage function in DynaPDF manual.

3.34.306 GetErrorMode as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current error mode.
See also GetErrorMode function in DynaPDF manual.

3.34.307 GetField(index as Integer) as DynaPDFFieldMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the most important properties of a field.
**Deprecated:** This item is deprecated and should no longer be used. You can use GetFieldEx instead.

3.34.308 GetFieldBackColor as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the default background color used for newly created interactive form fields.
See also GetFieldBackColor function in DynaPDF manual.

3.34.309 GetFieldBorderColor as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the default border color used for newly created interactive form fields.
See also GetFieldBorderColor function in DynaPDF manual.

3.34.310 GetFieldBorderStyle(Field as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the border style of a specific form field.
See also GetFieldBorderStyle function in DynaPDF manual.
3.34. CLASS DYNAPDFMBS

3.34.311 GetFieldBorderWidth(aField as Integer) as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the line width of the border of a field. See also GetFieldBorderWidth function in DynaPDF manual.

3.34.312 GetFieldChoiceValue(Field as Integer, ValIndex as Integer) as DynaPDFChoiceValueMBS

Plugin Version: 10.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the choice values for this field. See also GetFieldChoiceValue function in DynaPDF manual.

3.34.313 GetFieldColor(Field as Integer, ColorType as Integer, byref ColorSpace as Integer, byref ColorValue as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves a specific color of an interactive form field. See also GetFieldColor function in DynaPDF manual.

3.34.314 GetFieldCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of fields contained in the document. See also GetFieldCount function in DynaPDF manual.

3.34.315 GetFieldEx(index as Integer) as DynaPDFFieldExMBS

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the most important properties of a field. **Example:**

```dim pdf as new MyDynaPDFMBS
pdf.SetLicenseKey "Lite" // For this example you can use a Lite, Pro or Enterprise License

call pdf.CreateNewPDF(nil)
call pdf.SetImportFlags(BitwiseOr(pdf.kifImportAll, pdf.kifImportAsPage))

dim filePath as FolderItem=SpecialFolder.Desktop.Child("acroform.pdf")```
if (pdf.OpenImportFile(filePath, pdf.kptOpen, "") < 0) then
    MsgBox "Input file ", filePath.name, " not found!"
    quit
end if

// import all pages
dim r as Integer = pdf.ImportPDFFile(1, 1.0, 1.0)

// now check all fields
dim n as Integer = pdf.GetFieldCount
for i as Integer = 0 to n-1
    dim f as DynaPDFFieldExMBS = pdf.GetFieldEx(i)
    break // inspect in debugger
next

Notes:
See dynapdf_help.pdf for more details.
See also GetFieldEx function in DynaPDF manual.

3.34.316 GetFieldExpValCount(Field as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of values/export values which are defined for a field. See also GetFieldExpValCount function in DynaPDF manual.

3.34.317 GetFieldExpValue(Field as Integer) as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function retrieves the export value(s) of a check box, list box, or combo box. See also GetFieldExpValue function in DynaPDF manual.

3.34.318 GetFieldExpValueEx(Field as Integer, ValIndex as Integer, byref Value as string, byref ExpValue as string, byref Selected as boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to enumerate the choice values of a combo box, list box, or radio button. See also GetFieldExpValueEx function in DynaPDF manual.
3.34. **CLASS DYNAPDFMBS**

### 3.34.319 **GetFieldFlags(Field as Integer) as Integer**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the flags of a specific interactive form field.
See also GetFieldFlags function in DynaPDF manual.

### 3.34.320 **GetFieldGroupType(Field as Integer) as Integer**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the base type of a field group.
See also GetFieldGroupType function in DynaPDF manual.

### 3.34.321 **GetFieldHighlightMode(Field as Integer) as Integer**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the highlight mode of buttons, checkboxes, and signature fields.
See also GetFieldHighlightMode function in DynaPDF manual.

### 3.34.322 **GetFieldIndex(Field as Integer) as Integer**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the index or tab order of the field.
See also GetFieldIndex function in DynaPDF manual.

### 3.34.323 **GetFieldMapName(Field as Integer) as string**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the mapping name of a specific form field if set.
**Notes:** The result string is in unicode or ASCII encoding.
See also GetFieldMapName function in DynaPDF manual.

### 3.34.324 **GetFieldName(Field as Integer) as string**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the name of a specific interactive form field.
See also GetFieldName function in DynaPDF manual.
3.34.325 GetFieldOrientation(Field as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the orientation of a field.
See also GetFieldOrientation function in DynaPDF manual.

3.34.326 GetFieldTextAlign(Field as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the text alignment of a text field or button field.
See also GetFieldTextAlign function in DynaPDF manual.

3.34.327 GetFieldTextColor as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the default text color used for newly created fields.
See also GetFieldTextColor function in DynaPDF manual.

3.34.328 GetFieldToolTip(Field as Integer) as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves a pointer to the tool tip string of a specific interactive form field.
**Notes:** The result string has either unicode or ascii encoding.
See also GetFieldToolTip function in DynaPDF manual.

3.34.329 GetFieldType(Field as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the field type.
See also GetFieldType function in DynaPDF manual.

3.34.330 GetFillColor as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current color used for fillings.
See also GetFillColor function in DynaPDF manual.
3.34. CLASS DYNAPDFMBS

3.34.331 GetFontCount as Integer

Plugin Version: 8.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the font count.

See also GetFontCount function in DynaPDF manual.

3.34.332 GetFontEx(index as Integer) as DynaPDFFontMBS

Plugin Version: 8.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the font information for the font specified by the index value.

**Example:**

```vbscript
// create PDF object with page
dim pdf as new DynaPDFMBS
call pdf.CreateNewPDF(nil)
call pdf.Append

// draw some text
call pdf.SetFont "Times", pdf.kfsItalic, 40.0, true, pdf.kcp1252
call pdf.WriteFText pdf.ktaCenter, "My first Xojo output!"

// and list all fonts:
dim n as Integer = pdf.GetFontCount-1
for i as Integer = 0 to n
    MsgBox pdf.GetFontEx(i).FontName
next
```

**Deprecated:** This item is deprecated and should no longer be used. You can use GetFontInfo instead.

**Notes:**

- Returns nil on any error.
- Index from 0 to GetFontCount-1.

3.34.333 GetFontInfoEx(index as Integer) as DynaPDFFontInfoMBS

Plugin Version: 14.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Retrieves the most important properties of a font.

**Notes:**

- This function accepts a font handle instead. A font handle is a simple array index. To enumerate all fonts of a document execute the function in a loop from zero to GetFontCount - 1.
If the function succeeds the return value is font info object. If the function fails the return value is nil. See also GetFontInfoEx function in DynaPDF manual.

3.34.334 GetFontOrigin as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function returns the current font origin. See also GetFontOrigin function in DynaPDF manual.

3.34.335 GetFontSearchOrder as Integer()

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Returns the font search order. Notes: The values in the array use this constants:

- kfbtTrueType: TrueType, TrueType Collections, or OpenType fonts with TrueType outlines
- kfbtType1: Type1 font
- kfbtOpenType: OpenType font with Postscript outlines
- kfbtStdFont: PDF Standard font
- kfbtDisabled: This value can be used to disable a specific font format.

The array has 4 values. See also GetFontSearchOrder function in DynaPDF manual.

3.34.336 GetFontSelMode as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function returns the current font selection mode. See also GetFontSelMode function in DynaPDF manual.

3.34.337 GetFontWeight as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function returns the weight that will be used to emulate a bold font style. See also GetFontWeight function in DynaPDF manual.
3.34. CLASS DYNAPDFMBS

3.34.338 GetFTextHeight(Align as Integer, aText as string) as Double

Notes: The text parameter is converted to unicode.
See also GetFTextHeight function in DynaPDF manual.

3.34.339 GetFTextHeightAnsi(Align as Integer, aText as string) as Double

Notes: The text parameter is converted to ANSI.
See also GetFTextHeight function in DynaPDF manual.

3.34.340 GetFTextHeightEx(Width as Double, Align as Integer, aText as string) as Double

Notes: The text parameter is converted to unicode.
See also GetFTextHeightEx function in DynaPDF manual.

3.34.341 GetFTextHeightExAnsi(Width as Double, Align as Integer, aText as string) as Double

Notes: The text parameter is converted to ANSI.
See also GetFTextHeightEx function in DynaPDF manual.

3.34.342 GetGlyphIndex(Index as UInt32) as Integer

Notes:
How Index must be defined depends on the code page with which the font was loaded. For example, if the font was loaded with a 8 bit code page, then indexes below 256 are treated as index into the code page table. Higher indexes are treated as Unicode value in this case. Note that all Unicode encoded glyphs of the font
are accessible in this case, also if the font was loaded with a 8 bit code page!

At time of publication the function does not support CJK code pages which require a conversion to Unicode, e.g. cpCJK_Big5_Uni, cpCJK_EUC_JP_Uni, and so on.

If the function succeeds the return value is greater or equal zero. If the function fails the return value is a negative error code.
See also GetGlyphIndex function in DynaPDF manual.

### 3.34.343 GetGlyphOutline(Index as UInt32) as DynaPDFGlyphOutlineMBS

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the outline of a glyph of the active font.

**Notes:**

Note that not all glyphs have an outline. A space character, for example, has no outline and therefore the size can be zero. The function returns normalized outlines scaled to a font size of 1000 units.

Please see dynapdf_help.pdf and our example project on how to process the outline data.
See also GetGlyphOutline function in DynaPDF manual.

### 3.34.344 GetGoToAction(index as Integer, Decompress as Boolean = false, ImageParseFlags as Integer = &h00000080) as DynaPDFGoToActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for a GoToR action.

**Notes:**

Index is from 0 to GetActionCount-1.

If Decompress is true, all file specification containing compressed data are uncompressed.
And ImageParseFlags defines how GetImageObj is called internally to decompress image. Default is to only get image info, but you can pass other values to actually get image data.
See also GetGoToAction function in DynaPDF manual.
3.34. CLASS DYNAPDFMBS

3.34.345 GetGoToRAction(index as Integer, Decompress as Boolean = false, ImageParseFlags as Integer = & h00000080) as DynaPDFGoToActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for a GoTo action.
**Notes:**
Index is from 0 to GetActionCount-1.

If Decompress is true, all file specification containing compressed data are uncompressed. And ImageParseFlags defines how GetImageObj is called internally to decompress image. Default is to only get image info, but you can pass other values to actually get image data.
See also `GetGoToRAction` function in DynaPDF manual.

3.34.346 GetGStateFlags as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current graphics state flags.
See also `GetGStateFlags` function in DynaPDF manual.

3.34.347 GetHideAction(index as Integer) as DynaPDFHideActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for a hide action.
**Notes:** Index is from 0 to GetActionCount-1.
See also `GetHideAction` function in DynaPDF manual.

3.34.348 GetIconColor as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the icon color used for newly created text annotations.
See also `GetIconColor` function in DynaPDF manual.

3.34.349 GetImageBuffer as string

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the image buffer.
See also GetImageBuffer function in DynaPDF manual.

3.34.350 GetImageBufferMemory as memoryblock


3.34.351 GetImageCount(File as folderitem) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function returns the number of images contained in a multi page image. See also GetImageCount function in DynaPDF manual. See also:

- 3.34.352 GetImageCount(Path as string) as Integer

3.34.352 GetImageCount(Path as string) as Integer

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function returns the number of images contained in a multi page image. See also GetImageCount function in DynaPDF manual. See also:

- 3.34.351 GetImageCount(File as folderitem) as Integer

3.34.353 GetImageCountEx(Buffer as Memoryblock) as Integer

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function determines the number of images in a multi-page image in the same way as GetImageCount(), but accepts a file buffer as input. See also GetImageCountEx function in DynaPDF manual. See also:

- 3.34.354 GetImageCountEx(Buffer as string) as Integer

3.34.354 GetImageCountEx(Buffer as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function determines the number of images in a multi-page image in the same way as GetImageCount(), but accepts a file buffer as input.
3.34. **CLASS DYNAPDFMBS**

See also GetImageCountEx function in DynaPDF manual.
See also:

- 3.34.353 GetImageCountEx(Buffer as Memoryblock) as Integer

### 3.34.355 GetImageHeight(Handle as Integer) as Integer

**Plugin Version:** 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the height of an image in pixel.
See also GetImageHeight function in DynaPDF manual.

### 3.34.356 GetImageObj(Handle as UInt32, Flags as Integer) as DynaPDFImageMBS

**Plugin Version:** 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the properties of an image as well as the decompressed image buffer if needed.

**Notes:**
For the flags use the constants: kpfNone, kpfDecomprAllImages, kpfNoJPXDecode, kpfDitherImagesToBW, kpfConvImagesToGray, kpfConvImagesToRGB, kpfConvImagesToCMYK or kpfImageInfoOnly.

By default all images are returned decompressed, with exception of image types which are already stored in a valid file format like JPEG and JPEG 2000 images.
If all image types should be decompressed set the flag kpfDecompressAllImages.
This function allocates memory that should be released with FreeImageObj when finish.
Image handles are simple array indexes. The number of image objects can be determined with GetImageObjCount. Note that this array does not include inline images which are stored in content streams. Such images can only be accessed with ParseContent().

Returns the function succeeds the return value is true. If the function fails the return value is false.
See also GetImageObj function in DynaPDF manual.

### 3.34.357 GetImageObjCount as Integer

**Plugin Version:** 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the number of image objects which were loaded with DynaPDF functions or imported from external PDF files.

**Notes:**
The images can be accessed with GetImageObj().
The return value is the number of image objects. This function cannot fail.
See also GetImageObjCount function in DynaPDF manual.
3.34.358 GetImageWidth(Handle as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the width of an image in pixels.
See also GetImageWidth function in DynaPDF manual.

3.34.359 GetImportDataAction(index as Integer, Decompress as Boolean = false, ImageParseFlags as Integer = &h00000080) as DynaPDFImportDataActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for an import action.
**Notes:**
Index is from 0 to GetActionCount-1.
If Decompress is true, all file specification containing compressed data are uncompressed.
And ImageParseFlags defines how GetImageObj is called internally to decompress image. Default is to only get image info, but you can pass other values to actually get image data.
See also GetImportDataAction function in DynaPDF manual.

3.34.360 GetImportFlags as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current import flags used to import PDF files.
See also GetImportFlags function in DynaPDF manual.

3.34.361 GetImportFlags2 as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries import flags 2.
See also GetImportFlags2 function in DynaPDF manual.

3.34.362 GetInBBox(PageNum as Integer, Boundary as Integer) as DynaPDFRectMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves a bounding box of an external PDF page.
**Example:**
3.34. CLASS DYNAPDFMBS

```vba
dim pdf as new MyDynaPDFMBS

// import some PDF
call pdf.CreateNewPDF(nil)
call pdf.OpenImportFile(file, 0, ")")
call pdf.SetImportFlags(pdf.kifImportAsPage) // important! It makes the rendering faster.
call pdf.ImportPDFFile(1,1.0,1.0)

dim bounds as DynaPDFRectMBS = pdf.GetInBBox(1, pdf.kpbMediaBox)
```

See also GetInBBox function in DynaPDF manual.

3.34.363 GetInDocInfo(DInfo as Integer, byref value as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves a document info entry from an external PDF file as Unicode string.
See also GetInDocInfo function in DynaPDF manual.

3.34.364 GetInDocInfoCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of available document info entries of the currently opened import file or a negative error code on failure.
See also GetInDocInfoCount function in DynaPDF manual.

3.34.365 GetInDocInfoEx(index as Integer, byref DInfo as Integer, byref key as string, byref value as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns a document info entry from the currently opened import file.
**Notes:**
The key result is an ASCII string.
The value result is an ASCII or Unicode string.
See also GetInDocInfoEx function in DynaPDF manual.
3.34.366  GetInEncryptionFlags as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the encryption flags of the currently opened import file.
See also GetInEncryptionFlags function in DynaPDF manual.

3.34.367  GetInFieldCount as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns number of field in open import file.
See also GetInFieldCount function in DynaPDF manual.

3.34.368  GetInIsCollection as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function checks whether the currently opened import file is a portable collection.
**Notes:** Changed to integer in order to allow returning error codes besides 0 for false and 1 for true.
See also GetInIsCollection function in DynaPDF manual.

3.34.369  GetInIsEncrypted as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function checks whether the currently opened import file is encrypted.
**Notes:** Changed to integer in order to allow returning error codes besides 0 for false and 1 for true.
See also GetInIsEncrypted function in DynaPDF manual.

3.34.370  GetInIsSigned as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to determine whether a PDF file contains a digital signature.
**Notes:** Changed to integer in order to allow returning error codes besides 0 for false and 1 for true.
See also GetInIsSigned function in DynaPDF manual.

3.34.371  GetInIsTrapped as Integer

Plugin Version: 10.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the input PDF is trapped.
3.34. **CLASS DYNAPDFMBS**

**Notes:** Changed to integer in order to allow returning error codes besides 0 for false and 1 for true. See also GetInIsTrapped function in DynaPDF manual.

### 3.34.372 GetInIsXFAForm as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the input PDF is a XFA form. **Notes:** Changed to integer in order to allow returning error codes besides 0 for false and 1 for true. See also GetInIsXFAForm function in DynaPDF manual.

### 3.34.373 GetInMetadata(PageNum as Integer) as String

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Access the optional metadata streams of pages or the global metadata stream of the current open import file. **Notes:**

Metadata streams are in XMP format that is a superset of XML. The PDF file must be opened with OpenImportFile or OpenImportBuffer beforehand. Although the global XMP stream does usually exist in todays PDF files, metadata streams are optional and maybe not present. The function returns true if no error occurs, also if no metadata stream is present. See also GetInMetadata function in DynaPDF manual.

### 3.34.374 GetInOrientation(PageNum as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the orientation of a specific page within the currently open import file (see also OpenImportFile()). See also GetInOrientation function in DynaPDF manual.

### 3.34.375 GetInPageCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of pages contained in an external PDF file. See also GetInPageCount function in DynaPDF manual.

### 3.34.376 GetInPDFVersion as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the minor PDF version number of an external PDF file.
See also `GetInPDFVersion` function in DynaPDF manual.

### 3.34.377 GetInPrintSettings as DynaPDFPrintSettingsMBS

**Plugin Version:** 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the print settings for the imported document. **Notes:** This is a PDF 1.7 extension. See also `GetInPrintSettings` function in DynaPDF manual.

### 3.34.378 GetInRepairMode as Integer

**Plugin Version:** 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to determine whether the current open import file was opened in repair or normal mode. **Notes:** Changed to integer in order to allow returning error codes besides 0 for false and 1 for true. See also `GetInRepairMode` function in DynaPDF manual.

### 3.34.379 GetIsFixedPitch as Integer

**Plugin Version:** 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns 1 if the active font is a fixed pitch font or 0 if the font is a variable pitch font. **Notes:** Changed to integer in order to allow returning error codes besides 0 for false and 1 for true.

### 3.34.380 GetIsTaggingEnabled as boolean

**Plugin Version:** 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether tagging is enabled. See also `GetIsTaggingEnabled` function in DynaPDF manual.

### 3.34.381 GetItalicAngle as Double

**Plugin Version:** 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the italic angle in degrees that will be used to emulate italic style fonts. See also `GetItalicAngle` function in DynaPDF manual.
3.34. **CLASS DYNAJSONMBS**

### 3.34.382 GetJavaScript(Handle as Integer) as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns a global JavaScript as string.

**Notes:** The result text string has either unicode or ASCII encoding.

See also **GetJavaScript** function in DynaPDF manual.

### 3.34.383 GetJavaScriptAction(Handle as Integer) as string

Plugin Version: 8.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns a java script action value for the given handle.

**Notes:** May return an unicode string.

See also:

- 3.34.384 GetJavaScriptAction(ObjType as Integer, ObjHandle as Integer, ActIndex as Integer, byref ObjEvent as Integer) as string

### 3.34.384 GetJavaScriptAction(ObjType as Integer, ObjHandle as Integer, ActIndex as Integer, byref ObjEvent as Integer) as string

Plugin Version: 8.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns a java script action value for the given object.

**Notes:**

May return an unicode string.

The ObjEvent parameter was added in plugin version 9.3 and contains a value from the koe* constants. See also:

- 3.34.383 GetJavaScriptAction(Handle as Integer) as string

### 3.34.385 GetJavaScriptActionEx(index as Integer) as DynaPDFJavaScriptActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for an javascript action.

**Notes:** Index is from 0 to GetActionCount-1.

See also **GetJavaScriptActionEx** function in DynaPDF manual.
3.34.386 GetJavaScriptCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of global JavaScripts contained in a document. See also GetJavaScriptCount function in DynaPDF manual.

3.34.387 GetJavaScriptEx(Name as string) as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns a global JavaScript as string by using the script's name instead of a handle to identify the script. **Notes:** The result string is an unicode or an ASCII string. See also GetJavaScriptEx function in DynaPDF manual.

3.34.388 GetJavaScriptName(Handle as Integer) as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the name of a global JavaScript. **Notes:** The result string has either unicode or ASCII encoding. See also GetJavaScriptName function in DynaPDF manual.

3.34.389 GetJPEGQuality as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current JPEG compression quality in percent used for newly inserted images which are compressed with JPEG. See also GetJPEGQuality function in DynaPDF manual.

3.34.390 GetJPEGVersion as String

Plugin Version: 17.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries JPEG library version. **Notes:** Currently reporting 9.1 for version 9b.

3.34.391 GetLanguage as string

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the language identifier of the document as an ISO 3166 language tag or IANA tag, or "" if not set.
3.34.392 GetLastTextPosX as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the x coordinate of the last printed text.

3.34.393 GetLastTextPosY as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the y coordinate of the last printed text.

3.34.394 GetLaunchAction(index as Integer, Decompress as Boolean = false, ImageParseFlags as Integer = & h00000080) as DynaPDFLaunchActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for a launch action.  
**Notes:**  
Index is from 0 to GetActionCount-1.

If Decompress is true, all file specification containing compressed data are uncompressed.  
And ImageParseFlags defines how GetImageObj is called internally to decompress image. Default is to only get image info, but you can pass other values to actually get image data.  
See also GetLaunchAction function in DynaPDF manual.

3.34.395 GetLayerConfig(Index as Integer) as DynaPDFOCCLayerConfigMBS

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Retrieves the most important properties of a layer configuration.  
**Notes:**  
A PDF file can contain one or more layer configurations so that different layers can be initially shown or hidden.  
A PDF file that contains layers (Optional Content Groups in PDF syntax) contains usually at least a default configuration dictionary. This configuration is loaded by default when the visibility state of a layer or optional content group must be determined, e.g. when rendering a page.  
To determine the number of available configurations call GetLayerConfigCount(). The first index is denoted
If the function succeeds the return value is the object. If the function fails the return value is nil.
See also GetLayerConfig function in DynaPDF manual.

3.34.396 GetLayerConfigCount as Integer

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the number of available layer configurations.

**Notes:**
Note that it is possible that a document contains layers but no layer configuration. To determine whether a document contains layers or optional content groups use GetOCGCount().
To load a specific layer configuration call LoadLayerConfig().
See also GetLayerConfigCount function in DynaPDF manual.

3.34.397 GetLeading as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current leading.
See also GetLeading function in DynaPDF manual.

3.34.398 GetLineCapStyle as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current line cap style used for vector graphics.
See also GetLineCapStyle function in DynaPDF manual.

3.34.399 GetLineJoinStyle as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current line join style used for vector graphics.
See also GetLineJoinStyle function in DynaPDF manual.

3.34.400 GetLineWidth as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current line width used for stroked vector graphics and the border of interactive objects.
3.34. **CLASS DYNAPDFMBS**

See also GetLineWidth function in DynaPDF manual.

### 3.34.401 GetLinkHighlightMode as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current highlight mode used for newly created annotations. See also GetLinkHighlightMode function in DynaPDF manual.

### 3.34.402 GetLogMetafileSize(FileName as folderitem) as DynaPDFRectMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the logical bounding box of an enhanced or Windows metafile. See also GetLogMetafileSize function in DynaPDF manual.

### 3.34.403 GetLogMetafileSizeEx(Buffer as Memoryblock) as DynaPDFRectMBS

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the logical bounding box of an enhanced or Windows metafile. See also GetLogMetafileSizeEx function in DynaPDF manual. See also:

- 3.34.404 GetLogMetafileSizeEx(Buffer as string) as DynaPDFRectMBS

### 3.34.404 GetLogMetafileSizeEx(Buffer as string) as DynaPDFRectMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the logical bounding box of an enhanced or Windows metafile. See also GetLogMetafileSizeEx function in DynaPDF manual. See also:

- 3.34.403 GetLogMetafileSizeEx(Buffer as Memoryblock) as DynaPDFRectMBS

### 3.34.405 GetMatrix(byref Matrix as DynaPDFMatrixMBS) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the current transformation. See also GetMatrix function in DynaPDF manual.
3.34.406 GetMaxFieldLen(TxtField as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the allowed maximum string length of a text field, or zero if the length is not restricted. See also GetMaxFieldLen function in DynaPDF manual.

3.34.407 GetMetaConvFlags as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the conversion flags used to convert enhanced metafiles to PDF. See also GetMetaConvFlags function in DynaPDF manual.

3.34.408 GetMetadata(ObjType as Integer, Handle as Integer) as String

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function can be used to access the optional metadata streams of pages, fonts, images, pages, templates, as well as the global metadata stream that is associated with the Catalog object. **Notes:**

Metadata streams are in XMP format that is a superset of XML. The global metadata stream will be created when this function is called. The returned stream is a preview of the XMP stream that will be stored in the file when CloseFile or CloseFileEx is called. Note that the creation and modification date will be updated when the file is closed. The original global XMP stream of external PDF files can be accessed with GetInMetadata(). Metadata streams are optional and maybe not present. The function returns true if no error occurs, also if no metadata stream is present. See also GetMetadata function in DynaPDF manual.

3.34.409 GetMissingGlyphs as UInt32()

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns an array with missing glyphs. **Notes:** See also GetMissingGlyphsString. See also GetMissingGlyphs function in DynaPDF manual.

3.34.410 GetMissingGlyphsString as String

Plugin Version: 12.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns a string containing the missing glyphs characters. **Notes:**
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This is a convenience function which builds a string from the array given by pdfGetMissingGlyphs.

See also GetMissingGlyphs.

3.3.4.11 GetMiterLimit as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current miter limit used to draw stroked vector graphics. See also GetMiterLimit function in DynaPDF manual.

3.3.4.12 GetMovieAction(index as Integer, Decompress as Boolean = false, ImageParseFlags as Integer = & h00000080) as DynaPDFFieldMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for a movie action.

**Notes:**

Index is from 0 to GetActionCount-1.

If Decompress is true, all file specification containing compressed data are uncompressed. And ImageParseFlags defines how GetImageObj is called internally to decompress image. Default is to only get image info, but you can pass other values to actually get image data. See also GetMovieAction function in DynaPDF manual.

3.3.4.13 GetNamedAction(index as Integer) as DynaPDFNamedActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for a named action.

**Notes:** Index is from 0 to GetActionCount-1.

See also GetNamedAction function in DynaPDF manual.

3.3.4.14 GetNamedDest(index as Integer) as DynaPDFNamedDestMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries information about the named destination with the given index.

**Notes:** Index from 0 to GetNamedDestCount-1. Returns nil on any error.
See also GetNamedDest function in DynaPDF manual.

### 3.34.415 GetNamedDestCount as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries number of named destination objects.
See also GetNamedDestCount function in DynaPDF manual.

### 3.34.416 GetNeedAppearance as boolean

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether appearance is needed.
See also GetNeedAppearance function in DynaPDF manual.

### 3.34.417 GetObjActionCount(ObjType as Integer, ObjHandle as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of actions used by an object.

### 3.34.418 GetObjActions(ObjType as Integer, ObjHandle as Integer, byref Actions as DynaPDFObjActionsMBS) as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for an object action.
**Notes:**

Index is from 0 to GetActionCount-1.

The function retrieves the first action and additional trigger events that should be executed when a specific event occurs.
If the object type is a page, then use the page number as handle.

Trigger events are supported by the global Catalog object (this is the document root), Pages, and Form Fields. All other objects do not support trigger events.
Actions are defined as a single linked list. That means one action can execute another action (if NextAction of that action is \( \geq 0 \)).
Note that an action can reference itself! The application must check whether an action is already in the...
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execution list before it will be executed.

If an error occurred, the plugin returns nil.
On success, we provide the DynaPDFObjActionsMBS object in Actions parameter.

Return values:

<0  An error occurred, e.g. due to an invalid handle.
0  The object contains no action or trigger event.
1  The object contains an action.
2  The object contains a trigger event.
3  The object contains an action and a trigger event.

See also GetObjActions function in DynaPDF manual.

### 3.34.419 GetOCG(Handle as UInt32) as DynaPDFOCGMBS

**Plugin Version:** 15.0, **Console & Web:** Yes, **Mac:** Yes, **Win:** Yes, **Linux:** Yes. **Function:** Returns the properties of an OCG, also called layer.

**Notes:**

An OCG handle is a simple array index. You can loop over all available OCGs from 0 to GetOCGCount - 1.
If the member HaveContUsage is true, the OCG contains a Content Usage dictionary. The contents of this dictionary can be accessed with the function GetOCGContUsage. A Content Usage dictionary contains additional information about a layer or OCG.

If the OCG is also included in an application event, this is the case if AppEvent is non-zero, then the Content Usage dictionary is used to control the visibility state of the layer. The member Categories specifies which categories control the visibility state.

Returns nil on any error.
See also GetOCG function in DynaPDF manual.

### 3.34.420 GetOCGContUsage(Handle as UInt32) as DynaPDFOCGContUsageMBS

**Plugin Version:** 15.0, **Console & Web:** Yes, **Mac:** Yes, **Win:** Yes, **Linux:** Yes. **Function:** Returns the properties of the Content Usage dictionary that is associated with an OCG or layer.

**Notes:**
If the OCG is not included in an application event, then the contents in this dictionary serves as pure information.
If the OCG is included in one or more application events, then these settings control also the visibility state of the OCG. The function GetOCG returns the events and categories which control the layer visibility.
If UserNamesCount is greater zero, the dictionary contains also user names. The user names can be accessed with GetOCGUsageUserName.

Returns nil on any error.
See also GetOCGContUsage function in DynaPDF manual.

3.34.421  GetOCGCount as Integer

Plugin Version:  15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Returns the number of OCGs or layers which are available in document.
Notes: This function cannot fail, the return value is always greater or equal zero.
See also GetOCGCount function in DynaPDF manual.

3.34.422  GetOCGUsageUserName(Handle as UInt32, Index as UInt32, byref Name as String) as Boolean

Plugin Version:  15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Returns a user name of a Content Usage dictionary that is associated with an OCG or layer.
Notes: The functions a pointer of the original string that is stored in the PDF file.
If the function succeeds the return value is true. If the function fails the return value is false.
See also GetOCGUsageUserName function in DynaPDF manual.

3.34.423  GetOCUIXmlNode(Node as Integer) as DynaPDFOCUIXmlNodeMBS

Plugin Version:  17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Retrieves the most important properties of an Optional Content UI node (UI stands for User Interface).
Notes: If the PDF file was not already imported with ImportPDFFile() the function ImportOCProperties() must be called to import the global Optional Content Properties.
UI nodes are part of a layer configuration. Therefore, a layer configuration must be loaded with LoadLayerConfig() before the function can be called.

Optional Content Groups (OCGs) which are returned by this function should be visible in the user interface
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of a viewer application. All other OCGs should not be shown by default. UI nodes are stored in a single linked list. To get the pointer of the root node set the parameter Node to 0. The parameter OutNode will be ignored in this case but it is required otherwise. The next node of the root is in the NextItem property. If no further node is available the return value will be 0. Every node can contain one or more child nodes, an optional label, or a reference to an OCG. See also *GetOCUIINode* function in DynaPDF manual.

### 3.34.424 GetOpacity as Double

**Plugin Version:** 8.0, **Console & Web:** Yes, **Mac:** Yes, **Win:** Yes, **Linux:** Yes. **Function:** The function returns the opacity value used to draw the visible appearance of an annotation (requires Acrobat 5 or higher). See also *GetOpacity* function in DynaPDF manual.

### 3.34.425 GetOrientation as Integer

**Plugin Version:** 8.0, **Console & Web:** Yes, **Mac:** Yes, **Win:** Yes, **Linux:** Yes. **Function:** The function returns the orientation of the current open page if an open page was detected or the default orientation for newly created pages if no open page was detected. See also *GetOrientation* function in DynaPDF manual.

### 3.34.426 GetOutputIntent(Index as Integer) as DynaPDFOutputIntentMBS

**Plugin Version:** 14.2, **Console & Web:** Yes, **Mac:** Yes, **Win:** Yes, **Linux:** Yes. **Function:** Returns an output intent as well as the properties of it. **Notes:** An output intent is an ICC profile that describes the characteristics of the output device. The profile is mostly embedded but certain standards like PDF/X 4p, for example, allow also the usage of non-embedded profiles.

The parameter Index is the array index of the output intent. To determine the number of available intents call GetOutputIntentCount.

Returns nil in case of error. See also *GetOutputIntent* function in DynaPDF manual.
3.34.427 GetOutputIntentCount as Integer

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the number of available output intents.
See also GetOutputIntentCount function in DynaPDF manual.

3.34.428 GetPage(PageNum as UInt32) as DynaPDFPageMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the page object for the given page number.
**Notes:** If you like to open a page for editing, please use editpage function.

3.34.429 GetPageAnnot(index as Integer) as DynaPDFAnnotationMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Retrieves the page annotation with the given index.
**Deprecated:** This item is deprecated and should no longer be used. You can use GetPageAnnotEx instead.

3.34.430 GetPageAnnotCount as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the page annotation count.
See also GetPageAnnotCount function in DynaPDF manual.

3.34.431 GetPageAnnotEx(index as Integer) as DynaPDFAnnotationExMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries an extended annotation with the given index.
See also GetPageAnnotEx function in DynaPDF manual.

3.34.432 GetPageColorSpaces as DynaPDFColorSpaceMBS()

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries for current open page the color spaces used.
**Notes:**
Color spaces used for drawing colors (Stroke and Fill Color) and for image color space.
The list may be empty if for example everything is drawn in standard color spaces like RGB.
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3.34.433 GetPageCoords as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the page coordinate system setting.  
**Notes:** The native coordinate system of the Portable Document Format is bottom up. 
See also GetPageCoords function in DynaPDF manual.

3.34.434 GetPageCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of pages of the current PDF file if any. 
See also GetPageCount function in DynaPDF manual.

3.34.435 GetPageField(Index as Integer) as DynaPDFFieldMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the most important properties of a field. 
**Deprecated:** This item is deprecated and should no longer be used. You can use GetPageFieldEx instead.

3.34.436 GetPageFieldCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of fields used by a page. 
See also GetPageFieldCount function in DynaPDF manual.

3.34.437 GetPageFieldEx(Index as Integer) as DynaPDFFieldExMBS

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the most important properties of a field. 
**Notes:** The parameter Index must be a valid index to the page’s field array. To enumerate the fields of a page execute the function in a loop from 0 to GetPageFieldCount - 1. 
See also GetPageFieldEx function in DynaPDF manual.

3.34.438 GetPageHeight as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the height of the currently open page. 
See also GetPageHeight function in DynaPDF manual.
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3.34.439 GetPageLabel(index as Integer, byref Label as DynaPDFPageLabelMBS) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the properties of a page label. See also GetPageLabel function in DynaPDF manual.

3.34.440 GetPageLabelCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of page labels defined in the document. See also GetPageLabelCount function in DynaPDF manual.

3.34.441 GetPageLayout as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the page layout that is used when opening the document with Adobe's Acrobat. See also GetPageLayout function in DynaPDF manual.

3.34.442 GetPageMode as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the page mode that is used when opening the document with Adobe's Acrobat. See also GetPageMode function in DynaPDF manual.

3.34.443 GetPageNum as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the page number of the currently open page. See also GetPageNum function in DynaPDF manual.

3.34.444 GetPageText(stack as DynaPDFStackMBS) as boolean

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to extract the text of a page or template, or to find a specific text that should be replaced or deleted with the function ReplacePageText() or ReplacePageTextEx().

Notes:
InitStack must be called before you use GetPageText.

If you have problems with asian characters, please make sure you use SetCMapDir and load the CMAPs.
Requires DynaPDF Pro license.
See also GetPageText function in DynaPDF manual.

### 3.34.445 GetPageWidth as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the width of the currently open page.
See also GetPageWidth function in DynaPDF manual.

### 3.34.446 GetPDFVersion as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the minor version of the output PDF file as Integer value.
**Notes:** Zero stand for PDF 1.0, one for PDF 1.1 and so on.
See also GetPDFVersion function in DynaPDF manual.

### 3.34.447 GetPNGVersion as String

Plugin Version: 17.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries PNG library version used in DynaPDF.

### 3.34.448 GetPrintSettings as DynaPDFPrintSettingsMBS

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the print settings for the current document.
**Notes:** This is a PDF 1.7 extension.
See also GetPrintSettings function in DynaPDF manual.

### 3.34.449 GetResetAction(Handle as UInt32) as DynaPDFResetFormActionMBS

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the properties of a Reset Form Action.
See also GetResetAction function in DynaPDF manual.
3.34.450  GetResolution as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the resolution in DPI (Dots per Inch), in which images are stored by DynaPDF. See also GetResolution function in DynaPDF manual.

3.34.451  GetSaveNewImageFormat as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If false, images are not downscaled if necessary. See also GetSaveNewImageFormat function in DynaPDF manual.

3.34.452  GetSeparationInfo(byref Colorant as string, byref ColorSpace as Integer) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the separation info stored in the current open page. See also GetSeparationInfo function in DynaPDF manual.

3.34.453  GetSpaceWidth(FontHandle as Integer, FontSize as Double) as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the width of the space character of the font depending on the font size.

**Notes:**
If the font contains no space character a default size is used to compute the space width.
The parameter FontHandle must be a valid pointer to a PDF font. Such a reference is returned by GetPageText, EnumDocFonts, or by the content parser (see ParseContent).

Returns: If the function succeeds the return value is the space width. If the function fails the return value is zero. This function does not use the exception handling of DynaPDF. No error message is set on failure. See also GetSpaceWidth function in DynaPDF manual.

3.34.454  GetStrokeColor as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current stroke color.
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See also GetStrokeColor function in DynaPDF manual.

### 3.34.455 GetSubmitAction(Handle as UInt32) as DynaPDFSubmitFormActionMBS

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the properties of a Submit Form Action.  
**Notes:** Returns nil in case of an error.  
See also GetSubmitAction function in DynaPDF manual.

### 3.34.456 GetSysFontInfo as DynaPDFSysFontMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the most important properties of a system font.  
**Example:**

```plaintext
// list all fonts  
dim d as new DynaPDFMBS

dim f as DynaPDFSysFontMBS = d.GetSysFontInfo  
while f<>nil  
Listbox1.AddRow f.FamilyName

f = f.NextFont  
wend
```

**Notes:**

The function returns the fonts in the current font search order. That means if the search order is `{ fbTrueType, fbOpenType, fbType1, fbStdFont }`, for example, then the function returns first all TrueType fonts sorted in ascending order, then all OpenType fonts, and so on.  
Since standard fonts are no system fonts, these fonts are not returned.  
See also GetSysFontInfo function in DynaPDF manual.

See also:

- 3.34.457 GetSysFontInfo(PostscriptName as String) as DynaPDFSysFontMBS

### 3.34.457 GetSysFontInfo(PostscriptName as String) as DynaPDFSysFontMBS

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries system font with given postscript name.  
**Example:**
dim d as new DynaPDFMBS

// find one font with postscript name
dim font as DynaPDFSysFontMBS = d.GetSysFontInfo("Verdana-BoldItalic")

// find all with family name
dim fonts() as DynaPDFSysFontMBS = d.GetSysInfos("Verdana")

Break // see in debugger

Notes: Returns nil if font is not found.
See also GetSysFontInfo function in DynaPDF manual.
See also:

• 3.34.456 GetSysFontInfo as DynaPDFSysFontMBS

3.34.458 GetSysFontInfos as DynaPDFSysFontMBS()

Plugin Version: 16.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Returns an array with the most important properties of system fonts.
Example:

dim pdf as new MyDynaPDFMBS

// get all fonts
dim fonts() as DynaPDFSysFontMBS = pdf.GetSysFontInfos

// add one row for each font
for each f as DynaPDFSysFontMBS in fonts

dim name as string = f.FamilyName

if f.BaseType = pdf.kfbtOpenType and f.CIDOrdering = "" then
// This font cannot be used with Unicode

else
// Anything is ok
end if

next

Notes:
The function returns the fonts in the current font search order. That means if the search order is { fbtt-
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TrueType, fbtOpenType, fbtType1, fbtStdFont }, for example, then the function returns first all TrueType fonts sorted in ascending order, then all OpenType fonts, and so on. Since standard fonts are no system fonts, these fonts are not returned. See also:

- 3.34.459 GetSysFontInfos(Name as String) as DynaPDFSysFontMBS()

3.34.459 GetSysFontInfos(Name as String) as DynaPDFSysFontMBS()

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Returns an array with the most important properties of system fonts.

Example:

dim d as new DynaPDFMBS

// find one font with postscript name
dim font as DynaPDFSysFontMBS = d.GetSysFontInfo("Verdana-BoldItalic")

// find all with family name
dim fonts() as DynaPDFSysFontMBS = d.GetSysFontInfos("Verdana")

Break // see in debugger

Notes:

Matches fonts by family name, full name or Postscript name.

The function returns the fonts in the current font search order. That means if the search order is \{ fbtTrueType, fbtOpenType, fbtType1, fbtStdFont \}, for example, then the function returns first all TrueType fonts sorted in ascending order, then all OpenType fonts, and so on. Since standard fonts are no system fonts, these fonts are not returned. See also:

- 3.34.458 GetSysFontInfos as DynaPDFSysFontMBS()

3.34.460 GetTabLen as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function returns the tabulator length in spaces that is used to emulate tabulators during text formatting (see WriteFText() for further information).

See also GetTabLen function in DynaPDF manual.
### 3.34.461 GetTemplCount as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the number of templates used by a page. See also `GetTemplCount` function in DynaPDF manual.

### 3.34.462 GetTemplHandle as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the handle of the current open template or a negative error code on failure. See also `GetTemplHandle` function in DynaPDF manual.

### 3.34.463 GetTemplHeight(Handle as Integer) as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the height of a template. See also `GetTemplHeight` function in DynaPDF manual.

### 3.34.464 GetTemplWidth(Handle as Integer) as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A new function in `dynapdf` which is not documented. See also `GetTemplWidth` function in DynaPDF manual.

### 3.34.465 GetTextDrawMode as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the text draw mode. See draw modes are described in detail under `SetTextDrawMode()`. See also `GetTextDrawMode` function in DynaPDF manual.

### 3.34.466 GetTextFieldValue(Field as Integer, byref Value as string, byref DefaultValue as string) as Boolean

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the text of a field. **Notes:** The strings may be ANSI or Unicode encoded. See also `GetTextFieldValue` function in DynaPDF manual.
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3.34.467 GetTextHeight(Align as Integer, aText as string) as Double

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function measures the height of a formatted text block.

**Example:**

```vba
dim pdf as DynaPDFMBS // your PDF instance

dim text as string = "Hello \ul# World"

dim h1 as Integer = pdf.GetTextHeight(pdf.ktaLeft, text)
dim h2 as Integer = pdf.GetFTextHeight(pdf.ktaLeft, text)

dim h3 as Integer = pdf.GetTextHeightEx(150, pdf.ktaLeft, text)
dim h4 as Integer = pdf.GetFTextHeightEx(150, pdf.ktaLeft, text)

// see different heights in debugger.
```

**Notes:**

GetTextHeight does escape backslashes so no formatting commands are taken from the string. The text parameter is converted to unicode.

3.34.468 GetTextHeightAnsi(Align as Integer, aText as string) as Double

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function measures the height of a formatted text block.

**Notes:**

GetTextHeightAnsi does escape backslashes so no formatting commands are taken from the string. The text parameter is converted to ANSI.

3.34.469 GetTextHeightEx(Width as Double, Align as Integer, aText as string) as Double

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function measures the height of a formatted text block.

**Example:**

```vba
dim pdf as new MyDynaPDFMBS

call pdf.CreateNewPDF nil
```
call pdf.Append

call pdfSetFont("Helvetica", pdf.kfsnone, 12, true, pdf.kcpUnicode)

dim h as Double = pdf.GetTextHeightEx(100, pdf.ktaLeft, "Hello World. Just a test string.")

MsgBox "height: "+str(h)

call pdf.EndPage
call pdf.CloseFile

Notes:

GetTextHeightEx does escape backslashes so no formatting commands are taken from the string. The text parameter is converted to unicode.

3.34.470 GetTextHeightExAnsi(Width as Double, Align as Integer, aText as string) as Double

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function measures the height of a formatted text block.

Notes:

GetTextHeightExAnsi does escape backslashes so no formatting commands are taken from the string. The text parameter is converted to ANSI.

3.34.471 GetTextRect(byref PosX as Double, byref PosY as Double, byref Width as Double, byref Height as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the bounding rectangle to output formatted text.

See also GetTextRect function in DynaPDF manual.

3.34.472 GetTextRise as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current text rise used to output text.

See also GetTextRise function in DynaPDF manual.
### 3.34.473 GetTextScaling as Double

**Plugin Version:** 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the current value of horizontal text scaling. See also GetTextScaling function in DynaPDF manual.

### 3.34.474 GetTextWidth(aText as string) as Double

**Plugin Version:** 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function calculates the width of a string. **Notes:** The text parameter is converted to unicode. See also GetTextWidth function in DynaPDF manual. See also:

- 3.34.475 GetTextWidth(FontHandle as integer, Text as String, CharSpacing as Single, WordSpacing as Single, TextScale as Single) as double

### 3.34.475 GetTextWidth(FontHandle as integer, Text as String, CharSpacing as Single, WordSpacing as Single, TextScale as Single) as double

**Plugin Version:** 18.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Calculates text width. **Notes:**

The function can be used to calculate the width of a sub string that was returned by the content parser (see ParseContent() for further information). The parameter FontHandle must be a valid handle of a font object that was provided in the SetFont event. Note that this function is optimized for speed and does not use the normal error handling of DynaPDF. The parameters CharSpacing, WordSpacing, and TextScale must be taken from the current graphics state.

If the function succeeds the return value is the string width measured in text space. If the parameter FontHandle is set 0 the return value is 0.0. See also GetTextWidth function in DynaPDF manual. See also:

- 3.34.474 GetTextWidth(aText as string) as Double

### 3.34.476 GetTextWidthAnsi(aText as string) as Double

**Plugin Version:** 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function calculates the width of a string. **Notes:** The text parameter is converted to ANSI.
See also GetTextWidth function in DynaPDF manual.

See also:

- 3.34.474 GetTextWidth(aText as string) as Double
- 3.34.475 GetTextWidth(FontHandle as integer, Text as String, CharSpacing as Single, WordSpacing as Single, TextScale as Single) as double

3.34.477 GetTIFFVersion as String


**Notes:**

Should be 3.7.2 on plugins 17.1.
Version is always same on Mac, Windows and Linux.
If you notice a mismatch, something is wrong!

3.34.478 GetTransparentColor as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the transparent color value that is used for newly inserted images.
See also GetTransparentColor function in DynaPDF manual.

3.34.479 GetTrapped as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the trapped key of the document.
See also GetTrapped function in DynaPDF manual.

3.34.480 GetURIAction(index as Integer) as DynaPDFURIActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries details for an URI action.

**Notes:** Index is from 0 to GetActionCount-1.
See also GetURIAction function in DynaPDF manual.
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3.34.481 GetUseExactPwd as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If the property UseExactPwd is false, an encrypted PDF file can always be decrypted, if either the open or owner password in the file is an empty string.

See also GetUseExactPwd function in DynaPDF manual.

3.34.482 GetUseGlobalImpFiles as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property specifies whether import files should be loaded permanent into memory, e.g. to enable splitting of large PDF files.

See also GetUseGlobalImpFiles function in DynaPDF manual.

3.34.483 GetUserRights as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the encryption flags of an imported PDF file or -1 if the imported PDF file was not encrypted.

See also GetUserRights function in DynaPDF manual.

3.34.484 GetUserUnit as single

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the user unit of the current open page.

**Notes:**

A user unit acts like a scaling factor. The page format and all page coordinates are multiplied with this factor in a viewer application. The default size of a PDF unit is 1/72 inch and the default user unit is 1.0. User units can be useful if the page format would be too large to be expressed in standard PDF units. The largest page format in PDF is limited to 14400 units or 200 inches. This limit can be extended with the user unit.

The largest value that is supported is 75.0 which results in a maximum page format of 15,000 x 15,000 inches or 1,800,000 units.

See also GetUserUnit function in DynaPDF manual.

3.34.485 GetUseStdFonts as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns 1 (true) if the 14 standard fonts are enabled.
3.34.486  GetUsesTransparency(Page as Integer = -1) as Boolean

Plugin Version: 18.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Checks whether a page or the entire document uses transparency.

**Notes:**
This is no quick check as GetDocUsesTransparency() applies. The function parses the page or pages to determine whether transparent objects are really used.
To check whether a specific page uses transparency set the parameter PageNum to the wished page number. The first page is denoted by 1. To check the entire PDF file set PageNum to -1.

The return value is a bit mask on success (a positive integer value), or a negative error code on failure. The following flags are defined:

- 0: The page or document uses no transparency.
- 1: The content stream of a page contains transparent objects.
- 2: A page defines the blending color space (Group dictionary).
- 4: A page contains transparent annotations or form fields.

The above values can occur in any combination. To check whether a specific flag was set use a binary and operator: BitwiseAnd(value, flag)

See also GetUsesTransparency function in DynaPDF manual.

3.34.487  GetUseSystemFonts as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property specifies whether the %Windows% /Fonts directory should be added automatically to the list of available font search paths.

See also GetUseSystemFonts function in DynaPDF manual.

3.34.488  GetUseTransparency as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property specifies whether images should get a transparent background.

See also GetUseTransparency function in DynaPDF manual.
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3.34.489 GetUseVisibleCoords as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property specifies whether DynaPDF should consider the crop box to calculate to position of an object. See also GetUseVisibleCoords function in DynaPDF manual.

3.34.490 GetViewerPreferences(byref Preference as Integer, byref AddVal as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the viewer preferences specified in the document. See also GetViewerPreferences function in DynaPDF manual.

3.34.491 GetViewport(Page as UInt32, index as Integer) as DynaPDFViewportMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns a viewport that is associated with a page. **Notes:**

A viewport is a rectangular region of a page, that specifies usually a measure coordinate system or points in a geospatial coordinate system.

Since viewports might overlap, to determine the viewport to use for any point on a page, the viewports in the array shall be examined, starting with the last one and iterating in reverse, and the first one whose BBox entry contains the point shall be chosen.

To determine how viewports and measure dictionaries can be used, please have a look into the PDF Reference 2.0, ISO/DIS 32000-2, Section Measurement properties. Returns nil on any error. See also GetViewport function in DynaPDF manual.

3.34.492 GetViewportCount(Page as UInt32) as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the number of viewports which are associated with a page. **Notes:**

The first page has the page number 1.
If the function succeeds the return value is the number of viewports, a number greater or equal zero. If the function fails the return value is a negative error code. The function can only fail if the page number is invalid. See also GetViewportCount function in DynaPDF manual.
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3.34.493 GetWMFDefExtent(byref width as Integer, byref height as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function retrieves the default size which is used to convert non portable WMF files to EMF. See also GetWMFDefExtent function in DynaPDF manual.

3.34.494 GetWMFPixelPerInch as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function returns the default pixels per inch of the y-axis which are used to convert portable WMF files to EMF. See also GetWMFPixelPerInch function in DynaPDF manual.

3.34.495 GetWordSpacing as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function returns the current word spacing. See also GetWordSpacing function in DynaPDF manual.

3.34.496 GetXFAStruct(Handle as UInt32) as DynaPDFXFAStructMBS

The parameter Index is the array index. The function GetXFAStructCount() returns the number of available streams.
An XFA form consist of several XML streams. The stream name must be used to determine which stream was returned.
If the function succeeds the return value is 1. If the function fails the return value is 0. See also GetXFAStruct function in DynaPDF manual.

3.34.497 GetXFAStructCount as Integer

Plugin Version: 16.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Returns the number of available XFA streams. Notes:
XFA streams are available after a PDF file was imported. If the function succeeds the return value is the number of available XFA streams. If the function fails the
return value is a negative error code.
See also GetXFAStreamCount function in DynaPDF manual.

### 3.34.498 GetZlibVersion as String

Plugin Version: 17.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries version of zlib library.

**Notes:**
Should be 1.2.7 on plugins 17.x.
Version is always same on Mac, Windows and Linux.
If you notice a mismatch, something is wrong!

### 3.34.499 GofRGB(RGB as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns G of a RGB color value.

**Example:**
```vbscript
dim rgb as Integer = DynaPDFMBS.RGB(1,2,3)
MsgBox str(DynaPDFMBS.GofRGB(rgb)) // shows 2
```

### 3.34.500 HaveOpenDoc as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If an error occurred it is not always clear whether the PDF file was already deleted or if it is still in memory.
See also HaveOpenDoc function in DynaPDF manual.

### 3.34.501 HaveOpenPage as Boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether a page is open.
See also HaveOpenPage function in DynaPDF manual.
3.34.502  **HighlightAnnot(SubType as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double, ColorValue as Integer, Author as string, Subject as string, Comment as string) as Integer**

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a highlight annotation with unicode text.
See also **HighlightAnnot** function in DynaPDF manual.

3.34.503  **HighlightAnnotAnsi(SubType as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double, ColorValue as Integer, Author as string, Subject as string, Comment as string) as Integer**

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a highlight annotation with ANSI text.
See also **HighlightAnnot** function in DynaPDF manual.

3.34.504  **HighlightOnAllPages(SearchText as string, ColorValue as Color, CaseInsensitive as boolean = false) as Integer**

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Highlights text on all pages of the current document.
**Notes:**
If CaseInsensitive is true, the case of letters is ignored (also umlauts and accents)
Searches on all pages in the document.
Returns number of times the text was found.

3.34.505  **HighlightOnCurrentPage(SearchText as string, ColorValue as Color, CaseInsensitive as boolean = false) as Integer**

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Highlights text on all pages of the current page.
**Notes:**
If CaseInsensitive is true, the case of letters is ignored (also umlauts and accents)
Use EditPage function to open the page before you search on it.
Returns number of times the text was found.
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3.34.506 ImportBookmarks as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function imports the outline tree of the currently opened import file (see OpenImportFile() or OpenImportBuffer()). See also ImportBookmarks function in DynaPDF manual.

3.34.507 ImportCatalogObjects as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function imports global objects of the currently opened import file such as bookmarks, JavaScripts, embedded files, open actions, invisible page templates, rendering intents, the document info entries, and certain other global properties such as the page mode or page layout. See also ImportCatalogObjects function in DynaPDF manual.

3.34.508 ImportDocInfo as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function imports the document info entries from the currently opened import file. See also ImportDocInfo function in DynaPDF manual.

3.34.509 ImportEncryptionSettings as Boolean

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Imports the encryption settings from the currently open import file (see OpenImportFile() or OpenImportBuffer() for further information).

**Notes:**
If the PDF file is not encrypted, the function does nothing. To determine whether the open PDF file is encrypted call GetInIsEncrypted().

The encryption settings should be imported to make sure that the PDF file can be saved with the same settings after it was edited. The user rights should be considered if the file was opened with the open password, also if the password was just an empty string. See GetUserRights() for further information.

If the file was opened with the owner password, then all editing rights should be grated. The PDF file must be closed with CloseFile() or CloseAndSignFile() for example. Don’t use CloseFileEx() for example since this function would override the encryption settings.

If the file should be saved unencrypted call ResetEncryptionSettings() before closing the file. Return values: If the function succeeds the return value is true. If the function fails the return value is false. See also ImportEncryptionSettings function in DynaPDF manual.
3.34.510 ImportOCProperties as Boolean

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Imports the global Optional Content Properties of the current open import file. **Notes:**

OC properties are normally automatically imported by functions like ImportPDFFile() or when importing a page that contains layers. However, a viewer application must be able to access the OC properties right after the PDF file was opened so that the layer configuration and the layer tree can be loaded (see LoadLayerConfig() and GetOCUINode() for further information). The function can be called multiple times without causing unwanted side effects.

If the function succeeds the return value is true. If the function fails the return value is false. See also ImportOCProperties function in DynaPDF manual.

3.34.511 ImportPage(PageNum as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function imports a page of an external PDF file and converts this page to a template. **Notes:** Requires DynaPDF Pro license. See also ImportPage function in DynaPDF manual.

3.34.512 ImportPageEx(PageNum as Integer, ScaleX as Double = 1.0, ScaleY as Double = 1.0) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function imports a PDF page of an external PDF file incl. interactive objects such as annotations, form fields and so on, if any. **Notes:** Requires DynaPDF Pro license. See also ImportPageEx function in DynaPDF manual.

3.34.513 ImportPDFFile(DestPage as Integer, ScaleX as Double = 1.0, ScaleY as Double = 1.0) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function imports an external PDF file incl. interactive objects such as annotations, bookmarks, form fields and so on. **Notes:**

Scaling factor is ignored if importing as pages (not templates).

This function returns the page number of the last page imported. It does not return how many pages are
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imported. If you need number of imported pages, please use returned value minus DestPage. See also **ImportPDFFile** function in DynaPDF manual.

### 3.34.514 ImportPDFPage(PageNum as Integer, ScaleX as Double = 1.0, ScaleY as Double = 1.0) as Integer

Plugin Version: 15.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Imports a PDF page.

**Notes:**

If a page is open, this function calls EndPage. Then it appends a new page, calls ImportPageEx and Endpage.

On success the return value is zero. If the function fails the return value is a negative error code.

### 3.34.515 InitColorManagement(profiles as DynaPDFColorProfilesMBS, DestSpace as Integer, Flags as Integer) as boolean

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Initializes color management with the given default profiles.

**Notes:**

Pass nil for profiles to disable color management.
DestSpace can be kcsDeviceRGB, kcsDeviceCMYK or kcsDeviceGray.
Flags can be kicmDefault or kicmBPCompensation for:
Black point compensation preserves the black point when converting CMYK colors to different color spaces.

See also **InitColorManagement** function in DynaPDF manual.

### 3.34.516 InitColorManagementEx(profiles as DynaPDFColorProfilesExMBS, DestSpace as Integer, Flags as Integer) as boolean

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Initialize color management.

**Notes:**

The function enables color management in the functions RenderPage(), RenderPageEx(), RenderPageToImage(), and RenderPDFFile() exactly like InitColorManagement() but accepts ICC profile buffers instead of file paths. See InitColorManagement() for further information.
To disable color management set the parameter Profiles to nil.

Initializing the color management requires a considerable amount of processing time. It is strongly recommended to use one PDF instance as long as possible so that it must not be initialized again when another PDF file will be rendered.
The color management can be initialized right after the PDF instance was created.

Returns true on success or false on failure.
See also InitColorManagementEx function in DynaPDF manual.

3.34.517 InitStack(byref stack as DynaPDFStackMBS) as boolean

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function initializes the variable Stack with default values and prepares the editing of a content stream.

Example:

dim s as DynaPDFStackMBS
dim pdf as DynaPDFMBS // get your DynaPDF object
call pdf.InitStack(s)

Notes:
If stack is nil, a new one will be created and stored in the variable.

Return values:
If the function succeeds the return value is true. If the function fails the return value is false.

See also InitStack function in DynaPDF manual.

3.34.518 InkAnnot(points() as DynaPDFPointMBS, LineWidth as Double, ColorValue as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer


Notes:
An ink annotation (PDF 1.3) represents a freehand "scribble" composed of one or more disjoint paths. The parameter Points represents a stroked path. More paths can be added with AddInkList.
The points are interpreted in current user space. Any transformation that was applied on the coordinate
The points are connected with bezier curves to achieve a smooth transition between points. If the points should be connected with straight lines, then create a PolyLine annotation instead (see PolyLineAnnot). This annotation type has an associated PopUp annotation that displays the string Content in a floating window. The initial window state of the associated PopUp annotation is closed by default but the state can be changed with SetAnnotOpenState() if necessary.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code.

See also InkAnnot function in DynaPDF manual.

### 3.34.519 InkAnnotAnsi(points() as DynaPDFPointMBS, LineWidth as Double, ColorValue as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates an Ink annotation.

**Notes:**

An ink annotation (PDF 1.3) represents a freehand "scribble" composed of one or more disjoint paths. The parameter Points represents a stroked path. More paths can be added with AddInkList. The points are interpreted in current user space. Any transformation that was applied on the coordinate system will be taken into account. The points are connected with bezier curves to achieve a smooth transition between points. If the points should be connected with straight lines, then create a PolyLine annotation instead (see PolyLineAnnot). This annotation type has an associated PopUp annotation that displays the string Content in a floating window. The initial window state of the associated PopUp annotation is closed by default but the state can be changed with SetAnnotOpenState() if necessary.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code.

See also InkAnnot function in DynaPDF manual.

### 3.34.520 InsertBMPFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as memoryblock) as Integer

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts a Device Independent Bitmap from a file buffer.

**Deprecated:** This item is deprecated and should no longer be used. You can use InsertImageFromBuffer instead. See also: 3.34.521 InsertBMPFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as string) as Integer
3.34.521 InsertBMPFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as string) as Integer

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function inserts a Device Independent Bitmap from a file buffer. Deprecated: This item is deprecated and should no longer be used. You can use InsertImageFromBuffer instead. See also:

- 3.34.522 InsertBMPFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, BufferAddress as Integer) as Integer
- 3.34.520 InsertBMPFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as memoryblock) as Integer

3.34.522 InsertBMPFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, BufferAddress as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function inserts a Device Independent Bitmap from a file buffer. Deprecated: This item is deprecated and should no longer be used. You can use InsertImageFromBuffer instead. See also:

- 3.34.523 InsertBMPFromHandle(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, hBitmap as Integer) as Integer
- 3.34.520 InsertBMPFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as memoryblock) as Integer
- 3.34.521 InsertBMPFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as string) as Integer

3.34.523 InsertBMPFromHandle(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, hBitmap as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function inserts a bitmap in the same way as InsertImage() but accepts a HBITMAP handle as input. See also InsertBMPFromHandle function in DynaPDF manual.

3.34.524 InsertBookmark(title as String, parent as Integer, DestPage as Integer, Open as boolean, AddChildren as boolean) as Integer

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Notes: The title parameter is converted to unicode.
See also InsertBookmark function in DynaPDF manual.

3.34.525 InsertBookmarkAnsi(title as String, parent as Integer, DestPage as Integer, Open as boolean, AddChildren as boolean) as Integer

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function inserts a bookmark to the global outline tree of the document.
Notes: The title parameter is converted to ANSI.
See also InsertBookmark function in DynaPDF manual.

3.34.526 InsertBookmarkEx(title as String, parent as Integer, NamedDest as Integer, Open as boolean, AddChildren as boolean) as Integer

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function inserts a bookmark to the global outline tree of the document.
Notes: The title parameter is converted to unicode.
See also InsertBookmarkEx function in DynaPDF manual.

3.34.527 InsertBookmarkExAnsi(title as String, parent as Integer, NamedDest as Integer, Open as boolean, AddChildren as boolean) as Integer

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function inserts a bookmark to the global outline tree of the document.
Notes: The title parameter is converted to ANSI.
See also InsertBookmarkEx function in DynaPDF manual.

3.34.528 InsertImage(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, File as folderitem) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts an image from a file.
**Example:**

```vbnet
dim pdf as DynaPDFMBS

// ... add page

// use transparency from image
```
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call pdf.SetUseTransparency(False)

// max 300 dpi for recompressed images
call pdf.SetResolution(300)

// use JPEG when compressing new pictures
call pdf.SetCompressionFilter(pdf.kcfJPEG)

// pass through JPEGs if possible
call pdf.SetSaveNewImageFormat(false)

// insert image

dim source as FolderItem = SpecialFolder.Desktop.Child("test.jpg")
call pdf.InsertImage(0, 0, 300, 200, source)

Deprecated: This item is deprecated and should no longer be used. You can use InsertImage instead.

Notes:

Please call SetUseTransparency(false) before inserting image if you don’t like one of the colors (default white) to become transparent.

DynaPDF 3.0 adds support for pictures with alpha channel for this function.

3.34.529 InsertImageEx(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, File as folderitem, index as Integer = 1) as Integer


Example:

dim pdf as DynaPDFMBS

// ... add page

// use transparency from image
call pdf.SetUseTransparency(False)

// max 300 dpi for recompressed images
call pdf.SetResolution(300)

// use JPEG when compressing new pictures
call pdf.SetCompressionFilter(pdf.kcfJPEG)
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// pass through JPEGs if possible
call pdf.SetSaveNewImageFormat(false)

// insert image
dim source as FolderItem = SpecialFolder.Desktop.Child("test.jpg")
call pdf.InsertImageEx(0, 0, 300, 200, source)

Notes:

Please call SetUseTransparency(false) before inserting image if you don’t like one of the colors (default white) to become transparent.

DynaPDF 3.0 adds support for pictures with alpha channel for this function.
See also InsertImageEx function in DynaPDF manual.

3.34.530 InsertImageFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as Memoryblock, index as Integer = 1) as Integer

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts an image in exactly the same way as InsertImageEx(), but it accepts a file buffer as input.

Notes:

Please call SetUseTransparency(false) before inserting image if you don’t like one of the colors (default white) to become transparent.

DynaPDF 3.0 adds support for pictures with alpha channel for this function.
Please pass position and size as doubles. If you use integers, Xojo will give a compile error.
See also InsertImageFromBuffer function in DynaPDF manual.
See also:

- 3.34.531 InsertImageFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as string, index as Integer = 1) as Integer

3.34.531 InsertImageFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as string, index as Integer = 1) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts an image in exactly the same way as InsertImageEx(), but it accepts a file buffer as input.

Notes:
Please call SetUseTransparency(false) before inserting image if you don’t like one of the colors (default white) to become transparent.

DynaPDF 3.0 adds support for pictures with alpha channel for this function. Please pass position and size as doubles. If you use integers, Xojo will give a compile error. See also InsertImageFromBuffer function in DynaPDF manual.

See also:

- 3.34.530 InsertImageFromBuffer(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Buffer as Memoryblock, index as Integer = 1) as Integer

3.34.532 InsertMetafile(FileName as folderitem, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function converts an Enhanced Meta File (EMF) or Windows Meta File (WMF) to a native PDF vector graphic. **Notes:** Requires DynaPDF Lite license. See also InsertMetafile function in DynaPDF manual.

3.34.533 InsertMetafileEx(Buffer as memoryblock, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function converts an Enhanced Meta File (EMF) or Windows Meta File (WMF) to a native PDF vector graphic in the same way as InsertMetafile(). **Notes:** Requires DynaPDF Lite license. See also InsertMetafileEx function in DynaPDF manual.

See also:

- 3.34.534 InsertMetafileEx(Buffer as string, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

3.34.534 InsertMetafileEx(Buffer as string, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function converts an Enhanced Meta File (EMF) or Windows Meta File (WMF) to a native PDF vector graphic in the same way as InsertMetafile(). **Notes:** Requires DynaPDF Lite license. See also InsertMetafileEx function in DynaPDF manual.
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- 3.34.533 InsertMetafileEx(Buffer as memoryblock, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

### 3.34.535 InsertMetafileExt(FileName as folderitem, View as DynaPDFRectMBS, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

**Plugin Version:** 8.0, **Console & Web:** Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function converts an Enhanced Meta File (EMF) or Windows Meta File (WMF) to a native PDF vector graphic in the same way as InsertMetafile().

**Notes:** Requires DynaPDF Lite license.

See also InsertMetafileExt function in DynaPDF manual.

### 3.34.536 InsertMetafileExtEx(Buffer as Memoryblock, View as DynaPDFRectMBS, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

**Plugin Version:** 13.0, **Console & Web:** Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function converts an Enhanced Meta File (EMF) or Windows Meta File (WMF) to a native PDF vector graphic in the same way as InsertMetafileExt().

**Notes:** Requires DynaPDF Lite license.

See also InsertMetafileExtEx function in DynaPDF manual.

See also:

- 3.34.537 InsertMetafileExtEx(Buffer as String, View as DynaPDFRectMBS, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

### 3.34.537 InsertMetafileExtEx(Buffer as String, View as DynaPDFRectMBS, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

**Plugin Version:** 8.0, **Console & Web:** Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function converts an Enhanced Meta File (EMF) or Windows Meta File (WMF) to a native PDF vector graphic in the same way as InsertMetafileExt().

**Notes:** Requires DynaPDF Lite license.

See also InsertMetafileExtEx function in DynaPDF manual.

See also:

- 3.34.536 InsertMetafileExtEx(Buffer as Memoryblock, View as DynaPDFRectMBS, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean
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3.34.538 InsertMetafileFromHandle(hEnhMetafileHandle as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function inserts an Enhanced Metafile exactly in the same way as InsertMetafile() but accepts a HENHMETAFILE handle as input.

**Notes:** Requires DynaPDF Lite license.
See also InsertMetafileFromHandle function in DynaPDF manual.

3.34.539 InsertMetafileFromHandleEx(hEnhMetafileHandle as Integer, View as DynaPDFRectMBS, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function inserts an Enhanced Metafile exactly in the same way as InsertMetafileExt() but accepts a HENHMETAFILE handle as input.

**Notes:** Requires DynaPDF Lite license.
See also InsertMetafileFromHandleEx function in DynaPDF manual.

3.34.540 InsertPicture(pic as picture, mask as picture, PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double) as Integer

Plugin Version: 9.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Takes a Xojo picture with a mask and adds it to the PDF.

**Example:**

```xojo
// insert MBS Logo with round Mask
dim d as new MyDynaPDFMBS
dim file as FolderItem = SpecialFolder.Desktop.Child("test.pdf")
call d.CreateNewPDF file
call d.Append

// get picture
dim p as Picture = LogoMBS(500)

// get mask
dim m as new Picture(500, 500, 32)
m.Graphics.ForeColor = & cFFFFFF
m.Graphics.FillRect 0,0,500,500
m.Graphics.ForeColor = & c000000
m.Graphics.FillOval 0,0,500,500
```
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// add image to pdf
call d.InsertPicture(p, m, 50, 150, 500, 500)

call d.EndPage
call d.CloseFile

Notes:

Please call SetUseTransparency(false) before inserting image if you don’t like one of the colors (default white) to become transparent.

This is a convenience function to handle picture with mask. With DynaPDF 3 the mask is used while we used a keycolor in DynaPDF 2.x.

Internally this calls pdfInsertRawImage so check the documentation on this function in the dynapdf manual. Does not work with alpha channel pictures.

PosX and PosY are the destination position and ScaledWidth and ScaledHeight is the new size of the image. See also:

- 3.34.541 InsertPicture(pic as picture, PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double) as Integer

3.34.541 InsertPicture(pic as picture, PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double) as Integer

Plugin Version: 8.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: Takes a Xojo picture and adds it to the PDF.

Notes:

Please call SetUseTransparency(false) before inserting image if you don’t like one of the colors (default white) to become transparent.

Internally this calls pdfInsertRawImage so check the documentation on this function in the dynapdf manual. Does not work with alpha channel or masked pictures.

PosX and PosY are the destination position and ScaledWidth and ScaledHeight is the new size of the image. See also:

- 3.34.540 InsertPicture(pic as picture, mask as picture, PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double) as Integer
3.34.542 InsertRawImage(Data as String, BitsPerPixel as Integer, ColorCount as Integer, ImgWidth as Integer, ImgHeight as Integer, PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double) as Integer

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts an image from a raw image buffer which contains no image header.
See also InsertRawImage function in DynaPDF manual.
See also:

- 3.34.543 InsertRawImage(Memory as MemoryBlock, BitsPerPixel as Integer, ColorCount as Integer, ImgWidth as Integer, ImgHeight as Integer, PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double) as Integer

3.34.543 InsertRawImage(Memory as MemoryBlock, BitsPerPixel as Integer, ColorCount as Integer, ImgWidth as Integer, ImgHeight as Integer, PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts an image from a raw image buffer which contains no image header.
See also InsertRawImage function in DynaPDF manual.
See also:

- 3.34.542 InsertRawImage(Data as String, BitsPerPixel as Integer, ColorCount as Integer, ImgWidth as Integer, ImgHeight as Integer, PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double) as Integer

3.34.544 InsertRawImageEx(PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double, Image as DynaPDFRawImageMBS) as Integer

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts an image from a raw image buffer that contains no image header.
**Notes:**
See also InsertRawImageEx in dynapdf_help.pdf manual file.
Returns false if image parameter has invalid values.
See also InsertRawImageEx function in DynaPDF manual.
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### 3.34.545 IsBidiText(Text as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function returns the position of the first bidirectional character that can be found in the string or -1 if no such character can be found.  
**Notes:** The text parameter is converted to unicode.  
See also IsBidiText function in DynaPDF manual.

### 3.34.546 IsColorPage(GrayIsColor as Boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function checks whether a page is a color page or if all graphic elements of the page use black & white only.  
**Notes:** Value is 0 for false, 1 for true or negative for an error.  
See also IsColorPage function in DynaPDF manual.

### 3.34.547 IsEmptyPage as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function checks whether a page is empty.  
**Notes:** Value is 0 for false, 1 for true or negative for an error.  
See also IsEmptyPage function in DynaPDF manual.

### 3.34.548 IsWrongPwd(errCode as Integer) as boolean

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether an error code is for a wrong password.  
**Notes:** We have several error codes which result from different password protections and this function considers them all.  
See also IsWrongPwd function in DynaPDF manual.

### 3.34.549 KofCMYK(CMYK as UInt32) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns K of a CMYK color value.  
**Example:**

```vbnet
dim cmyk as Integer = DynaPDFMBS.CMYK(1,2,3,4)
MsgBox str(DynaPDFMBS.KofCMYK(cmyk)) // shows 4
```
Notes: Returns different values on BigEndian and LittleEndian systems.

3.34.550  LAB(L as Integer, A as Integer, B as Integer) as Integer

Plugin Version: 8.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Builds a LAB color value based on the given component values.

**Example:**

```vba
dim lab as Integer = DynaPDFMBS.LAB(1,2,3)
MsgBox hex(lab)
```

3.34.551  LineAnnot(x1 as Double, y1 as Double, x2 as Double, y2 as Double, LineWidth as Double, StartLineEndStyle as Integer, EndLineEndStyle as Integer, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a line annotation.

See also LineAnnot function in DynaPDF manual.

3.34.552  LineAnnotAnsi(x1 as Double, y1 as Double, x2 as Double, y2 as Double, LineWidth as Double, StartLineEndStyle as Integer, EndLineEndStyle as Integer, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a line annotation.

See also LineAnnot function in DynaPDF manual.

3.34.553  LineTo(PosX as Double, PosY as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function draws a path from the current position up to the specified point.

**Example:**
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```vbscript
dim pdf as new DynaPDFMBS
dim f as FolderItem = SpecialFolder.Desktop.Child("Create PDF with Line.pdf")

pdf.SetLicenseKey "Starter" // For this example you can use a Starter, Lite, Pro or Enterprise License

// Create a new PDF
call pdf.CreateNewPDF f

// We want to use top-down coordinates
call pdf.SetPageCoords pdf.kpcTopDown

// Add a page
call pdf.Append

// black
call pdf.SetStrokeColor 0

// line down
call pdf.MoveTo(100,100)
call pdf.LineTo(200,200)
call pdf.StrokePath

// line up
call pdf.MoveTo(200,200)
call pdf.LineTo(300,100)
call pdf.StrokePath

// end page
call pdf.EndPage

// Close page
call pdf.CloseFile

// Open PDF
f.Launch
```

See also LineTo function in DynaPDF manual.

3.34.554 LoadCMap(CMapName as string, Embed as Boolean) as Integer

See also LoadCMap function in DynaPDF manual.
3.34.555  LoadError as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The last error message from LoadLibrary call.

**Example:**

```vbnet
dim f as FolderItem = SpecialFolder.Desktop.Child("test.dylib")
if DynaPDFMBS.LoadLibrary(f) then
    MsgBox "OK"
else
    MsgBox DynaPDFMBS.LoadError
end if
```

3.34.556  LoadFDFData(FileName as folderitem, Password as string, Flags as Integer) as Boolean


See also LoadFDFData function in DynaPDF manual.

3.34.557  LoadFDFDataEx(Buffer as memoryblock, Password as string, Flags as Integer) as Boolean

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Loads PDF form data from the given PDF file in the buffer.

See also LoadFDFDataEx function in DynaPDF manual.

See also:

- 3.34.558 LoadFDFDataEx(Buffer as string, Password as string, Flags as Integer) as Boolean

3.34.558  LoadFDFDataEx(Buffer as string, Password as string, Flags as Integer) as Boolean

Plugin Version: 9.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Loads PDF form data from the given PDF file in the buffer.

See also LoadFDFDataEx function in DynaPDF manual.

See also:

- 3.34.557 LoadFDFDataEx(Buffer as memoryblock, Password as string, Flags as Integer) as Boolean
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3.34.559 LoadFont(Buffer as memoryblock, Style as Integer, size as Double, Embed as Boolean = false, CodePage as Integer = 2, CollectionIndex as UInt32 = 0) as Integer

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function loads a font from a file buffer.

**Notes:** Added CollectionIndex parameter in 12.1 plugin version.

See also `LoadFont` function in DynaPDF manual.

See also:

- 3.34.560 LoadFont(Buffer as string, Style as Integer, size as Double, Embed as Boolean = false, CodePage as Integer = 2, CollectionIndex as UInt32 = 0) as Integer

3.34.560 LoadFont(Buffer as string, Style as Integer, size as Double, Embed as Boolean = false, CodePage as Integer = 2, CollectionIndex as UInt32 = 0) as Integer

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function loads a font from a file buffer.

**Notes:** Added CollectionIndex parameter in 12.1 plugin version.

See also `LoadFont` function in DynaPDF manual.

See also:

- 3.34.559 LoadFont(Buffer as memoryblock, Style as Integer, size as Double, Embed as Boolean = false, CodePage as Integer = 2, CollectionIndex as UInt32 = 0) as Integer

3.34.561 LoadFontEx(File as folderitem, Style as Integer, size as Double, Embed as Boolean = false, CodePage as Integer = 2, CollectionIndex as UInt32 = 0) as Integer

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function loads a font from a font file and activates it in the graphics state if the function was called within an open page or template.

See also `LoadFontEx` function in DynaPDF manual.

See also:

- 3.34.562 LoadFontEx(Filepath as string, Style as Integer, size as Double, Embed as Boolean = false, CodePage as Integer = 2, CollectionIndex as UInt32 = 0) as Integer
### 3.34.562 LoadFontEx

**Function:** The function loads a font from a font file and activates it in the graphics state if the function was called within an open page or template.

See also `LoadFontEx` function in DynaPDF manual.

See also:

- 3.34.561 LoadFontEx(File as folderitem, Style as Integer, size as Double, Embed as Boolean = false, CodePage as Integer = 2, CollectionIndex as UInt32 = 0) as Integer

### 3.34.563 LoadLayerConfig

**Function:** Loads the specified layer configuration.

**Notes:**

A PDF file that contains layers (Optional Content Groups in PDF syntax) contains usually at least a default configuration dictionary. This configuration is loaded by default when the visibility state of a layer or optional content group must be determined, e.g. when rendering a page.

Use this function to load another configuration if available. To determine the number of available configurations call `GetLayerConfigCount()`.

The parameter Index can be one of the following:

- -1: Load the default configuration.
- -2: If a configuration was already loaded, leave it unchanged. Load the default configuration otherwise.
- 0..Count -1: Load the specified configuration.

If the function succeeds the return value is true. If the function fails the return value is false.

See also `LoadLayerConfig` function in DynaPDF manual.

### 3.34.564 LoadLibrary

**Function:** Loads the dynapdf library file.

**Example:**
MsgBox "Version before: " + DynaPDFMBS.DynaPDFVersion

dim f as FolderItem = SpecialFolder.Desktop.Child("dynapdf.dylib")

if DynaPDFMBS.LoadLibrary(f) then
    MsgBox "Version after: " + DynaPDFMBS.DynaPDFVersion
else
    MsgBox DynaPDFMBS.LoadError
end if

Notes:
Returns true on success or false on failure.

While the plugin comes with an internal dynapdf library, you can use this method to load a different version of the library.
See also:

- 3.34.565 LoadLibrary(Path as string) as boolean

3.34.565 LoadLibrary(Path as string) as boolean

Notes: Returns true on success or false on failure.

While the plugin comes with an internal dynapdf library, you can use this method to load a different version of the library.
See also:

- 3.34.564 LoadLibrary(File as FolderItem) as boolean

3.34.566 LockLayer(layer as UInt32) as boolean

See also LockLayer function in DynaPDF manual.
3.34.567 LofLAB(LAB as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns L of a LAB color value.

**Example:**

```vbnet
dim lab as Integer = DynaPDFMBS.LAB(1,2,3)
MsgBox str(DynaPDFMBS.LofLAB(lab)) // shows 1
```

3.34.568 MofCMYK(CMYK as UInt32) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns M of a CMYK color value.

**Example:**

```vbnet
dim cmyk as Integer = DynaPDFMBS.CMYK(1,2,3,4)
MsgBox str(DynaPDFMBS.MofCMYK(cmyk)) // shows 2
```

**Notes:** Returns different values on BigEndian and LittleEndian systems.

3.34.569 MovePage(source as Integer, dest as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function moves a page to another position in the document.

See also **MovePage** function in DynaPDF manual.

3.34.570 MoveTo(PosX as Double, PosY as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function moves the current position to the point specified by PosX, PosY.

**Example:**

```vbnet
dim pdf as new DynaPDFMBS
dim f as FolderItem = SpecialFolder.Desktop.Child("Create PDF with Line.pdf")

pdf.SetLicenseKey "Starter" // For this example you can use a Starter, Lite, Pro or Enterprise License

// Create a new PDF
call pdf.CreateNewPDF f
```
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// We want to use top-down coordinates
call pdf.SetPageCoords pdf.kpcTopDown

// Add a page
call pdf.Append

// black
call pdf.SetStrokeColor 0

// line down
call pdf.MoveTo(100,100)
call pdf.LineTo(200,200)
call pdf.StrokePath

// line up
call pdf.MoveTo(200,200)
call pdf.LineTo(300,100)
call pdf.StrokePath

// end page
call pdf.EndPage

// Close page
call pdf.CloseFile

// Open PDF
f.Launch

See also MoveTo function in DynaPDF manual.

3.34.571 MultiplyMatrix(M1 as DynaPDFMatrixMBS, M2 as DynapdfMatrixMBS, 
NewMatrix as DynapdfMatrixMBS) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function multiplies two transformation matrices and stores the result in the parameter NewMatrix. **Notes:** You must pass three non nil matrix references into the function. See also MultiplyMatrix function in DynaPDF manual.
3.34.572 OpenImportBuffer( Buffer as Memoryblock, PwdType as Integer = 0, Password as string = """) as Integer

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function reads an external PDF from a file buffer so that it can be imported entirely or parts of it. **Notes:** Requires DynaPDF Lite license. See also OpenImportBuffer function in DynaPDF manual.

See also:

- 3.34.573 OpenImportBuffer( Buffer as string, PwdType as Integer = 0, Password as string = """) as Integer

3.34.573 OpenImportBuffer( Buffer as string, PwdType as Integer = 0, Password as string = """) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function reads an external PDF from a file buffer so that it can be imported entirely or parts of it. **Notes:** Requires DynaPDF Lite license. See also OpenImportBuffer function in DynaPDF manual.

See also:

- 3.34.572 OpenImportBuffer( Buffer as Memoryblock, PwdType as Integer = 0, Password as string = """) as Integer

3.34.574 OpenImportFile( File as folderitem, PwdType as Integer = 0, Password as string = """) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function opens an external PDF file so that it can be imported entirely or parts of it. **Notes:** Requires DynaPDF Lite license. See also OpenImportFile function in DynaPDF manual.

3.34.575 OpenOutputFile( File as folderitem) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function opens the output file into which the PDF file should be written. See also OpenOutputFile function in DynaPDF manual.
3.34.576 OpenOutputFileEncrypted(File as folderitem, OpenPwd as string, OwnerPwd as string, KeyLen as Integer, Restrict as Integer) as Boolean

Plugin Version: 16.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:**

Opens the output file and sets the encryption parameters.

**Remarks:**

This function enables in combination with FlushPages the creation of very large encrypted PDF files with minimal memory usage.

The function can be called in a while statement, e.g. to display an open file dialog if the file could not be opened. Once the function succeeds the PDF file can be finished with CloseFile.

If the function succeeds the return value is true. If the function fails the return value is false.

See also OpenOutputFileEncrypted function in DynaPDF manual.

3.34.577 OpenTag(Tag as Integer, Lang as string, AltText as string, Expansion as string) as boolean


See also OpenTag function in DynaPDF manual.

3.34.578 OpenTagAnsi(Tag as Integer, Lang as string, AltText as string, Expansion as string) as boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Opens a tag with ANSI encoding.

See also OpenTag function in DynaPDF manual.

3.34.579 Optimize(Flags as Integer = 0, Params as DynaPDFOptimizeParamsMBS = nil) as boolean

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optimizes PDF.

See also Optimize function in DynaPDF manual.
3.34.580  PageLink(PosX as Double, PosY as Double, Width as Double, Height as Double, DestPage as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts a page link onto the current open page. See also PageLink function in DynaPDF manual.

3.34.581  PageLink2(PosX as Double, PosY as Double, Width as Double, Height as Double, NamedDest as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts a page link onto the current open page by using a named destination as target. See also PageLink2 function in DynaPDF manual.

3.34.582  PageLink3(PosX as Double, PosY as Double, Width as Double, Height as Double, NamedDest as string) as Integer

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function adds a page link to the current open page by using a named destination as target. **Notes:**
The difference in comparison to PageLink2() is that the named destination can be defined as string. This makes it possible to create the link, also if you don’t have the required information to create the named destination at this point. If the named destination does not exist when the file is closed then the link does nothing. See also, CreateNamedDest().

Return values:
If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code.

See also PageLink3 function in DynaPDF manual.

3.34.583  PageLinkEx(PosX as Double, PosY as Double, Width as Double, Height as Double, DestType as Integer, DestPage as Integer, a as Double, b as Double, c as Double, d as Double) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts a page link onto the current open page. See also PageLinkEx function in DynaPDF manual.
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3.34.584 PageStatistic(page as Integer = -1) as DynaPDFPageStatisticMBS

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries statistics from a page.

**Notes:**
If page is -1 the current open page is used. Else the plugin uses editpage(page) to open the page and run the statistics on that.
Returns nil on any error or statistic value.

3.34.585 ParseContent(ParseInterface as DynaPDFParseInterfaceMBS, flags as Integer) as boolean

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Parses the content of a page.

**Notes:** Requires DynaPDF Pro license.
See also ParseContent function in DynaPDF manual.

3.34.586 PlaceImage(ImgHandle as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Images can be used multiple times on different positions and with different sizes. This function places an image onto a page or template that was already inserted beforehand by an image function.
See also PlaceImage function in DynaPDF manual.

3.34.587 PlaceSigFieldValidateIcon(SigField as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function places the validation icon in a signature field to the whished position.
See also PlaceSigFieldValidateIcon function in DynaPDF manual.

3.34.588 PlaceTemplate(TmplHandle as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function places a template onto a page, another open template, or pattern.
3.34.589 PlaceTemplateEx(TmplHandle as Integer, PosX as Double, PosY as Double, ScaleWidth as Double, ScaleHeight as Double) as Boolean

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Places a template. See also PlaceTemplateEx function in DynaPDF manual.

3.34.590 PolygonAnnot(Vertices() as DynaPDFPointMBS, LineWidth as Double, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a Polygon Annotation. **Notes:**

The vertices are connected by straight lines. The path is always closed before it will be drawn. It is not required to close the path explicitly. At least two vertices must be provided. The coordinates of the vertices are interpreted in current user space. Any transformation that was applied on the coordinate system will be taken into account. The stroke or fill color can be set to the special constant kNO_COLOR to fill or stroke the polygon. It is not allowed to set both colors to kNO_COLOR since this would result in an invisible annotation. This annotation type has an associated PopUp annotation that displays the string Content in a floating window. The initial window state of the associated PopUp annotation is closed by default but the state can be changed with SetAnnotOpenState if necessary.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code. See also PolygonAnnot function in DynaPDF manual.

3.34.591 PolygonAnnotAnsi(Vertices() as DynaPDFPointMBS, LineWidth as Double, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a Polygon Annotation. **Notes:**

The vertices are connected by straight lines. The path is always closed before it will be drawn. It is not
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required to close the path explicitly. At least two vertices must be provided. The coordinates of the vertices are interpreted in current user space. Any transformation that was applied on the coordinate system will be taken into account. The stroke or fill color can be set to the special constant kNO_COLOR to fill or stroke the polygon. It is not allowed to set both colors to kNO_COLOR since this would result in an invisible annotation. This annotation type has an associated PopUp annotation that displays the string Content in a floating window. The initial window state of the associated PopUp annotation is closed by default but the state can be changed with SetAnnotOpenState if necessary.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code. See also **PolygonAnnot** function in DynaPDF manual.

---

**3.34.592 PolyLineAnnot(Vertices() as DynaPDFPointMBS, LineWidth as Double, StartLineEndStyle as Integer, EndLineEndStyle as Integer, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer**

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a PolyLine Annotation. **Notes:**

The vertices are connected by straight lines. At least two vertices must be provided. The coordinates of the vertices are interpreted in current user space. Any transformation that was applied on the coordinate system will be taken into account. The parameter FillColor is only used if the line end style of the start or end point has an interior that can be filled. The special constant kNO_COLOR represents a transparent interior. The stroke color is required and must not be set to kNO_COLOR.

This annotation type has an associated PopUp annotation that displays the string Content in a floating window. The initial window state of the associated PopUp annotation is closed by default but the state can be changed with SetAnnotOpenState if necessary. The parameter LineWidth must be in the range 0 through 12 units. Values outside the valid range will be adjusted to the nearest allowed value. A zero line width produces a 1 pixel wide line. The line end styles can be changed if necessary with SetAnnotLineEndStyle.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code. See also **PolyLineAnnot** function in DynaPDF manual.
3.34.593 **PolyLineAnnotAnsi(Vertices() as DynaPDFPointMBS, LineWidth as Double, StartLineEndStyle as Integer, EndLineEndStyle as Integer, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Content as string) as Integer**

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a PolyLine Annotation. **Notes:**

The vertices are connected by straight lines. At least two vertices must be provided. The coordinates of the vertices are interpreted in current user space. Any transformation that was applied on the coordinate system will be taken into account. The parameter FillColor is only used if the line end style of the start or end point has an interior that can be filled. The special constant kNO_COLOR represents a transparent interior. The stroke color is required and must not be set to kNO_COLOR.

This annotation type has an associated PopUp annotation that displays the string Content in a floating window. The initial window state of the associated PopUp annotation is closed by default but the state can be changed with SetAnnotOpenState if necessary. The parameter LineWidth must be in the range 0 through 12 units. Values outside the valid range will be adjusted to the nearest allowed value. A zero line width produces a 1 pixel wide line. The line end styles can be changed if necessary with SetAnnotLineEndStyle.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code. See also PolyLineAnnot function in DynaPDF manual.

3.34.594 **PrintGetDevMode as String**

Plugin Version: 17.2, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Function:** Queries last print dev mode. **Notes:**

You can store this in a preferences file for next printing. This is same data structure as in WindowsDeviceModeMBS class.

3.34.595 **PrintGetDevNames(byref Driver as String, byref Device as String, byref Output as String, byref DefaultFlag as Integer) as Boolean**

Plugin Version: 17.2, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Function:** Queries printer device names. **Notes:**
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Driver: File name (without the extension) of the device driver.
Device: Name of the device.
Output: Device name for the physical output medium (output port).
DefaultFlag: 1 if the selected printer is the default one.

Returns true on success or false on failure.

3.34.596 PrintPDFFile(TmpDir as FolderItem, DocName as string, DCHandle as integer, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean

Notes:
Returns true on success and false on failure.
Flags can be a combination of the flag values kpffPrintAsImage, kpffDefault, kpffColor, kpffAutoRotateAndCenter and kpff1Bit.
Margin can be nil. If not nil, specifies the margins to use.
DCHandle is the handle of the graphics context.

If you only want to print a selection of pages, please only import those pages via ImportPDFPage function. Or use DeletePage to remove the pages you don’t want to print.

Does not work with a graphics handle from Xojo 2016r4 and newer due to switch to DirectDraw APIs. Or in other words, you can use a HDC handle from graphics class in Xojo 2016r3 and older to print PDF. See also PrintPDFFile function in DynaPDF manual.

See also:
- 3.34.597 PrintPDFFile(TmpDir as FolderItem, DocName as string, PrinterName as String, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean

3.34.597 PrintPDFFile(TmpDir as FolderItem, DocName as string, PrinterName as String, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean

Notes:
Returns true on success and false on failure.
Flags can be a combination of the flag values kpffPrintAsImage, kpffDefault, kpffColor, kpffAutoRotateAnd-
Center and kpff1Bit.
Margin can be nil. If not nil, specifies the margins to use.
PrinterName is the name of the printer to use. The plugin will open the printer and print PDF there with default settings.

If you only want to print a selection of pages, please only import those pages via ImportPDFPage function.
Or use DeletePage to remove the pages you don’t want to print.
See also PrintPDFFile function in DynaPDF manual.
See also:

- 3.34.596 PrintPDFFile(TmpDir as FolderItem, DocName as string, DCHandle as integer, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean

3.34.598 PrintPDFFileWithDialog(TmpDir as FolderItem, DocName as string, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil, parentWindow as Window = nil) as Boolean

Notes:
Returns true on success and false on failure.
Flags can be a combination of the flag values kpffPrintAsImage, kpffDefault, kpffColor, kpffAutoRotateAndCenter and kpff1Bit.
Margin can be nil. If not nil, specifies the margins to use.
Shows print dialog and allows user to set printer.

If you only want to print a selection of pages, please only import those pages via ImportPDFPage function.
Or use DeletePage to remove the pages you don’t want to print.

After this call you can use PrintGetDevNames and PrintGetDevMode to get printer settings.
And before this call you can use PrintSetDevMode and PrintSetDevNames to restore printer settings.

3.34.599 PrintPDFPage(PageNum as Integer, DocName as string, DCHandle as integer, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean

Notes: See PrintPDFFile for details and options.
See also:
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- **3.34.600 PrintPDFPage(PageNum as Integer, DocName as string, PrinterName as String, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean**


**Notes:**
See PrintPDFFile for details and options.

Version 18.4 and newer use device mode set with DynaPDFMBS.PrintSetDevMode method for printer settings.

See also:

- **3.34.599 PrintPDFPage(PageNum as Integer, DocName as string, DCHandle as integer, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil) as Boolean**

3.34.601 **PrintPDFPageWithDialog(PageNum as Integer, DocName as string, Flags as Integer = 0, Margin as DynaPDFRectMBS = nil, PrintParams as DynaPDFPrintParamsMBS = nil, parentWindow as Window = nil) as Boolean**


**Notes:** See PrintPDFFileWithDialog for details and options.

3.34.602 **PrintSetDevMode(data as MemoryBlock) as Boolean**

Plugin Version: 18.5, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Function:** Set last print dev mode.

**Notes:**
Returns true on success.
This is same data structure as in WindowsDeviceModeMBS class.
See also:

- **3.34.603 PrintSetDevMode(data as String) as Boolean**
3.34.603 PrintSetDevMode(data as String) as Boolean

Plugin Version: 17.2, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Function:** Set last print dev mode.
**Notes:**
Returns true on success.
This is same data structure as in WindowsDeviceModeMBS class.
See also:
- 3.34.602 PrintSetDevMode(data as MemoryBlock) as Boolean

3.34.604 PrintSetDevNames(Driver as String, Device as String, Output as String, DefaultFlag as Integer) as Boolean

Plugin Version: 17.2, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Function:** Sets printer device names.
**Notes:**
Driver: File name (without the extension) of the device driver.
Device: Name of the device.
Output: Device name for the physical output medium (output port).
DefaultFlag: 1 if the selected printer is the default one.

Returns true on success or false on failure.

3.34.605 ReadImageFormat(FileName as folderitem, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the most important properties of an image file.

3.34.606 ReadImageFormat2(FileName as folderitem, Index as Integer, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the most important properties of an image file.

**Example:**
```plaintext
// read image format and resolution and calculate physical size
dim bits as integer
```
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```vbnet
dim useZip as Boolean
dim resX as integer = 0
dim resY as integer = 0
dim physHeight as integer
dim physWidth as integer
dim w as integer
dim h as integer

call pdf.ReadImageFormat2(Source, 1, w, h, bits, useZip)
call pdf.ReadImageResolution(Source, 1, resX, resY)

if (resX <> resY and resX > 0 and resY > 0) then
  if (resX > resY) then
    physWidth = w
    physHeight = h \ (resX \ resY)
  else
    physWidth = w \ (resY \ resX)
    physHeight = h
  end if
else
  physHeight = h
  physWidth = w
end if
```

See also ReadImageFormat2 function in DynaPDF manual.

**3.34.607 ReadImageFormatEx(hBitmap as Integer, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the most important properties of a memory bitmap. See also ReadImageFormatEx function in DynaPDF manual.

**3.34.608 ReadImageFormatFromBuffer(Buffer as memoryblock, Index as Integer, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean**

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the most important properties of an image in the same way as ReadImageFormat2(), but accepts an image buffer as input.
3.34.609 ReadImageFormatFromBuffer(Buffer as string, Index as Integer, byref Width as Integer, byref Height as Integer, byref BitsPerPixel as Integer, byref UseZip as Boolean) as Boolean

Function: The function retrieves the most important properties of an image in the same way as ReadImageFormat2(), but accepts an image buffer as input.

See also: ReadImageFormatFromBuffer function in DynaPDF manual.

Example:

```vbnet
// read image format and resolution and calculate physical size
Dim bits As Integer
Dim useZip As Boolean
Dim resX As Integer = 0
Dim resY As Integer = 0
Dim physHeight As Integer
Dim physWidth As Integer
Dim w As Integer
Dim h As Integer
Call pdf.ReadImageFormat2(Source, 1, w, h, bits, useZip)
Call pdf.ReadImageResolution(Source, 1, resX, resY)
If (resX <> resY And resX > 0 And resY > 0) Then
    If (resX > resY) Then
        physWidth = w
        physHeight = h \
            
    Else
        ' else code
    End If
End If
```
See also ReadImageResolution function in DynaPDF manual.

**3.34.611 ReadImageResolutionEx(Buffer as Memoryblock, Index as Integer, byref ResX as Integer, byref ResY as Integer) as Boolean**

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the horizontal and vertical resolution of an image file in the same way as ReadImageResolution() but accepts an image buffer as input.
See also ReadImageResolutionEx function in DynaPDF manual.
See also:

- 3.34.612 ReadImageResolutionEx(Buffer as string, Index as Integer, byref ResX as Integer, byref ResY as Integer) as Boolean

**3.34.612 ReadImageResolutionEx(Buffer as string, Index as Integer, byref ResX as Integer, byref ResY as Integer) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function retrieves the horizontal and vertical resolution of an image file in the same way as ReadImageResolution() but accepts an image buffer as input.
See also ReadImageResolutionEx function in DynaPDF manual.
See also:

- 3.34.611 ReadImageResolutionEx(Buffer as Memoryblock, Index as Integer, byref ResX as Integer, byref ResY as Integer) as Boolean

**3.34.613 Rectangle(PosX as Double, PosY as Double, Width as Double, Height as Double, FillMode as Integer) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function draws a rectangle.
See also Rectangle function in DynaPDF manual.
3.34.614 ReEncryptPDF(File as folderitem, PwdType as Integer, InPwd as string, OpenPwd as string, OwnerPwd as string, KeyLen as Integer, Restrict as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function encrypts an already encrypted or unencrypted PDF file. See also ReEncryptPDF function in DynaPDF manual.

3.34.615 ReEncryptPDF Ansi(Path as string, PwdType as Integer, InPwd as string, OpenPwd as string, OwnerPwd as string, KeyLen as Integer, Restrict as Integer) as Integer

Plugin Version: 12.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: This function encrypts an already encrypted or unencrypted PDF file. Notes: Same as ReEncryptPDF, but takes path name in Windows ANSI encoding. See also ReEncryptPDF function in DynaPDF manual.

3.34.616 RenameSpotColor(Colorant as string, NewName as string) as Integer

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Renames a colorant. Example:

// your instance
dim pdf as DynaPDFMBS

// rename the color
call pdf.RenameSpotColor("Magenta", "Magenta2")

Notes: Strings are converted to UTF-8. See also RenameSpotColor function in DynaPDF manual.

3.34.617 RenderAnnotOrField(Handle as UInt32, IsAnnot as boolean, State as Integer, Matrix as DynaPDFMatrixMBS, Flags as Integer, PixFmt as Integer, Filter as Integer, byref Out as DynaPDFBitmapMBS) as Integer

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**Notes:**

Please check dynapdf_help.pdf for details on RenderAnnotOrField function.
Plugin will fill out parameter only if result is zero.
Requires DynaPDF Pro license.
See also [RenderAnnotOrField](function_in_dynampdf_manual) function in DynaPDF manual.

**3.34.618 RenderPagePicture(PageNum as Integer) as picture**

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Renders a picture for the page with the given page number.

**Example:**

```vba
dim pdf as new MyDynaPDFMBS

    // For this example you can use a Pro or Enterprise License
    pdf.SetLicenseKey "Pro"

    // create in memory
    call pdf.CreateNewPDF nil

    // set import flags
    call pdf.SetImportFlags pdf.kifImportAsPage

    // open the PDF file
    dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")
    call pdf.OpenImportFile(f, 0, "")

    // import all the pages
    call pdf.ImportPDFFile(1, 1.0, 1.0)

    // and render first page
    dim out as Picture = pdf.RenderPagePicture(1)

    // display in window
    Backdrop = out
```

**Notes:**

Please note that for most cases RenderPageToImage and RenderPDFFile are better choices for rendering. Especially if you plan to compress images later anyway. And you avoid trouble with color matching. For this function to work correct you have to initialize DynaPDF with right color space for screen (Generic RGB on Mac and screen profile for Windows).

The picture size is set to the Cropbox. If no Crop box is defined, it uses the media box.
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Returns nil on any error.

If you render a lot of pages from the same PDF, consider using DynaPDFRasterizerMBS class as it’s faster when you reuse the rasterizer.

Currently not available for Linux Desktop apps. Requires DynaPDF Pro license. See also:

- 3.34.619 RenderPagePicture(PageNum as Integer, Width as Integer, Height as Integer, DefScale as Integer = 2, matrix as DynaPDFMatrixMBS = nil) as picture

3.34.619 RenderPagePicture(PageNum as Integer, Width as Integer, Height as Integer, DefScale as Integer = 2, matrix as DynaPDFMatrixMBS = nil) as picture

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Renders a picture for the page with the given page number.

Example:

```vbnet
dim pdf as new MyDynaPDFMBS

// For this example you can use a Pro or Enterprise License
pdf.SetLicenseKey "Pro"

// create in memory
Call pdf.CreateNewPDF nil

// set import flags
Call pdf.SetImportFlags pdf.kifImportAsPage

// open the PDF file
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")
call pdf.OpenImportFile(f, 0, ")")

// import all the pages
call pdf.ImportPDFFile(1, 1.0, 1.0)

// and render first page with window size
dim out as Picture = pdf.RenderPagePicture(1, Width, Height)

// display in window
Backdrop = out
```
Notes:

Please note that for most cases RenderPageToImage and RenderPDFFile are better choices for rendering. Especially if you plan to compress images later anyway. And you avoid trouble with color matching. For this function to work correct you have to initialize DynaPDF with right color space for screen (Generic RGB on Mac and screen profile for Windows).

The picture is created with the given size. The PDF page is scaled to fit size. You can use the constants kpsFitBest, kpsFitHeight or kpsFitWidth for the DefScale parameter. The matrix allows you to move, rotate or scale the PDF inside the picture.

Returns nil on any error.

If you render a lot of pages from the same PDF, consider using DynaPDFRasterizerMBS class as it’s faster when you reuse the rasterizer.

Currently not available for Linux Desktop apps.
Requires DynaPDF Pro license.
See also:

- 3.34.618 RenderPagePicture(PageNum as Integer) as picture

3.34.620 RenderPageToImage(PageNumber as UInt32, OutFile as folderitem, Resolution as UInt32, Width as UInt32, Height as UInt32, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function renders a PDF page into an image.

**Example:**

dim pdf as new MyDynaPDFMBS // your DynaPDF subclass with Error event filled

// where to get PDF page
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")

// where to write
dim t as FolderItem = SpecialFolder.Desktop.Child("test.jpg")

pdf.SetLicenseKey "Pro" // For this example you can use a Pro or Enterprise License

call pdf.CreateNewPDF nil
call pdf.SetImportFlags(pdf.kifImportAll + pdf.kifImportAsPage)
// open file
call pdf.OpenImportFile(f,0,"")

// add page
call pdf.Append

// import the page
call pdf.ImportPageEx(1,1.0,1.0)
call pdf.EndPage

// render the page
call pdf.RenderPageToImage(1, t, 72, ImageView1.Width, ImageView1.Height, DynaPDFRasterImageMBS.krfDefault, DynaPDFRasterizerMBS.kpxfRGB, DynaPDFMBS.kcfJPEG, DynaPDFMBS.kifmJPEG)

Notes:

PixFmt: pass kpxf* constants like DynaPDFRasterizerMBS.kpxfRGB.
Filter: Pass kcf* constants like DynaPDFMBS.kcfJPEG.
Format: pass kifm* constants like DynaPDFMBS.kifmJPEG.

The page that should be rendered must be closed (Append() or EditPage() open a page and EndPage() closes a page).
If the parameter OutFile is set to nil the image is created in memory. In this case call GetImageBuffer() to retrieve the image buffer and finally FreeImageBuffer() to release it.

The output image size can be calculated in different ways:

- If Resolution is >0 the image width and height is calculated according to the specified resolution. On a 32 bit machine it is possible to render pages in up to 1200 DPI depending on the page format. Larger resolutions require special techniques like banding to restrict the memory usage. However, no such feature is available in DynaPDF.
- If Width >0 and if Height == 0 the image height is calculated according to the given width to archive an image with exact proportions.
- If Width == 0 and if Height >0 then image width is calculated according to the given height to archive an image with exact proportions.
- If Width >0 and if Height >0 the image is scaled to the width and height.

The pixel format and the output image format must be compatible. Because TIFF is the only image format that supports different compression filters, the parameter Filter will be ignored for all other output formats. If the function succeeds the return value is true. If the function fails the return value is false.
Requires DynaPDF Pro license.
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3.34.621  **RenderPageToImageMT**(*PageNumber as UInt32, OutFile as folderitem, Resolution as UInt32, Width as UInt32, Height as UInt32, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32*) as boolean

Plugin Version: 14.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function renders a PDF page into an image.

**Notes:**

PixFmt: pass kpxf* constants like DynaPDFRasterizerMBS.kpxfRGB.
Filter: Pass kcf* constants like DynaPDFMBS.kcfJPEG.
Format: pass kifm* constants like DynaPDFMBS.kifnJPEG.

The page that should be rendered must be closed (Append() or EditPage() open a page and EndPage() closes a page).
If the parameter OutFile is set to nil the image is created in memory. In this case call GetImageBuffer() to retrieve the image buffer and finally FreeImageBuffer() to release it.

The output image size can be calculated in different ways:

- If Resolution is >0 the image width and height is calculated according to the specified resolution. On a 32 bit machine it is possible to render pages in up to 1200 DPI depending on the page format. Larger resolutions require special techniques like banding to restrict the memory usage. However, no such feature is available in DynaPDF.

- If Width >0 and if Height == 0 the image height is calculated according to the given width to archive an image with exact proportions.

- If Width == 0 and if Height >0 then image width is calculated according to the given height to archive an image with exact proportions.

- If Width >0 and if Height >0 the image is scaled to the width and height.

The pixel format and the output image format must be compatible. Because TIFF is the only image format that supports different compression filters, the parameter Filter will be ignored for all other output formats. If the function succeeds the return value is true. If the function fails the return value is false.

Must be called inside a Xojo (Xojo) thread so time yields to main thread and you can keep the GUI running. Requires DynaPDF Pro license.
3.34.622  **RenderPageToPicture** (PageNum as integer, pic as picture, DefScale as integer = 2, matrix as DynaPDFMatrixMBS = nil, RenderWithAlpha as boolean = false) as boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Renders the page into the given picture.

**Example:**

```vba
dim pdf as new MyDynaPDFMBS

  // For this example you can use a Pro or Enterprise License
  pdf.SetLicenseKey "Pro"

  // create in memory
  call pdf.CreateNewPDF nil

  // set import flags
  call pdf.SetImportFlags pdf.kifImportAsPage

  // open the PDF file
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")
call pdf.OpenImportFile(f, 0, "")

  // import all the pages
call pdf.ImportPDFFile(1, 1.0, 1.0)

  // create picture
dim out as new Picture(800, 600, 32)

  // render first page in the existing picture
call pdf.RenderPageToPicture(1, out)

  // display in window
  Backdrop = out
```

**Notes:**

Please note that for most cases RenderPageToImage and RenderPDFFile are better choices for rendering. Especially if you plan to compress images later anyway. And you avoid trouble with color matching. For this function to work correct you have to initialize DynaPDF with right color space for screen (Generic RGB on Mac and screen profile for Windows).

This method draws into an existing picture. The PDF page is scaled to fit size. You can use the constants kpsFitBest, kpsFitHeight or kpsFitWidth for the DefScale parameter. The matrix allows you to move, rotate or scale the PDF inside the picture.
Returns nil on any error.

This does not work on Linux desktop targets as the plugin can’t write into a picture there.

If you render a lot of pages from the same PDF, consider using DynaPDFRasterizerMBS class as it’s faster when you reuse the rasterizer.
Requires DynaPDF Pro license.

Added RenderWithAlpha parameter in plugin version 19.0.
If RenderWithAlpha is true, we render with alpha channel. If the destination is a picture has alpha channel, you should get the alpha there. Otherwise for picture without alpha channel, we only copy RGB channels.

3.34.623 RenderPDFFile(OutFile as folderitem, Resolution as UInt32, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function renders all PDF pages which are currently in memory and stores the result in a proprietary image format.

Example:

```plaintext
dim file as FolderItem = SpecialFolder.Desktop.Child("test.pdf")
dim pdf as new DynaPDFMBS

call pdf.CreateNewPDF nil

call pdf.OpenImportFile(file, 0, "")
call pdf.ImportPDFFile(1, 1.0, 1.0)

// create a TIFF file:

dim outfile as FolderItem = SpecialFolder.Desktop.Child("test.tif")

dim Flags as Integer = DynaPDFRasterImageMBS.krfDefault
dim PixFmt as Integer = DynaPDFRasterizerMBS.kpxfRGB
dim Format as Integer = DynaPDFMBS.kifmTIFF // use kifm* constants
dim Filter as Integer = DynaPDFMBS.kcfLZW // pick a compression scheme for the file format

call pdf.RenderPDFFile(outfile, 300, Flags, PixFmt, Filter, Format)

// create a folder of JPEG file:

dim outfolder as FolderItem = SpecialFolder.Desktop.Child("test files")
outfolder.CreateAsFolder

Flags = DynaPDFRasterImageMBS.krfDefault
```
PixFmt = DynaPDFRasterizerMBS.kpxfRGB
Format = DynaPDFMBS.kifmJPEG // use kifm* constants
Filter = DynaPDFMBS.kcfJPEG

call pdf.RenderPDFFile(outfolder, 300, Flags, PixFmt, Filter, Format)

Notes: Also check the dynapdf manual on the pdfRenderPDFFileA function (pdfRenderPDFFileW on Windows).

3.34.624 RenderPDFFileEx(OutFile as folderitem, Resolution as UInt32, Width as Integer, Height as Integer, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean

Plugin Version: 18.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Renders all PDF pages which are currently in memory and stores the result in a proprietary image format.
Notes:
The pages in memory could be imported from one or more external PDF files, e.g. with ImportPDFFile(), created with DynaPDF functions, or a combination of both.

The parameter OutFile can be a path to an existing directory or the file name of the output image. The latter type can be used with TIFF images because this format supports multi-page output. When a file path is used with a single page image format only the first page will be rendered.

The function checks whether the path is a directory or a file name.
The function can render pages in a specific resolution, or scale them to a given width or height.

Depending on which parameters are set the image size is calculated as follows:

- Resolution >0 and Width == 0 and Height == 0: Pages are rendered according to the given resolution. Note that PDF pages can be very large. Therefore, it is maybe not possible to render all pages in the wished resolution.
- Resolution >0 and Width <0 and or Height <0: Pages are rendered according to the given resolution. Negative values of Width and Height are interpreted as maximum width or height if Resolution is greater zero. Since PDF pages can be very large, it is recommended to set the maximum width and height to a value that is low enough so that no out of memory exception occurs, e.g. 5000 x 5000 pixels.
- Resolution == 0 and Width >0 or Height >0: Pages are scaled to the given Width or Height. If Width and Height are greater zero then pages are scaled to that size independent of the original page format (not recommended). It is usually best to set the width or height to zero so that the function can calculate the missing value to preserve the aspect ratio.
On a 32 bit system it is possible to render PDF pages in RGB with up to around 1200 DPI, depending on the page format and available memory. The resolution of gray images can be higher but the encoder must be able to handle such large images. The PNG and bitmap encoders accept images in almost arbitrary resolutions but all other encoders can fail when the resolution is larger than about 2000 DPI.

The function calls the progress events.
Returns true on success or false on failure.

See also RenderPDFFileEx function in DynaPDF manual.

3.34.625 RenderPDFFileExMT(OutFile as folderitem, Resolution as UInt32, Width as Integer, Height as Integer, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean

Plugin Version: 18.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Renders all PDF pages which are currently in memory and stores the result in a proprietary image format.

Notes:
The pages in memory could be imported from one or more external PDF files, e.g. with ImportPDFFile(), created with DynaPDF functions, or a combination of both.

The parameter OutFile can be a path to an existing directory or the file name of the output image. The latter type can be used with TIFF images because this format supports multi-page output. When a file path is used with a single page image format only the first page will be rendered.

The function checks whether the path is a directory or a file name.
The function can render pages in a specific resolution, or scale them to a given width or height.

Depending on which parameters are set the image size is calculated as follows:

- Resolution >0 and Width == 0 and Height == 0: Pages are rendered according to the given resolution. Note that PDF pages can be very large. Therefore, it is maybe not possible to render all pages in the wished resolution.
- Resolution >0 and Width <0 and or Height <0: Pages are rendered according to the given resolution. Negative values of Width and Height are interpreted as maximum width or height if Resolution is greater zero. Since PDF pages can be very large, it is recommended to set the maximum width and height to a value that is low enough so that no out of memory exception occurs, e.g. 5000 x 5000 pixels.
- Resolution == 0 and Width >0 or Height >0: Pages are scaled to the given Width or Height. If Width and Height are greater zero then pages are scaled to that size independent of the original page size.
format (not recommended). It is usually best to set the width or height to zero so that the function can calculate the missing value to preserve the aspect ratio.

On a 32 bit system it is possible to render PDF pages in RGB with up to around 1200 DPI, depending on the page format and available memory. The resolution of gray images can be higher but the encoder must be able to handle such large images. The PNG and bitmap encoders accept images in almost arbitrary resolutions but all other encoders can fail when the resolution is larger than about 2000 DPI.

The function calls the progress events.
Returns true on success or false on failure.

Same as RenderPDFFile, but multithreaded.

Must be called inside a Xojo (Xojo) thread so time yields to main thread and you can keep the GUI running.
Requires DynaPDF Pro license.

### 3.34.626  RenderPDFFileMT(OutFile as folderitem, Resolution as UInt32, Flags as UInt32, PixFmt as UInt32, Filter as UInt32, Format as UInt32) as boolean

Plugin Version: 18.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function renders all PDF pages which are currently in memory and stores the result in a proprietary image format.
**Notes:**
Same as RenderPDFFile, but multithreaded.
Also check the dynapdf manual on the pdfRenderPDFFileA function (pdfRenderPDFFileW on Windows).

Must be called inside a Xojo (Xojo) thread so time yields to main thread and you can keep the GUI running.
Requires DynaPDF Pro license.

### 3.34.627  ReOpenImportFile(Handle as Integer) as boolean

Plugin Version: 13.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function re-opens a PDF file so that further contents can be imported from it.
**Notes:**
The parameter Handle must be a valid file handle that OpenImportFile() or OpenImportBuffer() returned.
When the file is no longer needed close the parser instance with CloseImportFileEx().
If the function succeeds the return value is true. If the function fails the return value is false.
See also ReOpenImportFile function in DynaPDF manual.
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3.34.628 ReplaceFont(PDFFontRef as Integer, Name as string, Style as integer = 0, NameIsFamilyName as boolean = true) as integer

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces a PDF font with another one.

**Notes:**

The function can be called in the OnFontNotFound event of the function CheckConformance(). The return value of the event should be the return value of this function. The parameter PDFFontRef is a parameter of the event. The font reference is required and must be passed unchanged to the function.

On Linux or Unix system fonts must be loaded with AddFontSearchPath() before this function can be called. This should be done before the first PDF file is imported.

If the function succeeds the return value is zero. If the function fails the return value is a negative error code.

See also ReplaceFont function in DynaPDF manual.

3.34.629 ReplaceFontAnsi(PDFFontRef as Integer, Name as string, Style as integer = 0, NameIsFamilyName as boolean = true) as integer

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces a PDF font with another one.

**Notes:**

The function can be called in the OnFontNotFound event of the function CheckConformance(). The return value of the event should be the return value of this function. The parameter PDFFontRef is a parameter of the event. The font reference is required and must be passed unchanged to the function.

On Linux or Unix system fonts must be loaded with AddFontSearchPath() before this function can be called. This should be done before the first PDF file is imported.

If the function succeeds the return value is zero. If the function fails the return value is a negative error code.

See also ReplaceFont function in DynaPDF manual.

3.34.630 ReplaceFontEx(PDFFontRef as Integer, FontFile as FolderItem, Embed as boolean = true) as integer

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces a PDF font with another one.

**Notes:**
The font file can be loaded directly. It is not required to install the font on the system. The function can be called in the OnFontNotFound event of the function CheckConformance(). The return value of the event should be the return value of this function. The parameter PDFFontRef is a parameter of the event. The font reference is required and must be passed unchanged to the function.

If the function succeeds the return value is zero. If the function fails the return value is a negative error code.

See also ReplaceFontEx function in DynaPDF manual.

See also:

- 3.34.631 ReplaceFontEx(PDFFontRef as Integer, FontFilePath as string, Embed as boolean = true) as integer

3.34.631 ReplaceFontEx(PDFFontRef as Integer, FontFilePath as string, Embed as boolean = true) as integer

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces a PDF font with another one.

**Notes:**

The font file can be loaded directly. It is not required to install the font on the system. The function can be called in the OnFontNotFound event of the function CheckConformance(). The return value of the event should be the return value of this function. The parameter PDFFontRef is a parameter of the event. The font reference is required and must be passed unchanged to the function.

If the function succeeds the return value is zero. If the function fails the return value is a negative error code.

See also ReplaceFontEx function in DynaPDF manual.

See also:

- 3.34.630 ReplaceFontEx(PDFFontRef as Integer, FontFile as FolderItem, Embed as boolean = true) as integer

3.34.632 ReplaceFontExAnsi(PDFFontRef as Integer, FontFilePath as string, Embed as boolean = true) as integer

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces a PDF font with another one.

**Notes:**

The font file can be loaded directly. It is not required to install the font on the system. The function can be called in the OnFontNotFound event of the function CheckConformance(). The return value of the event should be the return value of this function. The parameter PDFFontRef is a parameter of the event. The font reference is required and must be passed unchanged to the function.
If the function succeeds the return value is zero. If the function fails the return value is a negative error code.

See also ReplaceFontEx function in DynaPDF manual.

See also:

- 3.34.630 ReplaceFontEx(PDFFontRef as Integer, FontFile as FolderItem, Embed as boolean = true) as integer
- 3.34.631 ReplaceFontEx(PDFFontRef as Integer, FontFilePath as string, Embed as boolean = true) as integer

### 3.34.633 ReplaceICCProfile(ColorSpace as Integer, ICCFile as folderitem) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function is used to dynamically create ICC based color spaces within the callback function OnReplaceICCProfile of CheckConformance().

See also ReplaceICCProfile function in DynaPDF manual.

### 3.34.634 ReplaceICCProfileEx(ColorSpace as integer, ICCFileData as MemoryBlock) as integer

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces an ICC profile exactly in the same way as ReplaceICCProfile() but accepts a file buffer as input.

**Notes:** If the function succeeds the return value is zero. If the function fails the return value is a negative error code.

See also ReplaceICCProfileEx function in DynaPDF manual.

See also:

- 3.34.635 ReplaceICCProfileEx(ColorSpace as integer, ICCFileData as String) as integer

### 3.34.635 ReplaceICCProfileEx(ColorSpace as integer, ICCFileData as String) as integer

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces an ICC profile exactly in the same way as ReplaceICCProfile() but accepts a file buffer as input.

**Notes:** If the function succeeds the return value is zero. If the function fails the return value is a negative error code.

See also ReplaceICCProfileEx function in DynaPDF manual.

See also:

- 3.34.634 ReplaceICCProfileEx(ColorSpace as integer, ICCFileData as MemoryBlock) as integer
3.34.636 ReplaceImage(ImageToReplace as DynaPDFImageMBS, ImageFile as FolderItem, Index as Integer = 1, ColorSpace as Integer = 0, CSHandle as Integer = -1, Flags as Integer = 0) as Boolean

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces an image with another image.

**Notes:**

The parameter ImageToReplace must be a valid pointer of an image object which is retrieved by functions like GetImageObj() or ParseContent(). The resolution, aspect ratio, color space and so on can be freely chosen. However, note that this function does not change the output position or size. If the aspect ratio of the new image is different, then it will be stretched or shrunked to fit into the output rectangle.

The parameter ColorSpace specifies the destination color space into which the image should be converted or saved, if the image is already defined in that color space. CSHandle must be the handle of that color space if a non-device space is used. The will be ignored for devices spaces.

The function works in the very same way as InsertImageEx() with the following differences:

- The color of an image mask cannot be set or changed because this would require changes on the content stream in which the image is used. An image mask will be created if the image color depth is 1 bit and if color key masking is enabled (see SetUseTransparency()). SetUseTransparency() should normally be set to false before calling this function.
- The image will never be downscaled, independent of the current resolution, because the size of the output rectangle is not known.

If the image that should be replaced is a soft mask of another base image, then make sure that the destination color space is set to kesDeviceGray, kesCalGray, or to a one channel ICC based color space because a soft mask must not contain more than one color channel.

The flags kgfUseImageColorSpace, kgfIgnoreICCProfiles, kgfRealPassThrough, and kfNoBitmapAlpha are all supported. See SetGStateFlags() for further information.

If the function succeeds the return value is true. If the function fails the return value is false. See also ReplaceImage function in DynaPDF manual.

3.34.637 ReplaceImageEx(ImageToReplace as DynaPDFImageMBS, ImageData as MemoryBlock, Index as Integer = 1, ColorSpace as Integer = 0, CSHandle as Integer = -1, Flags as Integer = 0) as Boolean

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Replaces an image with a new image exactly like ReplaceImage() but accepts a file buffer as input.

**Notes:**

See ReplaceImage() for further information.
If the function succeeds the return value is 1. If the function fails the return value is 0.
See also ReplaceImageEx function in DynaPDF manual.
See also:

- ReplaceImageEx(ImageToReplace as DynaPDFImageMBS, ImageData as String, Index as Integer = 1, ColorSpace as Integer = 0, CCHandle as Integer = -1, Flags as Integer = 0) as Boolean

ReplaceImageEx(ImageToReplace as DynaPDFImageMBS, ImageData as String, Index as Integer = 1, ColorSpace as Integer = 0, CCHandle as Integer = -1, Flags as Integer = 0) as Boolean

Notes:
See ReplaceImage() for further information.
If the function succeeds the return value is 1. If the function fails the return value is 0.
See also ReplaceImageEx function in DynaPDF manual.
See also:

- ReplaceImageEx(ImageToReplace as DynaPDFImageMBS, ImageData as MemoryBlock, Index as Integer = 1, ColorSpace as Integer = 0, CCHandle as Integer = -1, Flags as Integer = 0) as Boolean

ReplacePageText(text as string, stack as DynaPDFStackMBS) as boolean

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function deletes or replaces a text string of a content stream that was found by the function GetPageText() beforehand.
Notes:
Be aware that ReplacePageText can’t always replace text as encoding must match and fonts may not have the characters for the new text. For that better use ReplacePageTextEx.
If you have problems with asian characters, please make sure you use SetCMapDir and load the CMAPs.
Requires DynaPDF Pro license.
See also ReplacePageText function in DynaPDF manual.
3.34.640 ReplacePageTextEx(text as string, stack as DynaPDFStackMBS) as boolean

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function deletes or replaces a text string of a content stream that was found by the function GetPageText() beforehand. **Notes:**
The text parameter is converted to unicode.

If you have problems with asian characters, please make sure you use SetCMapDir and load the CMAPs. Requires DynaPDF Pro license.
See also `ReplacePageTextEx` function in DynaPDF manual.

3.34.641 ReplacePageTextExAnsi(text as string, stack as DynaPDFStackMBS) as boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function deletes or replaces a text string of a content stream that was found by the function GetPageText() beforehand. **Notes:**
The text parameter is converted to ANSI.
Requires DynaPDF Pro license.
See also `ReplacePageTextEx` function in DynaPDF manual.

3.34.642 ResetEncryptionSettings as Boolean

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Resets the encryption settings which were imported from an external PDF file so that the PDF file in memory can be saved unencrypted. **Notes:** If the function succeeds the return value is true. If the function fails the return value is false.
See also `ResetEncryptionSettings` function in DynaPDF manual.

3.34.643 ResetLineDashPattern as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function resets a previously defined line dash pattern to its default value (straight line).
See also `ResetLineDashPattern` function in DynaPDF manual.
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### 3.34.644 RestoreGraphicState as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function restores a previously saved graphics state. See also *RestoreGraphicState* function in DynaPDF manual.

### 3.34.645 RGB(R as Integer, G as Integer, B as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Builds a RGB color value based on the given component values. **Example:**

```pascal
Dim rgb as Integer = DynaPDFMBS.RGB(1,2,3)
MsgBox hex(rgb)
```

### 3.34.646 RofRGB(RGB as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns R of a RGB color value. **Example:**

```pascal
Dim rgb as Integer = DynaPDFMBS.RGB(1,2,3)
MsgBox str(DynaPDFMBS.RofRGB(rgb))  // shows 1
```

### 3.34.647 RotateCoords(alpha as Double, OriginX as Double, OriginY as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function rotates the coordinate system at the point OriginX, OriginY by applying a transformation matrix. **Notes:** Please do not try to scale/skew/translate back later. use SaveGraphicState and RestoreGraphicState. See also *RotateCoords* function in DynaPDF manual.

### 3.34.648 RotateTemplate(OldTemplate as Integer, Rotation as Integer, RotateCoords as boolean = true) as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Rotates a template. **Notes:**
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Returns a new template handle.
This is a convenience function which creates a new template and draws the existing template there with rotation.
Returns negative number for errors. The plugin uses -1 for plugin errors like wrong rotation angle.

RotateCoords: Whether to rotate coordinate system.
This is now done by DynaPDF automatically, so for current version of the library, this must be false. But older versions need the true.

3.34.649 RoundRect(PosX as Double, PosY as Double, Width as Double, Height as Double, Radius as Double, FillMode as Integer) as Boolean

Example:

dim pdf as new DynaPDFMBS
dim f as FolderItem = SpecialFolder.Desktop.Child("Create PDF with Round Rectangles.pdf")

dim PosX as Double = 100.0
dim PosY as Double = 100.0

dim Width as Double = 100.0
dim Height as Double = 100.0

dim Radius as Double = 20.0

dim FillMode as Integer = pdf.kfmFill

call pdf.RoundRect(PosX, PosY, Width, Height, Radius, FillMode)

call pdf.RoundRectEx(PosX, PosY, Width, Height, RadiusX, RadiusY, FillMode)

call pdf.EndPage
call pdf.CloseFile
f.Launch
3.34.650 **RoundRectEx**(PosX as Double, PosY as Double, Width as Double, Height as Double, rWidth as Double, rHeight as Double, FillMode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function draws a rectangle with elliptical corners.

**Example:**

```vba
' dim pdf as new DynaPDFMBS
' dim f as FolderItem = SpecialFolder.Desktop.Child("Create PDF with Round Rectangles.pdf")

pdf.SetLicenseKey "Starter" // For this example you can use a Starter, Lite, Pro or Enterprise License

call pdf.CreateNewPDF f
call pdf.Append

dim PosX as Double = 100.0
dim PosY as Double = 100.0
dim Width as Double = 100.0
dim Height as Double = 100.0
dim Radius as Double = 20.0
dim FillMode as Integer = pdf.kfmFill

call pdf.RoundRect(PosX, PosY, Width, Height, Radius, FillMode)

PosX = 300.0
dim RadiusX as Double = 30.0
dim RadiusY as Double = 30.0

call pdf.RoundRectEx(PosX, PosY, Width, Height, RadiusX, RadiusY, FillMode)

call pdf.EndPage
call pdf.CloseFile

f.Launch
```

See also **RoundRectEx** function in DynaPDF manual.
3.34.651 SaveGraphicState as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function saves the current graphics state. See also SaveGraphicState function in DynaPDF manual.

3.34.652 ScaleCoords(sx as Double, sy as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function scales the coordinate system by applying a transformation matrix. **Notes:** Please do not try to scale/skew/translate back later. use SaveGraphicState and RestoreGraphicState. See also ScaleCoords function in DynaPDF manual.

3.34.653 SelfTest as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function checks the size of all required data types and checks whether the endian configuration of the library is correct. See also SelfTest function in DynaPDF manual.

3.34.654 Set3DAnnotProps(Annot as Integer, ActType as Integer, DeActType as Integer, InstType as Integer, DeInstType as Integer, DisplayToolbar as boolean, DisplayModelTree as boolean) as boolean

Plugin Version: 9.8, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the properties of a 3D Annotation. See also Set3DAnnotProps function in DynaPDF manual.

3.34.655 Set3DAnnotScriptAnsi(Annot as Integer, Value as string) as boolean

Plugin Version: 9.8, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the 3D Annotation Script. See also Set3DAnnotScript function in DynaPDF manual.
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### 3.34.656 SetAllocBy(Value as Integer) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the size of the memory blocks in kilo bytes, which will be allocated if memory must be allocated for page content streams.

See also SetAllocBy function in DynaPDF manual.

### 3.34.657 SetAnnotBorderEffect(Handle as Integer, BorderEffect as Integer) as Boolean

Plugin Version: 15.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the border effect for an annotation.

**Notes:**

Returns true on success.
Handle is in range of 0 to number of annotations - 1.
See also SetAnnotBorderEffect function in DynaPDF manual.

### 3.34.658 SetAnnotBorderStyle(Handle as Integer, BorderStyle as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the annotation border style.

See also SetAnnotBorderStyle function in DynaPDF manual.

### 3.34.659 SetAnnotBorderWidth(Handle as Integer, LineWidth as Double) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the annotation border width.

See also SetAnnotBorderWidth function in DynaPDF manual.

### 3.34.660 SetAnnotColor(Handle as Integer, ColorType as Integer, PDFColorSpace as Integer, ColorValue as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the annotation color.

See also SetAnnotColor function in DynaPDF manual.
3.34.661 SetAnnotFlags(Flags as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the default flags used for newly created annotations. See also SetAnnotFlags function in DynaPDF manual.

3.34.662 SetAnnotFlagsEx(Handle as Integer, Flags as Integer) as boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the annotation flags. See also SetAnnotFlagsEx function in DynaPDF manual.

3.34.663 SetAnnotHighlightMode(Handle as Integer, HighlightMode as Integer) as boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the annotation highlight mode. See also SetAnnotHighlightMode function in DynaPDF manual.

3.34.664 SetAnnotIcon(Handle as Integer, AnnotIcon as Integer) as boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the annotation icon. See also SetAnnotIcon function in DynaPDF manual.

3.34.665 SetAnnotLineDashPattern(Handle as UInt32, dash as memoryblock, NumValues as integer) as Boolean

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets or deletes the line dash pattern of an annotation. 

**Notes:**

The following annotation types support line dash patterns:

- atCircle
- atInk
- atLine
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- atPolygon
- atPolyLine
- atSquare

Memory block must contain floating point values (Single).
Returns true on success.

If array is nil, the pattern is removed.
See also `SetAnnotLineDashPattern` function in DynaPDF manual.
See also:

- 3.34.666 `SetAnnotLineDashPattern(Handle as UInt32, dash() as single) as Boolean`

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### 3.34.666 `SetAnnotLineDashPattern(Handle as UInt32, dash() as single) as Boolean`

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets or deletes the line dash pattern of an annotation.

**Notes:**

The following annotation types support line dash patterns:

- atCircle
- atInk
- atLine
- atPolygon
- atPolyLine
- atSquare

Returns true on success.

If array is nil, the pattern is removed.
See also `SetAnnotLineDashPattern` function in DynaPDF manual.
See also:

- 3.34.665 `SetAnnotLineDashPattern(Handle as UInt32, dash as memoryblock, NumValues as integer) as Boolean`
3.34.667 SetAnnotLineEndStyle(Handle as UInt32, StartLineStyle as Integer, EndLineStyle as Integer) as boolean

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the line end styles of a Line or PolyLine Annotation. **Notes:** If the function succeeds the return value is true. If the function fails the return value is false. See also SetAnnotLineEndStyle function in DynaPDF manual.

3.34.668 SetAnnotMigrationState(Handle as Integer, State as Integer, Name as string) as Integer

Plugin Version: 15.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a migration state to a markup annotation. **Notes:**

All annotation types with exception of 3D, Link, Movie, Screen, PrinterMark, TrapNet, and Watermark are markup annotations. Migration states are stored in text annotations as reply to the base annotation. Further states are stored as reply to the last reply; the result is a single linked list. Because the base annotation contains no reference to the last reply or migration state the function must search for it. To speed up processing the function returns the handle of the text annotation so that the next state can directly be added to this annotation.

The migration state is defined since PDF 1.5. The function adjusts the PDF version automatically if it is lower than PDF 1.5.

If the function succeeds the return value is the handle of the text annotation, a value greater or equal zero. If the function fails the return value is a negative error code.

State can be kasNone, kasAccepted, kasRejected, kasCancelled, kasCompleted. See also SetAnnotMigrationState function in DynaPDF manual.

3.34.669 SetAnnotMigrationStateAnsi(Handle as Integer, State as Integer, Name as string) as Integer

Plugin Version: 15.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a migration state to a markup annotation. **Notes:**

All annotation types with exception of 3D, Link, Movie, Screen, PrinterMark, TrapNet, and Watermark are markup annotations. Migration states are stored in text annotations as reply to the base annotation. Further states are stored as reply to the last reply; the result is a single linked list. Because the base annotation contains no reference to
the last reply or migration state the function must search for it. To speed up preprocessing the function returns the handle of the text annotation so that the next state can directly be added to this annotation.

The migration state is defined since PDF 1.5. The function adjusts the PDF version automatically if it is lower than PDF 1.5.

If the function succeeds the return value is the handle of the text annotation, a value greater or equal zero. If the function fails the return value is a negative error code.

State can be kasNone, kasAccepted, kasRejected, kasCancelled, kasCompleted.
See also SetAnnotMigrationState function in DynaPDF manual.

### 3.34.670 SetAnnotOpacity(Handle as Integer, opacity as Double) as Boolean

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the opacity of a markup annotation.

**Notes:**
The function GetAnnotEx() or GetPageAnnotEx() can be used to determine whether an annotation is a markup annotation.

Returns true on success or false on failure.
See also SetAnnotOpacity function in DynaPDF manual.

### 3.34.671 SetAnnotOpenState(Handle as Integer, Open as Boolean) as boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the annotation open state.
See also SetAnnotOpenState function in DynaPDF manual.

### 3.34.672 SetAnnotOrFieldDate(CSHandle as UInt32, IsField as Boolean, Type as Integer, DateTime as UInt32) as boolean

Plugin Version: 13.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the creation or modification date of an annotation or form field.

**Notes:**
If the parameter IsField is set to true, a valid field handle must be passed to the parameter Handle. An annotation handle is expected otherwise.
Annotations and form fields support a modification date but a creation date is supported by markup anno-
The following annotation types are markup annotations:

- Care
- Circle
- FileAttach
- FreeText
- Highlight, Squiggly, Strikeout, Underline
- Ink
- Line
- Polygon
- Projection
- Redact
- Sound
- Square
- Stamp
- Text

The function GetAnnotEx() or GetPageAnnotEx() can also be used to determine whether an annotation is a markup annotation.

If the function succeeds the return value is 1. If the function fails the return value is 0. See also SetAnnotOrFieldDate function in DynaPDF manual.

### 3.34.673 SetAnnotQuadPoints(Handle as UInt32, points() as DynaPDFPointMBS) as boolean

**Plugin Version:** 15.3, **Console & Web:** Yes, **Mac:** Yes, **Win:** Yes, **Linux:** Yes. **Function:** Sets or changes the quad points definition of a Highlight, Link, Redakt, Squiggly, Strikeout, or Underline annotation.

**Notes:**

The function must be called within an open page.

Independent of the used coordinate system (bottom up or top down), the points must be defined in the following order:

\[
\begin{align*}
  x_1, y_1 & \quad x_3, y_3 \\
  x_2, y_2 & \quad x_4, y_4
\end{align*}
\]
The coordinates of the vertices are interpreted in current user space. Any transformation that was applied on the coordinate system will be taken into account. The number of points must be 4 or a multiple of 4.

Returns true on success.
See also SetAnnotQuadPoints function in DynaPDF manual.

### 3.34.674 SetAnnotString(Handle as Integer, StringType as Integer, Value as string) as boolean

See also SetAnnotString function in DynaPDF manual.

### 3.34.675 SetAnnotStringAnsi(Handle as Integer, StringType as Integer, Value as string) as boolean

See also SetAnnotString function in DynaPDF manual.

### 3.34.676 SetAnnotSubject(Handle as Integer, Value as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the optional subject string of an annotation.
**Notes:** The value parameter is converted to unicode.
See also SetAnnotSubject function in DynaPDF manual.

### 3.34.677 SetAnnotSubjectAnsi(Handle as Integer, Value as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the optional subject string of an annotation.
**Notes:** The value parameter is converted to ANSI.
See also SetAnnotSubject function in DynaPDF manual.
3.34.678 SetBBox(Boundary as Integer, LeftX as Double, LeftY as Double, RightX as Double, RightY as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets a specific bounding box of the current open PDF page. See also SetBBox function in DynaPDF manual.

3.34.679 SetBidiMode(BidiMode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the bidirectional mode. See also SetBidiMode function in DynaPDF manual.

3.34.680 SetBlack(FillColor as Boolean, StrokeColor as Boolean) as Boolean

Plugin Version: 19.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets black color. **Notes:** This function is a bit optimized to check the current color space. Depending on whether it’s RGB, Gray, CMYK or Lab, it will set different color values. And if other color space is active, it switches to Gray colorspace to set black.

3.34.681 SetBookmarkDest(ABmk as Integer, DestType as Integer, a as Double, b as Double, c as Double, d as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the destination of a bookmark. See also SetBookmarkDest function in DynaPDF manual.

3.34.682 SetBookmarkStyle(ABmk as Integer, Style as Integer, RGBColor as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the bookmark style. See also SetBookmarkStyle function in DynaPDF manual.
3.34.683  SetBorderStyle(Style as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the global border style which is used for newly created form fields. See also SetBorderStyle function in DynaPDF manual.

3.34.684  SetCharacterSpacing(value as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the current character spacing. The function requires an open page, template or pattern. See also SetCharacterSpacing function in DynaPDF manual.

3.34.685  SetCheckBoxChar(CheckBoxChar as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the character which should be used for newly created check boxes. See also SetCheckBoxChar function in DynaPDF manual.

3.34.686  SetCheckBoxDefState(Field as Integer, Checked as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function changes the default state of a check box; it can differ from the current visible state of the check box. See also SetCheckBoxDefState function in DynaPDF manual.

3.34.687  SetCheckBoxState(Field as Integer, Checked as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the state of a check box. The parameter Field must be a valid check box handle. See also SetCheckBoxState function in DynaPDF manual.

3.34.688  SetCIDFont(CMapHandle as Integer, Name as string, Style as Integer, Size as Double, Embed as boolean) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets a CID Font. See also SetCIDFont function in DynaPDF manual.
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3.34.689 SetCMapDir(path as folderitem, flags as Integer) as Integer

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the character map directory.

**Example:**

```
dim pdf as DynaPDFMBS // your dynapdf instance
```

**Notes:**

Takes an integer instead of a boolean starting with plugin version 11.2pr6.
See klcmDefault, klcmDelayed and klcmRecursive constants.
Requires DynaPDF Pro license.
See also SetCMapDir function in DynaPDF manual.
See also:

- 3.34.690 SetCMapDir(path as string, flags as Integer) as Integer

3.34.690 SetCMapDir(path as string, flags as Integer) as Integer

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the character map directory.

**Example:**

```
dim pdf as DynaPDFMBS // your dynapdf instance
```

**Notes:**

Takes an integer instead of a boolean starting with plugin version 11.2pr6.
See klcmDefault, klcmDelayed and klcmRecursive constants.
Requires DynaPDF Pro license.
See also SetCMapDir function in DynaPDF manual.
See also:

- 3.34.689 SetCMapDir(path as folderitem, flags as Integer) as Integer

3.34.691 SetColDefFile(EmbFile as Integer) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the initial document of a portable collection that should be opened in the viewer application. See also CreateCollection().
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See also SetColDefFile function in DynaPDF manual.

3.34.692 SetColorMask(ImageHandle as Integer, Mask as Ptr, Count as UInt32) as boolean

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The functions sets or overrides the color mask of an image.  
**Notes:** See also SetColorMask function in dynapdf_help.pdf manual.  
See also SetColorMask function in DynaPDF manual.  
See also:
- 3.34.693 SetColorMask(ImageHandle as Integer, Mask() as Integer) as boolean

3.34.693 SetColorMask(ImageHandle as Integer, Mask() as Integer) as boolean

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The functions sets or overrides the color mask of an image.  
**Notes:**  
Same as other SetColorMask function, but values are taken from array.  
See also SetColorMask function in dynapdf_help.pdf manual.  
See also SetColorMask function in DynaPDF manual.  
See also:
- 3.34.692 SetColorMask(ImageHandle as Integer, Mask as Ptr, Count as UInt32) as boolean

3.34.694 SetColors(ColorValue as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the fill and stroke color.  
See also SetColors function in DynaPDF manual.

3.34.695 SetColorSpace(ColorSpace as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the color space.  
**Example:**
```vbnet
dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean

// get the colorspace of the image file```

const DP_csDeviceRGB=0
const DP_csDeviceCMYK=1
const DP_csDeviceGray=2

dim iColorSpace as Integer

iColorSpace = DP_csDeviceRGB

// define color space
bBool = pdf.SetColorSpace(iColorSpace)

See also SetColorSpace function in DynaPDF manual.

### 3.34.696 SetColSortField(ColField as Integer, AscendingOrder as boolean) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the collection field that should be used to sort the list of embedded files. See also SetColSortField function in DynaPDF manual.

### 3.34.697 SetCompressionFilter(Filter as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the compression filter which is used to compress images.

**Example:**

```vba
dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean

// set compression filter
bBool = pdf.SetCompressionFilter(pdf.kcfJPEG)
```

**Notes:** Use kcfCCITT3, kcfCCITT4, kcfFlate, kcfFlateBW, kcfJP2K, kcfJPEG or kcfLZW constants. See also SetCompressionFilter function in DynaPDF manual.
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### 3.34.698 SetCompressionLevel(CompressLevel as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the current compression level. See also SetCompressionLevel function in DynaPDF manual.

### 3.34.699 SetContent(buffer as memoryblock) as Boolean

Plugin Version: 13.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function replaces the content stream of the currently open page or template with a new one. See also SetContent function in DynaPDF manual. See also:

- 3.34.700 SetContent(buffer as string) as Boolean

### 3.34.700 SetContent(buffer as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function replaces the content stream of the currently open page or template with a new one. See also SetContent function in DynaPDF manual. See also:

- 3.34.699 SetContent(buffer as memoryblock) as Boolean

### 3.34.701 SetDateTimeFormat(TxtField as Integer, Fmt as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function restricts the allowed value of a text field to a date time format and applies this format if the value was valid. See also SetDateTimeFormat function in DynaPDF manual.

### 3.34.702 SetDefBitsPerPixel(value as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the default color depth in bits per pixel, which determines whether images should be downsampled. See also SetDefBitsPerPixel function in DynaPDF manual.

### 3.34.703 SetDocInfo(DInfo as Integer, Text as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function set or changes a document info entry.
Example:

dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean
dim source as FolderItem // source pdf file?

const diAuthor=0
cont diCreator=1
cont diKeywords=2
cont diProducer=3
cont diSubject=4
cont diTitle=5

// Define some pdf properties:
bBool=pdf.SetDocInfo(diAuthor, SystemInformationMBS.Username)
bBool=pdf.SetDocInfo(diCreator, "SysProgName" + " - " + "MetSysProgVer")
bBool=pdf.SetDocInfo(diKeywords, "")
bBool=pdf.SetDocInfo(diProducer, "SysProgName" + " - " + "MetSysProgVer")
bBool=pdf.SetDocInfo(diSubject, "")
bBool=pdf.SetDocInfo(diTitle, source.name)

Notes: The text parameter is converted to unicode.
See also SetDocInfo function in DynaPDF manual.

3.34.704 SetDocInfoAnsi(DInfo as Integer, Text as string) as Boolean


Example:

dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean
dim source as FolderItem // source pdf file?

const diAuthor=0
cont diCreator=1
cont diKeywords=2
cont diProducer=3
cont diSubject=4
cont diTitle=5

// Define some pdf properties:
bBool=pdf.SetDocInfoAnsi(diAuthor, SystemInformationMBS.Username)
bBool=pdf.SetDocInfoAnsi(diCreator, "SysProgName" + " - " + "MetSysProgVer")
bBool=pdf.SetDocInfoAnsi(diKeywords, "")
bBool=pdf.SetDocInfoAnsi(diProducer, "SysProgName" + " - " + "MetSysProgVer")
bBool=pdf.SetDocInfoAnsi(diSubject, "")
bBool=pdf.SetDocInfoAnsi(diTitle, source.name)

**Notes:** The text parameter is converted to ANSI. See also `SetDocInfo` function in DynaPDF manual.

### 3.34.705 `SetDocInfoEx(DInfo as Integer, Key as string, Text as string) as Boolean`

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function set or changes a document info entry. **Notes:** The Text parameter is converted to unicode. See also `SetDocInfoEx` function in DynaPDF manual.

### 3.34.706 `SetDocInfoExAnsi(DInfo as Integer, Key as string, Text as string) as Boolean`

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function set or changes a document info entry. **Notes:** The Text parameter is converted to ANSI. See also `SetDocInfoEx` function in DynaPDF manual.

### 3.34.707 `SetDrawDirection(Direction as Integer) as Boolean`

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the draw direction of closed vector graphics such as rectangles, ellipses, triangles and so on. See also `SetDrawDirection` function in DynaPDF manual.

### 3.34.708 `SetEMFFrameDPI(DPIX as Integer, DPIY as Integer) as Boolean`

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to adjust DPI value which is used to calculate the picture size of an EMF file. See also `SetEMFFrameDPI` function in DynaPDF manual.
3.34.709 SetEMFPatternDistance(value as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the default distance between lines of standard patterns during EMF conversion. See also SetEMFPatternDistance function in DynaPDF manual.

3.34.710 SetErrorMode(ErrMode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The error mode specifies which error types should be treated as fatal error. See also SetErrorMode function in DynaPDF manual.

3.34.711 SetExtColorSpace(Handle as Integer) as Integer

Plugin Version: 8.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function activates an extended color space in the graphics state. **Notes:** Requires DynaPDF Pro license. See also SetExtColorSpace function in DynaPDF manual.

3.34.712 SetExtFillColorSpace(Handle as UInt32) as boolean

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Set the colorspace for filling. **Notes:** Pass Colorspace handle like for SetExtColorSpace. Requires DynaPDF Pro license. See also SetExtFillColorSpace function in DynaPDF manual.

3.34.713 SetExtGState(Handle as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function applies an extended graphics state. See also SetExtGState function in DynaPDF manual.
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3.34.714 SetExtStrokeColorSpace(Handle as UInt32) as boolean

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Set the colorspace for filling.

**Notes:**
Pass Colorspace handle like for SetExtColorSpace.
Requires DynaPDF Pro license.
See also SetExtStrokeColorSpace function in DynaPDF manual.

3.34.715 SetFieldBackColor(ColorValue as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the background color used for newly created interactive form fields and annotations.
See also SetFieldBackColor function in DynaPDF manual.

3.34.716 SetFieldBBox(Handle as Integer, rect as DynaPDFRectMBS) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the bounding box of a field.
See also SetFieldBBox function in DynaPDF manual.

3.34.717 SetFieldBorderColor(ColorValue as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the border color used for newly created interactive form fields and annotations.
See also SetFieldBorderColor function in DynaPDF manual.

3.34.718 SetFieldBorderStyle(Field as Integer, Style as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the border style of a specific Interactive Form field.
See also SetFieldBorderStyle function in DynaPDF manual.

3.34.719 SetFieldBorderWidth(Field as Integer, LineWidth as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to change the border width of a field.
See also SetFieldBorderWidth function in DynaPDF manual.

3.34.720 SetFieldColor(Field as Integer, ColorType as Integer, ColorSpace as Integer, ColorValue as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets a specific color of an interactive form field.
See also SetFieldColor function in DynaPDF manual.

3.34.721 SetFieldExpValue(Field as Integer, ValIndex as Integer, Value as string, ExpValue as string, Selected as boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to change the choice values of a combo box, list box, or radio button.
See also SetFieldExpValue function in DynaPDF manual.

3.34.722 SetFieldExpValueAnsi(Field as Integer, ValIndex as Integer, Value as string, ExpValue as string, Selected as boolean) as Boolean

Plugin Version: 16.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to change the choice values of a combo box, list box, or radio button.
See also SetFieldExpValue function in DynaPDF manual.

3.34.723 SetFieldExpValueEx(Field as Integer, ValIndex as Integer, Selected as boolean, DefSelected as boolean) as Boolean

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function marks a choice value of a combo or list box as selected or unselected.
**Notes:**
It can also be used to change the state of check boxes or the children of a radio button. The parameter ValIndex will be ignored if the field is a normal check box (no child of a radio button or field group).

To enumerate the choice values of a combo box, list box or radio button use the function GetFieldExpValueEx().

**Return value:**
If the function succeeds the return value is true. If the function fails the return value is false.
3.34.4 SetFieldExpValueEx function in DynaPDF manual.

3.34.724 SetFieldFlags(Field as Integer, Flags as Integer, Reset as boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the flags of a specific interactive form field. See also SetFieldFlags function in DynaPDF manual.

3.34.725 SetFieldFont(Field as Integer, Name as string, Style as Integer, Size as Double, Embed as Boolean, CodePage as Integer) as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the font of a form field. **Notes:** See documentation of SetFieldFont function in dynapdf_help manual file for details. See also SetFieldFont function in DynaPDF manual.

3.34.726 SetFieldFontAnsi(Field as Integer, Name as string, Style as Integer, Size as Double, Embed as Boolean, CodePage as Integer) as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the font of a form field. **Notes:** See documentation of SetFieldFont function in dynapdf_help manual file for details. See also SetFieldFont function in DynaPDF manual.

3.34.727 SetFieldFontEx(Field as UInt32, Handle as UInt32, FontSize as Double) as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or replaces the font of a field. **Notes:** The function requires a font handle that was returned by SetFieldFont. Returns true on success and false on failure. See also SetFieldFontEx function in DynaPDF manual.
3.34.728 SetFieldFontSize(aField as Integer, FontSize as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the font size of a specific field. See also SetFieldFontSize function in DynaPDF manual.

3.34.729 SetFieldHighlightMode(Field as Integer, HighlightMode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the highlight mode of a specific field. See also SetFieldHighlightMode function in DynaPDF manual.

3.34.730 SetFieldIndex(Field as Integer, Index as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function can be used to set the tab order of interactive form fields. See also SetFieldIndex function in DynaPDF manual.

3.34.731 SetFieldMapName(Field as Integer, Name as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the mapping name of a field. **Notes:** The parameter name is converted to unicode. See also SetFieldMapName function in DynaPDF manual.

3.34.732 SetFieldMapNameAnsi(Field as Integer, Name as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the mapping name of a field. **Notes:** The parameter name is converted to ANSI. See also SetFieldMapName function in DynaPDF manual.

3.34.733 SetFieldName(Field as Integer, NewName as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the name of an interactive form field.
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See also `SetFieldName` function in DynaPDF manual.

### 3.34.734 SetFieldNameAnsi(\( \text{Field as Integer, NewName as string} \)) as Boolean

Plugin Version: 16.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the name of an interactive form field.  
**Notes:** The text parameter is converted to ANSI.  
See also `SetFieldName` function in DynaPDF manual.

### 3.34.735 SetFieldOrientation(\( \text{Field as Integer, Value as Integer} \)) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the orientation of a field.  
See also `SetFieldOrientation` function in DynaPDF manual.

### 3.34.736 SetFieldTextAlign(\( \text{Field as Integer, Align as Integer} \)) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function set or changes the text alignment of a text or button field.  
See also `SetFieldTextAlign` function in DynaPDF manual.

### 3.34.737 SetFieldTextColor(\( \text{ColorValue as Integer} \)) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the text color which is used for newly created interactive form fields.  
See also `SetFieldTextColor` function in DynaPDF manual.

### 3.34.738 SetFieldToolTip(\( \text{Field as Integer, Value as string} \)) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function set or changes the tool tip or description string of an interactive form field.  
**Notes:** The value parameter is converted to unicode.  
See also `SetFieldToolTip` function in DynaPDF manual.
3.34.739 SetFieldToolTip Ansi(Field as Integer, Value as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function set or changes the tool tip or description string of an interactive form field. **Notes:** The value parameter is converted to ANSI. See also SetFieldToolTip function in DynaPDF manual.

3.34.740 SetFillColor(ColorValue as Color) as Boolean

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the fill color. **Notes:**

- Raises an exception if current color space is CMYK or Gray and not RGB.
- The parameter Color must be defined in the current color space.
- See also SetFillColor function in DynaPDF manual.
- See also:
  - 3.34.741 SetFillColor(ColorValue as Integer) as Boolean
  - 3.34.742 SetFillColor(values() as Double) as boolean
  - 3.34.743 SetFillColor(values() as single) as boolean

3.34.741 SetFillColor(ColorValue as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the fill color. **Example:**

```vba
// new DynaPDF Object. Use your own subclass to catch errors in error event
dim pdf as new DynaPDFMBS

// For this example you can use a Starter, Lite, Pro or Enterprise License
pdf.SetLicenseKey "Starter"

// destination pdf file
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")

// create new pdf document
call pdf.CreateNewPDF f

// add new page
call pdf.append

// set red text color
```
3.34. **CLASS DYNAPDFMBS**

call pdf.SetFillColor pdf.RGB(255,0,0)

    // set font
call pdf.SetFont "Times", pdf.kfsItalic, 40.0, true, pdf.kcp1252

    // write some text
call pdf.WriteFText pdf.ktaCenter, "My first PDF!"

    // close page
call pdf.EndPage

    // close file
call pdf.CloseFile

    // open in users preferred PDF viewer application
f.Launch

**Notes:** The parameter Color must be defined in the current color space. See also SetFillColor function in DynaPDF manual.

See also:

- 3.34.740 SetFillColor(ColorValue as Color) as Boolean  
- 3.34.742 SetFillColor(values() as Double) as boolean  
- 3.34.743 SetFillColor(values() as single) as boolean

### 3.34.742 SetFillColor(values() as Double) as boolean

**Plugin Version:** 11.2, **Console & Web:** Yes, **Mac:** Yes, **Win:** Yes, **Linux:** Yes. **Function:** Sets fill color based on an array of floats.

**Example:**

    // new DynaPDF Object. Use your own subclass to catch errors in error event
dim pdf as new DynaPDFMBS

    // For this example you can use a Starter, Lite, Pro or Enterprise License
pdf.SetLicenseKey "Starter"

    // destination pdf file
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")

    // create new pdf document
call pdf.CreateNewPDF f

    // add new page
call pdf.append

// set blue text color with values in memoryblock
dim colorvalues() as Double = array(0.0, 1.0, 0.0)
call pdf.SetFillColor colorvalues

// set font
call pdf.SetFont "Times", pdf.kfsItalic, 40.0, true, pdf.kcp1252

// write some text
call pdf.WriteFText pdf.ktaCenter, "My first PDF!"

// close page
call pdf.EndPage

// close file
call pdf.CloseFile

// open in users preferred PDF viewer application
f.Launch

Notes: The number of components must match.
See also SetFillColor function in DynaPDF manual.
See also:

- 3.34.740 SetFillColor(ColorValue as Color) as Boolean 440
- 3.34.741 SetFillColor(ColorValue as Integer) as Boolean 440
- 3.34.743 SetFillColor(values() as single) as boolean 442

3.34.743 SetFillColor(values() as single) as boolean

on an array of floats.
Notes: The number of components must match.
See also SetFillColor function in DynaPDF manual.
See also:

- 3.34.740 SetFillColor(ColorValue as Color) as Boolean 440
- 3.34.741 SetFillColor(ColorValue as Integer) as Boolean 440
- 3.34.742 SetFillColor(values() as Double) as boolean 441
3.34. CLASS DYNAPDFMBS

3.34.744 SetFillColorEx(colorvalues as memoryblock, count as Integer) as Boolean

Plugin Version: 9.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the fill color using the values in parameters.

**Example:**

```vbscript
// new DynaPDF Object. Use your own subclass to catch errors in error event
dim pdf as new DynaPDFMBS

// For this example you can use a Starter, Lite, Pro or Enterprise License
df.SetLicenseKey "Starter"

// destination pdf file
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")

// create new pdf document
call pdf.CreateNewPDF f

// add new page
call pdf.append

// set blue text color with values in memoryblock
dim m as new MemoryBlock(3)
m.Byte(0) = 0
m.Byte(1) = 0
m.Byte(2) = 255
call pdf.SetFillColorEx m,3

// set font
call pdf.SetFont "Times", pdf.ttfItalic, 40.0, true, pdf.kcp1252

// write some text
call pdf.WriteFText pdf.ktaCenter, "My first PDF!"

// close page
call pdf.EndPage

// close file
call pdf.CloseFile

// open in users preferred PDF viewer application
f.Launch
```

**Notes:** Pass as many color values as needed for the current color space. 3 for RGB, 4 for CMYK. All values must be in the range of 0 to 255.

See also **SetFillColorEx** function in DynaPDF manual.

See also:
3.34.745 SetFillColorEx(ParamArray colorvalue as Integer) as Boolean

Plugin Version: 9.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the fill color using the values in parameters.

**Example:**

```vbnet
' new DynaPDF Object. Use your own subclass to catch errors in error event
dim pdf as new DynaPDFMBS

' For this example you can use a Starter, Lite, Pro or Enterprise License
pdf.SetLicenseKey "Starter"

' destination pdf file
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")

' create new pdf document
call pdf.CreateNewPDF f

' add new page
call pdf.append

' set red text color
call pdf.SetFillColorEx 255,0,0

' set font
call pdf.SetFont "Times", pdf.kfsItalic, 40.0, true, pdf.kcp1252

' write some text
call pdf.WriteFText pdf.ktaCenter, "My first PDF!"

' close page
call pdf.EndPage

' close file
call pdf.CloseFile

' open in users preferred PDF viewer application
f.Launch
```

**Notes:** Pass as many color values as needed for the current color space. 3 for RGB, 4 for CMYK. All values must be in the range of 0 to 255.

See also SetFillColorEx function in DynaPDF manual.
3.34.746 SetFillColorSpace(Colorsas Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the fill color space.
See also SetFillColorSpace function in DynaPDF manual.

3.34.747 SetFloatPrecision(NumTextDecDigits as UInt32, NumVectDecDigits as UInt32) as boolean

Plugin Version: 16.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the output precision of text and vector coordinates.

**Notes:**
The default precision for text and vector graphics is two decimal digits. This corresponds to 7200 DPI. The output precision of bezier curves is one higher as for vector graphics. The maximum output precision is 5 decimal digits.
Note that higher values increase the resulting file size.

NumTextDecDigits: Number decimal digits for text object.
NumVectDecDigits: Number of decimal digits for vector objects.

Returns boolean, true for success.
See also SetFloatPrecision function in DynaPDF manual.

3.34.748 SetFont(Name as string, Style as Integer = 0, Size as Double = 12, Embed as boolean = true, CP as Integer = & h27) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function loads a font that can be used for text output and interactive form fields.

**Notes:** The name parameter is converted to unicode.

If font is not found by name, please check SetFontSelMode function.
See also SetFont function in DynaPDF manual.
3.34.749  **SetFontAnsi** (Name as string, Style as Integer = 0, Size as Double = 12, Embed as boolean = true, CP as Integer = & h27) as Integer

Function: The function loads a font that can be used for text output and interactive form fields.

Example:

```vbnet
dim pdf as DynaPDFMBS // your PDF object
call pdfSetFontAnsi("Helvetica", pdf.kfsNone, 10.0, true, pdf.kcp1252)
```

Notes:

The name parameter is converted to ANSI.

If font is not found by name, please check SetFontSelMode function.

See also `SetFont` function in DynaPDF manual.

---

3.34.750  **SetFontEx** (Name as string, Style as Integer = 0, Size as Double = 12, Embed as boolean = true, CP as Integer = & h27) as Integer

Function: The function loads a font that can be used for text output and interactive form fields.

Notes:

The name parameter is converted to unicode.

If font is not found by name, please check SetFontSelMode function.

See also `SetFontEx` function in DynaPDF manual.

---

3.34.751  **SetFontExAnsi** (Name as string, Style as Integer = 0, Size as Double = 12, Embed as boolean = true, CP as Integer = & h27) as Integer

Function: The function loads a font that can be used for text output and interactive form fields.

Notes:

The name parameter is converted to ANSI.

If font is not found by name, please check SetFontSelMode function.

See also `SetFontEx` function in DynaPDF manual.
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3.34.752 SetFontOrigin(Origin as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the current font origin that is used to position text strings. See also SetFontOrigin function in DynaPDF manual.

3.34.753 SetFontSearchOrder(Order() as Integer)

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the font search order. **Notes:**

The values in the array use this constants:

- kfbTrueType: TrueType, TrueType Collections, or OpenType fonts with TrueType outlines
- kfbType1: Type1 font
- kfbOpenType: OpenType font with Postscript outlines
- kfbStdFont: PDF Standard font
- kfbDisabled: This value can be used to disable a specific font format.

The array has 4 values. See also SetFontSearchOrder function in DynaPDF manual.

3.34.754 SetFontSearchOrderEx(Order1 as Integer, Order2 as Integer, Order3 as Integer, Order4 as Integer)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the font search order in the same way as SetFontSearchOrder() but it does not use an array to set the search order to improve compatibility to programming languages with limited array support. **Notes:** use the font base constants. See also SetFontSearchOrderEx function in DynaPDF manual.

3.34.755 SetFontSelMode(Mode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the font selection mode. See also SetFontSelMode function in DynaPDF manual.
3.34.756 SetFontWeight(Weight as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The font weight specifies the thickness or boldness of a font.
See also `SetFontWeight` function in DynaPDF manual.

3.34.757 SetGStateFlags(Flags as Integer, Reset as boolean)

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets optional flags affecting the graphics state and coordinate handling.
See also `SetGStateFlags` function in DynaPDF manual.

3.34.758 SetIconColor(ColorValue as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The icon color is used for the closed state of a text annotation.
See also `SetIconColor` function in DynaPDF manual.

3.34.759 SetImportFlags(Flags as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets optional flags to control the import of external PDF files.
See also `SetImportFlags` function in DynaPDF manual.

3.34.760 SetImportFlags2(Flags as Integer) as Boolean

Plugin Version: 8.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets optional flags to control the import of external PDF files.
See also `SetImportFlags2` function in DynaPDF manual.

3.34.761 SetItalicAngle(value as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property ItalicAngle is used to emulate an italic font if the font is not available in an italic style.
See also `SetItalicAngle` function in DynaPDF manual.
3.34. CLASS DYNAPDFMBS

3.34.762 SetJPEGQuality(Value as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the quality of JPEG compressed images in percent if JPEG compression is used. See also SetJPEGQuality function in DynaPDF manual.

3.34.763 SetLanguage(ISOTag as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property specifies the language of the document. See also SetLanguage function in DynaPDF manual.

3.34.764 SetLeading(value as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the leading that will be used by the functions AddContinueText() and WriteFText() to calculate the distance between two text lines. **Notes:** This is for setting the line height. See also SetLeading function in DynaPDF manual.

3.34.765 SetLicenseKey(Value as string)

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Use this function to enter your license key. **Example:**

```vbnet
dim pdf as DynaPDFMBS ' your DynaPDF object
pdf.SetLicenseKey("1234567890") ' enter your code here
```

**Notes:**
If the value represents a correct license key the demo string does not longer appear on PDF pages. Once a correct key was set, it will be active until the library is unloaded or the current PDF object is released. Note that the key must be entered for each PDF object or process of a multi-threading application separately.

The license key must not be stored in the registry or other files in an unencrypted form.

You need to buy a license key from MBS. The key will unlock the library to not run in demo mode.
Pro license is required for the following functions:

- BeginTransparencyGroup
- ConvertColors
- Create3DAnnot
- CreateSoftMask
- FlattenForm
- GetPageText
- ImportPage and ImportPageEx
- ParseContent
- RenderAnnotOrField
- RenderPage
- SetCMapDir
- SetExtColorSpace, SetExtFillColorSpace and SetExtStrokeColorSpace.
- SetUseGlobalImpFiles

Lite is required for:

- AddRenderingIntent and AddRenderingIntentEx
- CreateFormFields
- CloseFileEx
- ConvertEMFSpool
- CreateCollection
- CreateExtGState
- InsertMetafile and InsertMetafileEx
- OpenImportBuffer, OpenImportFile and OpenImportStream
- SetPDFVersion for PDF/A and PDF/X

And all functions relaying on those functions internally.
See also SetLicenseKey function in DynaPDF manual.
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3.34.766 SetLicenseKeyGlobal(Value as string)

Plugin Version: 11.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Use this function to enter your license key.

**Notes:** This method stores the key for later use. The constructor uses than this key to call SetLicenseKey for any new instance of the DynaPDFMBS class. This way you can register in the app.open event for your whole application.

See also:

- 3.34.767 SetLicenseKeyGlobal(Value as string)

3.34.767 SetLicenseKeyGlobal(Value as string)

Plugin Version: 18.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Private method to avoid you call this on an object.

**Notes:**

Please call shared method in app.open.

Because if you make a new object and set key, it’s too late.

See also:

- 3.34.766 SetLicenseKeyGlobal(Value as string)

3.34.768 SetLineAnnotParms(Handle as UInt32, FontHandle as Integer, FontSize as Double, Params as DynaPDFLineAnnotParameterMBS) as boolean

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or changes the properties of a line annotation relating to measure lines.

**Notes:**

The parameter Params can be set to nil to delete all measure line specific values. The parameters FontHandle and FontSize will be ignored in this case.

The member Caption specifies whether the parameter Content of the function LineAnnot should be used as caption of the measure line. Although a measure line can display the string in a PopUp annotation like ordinary line annotations, this is not recommended and not fully supported in Adobe’s Acrobat or Reader. If Caption is true (recommended), the caption is drawn horizontally centered either on top or inside the measure line. The text position can be changed from its normal position with the members CaptionOffsetX and CaptionOffsetY.

The parameter FontHandle can be used to specify an arbitrary font that should be used to draw the caption. Although it is possible to use any font or font size greater 0 with DynaPDF, a PDF viewer will change the font and font size to it’s default values when the annotation will be edited since line annotations support no property to specify the font or font size.

Function Reference
The default font to draw the caption is Helvetica and the default font size is 9 units. In order to use the
default font set the parameter FontHandle to -1. The default font size is used if the parameter FontSize is set
to to zero.

Returns true on success or false on failure.
See also SetLineAnnotParms function in DynaPDF manual.

3.34.769 SetLineCapStyle(Style as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function sets
the line cap style that specifies how the endpoint of a line will be drawn.
See also SetLineCapStyle function in DynaPDF manual.

3.34.770 SetLineDashPattern(Dash as string, Phase as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The line dash
pattern controls the pattern of dashes and gaps used to stroke paths.
See also SetLineDashPattern function in DynaPDF manual.

3.34.771 SetLineDashPatternEx(dash as memoryblock, NumValues as Integer,
Phase as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function sets a
line dash pattern in the same way as SetLineDashPattern().
Notes:
dash is a memoryblock with doubles.
So dash.size=NumValues*8.

See also SetLineDashPatternEx function in DynaPDF manual.
See also:
• 3.34.772 SetLineDashPatternEx(dash() as double, Phase as integer) as Boolean

3.34.772 SetLineDashPatternEx(dash() as double, Phase as integer) as Boolean

pattern with a given array.
Notes:
However, this version accepts an array of doubles instead of a string value. Returns true on success. See SetLineDashPattern for more details.

If array is nil, the pattern is removed. See also SetLineDashPatternEx function in DynaPDF manual.

See also:

- 3.34.771 SetLineDashPatternEx(dash as memoryblock, NumValues as Integer, Phase as Integer) as Boolean

3.34.773 SetLineJoinStyle(Style as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the line join style which specifies how two line segments are connected. See also SetLineJoinStyle function in DynaPDF manual.

3.34.774 SetLineWidth(value as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the line width used to stroke paths. See also SetLineWidth function in DynaPDF manual.

3.34.775 SetLinkHighlightMode(Mode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the highlight mode that is used by link annotations. See also SetLinkHighlightMode function in DynaPDF manual.

3.34.776 SetListFont(Handle as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function marks an arbitrary font as list font. See also SetListFont function in DynaPDF manual.
3.34.777 SetMatrix(Matrix as DynaPDFMatrixMBS) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function left multiplies the current transformation matrix with the new one.

See also *SetMatrix* function in DynaPDF manual.

3.34.778 SetMaxErrLogMsgCount(value as Integer)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the maximum number of error log messages kept in memory.

See also *SetMaxErrLogMsgCount* function in DynaPDF manual.

3.34.779 SetMaxFieldLen.TxtField as Integer, MaxLen as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the maximum count of characters which can be entered into a text field.

**Notes:**

A value of zero determines that the string length should not be restricted.

See also *SetMaxFieldLen* function in DynaPDF manual.

3.34.780 SetMetaConvFlags(Flags as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets specific flags to control the conversion of metafiles.

See also *SetMetaConvFlags* function in DynaPDF manual.

3.34.781 SetMetadata(ObjType as Integer, Handle as Integer, Buffer as Memoryblock) as Boolean

Plugin Version: 15.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets or replaces the XMP metadata stream of a specific object.

**Notes:**

The function deletes the XMP stream if empty buffer will be provided.

If the global XMP stream of the Catalog object should be replaced then proceed as follows:
3.34. CLASS DYNAPDFMBS

- Set the wished output PDF version with SetPDFVersion.
- Get a preview of the XMP stream with GetMetadata.
- Modify the returned stream as needed and save it with SetMetadata, finished!

The above steps make sure that the XMP metadata and document info contain the same values. This is especially important for PDF standards like PDF/A or PDF/X. DynaPDF makes sure that the creation and modification date will not be changed when closing the file.

Returns true on success and false on failure.
See also SetMetadata function in DynaPDF manual.
See also:

- 3.34.782 SetMetadata(ObjType as Integer, Handle as Integer, Buffer as String) as Boolean

3.34.782 SetMetadata(ObjType as Integer, Handle as Integer, Buffer as String) as Boolean

Plugin Version: 15.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function sets or replaces the XMP metadata stream of a specific object.
Notes:
The function deletes the XMP stream if empty buffer will be provided.

If the global XMP stream of the Catalog object should be replaced then proceed as follows:

- Set the wished output PDF version with SetPDFVersion.
- Get a preview of the XMP stream with GetMetadata.
- Modify the returned stream as needed and save it with SetMetadata, finished!

The above steps make sure that the XMP metadata and document info contain the same values. This is especially important for PDF standards like PDF/A or PDF/X. DynaPDF makes sure that the creation and modification date will not be changed when closing the file.

Returns true on success and false on failure.
See also SetMetadata function in DynaPDF manual.
See also:

- 3.34.781 SetMetadata(ObjType as Integer, Handle as Integer, Buffer as Memoryblock) as Boolean
3.34.783  SetMiterLimit(value as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the miter limit. See also SetMiterLimit function in DynaPDF manual.

3.34.784  SetNeedAppearance(value as boolean)

Plugin Version: 9.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the appearance flag.
See also SetNeedAppearance function in DynaPDF manual.

3.34.785  SetNumberFormat(TxtField as Integer, Sep as Integer, DecPlaces as Integer, NegStyle as Integer, CurrStr as string, Prepend as boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function restricts the allowed input characters of a text field to numbers and formats the resulting string as specified. See also SetNumberFormat function in DynaPDF manual.

3.34.786  SetOCGContUsage(Handle as UInt32, Value as DynaPDFOCGContUsageMBS) as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates or changes the Content Usage dictionary of an OCG.

**Notes:**
See dynapdf_help.pdf manual for details.
If the function succeeds the return value is true. If the function fails the return value is false.
See also SetOCGContUsage function in DynaPDF manual.

3.34.787  SetOCGState(Handle as UInt32, On as Boolean, SaveState as Boolean) as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Changes the visibility state of an OCG or layer.

**Notes:**
If the parameter SaveState is true, the new state is also saved in the PDF file. Otherwise, the state is only changed temporarily so that the wished state can be rendered with RenderPage or RenderPageToImage for example.
Note that only the new state of the current OCG will be saved. If the state of other OCGs were changed beforehand, while SaveState was set to false, then these changes will not be considered.

If the function succeeds the return value is true. If the function fails the return value is false. See also SetOCGState function in DynaPDF manual.

### 3.34.788 SetOpacity(value as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the opacity value which is used to render the appearance of a text annotation. See also SetOpacity function in DynaPDF manual.

### 3.34.789 SetOrientation(Value as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the orientation of a page. See also SetOrientation function in DynaPDF manual.

### 3.34.790 SetOrientationEx(Value as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the orientation of a page, incl. important page properties such as the width and height, and the coordinate system. See also SetOrientationEx function in DynaPDF manual.

### 3.34.791 SetPageCoords(PageCoords as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The native coordinate system of the Portable Document Format is bottom up. **Notes:** Value can be kpcTopDown or kpcBottomUp. Default is kpcBottomUp. See also SetPageCoords function in DynaPDF manual.

### 3.34.792 SetPageFormat(Value as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets a predefined page or paper format. **Notes:**
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Common paper formats and sizes in points:

<table>
<thead>
<tr>
<th>Format</th>
<th>Size in units (Width x Height)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIN A3</td>
<td>842.0 x 1191.0</td>
</tr>
<tr>
<td>DIN A4</td>
<td>595.0 x 842.0</td>
</tr>
<tr>
<td>DIN A5</td>
<td>419.0 x 595.0</td>
</tr>
<tr>
<td>DIN B4</td>
<td>709.0 x 1001.0</td>
</tr>
<tr>
<td>DIN B5</td>
<td>499.0 x 709.0</td>
</tr>
<tr>
<td>DIN B6</td>
<td>354.0 x 499.0</td>
</tr>
<tr>
<td>DIN C3</td>
<td>918.0 x 1298.0</td>
</tr>
<tr>
<td>DIN C4</td>
<td>649.0 x 918.0</td>
</tr>
<tr>
<td>DIN C5</td>
<td>459.0 x 649.0</td>
</tr>
<tr>
<td>DIN C6</td>
<td>323.0 x 459.0</td>
</tr>
<tr>
<td>DIN C65</td>
<td>323.0 x 649.0</td>
</tr>
<tr>
<td>DIN DL</td>
<td>312.0 x 624.0</td>
</tr>
<tr>
<td>DIN E4</td>
<td>623.0 x 879.0</td>
</tr>
<tr>
<td>DIN E5</td>
<td>439.0 x 624.0</td>
</tr>
<tr>
<td>DIN E6</td>
<td>312.0 x 439.0</td>
</tr>
<tr>
<td>DIN E65</td>
<td>312.0 x 624.0</td>
</tr>
<tr>
<td>DIN M5</td>
<td>439.0 x 632.0</td>
</tr>
<tr>
<td>DIN M65</td>
<td>317.0 x 632.0</td>
</tr>
<tr>
<td>US Legal</td>
<td>612.0 x 1008.0</td>
</tr>
<tr>
<td>US Letter</td>
<td>612.0 x 792.0</td>
</tr>
</tbody>
</table>

See also `SetPageFormat` function in DynaPDF manual.

### 3.34.793 SetPageHeight(value as Double) as Boolean

**Plugin Version:** 8.0, **Console & Web:** Yes, **Mac:** Yes, **Win:** Yes, **Linux:** Yes. **Function:** The function changes the height of the currently open page if any, or the default height for newly created pages.

**Example:**

```pascal
    dim pdf as DynaPDFMBS // your DynaPDF object
    dim bBool as Boolean
    dim dWidth as Double = 800 // new width
    dim dHeight as Double = 600 // new height

    // define page size
    bBool=pdf.SetPageWidth(dWidth)
    bBool=pdf.SetPageHeight(dHeight)
```
3.34. CLASS DYNAPDFMBS

Notes:

Common paper formats and sizes in points:

<table>
<thead>
<tr>
<th>Format</th>
<th>Size in units (Width x Height)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIN A3</td>
<td>842.0 x 1191.0</td>
</tr>
<tr>
<td>DIN A4</td>
<td>595.0 x 842.0</td>
</tr>
<tr>
<td>DIN A5</td>
<td>419.0 x 595.0</td>
</tr>
<tr>
<td>DIN B4</td>
<td>709.0 x 1001.0</td>
</tr>
<tr>
<td>DIN B5</td>
<td>499.0 x 709.0</td>
</tr>
<tr>
<td>DIN B6</td>
<td>354.0 x 499.0</td>
</tr>
<tr>
<td>DIN C3</td>
<td>918.0 x 1298.0</td>
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<td>317.0 x 632.0</td>
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</tr>
<tr>
<td>US Letter</td>
<td>612.0 x 792.0</td>
</tr>
</tbody>
</table>

See also SetPageHeight function in DynaPDF manual.

3.34.794 SetPageLayout(Layout as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the page layout that is used when opening the document with Adobe's Acrobat.

**Example:**

```vbnet
dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean

// define page view
'plSinglePage = 0, // Show one page at time
'plOneColumn = 1, // Show the pages continous
```
`plTwoColumnLeft = 2, // Two columns, start with left column
plTwoColumnRight = 3 // Two columns, start with right column
bBool=pdf.SetPageLayout(0)

See also `SetPageLayout` function in DynaPDF manual.

### 3.34.795 SetPageMode(Mode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the page mode that is used when opening the document with Adobe’s Acrobat.

**Example:**

```vba
'' define page mode
'pmUseNone = 0, // Default
'pmUseOutlines = 1, // Show the outline tree
'pmUseThumbs = 2, // Show the thumb nails
'pmFullScreen = 3 // Open the document in full-screen mode
bBool=pdf.SetPageMode(0)
```

See also `SetPageMode` function in DynaPDF manual.

### 3.34.796 SetPageWidth(value as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the width of the currently open page if any, or the default width for newly created pages.

**Example:**

```vba
'' define page size
bBool=pdf.SetPageWidth(dWidth)
bBool=pdf.SetPageHeight(dHeight)
```
3.34. CLASS DYNAPDFMBS

Notes:

Common paper formats and sizes in points:

<table>
<thead>
<tr>
<th>Format</th>
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<tr>
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<tr>
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<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>US Legal</td>
<td>612.0 x 1008.0</td>
</tr>
<tr>
<td>US Letter</td>
<td>612.0 x 792.0</td>
</tr>
</tbody>
</table>

See also SetPageWidth function in DynaPDF manual.

3.34.797 SetPDFVersion(Version as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the output PDF file version.

**Example:**

```plaintext
const pvPDF_1_3=3

dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean

// ask to create a pdf in version 1.3
bBool=pdf.SetPDFVersion(DynaPDFMBS.kpvPDFA_2005)
```
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Notes: Requires DynaPDF Lite license for PDF/A and PDF/X versions.
See also SetPDFVersion function in DynaPDF manual.

3.34.798 SetPrintSettings(Mode as Integer, PickTrayByPDFSize as Integer, NumCopies as Integer, PrintScaling as Integer, PrintRanges() as Integer) as boolean

Notes:
This is a PDF 1.7 extension.

For the Mode use the kdpm* constants.
For the PrintScaling use the kps* constants.
See also SetPrintSettings function in DynaPDF manual.

3.34.799 SetResolution(Value as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function sets the resolution in DPI (Dots per Inch), in which images are stored by DynaPDF.
Example:

dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean

// set maximum resolution
bBool = pdf.SetResolution(150)

See also SetResolution function in DynaPDF manual.

3.34.800 SetSaveNewImageFormat(value as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The property SaveNewImageFormat specifies whether images should be downscaled if the original resolution of the image is higher than the value of the property resolution (see also SetResolution()).
Example:
3.34. **CLASS DYNAPDFMBS**  

```vba
dim pdf as DynaPDFMBS ' your DynaPDF object  
dim bBool as Boolean

' whether you want image to be recompressed  
bBool=pdf.SetSaveNewImageFormat(False)
```

See also [SetSaveNewImageFormat](#) function in DynaPDF manual.

### 3.34.801 SetSeparationInfo(Handle as Integer) as boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the separation info of the current open page.  
See also [SetSeparationInfo](#) function in DynaPDF manual.

### 3.34.802 SetStrokeColor(ColorValue as color) as Boolean

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the color used for stroked graphics objects.  
**Notes:** Raises an exception if current color space is CMYK or Gray and not RGB.  
See also [SetStrokeColor](#) function in DynaPDF manual.  
See also:

- 3.34.803 SetStrokeColor(ColorValue as Integer) as Boolean
- 3.34.804 SetStrokeColor(values() as Double) as boolean
- 3.34.805 SetStrokeColor(values() as single) as boolean

### 3.34.803 SetStrokeColor(ColorValue as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the color used for stroked graphics objects.  
See also [SetStrokeColor](#) function in DynaPDF manual.  
See also:

- 3.34.802 SetStrokeColor(ColorValue as color) as Boolean
- 3.34.804 SetStrokeColor(values() as Double) as boolean
- 3.34.805 SetStrokeColor(values() as single) as boolean
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3.34.804 SetStrokeColor(values() as Double) as boolean

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets stroke color based on an array of floats.

**Notes:** The number of components must match.

See also `SetStrokeColor` function in DynaPDF manual.

See also:

- 3.34.802 SetStrokeColor(ColorValue as color) as Boolean
- 3.34.803 SetStrokeColor(ColorValue as Integer) as Boolean
- 3.34.805 SetStrokeColor(values() as single) as boolean

3.34.805 SetStrokeColor(values() as single) as boolean

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets stroke color based on an array of floats.

**Notes:** The number of components must match.

See also `SetStrokeColor` function in DynaPDF manual.

See also:

- 3.34.802 SetStrokeColor(ColorValue as color) as Boolean
- 3.34.803 SetStrokeColor(ColorValue as Integer) as Boolean
- 3.34.804 SetStrokeColor(values() as Double) as boolean

3.34.806 SetStrokeColorEx(colorvalues as memoryblock, count as Integer) as Boolean

Plugin Version: 9.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the stroke color using the values in parameters.

**Example:**

dim p as DynaPDFMBS // get a pdf object

dim colorvalues as memoryblock

colorvalues=NewMemoryBlock(3)
colorvalues.Byte(0)=255
colorvalues.Byte(1)=128
colorvalues.Byte(2)=0

if p.SetStrokeColorEx(colorvalues, 3) then
' ok
else

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' failed
end if

**Notes:** Pass as many color values as needed for the current color space. 3 for RGB, 4 for CMYK. All values must be in the range of 0 to 255. See also `SetStrokeColorEx` function in DynaPDF manual.

See also:

- 3.34.807 `SetStrokeColorEx(ParamArray colorvalue as Integer) as Boolean`

### 3.34.807 SetStrokeColorEx(ParamArray colorvalue as Integer) as Boolean

**Plugin Version:** 9.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the stroke color using the values in parameters.

**Example:**

```pascal
dim p as DynaPDFMBS ' get a pdf object
if p.SetStrokeColorEx(255,128,0) then
  ' ok
else
  ' failed
end if
```

**Notes:** Pass as many color values as needed for the current color space. 3 for RGB, 4 for CMYK. All values must be in the range of 0 to 255. See also `SetStrokeColorEx` function in DynaPDF manual.

See also:

- 3.34.806 `SetStrokeColorEx(colorvalues as memoryblock, count as Integer) as Boolean`

### 3.34.808 SetStrokeColorSpace(Colorspace as Integer) as Boolean

**Plugin Version:** 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function changes the stroke color space. In PDF, fill and stroke colors use both their own color spaces. See also `SetStrokeColorSpace` function in DynaPDF manual.

### 3.34.809 SetTabLen(TabLen as Integer) as Boolean

**Plugin Version:** 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the tabulator length, specified in number of spaces, which will be used to emulate tabulators during text
formatting (see WriteFText() for further information).
See also SetTabLen function in DynaPDF manual.

3.34.810 SetTextDrawMode(Mode as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The text draw mode specifies how text should be rendered.
See also SetTextDrawMode function in DynaPDF manual.

3.34.811 SetTextFieldValue(Field as Integer, Value as string, DefValue as string, Align as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function sets or changes the value and default value of a text field.
Notes: The Value and the DefValue strings are converted to unicode.
See also SetTextFieldValue function in DynaPDF manual.

3.34.812 SetTextFieldValueAnsi(Field as Integer, Value as string, DefValue as string, Align as Integer) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function sets or changes the value and default value of a text field.
Notes: The Value and the DefValue strings are converted to ANSI.
See also SetTextFieldValue function in DynaPDF manual.

3.34.813 SetTextFieldValueAnsiEx(Field as Integer, Value as string) as Boolean


3.34.814 SetTextFieldValueEx(Field as Integer, Value as string) as Boolean

See also SetTextFieldValueEx function in DynaPDF manual.
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3.34.815 **SetTextRect(PosX as Double, PosY as Double, Width as Double, Height as Double) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function defines the output rectangle that is used to output formatted text by the function WriteFText(). See also **SetTextRect** function in DynaPDF manual.

3.34.816 **SetTextRise(value as Double) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Text rise specifies the distance, to move the baseline up or down from its default location. See also **SetTextRise** function in DynaPDF manual.

3.34.817 **SetTextScaling(value as Double) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The scaling value adjusts the width of glyphs by stretching or compressing them in the horizontal direction. See also **SetTextScaling** function in DynaPDF manual.

3.34.818 **SetTransparentColor(ColorValue as Integer) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the transparent color which is used for newly inserted images. See also **SetTransparentColor** function in DynaPDF manual.

3.34.819 **SetTrapped(value as boolean)**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the trapped key of the document. See also **SetTrapped** function in DynaPDF manual.

3.34.820 **SetUseExactPwd(value as Boolean) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If the property UseExactPwd is false, an encrypted PDF file can always be decrypted, if either the open or owner password in the file is an empty string. See also **SetUseExactPwd** function in DynaPDF manual.
3.34.821 SetUseGlobalImpFiles(value as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property can be used to load an external PDF file permanent into memory, e.g. to split a large PDF file into smaller pieces. **Notes:** Requires DynaPDF Pro license. See also SetUseGlobalImpFiles function in DynaPDF manual.

3.34.822 SetUseImageInterpolation(Index as Integer, Value as Boolean) as Boolean

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Enables or disables image interpolation explicitely for a given image. **Notes:**

If nothing was specified (this is the default), a viewer applications can only use a heuristic to determine whether image interpolation should be enabled or not. The result is then of course application specific. The parameter Handle must be a valid image handle that was returned by a DynaPDF function like InsertImage(), InsertImageEx(), or InsertImageFromFile(), for example.

If the function succeeds the return value is true. If the function fails the return value is false. See also SetUseImageInterpolation function in DynaPDF manual.

3.34.823 SetUserUnit(value as single) as boolean

Plugin Version: 11.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the user unit of the current open page. **Notes:**

A user unit acts like a scaling factor. The page format and all page coordinates are multiplied with this factor in a viewer application. The default size of a PDF unit is 1/72 inch. User units can be useful if the page format would be too large to be expressed in standard PDF units. The largest page format in PDF is limited to 14400 units or 200 inches. This limit can be extended with the user unit. The largest value that is supported is 75.0 which results in a maximum page format of 15,000 x 15,000 inches or 1,800,000 units. Note that all functions which return page coordinates or page properties do not consider the user unit.

The page format must still be in the range 3..14400 units. It is also strongly recommended to set the user unit only if necessary. This is only the case if the required page format is larger 14400 units. Default value = 1.0

**Return values:**
If the function succeeds the return value is true. If the function fails the return value is false. See also SetUserUnit function in DynaPDF manual.
3.34.824 SetUseStdFonts(value as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function can be used to disable the 14 standard fonts temporarily. See also SetUseStdFonts function in DynaPDF manual.

3.34.825 SetUseSwapFile(SwapContents as Boolean, SwapLimit as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** When creating large PDF files with many or large images it is sometimes recommended to page out large objects to a temp file to restrict the memory usage.

**Example:**

```vba
dim pdf as DynaPDFMBS // your DynaPDF object

// define a swap file in case memory is low
dim b as Boolean=pdf.SetUseSwapFile(False, 256*1024*1024)
if b=False then
    MsgBox "Failed to create swap file."
    Return
end if
```

**Deprecated:** This item is deprecated and should no longer be used. **Notes:**

Do not use FlushPages and SetUseSwapFile together. Use one function.

3.34.826 SetUseSwapFileEx(SwapContents as Boolean, SwapLimit as Integer, SwapDir as FolderItem) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This function enables paging out of large objects to restrict the memory usage in the same way as SetUseSwapFile(). **Deprecated:** This item is deprecated and should no longer be used.

3.34.827 SetUseSystemFonts(value as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property specifies whether the Windows/Fonts directory should be added automatically to the list of available font search paths. See also SetUseSystemFonts function in DynaPDF manual.
3.34.828  SetUseTransparency(value as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property specifies whether images should get a transparent background.

**Example:**

```vbnet
dim pdf as DynaPDFMBS // your DynaPDF object
dim bBool as Boolean

// allow transparency for images
bBool=pdf.SetUseTransparency(False)
```

See also SetUseTransparency function in DynaPDF manual.

3.34.829  SetUseVisibleCoords(value as Boolean) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The property specifies whether DynaPDF should consider the crop box to calculate to position of an object.

See also SetUseVisibleCoords function in DynaPDF manual.

3.34.830  SetViewerPreferences(Value as Integer, AddVal as Integer) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the viewer preferences which can be used to control a few parameter of Adobe’s Acrobat, such as hide the toolbar or men bar.

See also SetViewerPreferences function in DynaPDF manual.

3.34.831  SetWhite(FillColor as Boolean, StrokeColor as Boolean) as Boolean


**Notes:**

This function is a bit optimized to check the current color space. Depending on whether it’s RGB, Gray, CMYK or Lab, it will set different color values. And if other color space is active, it switches to Gray colorspace to set white.
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3.34.832 SetWMFDefExtent(Width as Integer, Height as Integer) as Boolean

Function: The function sets the default size which is used to convert non-portable WMF files to EMF. See InsertMetafile() for further information.

See also SetWMFDefExtent function in DynaPDF manual.

3.34.833 SetWMFPixelPerInch(Value as Integer) as Boolean

Function: The function sets the default pixels per inch of the y-axis which are used to convert portable WMF files to EMF.

See also SetWMFPixelPerInch function in DynaPDF manual.

3.34.834 SetWordSpacing(value as Double) as Boolean

Function: The function sets the word spacing.

See also SetWordSpacing function in DynaPDF manual.

3.34.835 ShowDifferences(PageIndex1 as Integer, OtherPDF as DynaPDFMBS, PageIndex2 as Integer, CheckMoving as boolean, HighlightColor as UInt32 = &hFFFF, ScaleFactor as Integer = 1, ColorTolerance as Integer = 3, debug as boolean = false) as Integer

Function: Shows differences on two PDF pages by adding highlight annotations.

Notes:

Please pass page indexes for both pages. OtherPDF can be same as the current instance you call this method on.

CheckMoving: Whether to check for moving parts, e.g. the big part of the page shifted up one line.

Returns number of annotations on success which means that highlight annotations have been added to both pages.
Or returns negative value in case of error.
You can than render a page to show differences to user.
Requires a DynaPDF Pro license. Without a license, the DynaPDF watermark will reduce the accuracy.

Scale: When comparison, scales up the pictures used for comparison. Default is 1 for 72dpi, but you can use
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2 for double.
ColorTolerance: The tolerance for color comparison.
Colors where red, green or blue components are within given tolerance are considered equal. So FFFFFF and FFFFFD are equal.
Default is 3.

Debug Parameter: Whether to write debug images to temp folder.
If true, we write png files to temp folder. One image is before the check, one with all similar lines removed and one with result of comparison. Red pixels show you the raster, green equal pixels.

3.34.836  **SkewCoords(alpha as Double, beta as Double, OriginX as Double, OriginY as Double) as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function skews the coordinate system and sets the coordinate origin to the point OriginX, OriginY. **Notes:** Please do not try to scale/skew/translate back later. use SaveGraphicState and RestoreGraphicState. See also SkewCoords function in DynaPDF manual.

3.34.837  **SortFieldsByIndex as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sorts the interactive form fields of a page by comparing the internal indices which can be set for each field separately (see SetFieldIndex() for further information). See also SortFieldsByIndex function in DynaPDF manual.

3.34.838  **SortFieldsByName as Boolean**

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sorts the interactive form fields of a page in ascending order by field name. See also SortFieldsByName function in DynaPDF manual.

3.34.839  **SquareAnnot(PosX as Double, PosY as Double, Width as Double, Height as Double, LineWidth as Double, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Comment as string) as Integer**

Plugin Version: 13.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function draws a square annotation on the current open page.
Notes:

If the parameters Width and Height are equal the function draws a square, a rectangle otherwise. If the annotation should be drawn without a border, set the parameter LineWidth to zero or StrokeColor to the special constant kNO_COLOR.
If the interior should be transparent set FillColor to the special constant kNO_COLOR.
Although the line width can be set to any positive floating point value, Adobe’s Acrobat or Reader restrict the line width to 0 through 12 units. The line width should be restricted in the same way to avoid issues in Adobe viewer products.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails, the return value is a negative error code.
See also SquareAnnot function in DynaPDF manual.

3.34.840 SquareAnnotAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, LineWidth as Double, FillColor as UInt32, StrokeColor as UInt32, ColorSpace as Integer, Author as string, Subject as string, Comment as string) as Integer

Notes:

If the parameters Width and Height are equal the function draws a square, a rectangle otherwise. If the annotation should be drawn without a border, set the parameter LineWidth to zero or StrokeColor to the special constant kNO_COLOR.
If the interior should be transparent set FillColor to the special constant kNO_COLOR.
Although the line width can be set to any positive floating point value, Adobe’s Acrobat or Reader restrict the line width to 0 through 12 units. The line width should be restricted in the same way to avoid issues in Adobe viewer products.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails, the return value is a negative error code.
See also SquareAnnot function in DynaPDF manual.

3.34.841 StampAnnot(SubType as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Subject as string, Comment as string) as Integer

See also StampAnnot function in DynaPDF manual.
3.34.842 StampAnnotAnsi(SubType as Integer, PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Subject as string, Comment as string) as Integer

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a stamp annotation with ANSI encoded texts. See also StampAnnot function in DynaPDF manual.

3.34.843 StrokePath as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function strokes the current path without closing it. See also StrokePath function in DynaPDF manual.

3.34.844 TestGlyphs(FontHandle as Integer, Text as string) as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function checks whether all glyphs of the text are available in the specified font.

**Example:**

```vbnet
// create dummy PDF with one page
dim d as new myDynaPDFMBS

call d.CreateNewPDF
call d.Append

// check this text
dim x as string = "" // Hello in Chinese

// load 2 fonts to check
dim FontHandle1 as Integer = d.SetFont("Times", 12)
dim FontHandle2 as Integer = d.SetFont("Arial Unicode MS", 12)

dim r1 as Integer = d.TestGlyphs(FontHandle1, x)
if r1 = -1 then
    MsgBox "Times supports chinese characters"
else
    MsgBox "Times does not support chinese characters"
end if

dim r2 as Integer = d.TestGlyphs(FontHandle2, x)
if r2 = -1 then
```
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MsgBox "Arial Unicode MS supports chinese characters"
else
MsgBox "Arial Unicode MS does not support chinese characters"
end if

**Notes:**

The return value is the position of the first missing glyph, or -1 if all glyphs are available.
If the font uses a mixed 8/16 bit CJK code page that requires a conversion to Unicode (a code page that ends with "_Uni"), then the return value corresponds to the converted Unicode string and not to the CJK input string.
See also TestGlyphs function in DynaPDF manual.

### 3.34.845 TestGlyphsAnsI(FontHandle as Integer, Text as string) as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function checks whether all glyphs of the text are available in the specified font.
**Notes:**

The return value is the position of the first missing glyph, or -1 if all glyphs are available.
If the font uses a mixed 8/16 bit CJK code page that requires a conversion to Unicode (a code page that ends with "_Uni"), then the return value corresponds to the converted Unicode string and not to the CJK input string.
The text parameter is converted to ANSI.
See also TestGlyphs function in DynaPDF manual.

### 3.34.846 TextAnnot(PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Text as string, Icon as Integer, Open as boolean) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a text annotation.
**Notes:** The text and the author parameters are converted to unicode.
See also TextAnnot function in DynaPDF manual.
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3.34.847 TextAnnotAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, Author as string, Text as string, Icon as Integer, Open as boolean) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function creates a text annotation.

**Notes:** The text and the author parameters are converted to ANSI.
See also TextAnnot function in DynaPDF manual.

3.34.848 TranslateCoords(OriginX as Double, OriginY as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function translates the coordinate system to the new origin OriginX, OriginY.
See also TranslateCoords function in DynaPDF manual.

3.34.849 TranslateRawCode(IFont as Integer, text as string, byref Width as Double, byref Decoded as boolean, CharSpacing as Double, WordSpacing as Double, TextScale as Double) as string

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Translates a raw code.

**Notes:** Deprecated. Please use other variant with more parameters.
See also:

- 3.34.850 TranslateRawCode(IFont as integer, text as string, textOffset as Integer, byref Width as double, byref Decoded as boolean, CharSpacing as double, WordSpacing as double, TextScale as double, byref count as integer) as string

3.34.850 TranslateRawCode(IFont as integer, text as string, textOffset as Integer, byref Width as double, byref Decoded as boolean, CharSpacing as double, WordSpacing as double, TextScale as double, byref count as integer) as string

Plugin Version: 18.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function converts a source character to Unicode.

**Notes:**

The code length of a character depends on the font’s encoding. PDF supports encodings with fixed and variable code lengths from one through four bytes per character. The Count parameter provides the number of bytes which were consumed to convert the character to Unicode; this value must be used to increment the textOffset parameter for further calls.

The resulting Unicode character or sequence is returned in function result. The width parameter is used to
return the character width.
The parameter Decoded is set to true if the source character could be successfully converted to Unicode. If Decode is false the output string and character width contain no meaningful values.
The function can only fail when processing strings of CID fonts, e.g. if the font depends on an external CMap that could not be loaded, or if the font uses a damaged CMap. The search path(s) to external CMaps should always be set before extracting text from PDF files with SetCMapDir().
Passing an invalid or undefined code sequence to the function does not result in an error. In this case the notdef character is added to the output string (this is usually 0 or 0xFFFD if the font contains a ToUnicode CMap).
Notice:
To improve processing speed the function does not check whether the parameters are valid.
Remarks:
This function was designed to convert raw strings on a per character basis to Unicode which were returned by ParseContent() or GetPageText(). The parameters CharSpacing, WordSpacing, and TextScale must be taken from the current graphics state or from the structure DynaPDFStackMBS.
Return values:
The count value of this function is always greater or equal to one. Check the parameter Decoded to determine whether the function succeed.
See also:

- 3.34.849 TranslateRawCode(IFont as Integer, text as string, byref Width as Double, byref Decoded as boolean, CharSpacing as Double, WordSpacing as Double, TextScale as Double) as string 476

3.34.851 TranslateString(IFont as Integer, text as string, flags as Integer) as string

See also:

- 3.34.852 TranslateString(stack as DynaPDFStackMBS, flags as Integer) as string 477

3.34.852 TranslateString(stack as DynaPDFStackMBS, flags as Integer) as string

See also:

- 3.34.851 TranslateString(IFont as Integer, text as string, flags as Integer) as string 477

3.34.853 Triangle(x1 as Double, y1 as Double, x2 as Double, y2 as Double, x3 as Double, y3 as Double, FillMode as Integer) as Boolean

See also Triangle function in DynaPDF manual.

3.34.854 UnLockLayer(layer as UInt32) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Locks a layer. See also UnLockLayer function in DynaPDF manual.

3.34.855 WatermarkAnnot(PosX as Double, PosY as Double, Width as Double, Height as Double) as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a Watermark annotation. **Notes:**

Watermark annotations have no interactive elements like other annotation types. This property is useful in many cases because it is usually not possible to select or change the contents of a watermark annotation in viewer applications.

The annotation has no appearance after it was created. Call CreateAnnotAP to create an appearance template for the annotation. After the appearance template was created you can draw text, images or vector graphics into it. The template must be closed with EndTemplate when finished. It is also possible to import an external page or EMF contents into the template.

Watermark annotations can be shared on multiple pages. To place the annotation on other pages call AddAnnotToPage.

If the function succeeds the return value is the annotation handle, a value greater or equal zero. If the function fails the return value is a negative error code. See also WatermarkAnnot function in DynaPDF manual.

3.34.856 WebLink(PosX as Double, PosY as Double, Width as Double, Height as Double, aText as string) as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts a web link onto the current open page. **Notes:** The text parameter is converted to unicode. See also WebLink function in DynaPDF manual.
3.34.857 WebLinkAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, aText as string) as Integer

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts a web link onto the current open page. **Notes:** The text parameter is converted to ANSI. See also WebLink function in DynaPDF manual.

3.34.858 WeightFromStyle(s as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Converts a style value to a weight value.

3.34.859 WeightToStyle(s as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Converts a weight value to a style value.

3.34.860 WidthFromStyle(s as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Converts a style constant to the width value.

3.34.861 WidthToStyle(s as Integer) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Converts a width value to a style value.

3.34.862 WriteAngleText(aText as string, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a string in a user defined angle around a radius. **Notes:** The text parameter is converted to unicode. See also WriteAngleText function in DynaPDF manual. See also:
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- **3.34.863 WriteAngleText(glyphs() as Integer, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean**

**3.34.863 WriteAngleText(glyphs() as Integer, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean**

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a string in a user defined angle around a radius.

**Notes:**

This version takes an array of integers. So if you are using the kcpUnicode on SetFont, please pass an array of unicode codepoints. If you use kcpGlyphIndexes, please pass an array of glyph values.

See also **WriteAngleText** function in DynaPDF manual.

See also:

- **3.34.862 WriteAngleText(aText as string, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean**

**3.34.864 WriteAngleTextAnsi(aText as string, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean**

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a string in a user defined angle around a radius.

**Notes:** The text parameter is converted to ANSI, so use only with SetFont with kcp1252.

See also **WriteAngleText** function in DynaPDF manual.

See also:

- **3.34.862 WriteAngleText(aText as string, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean**

- **3.34.863 WriteAngleText(glyphs() as Integer, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean**

**3.34.865 WriteAngleTextDirect(aText as string, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean**

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a string in a user defined angle around a radius.

**Notes:** The text parameter is not converted, so pass a string in the right encoding.

See also:

- **3.34.866 WriteAngleTextDirect(glyphs() as Integer, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean**
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3.34.866 WriteAngleTextDirect(glyphs() as Integer, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a string in a user defined angle around a radius.

**Notes:**
This version takes an array of integers. So pass in values in the encoding you are using. This can be glyph values or bytes in any encoding you selected in the SetFont method.

See also:
- 3.34.865 WriteAngleTextDirect(aText as string, Angle as Double, PosX as Double, PosY as Double, Radius as Double, YOrigin as Double) as Boolean

3.34.867 WriteFText(Align as Integer, aText as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Instead of printing text on a line by line basis it is also possible to output text into a rectangle by applying a formatting algorithm.

**Notes:**
The text parameter is converted to unicode.

The PageBreak event is called when needed by the plugin.
See also WriteFText function in DynaPDF manual.
See also:
- 3.34.868 WriteFText(Align as Integer, glyphs() as Integer) as Boolean

3.34.868 WriteFText(Align as Integer, glyphs() as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Instead of printing text on a line by line basis it is also possible to output text into a rectangle by applying a formatting algorithm.

**Notes:**
This version takes an array of integers. So if you are using the kcpUnicode on SetFont, please pass an array of unicode codepoints. If you use kcpGlyphIndexes, please pass an array of glyph values.

The PageBreak event is called when needed by the plugin.
See also WriteFText function in DynaPDF manual.
See also:
3.34.869 WriteFTextAnsi(Align as Integer, aText as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Instead of printing text on a line by line basis it is also possible to output text into a rectangle by applying a formatting algorithm.

**Notes:**
The text parameter is converted to ANSI, so use only with SetFont with kcp1252.

The PageBreak event is called when needed by the plugin.

See also WriteFText function in DynaPDF manual.

See also:
- 3.34.867 WriteFText(Align as Integer, aText as string) as Boolean
- 3.34.868 WriteFText(Align as Integer, glyphs() as Integer) as Boolean

3.34.870 WriteFTextDirect(Align as Integer, aText as string) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Instead of printing text on a line by line basis it is also possible to output text into a rectangle by applying a formatting algorithm.

**Notes:**
The text parameter is not converted, so pass a string in the right encoding.

The PageBreak event is called when needed by the plugin.

See also:
- 3.34.871 WriteFTextDirect(Align as Integer, glyphs() as Integer) as Boolean

3.34.871 WriteFTextDirect(Align as Integer, glyphs() as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Instead of printing text on a line by line basis it is also possible to output text into a rectangle by applying a formatting algorithm.

**Notes:**
This version takes an array of integers. So pass in values in the encoding you are using. This can be glyph values or bytes in any encoding you selected in the SetFont method.

The PageBreak event is called when needed by the plugin.

See also:
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- 3.34.870 WriteFTextDirect(Align as Integer, aText as string) as Boolean

3.34.872 WriteFTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, aText as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a formatted text exactly in the same way as WriteFText().

**Notes:**
The text parameter is converted to unicode.

The PageBreak event is called when needed by the plugin.
See also WriteFTextEx function in DynaPDF manual.
See also:

- 3.34.873 WriteFTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, glyphs() as Integer) as Boolean

3.34.873 WriteFTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, glyphs() as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a formatted text exactly in the same way as WriteFText().

**Notes:**
This version takes an array of integers. So if you are using the kcpUnicode on SetFont, please pass an array of unicode codepoints. If you use kcpGlyphIndexes, please pass an array of glyph values.

The PageBreak event is called when needed by the plugin.
See also WriteFTextEx function in DynaPDF manual.
See also:

- 3.34.872 WriteFTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, aText as string) as Boolean

3.34.874 WriteFTextExAnsi(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, aText as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a formatted text exactly in the same way as WriteFText().

**Notes:**
The text parameter is converted to ANSI, so use only with SetFont with kcp1252.
The PageBreak event is called when needed by the plugin. See also WriteFTextEx function in DynaPDF manual. See also:

- 3.34.872 WriteFTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, aText as string) as Boolean
- 3.34.873 WriteFTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, glyphs() as Integer) as Boolean

3.34.875 WriteFTextExDirect(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, aText as string) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function prints a formatted text exactly in the same way as WriteFText().
Notes:
The text parameter is not converted, so pass a string in the right encoding.

The PageBreak event is called when needed by the plugin. See also:

- 3.34.876 WriteFTextExDirect(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, glyphs() as Integer) as Boolean

3.34.876 WriteFTextExDirect(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, glyphs() as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The function prints a formatted text exactly in the same way as WriteFText().
Notes:
This version takes an array of integers. So pass in values in the encoding you are using. This can be glyph values or bytes in any encoding you selected in the SetFont method.

The PageBreak event is called when needed by the plugin. See also:

- 3.34.875 WriteFTextExDirect(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, aText as string) as Boolean

3.34.877 WriteStyledText(Align as Integer, StyledText as StyledText) as Boolean

Plugin Version: 16.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Writes styled text. Notes: Same as WriteFText, but calls ConvertStyledText for you to convert the styled text to formatting
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commands.

See also:

- 3.34.878 WriteStyledText(Align as Integer, TextArea as TextArea) as Boolean

### 3.34.878 WriteStyledText(Align as Integer, TextArea as TextArea) as Boolean

Plugin Version: 16.5, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Writes styled text from TextArea.

**Notes:** Same as WriteFText, but calls ConvertStyledText for you to convert the styled text to formatting commands.

See also:

- 3.34.877 WriteStyledText(Align as Integer, StyledText as StyledText) as Boolean

### 3.34.879 WriteStyledTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, StyledText as StyledText) as Boolean

Plugin Version: 16.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Writes styled text.

**Notes:** Same as WriteFTextEx, but calls ConvertStyledText for you to convert the styled text to formatting commands.

See also:

- 3.34.880 WriteStyledTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, TextArea as TextArea) as Boolean

### 3.34.880 WriteStyledTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, TextArea as TextArea) as Boolean

Plugin Version: 16.5, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Writes styled text from TextArea.

**Notes:** Same as WriteFTextEx, but calls ConvertStyledText for you to convert the styled text to formatting commands.

See also:

- 3.34.879 WriteStyledTextEx(PosX as Double, PosY as Double, Width as Double, Height as Double, Align as Integer, StyledText as StyledText) as Boolean
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3.34.881 WriteText(PosX as Double, PosY as Double, aText as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern. **Notes:** The text parameter is converted to unicode. See also WriteText function in DynaPDF manual. See also:

- 3.34.882 WriteText(PosX as Double, PosY as Double, glyphs() as Integer) as Boolean

3.34.882 WriteText(PosX as Double, PosY as Double, glyphs() as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern. **Notes:** This version takes an array of integers. So if you are using the kcpUnicode on SetFont, please pass an array of unicode codepoints. If you use kcpGlyphIndexes, please pass an array of glyph values. See also WriteText function in DynaPDF manual. See also:

- 3.34.881 WriteText(PosX as Double, PosY as Double, aText as string) as Boolean

3.34.883 WriteTextAnsi(PosX as Double, PosY as Double, aText as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern. **Notes:** The text parameter is converted to ANSI, so use only with SetFont with kcp1252. See also WriteText function in DynaPDF manual. See also:

- 3.34.881 WriteText(PosX as Double, PosY as Double, aText as string) as Boolean
- 3.34.882 WriteText(PosX as Double, PosY as Double, glyphs() as Integer) as Boolean

3.34.884 WriteTextDirect(PosX as Double, PosY as Double, aText as string) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern.
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Notes: The text parameter is not converted, so pass a string in the right encoding.

See also:

- 3.34.885 WriteTextDirect(PosX as Double, PosY as Double, glyphs() as Integer) as Boolean

3.34.885 WriteTextDirect(PosX as Double, PosY as Double, glyphs() as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern.

Notes:

This version takes an array of integers. So pass in values in the encoding you are using. This can be glyph values or bytes in any encoding you selected in the SetFont method.

See also:

- 3.34.884 WriteTextDirect(PosX as Double, PosY as Double, aText as string) as Boolean

3.34.886 WriteTextMatrix(Matrix as DynaPDFMatrixMBS, glyphs() as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern by using a transformation matrix to calculate the position of the string.

Notes:

This version takes an array of integers. So if you are using the kcpUnicode on SetFont, please pass an array of unicode codepoints. If you use kcpGlyphIndexes, please pass an array of glyph values.

See also **WriteTextMatrix** function in DynaPDF manual.

See also:

- 3.34.887 WriteTextMatrix(Matrix as DynaPDFMatrixMBS, Text as string) as Boolean

3.34.887 WriteTextMatrix(Matrix as DynaPDFMatrixMBS, Text as string) as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern by using a transformation matrix to calculate the position of the string.

Notes: The text parameter is converted to unicode.

See also **WriteTextMatrix** function in DynaPDF manual.

See also:
3.34.888 WriteTextMatrixAnsi(Matrix as DynaPDFMatrixMBS, Text as string) as Boolean

Plugin Version: 8.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern by using a transformation matrix to calculate the position of the string.

**Notes:** The text parameter is converted to ANSI, so use only with SetFont with kcp1252. See also WriteTextMatrix function in DynaPDF manual.

See also:

- 3.34.886 WriteTextMatrix(Matrix as DynaPDFMatrixMBS, glyphs() as Integer) as Boolean 487
- 3.34.887 WriteTextMatrix(Matrix as DynaPDFMatrixMBS, Text as string) as Boolean 487

3.34.889 WriteTextMatrixDirect(Matrix as DynaPDFMatrixMBS, glyphs() as Integer) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern by using a transformation matrix to calculate the position of the string.

**Notes:** This version takes an array of integers. So pass in values in the encoding you are using. This can be glyph values or bytes in any encoding you selected in the SetFont method.

See also:

- 3.34.890 WriteTextMatrixDirect(Matrix as DynaPDFMatrixMBS, Text as string) as Boolean 488

3.34.890 WriteTextMatrixDirect(Matrix as DynaPDFMatrixMBS, Text as string) as Boolean

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function prints a text onto the current open page, template, or pattern by using a transformation matrix to calculate the position of the string.

**Notes:** The text parameter is not converted, so pass a string in the right encoding.

See also:

- 3.34.889 WriteTextMatrixDirect(Matrix as DynaPDFMatrixMBS, glyphs() as Integer) as Boolean 488
3.34. CLASS DYNAPDFMBS

### 3.34.891 YofCMYK(CMYK as UInt32) as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns Y of a CMYK color value.  
**Example:**
```
    dim cmyk as Integer = DynaPDFMBS.CMYK(1,2,3,4)
    MsgBox str(DynaPDFMBS.YofCMYK(cmyk))  // shows 3
```

**Notes:** Returns different values on BigEndian and LittleEndian systems.

### 3.34.892 Properties

#### 3.34.893 DynaPDFVersion as String

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The DynaPDF version text.  
**Notes:** (Read only property)

#### 3.34.894 Handle as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The IPDF handle passed to each API function.  
**Notes:**  
The constructor fills this handle and the destructor frees it.  
(Read only property)

#### 3.34.895 ImportFlags as Integer

**Notes:**  
Same as using GetImportFlags and SetImportFlags.  
(Read and Write property)
CHAPTER 3. DYNAPDF

3.34.896 ImportFlags2 as Integer


**Notes:**

Same as using GetImportFlags2 and SetImportFlags2. (Read and Write property)

3.34.897 JasperVersion as String


**Example:**

MsgBox DynaPDFMBS.JasperVersion

**Notes:**

DynaPDF uses customized version of Jasper library, so this may not be the latest public version. But it’s patched to fix a couple of issues seen in PDF context. (Read only property)

3.34.898 PageCoords as Integer

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The page coordinate system setting.

**Notes:**

The native coordinate system of the Portable Document Format is bottom up. Also check the dynapdf manual on the pdfGetPageCoords and pdfSetPageCoords functions. Value can be kpcTopDown or kpcBottomUp. Default is kpcBottomUp. (Read and Write property)

3.34.899 PageGraphics as Graphics


**Example:**

```
Dim pdf As New DynapdfMBS
// please subclass DynapdfMBS to implement error event
```
Dim f As FolderItem = SpecialFolder.Desktop.Child("DynaPDF Graphics.pdf")

'pdf.SetLicenseKey "Starter"
// For this example you can use a Starter, Lite, Pro or Enterprise License

// Create new PDF. Use f = nil for in-memory PDF
Call pdf.CreateNewPDF(f)

// append a new page, so we have an open page
Call pdf.Append

// get graphics object to draw on the page
Dim g As Graphics = pdf.PageGraphics

// draw as usual
g.DrawString "Hello World", 105, 100
g.DrawRect 100, 80, 100, 100

// close page and file
Call pdf.EndPage
Call pdf.CloseFile

// for in-memory PDF, use GetBuffer here to grab it.
'Dim PDFData As String = pdf.GetBuffer

Notes:
We create a temporary picture and subclass the graphics to reproduce all drawing commands called on this graphics object to the current PDF Page.

For every drawing command, we apply the following properties from graphics object to DynaPDF:

- ForeColor
- Bold
- Italic
- Underline
- TextUnit
- TextFont
- TextSize
- ScaleX
• ScaleY
• PenHeight
• PenWidth
• CharacterSpacing

Supports the following graphics commands:

• Draw/Fill Oval/Rect/RoundRect/Line/Polygon
• DrawString
• StringHeight and StringWidth
• DrawPicture
• NextPage
• Get/Set Pixel.
• Clip
• Supports vector graphics classes (Object2D)
• Supports report engine

Some notes:

• Handle() function returns handle for picture.
• Pixel reads from temporary picture
• ClearRect draws white rectangle
• DrawCautionIcon, DrawNoteIcon and DrawStopIcon are not supported.
• NextPage method calls NextPage event. If missing, we end page and create a new one. In the event, please call EndPage and maybe Append or import an existing PDF page from import PDF.
• If CMYK, Gray or Lab colorspace is set, the plugin will keep them for white/black colors, but switch to RGB for all other colors.

StyledTextPrinter is not supported, but you can do similar things via WriteStyledText or WriteStyledTextEx methods in DynaPDFMBS class.

If no page is open, call this may append a new page. If no document is open, we call CreateNewPDF for you with nil folderitem, so an in memory PDF get’s created.
(Read only property)
3.34. CLASS DYNAPDFMBS

3.34.900 PageGraphicsPicture as Picture


**Notes:**
For debugging it may be useful to see the temporary picture with all the draws made on the PDF page. This is not 1 to 1 what you will see in rendered PDF Page.

This can be viewed even when graphics object is cleared.
(Read only property)

3.34.901 TIFFVersion as String

Plugin Version: 19.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns version of tiff library.

**Example:**
MsgBox DynaPDFMBS.TIFFVersion

**Notes:**
DynaPDF uses customized version of tiff library, so this may not be the latest public version. But it’s patched to fix a couple of issues seen in PDF context.
(Read only property)

3.34.902 TraceFile as Folderitem

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The trace file.

**Notes:**
The plugin writes debug messages to this file so you can check what functions you called. Not all functions are supported for this. Improved with 16.2 plugin to really cover over 99% of all calls with parameters and result. Please report if you miss something.
(Read and Write property)

3.34.903 TraceHandle as Integer

Plugin Version: 10.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The internal file handle for the trace file.
Notes:
If this is not zero, the tracing option is turned on.
You can set this value indirectly by using the TraceFile property.
(Read only property)

3.34.904 ValidateTextEncodings as Boolean

Example:

```vba
dim pdf as new DynaPDFMBS

call pdf.CreateNewPDF nil
call pdf.Append

 '// enable validating
pdf.ValidateTextEncodings = true

 '// make text without text encoding
dim s as string = "Hello World"
s = DefineEncoding(s, nil) // remove encoding

call pdf.SetFont "Times", pdf.kfsItalic, 20.0, true, pdf.kcp1252
 '// now cause exception
call pdf.WriteText 50.0, 580.0, s

call pdf.EndPage
call pdf.CloseFile
```

Notes:
You should enable this for debugging to find bugs with text encodings.
(Read and Write property)

3.34.905 zlibVersion as String

Example:

`MsgBox DynaPDFMBS.zlibVersion`
Notes:
DynaPDF uses customized version of zlib library, so this may not be the latest public version.
But it's patched to fix a couple of issues seen in PDF context.
(Read only property)

3.34.906 Events

3.34.907 EnumDocFont(Font as DynaPDFFontMBS, FontInfo as DynaPDFFontInfoMBS, Type as Integer, BaseFont as string, Fontname as string, Embedded as boolean, IsFormFont as boolean, Flags as Integer, FontRef as Integer) as Integer

Notes:
Font is deprecated. FontRef is the internal reference to the font.
FontInfo is the new property to use for font details.

3.34.908 EnumHostFont(FamilyName as string, PostScriptName as string, Style as Integer) as Integer


3.34.909 EnumHostFontEx(FamilyName as string, PostScriptName as string, Style as Integer, BaseType as Integer, Embeddable as boolean, Flags as Integer, FilePath as string) as Integer


3.34.910 Error(ErrorCode as Integer, ErrorMessage as string, ErrorType as Integer) as Integer

Notes:
ErrCode is a positive error number starting at zero; it is an index into the array of error messages. ErrType is a bitmask to determine what kind of error occurred. The following constants are defined:

```cpp
class { E_WARNING = 0x02000000, E_SYNTAX_ERROR = 0x04000000, E_VALUE_ERROR = 0x08000000, E_FONT_ERROR = 0x10000000, E_FATAL_ERROR = 0x20000000, E_FILE_ERROR = 0x40000000, }
```

At time of publication only one flag is set at any one time. Future versions may be set multiple flags, e.g. E_SYNTAX_ERROR and E_WARNING. Because of this, it is recommended to mask out the error type with a bitwise and operator.
If the callback function returns a value other than zero (0), processing stops immediately.

### 3.34.911 InitProgress(ProgType as Integer, MaxCount as Integer)

Plugin Version: 8.0, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Called when a progress ist starting.
**Notes:**
The return value of the progress callback function must be 0, any other return value breaks processing.
See pt* constants for ProgType.

### 3.34.912 NextPage(g as graphics)

Plugin Version: 8.0, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The event called for graphics.nextpage method.
**Notes:**
If you don’t implement this event, the plugin will end the page and append a new page.
You can implement this event to do your own code to import e.g. an existing page as background.
3.34. CLASS DYNAPDFMBS

3.34.913 OnFontNotFound(PDFFontRef as Integer, FontName as string, Style as Integer, StdFontIndex as Integer, IsSymbolFont as boolean) as Integer

Plugin Version: 8.0, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The events called when a font is not found.

**Notes:**

Please call one of the ReplaceFont functions here and return their return code from the callback. Or return -1 if your code has an error.

See also OnFontNotFound function in DynaPDF manual.

3.34.914 OnReplaceICCProfile(Type as Integer, ColorSpace as Integer) as Integer

Plugin Version: 8.0, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The event called when an ICC profile is replaced.

See also OnReplaceICCProfile function in DynaPDF manual.

3.34.915 PageBreak(LastPosX as Double, LastPosY as Double, PageBreak as boolean) as Integer

Plugin Version: 8.0, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The event called on every pagebreak.

**Notes:**

The parameter PageBreak of the event specifies why the event was called:

- If true, a page break tag in the string was found (see WriteFText for further information).
- If false, the output rectangle was filled with text entirely.

The usage of the event is described in detail under WriteFText(). However, the following return values of the event can be used the change the text alignment:

New Alignment Left 1
New Alignment Right 2
New Alignment Center 3
New Alignment Justify 4

A return value of zero indicates that the alignment must not be changed. Negative return values break processing immediately. WriteFText() returns then with a warning.
When the event is called, the coordinate system is always bottom-up, it can be changed to top-down coordinates inside the event if necessary. The current page is still open, the page must be closed with EndPage() before a new page can be added or opened with Append() or EditPage(). To determine the current page number, call GetPageNum().

For example SetFont may fail if you try normal font family names. That is because SetFontSelMode is used with postscript names and you may want to set it to ksmPostScriptName using SetFontSelMode for SetFont to accept family names.

**3.34.916 Progress(ActivePage as Integer) as Integer**

Plugin Version: 8.0, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The progress callback. 
**Notes:** The return value of the progress callback function must be 0, any other return value breaks processing.

**3.34.917 RasterShowText(MatrixBefore as DynaPDFMatrixMBS, MatrixAfter as DynapdfMatrixMBS, TextBuffers() as DynaPDFTextRecordAMBS, Texts() as String, Width as Double, Vertical as boolean, FontRef as Integer, textScaling as Double)**

**Notes:**
This is experimental and will be replaced later with a better API in a future DynaPDF release. Works only if you have a plugin where this is enabled by us.

If you implement this event, you get an event whenever one of the rasterizers draws some text on a page. MatrixBefore tells you start position, MatrixAfter end position. TextBuffers provide raw text data. Texts array the matching unicode text. Width is length of text in points. Vertical is true for vertical text. FontRef is the internal font reference. You can query fonts with EnumDocFont before to get a list of all fonts and find it in the array. Do not use font functions in the event as that can confuse the rasterizer.

Do not use with MT methods, please.
3.34. CLASS DYNAPDFMBS

3.34.918 Constants

3.34.919 kadAnnotation = 0

Plugin Version: 13.5. **Function:** One of the destination object types.  
**Notes:** Destination is annotation handle.

3.34.920 kadCatalog = 1

Plugin Version: 13.5. **Function:** One of the destination object types.  
**Notes:** Destination is root object of document (no handle).

3.34.921 kadField = 2

Plugin Version: 13.5. **Function:** One of the destination object types.  
**Notes:** Destination is field handle.

3.34.922 kadImage = 3

Plugin Version: 13.5. **Function:** One of the destination object types.  
**Notes:** Destination is image handle.

3.34.923 kadPage = 4

Plugin Version: 13.5. **Function:** One of the destination object types.  
**Notes:** Destination is page handle.

3.34.924 kadTemplate = 5

Plugin Version: 13.5. **Function:** One of the destination object types.  
**Notes:** Destination is template handle.
3.34.925 kaeExport = 1

Plugin Version: 15.0. Function: One of the application event constants. Notes: Export

3.34.926 kaePrint = 2

Plugin Version: 15.0. Function: One of the application event constants. Notes: Print

3.34.927 kaeView = 4

Plugin Version: 15.0. Function: One of the application event constants. Notes: View

3.34.928 kaffFormFields = &h00000010

Plugin Version: 18.4. Function: One of the annotation flatten flags. Notes: If set, form fields will be flattened too.

3.34.929 kaffKeepFileAttach = &h00002000

Plugin Version: 18.5. Function: One of the annotation flatten flags. Notes: If set, file attachment annotations will be kept.

3.34.930 kaffKeepLinkAnnots = &h00001000

Plugin Version: 18.5. Function: One of the annotation flatten flags. Notes: If set, link annotations will be kept.

3.34.931 kaffKeepTextAnnots = &h00004000

Plugin Version: 18.5. Function: One of the annotation flatten flags. Notes: If set, text annotations will be kept.
3.34. CLASS DYNAPDFMBS

3.34.932 kaffMarkupAnnots = 2

Plugin Version: 8.6. **Function:** One of the annotation flatten flags. 
**Notes:** If set, markup annotations are flattened only. Link, Sound, or FileAttach annotations are no markup annotations. These types will be left intact.

3.34.933 kaffNone = 0

Plugin Version: 8.6. **Function:** One of the annotation flatten flags. 
**Notes:**
Printable annotations independent of the type.
By default all annotations which have an appearance stream and which have the print flag set are flattened.
All annotations are deleted when the function returns with the exception of file attachment annotations.
If you want to flatten the view state then set the flag affUseViewState.

3.34.934 kaffNonPDFA_1 = 4

Plugin Version: 18.4. **Function:** One of the annotation flatten flags. 
**Notes:** Flatten all annotations which are unsupported in PDF/A 1.

3.34.935 kaffNonPDFA_2 = 8

Plugin Version: 18.4. **Function:** One of the annotation flatten flags. 
**Notes:** Flatten all annotations which are unsupported in PDF/A 2/3.

3.34.936 kaffPreserveZOrder = & h00400000

Plugin Version: 18.5. **Function:** One of the annotation flatten flags. 
**Notes:** If set, preserve the z-order under any circumstances. That means visible overlapping annotations or form fields will be flattened, regardless the type.

3.34.937 kaffUseFieldViewState = & h00000020

Plugin Version: 18.4. **Function:** One of the annotation flatten flags. 
**Notes:** Meaningful only if affFormFields is set. If set, flatten the view state of form fields. Use the print state otherwise.
3.34.938 \texttt{kaffUseViewState} = 1

Plugin Version: 8.6. \textbf{Function}: One of the annotation flatten flags. 
\textbf{Notes}: If set, annotations which are visible in a viewer become flattened.

3.34.939 \texttt{kafHidden} = 2

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF annotation flags constants for SetAnnotFlags. 
\textbf{Notes}: One of the three options to hide the annotation (see dynapdf manual)

3.34.940 \texttt{kafInvisible} = 1

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF annotation flags constants for SetAnnotFlags. 
\textbf{Notes}: One of the three options to hide the annotation (see dynapdf manual)

3.34.941 \texttt{kafLocked} = \& \texttt{h00000080}

Plugin Version: 15.3. \textbf{Function}: One of the DynaPDF annotation flags constants for SetAnnotFlags. 
\textbf{Notes}: (PDF 1.4) If set, do not allow the annotation to be deleted or its properties (including position and size) to be modified by the user. However, this flag does not restrict changes to the annotation’s contents.

3.34.942 \texttt{kafLockedContents} = \& \texttt{h00000200}

Plugin Version: 15.3. \textbf{Function}: One of the DynaPDF annotation flags constants for SetAnnotFlags. 
\textbf{Notes}: (PDF 1.7) If set, do not allow the contents of the annotation to be modified by the user. This flag does not restrict deletion of the annotation or changes to other annotation properties, such as position and size.

3.34.943 \texttt{kafNone} = 0

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF annotation flags constants for SetAnnotFlags. 
\textbf{Notes}: No flags are set
3.34. CLASS DYNAPDFMBS

3.34.944  kafNoRotate = & h00000010

Plugin Version: 8.0. **Function:** One of the DynaPDF annotation flags constants for SetAnnotFlags. **Notes:** Do not rotate the annotation

3.34.945  kafNoView = & h00000020

Plugin Version: 8.0. **Function:** One of the DynaPDF annotation flags constants for SetAnnotFlags. **Notes:** One of the three options to hide the annotation (see dynapdf manual)

3.34.946  kafNoZoom = 8

Plugin Version: 8.0. **Function:** One of the DynaPDF annotation flags constants for SetAnnotFlags. **Notes:** Do not zoom the annotation

3.34.947  kafPrint = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF annotation flags constants for SetAnnotFlags. **Notes:** Annotation is printable

3.34.948  kafReadOnly = & h00000040

Plugin Version: 8.0. **Function:** One of the DynaPDF annotation flags constants for SetAnnotFlags. **Notes:** Changes are not allowed.

3.34.949  kafToggleNoView = & h00000100

Plugin Version: 15.3. **Function:** One of the DynaPDF annotation flags constants for SetAnnotFlags. **Notes:** (PDF 1.5) If set, invert the interpretation of the NoView flag for certain events.

3.34.950  kaiComment = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for annotation icons.
3.34.951  kaiHelp = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for annotation icons.

3.34.952  kaiInsert = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for annotation icons.

3.34.953  kaiKey = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for annotation icons.

3.34.954  kaiNewParagraph = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for annotation icons.

3.34.955  kaiNote = 5

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for annotation icons.

3.34.956  kaiParagraph = 6

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for annotation icons.

3.34.957  karAlternative = 4

Plugin Version: 14.3. **Function:** One of the relationship constants.  
**Notes:** This key must be used for ZUGFeRD compatible invoices

3.34.958  karAssociated = 0

Plugin Version: 13.5. **Function:** One of the relationship constants.
3.34. CLASS DYNAPDFMBS

3.34.959 karData = 1

Plugin Version: 13.5. **Function:** One of the relationship constants.

3.34.960 karSource = 2

Plugin Version: 13.5. **Function:** One of the relationship constants.

3.34.961 karSupplement = 3

Plugin Version: 13.5. **Function:** One of the relationship constants.

3.34.962 kasAccepted = 1

Plugin Version: 15.4. **Function:** One of the annotation migration state constants. **Notes:** Accepted

3.34.963 kasAuthor = 0

Plugin Version: 9.7. **Function:** One of the annotation string type constants for SetAnnotString. **Notes:** Author

3.34.964 kasCancelled = 3

Plugin Version: 15.4. **Function:** One of the annotation migration state constants. **Notes:** Cancelled

3.34.965 kasCompleted = 4

Plugin Version: 15.4. **Function:** One of the annotation migration state constants. **Notes:** Completed
3.34.966  \texttt{kasContent} = 1

Plugin Version: 9.7. \textbf{Function:} One of the annotation string type constants for \texttt{SetAnnotString}.
\textbf{Notes:} Content

3.34.967  \texttt{kasCreateReply} = 5

Plugin Version: 15.4. \textbf{Function:} One of the annotation migration state constants.
\textbf{Notes:} Don’t add a migration state, create a reply instead. Set the contents of the reply with \texttt{SetAnnotString}.

3.34.968  \texttt{kasName} = 2

Plugin Version: 9.7. \textbf{Function:} One of the annotation string type constants for \texttt{SetAnnotString}.
\textbf{Notes:} Name

3.34.969  \texttt{kasNone} = 0

Plugin Version: 15.4. \textbf{Function:} One of the annotation migration state constants.
\textbf{Notes:} Undefined

3.34.970  \texttt{kasRejected} = 2

Plugin Version: 15.4. \textbf{Function:} One of the annotation migration state constants.
\textbf{Notes:} Rejected

3.34.971  \texttt{kasRichStyle} = 4

Plugin Version: 15.3. \textbf{Function:} One of the annotation string type constants for \texttt{SetAnnotString}.
\textbf{Notes:} Default style string. ->FreeText annotations only.

3.34.972  \texttt{kasRichText} = 5

Plugin Version: 15.3. \textbf{Function:} One of the annotation string type constants for \texttt{SetAnnotString}.
\textbf{Notes:} Rich text string. ->Supported by markup annotations.
3.34. CLASS DYNAPDFMBS

3.34.973  kasSubject = 3

Plugin Version: 9.7. **Function:** One of the annotation string type constants for SetAnnotString.
**Notes:** Subject

3.34.974  kat3D = & h00000013

Plugin Version: 8.0. **Function:** One of the constants for annotation types.
**Notes:** PDF 1.6

3.34.975  kat3D_AppDefault = 0

Plugin Version: 9.8. **Function:** One of the 3D Activation Type constants.
**Notes:** Default.

3.34.976  kat3D_Explicit = 3

Plugin Version: 9.8. **Function:** One of the 3D Activation Type constants.
**Notes:** The annotation should remain inactive until explicitly activated by a script or action (default).

3.34.977  kat3D_PageOpen = 1

Plugin Version: 9.8. **Function:** One of the 3D Activation Type constants.
**Notes:** The annotation should be activated when the page is opened.

3.34.978  kat3D_PageVisible = 2

Plugin Version: 9.8. **Function:** One of the 3D Activation Type constants.
**Notes:** The annotation should be activated when the page becomes visible.

3.34.979  katCaret = 0

Plugin Version: 8.0. **Function:** One of the constants for annotation types.
3.34.980 \texttt{katCircle} = 1

Plugin Version: 8.0. \textbf{Function}: One of the constants for annotation types.

3.34.981 \texttt{katFileAttach} = \& h00000015

Plugin Version: 8.0. \textbf{Function}: One of the constants for annotation types.  
\textbf{Notes}: PDF 1.3

3.34.982 \texttt{katFileLink} = 2

Plugin Version: 8.0. \textbf{Function}: One of the constants for annotation types.

3.34.983 \texttt{katFreeText} = 3

Plugin Version: 8.0. \textbf{Function}: One of the constants for annotation types.

3.34.984 \texttt{katGoTo} = 0

Plugin Version: 8.0. \textbf{Function}: One of the constants for action types.

3.34.985 \texttt{katGoTo3DView} = \& h00000010

Plugin Version: 8.0. \textbf{Function}: One of the constants for action types.  
\textbf{Notes}: PDF 1.6

3.34.986 \texttt{katGoToE} = \& h00000011

Plugin Version: 9.3. \textbf{Function}: Like \texttt{katGoToR} but refers to an embedded PDF file.  
\textbf{Notes}: PDF 1.6 Like \texttt{atGoToR} but refers to an embedded PDF file.
3.34. **CLASS DYNAPDFMBS**

3.34.987  katGoToR = 1

Plugin Version: 8.0. **Function:** One of the constants for action types.

3.34.988  katHide = 2

Plugin Version: 8.0. **Function:** One of the constants for action types.

3.34.989  katHighlight = 4

Plugin Version: 8.0. **Function:** One of the constants for annotation types.

3.34.990  katImportData = 3

Plugin Version: 8.0. **Function:** One of the constants for action types.

3.34.991  katInk = 5

Plugin Version: 8.0. **Function:** One of the constants for annotation types.

3.34.992  katJavaScript = 4

Plugin Version: 8.0. **Function:** One of the constants for action types.

3.34.993  katLaunch = 5

Plugin Version: 8.0. **Function:** One of the constants for action types.

3.34.994  katLine = 6

Plugin Version: 8.0. **Function:** One of the constants for annotation types.
3.34.995 katMovie = 6

Plugin Version: 8.0. **Function:** One of the constants for action types.

3.34.996 katMovieAnnot = \& h00000019

Plugin Version: 11.1. **Function:** One of the constants for annotation types.  
**Notes:** PDF 1.2

3.34.997 katNamed = 7

Plugin Version: 8.0. **Function:** One of the constants for action types.

3.34.998 katPageLink = 7

Plugin Version: 8.0. **Function:** One of the constants for annotation types.

3.34.999 katPolygon = 8

Plugin Version: 8.0. **Function:** One of the constants for annotation types.

3.34.1000 katPolyLine = 9

Plugin Version: 8.0. **Function:** One of the constants for annotation types.

3.34.1001 katPopUp = \& h0000000A

Plugin Version: 8.0. **Function:** One of the constants for annotation types.

3.34.1002 katPrinterMark = \& h0000001A

Plugin Version: 11.1. **Function:** One of the constants for annotation types.  
**Notes:** PDF 1.4
3.34. CLASS DYNAPDFMBS

3.34.1003  katProjection = & h0000001B

Plugin Version: 11.1. **Function:** One of the constants for annotation types.
**Notes:** PDF 1.7 Extension Level 3

3.34.1004  katRedact = & h00000016

Plugin Version: 10.5. **Function:** One of the constants for annotation types.
**Notes:** PDF 1.7

3.34.1005  katRendition = 8

Plugin Version: 8.0. **Function:** One of the constants for action types.
**Notes:** PDF 1.5

3.34.1006  katReset = 9

Plugin Version: 8.0. **Function:** One of the constants for action types.
**Notes:** Reset Form

3.34.1007  katRichMedia = & h0000001C

Plugin Version: 11.1. **Function:** One of the constants for annotation types.
**Notes:** PDF 1.7 Extension Level 3

3.34.1008  katRichMediaExec = & h00000012

Plugin Version: 11.1. **Function:** One of the constants for action types.
**Notes:** PDF 1.7 Extension Level 3

3.34.1009  katScreen = & h0000001D

Plugin Version: 11.1. **Function:** One of the constants for annotation types.
**Notes:** PDF 1.5
3.34.1010 katSetOCGState = & h000000A

Plugin Version: 8.0. **Function:** One of the constants for action types.
**Notes:** PDF 1.5

3.34.1011 katSound = & h000000B

Plugin Version: 8.0. **Function:** One of the constants for action types.

3.34.1012 katSoundAnnot = & h0000014

Plugin Version: 8.0. **Function:** One of the constants for annotation types.
**Notes:** PDF 1.2

3.34.1013 katSquare = & h000000B

Plugin Version: 8.0. **Function:** One of the constants for annotation types.

3.34.1014 katSquiggly = & h000000C

Plugin Version: 8.0. **Function:** One of the constants for annotation types.
**Notes:** Highlight annotation

3.34.1015 katStamp = & h000000D

Plugin Version: 8.0. **Function:** One of the constants for annotation types.

3.34.1016 katStrikeOut = & h000000E

Plugin Version: 8.0. **Function:** One of the constants for annotation types.
**Notes:** Highlight annotation
3.34. CLASS DYNAPDFMBS

3.34.1017 katSubmit = & h0000000C

Plugin Version: 8.0. Function: One of the constants for action types.
Notes: Submit Form

3.34.1018 katText = & h0000000F

Plugin Version: 8.0. Function: One of the constants for annotation types.
Notes: Also used as container to store the State Model

3.34.1019 katThread = & h0000000D

Plugin Version: 8.0. Function: One of the constants for action types.

3.34.1020 katTransition = & h0000000E

Plugin Version: 8.0. Function: One of the constants for action types.

3.34.1021 katTrapNet = & h0000001E

Plugin Version: 11.1. Function: One of the constants for annotation types.
Notes: PDF 1.3

3.34.1022 katUnderline = & h00000010

Plugin Version: 8.0. Function: One of the constants for annotation types.
Notes: Highlight annotation

3.34.1023 katUnknown = & h00000018

Plugin Version: 10.5. Function: One of the constants for annotation types.
Notes: Unknown annotation type
3.34.1024 katURI = &h0000000F

Plugin Version: 8.0. **Function**: One of the constants for action types.

3.34.1025 katWatermark = &h00000017

Plugin Version: 10.5. **Function**: One of the constants for annotation types.
**Notes**: PDF 1.6

3.34.1026 katWebLink = &h00000011

Plugin Version: 8.0. **Function**: One of the constants for annotation types.
**Notes**: A Link annotation with an associated URI action

3.34.1027 katWidget = &h00000012

Plugin Version: 8.0. **Function**: One of the constants for annotation types.
**Notes**: Form Fields are handled separately

3.34.1028 kavDirectionL2R = 8

Plugin Version: 8.0. **Function**: One of the constants for parameter of the viewer preference.

3.34.1029 kavDirectionR2L = &h00000010

Plugin Version: 8.0. **Function**: One of the constants for parameter of the viewer preference.

3.34.1030 kavNone = 0

Plugin Version: 8.0. **Function**: One of the constants for parameter of the viewer preference.
3.34. CLASS DYNAPDFMBS

3.34.1031  kavNonFullScrUseNone = 1

Plugin Version: 8.0. **Function:** One of the constants for parameter of the viewer preference.

3.34.1032  kavNonFullScrUseOC = & h00000400

Plugin Version: 8.0. **Function:** One of the constants for parameter of the viewer preference.

3.34.1033  kavNonFullScrUseOutlines = 2

Plugin Version: 8.0. **Function:** One of the constants for parameter of the viewer preference.

3.34.1034  kavNonFullScrUseThumbs = 4

Plugin Version: 8.0. **Function:** One of the constants for parameter of the viewer preference.

3.34.1035  kavViewPrintArtBox = & h00000020

Plugin Version: 8.0. **Function:** One of the constants for parameter of the viewer preference.

3.34.1036  kavViewPrintBleedBox = & h00000040

Plugin Version: 8.0. **Function:** One of the constants for parameter of the viewer preference.

3.34.1037  kavViewPrintCropBox = & h00000080

Plugin Version: 8.0. **Function:** One of the constants for parameter of the viewer preference.

3.34.1038  kavViewPrintMediaBox = & h00000100

Plugin Version: 8.0. **Function:** One of the constants for parameter of the viewer preference.
3.34.1039  \texttt{kavViewPrintTrimBox} = \& \texttt{h00000200}

Plugin Version: 8.0. \textbf{Function}: One of the constants for parameter of the viewer preference.

3.34.1040  \texttt{kAV\_DIRECTION\_MASK} = \& \texttt{h0000018}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants.

3.34.1041  \texttt{kAV\_NON\_FULL\_SRC\_MASK} = 5

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants.

3.34.1042  \texttt{kAV\_VIEW\_PRINT\_MASK} = \& \texttt{h000003E0}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants.

3.34.1043  \texttt{kbcpCaptionAbove} = 3

Plugin Version: 14.0. \textbf{Function}: One of the button caption constants.  
\textbf{Notes}: Caption above the image

3.34.1044  \texttt{kbcpCaptionBelow} = 2

Plugin Version: 14.0. \textbf{Function}: One of the button caption constants.  
\textbf{Notes}: Caption below the image

3.34.1045  \texttt{kbcpCaptionLeft} = 5

Plugin Version: 14.0. \textbf{Function}: One of the button caption constants.  
\textbf{Notes}: Caption on the left of the image
3.34. **CLASS DYNAPDFMBS**

3.34.1046  **kbcpCaptionOnly = 0**

Plugin Version: 14.0. **Function**: One of the button caption constants.  
**Notes**: Default

3.34.1047  **kbcpCaptionOver = 6**

Plugin Version: 14.0. **Function**: One of the button caption constants.  
**Notes**: Caption overlaid directly on the image

3.34.1048  **kbcpCaptionRight = 4**

Plugin Version: 14.0. **Function**: One of the button caption constants.  
**Notes**: Caption on the right of the image

3.34.1049  **kbcpImageOnly = 1**

Plugin Version: 14.0. **Function**: One of the button caption constants.  
**Notes**: No caption; image only

3.34.1050  **kbeCloudy1 = 1**

Plugin Version: 15.2. **Function**: One of the annotation border effect values.  
**Notes**: Circle diameter 9 units

3.34.1051  **kbeCloudy2 = 2**

Plugin Version: 15.2. **Function**: One of the annotation border effect values.  
**Notes**: Circle diameter 17 units

3.34.1052  **kbeMacExpert = 2**

Plugin Version: 14.3. **Function**: One of the font base encoding constants.  
**Notes**: Mac Expert encoding.
3.34.1053  kbeMacRoman = 1

Plugin Version: 14.3.  Function: One of the font base encoding constants.
Notes: Mac Roman encoding.

3.34.1054  kbeSolid = 0

Plugin Version: 15.2.  Function: One of the annotation border effect values.
Notes: Default

3.34.1055  kbeStandard = 3

Plugin Version: 14.3.  Function: One of the font base encoding constants.
Notes: Standard encoding is a special encoding for Type1 fonts.

3.34.1056  kbeWinAnsi = 0

Plugin Version: 14.3.  Function: One of the font base encoding constants.
Notes: This represents the Windows code page 1252.

3.34.1057  kbmColor = 2

Plugin Version: 8.0.  Function: One of the DynaPDF constants for blend modes.
Notes: Color

3.34.1058  kbmColorBurn = 3

Plugin Version: 8.0.  Function: One of the DynaPDF constants for blend modes.
Notes: Color Burn

3.34.1059  kbmColorDodge = 4

Plugin Version: 8.0.  Function: One of the DynaPDF constants for blend modes.
Notes: Color Dodge
3.34. CLASS DYNAPDFMBS

3.34.1060  kbmDarken = 5

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.
**Notes:** Darken

3.34.1061  kbmDifference = 6

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.
**Notes:** Difference

3.34.1062  kbmExclusion = 7

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.
**Notes:** Exclusion

3.34.1063  kbmHardLight = 8

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.
**Notes:** Hard Light

3.34.1064  kbmHue = 9

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.
**Notes:** Hue

3.34.1065  kBMK_ADD_CHILDREN = & h40000000

Plugin Version: 11.2. **Function:** Special flag for bookmark values.

3.34.1066  kBMK_INSERT = & h20000000

Plugin Version: 11.2. **Function:** Special flag for bookmark values.
3.34.1067  \( \text{kbmLeftToRight} = 0 \)

Plugin Version: 8.0. **Function:** One of the constants for bidirectional mode.  
**Notes:** Apply the bidi algorithm on Unicode strings in Left to Right layout.

3.34.1068  \( \text{kbmLighten} = \& \text{h0000000A} \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.  
**Notes:** Lighten

3.34.1069  \( \text{kbmLuminosity} = \& \text{h0000000B} \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.  
**Notes:** Luminosity

3.34.1070  \( \text{kbmMultiply} = \& \text{h0000000C} \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.  
**Notes:** Multiply

3.34.1071  \( \text{kbmNone} = 2 \)

Plugin Version: 8.0. **Function:** One of the constants for bidirectional mode.  
**Notes:** Default ->do not apply the bidi algorithm.

3.34.1072  \( \text{kbmNormal} = 1 \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.  
**Notes:** Normal

3.34.1073  \( \text{kbmNotSet} = 0 \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.  
**Notes:** Non Set.
3.34. CLASS DYNAPDFMBS

3.34.1074  kbmOverlay = & h0000000D

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.
**Notes:** Overlay

3.34.1075  kbmRightToLeft = 1

Plugin Version: 8.0. **Function:** One of the constants for bidirectional mode.
**Notes:** Apply the bidi algorithm on Unicode strings in Right to Left layout.

3.34.1076  kbmSaturation = & h0000000E

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.
**Notes:** Saturation

3.34.1077  kbmsBold = 2

Plugin Version: 11.3. **Function:** One of the constants for use with DynaPDFBookmarkMBS class' text style property.
**Notes:** Bold

3.34.1078  kbmScreen = & h0000000F

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for blend modes.
**Notes:** Screen

3.34.1079  kbmsItalic = 1

Plugin Version: 11.3. **Function:** One of the constants for use with DynaPDFBookmarkMBS class' text style property.
**Notes:** Italic

3.34.1080  kbmsNormal = 0

Plugin Version: 11.3. **Function:** One of the constants for use with DynaPDFBookmarkMBS class' text style property.
CHAPTER 3. DYNAPDF

3.34.1081  kbmSoftLight = & h00000010


3.34.1082  kbsBevelled = 1

Plugin Version: 8.0. Function: One of the DynaPDF constants for border styles.

3.34.1083  kbsDashed = 4

Plugin Version: 8.0. Function: One of the DynaPDF constants for border styles.

3.34.1084  kbsDown = 1

Plugin Version: 8.0. Function: One of the DynaPDF constants for button states.

3.34.1085  kbsInset = 2

Plugin Version: 8.0. Function: One of the DynaPDF constants for border styles.

3.34.1086  kbsRollOver = 2

Plugin Version: 8.0. Function: One of the DynaPDF constants for button states.

3.34.1087  kbsSolid = 0

Plugin Version: 8.0. Function: One of the DynaPDF constants for border styles.
3.34. **CLASS DYNAPDFMBS**

3.34.1088  **kbsUnderline = 3**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for border styles.

3.34.1089  **kbsUp = 0**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for button states.

3.34.1090  **kbtAnnot = 2**

Plugin Version: 8.1. **Function:** One of the PDF base tag constants. **Notes:** An annotation must be inserted to finish the tag!

3.34.1091  **kbtArt = 0**

Plugin Version: 8.1. **Function:** One of the PDF base tag constants.

3.34.1092  **kbtArtifact = 1**

Plugin Version: 8.1. **Function:** One of the PDF base tag constants.

3.34.1093  **kbtBibEntry = 3**

Plugin Version: 8.1. **Function:** One of the PDF base tag constants. **Notes:** BibEntry ->Bibliography entry

3.34.1094  **kbtBlockQuote = 4**

Plugin Version: 8.1. **Function:** One of the PDF base tag constants.

3.34.1095  **kbtCaption = 5**

Plugin Version: 8.1. **Function:** One of the PDF base tag constants.
3.34.1096 kbtCode = 6

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1097 kbtDiv = 7

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1098 kbtDocument = 8

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1099 kbtFigure = 9

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1100 kbtForm = \& h0000000A

Plugin Version: 8.1. Function: One of the PDF base tag constants. Notes: A form field must be inserted to finish the tag!

3.34.1101 kbtFormula = \& h0000000B

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1102 kbtH = \& h0000000C

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1103 kbtH1 = \& h0000000D

Plugin Version: 8.1. Function: One of the PDF base tag constants.
3.34. CLASS DYNAPDFMBS

3.34.1104 kbtH2 = & h0000000E

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1105 kbtH3 = & h0000000F

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1106 kbtH4 = & h00000010

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1107 kbtH5 = & h00000011

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1108 kbtH6 = & h00000012

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1109 kbtIndex = & h00000013

Plugin Version: 8.1. Function: One of the PDF base tag constants.

3.34.1110 kbtLink = & h00000014

Plugin Version: 8.1. Function: One of the PDF base tag constants.
Notes: A link annotation must be inserted to finish the tag (FileLink(), PageLink(), or WebLink())!

3.34.1111 kbtList = & h00000015

Plugin Version: 8.1. Function: One of the PDF base tag constants.
Notes: L
CHAPTER 3. DYNAPDF

3.34.1112 kbtListElem = & h00000016

Plugin Version: 8.1. **Function**: One of the PDF base tag constants. **Notes**: LI, ->Correct nesting: btList/btListElem

3.34.1113 kbtListText = & h00000017

Plugin Version: 8.1. **Function**: One of the PDF base tag constants. **Notes**: LBody ->Correct nesting: btList/btListElem/btListText

3.34.1114 kbtNote = & h00000018

Plugin Version: 8.1. **Function**: One of the PDF base tag constants.

3.34.1115 kbtP = & h00000019

Plugin Version: 8.1. **Function**: One of the PDF base tag constants.

3.34.1116 kbtPart = & h0000001A

Plugin Version: 8.1. **Function**: One of the PDF base tag constants.

3.34.1117 kbtQuote = & h0000001B

Plugin Version: 8.1. **Function**: One of the PDF base tag constants.

3.34.1118 kbtReference = & h0000001C

Plugin Version: 8.1. **Function**: One of the PDF base tag constants.

3.34.1119 kbtSection = & h0000001D

Plugin Version: 8.1. **Function**: One of the PDF base tag constants. **Notes**: Sect
3.34.1120  \texttt{kbtSpan} = \& \texttt{h0000001E}

Plugin Version: 8.1. \textbf{Function}: One of the PDF base tag constants.

3.34.1121  \texttt{kbtTable} = \& \texttt{h0000001F}

Plugin Version: 8.1. \textbf{Function}: One of the PDF base tag constants.

3.34.1122  \texttt{kbtTableDataCell} = \& \texttt{h00000020}

Plugin Version: 8.1. \textbf{Function}: One of the PDF base tag constants.  
\textbf{Notes}: TD

3.34.1123  \texttt{kbtTableHeader} = \& \texttt{h00000021}

Plugin Version: 8.1. \textbf{Function}: One of the PDF base tag constants.  
\textbf{Notes}: TH

3.34.1124  \texttt{kbtTableRow} = \& \texttt{h00000022}

Plugin Version: 8.1. \textbf{Function}: One of the PDF base tag constants.  
\textbf{Notes}: TR

3.34.1125  \texttt{kbtTOC} = \& \texttt{h00000023}

Plugin Version: 8.1. \textbf{Function}: One of the PDF base tag constants.

3.34.1126  \texttt{kbtTOCEntry} = \& \texttt{h00000024}

Plugin Version: 8.1. \textbf{Function}: One of the PDF base tag constants.  
\textbf{Notes}: TOCI
3.34.1127 kcbChecked = 1

Plugin Version: 10.1. **Function:** One of the checkbox state constants.

3.34.1128 kcbfIgnoreWhiteAreas = 1

Plugin Version: 8.1. **Function:** One of the flag constants for ComputeBBox. **Notes:** Ignore white vector graphics or text.

3.34.1129 kcbfNone = 0

Plugin Version: 8.1. **Function:** One of the flag constants for ComputeBBox.

3.34.1130 kcbfParse1BitImages = 2

Plugin Version: 8.1. **Function:** One of the flag constants for ComputeBBox. **Notes:** Find the visible area in 1 bit images. This is the most important case since scanned faxes are usually 1 bit images.

3.34.1131 kcbfParseAllImages = &h0000000E

Plugin Version: 8.1. **Function:** One of the flag constants for ComputeBBox. **Notes:** Find the visible area in all images.

3.34.1132 kcbfParseColorImages = 8

Plugin Version: 8.1. **Function:** One of the flag constants for ComputeBBox. **Notes:** Find the visible area in color images. This is usually not required and slows down processing a lot.

3.34.1133 kcbfParseGrayImages = 4

Plugin Version: 8.1. **Function:** One of the flag constants for ComputeBBox. **Notes:** Find the visible area in gray images.
3.34. CLASS DYNAPDFMBS

3.34.1134 kcbUnChecked = 2

Plugin Version: 10.1. **Function**: One of the checkbox state constants.

3.34.1135 kcbUnknown = 0

Plugin Version: 10.1. **Function**: One of the checkbox state constants.

3.34.1136 kccCheck = 0

Plugin Version: 8.0. **Function**: One of the checkbox character constants.

3.34.1137 kccCircle = 1

Plugin Version: 8.0. **Function**: One of the checkbox character constants.

3.34.1138 kccCross1 = 2

Plugin Version: 8.0. **Function**: One of the checkbox character constants.

3.34.1139 kccCross2 = 3

Plugin Version: 8.0. **Function**: One of the checkbox character constants.

3.34.1140 kccCross3 = 4

Plugin Version: 8.0. **Function**: One of the checkbox character constants.

3.34.1141 kccCross4 = 5

Plugin Version: 8.0. **Function**: One of the checkbox character constants.
3.34.1142 kccDiamond = 6

Plugin Version: 8.0. **Function:** One of the checkbox character constants.

3.34.1143 kccfBW_To_Gray = 0

Plugin Version: 8.6. **Function:** One of the flag constants for color conversion.  
**Notes:** Default, RGB Black and White set with rg or RG inline operators are converted to gray

3.34.1144 kccfRGB_To_Gray = 1

Plugin Version: 8.6. **Function:** One of the flag constants for color conversion.  
**Notes:** If set, inline color operators rg and RG are converted to gray

3.34.1145 kccfToGrayAdjust = 2

Plugin Version: 12.4. **Function:** One of the flag constants for color conversion.  
**Notes:** Converts RGB and gray inline operators to gray and allows to darken or lighten the colors.

3.34.1146 kccSquare = 7

Plugin Version: 8.0. **Function:** One of the checkbox character constants.

3.34.1147 kccStar = 8

Plugin Version: 8.0. **Function:** One of the checkbox character constants.

3.34.1148 kcfCCITT3 = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for compression filter.  
**Notes:** PDF or TIFF output ->B&W CCITT Fax G3 compression ->fast but less compression ratio
3.34. CLASS DYNAPDFMBS

3.34.1149  kcfCCITT4 = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for compression filter.  
**Notes:** PDF or TIFF output -> B&W CCITT Fax G4 compression -> slower but higher compression ratio

3.34.1150  kcfConvGrayToOtsu = & h00002000

Plugin Version: 18.1. **Function:** One of the DynaPDF constants for compression filter.  
**Notes:** The Otsu filter is a special filter to produce black & white images. It is very useful if an OCR scan should be applied on the resulting 1 bit image. The flag is considered in AddRasImage(), RenderPDFFile(), and RenderPageToImage() if the pixel format was set to pxfGray.

3.34.1151  kcfDitherFloydSteinberg = & h00001000

Plugin Version: 18.1. **Function:** One of the DynaPDF constants for compression filter.  
**Notes:** Floyd Steinberg dithering. Special flags for AddRasImage(). These flags can be combined with the filters cfFlate, cfCCITT3, cfCCITT4, and LZW.

3.34.1152  kcfFlate = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for compression filter.  
**Notes:** PDF or TIFF output

3.34.1153  kcfFlateBW = 6

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for compression filter.  
**Notes:** TIFF, PNG, or BMP output -> Dithered black & white output. The resulting image will be compressed with Flate or left uncompressed if the output image format is a bitmap. If you want to use CCITT Fax 4 compression (TIFF only) set the flag icUseCCITT4 in the AddImage() function call. Note that this filter is not supported for PDF creation!

3.34.1154  kcfJBIG2 = 8

Plugin Version: 18.4. **Function:** One of the DynaPDF constants for compression filter.  
**Notes:** JBIG2 for PDF output only.
3.34.1155 \( \text{kcfJP2K} = 7 \)

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for compression filter.
**Notes**: PDF or JPEG2000 output

3.34.1156 \( \text{kcfJPEG} = 1 \)

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for compression filter.
**Notes**: PDF, JPEG, or TIFF output

3.34.1157 \( \text{kcfLZW} = 4 \)

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for compression filter.
**Notes**: TIFF or GIF output ->Very fast but less compression ratios than flate

3.34.1158 \( \text{kcfLZWBW} = 5 \)

Plugin Version: 13.1. **Function**: One of the DynaPDF constants for compression filter.
**Notes**: TIFF output ->Very fast but less compression ratios than flate. For black and white.

3.34.1159 \( \text{kcisCompressedSize} = 8 \)

Plugin Version: 11.0. **Function**: One of the DynaPDF constants for user defined columns is stored in collection items.
**Notes**: The compressed file size.
Data value comes from the embedded file.

3.34.1160 \( \text{kcisCreationDate} = 0 \)

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for user defined columns is stored in collection items.
**Notes**: The creation date of this file.
Data value comes from the embedded file.
3.34. CLASS DYNAPDFMBS

3.34.1161  kcisCustomDate = 5

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for user defined columns is stored in collection items.
**Notes:** User defined date.

3.34.1162  kcisCustomNumber = 6

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for user defined columns is stored in collection items.
**Notes:** User defined number.

3.34.1163  kcisCustomString = 7

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for user defined columns is stored in collection items.
**Notes:** User defined string.

3.34.1164  kcisDescription = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for user defined columns is stored in collection items.
**Notes:**
The description of the file.
Data value comes from the embedded file.

3.34.1165  kcisFileName = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for user defined columns is stored in collection items.
**Notes:**
The file name.
Data value comes from the embedded file.
### 3.34.1166  kcisModDate = 3

**Plugin Version:** 8.0. **Function:** One of the DynaPDF constants for user defined columns is stored in collection items.  
**Notes:**  
The modification date.  
Data value comes from the embedded file.

### 3.34.1167  kcisSize = 4

**Plugin Version:** 8.0. **Function:** One of the DynaPDF constants for user defined columns is stored in collection items.  
**Notes:**  
The file size.  
Data value comes from the embedded file.

### 3.34.1168  kcivCustom = 4

**Plugin Version:** 11.1. **Function:** One of the DynaPDF constants for specifying how a file collection is shown.  
**Notes:** Custom: PDF 1.7 Extension Level 3, the collection view is presented by a SWF file.

### 3.34.1169  kcivDetails = 1

**Plugin Version:** 8.0. **Function:** One of the DynaPDF constants for specifying how a file collection is shown.  
**Notes:** Details.

### 3.34.1170  kcivHidden = 3

**Plugin Version:** 8.0. **Function:** One of the DynaPDF constants for specifying how a file collection is shown.  
**Notes:** Hidden.

### 3.34.1171  kcivNotSet = 0

**Plugin Version:** 8.0. **Function:** One of the DynaPDF constants for specifying how a file collection is shown.  
**Notes:** Not set.
3.34.1172  \texttt{kcvTile} = 2

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for specifying how a file collection is shown. 
\textbf{Notes}: Title.

3.34.1173  \texttt{kclDefault} = 1

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for compression level.

3.34.1174  \texttt{kclFastest} = 2

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for compression level.

3.34.1175  \texttt{kclMax} = 3

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for compression level.

3.34.1176  \texttt{kclNone} = 0

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for compression level.

3.34.1177  \texttt{kcmEvenOdd} = 0

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for clipping mode.

3.34.1178  \texttt{kcmFill} = 0

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for color modes.
3.34.1179  \textit{kcmFillStroke} = 2

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for color modes.

3.34.1180  \textit{kcmStroke} = 1

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for color modes.

3.34.1181  \textit{kcmWinding} = 1

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for clipping mode.

3.34.1182  \textit{kcoAllowDeviceSpaces} = \& h40000000

Plugin Version: 16.1. \textbf{Function}: One of the check flag constants for CheckConformance.  
\textbf{Notes}: If set, device color spaces will not be replaced with ICC based color spaces. This flag is meaningful for normalization only.

3.34.1183  \textit{kcoApplyExportState} = \& h00020000

Plugin Version: 16.0. \textbf{Function}: One of the check flag constants for CheckConformance.  
\textbf{Notes}: Meaningful only if \textit{coDeleteAppEvents} is set. Apply the export state.

3.34.1184  \textit{kcoApplyPrintState} = \& h00040000

Plugin Version: 16.0. \textbf{Function}: One of the check flag constants for CheckConformance.  
\textbf{Notes}: Meaningful only if \textit{coDeleteAppEvents} is set. Apply the print state.

3.34.1185  \textit{kcoCheckImages} = \& h00800000

Plugin Version: 18.2. \textbf{Function}: One of the check flag constants for CheckConformance.  
\textbf{Notes}: Images will be decompressed to identify damages.
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### 3.34.1186 kcoDefault = & h0010FFFF

*Plugin Version: 8.0.*  
**Function:** One of the check flag constants for CheckConformance. 
**Notes:** Default flags

---

### 3.34.1187 kcoDeleteActionsAndScripts = 8

*Plugin Version: 8.0.*  
**Function:** One of the check flag constants for CheckConformance. 
**Notes:** Delete actions and scripts. Imported files only.

---

### 3.34.1188 kcoDeleteAlternateImages = & h00000800

*Plugin Version: 15.0.*  
**Function:** One of the check flag constants for CheckConformance. 
**Notes:** Delete alternate images. 
Alternate images are seldom used and prohibited in PDF/A.

---

### 3.34.1189 kcoDeleteAppEvents = & h00008000

*Plugin Version: 16.0.*  
**Function:** One of the check flag constants for CheckConformance. 
**Notes:** PDF/A 2 and 3. Application events are prohibited in PDF/A. The view state will be applied.

---

### 3.34.1190 kcoDeleteDamagedImages = & h01000000

*Plugin Version: 18.2.*  
**Function:** One of the check flag constants for CheckConformance. 
**Notes:** Meaningful only if coCheckImages is set.

---

### 3.34.1191 kcoDeleteEmbeddedFiles = & h00000080

*Plugin Version: 8.0.*  
**Function:** One of the check flag constants for CheckConformance. 
**Notes:** Delete embedded files. Imported files only.
3.34.1192  kcoDeleteHalftones = & h00100000

Plugin Version: 16.0. **Function:** One of the check flag constants for CheckConformance. 
**Notes:** Delete halftone screens.

3.34.1193  kcoDeleteInvRenderingIntent = & h00000010

Plugin Version: 8.0. **Function:** One of the check flag constants for CheckConformance. 
**Notes:** Delete rendering intent. Imported files only

3.34.1194  kcoDeleteMultiMediaContents = 4

Plugin Version: 8.0. **Function:** One of the check flag constants for CheckConformance. 
**Notes:** Delete multimedia content. Imported files only.

3.34.1195  kcoDeleteOPIComments = & h00000100

Plugin Version: 8.0. **Function:** One of the check flag constants for CheckConformance. 
**Notes:** Delete OPI comments. Imported files only

3.34.1196  kcoDeletePostscript = & h00000400

Plugin Version: 15.0. **Function:** One of the check flag constants for CheckConformance. 
**Notes:** Delete Postscript XObjects.

3.34.1197  kcoDeletePresentation = & h00400000

Plugin Version: 16.1. **Function:** One of the check flag constants for CheckConformance. 
**Notes:** Presentations are prohibited in PDF/A 2 and 3.

3.34.1198  kcoDeleteReplies = & h00080000

Plugin Version: 16.0. **Function:** One of the check flag constants for CheckConformance. 
**Notes:** Delete annotation replies. If absent, replies will be converted to regular text annotations.
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3.34.1199  kcoDeleteSignatures = & h00000200

Plugin Version: 8.0. **Function:** One of the check flag constants for CheckConformance. **Notes:** Delete signatures. Imported files only

3.34.1200  kcoDeleteTransferFuncs = 2

Plugin Version: 8.0. **Function:** One of the check flag constants for CheckConformance. **Notes:** Delete transfer functions. Imported files only

3.34.1201  kcoEmbedSubsets = 1

Plugin Version: 8.0. **Function:** One of the check flag constants for CheckConformance. **Notes:** Already done.

3.34.1202  kco FlattenFormFields = & h00000020

Plugin Version: 8.0. **Function:** One of the check flag constants for CheckConformance. **Notes:** Flatten form fields.

3.34.1203  kcoFlattenLayers = & h00200000

Plugin Version: 16.1. **Function:** One of the check flag constants for CheckConformance. **Notes:** PDF/A 1b only. Flatten layers if any.

3.34.1204  kcoFlushPages = & h20000000

Plugin Version: 16.0. **Function:** One of the check flag constants for CheckConformance. **Notes:** Write converted pages directly into the output file to reduce the memory usage.

3.34.1205  kcoMakeLayerVisible = & h00004000

Plugin Version: 16.4. **Function:** One of the check flag constants for CheckConformance. **Notes:** PDF/A 2 and 3 prohibit invisible layers. Layers can also be flattened if this is no option.
3.34.1206  kcoNoFontEmbedding = \& h10000000

Plugin Version: 7.7. **Function:** One of the check flag constants for CheckConformance.

**Notes:**
Normalization only.
If this flag is set not PDF/A file will be produced!

3.34.1207  kcoReComprJPEG2000Images = \& h00001000

Plugin Version: 15.0. **Function:** One of the check flag constants for CheckConformance.

**Notes:**
Recompresses JPEG 2000 as flate images.
Recompression results in lower quality and usually in larger images. It is often better to keep such files as is.

3.34.1208  kcoRepairDamagedImages = \& h02000000

Plugin Version: 18.2. **Function:** One of the check flag constants for CheckConformance.

**Notes:** Meaningful only if coCheckImages is set. If set, try to recompress a damaged image. The new image is maybe incomplete but error free. This flag can be combined with coDeleteDamagedImages to delete the image if recompression fails.

3.34.1209  kcoReplaceV4ICCProfiles = \& h00000040

Plugin Version: 8.0. **Function:** One of the check flag constants for CheckConformance.

**Notes:** Replace V4 ICC Profiles. Imported files only

3.34.1210  kcoReplCCITTFaxWithFlate = \& h00010000

Plugin Version: 10.3. **Function:** One of the check flag constants for CheckConformance.

**Notes:** Replace CCITT Fax compression with Flate.

3.34.1211  kcoResolveOverprint = \& h00002000

Plugin Version: 8.0. **Function:** One of the check flag constants for CheckConformance.

**Notes:** PDF/A 2 and 3. Set the overprint mode to 0 if the overprint mode = 1 and if overprinting for fill or stroke is true and if a ICCBased CMYK color space is used. Note that DeviceCMYK is treated as ICCBased
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color space due to implicit color conversion rules.

3.34.1212 kcp1250 = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1213 kcp1251 = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1214 kcp1252 = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1215 kcp1253 = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1216 kcp1254 = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1217 kcp1255 = 5

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1218 kcp1256 = 6

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.
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3.34.1219  kcp1257 = 7

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for 8 bit code pages.

3.34.1220  kcp1258 = 8

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for 8 bit code pages.

3.34.1221  kcp437 = \&h00000017

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for 8 bit code pages.

3.34.1222  kcp737 = \&h00000018

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for 8 bit code pages.

3.34.1223  kcp775 = \&h00000019

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for 8 bit code pages.

3.34.1224  kcp850 = \&h0000001A

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for 8 bit code pages.

3.34.1225  kcp852 = \&h0000001B

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for 8 bit code pages.

3.34.1226  kcp855 = \&h0000001C

Plugin Version: 8.0. **Function**: One of the DynaPDF constants for 8 bit code pages.
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3.34.1227  \texttt{kcp857 = \& h0000001D}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for 8 bit code pages.

3.34.1228  \texttt{kcp860 = \& h0000001E}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for 8 bit code pages.

3.34.1229  \texttt{kcp861 = \& h0000001F}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for 8 bit code pages.

3.34.1230  \texttt{kcp862 = \& h00000020}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for 8 bit code pages.

3.34.1231  \texttt{kcp863 = \& h00000021}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for 8 bit code pages.

3.34.1232  \texttt{kcp864 = \& h00000022}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for 8 bit code pages.

3.34.1233  \texttt{kcp865 = \& h00000023}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for 8 bit code pages.

3.34.1234  \texttt{kcp866 = \& h00000024}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for 8 bit code pages.
3.34.1235  kcp869 = & h00000025  
Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1236  kcp874 = & h00000026  
Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1237  kcp8859_10 = & h00000011  
Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1238  kcp8859_13 = & h00000012  
Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1239  kcp8859_14 = & h00000013  
Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1240  kcp8859_15 = & h00000014  
Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1241  kcp8859_16 = & h00000015  
Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1242  kcp8859_2 = 9  
Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.
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3.34.1243 kcp8859_3 = &h0000000A

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1244 kcp8859_4 = &h0000000B

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1245 kcp8859_5 = &h0000000C

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1246 kcp8859_6 = &h0000000D

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1247 kcp8859_7 = &h0000000E

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1248 kcp8859_8 = &h0000000F

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1249 kcp8859_9 = &h000000010

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for 8 bit code pages.

3.34.1250 kcpAdobeStd = &h00000003F

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for code pages.  
**Notes:** Internal -> not usable
3.34.1251  kcpBig5 = & h0000003A

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for code pages.
**Notes:** Big5 plus HKSCS extension.

3.34.1252  kcpCJK_2022_CN_Uni = & h0000002F

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** ISO-2022-CN-EXT (GB-2312 plus ISO-11643 Planes 1-7).

3.34.1253  kcpCJK_2022_JP_Uni = & h00000030

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** ISO-2022-JP.

3.34.1254  kcpCJK_2022_KR_Uni = & h00000031

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** ISO-2022-KR.

3.34.1255  kcpCJK_646_CN_Uni = & h00000032

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** ISO-646-CN (GB-1988-80).

3.34.1256  kcpCJK_646_JP_Uni = & h00000033

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
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3.34.1257  kcpCJK_932_Uni = \& h00000035

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** Microsoft extended version of SHIFT_JIS.

3.34.1258  kcpCJK_949_Uni = \& h00000036

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** EUC-KR extended with UHC (Unified Hangul Codes).

3.34.1259  kcpCJK_950_Uni = \& h00000037

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** Microsoft extended version of Big5.

3.34.1260  kcpCJK_Big5_Uni = \& h00000028

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** Big5 plus HKSCS extension.

3.34.1261  kcpCJK_EUC_JP_Uni = \& h00000029

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** EUC-JP.

3.34.1262  kcpCJK_EUC_KR_Uni = \& h0000002A

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** EUC-KR.
3.34.1263 kcpCJK_EUC_TW_Uni = & h0000002B

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** CNS-11643-1992 (Planes 1-15).

3.34.1264 kcpCJK_GB12345_Uni = & h0000002D

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** GB-12345-1990 (Traditional Chinese form of GB-2312).

3.34.1265 kcpCJK_GBK_Uni = & h0000002C

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** GBK is the Microsoft code page 936 (GB2312, EUC-CN plus GBK extension).

3.34.1266 kcpCJK_HZ_Uni = & h0000002E

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** Mixed ASCII / GB-2312 encoding

3.34.1267 kcpCJK_IR_165_Uni = & h00000034

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** ISO-IR-165 (extended version of GB-2312).

3.34.1268 kcpCJK_JOHAB_Uni = & h00000038

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for Chinese, Japanese, and Korean codepages.
**Notes:** JOHAB.
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3.34.1269  \textit{kcpDingbats} = \& h00000044

Plugin Version: 10.1. \textbf{Function}: One of the code page constants.  
\textbf{Notes}: Internal -> Special encoding for ZapfDingbats

3.34.1270  \textit{kcpExtCMap} = \& h00000043

Plugin Version: 10.1. \textbf{Function}: One of the code page constants.  
\textbf{Notes}: Internal -> not usable. This code page is set when a font was loaded with an external cmap.

3.34.1271  \textit{kcpGB2312} = \& h0000003B

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for code pages.  
\textbf{Notes}: GB2312 charset plus GBK and cp936 extension.

3.34.1272  \textit{kcpGlyphIndexes} = \& h00000041

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for code pages.  
\textbf{Notes}: Internal -> not usable

3.34.1273  \textit{kcpInline} = 0

\textbf{Notes}: The caption is centered inside the line.

3.34.1274  \textit{kcpJohab} = \& h0000003D

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for code pages.  
\textbf{Notes}: The Johab text encoding.

3.34.1275  \textit{kcpMacRoman} = \& h0000003E

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for code pages.  
\textbf{Notes}: The Mac Roman text encoding.
3.34.1276  \texttt{kcpRoman8 = \& h00000046}

Plugin Version: 12.5. \textbf{Function}: One of the code page constants.  
\textbf{Notes}: This is a standard PCL 5/6 code page.

3.34.1277  \texttt{kcpShiftJIS = \& h00000039}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for code pages.  
\textbf{Notes}: ShiftJIS charset plus code page 932 extension.

3.34.1278  \texttt{kcpSymbol = \& h00000016}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for 8 bit code pages.

3.34.1279  \texttt{kcpTop = 1}

\textbf{Notes}: The caption is drawn on top of the line.

3.34.1280  \texttt{kcpUnicode = \& h00000027}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for unicode codepage.

3.34.1281  \texttt{kcpWansung = \& h0000003C}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for code pages.  
\textbf{Notes}: The Wansung encoding.

3.34.1282  \texttt{kcsButtCap = 0}

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for line cap styles.  
\textbf{Notes}: Butt cap.
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3.34.1283 kcsDeviceCMYK = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF colorspace constants.

3.34.1284 kcsDeviceGray = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF colorspace constants.

3.34.1285 kcsDeviceRGB = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF colorspace constants.

3.34.1286 kcsRoundCap = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for line cap styles. **Notes:** Round cap.

3.34.1287 kcsSquareCap = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for line cap styles. **Notes:** Square cap.

3.34.1288 kctNormalize = 1

Plugin Version: 10.3. **Function:** One of the conformance type constants. **Notes:** Check the file for errors, rebuild all embedded fonts plus options.

3.34.1289 kctPDF_A_1b_2005 = 0

Plugin Version: 8.0. **Function:** One of the conformance type constants. **Notes:** Convert the file to PDF/A if possible.
3.34.1290  kctPDFA__2b = 2

Plugin Version: 14.4. **Function:** One of the conformance type constants. **Notes:** Convert the file to PDF/A 2b if possible

3.34.1291  kctPDFA__3b = 3

Plugin Version: 14.4. **Function:** One of the conformance type constants. **Notes:** Convert the file to PDF/A 3b if possible

3.34.1292  kctZUGFeRD_Basic = 4

Plugin Version: 16.3. **Function:** One of the conformance type constants. **Notes:**

Set the ZUGFeRD conformance level to Basic
This constant convert the file to PDF/A 3b and set the wished ZUGFeRD conformance level in the XMP metadata. CheckConformance() does not validate the XML invoice but it checks whether it is present. Setting the correct ZUGFeRD conformance level is very important since this value defines which fields must be present in the XML invoice.

3.34.1293  kctZUGFeRD_Comfort = 5

Plugin Version: 16.3. **Function:** One of the conformance type constants. **Notes:**

Set the ZUGFeRD conformance level to Comfort
This constant convert the file to PDF/A 3b and set the wished ZUGFeRD conformance level in the XMP metadata. CheckConformance() does not validate the XML invoice but it checks whether it is present. Setting the correct ZUGFeRD conformance level is very important since this value defines which fields must be present in the XML invoice.

3.34.1294  kctZUGFeRD_Extended = 6

Plugin Version: 16.3. **Function:** One of the conformance type constants. **Notes:**

Set the ZUGFeRD conformance level to Extended
This constant convert the file to PDF/A 3b and set the wished ZUGFeRD conformance level in the XMP metadata. CheckConformance() does not validate the XML invoice but it checks whether it is present. Setting the correct ZUGFeRD conformance level is very important since this value defines which fields must be
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present in the XML invoice.

3.34.1295 kddClockwise = 1

Plugin Version: 8.0. **Function:** One of the constants for draw direction.  
**Notes:** Clockwise.

3.34.1296 kddCounterClockwise = 0

Plugin Version: 8.0. **Function:** One of the constants for draw direction.  
**Notes:** Counter Clockwise.

3.34.1297 kDEFAULT_LIST_CHAR = \& h0000009F

Plugin Version: 8.0. **Function:** Default character index of the font Wingdings-Regular to create a list (see WriteFText())

3.34.1298 kdf12HR_MM = \& h0000000F

Plugin Version: 8.0. **Function:** One of the date/time constants.  
**Notes:** e.g. 2pm:59

3.34.1299 kdf12HR_MM_SS = \& h00000011

Plugin Version: 8.0. **Function:** One of the date/time constants.  
**Notes:** e.g. 2pm:59:59

3.34.1300 kdf24HR_MM = \& h0000000E

Plugin Version: 8.0. **Function:** One of the date/time constants.  
**Notes:** e.g. 14:59
3.34.1301  kdf24HR_MM_SS = & h00000010

Plugin Version: 8.0. **Function:** One of the date/time constants.
**Notes:** e.g. 14:59:59

3.34.1302  kdfASCII85Decode = 1

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1303  kdfASCIIHexDecode = 2

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1304  kdfCCITTFaxDecode = 3

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1305  kdfDCTDecode = 4

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1306  kdfDD_MMM_YY = 6

Plugin Version: 8.0. **Function:** One of the date/time constants.
**Notes:** e.g. 24 Dec 99

3.34.1307  kdfD_MMM = 4

Plugin Version: 8.0. **Function:** One of the date/time constants.
**Notes:** e.g. 24 Dec
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3.34.1308  kdfD_MMM_YY = 5

Plugin Version: 8.0. **Function:** One of the date/time constants.  
**Notes:** e.g. 24 Dec 99

3.34.1309  kdfFlateDecode = 5

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1310  kdfJBIG2Decode = 6

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1311  kdfJPXDecode = 7

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1312  kdfLZWDecode = 8

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1313  kdfMMMM_D_YYYY = & h0000000B

Plugin Version: 8.0. **Function:** One of the date/time constants.  
**Notes:** e.g. December 24 1999

3.34.1314  kdfMMMM_YY = 9

Plugin Version: 8.0. **Function:** One of the date/time constants.  
**Notes:** e.g. December 99
3.34.1315  kdfMMM_D_YYYY = &h0000000A

Plugin Version: 8.0. **Function**: One of the date/time constants.  
**Notes**: e.g. Dec 24 1999

3.34.1316  kdfMMM_YY = 8

Plugin Version: 8.0. **Function**: One of the date/time constants.  
**Notes**: e.g. Dec 99

3.34.1317  kdfMM_D = 0

Plugin Version: 8.0. **Function**: One of the date/time constants.  
**Notes**: e.g. 12/24

3.34.1318  kdfMM_DD_YY = 2

Plugin Version: 8.0. **Function**: One of the date/time constants.  
**Notes**: e.g. 12/24/99

3.34.1319  kdfMM_YY = 3

Plugin Version: 8.0. **Function**: One of the date/time constants.  
**Notes**: e.g. 12 99

3.34.1320  kdfM_D_YY = 1

Plugin Version: 8.0. **Function**: One of the date/time constants.  
**Notes**: e.g. 12 24 99

3.34.1321  kdfM_D_YY_HH_MM = &h0000000D

Plugin Version: 8.0. **Function**: One of the date/time constants.  
**Notes**: e.g. 12/24/99 14:59
3.34. CLASS DYNAPDFMBS

3.34.1322  kdfM_D YY_H MM TT = & h0000000C

Plugin Version: 8.0. **Function:** One of the date/time constants.
**Notes:** e.g. 12/24/99 14:59:59

3.34.1323  kdfNone = 0

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1324  kdfRunLengthDecode = 9

Plugin Version: 8.0. **Function:** One of the Decode Filter constants.

3.34.1325  kdfYY MM DD = 7

Plugin Version: 8.0. **Function:** One of the date/time constants.
**Notes:** e.g. 99.12.24

3.34.1326  kdi3D_AppDefault = 0

Plugin Version: 9.8. **Function:** One of the De-instantiation type constants for Set3DAnnotProps.

3.34.1327  kdi3D_Instantiated = 2

Plugin Version: 9.8. **Function:** One of the De-instantiation type constants for Set3DAnnotProps.
**Notes:** The annotation will be instantiated but animations are disabled.

3.34.1328  kdi3D_Live = 3

Plugin Version: 9.8. **Function:** One of the De-instantiation type constants for Set3DAnnotProps.
**Notes:** The annotation will be instantiated and animations are enabled (default).
3.34.1329  kdi3D_UnInstantiated = 1

Plugin Version: 9.8. **Function:** One of the De-instantiation type constants for Set3DAnnotProps.
**Notes:** The annotation will be uninstantiated (default)

3.34.1330  kdiAuthor = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for document information.
**Notes:** Author Name

3.34.1331  kdiCompany = 6

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for document information.
**Notes:** Company Name

3.34.1332  kdiCreationDate = & h0000000A

Plugin Version: 11.1. **Function:** One of the DynaPDF constants for document information.
**Notes:** Creation Date

3.34.1333  kdiCreator = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for document information.
**Notes:** Creator Name

3.34.1334  kdiCustom = 8

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for document information.
**Notes:** User defined key

3.34.1335  kdiKeywords = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for document information.
**Notes:** Keywords
3.34. CLASS DYNAPDFMBS

3.34.1336  kdiModDate = & h0000000B

Plugin Version: 11.1. **Function:** One of the DynaPDF constants for document information.  
**Notes:** Modification date.

3.34.1337  kdiPDFX_Conf = 9

Plugin Version: 11.1. **Function:** One of the DynaPDF constants for document information.

3.34.1338  kdiPDFX_Ver = 7

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for document information.  
**Notes:** GetInDocInfo() only ->The PDF/X version is set by SetPDFVersion()!

3.34.1339  kdiProducer = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for document information.  
**Example:**
```
    dim pdf as DynaPDFMBS  // your dynapdf instance
    call pdf.SetDocInfo pdf.kdiProducer, "Xojo test application"
```

**Notes:** Producer Name

3.34.1340  kdiSubject = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for document information.  
**Example:**
```
    dim pdf as DynaPDFMBS  // your dynapdf instance
    call pdf.SetDocInfo pdf.kdiSubject, "My first Xojo output"
```

**Notes:** Subject line
3.34.1341  kdiTitle = 5

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for document information.

**Example:**

```pascal
dim pdf as DynaPDFMBS // your dynapdf instance
call pdf.SetDocInfo pdf.kdiTitle, "My first Xojo output"
```

**Notes:** Title tag.

3.34.1342  kdmClipping = 7

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for draw modes.

3.34.1343  kdmFillClip = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for draw modes.

3.34.1344  kdmFillStroke = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for draw modes.

3.34.1345  kdmFillStrokeClip = 6

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for draw modes.

3.34.1346  kdmInvisible = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for draw modes.

3.34.1347  kdmNormal = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for draw modes.
3.34. CLASS DYNAPDFMBS

3.34.1348  kdmStroke = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for draw modes.

3.34.1349  kdmStrokeClip = 5

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for draw modes.

3.34.1350  kdpmFlipLongEdge = 3

Plugin Version: 8.7. **Function:** One of the duplex mode constants for the print settings.  
**Notes:** flip long edge

3.34.1351  kdpmFlipShortEdge = 2

Plugin Version: 8.7. **Function:** One of the duplex mode constants for the print settings.  
**Notes:** flip short edge

3.34.1352  kdpmNone = 0

Plugin Version: 8.7. **Function:** One of the duplex mode constants for the print settings.  
**Notes:** Use the default value of the viewer

3.34.1353  kdpmSimplex = 1

Plugin Version: 8.7. **Function:** One of the duplex mode constants for the print settings.  
**Notes:** Simplex

3.34.1354  kDRV_FLOAT_PRECISION = 5

Plugin Version: 8.6. **Function:** The precision used for float values.
3.34.1355  \texttt{kdsCommaDot} = 0

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for thousand and decimal separators.
\textbf{Notes}: 1,234.56

3.34.1356  \texttt{kdsDotComma} = 2

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for thousand and decimal separators.
\textbf{Notes}: 1.234,56

3.34.1357  \texttt{kdsNoneComma} = 3

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for thousand and decimal separators.
\textbf{Notes}: 1234,56

3.34.1358  \texttt{kdsNoneDot} = 1

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for thousand and decimal separators.
\textbf{Notes}: 1234.56

3.34.1359  \texttt{kdt3D\_AppDefault} = 0

Plugin Version: 9.8. \textbf{Function}: One of the 3D DeActivateType constants.

3.34.1360  \texttt{kdt3D\_Explicit} = 3

Plugin Version: 9.8. \textbf{Function}: One of the 3D DeActivateType constants.
\textbf{Notes}: The annotation should remain active until explicitly deactivated by a script or action.

3.34.1361  \texttt{kdt3D\_PageClosed} = 1

Plugin Version: 9.8. \textbf{Function}: One of the 3D DeActivateType constants.
\textbf{Notes}: The annotation should be deactivated as soon as the page is closed.
3.34.1362 kdt3D_PageInvisible = 2

Plugin Version: 9.8. **Function:** One of the 3D DeActivateType constants.  
**Notes:** The annotation should be deactivated as soon as the page becomes invisible (default).

3.34.1363 kdtCreationDate = 0

Plugin Version: 13.5. **Function:** One of the date types.  
**Notes:** Creation Date, Markup annotations only.

3.34.1364 kdtFit = 1

Plugin Version: 8.0. **Function:** One of the destination type constants for a link.  
**Notes:** no parameters

3.34.1365 kdtFitB = 5

Plugin Version: 8.0. **Function:** One of the destination type constants for a link.  
**Notes:** no parameters

3.34.1366 kdtFitBH_Top = 6

Plugin Version: 8.0. **Function:** One of the destination type constants for a link.  
**Notes:** one parameter (a)

3.34.1367 kdtFitBV_Left = 7

Plugin Version: 8.0. **Function:** One of the destination type constants for a link.  
**Notes:** one parameter (a)

3.34.1368 kdtFitH_Top = 2

Plugin Version: 8.0. **Function:** One of the destination type constants for a link.  
**Notes:** one parameter
3.34.1369  kdtFitV_Left = 3

Plugin Version: 8.0. **Function:** One of the destination type constants for a link.
**Notes:** one parameter (a)

3.34.1370  kdtFit_Rect = 4

Plugin Version: 8.0. **Function:** One of the destination type constants for a link.
**Notes:** four parameters (a, b, c, d) -> (left, bottom, right, top)

3.34.1371  kdtModDate = 1

Plugin Version: 13.5. **Function:** One of the date types.
**Notes:** Modification Date, Annotations or form fields.

3.34.1372  kdtXY_Zoom = 0

Plugin Version: 8.0. **Function:** One of the destination type constants for a link.
**Notes:** Three parameters (a, b, c) -> (X, Y, Zoom)

3.34.1373  kDYNAPDF_REVISION = "$ Rev: 276 $"

Plugin Version: 8.0. **Function:** The version of the dynapdf library.

3.34.1374  kDYNAPDF_VERSIONSTRING = "4.0.27.80"

Plugin Version: 8.0. **Function:** The version of the dynapdf library.

3.34.1375  keflChild = 0

Plugin Version: 13.2. **Function:** One of the possible values for embedded file location.
**Notes:** The file is an embedded file in the current document.
3.34. CLASS DYNAPDFMBS

3.34.1376  kefChildAnnot = 1

Plugin Version: 13.2. **Function:** One of the possible values for embedded file location. **Notes:** The file is located in a file attachment annotation in the current document.

3.34.1377  kefExternal = 2

Plugin Version: 13.2. **Function:** One of the possible values for embedded file location. **Notes:** The file is an embedded file in an external document.

3.34.1378  kefExternalAnnot = 3

Plugin Version: 13.2. **Function:** One of the possible values for embedded file location. **Notes:** The file is located in a file attachment annotation in an external document.

3.34.1379  kefParent = 4

Plugin Version: 13.2. **Function:** One of the possible values for embedded file location. **Notes:** The file is located in the parent document.

3.34.1380  kefParentAnnot = 5

Plugin Version: 13.2. **Function:** One of the possible values for embedded file location. **Notes:** The file is located in a file attachment annotation in the parent document.

3.34.1381  kefpAnsiPath = 0

Plugin Version: 11.3. **Function:** One of the flags for the EnumHostFontEx event. **Notes:** Code page 1252 on Windows, UTF-8 otherwise. The font has embedding rights.

3.34.1382  kefpEditable = 4

Plugin Version: 14.0. **Function:** One of the flags for the EnumHostFontEx event. **Notes:** If set, the font has editing rights (important for form fields).
3.34.1383  kefpEmbeddable = 2

Plugin Version: 11.3.  **Function:** One of the flags for the EnumHostFontEx event.  
**Notes:** The font has embedding rights.

3.34.1384  kefpUnicodePath = 1

Plugin Version: 11.3.  **Function:** One of the flags for the EnumHostFontEx event.  
**Notes:** FilePath is in Unicode format. Make a typecast to (UI16*) in this case. The plugin handles that for you.

3.34.1385  kemAllErrors = & h0000FFFF

Plugin Version: 8.0.  **Function:** One of the error mode constants.  
**Notes:** All errors

3.34.1386  kemFileError = 8

Plugin Version: 8.0.  **Function:** One of the error mode constants.  
**Notes:** File Error

3.34.1387  kemFontError = & h00000010

Plugin Version: 8.0.  **Function:** One of the error mode constants.  
**Notes:** Font Error

3.34.1388  kemIgnoreAll = 0

Plugin Version: 8.0.  **Function:** One of the error mode constants.  
**Notes:** Ignore All

3.34.1389  kemNoFuncNames = & h10000000

Plugin Version: 8.0.  **Function:** One of the error mode constants.  
**Notes:** Do not print function names in error messages
3.34. **CLASS DYNAPDFMBS**

### 3.34.1390 kemSyntaxError = 1

Plugin Version: 8.0. **Function:** One of the error mode constants.  
**Notes:** Syntax Error

### 3.34.1391 kemUseErrLog = & h20000000

Plugin Version: 11.3. **Function:** One of the error mode constants.  
**Notes:** Redirect all error messages to the error log.

### 3.34.1392 kemValueError = 2

Plugin Version: 8.0. **Function:** One of the error mode constants.  
**Notes:** Value Error

### 3.34.1393 kemWarning = 4

Plugin Version: 8.0. **Function:** One of the error mode constants.  
**Notes:** Warning

### 3.34.1394 kesCalGray = 3

Plugin Version: 8.0. **Function:** One of the extended color space constants.  
**Notes:** CIE-based color space

### 3.34.1395 kesCalRGB = 4

Plugin Version: 8.0. **Function:** One of the extended color space constants.  
**Notes:** CIE-based color space

### 3.34.1396 kesDeviceCMYK = 1

Plugin Version: 8.0. **Function:** One of the extended color space constants.  
**Notes:** Device color space
3.34.1397  kesDeviceGray = 2

Plugin Version: 8.0. Function: One of the extended color space constants.
Notes: Device color space

3.34.1398  kesDeviceN = & h0000000A

Plugin Version: 8.0. Function: One of the extended color space constants.
Notes: Special color space

3.34.1399  kesDeviceRGB = 0

Plugin Version: 8.0. Function: One of the extended color space constants.
Notes: Device color space

3.34.1400  kesICCBased = 6

Plugin Version: 8.0. Function: One of the extended color space constants.
Notes: CIE-based color space ->contains an ICC profile

3.34.1401  kesIndexed = 8

Plugin Version: 8.0. Function: One of the extended color space constants.
Notes: Special color space

3.34.1402  kesLab = 5

Plugin Version: 8.0. Function: One of the extended color space constants.
Notes: CIE-based color space

3.34.1403  kesNChannel = & h0000000B

Plugin Version: 8.0. Function: One of the extended color space constants.
Notes: Special color space
3.34. CLASS DYNAPDFMBS

3.34.1404  kesPattern = 7

Plugin Version: 8.0. **Function:** One of the extended color space constants.
**Notes:** Special color space

3.34.1405  kesSeparation = 9

Plugin Version: 8.0. **Function:** One of the extended color space constants.
**Notes:** Special color space

3.34.1406  kE_FATAL_ERROR = & h20000000

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for error types.
**Notes:**
Note that error codes are negative; to determine the error type use the absolute value:

// if bitwiseand(-errCode,E_FATAL_ERROR)=E_FATAL_ERROR then msgbox "A fatal error occurred!"

3.34.1407  kE_FILE_ERROR = & h40000000

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for error types.
**Notes:**
Note that error codes are negative; to determine the error type use the absolute value:

// if bitwiseand(-errCode,E_FILE_ERROR)=E_FILE_ERROR then msgbox "A fatal error occurred!"

3.34.1408  kE_FONT_ERROR = & h10000000

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for error types.
**Notes:**
Note that error codes are negative; to determine the error type use the absolute value:

// if bitwiseand(-errCode,E_FONT_ERROR)=E_FONT_ERROR then msgbox "A fatal error occurred!"
3.34.1409  kE_SYNTAX_ERROR = & h04000000

Plugin Version: 8.0. Function: One of the DynaPDF constants for error types.
Notes:
Note that error codes are negative; to determine the error type use the absolute value:

// if bitwiseand(-errCode,E_SYNTAX_ERROR)=E_SYNTAX_ERROR then msgbox "A fatal error occurred!"

3.34.1410  kE_VALUE_ERROR = & h08000000

Plugin Version: 8.0. Function: One of the DynaPDF constants for error types.
Notes:
Note that error codes are negative; to determine the error type use the absolute value:

// if bitwiseand(-errCode,E_VALUE_ERROR)=E_VALUE_ERROR then msgbox "A fatal error occurred!"

3.34.1411  kE_WARNING = & h02000000

Plugin Version: 8.0. Function: One of the DynaPDF constants for error types.
Notes:
Note that error codes are negative; to determine the error type use the absolute value:

// if bitwiseand(-errCode,E_WARNING)=E_WARNING then msgbox "A fatal error occurred!"

3.34.1412  kfaiGraph = 0

Plugin Version: 8.0. Function: One of the file attach icon constants.
Notes: Graph.

3.34.1413  kfaiPaperClip = 1

Plugin Version: 8.0. Function: One of the file attach icon constants.
Notes: Paper Clip
3.34. **CLASS DYNAPDFMBS**

### 3.34.1414 kfaipushPin = 2

Plugin Version: 8.0. **Function:** One of the file attach icon constants. **Notes:** Push Pin

### 3.34.1415 kfaitag = 3

Plugin Version: 8.0. **Function:** One of the file attach icon constants. **Notes:** Tag

### 3.34.1416 kfbtDisabled = 4

Plugin Version: 10.1. **Function:** One of the font base type constants. **Notes:** This value can be used to disable a specific font format. See SetFontSearchOrder() for further information.

### 3.34.1417 kfbtOpenType = 2

Plugin Version: 10.1. **Function:** One of the font base type constants. **Notes:** OpenType font with Postscript outlines

### 3.34.1418 kfbtStdFont = 3

Plugin Version: 10.1. **Function:** One of the font base type constants. **Notes:** PDF Standard font

### 3.34.1419 kfbtTrueType = 0

Plugin Version: 8.0. **Function:** One of the font base type constants. **Notes:** TrueType, TrueType Collections, or OpenType fonts with TrueType outlines

### 3.34.1420 kfbtType1 = 1

Plugin Version: 8.0. **Function:** One of the font base type constants. **Notes:** Type1 font
3.34.1421  kfcBackColor = 0

Plugin Version: 8.0. **Function:** One of the constants for field or annotation colors.

3.34.1422  kfcBorderColor = 1

Plugin Version: 8.0. **Function:** One of the constants for field or annotation colors.

3.34.1423  kfcTextColor = 2

Plugin Version: 8.0. **Function:** One of the constants for field or annotation colors.

3.34.1424  kffComb = & h01000000

Plugin Version: 8.0. **Function:** One of the field flags constants.
**Notes:** PDF 1.5 Text fields only

3.34.1425  kffCommitOnSelCh = & h04000000

Plugin Version: 9.3. **Function:** One of the field flags constants.
**Notes:** (PDF 1.5) If set, the new value is committed as soon as a selection is made with the pointing device. This allows applications to perform an action once a selection is made, without requiring the user to exit the field. If clear, the new value is not committed until the user exits the field. Supported by combo boxes and list boxes only.

3.34.1426  kffDoNotScroll = & h00800000

Plugin Version: 8.0. **Function:** One of the field flags constants.
**Notes:** PDF 1.4 Text fields only

3.34.1427  kffDoNotSpellCheck = & h00400000

Plugin Version: 8.0. **Function:** One of the field flags constants.
**Notes:** PDF 1.4 Text fields, combo boxes. If the field is a combo box, this flag is meaningful only if ffEdit is also set.
3.34. **CLASS DYNAPDFMBS**

3.34.1428  **kffEdit = & h00040000**

Plugin Version: 8.0. **Function:** One of the field flags constants.  
**Notes:** Combo boxes only

3.34.1429  **kffFileSelect = & h00100000**

Plugin Version: 8.0. **Function:** One of the field flags constants.  
**Notes:** PDF 1.4 Text fields only

3.34.1430  **kffHidden = & h0000010**

Plugin Version: 8.0. **Function:** One of the field flags constants.

3.34.1431  **kffInvisible = 8**

Plugin Version: 8.0. **Function:** One of the field flags constants.

3.34.1432  **kffMultiline = & h0001000**

Plugin Version: 8.0. **Function:** One of the field flags constants.  
**Notes:** Text fields only

3.34.1433  **kffMultiSelect = & h00200000**

Plugin Version: 8.0. **Function:** One of the field flags constants.  
**Notes:** PDF 1.4 List boxes only

3.34.1434  **kffNoExport = 4**

Plugin Version: 8.0. **Function:** One of the field flags constants.
3.34.1435  kffNoRotate = \& h00000080

Plugin Version: 8.0. **Function:** One of the field flags constants.

3.34.1436  kffNoToggleToOff = \& h00004000

Plugin Version: 8.0. **Function:** One of the field flags constants.
**Notes:** Radio buttons

3.34.1437  kffNoView = \& h0000100

Plugin Version: 8.0. **Function:** One of the field flags constants.

3.34.1438  kffNoZoom = \& h0000040

Plugin Version: 8.0. **Function:** One of the field flags constants.

3.34.1439  kffPassword = \& h00002000

Plugin Version: 8.0. **Function:** One of the field flags constants.
**Notes:** Text fields only

3.34.1440  kffPrint = \& h0000020

Plugin Version: 8.0. **Function:** One of the field flags constants.

3.34.1441  kffRadioIsUnion = \& h0200000

Plugin Version: 9.3. **Function:** One of the field flags constants.
**Notes:** PDF-1.5 check boxes of a radio button field only
3.34.1442  \textit{kffReadOnly} = 1

Plugin Version: 8.0. \textbf{Function}: One of the field flags constants.

3.34.1443  \textit{kffRequired} = 2

Plugin Version: 8.0. \textbf{Function}: One of the field flags constants.

3.34.1444  \textit{kffsCIDFontType0C} = 1

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for font file sub types.
\textbf{Notes}: CFF based Type1 CID font

3.34.1445  \textit{kffsCIDFontType2} = 4

Plugin Version: 10.1. \textbf{Function}: One of the font file type constants.
\textbf{Notes}: TrueType based CID Font

3.34.1446  \textit{kffsNoSubtype} = 9

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for font file sub types.
\textbf{Notes}: The font file is in the format of FontType

3.34.1447  \textit{kffsOpenType} = 2

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for font file sub types.
\textbf{Notes}: TrueType based OpenType font

3.34.1448  \textit{kffsOpenTypeC} = 3

Plugin Version: 10.1. \textbf{Function}: One of the font file type constants.
\textbf{Notes}: CFF based OpenType font
3.34.1449  kffSorted = & h00080000

Plugin Version: 8.0. **Function:** One of the field flags constants.  
**Notes:** Use this flag to change the sort flag of combo boxes or list boxes

3.34.1450  kffsType1C = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for font file sub types.  
**Notes:** CFF based Type1 font.

3.34.1451  kfmClose = & h000000B

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Close the path, but do not fill or stroke it. More vertices are required or stroke the path in a separate step.

3.34.1452  kfmFill = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Fill path.

3.34.1453  kfmFillEvOdd = 6

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Fill even odd.

3.34.1454  kfmFillEvOddNoClose = 8

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Fill even odd and no close.

3.34.1455  kfmFillNoClose = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Fill, but don’t close.
3.34. CLASS DYNAPDFMBS

3.34.1456  kfmFillStroke = 5

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Fill and stroke.

3.34.1457  kfmFillStrokeEvOdd = 7

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Fill and stroke even odd.

3.34.1458  kfmFillStrokeEvOddNoClose = 9

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Fill and stroke even odd, no close.

3.34.1459  kfmFillStrokeNoClose = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Fill, Stroke, but don’t close.

3.34.1460  kfmNoFill = \texttt{& h000000A}

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Don’t fill.

3.34.1461  kfmStroke = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Stroke path.

3.34.1462  kfmStrokeNoClose = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for the fill mode.  
**Notes:** Stroke, but do not close.
3.34.1463  kfoOpen = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for file operation for use with CreateLaunchAction function.
**Notes:** Open file.

3.34.1464  kfoPrint = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for file operation for use with CreateLaunchAction function.
**Notes:** Print file.

3.34.1465  kfpfDefault = 0

Plugin Version: 11.1. **Function:** One of the flush constants for Flush method.
**Notes:** Write anything to the file that is possible.

3.34.1466  kfpfExclLastPage = 2

Plugin Version: 11.1. **Function:** One of the flush constants for Flush method.
**Notes:** If set, the last page is not flushed.

3.34.1467  kfpfImagesOnly = 1

Plugin Version: 11.1. **Function:** One of the flush constants for Flush method.
**Notes:** If set, only images are written to the file. The pages are still in memory and can be modified with EditPage(). Flushed images can still be referenced in other pages. The image handles remain valid.

3.34.1468  kfsBlack = &h38400000

Plugin Version: 10.1. **Function:** One of the font style constants for the weight class.

3.34.1469  kfsBold = &h2BC00000

Plugin Version: 10.1. **Function:** One of the font style constants for the weight class.
**Notes:** The old constant 2 is still supported to preserve backward compatibility.
3.34.1470  \texttt{kfsCondensed = \& h00000300}  
Plugin Version: 10.1. \textbf{Function:} One of the font style constants for the width class.

3.34.1471  \texttt{kfsDemiBold = \& h25800000}  
Plugin Version: 10.1. \textbf{Function:} One of the font style constants for the weight class.

3.34.1472  \texttt{kfsExpanded = \& h00000700}  
Plugin Version: 10.1. \textbf{Function:} One of the font style constants for the width class.

3.34.1473  \texttt{kfsExtraBold = \& h32000000}  
Plugin Version: 10.1. \textbf{Function:} One of the font style constants for the weight class.

3.34.1474  \texttt{kfsExtraCondensed = \& h00000200}  
Plugin Version: 10.1. \textbf{Function:} One of the font style constants for the width class.

3.34.1475  \texttt{kfsExtraExpanded = \& h00000800}  
Plugin Version: 10.1. \textbf{Function:} One of the font style constants for the width class.

3.34.1476  \texttt{kfsExtraLight = \& h0C800000}  
Plugin Version: 10.1. \textbf{Function:} One of the font style constants for the weight class.
3.34.1477 kfsItalic = 1

Plugin Version: 8.0. **Function:** One of the constants for font style.

3.34.1478 kfsLight = & h12C00000

Plugin Version: 10.1. **Function:** One of the font style constants for the weight class.

3.34.1479 kfsMedium = & h1F400000

Plugin Version: 10.1. **Function:** One of the font style constants for the weight class.

3.34.1480 kfsNone = 0

Plugin Version: 8.0. **Function:** One of the constants for font style.

3.34.1481 kfsNormal = & h00000500

Plugin Version: 10.1. **Function:** One of the font style constants for the width class.

3.34.1482 kfsRegular = & h19000000

Plugin Version: 10.1. **Function:** One of the font style constants for the weight class. **Notes:** Same as fsNone

3.34.1483 kfsSemiCondensed = & h00000400

Plugin Version: 10.1. **Function:** One of the font style constants for the width class.

3.34.1484 kfsSemiExpanded = & h00000600

Plugin Version: 10.1. **Function:** One of the font style constants for the width class.
3.34. CLASS DYNAPDFMBS

3.34.1485 kfsStriked = 8

Plugin Version: 8.0. **Function:** One of the constants for font style.

3.34.1486 kfsThin = & h06400000

Plugin Version: 10.1. **Function:** One of the font style constants for the weight class.

3.34.1487 kfsUltraBlack = & h3E800000

Plugin Version: 10.1. **Function:** One of the font style constants for the weight class.

3.34.1488 kfsUltraCondensed = & h00000100

Plugin Version: 10.1. **Function:** One of the font style constants for the width class.

3.34.1489 kfsUltraExpanded = & h00000900

Plugin Version: 10.1. **Function:** One of the font style constants for the width class.

3.34.1490 kfsUnderlined = 4

Plugin Version: 8.0. **Function:** One of the constants for font style.

3.34.1491 kfsVerticalMode = & h0000010

Plugin Version: 10.1. **Function:** One of the constants for font style. **Notes:** Not considered at this time (v2.5)

3.34.1492 kftButton = 0

Plugin Version: 8.0. **Function:** One of the field type constants. **Notes:** Button
3.34.1493  kftCheckBox = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** Checkbox

3.34.1494  kftComboBox = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** Combobox

3.34.1495  kftGroup = 7

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** This is not a real field type, it is just an array of fields.

3.34.1496  kftListBox = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** Listbox

3.34.1497  kftMMType1 = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for font types.  
**Notes:** Multiple Master

3.34.1498  kftRadioBtn = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** Radio Button

3.34.1499  kftSignature = 6

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** Signature
3.34. CLASS DYNAPDFMBS

3.34.1500 kftText = 5

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** Text.

3.34.1501 kftTrueType = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for font types.  
**Notes:** TrueType font

3.34.1502 kftType0 = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for font types.  
**Notes:** CID font -> the descendant font can be a TrueType, Type1 (CFF), or OpenType font

3.34.1503 kftType1 = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for font types.  
**Notes:** Type1 font

3.34.1504 kftType3 = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for font types.  
**Notes:** Type3 font

3.34.1505 kgfAnsiStringIsUTF8 = \& h00000020

Plugin Version: 12.4. **Function:** One of the graphics state flag constants.  
**Notes:**

If set, single byte strings in Ansi functions are treated as UTF-8 encoded Unicode strings.  
Currently not useable with plugins.
3.34.1506 kgfCompatible = 0

Plugin Version: 8.0. **Function:** One of the graphics state flag constants.  
**Notes:** Compatible graphics state to earlier DynaPDF versions ->default

3.34.1507 kgfIgnoreICCProfiles = & h00000010

Plugin Version: 9.3. **Function:** One of the graphics state flag constants.  
**Notes:** Meaningful only if the flag gfUseImageColorSpace is set. If set, an embedded profile is not used to create an ICCBased color space for the image. The image is inserted in the corresponding device color space instead.

3.34.1508 kgfNativeBlackWhite = 4

Plugin Version: 8.1. **Function:** One of the graphics state flag constants.  
**Notes:** Do not convert RGB black or white to DeviceGray

3.34.1509 kgfNoBitmapAlpha = & h00000080

Plugin Version: 14.3. **Function:** One of the graphics state flag constants.  
**Notes:** If set, the alpha channel in 32 bit bitmaps will be ignored. Useful for bitmaps with an invalid alpha channel.

3.34.1510 kgfNoImageDuplCheck = & h00000100

Plugin Version: 14.3. **Function:** One of the graphics state flag constants.  
**Notes:** Disables duplicate check for images.

3.34.1511 kgfNoObjCompression = & h00000200

Plugin Version: 16.1. **Function:** One of the graphics state flag constants.  
**Notes:** If set, object compression will be disabled.
3.34. **CLASS DYNAPDFMBS**

### 3.34.1512 kgfRealPassThrough = & h00000040

Plugin Version: 14.3. **Function:** One of the graphics state flag constants.  
**Notes:** If set, JPEG images are inserted as is. JPEG images are normally rebuilt, also in pass-through mode, to avoid issues with certain malformed JPEG images which cannot be displayed in Adobes Acrobat or Reader. If you know that your JPEG images work then set this flag to avoid unnecessary processing time.

### 3.34.1513 kgfRealTopDownCoords = 2

Plugin Version: 8.0. **Function:** One of the graphics state flag constants.  
**Notes:** If set, the page coordinate system is not reset to bottom-up when transforming the coordinate system. However, real top-down coordinates require a large internal overhead and where never fully implemented. The usage of this flag should be avoided if possible.

### 3.34.1514 kgfRestorePageCoords = 1

Plugin Version: 8.0. **Function:** One of the graphics state flag constants.  
**Notes:** Restore the coordinate system with the graphics state (the value of PageCoords, see SetPageCoords())

### 3.34.1515 kgfUseImageColorSpace = 8

Plugin Version: 9.3. **Function:** One of the graphics state flag constants.  
**Notes:** If set, the active color space is ignored when inserting an image. The color space is taken from the image file instead.

### 3.34.1516 khmInvert = 1

Plugin Version: 8.0. **Function:** One of the Highlight Mode Constants.

### 3.34.1517 khmNone = 0

Plugin Version: 8.0. **Function:** One of the Highlight Mode Constants.
3.34.1518  \texttt{khmOutline} = 2

Plugin Version: 8.0. \textbf{Function:} One of the Highlight Mode Constants.

3.34.1519  \texttt{khmPush} = 3

Plugin Version: 8.0. \textbf{Function:} One of the Highlight Mode Constants.

3.34.1520  \texttt{khmPushUpd} = 4

Plugin Version: 8.0. \textbf{Function:} One of the Highlight Mode Constants.  
\textbf{Notes:} Update appearance stream on changes

3.34.1521  \texttt{khtDetached} = 0

Plugin Version: 10.2. \textbf{Function:} One of the constants for \texttt{CloseAndSignFileExt}.  
\textbf{Notes:} Returns the byte ranges of the finish PDF buffer to create a detached signature.

3.34.1522  \texttt{khtSHA1} = 1

Plugin Version: 10.2. \textbf{Function:} One of the constants for \texttt{CloseAndSignFileExt}.  
\textbf{Notes:} Returns the SHA1 hash of the PDF file so that it can be signed.

3.34.1523  \texttt{kicfDefault} = 0

Plugin Version: 11.2. \textbf{Function:} One of the cache initialization flags.

3.34.1524  \texttt{kicfIgnoreOpenAction} = 1

Plugin Version: 11.2. \textbf{Function:} One of the cache initialization flags.
3.34. **CLASS DYNAPDFMBS**

3.34.1525  **kicfIgnorePageLayout = 2**

Plugin Version: 11.2. **Function:** One of the cache initialization flags.

3.34.1526  **kicmBPCompensation = 1**

Plugin Version: 11.3. **Function:** One of the flags to pass to InitColorManagement function.  
**Notes:** Black point compensation preserves the black point when converting CMYK colors to different color spaces.

3.34.1527  **kicmCheckBlackPoint = 2**

Plugin Version: 14.2. **Function:** One of the flags to pass to InitColorManagement function.  
**Notes:** If set, soft proofing will be disabled if the black point of the output intent is probably invalid.

3.34.1528  **kicmDefault = 0**

Plugin Version: 11.3. **Function:** One of the flags to pass to InitColorManagement function.  
**Notes:** Default rules.

3.34.1529  **kicNone = 0**

Plugin Version: 7.7. **Function:** One of the image conversion flag constants.  
**Notes:** Default value.

3.34.1530  **kictCMYK = 2**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for ICC profile types.

3.34.1531  **kictGray = 0**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for ICC profile types.
3.34.1532  kictLab = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for ICC profile types.

3.34.1533  kictRGB = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for ICC profile types.

3.34.1534  kicUseCCITT4 = 1

Plugin Version: 7.7. **Function:** One of the image conversion flag constants. **Notes:** Use CCITT Fax 4 compression instead of Flate for dithered images.

3.34.1535  kif2CopyEncryptDict = & h00000040

Plugin Version: 17.0. **Function:** One of the constants for ImportFlags2. **Notes:** If set, the encryption settings of an encrypted PDF file are copied to the new PDF file. The flag does nothing if the file is not encrypted.

3.34.1536  kif2DuplicateCheck = & h00000010

Plugin Version: 12.4. **Function:** One of the constants for ImportFlags2. **Notes:** Perform a duplicate check on color spaces, fonts, images, patterns, and templates when merging PDF files.

3.34.1537  kif2MergeLayers = 1

Plugin Version: 8.1. **Function:** One of the constants for ImportFlags2. **Notes:** If set, layers with identical name are merged. If this flag is absent DynaPDF imports such layers separately so that each layer refers still to the pages where it was originally used.
3.34. CLASS DYNAPDFMBS

3.34.1538 kif2NoMetadata = 8

Plugin Version: 11.3. **Function:** One of the constants for ImportFlags2.
**Notes:** Ignore metadata streams which are attached to fonts, pages, images, and so on.

3.34.1539 kif2NoResNameCheck = & h00000020

Plugin Version: 16.5. **Function:** One of the constants for ImportFlags2.
**Notes:** Useful in viewer applications

3.34.1540 kif2Normalize = 2

Plugin Version: 10.3. **Function:** One of the constants for ImportFlags2.
**Notes:** Replace LZW compression with Flate, apply limit checks, repair errors if possible.

3.34.1541 kif2UseProxy = 4

Plugin Version: 11.3. **Function:** One of the constants for ImportFlags2.
**Notes:** Not meaningful for PDF files which are loaded from a memory buffer. If set, all streams are loaded from the file on demand but they are never held in memory. This reduces drastically the memory usage and enables the processing of almost arbitrary large PDF files with minimal memory usage. The corresponding PDF file must not be deleted before CloseFile() or CloseFileEx() was called.

3.34.1542 kif3DAnnot = & h00100000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1543 kifAllAnnots = & h009F0000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1544 kifAllPageObjects = & h40000000

Plugin Version: 8.0. **Function:** One of the constants for import flags.
3.34.1545  kifArticles = & h00000010

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1546  kifBookmarks = 8

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1547  kifBoxColorInfo = & h00000200

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1548  kifCatalogAction = 2

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1549  kifContentOnly = 0

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1550  kifDocInfo = & h00008000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1551  kifEmbeddedFiles = & h00200000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1552  kifEnumFonts = & h20000000

Plugin Version: 8.0. **Function:** One of the constants for import flags.
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3.34.1553 kifFileCollections = & h00400000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1554 kifFormFields = & h01000000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1555 kifFreeText = & h00010000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1556 kifImportAll = & h0FFFFFFFE

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1557 kifImportAsPage = & h80000000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1558 kifJavaScript = & h00002000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1559 kifJSActions = & h00004000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1560 kifLink = & h00040000

Plugin Version: 8.0. **Function:** One of the constants for import flags.
Plugin Version: 8.0. **Function:** One of the image format constants.
**Notes:** BMP: DeviceGray, DeviceRGB, Black & White -> Uncompressed.

### 3.34.1562 kifmJPC = 5

Plugin Version: 8.0. **Function:** One of the image format constants.
**Notes:** JPEG 2000: DeviceRGB, DeviceCMYK, DeviceGray -> JPEG2000 compression.

### 3.34.1563 kifmJPEG = 1

Plugin Version: 8.0. **Function:** One of the image format constants.
**Notes:** JPEG: DeviceRGB, DeviceCMYK, DeviceGray -> JPEG compression.

### 3.34.1564 kifmPNG = 2

Plugin Version: 8.0. **Function:** One of the image format constants.
**Notes:** PNG: DeviceGray, DeviceRGB, Black & White -> Flate compression.

### 3.34.1565 kifmTIFF = 0

Plugin Version: 8.0. **Function:** One of the image format constants.
**Notes:** TIFF: DeviceRGB, DeviceCMYK, DeviceGray, Black & White -> CCITT Fax Group 3/4, JPEG, Flate, LZW.

### 3.34.1566 kifNoContent = 1

Plugin Version: 8.0. **Function:** One of the constants for import flags.

### 3.34.1567 kifOtherAnnots = & h00800000

Plugin Version: 8.0. **Function:** One of the constants for import flags.
3.34. CLASS DYNAPDFMBS

3.34.1568 kifPageActions = 4

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1569 kifPageLabels = & h00000020

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1570 kifPieceInfo = & h02000000

Plugin Version: 16.5. **Function:** One of the constants for import flags.  
**Notes:** The PieceInfo dictionary contains arbitrary application defined data. The data in this dictionary is meaningful only for the application that created the data.

3.34.1571 kifPrepareForPDF = & h10000000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1572 kifSearchIndex = & h00001000

Plugin Version: 8.0. **Function:** One of the constants for import flags.

3.34.1573 kifSeparationInfo = & h00000100

Plugin Version: 8.0. **Function:** One of the constants for import flags.  
**Notes:** Separation info

3.34.1574 kifStamp = & h00080000

Plugin Version: 8.0. **Function:** One of the constants for import flags.
3.34.1575  \texttt{kifStructureTree} = \& h00000400

Plugin Version: 8.0. \textbf{Function}: One of the constants for import flags.

3.34.1576  \texttt{kifTextAnnot} = \& h00020000

Plugin Version: 8.0. \textbf{Function}: One of the constants for import flags.

3.34.1577  \texttt{kifThumbs} = \& h00000040

Plugin Version: 8.0. \textbf{Function}: One of the constants for import flags.

3.34.1578  \texttt{kifTransition} = \& h00000800

Plugin Version: 8.0. \textbf{Function}: One of the constants for import flags.

3.34.1579  \texttt{kifTranspGroups} = \& h00000080

Plugin Version: 8.0. \textbf{Function}: One of the constants for import flags.

3.34.1580  \texttt{kit3D\_AppDefault} = 0

\textbf{Notes}: Default

3.34.1581  \texttt{kit3D\_Instantiated} = 1

\textbf{Notes}: The annotation will be instantiated but animations are disabled.

3.34.1582  \texttt{kit3D\_Live} = 2

\textbf{Notes}: The annotation will be instantiated and animations are enabled (default).
3.34.1583  \texttt{kjsBevelJoin} = 2

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for line join styles.
\textbf{Notes}: Bevel Join

3.34.1584  \texttt{kjsMiterJoin} = 0

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for line join styles.
\textbf{Notes}: Miter Join

3.34.1585  \texttt{kjsRoundJoin} = 1

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for line join styles.
\textbf{Notes}: Round Join

3.34.1586  \texttt{kkl128bit} = 1

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for key length.
\textbf{Notes}: RC4 Encryption -> Acrobat 5 or higher

3.34.1587  \texttt{kkl128bitEx} = 2

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for key length.
\textbf{Notes}: RC4 Encryption -> Acrobat 6 or higher

3.34.1588  \texttt{kkl40bit} = 0

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF constants for key length.
\textbf{Notes}: RC4 Encryption -> Acrobat 3 or higher
3.34.1589  kklAES128 = 3

Notes: AES Encryption -> Acrobat 7 or higher

3.34.1590  kklAES256 = 4

Notes: AES Encryption -> Acrobat 9 or higher

3.34.1591  kklAESRev6 = 5

Plugin Version: 15.4. Function: One of the DynaPDF constants for key length.
Notes: AES Encryption -> PDF 2.0, Acrobat X or higher

3.34.1592  klcmDefault = 0

Plugin Version: 11.2. Function: One of the constants for flags to SetCMapDir function
Notes: Load the cmaps in the directory now.

3.34.1593  klcmDelayed = 2

Plugin Version: 11.2. Function: One of the constants for flags to SetCMapDir function
Notes: Load the cmap files only when a font requires an external cmap.

3.34.1594  klcmRecursive = 1

Plugin Version: 11.2. Function: One of the constants for flags to SetCMapDir function
Notes: Load sub directories recursively.

3.34.1595  kleButt = 1

Plugin Version: 14.0. Function: One of the flags for the line end style.
Notes: Butt
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3.34.1596  **kleCircle = 2**

Plugin Version: 14.0. **Function:** One of the flags for the line end style.  
**Notes:** Circle

3.34.1597  **kleClosedArrow = 3**

Plugin Version: 14.0. **Function:** One of the flags for the line end style.  
**Notes:** Left Close Arrow

3.34.1598  **kleDiamond = 4**

Plugin Version: 14.0. **Function:** One of the flags for the line end style.  
**Notes:** Diamond

3.34.1599  **kleNone = 0**

Plugin Version: 14.0. **Function:** One of the flags for the line end style.  
**Notes:** No end

3.34.1600  **kleOpenArrow = 5**

Plugin Version: 14.0. **Function:** One of the flags for the line end style.  
**Notes:** Left Open Arrow

3.34.1601  **kleRClosedArrow = 6**

Plugin Version: 14.0. **Function:** One of the flags for the line end style.  
**Notes:** Right Close Arrow

3.34.1602  **kleROpenArrow = 7**

Plugin Version: 14.0. **Function:** One of the flags for the line end style.  
**Notes:** Right Open Arrow
3.34.1603  kleSlash = 8

Plugin Version: 14.0. **Function:** One of the flags for the line end style.
**Notes:** Slash

3.34.1604  kleSquare = 9

Plugin Version: 14.0. **Function:** One of the flags for the line end style.
**Notes:** Square

3.34.1605  klsArtwork = 0

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.
**Notes:** Lights from file lsBlue,

3.34.1606  klsBlue = 1

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1607  klsCAD = 2

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1608  klsCube = 3

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1609  klsDay = 4

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.
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3.34.1610  \( \text{kl} \text{sHard} = 5 \)

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1611  \( \text{kl} \text{sHeadlamp} = 6 \)

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1612  \( \text{kl} \text{sNight} = 7 \)

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1613  \( \text{kl} \text{sNoLights} = 8 \)

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1614  \( \text{kl} \text{sNotSet} = \& h0000000C \)

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1615  \( \text{kl} \text{sPrimary} = 9 \)

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1616  \( \text{kl} \text{sRed} = \& h0000000A \)

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.

3.34.1617  \( \text{kl} \text{sWhite} = \& h0000000B \)

Plugin Version: 8.0. **Function:** One of the constants for a 3D Rendering mode for Create3DView.
3.34.1618  kmdoCatalog = 0

Plugin Version: 14.0. **Function:** One of the metadata object contants. 
**Notes:** The global XMP stream of the document (no handle needed)

3.34.1619  kmdoFont = 1

Plugin Version: 14.0. **Function:** One of the metadata object contants. 
**Notes:** Parameter Handle must be a font handle.

3.34.1620  kmdoImage = 2

Plugin Version: 14.0. **Function:** One of the metadata object contants. 
**Notes:** Parameter Handle must be an image handle.

3.34.1621  kmdoPage = 3

Plugin Version: 14.0. **Function:** One of the metadata object contants. 
**Notes:** Parameter Handle must be a page number.

3.34.1622  kmdoTemplate = 4

Plugin Version: 14.0. **Function:** One of the metadata object contants. 
**Notes:** Parameter Handle must be a template handle.

3.34.1623  kmfApplyBidiAlgo = & h00080000

Plugin Version: 8.0. **Function:** One of the meta flag constants. 
**Notes:** Apply the bidirectional algorithm on Unicode strings

3.34.1624  kmfClipRclBounds = & h01000000

Plugin Version: 8.5. **Function:** One of the metaflags constants. 
**Notes:**
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If set, the graphic is drawn into a clipping path with the size of rclBounds. This flag is useful if the graphic contains content outside of its bounding box.

3.34.1625  kmfClipView = 8

Plugin Version: 8.0. **Function:** One of the meta flag constants. **Notes:** Draw the file into a clipping rectangle

3.34.1626  kmfDebug = 1

Plugin Version: 8.0. **Function:** One of the meta flag constants. **Notes:** Write debug information into the content stream

3.34.1627  kmfDefault = 0

Plugin Version: 8.0. **Function:** One of the meta flag constants. **Notes:** Default conversion

3.34.1628  kmfDefBkModeTransp = & h00040000

Plugin Version: 8.0. **Function:** One of the meta flag constants. **Notes:** Initialize the background mode to transparent (SetBkMode() overrides this state).

3.34.1629  kmfDisableRasterEMF = & h02000000

Plugin Version: 8.7. **Function:** One of the metaflags constants. **Notes:** If set, EMF files which use unsupported ROP codes are not rastered.

3.34.1630  kmfFullScale = & h00010000

Plugin Version: 8.0. **Function:** One of the meta flag constants. **Notes:** Recommended if 32 bit coordinates are used
3.34.1631 \texttt{kmfGDIFontSelection} = \& h00100000

Plugin Version: 8.0. \textbf{Function}: One of the meta flag constants.  
\textbf{Notes}: Use the GDI to select fonts

3.34.1632 \texttt{kmfIgnoreEmbFonts} = \& h08000000

Plugin Version: 13.4. \textbf{Function}: One of the meta flag constants.  
\textbf{Notes}: If set, embedded fonts in GDIComment records will be ignored. This flag must be set if the fonts of an EMF spool file were pre-loaded with ConvertEMFSpool(). Spool fonts must always be loaded in a pre-processing step since required fonts are not necessarily embedded in the EMF files.

3.34.1633 \texttt{kmfIntersectClipRect} = \& h00002000

Plugin Version: 8.0. \textbf{Function}: One of the meta flag constants.  
\textbf{Notes}: enabled by default ->can be disabled with mfNoClippingRgn

3.34.1634 \texttt{kmfNoBBoxCheck} = \& h04000000

Plugin Version: 13.3. \textbf{Function}: One of the meta flag constants.  
\textbf{Notes}: Disable the bbox check.

3.34.1635 \texttt{kmfNoBmpPatterns} = \& h0000400

Plugin Version: 8.0. \textbf{Function}: One of the meta flag constants.  
\textbf{Notes}: Ignore bitmap patterns

3.34.1636 \texttt{kmfNoClippingRgn} = \& h0000040

Plugin Version: 8.0. \textbf{Function}: One of the meta flag constants.  
\textbf{Notes}: Disables SelectClippingRegion, IntersectClipRect, and SelectClipPath

3.34.1637 \texttt{kmfNoFontEmbedding} = \& h0000080

Plugin Version: 8.0. \textbf{Function}: One of the meta flag constants.  
\textbf{Notes}: Do not embed fonts ->Fonts should be embedded!!!
### 3.34.1638 kmfNoImages = & h00000100

Plugin Version: 8.0. **Function**: One of the meta flag constants.  
**Notes**: Ignore image records

### 3.34.1639 kmfNoStdPatterns = & h00000200

Plugin Version: 8.0. **Function**: One of the meta flag constants.  
**Notes**: Ignore standard patterns

### 3.34.1640 kmfNoText = & h00000800

Plugin Version: 8.0. **Function**: One of the meta flag constants.  
**Notes**: Ignore text records

### 3.34.1641 kmfNoTextClipping = & h00400000

Plugin Version: 8.5. **Function**: One of the metaflags constants.  
**Notes**: If set, the ETO_CLIPPED flag in text records is ignored.

### 3.34.1642 kmfNoTextScaling = 4

Plugin Version: 8.0. **Function**: One of the meta flag constants.  
**Notes**: Do not scale text

### 3.34.1643 kmfNoUnicode = & h00008000

Plugin Version: 8.0. **Function**: One of the meta flag constants.  
**Notes**: Avoid usage of Unicode fonts ->recommended to enable PDF 1.2 compability
3.34.1644  kmfRclFrameEx = \& h00200000

Plugin Version: 8.1. **Function:** One of the DynaPDF constants.

3.34.1645  kmfShowBounds = 2

Plugin Version: 8.0. **Function:** One of the meta flag constants.  
**Notes:** Show the bounding boxes of text strings.

3.34.1646  kmfSrcCopy_Only = \& h00800000

Plugin Version: 8.5. **Function:** One of the metaflag constants.  
**Notes:** If set, images which use a ROP code other than SRCCOPY are ignored. This is useful when processing Excel 2007 spool files.

3.34.1647  kmfUseRclBounds = \& h00000010

Plugin Version: 8.0. **Function:** One of the meta flag constants.  
**Notes:** Use rclBounds instead of rclFrame.

3.34.1648  kmfUseRclFrame = \& h00020000

Plugin Version: 8.0. **Function:** One of the meta flag constants.  
**Notes:** This flag should be set if the rclFrame rectangle is properly set.

3.34.1649  kmfUseSpacingArray = \& h00000020

Plugin Version: 8.0. **Function:** One of the meta flag constants.  
**Notes:** enabled by default -> can be disabled with mfUseTextScaling.

3.34.1650  kmfUseTextScaling = \& h00004000

Plugin Version: 8.0. **Function:** One of the meta flag constants.  
**Notes:** Scale text instead of using the intercharacter spacing array.
3.3.4. **CLASS DYNAPDFMBS**

**3.3.4.1651 kmfUseUnicode = & h00001000**

Plugin Version: 8.0. **Function:** One of the meta flag constants.  
**Notes:** Ignore ANSI_CHARSET

**3.3.4.1652 knaDefault = 0**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D named action.

**3.3.4.1653 knaDeletePages = & h0000000D**

Plugin Version: 8.0. **Function:** One of the named action constants.

**3.3.4.1654 knaFirst = 1**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D named action.

**3.3.4.1655 knaFirstPage = 0**

Plugin Version: 8.0. **Function:** One of the named action constants.

**3.3.4.1656 knaFitPage = & h0000000B**

Plugin Version: 8.0. **Function:** One of the named action constants.

**3.3.4.1657 knaFontsInfo = 8**

Plugin Version: 8.0. **Function:** One of the named action constants.

**3.3.4.1658 knaFullScreen = & h0000000C**

Plugin Version: 8.0. **Function:** One of the named action constants.
3.34.1659 knaGeneralInfo = 7

Plugin Version: 8.0. **Function:** One of the named action constants.

3.34.1660 knaGoBack = 4

Plugin Version: 8.0. **Function:** One of the named action constants.

3.34.1661 knaLast = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D named action.

3.34.1662 knaLastPage = 1

Plugin Version: 8.0. **Function:** One of the named action constants.

3.34.1663 knaNext = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D named action.

3.34.1664 knaNextPage = 2

Plugin Version: 8.0. **Function:** One of the named action constants.

3.34.1665 knaOpenDlg = 5

Plugin Version: 8.0. **Function:** One of the named action constants.

3.34.1666 knaPrevious = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D named action.
3.34. **CLASS DYNAPDFMBS**

3.34.1667  **knaPrevPage = 3**

Plugin Version: 8.0. **Function:** One of the named action constants.

3.34.1668  **knaPrintDlg = 6**

Plugin Version: 8.0. **Function:** One of the named action constants.

3.34.1669  **knaQuit = & h000000E**

Plugin Version: 9.8. **Function:** One of the named action constants.

3.34.1670  **knaSaveAs = 9**

Plugin Version: 8.0. **Function:** One of the named action constants.

3.34.1671  **knaSecurityInfo = & h000000A**

Plugin Version: 8.0. **Function:** One of the named action constants.

3.34.1672  **kNEW_ALIGN_CENTER = 3**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.

3.34.1673  **kNEW_ALIGN JUSTIFY = 4**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.

3.34.1674  **kNEW_ALIGN_LEFT = 1**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.
3.34.1675  kNEW_ALIGN_RIGHT = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.

3.34.1676  kNO_COLOR = & hFFFFFFF1

Plugin Version: 8.0. **Function:** One of the RGB color constants.  
**Notes:**  
This value can be used for form fields, annotations and standard patterns to determine that the specific color is not set.  
For example, when a form field should have a transparent background, set the field background color to NO_COLOR. The background appears then transparent.

3.34.1677  knsMinusBlack = 0

Plugin Version: 8.0. **Function:** One of the negative number format constants for SetNumberFormat.  
**Notes:** The number is colored black with a minus sign.

3.34.1678  knsParensBlack = 2

Plugin Version: 8.0. **Function:** One of the negative number format constants for SetNumberFormat.  
**Notes:** The number is colored black with parenthesis.

3.34.1679  knsParensRed = 3

Plugin Version: 8.0. **Function:** One of the negative number format constants for SetNumberFormat.  
**Notes:** The number is colored red with parenthesis.

3.34.1680  knsRed = 1

Plugin Version: 8.0. **Function:** One of the negative number format constants for SetNumberFormat.  
**Notes:** The number is colored red.
3.34. CLASS DYNAPDFMBS

**3.34.1681 koeOnAfterPrinting = \& h00000015**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** PDF 1.4 -> Catalog only

**3.34.1682 koeOnAfterSaving = \& h00000013**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** PDF 1.4 -> Catalog only

**3.34.1683 koeOnBeforeClosing = \& h00000011**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** PDF 1.4 -> Catalog only.

**3.34.1684 koeOnBeforePrinting = \& h00000014**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** PDF 1.4 -> Catalog only.

**3.34.1685 koeOnBeforeSaving = \& h00000012**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** PDF 1.4 -> Catalog only.

**3.34.1686 koeOnBlur = 8**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** Form fields only

**3.34.1687 koeOnCalc = \& h0000000B**

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** Form fields only.
3.34.1688 koeOnClose = 2

Plugin Version: 8.0. Function: One of the DynaPDF constants. Notes: Pages only.

3.34.1689 koeOnFocus = 7

Plugin Version: 8.0. Function: One of the DynaPDF constants. Notes: Form fields only.

3.34.1690 koeOnFormat = &h000000A

Plugin Version: 8.0. Function: One of the DynaPDF constants. Notes: Form fields only.

3.34.1691 koeOnKeyStroke = 9

Plugin Version: 8.0. Function: One of the DynaPDF constants. Notes: Form fields only.

3.34.1692 koeOnMouseDown = 6

Plugin Version: 8.0. Function: One of the DynaPDF constants. Notes: Form fields only.

3.34.1693 koeOnMouseEnter = 4

Plugin Version: 8.0. Function: One of the DynaPDF constants. Notes: Form fields only.

3.34.1694 koeOnMouseExit = 5

Plugin Version: 8.0. Function: One of the DynaPDF constants. Notes: Form fields only.
3.34. CLASS DYNAPDFMBS

3.34.1695  koeOnMouseUp = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** All fields, page link annotations, bookmarks

3.34.1696  koeOnOpen = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** Catalog, Pages

3.34.1697  koeOnPageClose = & h00000010

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** PDF 1.5 -> Form fields only

3.34.1698  koeOnPageInVisible = & h0000000E

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** PDF 1.5 -> Form fields only

3.34.1699  koeOnPageOpen = & h0000000F

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** PDF 1.5 -> Form fields only

3.34.1700  koeOnPageVisible = & h0000000D

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** PDF 1.5 -> Form fields only

3.34.1701  koeOnValidate = & h0000000C

Plugin Version: 8.0. **Function:** One of the DynaPDF constants.  
**Notes:** All form fields, except buttons
3.34.1702 kofAdjZeroLineWidthOnly = & h00002000

Plugin Version: 17.0. **Function:** One of the constants for the Optimize function.  
**Notes:** Meaningful only if the parameter MinLineWidth of the optimize parameters is greater zero. If set, change the line width of real hairlines only (a hairline is a one pixel width line ->Line Width = 0).

3.34.1703 kofCompressWithJBIG2 = & h00004000

Plugin Version: 18.4. **Function:** One of the constants for the Optimize function.  
**Notes:** If set, 1 bit images are compressed with JBIG2 if not already compressed with this filter.

3.34.1704 kofConvertAllColors = 2

Plugin Version: 14.2. **Function:** One of the constants for the Optimize function.  
**Notes:** If set, Separation, DeviceN, and NChannel color spaces will be converted to the device space.

3.34.1705 kofConvertGrayTo1Bit = & h00010000

Plugin Version: 18.4. **Function:** One of the constants for the Optimize function.  
**Notes:** Useful for scanned faxes since many scanners create gray images for black & white input.

3.34.1706 kofDefault = 0

Plugin Version: 16.4. **Function:** One of the constants for the Optimize function.  
**Notes:** Just rebuild the content streams.

3.34.1707 kofDeleteAlternateImages = & h00000400

Plugin Version: 16.4. **Function:** One of the constants for the Optimize function.  
**Notes:** If set, alternate images will be deleted.

3.34.1708 kofDeleteInvPaths = & h00000040

Plugin Version: 16.1. **Function:** One of the constants for the Optimize function.  
**Notes:** Delete invisible paths. An invisible path is a path that was finished with the no-op operator "n".
3.34. CLASS DYNAPDFMBS

3.34.1709  kofDeletePrivateData = & h00000100

Plugin Version: 16.4. **Function:** One of the constants for the Optimize function.  
**Notes:** 
Delete private data objects from pages, templates, and images.  
For example Indesign may store the original Photoshop image within the PDF file.

3.34.1710  kofDeleteThumbnails = & h00000200

Plugin Version: 16.4. **Function:** One of the constants for the Optimize function.  
**Notes:** Thumbnails can be deleted since PDF viewers can create thumbnails easily on demand.

3.34.1711  kofFlattenLayers = & h00000080

Plugin Version: 16.1. **Function:** One of the constants for the Optimize function.  
**Notes:** Flatten layers if any.

3.34.1712  kofIgnoreICCBased = 4

Plugin Version: 14.2. **Function:** One of the constants for the Optimize function.  
**Notes:** If set, ICCBased color spaces will be left unchanged.

3.34.1713  kofIgnoreZeroLineWidth = & h00001000

Plugin Version: 16.4. **Function:** One of the constants for the Optimize function.  
**Notes:** Meaningful only if the parameter MinLineWidth of the DynaPDFOptimizeParamsMBS class is greater zero. If set, ignore line width operators with a value of zero (zero means one device unit).

3.34.1714  kofInMemory = 1

Plugin Version: 16.1. **Function:** One of the constants for the Optimize function.  
**Notes:** Optimize the file fully in memory. Only useful for small PDF files.
### 3.34.1715 kofNewLinkNames = & h00000020

Plugin Version: 16.1. **Function:** One of the constants for the Optimize function.  
**Notes:** If set, rename all object links to short names like F1, F2 etc.

### 3.34.1716 kofNoFilterCheck = & h00008000

Plugin Version: 18.4. **Function:** One of the constants for the Optimize function.  
**Notes:** Meaningful only, if the flag ofCompressWithJBIG2 is set. If set, re-compress all 1 bit images, also if already compressed with JBIG2.

### 3.34.1717 kofNoImageSizeCheck = & h00000800

Plugin Version: 16.4. **Function:** One of the constants for the Optimize function.  
**Notes:** Meaningful only if ofScaleImages is set. If set, do not check whether the scaled image is smaller as the original image.

### 3.34.1718 kofScaleImages = 8

Plugin Version: 14.2. **Function:** One of the constants for the Optimize function.  
**Notes:** Scale images as specified in the DynaPDFOptimizeParamsMBS class.

### 3.34.1719 kofSkipMaskedImages = & h00000010

Plugin Version: 16.4. **Function:** One of the constants for the Optimize function.  
**Notes:** Meaningful only if ofScaleImages is set. If set, don’t scale images with a color mask.

### 3.34.1720 koiAll = 8

Plugin Version: 10.5. **Function:** One of the object intent constants for CreateOCG.

### 3.34.1721 koiDesign = 2

Plugin Version: 10.5. **Function:** One of the object intent constants for CreateOCG.
3.34. CLASS DYNAPDFMBS

3.34.1722  koiEmpty = & h00000010

Plugin Version: 10.5. **Function:** One of the object intent constants for CreateOCG.
**Notes:** Internal (refers to koiView if used)

3.34.1723  koiView = 4

Plugin Version: 10.5. **Function:** One of the object intent constants for CreateOCG.
**Notes:** Default.

3.34.1724  koiVisible = & h00000020

Plugin Version: 15.0. **Function:** One of the object intent constants for CreateOCG.
**Notes:** Visible

3.34.1725  kooAnnotation = 0

Plugin Version: 10.5. **Function:** One of the object type constants for AddObjectToLayer.
**Notes:** Handle is an annotation handle.

3.34.1726  kooField = 1

Plugin Version: 10.5. **Function:** One of the object type constants for AddObjectToLayer.
**Notes:** Handle is a field handle.

3.34.1727  kooImage = 2

Plugin Version: 10.5. **Function:** One of the object type constants for AddObjectToLayer.
**Notes:** Handle is an image handle.

3.34.1728  kooTemplate = 3

Plugin Version: 10.5. **Function:** One of the object type constants for AddObjectToLayer.
**Notes:** Handle is a template handle.
3.34.1729  korDownLeft = 0

Plugin Version: 8.0. **Function**: One of the origin constants.

3.34.1730  korTopLeft = 1

Plugin Version: 8.0. **Function**: One of the origin constants.

3.34.1731  kotAction = 0

Plugin Version: 8.0. **Function**: One of the object type constants.  
**Notes**: Action

3.34.1732  kotAnnotation = 1

Plugin Version: 8.0. **Function**: One of the object type constants.  
**Notes**: Annotation

3.34.1733  kotBookmark = 2

Plugin Version: 8.0. **Function**: One of the object type constants.  
**Notes**: Bookmark

3.34.1734  kotCatalog = 3

Plugin Version: 8.0. **Function**: One of the object type constants.  
**Notes**: Catalog. PDF 1.4

3.34.1735  kotField = 4

Plugin Version: 8.0. **Function**: One of the object type constants.  
**Notes**: Field
3.34. CLASS DYNAPDFMBS

3.34.1736 kotPage = 5

Plugin Version: 8.0. **Function:** One of the object type constants.  
**Notes:** Page

3.34.1737 kotPageLink = 6

Plugin Version: 8.0. **Function:** One of the object type constants.  
**Notes:** Page Link

3.34.1738 koucExport = 1

Plugin Version: 15.0. **Function:** One of the usage Categories which control the layer state.  
**Notes:** Export

3.34.1739 koucLanguage = 2

Plugin Version: 15.0. **Function:** One of the usage Categories which control the layer state.  
**Notes:** Language

3.34.1740 koucNone = 0

Plugin Version: 15.0. **Function:** One of the usage Categories which control the layer state.

3.34.1741 koucPrint = 4

Plugin Version: 15.0. **Function:** One of the usage Categories which control the layer state.  
**Notes:** Print

3.34.1742 koucUser = 8

Plugin Version: 15.0. **Function:** One of the usage Categories which control the layer state.  
**Notes:** User
3.34.1743  koucView = & h00000010

Plugin Version: 15.0. **Function**: One of the usage Categories which control the layer state.  
**Notes**: View

3.34.1744  koucZoom = & h00000020

Plugin Version: 15.0. **Function**: One of the usage Categories which control the layer state.  
**Notes**: Zoom

3.34.1745  kovAllOff = 0

Plugin Version: 10.5. **Function**: One of the visibility constants for CreateOCMD.  
**Notes**: All Off

3.34.1746  kovAllOn = 1

Plugin Version: 10.5. **Function**: One of the visibility constants for CreateOCMD.  
**Notes**: All On

3.34.1747  kovAnyOff = 2

Plugin Version: 10.5. **Function**: One of the visibility constants for CreateOCMD.  
**Notes**: Any Off

3.34.1748  kovAnyOn = 3

Plugin Version: 10.5. **Function**: One of the visibility constants for CreateOCMD.  
**Notes**: Any On

3.34.1749  kovNotSet = 4

Plugin Version: 10.5. **Function**: One of the visibility constants for CreateOCMD.  
**Notes**: Not Set
3.34. CLASS DYNAPDFMBS

3.34.1750  kpbArtBox = 0

Plugin Version: 8.0. Function: One of the PDF box constants. Notes: Art box.

3.34.1751  kpbBleedBox = 1

Plugin Version: 8.0. Function: One of the PDF box constants. Notes: Bleed box.

3.34.1752  kpbCropBox = 2

Plugin Version: 8.0. Function: One of the PDF box constants. Notes: Crop Box.

3.34.1753  kpbMediaBox = 4

Plugin Version: 8.0. Function: One of the PDF box constants. Notes: Media Box.

3.34.1754  kpbTrimBox = 3

Plugin Version: 8.0. Function: One of the PDF box constants. Notes: Trim Box.

3.34.1755  kpcBottomUp = 0

Plugin Version: 8.0. Function: One of the DynaPDF constants for the page coordinates.

3.34.1756  kpcrHandClosed = 1

Plugin Version: 11.3. Function: One of the cursor constants.
3.34.1757 kpcrHandNormal = 0

Plugin Version: 11.3. Function: One of the cursor constants.

3.34.1758 kpcrHandPoint = 2

Plugin Version: 11.3. Function: One of the cursor constants.

3.34.1759 kpcrIBeam = 3

Plugin Version: 11.3. Function: One of the cursor constants.

3.34.1760 kpcTopDown = 1

Plugin Version: 8.0. Function: One of the DynaPDF constants for the page coordinates.

3.34.1761 kPDF_ANNOT_INDEX = &h40000000

Plugin Version: 11.1. Function: Special flag for GetPageFieldEx() to indicate that an annotation index was passed to the function. Notes: See GetPageFieldEx() for further information.

3.34.1762 kPDF_AQUA = &h00FFFF00

Plugin Version: 8.0. Function: One of the constants for basic RGB colors. Notes: aqua

3.34.1763 kPDF_BLACK = 0

Plugin Version: 8.0. Function: One of the constants for basic RGB colors. Notes: black
3.34. **CLASS DYNAPDFMBS**

3.34.1764  **kPDF_BLUE = \& h00FF0000**

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** blue

3.34.1765  **kPDF_CREAM = \& h00F0FBFF**

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** cream

3.34.1766  **kPDF_DKGRAY = \& h00808080**

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** dark gray

3.34.1767  **kPDF_FUCHSIA = \& h00FF00FF**

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** fuchsia

3.34.1768  **kPDF_GRAY = \& h00808080**

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** gray

3.34.1769  **kPDF_GREEN = \& h00008000**

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** green

3.34.1770  **kPDF_LIME = \& h0000FF00**

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** lime
3.34.1771  \texttt{kPDF\_LIST\_FONT} = "Wingdings-Regular"

Plugin Version: 8.0. \textbf{Function}: Default font to display the list symbol -> can be changed with \texttt{SetListFont()}

3.34.1772  \texttt{kPDF\_LIST\_SEP\_WIDTH} = &h000000A

Plugin Version: 8.0. \textbf{Function}: Default width between the list symbol and text (see \texttt{WriteFText()} in the help file for further information)

3.34.1773  \texttt{kPDF\_LTGRAY} = &h00C0C0C0

Plugin Version: 8.0. \textbf{Function}: One of the constants for basic RGB colors. \textbf{Notes}: light gray

3.34.1774  \texttt{kPDF\_MAROON} = &h00000080

Plugin Version: 8.0. \textbf{Function}: One of the constants for basic RGB colors. \textbf{Notes}: maroon

3.34.1775  \texttt{kPDF\_MAX\_INT} = &h7FFFFFFF

Plugin Version: 8.0. \textbf{Function}: The maximum integer value.

3.34.1776  \texttt{kPDF\_MAX\_LIST\_COUNT} = &h00000020

Plugin Version: 8.0. \textbf{Function}: Maximum count of nested list levels (\texttt{WriteFText()})

3.34.1777  \texttt{kPDF\_MEDGRAY} = &h00A4A0A0

Plugin Version: 8.0. \textbf{Function}: One of the constants for basic RGB colors. \textbf{Notes}: medium gray
3.34. **CLASS DYNAPDFMBS**

3.34.1778  \texttt{kPDF\_MOGREEN = \& h00C0DCC0}

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.  
**Notes:** mogreen

3.34.1779  \texttt{kPDF\_NAVY = \& h00800000}

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.  
**Notes:** navy

3.34.1780  \texttt{kPDF\_OLIVE = \& h00008080}

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.  
**Notes:** olive

3.34.1781  \texttt{kPDF\_PURPLE = \& h00800080}

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.  
**Notes:** purple

3.34.1782  \texttt{kPDF\_RED = \& h000000FF}

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.  
**Notes:** red

3.34.1783  \texttt{kPDF\_SILVER = \& h00C0C0C0}

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.  
**Notes:** silver

3.34.1784  \texttt{kPDF\_SKYBLUE = \& h00F0CAA6}

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.  
**Notes:** skyblue
3.34.1785 kPDF_TABLEN = 3

Plugin Version: 8.6. **Function:** The default tab length.

3.34.1786 kPDF_TEAL = & h00808000

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** teal

3.34.1787 kPDF_WHITE = & h00FFFFFF

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** white

3.34.1788 kPDF_YELLOW = & h0000FFFF

Plugin Version: 8.0. **Function:** One of the constants for basic RGB colors.
**Notes:** yellow

3.34.1789 kpeBackgroundImage = 0

Plugin Version: 15.0. **Function:** One of the possible pagination artefact for an optional content group.
**Notes:** Background image.

3.34.1790 kpeForegroundImage = 1

Plugin Version: 15.0. **Function:** One of the possible pagination artefact for an optional content group.
**Notes:** Foreground Image.

3.34.1791 kpeHeaderFooter = 2

Plugin Version: 15.0. **Function:** One of the possible pagination artefact for an optional content group.
**Notes:** Header or Footer
3.34. CLASS DYNAPDFMBS

3.34.1792 kpeLogo = 3

Plugin Version: 15.0. **Function:** One of the possible pagination artefact for an optional content group.
**Notes:** Logo

3.34.1793 kpeNone = 4

Plugin Version: 15.0. **Function:** One of the possible pagination artefact for an optional content group.

3.34.1794 kpfConvImagesToCMYK = &h00000040

Plugin Version: 7.7. **Function:** One of the PDF Parser constants.
**Notes:** Convert images to CMYK.

3.34.1795 kpfConvImagesToGray = &h00000010

Plugin Version: 7.7. **Function:** One of the PDF Parser constants.
**Notes:** Convert images to grayscale.

3.34.1796 kpfConvImagesToRGB = &h00000020

Plugin Version: 7.7. **Function:** One of the PDF Parser constants.
**Notes:** Convert images to RGB.

3.34.1797 kpfDecomprAllImages = 2

Plugin Version: 8.0. **Function:** One of the parser flags.
**Notes:** This flag causes that all image formats will be decompressed with the exception of JBIG2 compressed images. If this flag is not set, images which are already stored in a valid image file format are returned as is. This is the case for RGB JPEG and JPEG2000 compressed images. If you want to extract the images of a PDF file this flag should be absent!

3.34.1798 kpfDIN_A0 = &h00000014

Plugin Version: 18.5. **Function:** One of the DynaPDF page format constants for SetPageFormat.
**Notes:** DIN A0
3.34.1799 kpfDIN_A1 = & h00000015


3.34.1800 kpfDIN_A10 = & h0000001B


3.34.1801 kpfDIN_A2 = & h00000016


3.34.1802 kpfDIN_A3 = 0


3.34.1803 kpfDIN_A4 = 1

Plugin Version: 8.0. Function: One of the DynaPDF page format constants for SetPageFormat. Notes: DIN A4

3.34.1804 kpfDIN_A5 = 2

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### 3.34.1805 kpfDIN_A6 = & h00000017

**Plugin Version:** 18.5. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN A6

### 3.34.1806 kpfDIN_A7 = & h00000018

**Plugin Version:** 18.5. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:**

### 3.34.1807 kpfDIN_A8 = & h00000019

**Plugin Version:** 18.5. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN A8

### 3.34.1808 kpfDIN_A9 = & h0000001A

**Plugin Version:** 18.5. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN A9

### 3.34.1809 kpfDIN_B4 = 3

**Plugin Version:** 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN B4

### 3.34.1810 kpfDIN_B5 = 4

**Plugin Version:** 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN B5

### 3.34.1811 kpfDIN_B6 = 5

**Plugin Version:** 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN B6
3.34.1812 kpfdIN_C3 = 6

Plugin Version: 8.0. **Function**: One of the DynaPDF page format constants for SetPageFormat.
**Notes**: DIN C3

3.34.1813  kpfdIN_C4 = 7

Plugin Version: 8.0. **Function**: One of the DynaPDF page format constants for SetPageFormat.
**Notes**: DIN C4

3.34.1814  kpfdIN_C5 = 8

Plugin Version: 8.0. **Function**: One of the DynaPDF page format constants for SetPageFormat.
**Notes**: DIN C5

3.34.1815  kpfdIN_C6 = 9

Plugin Version: 8.0. **Function**: One of the DynaPDF page format constants for SetPageFormat.
**Notes**: DIN C6

3.34.1816  kpfdIN_C65 = & h000000A

Plugin Version: 8.0. **Function**: One of the DynaPDF page format constants for SetPageFormat.
**Notes**: DIN C65

3.34.1817  kpfdIN_DL = & h000000B

Plugin Version: 8.0. **Function**: One of the DynaPDF page format constants for SetPageFormat.
**Notes**: DIN DL

3.34.1818  kpfdIN_E4 = & h000000C

Plugin Version: 8.0. **Function**: One of the DynaPDF page format constants for SetPageFormat.
**Notes**: DIN E4
### 3.34.1819  kpfDIN_E5 = & h0000000D

Plugin Version: 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN E5

### 3.34.1820  kpfDIN_E6 = & h0000000E

Plugin Version: 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN E6

### 3.34.1821  kpfDIN_E65 = & h0000000F

Plugin Version: 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN E65

### 3.34.1822  kpfDIN_M5 = & h00000010

Plugin Version: 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN M5

### 3.34.1823  kpfDIN_M65 = & h00000011

Plugin Version: 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat. **Notes:** DIN M65

### 3.34.1824  kpfDitherImagesToBW = 8

Plugin Version: 7.7. **Function:** One of the PDF Parser constants. **Notes:** Floyd-Steinberg dithering.

### 3.34.1825  kpff1Bit = 1

Plugin Version: 15.1. **Function:** One of the printing flags. **Notes:** Print with 1 bit in black and white.
3.34.1826 kpffAutoCenter = &h00000400

Plugin Version: 18.3. Function: One of the printing flags. Notes: Automatically scale the page to match printer context.

3.34.1827 kpffAutoRotate = &h00000200

Plugin Version: 18.3. Function: One of the printing flags. Notes: Automatically rotate the page to match printer context.

3.34.1828 kpffAutoRotateAndCenter = 4

Plugin Version: 15.1. Function: One of the printing flags. Notes: Automatically rotate and scale the page to match printer context. With newer versions you can use kpffAutoRotate and kpffAutoCenter separately.

3.34.1829 kpffColor = 2

Plugin Version: 15.1. Function: One of the printing flags. Notes: Print in color.

3.34.1830 kpffDefault = 0


3.34.1831 kpffNoEndDoc = &h00000080

Plugin Version: 15.2. Function: One of the printing flags. Notes: Do not call EndDoc on Windows
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3.34.1832 kpffNoStartDoc = & h00000020

Plugin Version: 15.2. **Function:** One of the printing flags.  
**Notes:** Do not call StartDoc on Windows

3.34.1833 kpffNoStartPage = & h00000040

Plugin Version: 15.2. **Function:** One of the printing flags.  
**Notes:** Do not call StartPage on Windows

3.34.1834 kpffPrintAsImage = 8

Plugin Version: 15.1. **Function:** One of the printing flags.  
**Notes:** Print by rendering each page as image and drawing it in the graphics context.

3.34.1835 kpffPrintPageAsIs = & h00000100

Plugin Version: 17.2. **Function:** One of the printing flags.  
**Notes:** If set, do not scale or rotate a page to fit into the printable area.

3.34.1836 kpffShrinkToPrintArea = & h00000100

Plugin Version: 15.1. **Function:** One of the printing flags.  
**Notes:** Shrink PDF to print area.

3.34.1837 kpffImageInfoOnly = & h00000080

Plugin Version: 8.2. **Function:** One of the image import flags.  
**Notes:** If set, images are not decompressed. This flag is useful if you want to enumerate the images of a PDF file or if you want to determine how many images are stored in it. Note that images can be compressed with multiple filters. The member Filter of the structure TPDFImage contains only the last filter with which the image was compressed. There is no indication whether multiple decode filters are required to decompress the image buffer. So, it makes no sense to set this flag if you want to try to decompress the image buffer manually with your own decode filters.
3.34.1838  kpfNoJPXDecode = 4

Plugin Version: 7.7. **Function:** One of the PDF Parser constants.  
**Notes:** Meaningful only if the flag pfDecomprAllImages is set. If set, JPEG2000 images are returned as is so that you can use your own library to decompress such images since the the entire JPEG2000 codec is still marked as experimental. If we find an alternative to the currently used Jasper library then we will replace it immediately with another one...

3.34.1839  kpfNone = 0

Plugin Version: 8.0. **Function:** One of the PDF Parser constants.

3.34.1840  kpfUS_Legal = &h00000012

Plugin Version: 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat.  
**Notes:** US Legal

3.34.1841  kpfUS_Letter = &h00000013

Plugin Version: 8.0. **Function:** One of the DynaPDF page format constants for SetPageFormat.  
**Notes:** US Letter

3.34.1842  kplDefault = 6

Plugin Version: 8.0. **Function:** One of the page layout constants.  
**Notes:** Use viewer’s default settings

3.34.1843  kplfDecimalArabic = 0

Plugin Version: 8.0. **Function:** One of the Page Label Format constants.  
**Notes:** 1,2,3,4...

3.34.1844  kplfLowercaseLetters = 4

Plugin Version: 8.0. **Function:** One of the Page Label Format constants.  
**Notes:** a,b,c,d...
3.34.1845  kplfLowercaseRoman = 2

Plugin Version: 8.0. Function: One of the Page Label Format constants. Notes: i, ii, iii, iv...

3.34.1846  kplfNone = 5

Plugin Version: 8.0. Function: One of the Page Label Format constants.

3.34.1847  kplfUppercaseLetters = 3


3.34.1848  kplfUppercaseRoman = 1


3.34.1849  kplOneColumn = 1

Plugin Version: 8.0. Function: One of the page layout constants.

3.34.1850  kplSinglePage = 0

Plugin Version: 8.0. Function: One of the page layout constants.

3.34.1851  kplTwoColumnLeft = 2

Plugin Version: 8.0. Function: One of the page layout constants.
3.34.1852  kplTwoColumnRight = 3

Plugin Version: 8.0. **Function:** One of the page layout constants.

3.34.1853  kplTwoPageLeft = 4

Plugin Version: 8.0. **Function:** One of the page layout constants.
**Notes:** PDF 1.5

3.34.1854  kplTwoPageRight = 5

Plugin Version: 8.0. **Function:** One of the page layout constants.
**Notes:** PDF 1.5

3.34.1855  kpmFullScreen = 3

Plugin Version: 8.0. **Function:** One of the page mode constants.

3.34.1856  kpmUseAttachments = 5

Plugin Version: 8.0. **Function:** One of the page mode constants.
**Notes:** PDF 1.6

3.34.1857  kpmUseNone = 0

Plugin Version: 8.0. **Function:** One of the page mode constants.

3.34.1858  kpmUseOC = 4

Plugin Version: 8.0. **Function:** One of the page mode constants.
**Notes:** PDF 1.5
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3.34.1859  kpmUseOutlines = 1

Plugin Version: 8.0. **Function:** One of the page mode constants.

3.34.1860  kpmUseThumbs = 2

Plugin Version: 8.0. **Function:** One of the page mode constants.

3.34.1861  kpsAppDefault = 0

Plugin Version: 8.7. **Function:** One of the print scaling flag constants.

3.34.1862  kpsFitBest = 2

Plugin Version: 11.1. **Function:** One of the constants to specify how the page should be scaled into the image buffer.
**Notes:** Scale the page so that it fits fully into the image buffer.

3.34.1863  kpsFitHeight = 1

Plugin Version: 11.1. **Function:** One of the constants to specify how the page should be scaled into the image buffer.
**Notes:** Scale the page to the height of the image buffer.

3.34.1864  kpsFitWidth = 0

Plugin Version: 11.1. **Function:** One of the constants to specify how the page should be scaled into the image buffer.
**Notes:** Scale the page to the width of the image buffer.

3.34.1865  kpsFitZoom = 3

Plugin Version: 11.3. **Function:** One of the constants to specify how the page should be scaled into the image buffer.
**Notes:** This mode must be used if the scaling factors of the transformation matrix are <>1.0
3.34.1866 \( \text{kpsNone} = 1 \)

Plugin Version: 8.7. **Function:** One of the print scaling flag constants.

3.34.1867 \( \text{kpt3DOrthographic} = 0 \)

Plugin Version: 8.0. **Function:** One of the constants for 3D projection types.  
**Notes:** Orthographic

3.34.1868 \( \text{kpt3DPerspective} = 1 \)

Plugin Version: 8.0. **Function:** One of the constants for 3D projection types.  
**Notes:** Perspective

3.34.1869 \( \text{kptColored} = 0 \)

Plugin Version: 8.0. **Function:** One of the pattern type constants.

3.34.1870 \( \text{kptDontCopyBuf} = 4 \)

Plugin Version: 8.0. **Function:** One of the constants for password type to pass when opening files.  
**Notes:** If set, OpenImportBuffer() does not copy the PDF buffer to an internal buffer. This increases the processing speed and reduces the memory usage. The PDF buffer must not be released until CloseImportFile() or CloseFile() was called.

3.34.1871 \( \text{kptForceRepair} = 2 \)

Plugin Version: 8.0. **Function:** One of the constants for password type to pass when opening files.  
**Notes:** Meaningful only when opening a PDF file with OpenImportFile() or OpenImportBuffer(). If set, the PDF parser rebuilds the cross-reference table by scanning all the objects in the file. This can be useful if the cross-reference table contains damages while the top level objects are intact. Setting this flag makes only sense if the file was already previously opened in normal mode and if errors occurred when importing pages of it.
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### 3.34.1872 kptImportPage = 0

**Plugin Version:** 8.0. **Function:** One of the DynaPDF constants for the proctype parameter in the progress event.  
**Notes:** This value is for: Start page import

### 3.34.1873 kptOpen = 0

**Plugin Version:** 8.0. **Function:** One of the constants for password type to pass when opening files.  
**Notes:** No password.

### 3.34.1874 kptOwner = 1

**Plugin Version:** 8.0. **Function:** One of the constants for password type to pass when opening files.  
**Notes:** Owner password provided.

### 3.34.1875 kptPrintPage = 2

**Plugin Version:** 15.2. **Function:** One of the DynaPDF constants for the proctype parameter in the progress event.  
**Notes:** Progress for printing a page.

### 3.34.1876 kptShadingPattern = 2

**Plugin Version:** 8.0. **Function:** One of the pattern type constants.

### 3.34.1877 kptUnColored = 1

**Plugin Version:** 8.0. **Function:** One of the pattern type constants.

### 3.34.1878 kptWritePage = 1

**Plugin Version:** 8.0. **Function:** One of the DynaPDF constants for the proctype parameter in the progress event.  
**Notes:** This value is for: Start writing a page to file or buffer
3.34.1879  kpvPDFA_1a = & h00000010

Notes: PDF/A 1a

3.34.1880  kpvPDFA_2005 = & h0000000E

Plugin Version: 8.0. Function: One of the PDF Version constants.
Notes: PDF/A-1b 2005

3.34.1881  kpvPDFA_2a = & h00000011

Notes: PDF/A 2a

3.34.1882  kpvPDFA_2b = & h00000012

Notes: PDF/A 2b

3.34.1883  kpvPDFA_2u = & h00000013

Notes: PDF/A 2u

3.34.1884  kpvPDFA_3a = & h00000014

Notes: PDF/A 3a

3.34.1885  kpvPDFA_3b = & h00000015

Notes: PDF/A 3b
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3.34.1886  kpvPDFA_3u = & h00000016

Plugin Version: 13.1. **Function:** One of the PDF Version constants.
**Notes:** PDF/A 3u

3.34.1887  kpvPDFX1a_2001 = & h0000000A

Plugin Version: 8.0. **Function:** One of the PDF Version constants.
**Notes:** PDF/X-1a:2001

3.34.1888  kpvPDFX1a_2003 = & h0000000B

Plugin Version: 8.0. **Function:** One of the PDF Version constants.
**Notes:** PDF/X-1a:2003

3.34.1889  kpvPDFX3_2002 = & h0000000C

Plugin Version: 8.0. **Function:** One of the PDF Version constants.
**Notes:** PDF/X-3:2002

3.34.1890  kpvPDFX3_2003 = & h0000000D

Plugin Version: 8.0. **Function:** One of the PDF Version constants.
**Notes:** PDF/X-3:2003

3.34.1891  kpvPDFX_4 = & h0000000F

Plugin Version: 13.0. **Function:** One of the PDF Version constants.
**Notes:** PDF/X-4

3.34.1892  kpvPDF_1_0 = 0

Plugin Version: 8.0. **Function:** One of the PDF Version constants.
**Notes:** PDF 1.0
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3.34.1893  kpvPDF_1_1 = 1

Plugin Version: 8.0. **Function:** One of the PDF Version constants.  
**Notes:** PDF 1.1

3.34.1894  kpvPDF_1_2 = 2

Plugin Version: 8.0. **Function:** One of the PDF Version constants.  
**Notes:** PDF 1.2

3.34.1895  kpvPDF_1_3 = 3

Plugin Version: 8.0. **Function:** One of the PDF Version constants.  
**Notes:** PDF 1.3

3.34.1896  kpvPDF_1_4 = 4

Plugin Version: 8.0. **Function:** One of the PDF Version constants.  
**Notes:** PDF 1.4

3.34.1897  kpvPDF_1_5 = 5

Plugin Version: 8.0. **Function:** One of the PDF Version constants.  
**Notes:** PDF 1.5

3.34.1898  kpvPDF_1_6 = 6

Plugin Version: 8.0. **Function:** One of the PDF Version constants.  
**Notes:** PDF 1.6

3.34.1899  kpvPDF_1_7 = 7

Plugin Version: 8.0. **Function:** One of the PDF Version constants.  
**Notes:** PDF 1.7
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3.34.1900  kpvPDF_2_0 = 8

Plugin Version: 13.0. **Function:** One of the PDF Version constants.
**Notes:** PDF 2.0

3.34.1901  kpvZUGFeRD_Basic = & h00010000

Plugin Version: 16.3. **Function:** One of the PDF Version constants.
**Notes:**
ZUGFeRD Basic level.
This constant are flags which can be combined with kpvPDFA_3a, kpvPDFA_3b, and kpvPDFA_3u. If used stand alone PDF/A 3b with the correspondig ZUGFeRD metadata will be created.

3.34.1902  kpvZUGFeRD_Comfort = & h00020000

Plugin Version: 16.3. **Function:** One of the PDF Version constants.
**Notes:**
ZUGFeRD Comfort level.
This constant are flags which can be combined with kpvPDFA_3a, kpvPDFA_3b, and kpvPDFA_3u. If used stand alone PDF/A 3b with the correspondig ZUGFeRD metadata will be created.

3.34.1903  kpvZUGFeRD_Extended = & h00040000

Plugin Version: 16.3. **Function:** One of the PDF Version constants.
**Notes:**
ZUGFeRD Extended level.
This constant are flags which can be combined with kpvPDFA_3a, kpvPDFA_3b, and kpvPDFA_3u. If used stand alone PDF/A 3b with the correspondig ZUGFeRD metadata will be created.

3.34.1904  kpvZUGFeRD_Mask = & h00070000

Plugin Version: 16.3. **Function:** One of the PDF Version constants.
**Notes:** The mask to bitwise AND the value and get the ZUGFeRD part.
3.34.1905 \( \text{kpxf1Bit} = 0 \)

Plugin Version: 12.2. **Function:** One of the pixel format constants.  
**Notes:** 1 bit per pixel black and white.

3.34.1906 \( \text{kpxfABGR} = 7 \)

Plugin Version: 12.2. **Function:** One of the pixel format constants.  
**Notes:** ABGR

3.34.1907 \( \text{kpxfARGB} = 6 \)

Plugin Version: 12.2. **Function:** One of the pixel format constants.  
**Notes:** ARGB

3.34.1908 \( \text{kpxfBGR} = 3 \)

Plugin Version: 12.2. **Function:** One of the pixel format constants.  
**Notes:** BGR

3.34.1909 \( \text{kpxfBGRA} = 5 \)

Plugin Version: 12.2. **Function:** One of the pixel format constants.  
**Notes:** BGRA

3.34.1910 \( \text{kpxfCMYK} = 9 \)

Plugin Version: 15.0. **Function:** One of the pixel format constants.  
**Notes:** CMYK without alpha

3.34.1911 \( \text{kpxfCMYKA} = \& \text{h0000000A} \)

Plugin Version: 15.0. **Function:** One of the pixel format constants.  
**Notes:** CMYK with alpha
3.34.1912  kpxfGray = 1

Plugin Version: 12.2. **Function:** One of the pixel format constants. 
**Notes:** 8 bit grayscale.

3.34.1913  kpxfGrayA = 8

Plugin Version: 11.2. **Function:** One of the pixel format constants.  
**Notes:** 8 bit grayscale with alpha.

3.34.1914  kpxfRGB = 2

Plugin Version: 12.2. **Function:** One of the pixel format constants. 
**Notes:** RGB

3.34.1915  kpxfRGBA = 4

Plugin Version: 12.2. **Function:** One of the pixel format constants. 
**Notes:** RGBA

3.34.1916  krfClipBoxMask = & h0000001C

Plugin Version: 15.0. **Function:** One of the raster flag constants.  
**Notes:** The mask for Clip flags.

3.34.1917  krfClipToArtBox = 4

Plugin Version: 12.2. **Function:** One of the raster flag constants. 
**Notes:**  
Clip the page to the art box if any.

Only one of these clip flags must be set at time!
3.34.1918  krfClipToBleedBox = 8

Plugin Version: 12.2. **Function:** One of the raster flag constants.  
**Notes:**
Clip the page to the bleed box if any.

Only one of these clip flags must be set at time!

3.34.1919  krfClipToTrimBox = & h00000010

Plugin Version: 12.2. **Function:** One of the raster flag constants.  
**Notes:**
Clip the page to the bleed box if any.

Only one of these clip flags must be set at time!

3.34.1920  krfCompositeWhite = & h0001000

Plugin Version: 13.1. **Function:** One of the raster flag constants.  
**Notes:** Composite pixel formats with an alpha channel finally with a white background. The alpha channel is 255 everywhere after composition. This flag is mainly provided for debug purposes but it can also be useful if the image must be copied on screen with a function that doesn’t support alpha blending.

3.34.1921  krfDefault = 0

Plugin Version: 12.2. **Function:** One of the raster flag constants.  
**Notes:** Render the page as usual

3.34.1922  krfDisableAAClipping = & h00200000

Plugin Version: 15.0. **Function:** One of the raster flag constants.  
**Notes:** Disable Anti-Aliasing for clipping paths. This flag is the most important one since clipping paths cause often visible artefacts in PDF files with flattened transparency.
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3.34.1923 krfDisableAAText = & h00400000

Plugin Version: 15.0. **Function:** One of the raster flag constants. **Notes:** Disable Anti-Aliasing for text.

3.34.1924 krfDisableAAVector = & h00800000

Plugin Version: 15.0. **Function:** One of the raster flag constants. **Notes:** Disable Anti-Aliasing for vector graphics.

3.34.1925 krfDisableAntiAliasing = & h00E00000

Plugin Version: 15.0. **Function:** One of the raster flag constants. **Notes:** Combination of krfDisableAAVector, krfDisableAAAText and krfDisableAAClipping.

3.34.1926 krfDisableBiLinearFilter = & h01000000

Plugin Version: 15.0. **Function:** One of the raster flag constants. **Notes:** Disable the BiLevel filter for images. Sometimes useful if sharp images are needed, e.g., for barcodes.

3.34.1927 krfExclAnnotations = & h00000020

Plugin Version: 12.2. **Function:** One of the raster flag constants. **Notes:** Don’t render annotations.

3.34.1928 krfExclButtons = & h00004000

Plugin Version: 14.4. **Function:** One of the raster flag constants. **Notes:**

If you want to render specific field types with RenderAnnotOrField() then use this flag to exclude buttons. If all fields should be skipped then set the flag rfExclFormFields instead.
3.34.1929  \texttt{krfExclCheckBoxes} = \& \texttt{h00008000}

Plugin Version: 15.0. \textbf{Function}: One of the raster flag constants.
\textbf{Notes}:
If you want to render specific field types with \texttt{RenderAnnotOrField()} then use this flag to exclude checkboxes. If all fields should be skipped then set the flag \texttt{rfExclFormFields} instead.

3.34.1930  \texttt{krfExclComboBoxes} = \& \texttt{h00010000}

Plugin Version: 15.0. \textbf{Function}: One of the raster flag constants.
\textbf{Notes}:
If you want to render specific field types with \texttt{RenderAnnotOrField()} then use this flag to exclude combobox. If all fields should be skipped then set the flag \texttt{rfExclFormFields} instead.

3.34.1931  \texttt{krfExclFormFields} = \& \texttt{h00000040}

Plugin Version: 12.2. \textbf{Function}: One of the raster flag constants.
\textbf{Notes}: Don’t render form fields.

3.34.1932  \texttt{krfExclListBoxes} = \& \texttt{h00020000}

Plugin Version: 15.0. \textbf{Function}: One of the raster flag constants.
\textbf{Notes}:
If you want to render specific field types with \texttt{RenderAnnotOrField()} then use this flag to exclude listbox. If all fields should be skipped then set the flag \texttt{rfExclFormFields} instead.

3.34.1933  \texttt{krfExclPageContent} = \& \texttt{h00002000}

Plugin Version: 14.4. \textbf{Function}: One of the raster flag constants.
\textbf{Notes}: If set, only annotations and form fields will be rendered (if any).

3.34.1934  \texttt{krfExclSigFields} = \& \texttt{h00080000}

Plugin Version: 15.0. \textbf{Function}: One of the raster flag constants.
\textbf{Notes}:
If you want to render specific field types with RenderAnnotOrField() then use this flag to exclude signature fields.
If all fields should be skipped then set the flag rfExclFormFields instead.

3.34.1935  krfExclTextFields = & h00040000

Plugin Version: 15.0.  **Function:** One of the raster flag constants.
**Notes:**
If you want to render specific field types with RenderAnnotOrField() then use this flag to exclude text fields.
If all fields should be skipped then set the flag rfExclFormFields instead.

3.34.1936  krfIgnoreCropBox = 2

Plugin Version: 12.2.  **Function:** One of the raster flag constants.
**Notes:** Ignore the crop box and render anything inside the media box without clipping.

3.34.1937  krfInitBlack = & h00000800

Plugin Version: 13.1.  **Function:** One of the raster flag constants.
**Notes:** Initialize the image buffer to black before rendering (RGBA or GrayA must be initialized to black)

3.34.1938  krfRenderInvisibleText = & h02000000

Plugin Version: 18.2.  **Function:** One of the raster flag constants.
**Notes:** If set, treat text rendering mode Invisible as Normal.

3.34.1939  krfRotate180 = & h00000200

Plugin Version: 12.2.  **Function:** One of the raster flag constants.
**Notes:** Rotate the page 180 degrees.

3.34.1940  krfRotate270 = & h00000400

Plugin Version: 12.2.  **Function:** One of the raster flag constants.
**Notes:** Rotate the page 270 degrees.
3.34.1941  krfRotate90 = & h00000100

Plugin Version: 12.2. **Function:** One of the raster flag constants.

**Example:**

```vba
dim pdf as new DynaPDFMBS // make subclass to catch error event

dim f as FolderItem = SpecialFolder.Desktop.Child("dynapdf_help.pdf")

// create PDF
call pdf.CreateNewPDF(nil)
// set import flags
call pdf.SetImportFlags(pdf.kifImportAll + pdf.kifImportAsPage)

// open import file
call pdf.OpenImportFile(f, 0, "")

// import all pdf pages
call pdf.ImportPDFFile(1, 1.0, 1.0)

dim PageCount as Integer = pdf.GetPageCount

// create rasterizer.
dim r as new DynaPDFRasterizerMBS(pdf, 1000,1000)

// create options
dim o as new DynaPDFRasterImageMBS

// fill white
o.InitWhite = true

// scale to fit
o.DefScale = o.kpsFitBest

// rotate
o.Flags = o.krfRotate90

// render all pages
for i as Integer = 1 to PageCount

dim p as DynaPDFPageMBS = pdf.GetPage(i)
if r.RenderPage(p, o) then
    // save to disc
dim outfile as FolderItem = SpecialFolder.Desktop.Child("page "+Format(i,"0")+".jpg")
call outfile.SaveAsJPEGMBS(r.Pic, 75)
```
3.34. CLASS DYNAPDFMBS

end
next

Notes: Rotate the page 90 degrees.

3.34.1942 krfScaleToBBox = & h00100000

Plugin Version: 15.0. Function: One of the raster flag constants.
Notes: Meaningful only, if rfClipToArtBox, rfClipToBleedBox, or rfClipToTrimBox is set. If set, the picture size is set to the size of the wished bounding box.

3.34.1943 krfScaleToMediaBox = 1

Plugin Version: 12.2. Function: One of the raster flag constants.
Notes: Render the real paper format. Contents outside the crop box is clipped.

3.34.1944 krfSkipUpdateBG = & h00000080

Plugin Version: 12.2. Function: One of the raster flag constants.
Notes: Don’t generate an update event after initializing the background to white.

3.34.1945 kriAbsoluteColorimetric = 0

Plugin Version: 8.0. Function: One of the rendering intent constants.

3.34.1946 krifByteAligned = & h00001000


3.34.1947 krifCMYKData = & h00004000

3.34.1948  krifRGBData = & h00002000

Plugin Version: 10.1. **Function:** One of the flags for adding raw images.

3.34.1949  kriPerceptual = 1

Plugin Version: 8.0. **Function:** One of the rendering intent constants.

3.34.1950  kriRelativeColorimetric = 2

Plugin Version: 8.0. **Function:** One of the rendering intent constants.

3.34.1951  kriSaturation = 3

Plugin Version: 8.0. **Function:** One of the rendering intent constants.

3.34.1952  krmBoundingBox = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1953  krmHiddenWireframe = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1954  krmIllustration = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1955  krmNotSet = & h0000000F

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.
3.34. **CLASS DYNAPDFMBS**

3.34.1956  \( \text{krmShadedIllustration} = 3 \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1957  \( \text{krmShadedVertices} = 4 \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1958  \( \text{krmShadedWireframe} = 5 \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1959  \( \text{krmSolid} = 6 \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1960  \( \text{krmSolidOutline} = 7 \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1961  \( \text{krmSolidWireframe} = 8 \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1962  \( \text{krmTransparent} = 9 \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.

3.34.1963  \( \text{krmTranspBBox} = & h0000000A \)

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D rendering mode.
3.34.1964  krmTranspBBoxOutline = & h0000000B

Plugin Version: 8.0. Function: One of the DynaPDF constants for a 3D rendering mode.

3.34.1965  krmTranspWireframe = & h0000000C

Plugin Version: 8.0. Function: One of the DynaPDF constants for a 3D rendering mode.

3.34.1966  krmVertices = & h0000000D

Plugin Version: 8.0. Function: One of the DynaPDF constants for a 3D rendering mode.

3.34.1967  krmWireframe = & h0000000E

Plugin Version: 8.0. Function: One of the DynaPDF constants for a 3D rendering mode.

3.34.1968  krsAddObj = & h00000020


3.34.1969  krsApproved = 0

Plugin Version: 8.0. Function: One of the rubber stamp constants for StampAnnotation.

3.34.1970  krsAsIs = 1

Plugin Version: 8.0. Function: One of the rubber stamp constants for StampAnnotation.

3.34.1971  krsAssemble = & h00000400

Notes: This flag is only used for 128 bit encryption. So this flag is ignored if 40 bit encryption is used.
3.34. **CLASS DYNAPDFMBS**

3.34.1972  \textit{krsConfidential} = 2

Plugin Version: 8.0. **Function:** One of the rubber stamp constants for StampAnnotation.

3.34.1973  \textit{krsCopyObj} = \& h00000010

Plugin Version: 8.0. **Function:** One of the DynaPDF restriction constants.

3.34.1974  \textit{krsDenyAll} = \& h00000F3C

Plugin Version: 8.0. **Function:** One of the DynaPDF restriction constants.

3.34.1975  \textit{krsDenyNothing} = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF restriction constants.

3.34.1976  \textit{krsDepartmental} = 3

Plugin Version: 8.0. **Function:** One of the rubber stamp constants for StampAnnotation.

3.34.1977  \textit{krsDraft} = 4

Plugin Version: 8.0. **Function:** One of the rubber stamp constants for StampAnnotation.

3.34.1978  \textit{krsEmbFilesOnly} = \& h00002000

Plugin Version: 8.0. **Function:** One of the DynaPDF restriction constants.

**Notes:**

This flag is only used for 128 bit encryption. So this flag is ignored if 40 bit encryption is used. PDF 1.6 Encrypt embedded files only ->Requires AES encryption.
3.34.1979  \texttt{krsExlMetadata} = & h00001000

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF restriction constants.  
\textbf{Notes}: This flag is only used for 128 bit encryption. So this flag is ignored if 40 bit encryption is used. PDF 1.5 Exclude metadata streams ->128/256 bit encryption bit only.

3.34.1980  \texttt{krsExperimental} = 5

Plugin Version: 8.0. \textbf{Function}: One of the rubber stamp constants for StampAnnotation.

3.34.1981  \texttt{krsExpired} = 6

Plugin Version: 8.0. \textbf{Function}: One of the rubber stamp constants for StampAnnotation.

3.34.1982  \texttt{krsExtractObj} = & h00000200

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF restriction constants.  
\textbf{Notes}: This flag is only used for 128 bit encryption. So this flag is ignored if 40 bit encryption is used.

3.34.1983  \texttt{krsFillInFormFields} = & h00000100

Plugin Version: 8.0. \textbf{Function}: One of the DynaPDF restriction constants.  
\textbf{Notes}: This flag is only used for 128 bit encryption. So this flag is ignored if 40 bit encryption is used.

3.34.1984  \texttt{krsFinal} = 7

Plugin Version: 8.0. \textbf{Function}: One of the rubber stamp constants for StampAnnotation.

3.34.1985  \texttt{krsForComment} = 8

Plugin Version: 8.0. \textbf{Function}: One of the rubber stamp constants for StampAnnotation.
3.34. CLASS DYNAPDFMBS

3.34.1986  krsForPublicRelease = 9

Plugin Version: 8.0. **Function:** One of the rubber stamp constants for StampAnnotation.

3.34.1987  krsModify = 8

Plugin Version: 8.0. **Function:** One of the DynaPDF restriction constants.

3.34.1988  krsNotApproved = & h0000000A

Plugin Version: 8.0. **Function:** One of the rubber stamp constants for StampAnnotation.

3.34.1989  krsNotForPublicRelease = & h0000000B

Plugin Version: 8.0. **Function:** One of the rubber stamp constants for StampAnnotation.

3.34.1990  krsPrint = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF restriction constants.

3.34.1991  krsPrintHighRes = & h00000800

Plugin Version: 8.0. **Function:** One of the DynaPDF restriction constants. **Notes:** This flag is only used for 128 bit encryption. So this flag is ignored if 40 bit encryption is used.

3.34.1992  krsSold = & h0000000C

Plugin Version: 8.0. **Function:** One of the rubber stamp constants for StampAnnotation.

3.34.1993  krsTopSecret = & h0000000D

Plugin Version: 8.0. **Function:** One of the rubber stamp constants for StampAnnotation.
3.34.1994  \( \text{krsUserDefined} = \& \text{h0000000E} \)

Plugin Version: 8.0. **Function:** One of the rubber stamp constants for StampAnnotation.

3.34.1995  \( \text{ksfCanonicalFormat} = \& \text{h00000200} \)

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.

3.34.1996  \( \text{ksfEmbedForm} = \& \text{h00002000} \)

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.  
**Notes:** PDF 1.5 embed the entire form into a file stream inside the FDF file -> requires the full version of Adobe’s Acrobat.

3.34.1997  \( \text{ksfExlFKey} = \& \text{h00000800} \)

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.

3.34.1998  \( \text{ksfExlNonUserAnnots} = \& \text{h00000400} \)

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.

3.34.1999  \( \text{ksfExlude} = 1 \)

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.  
**Notes:** If set, the fields in a submit form action are excluded if any.

3.34.2000  \( \text{ksfGetMethod} = 8 \)

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.
3.34. CLASS DYNAPDFMBS

3.34.2001 ksfHTML = 4

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.

3.34.2002 ksfInclAnnots = & h00000080

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.

3.34.2003 ksfInclAppSaves = & h0000040

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction. **Notes:** Requires the full version of Adobe’s Acrobat

3.34.2004 ksfInclNoValFields = 2

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.

3.34.2005 ksfNone = 0

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction. **Notes:** The default export format is FDF

3.34.2006 ksfPDF = & h00000100

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction. **Notes:** Submit the entire PDF file - requires the full version of Adobe’s Acrobat.

3.34.2007 ksfSubmCoords = & h00000010

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.
3.34.2008  ksfXML = & h00000024

Plugin Version: 8.0. **Function:** One of the submit flag constants for CreateSubmitAction.

3.34.2009  ksmFamilyName = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for font selection modes.

3.34.2010  ksmFullName = 2

Plugin Version: 11.3. **Function:** One of the DynaPDF constants for font selection modes.  
**Notes:** Full name.

3.34.2011  ksmPostScriptName = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for font selection modes.  
**Notes:** If font selection mode is set to smPostScriptName the font styles fsItalic or fsBold are ignored.  
The PostScriptName is already a unique font name incl. style information.

3.34.2012  ksmtAlpha = 0

Plugin Version: 11.3. **Function:** One of the soft mask constants.  
**Notes:** Alpha mode.

3.34.2013  ksmtLuminosity = 1

Plugin Version: 11.3. **Function:** One of the soft mask constants.  
**Notes:** Luminosity mode.

3.34.2014  kspcDefault = 0

Plugin Version: 13.4. **Function:** One of the constants for ConvertEMFSpool.  
**Notes:** Default flags.
3.34. **CLASS DYNAPDFMBS**

### 3.34.2015 \( kspcDontAddMargins = 2 \)

**Plugin Version:** 13.4. **Function:** One of the constants for ConvertEMFSpool.  
**Notes:** If set, the page format is calculated from the EMF files as is. The current page format is not used to calculate margins which are maybe required. Note that the parameters LeftMargin and TopMargin will still be considered.

### 3.34.2016 \( kspcFlushPages = 8 \)

**Plugin Version:** 13.4. **Function:** One of the constants for ConvertEMFSpool.  
**Notes:** If set, the function writes every finish page directly to the output file to reduce the memory usage. This flag is meaningful only if the PDF file is not created in memory. Note also that it is not possible to access already flushed pages again with EditPage().

### 3.34.2017 \( kspcIgnorePaperFormat = 1 \)

**Plugin Version:** 13.4. **Function:** One of the constants for ConvertEMFSpool.  
**Notes:** If set, the current page format is used as is for the entire spool file.

### 3.34.2018 \( kspcLoadSpoolFontsOnly = 4 \)

**Plugin Version:** 13.4. **Function:** One of the constants for ConvertEMFSpool.  
**Notes:** If set, only embedded fonts will be loaded. The EMF files must be converted with the flag mfIgnoreEmbFonts in this case. This flag can be useful if you want to use your own code to convert the EMF files of the spool file.

### 3.34.2019 \( kspCross = 4 \)

**Plugin Version:** 8.0. **Function:** One of the Standard Pattern Constants.

### 3.34.2020 \( kspDiaCross = 5 \)

**Plugin Version:** 8.0. **Function:** One of the Standard Pattern Constants.
**3.34.2021** kspHorizontal = 0

Plugin Version: 8.0. **Function:** One of the Standard Pattern Constants.

**3.34.2022** kspLDiagonal = 3

Plugin Version: 8.0. **Function:** One of the Standard Pattern Constants.

**3.34.2023** kspRDiagonal = 2

Plugin Version: 8.0. **Function:** One of the Standard Pattern Constants.

**3.34.2024** kspVertical = 1

Plugin Version: 8.0. **Function:** One of the Standard Pattern Constants.

**3.34.2025** kst3DHeight = 2

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D scale type.

**3.34.2026** kst3DMax = 4

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D scale type.

**3.34.2027** kst3DMin = 3

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D scale type.

**3.34.2028** kst3DValue = 0

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D scale type.
3.34. CLASS DYNAPDFMBS

3.34.2029 kst3DWidth = 1

Plugin Version: 8.0. **Function:** One of the DynaPDF constants for a 3D scale type.

3.34.2030 kstAxial = 2

Plugin Version: 8.0. **Function:** One of the shading type constants.

3.34.2031 kstCoonsPatch = 6

Plugin Version: 8.0. **Function:** One of the shading type constants.

3.34.2032 kstFreeFormGouraud = 4

Plugin Version: 8.0. **Function:** One of the shading type constants.

3.34.2033 kstFunctionBased = 1

Plugin Version: 8.0. **Function:** One of the shading type constants.

3.34.2034 kstLatticeFormGouraud = 5

Plugin Version: 8.0. **Function:** One of the shading type constants.

3.34.2035 kstRadial = 3

Plugin Version: 8.0. **Function:** One of the shading type constants.

3.34.2036 kstTensorProduct = 7

Plugin Version: 8.0. **Function:** One of the shading type constants.
3.34.2037  ktaCenter = 1

Plugin Version: 8.0. **Function:** One of the constants for the text alignment.
**Notes:** Center

3.34.2038  ktaJustify = 3

Plugin Version: 8.0. **Function:** One of the constants for the text alignment.
**Notes:** Justify

3.34.2039  ktaLeft = 0

Plugin Version: 8.0. **Function:** One of the constants for the text alignment.
**Notes:** Left

3.34.2040  ktaPlainText = & h10000000

Plugin Version: 19.2. **Function:** One of the constants for the text alignment.
**Notes:** Added to alignment flag to tell WriteFText to not interpret escape commands.

3.34.2041  ktaRight = 2

Plugin Version: 8.0. **Function:** One of the constants for the text alignment.
**Notes:** Right

3.34.2042  ktefDefault = 0

Plugin Version: 18.0. **Function:** One of the text extraction flags.
**Notes:** Create text lines in the original order.

3.34.2043  ktefDeleteOverlappingText = 4

Plugin Version: 18.0. **Function:** One of the text extraction flags.
**Notes:** Delete duplicate text records on same position.
3.34. CLASS DYNAPDFMBS

3.34.2044 ktefSortTextX = 1

Plugin Version: 18.0. **Function:** One of the text extraction flags. **Notes:** Sort text records in x-direction.

3.34.2045 ktefSortTextXY = 3

Plugin Version: 18.0. **Function:** One of the text extraction flags. **Notes:** Sort text records in x and y-direction.

3.34.2046 ktefSortTextY = 2

Plugin Version: 18.0. **Function:** One of the text extraction flags. **Notes:** Sort text records in y-direction.

3.34.2047 ktoAnnots = 4

Plugin Version: 11.1. **Function:** One of the Tab Order constants. **Notes:** Annotation order ->PDF 1.7 Extension Level 3

3.34.2048 ktoColumn = 1

Plugin Version: 8.0. **Function:** One of the Tab Order constants. **Notes:** Column.

3.34.2049 ktoFields = 5

Plugin Version: 11.1. **Function:** One of the Tab Order constants. **Notes:** Widget order (Form Fields) ->PDF 1.7 Extension Level 3.

3.34.2050 ktoNone = 3

Plugin Version: 8.0. **Function:** One of the Tab Order constants.
3.34.2051 kToRow = 0

Plugin Version: 8.0. **Function:** One of the Tab Order constants.
**Notes:** Row.

3.34.2052 kToStructure = 2

Plugin Version: 8.0. **Function:** One of the constants for the tab order.
**Notes:** Structure

3.34.2053 kTRANS_P_3DANNOT = &h40000000

Plugin Version: 11.1. **Function:** One of the annotation flags.
**Notes:**
This flag can be combined with the annotation handle in Set3DAnnotProps().

3D Annotations with a transparent background are supported since PDF 1.7, Extension Level 3

3.34.2054 kttConstSpacing = 0

Plugin Version: 8.0. **Function:** One of the Tiling Type Constants.

3.34.2055 kttFastConstSpacing = 2

Plugin Version: 8.0. **Function:** One of the Tiling Type Constants.

3.34.2056 kttNoDistortion = 1

Plugin Version: 8.0. **Function:** One of the Tiling Type Constants.

3.34.2057 kusbCursorHandClosed = &h00000020

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.
**Notes:**
3.34. CLASS DYNAPDFMBS

Occurs when the cursor leaves an action field and if the left mouse button is pressed.
The cursor constants are set by MouseMove. Since we have only one cursor there is never more than one constant set.

3.34.2058 kusbCursorHandNormal = & h00000010

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.
**Notes:**
This is the default if the left mouse button is not pressed and if we are not over an action field.
The cursor constants are set by MouseMove. Since we have only one cursor there is never more than one constant set.

3.34.2059 kusbCursorHandPoint = & h00000040

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.
**Notes:**
Occurs when we enter link or button field.
The cursor constants are set by MouseMove. Since we have only one cursor there is never more than one constant set.

3.34.2060 kusbCursorIBeam = & h00000080

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.
**Notes:**
Occurs when we enter an action field that accepts text input.
The cursor constants are set by MouseMove. Since we have only one cursor there is never more than one constant set.

3.34.2061 kusbCursorMask = & h000000F0

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.
**Notes:** Bitmask to mask out the cursor constants.
3.34.2062  kusbHorzRange = 4

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.  
**Notes:** Update the horizontal scroll range.

3.34.2063  kusbHorzScrollPos = 8

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.  
**Notes:** Update the horizontal scroll position.

3.34.2064  kusbNoUpdate = 0

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.  
**Notes:** Nothing to do.

3.34.2065  kusbUpdateAll = &h0000000F

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.  
**Notes:** Update both scroll ranges and the scroll positions.

3.34.2066  kusbVertRange = 1

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.  
**Notes:** Update the vertical scroll range.

3.34.2067  kusbVertScrollPos = 2

Plugin Version: 11.3. **Function:** One of the scrollbar update constants.  
**Notes:** Update the vertical scroll position.

3.34.2068  kvpCenterWindow = &h00000010

Plugin Version: 8.0. **Function:** One of the viewer preference constants.
3.34. CLASS DNAPDFMBS

3.34.2069  kvpDirection = & h00000080

Plugin Version: 8.0. **Function:** One of the viewer preference constants.

3.34.2070  kvpDisplayDocTitle = & h00000020

Plugin Version: 8.0. **Function:** One of the viewer preference constants.

3.34.2071  kvpFitWindow = 8

Plugin Version: 8.0. **Function:** One of the viewer preference constants.

3.34.2072  kvpHideMenuBar = 2

Plugin Version: 8.0. **Function:** One of the viewer preference constants.

3.34.2073  kvpHideToolBar = 1

Plugin Version: 8.0. **Function:** One of the viewer preference constants.

3.34.2074  kvpHideWindowUI = 4

Plugin Version: 8.0. **Function:** One of the viewer preference constants.

3.34.2075  kvpNonFullScrPageMode = & h00000040

Plugin Version: 8.0. **Function:** One of the viewer preference constants.

3.34.2076  kvpPrintArea = & h00000400

Plugin Version: 8.0. **Function:** One of the viewer preference constants.
3.34.2077  kvpPrintClip = & h00000800

Plugin Version: 8.0. **Function**: One of the viewer preference constants.

3.34.2078  kvpUseNone = 0

Plugin Version: 8.0. **Function**: One of the viewer preference constants.

3.34.2079  kvpViewArea = & h00000100

Plugin Version: 8.0. **Function**: One of the viewer preference constants.

3.34.2080  kvpViewClip = & h00000200

Plugin Version: 8.0. **Function**: One of the viewer preference constants.
3.35. **CLASS DYNAPDFMEASUREMBS**

3.35 **class DynaPDFMeasureMBS**

3.35.1 **class DynaPDFMeasureMBS**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a measure dictionary.
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.35.2 **Methods**

3.35.3 **Angles as DynaPDFNumberFormatMBS()**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number format array to measure angles.

3.35.4 **Area as DynaPDFNumberFormatMBS()**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number format array to measure areas.

3.35.5 **Bounds as Single()**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Array of numbers taken pairwise to describe the bounds for which geospatial transforms are valid.

3.35.6 **Constructor**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.35.7 **Distance as DynaPDFNumberFormatMBS()**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number format array to measure distances.
3.35.8 GPTS as Single()

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: Required, an array of numbers that shall be taken pairwise, defining points in geographic space as degrees of latitude and longitude, respectively.

3.35.9 LPTS as Single()

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: Optional, an array of numbers that shall be taken pairwise to define points in a 2D unit square.

3.35.10 Slope as DynaPDFNumberFormatMBS()

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: Number format array for measurement of the slope of a line.

3.35.11 X as DynaPDFNumberFormatMBS()

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: Number format array for measurement of change along the x-axis and, if Y is not present, along the y-axis as well.

3.35.12 Y as DynaPDFNumberFormatMBS()

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: Number format array for measurement of change along the y-axis.

3.35.13 Properties

3.35.14 AnglesCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function**: Number of objects in the array.

**Notes**: (Read and Write property)
3.35. **CLASS DYNAPDFMEASUREMBS**

### 3.35.15 AreaCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of objects in the array.  
**Notes:** (Read and Write property)

### 3.35.16 BoundCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of values in the array.  
**Notes:**  
Should be a multiple of two.  
(Read and Write property)

### 3.35.17 CXY as Single

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional, meaningful only when Y is present.  
**Notes:** (Read and Write property)

### 3.35.18 DCS_EPSG as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional, either EPSG or WKT is set.  
**Notes:** (Read and Write property)

### 3.35.19 DCS_IsSet as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the DCS members are set.  
**Notes:** (Read and Write property)

### 3.35.20 DCS_Projected as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the DCS values contains a projected coordinate system.
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Notes: (Read and Write property)

3.35.21  DCS_WKT as String

Notes: (Read and Write property)

3.35.22  DistanceCount as Integer

Notes: (Read and Write property)

3.35.23  GCS_EPSG as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Optional, either EPSG or WKT is set.
Notes: (Read and Write property)

3.35.24  GCS_Projected as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: If true, the GCS values contain a projected coordinate system.
Notes: (Read and Write property)

3.35.25  GCS_WKT as String

Notes: (Read and Write property)

3.35.26  GPTSCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Number of values in the array.
3.35. **CLASS DYNAPDFMEASUREMBS**

Notes: (Read and Write property)

### 3.35.27 IsRectilinear as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the members of the rectilinear measure dictionary are set.

Notes:
The geospatial members otherwise.
(Read and Write property)

### 3.35.28 LPTSCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of values in the array.

Notes: (Read and Write property)

### 3.35.29 OriginX as Single

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Origin of the measurement coordinate system.

Notes: (Read and Write property)

### 3.35.30 OriginY as Single

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Origin of the measurement coordinate system.

Notes: (Read and Write property)

### 3.35.31 PDU1 as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional preferred linear display units.

Notes: (Read and Write property)
3.35.32  PDU2 as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional preferred area display units.
**Notes:** (Read and Write property)

3.35.33  PDU3 as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional preferred angular display units.
**Notes:** (Read and Write property)

3.35.34  R as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A text string expressing the scale ratio of the drawing.
**Notes:** (Read and Write property)

3.35.35  SlopeCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of objects in the array.
**Notes:** (Read and Write property)

3.35.36  XCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of objects in the array.
**Notes:** (Read and Write property)

3.35.37  YCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of objects in the array.
**Notes:** (Read and Write property)
3.36. Class DynaPDFMovieActionMBS

3.36.1 Class DynaPDFMovieActionMBS

**Function:** The class for a movie action.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.36.2 Methods

3.36.3 Constructor

**Function:** The private constructor.

3.36.4 FWPosition(index as Integer) as Single

**Function:** The position.

**Notes:** Index from 0 to 1.

3.36.5 FWScale(index as Integer) as Single

**Function:** The scaling.

**Notes:** Index from 0 to 1.

3.36.6 Properties

3.36.7 Annot as Integer

**Function:** Optional. The movie annotation handle identifying the movie that shall be played.

**Notes:**
Either Annot or Title should be set, but not both.
(Read only property)
3.36.8 Mode as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The mode.  
**Notes:** (Read only property)

3.36.9 NextAction as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The handle to the next action.  
**Notes:**
-1 or next action handle to be executed if any  
(Read only property)

3.36.10 NextActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the next action.  
**Notes:**
Only set if NextAction is >= 0.  
(Read only property)

3.36.11 Operation as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Operation.  
**Notes:** (Read only property)

3.36.12 Rate as Single

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The playback rate.  
**Notes:** (Read only property)

3.36.13 ShowControls as Boolean

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether to show controls.
3.36. **CLASS DYNAPDFMOVIEACTIONMBS**

Notes: (Read only property)

### 3.36.14 Synchronous as Boolean

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Synchronous flag.  
**Notes:** (Read only property)

### 3.36.15 Title as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The title of a movie annotation that shall be played.  
**Notes:**  
Either Annot or Title should be set, but not both.  
(Read only property)

### 3.36.16 Volume as Single

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The volume.  
**Notes:** (Read only property)
3.37 class DynaPDFNamedActionMBS

3.37.1 class DynaPDFNamedActionMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a named action.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.37.2 Methods

3.37.3 Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.37.4 Properties

3.37.5 Name as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The name of the action.  
**Notes:**  
Only set if Type = knaUserDefined.  
(Read only property)

3.37.6 NewWindow as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether to show in a new window or not.  
**Notes:**  
-1 = viewer default, 0 = false, 1 = true.  
(Read only property)
3.37. **CLASS DYNAPDFNAMEDACTIONMBS**

### 3.37.7 NextAction as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The handle to the next action.

**Notes:**

-1 or next action handle to be executed if any
(Read only property)

### 3.37.8 NextActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the next action.

**Notes:**

Only set if NextAction is >= 0.
(Read only property)

### 3.37.9 Type as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Known pre-defined actions.

**Notes:**

See kna* constants.
(Read only property)
3.38 class DynaPDFNamedDestMBS

3.38.1 class DynaPDFNamedDestMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A class for the Named Destination.

3.38.2 Properties

3.38.3 DestFile as String

**Notes:** (Read only property)

3.38.4 DestPage as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destination page.
**Notes:** (Read only property)

3.38.5 DestPos as DynaPDFRectMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destination position.
**Notes:** (Read only property)

3.38.6 DestType as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destination type.
**Notes:**
Values can be a kdt* constant.
(Read only property)
3.38.7 Name as String

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The name of that destination.

**Notes:**

This string is either Unicode or ANSI encoded.

(Read only property)
3.39 class DynaPDFNotInitializedExceptionMBS

3.39.1 class DynaPDFNotInitializedExceptionMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** An exception for the case a function is called and the library is not initialized. **Notes:**

Should only happen on the unsupported platforms.
Subclass of the RuntimeException class.
3.40. **CLASS DYNAPDFNUMBERFORMATMBS**

3.40  **class DynaPDFNumberFormatMBS**

3.40.1  **class DynaPDFNumberFormatMBS**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a number format.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.40.2  **Methods**

3.40.3  **Constructor**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.40.4  **Properties**

3.40.5  **C as Single**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The conversion factor used to multiply a value in partial units.  
**Notes:** (Read and Write property)

3.40.6  **D as Integer**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A positive integer that shall specify the precision or denominator of a fractional amount.  
**Notes:** (Read and Write property)

3.40.7  **F as Integer**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number format.  
**Notes:**  
can be kmnfDecimal, kmnfFractional, kmnfRound or kmnfTruncate.  
(Read and Write property)
3.40.8 FD as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, a fractional value formatted according to the D entry may not have its denominator reduced or low-order zeros truncated. **Notes:** (Read and Write property)

3.40.9 O as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The label position. **Notes:**
Can be kmlpSuffix or kmlpPrefix.
(Read and Write property)

3.40.10 PS as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Text to be concatenated to the left of the label specified by U. **Notes:** (Read and Write property)

3.40.11 RD as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Text for the decimal position in displaying numerical values. **Notes:** (Read and Write property)

3.40.12 RT as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Text to be used between orders of thousands in display of numerical values. **Notes:** (Read and Write property)

3.40.13 SS as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Text that shall be concatenated after the label specified by U. **Notes:** (Read and Write property)
3.40. CLASS DYNAPDFNUMBERFORMATMBS

3.40.14 U as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Label, should be a universally recognized abbreviation. **Notes:** (Read and Write property)

3.40.15 Constants

3.40.16 kmlpPrefix = 1

Plugin Version: 15.0. **Function:** One of the label position constants. **Notes:** Prefix

3.40.17 kmlpSuffix = 0

Plugin Version: 15.0. **Function:** One of the label position constants. **Notes:** Suffix

3.40.18 kmnfDecimal = 0

Plugin Version: 15.0. **Function:** One of the number formats. **Notes:** Decimal

3.40.19 kmnfFractional = 1

Plugin Version: 15.0. **Function:** One of the number formats. **Notes:** Fractional

3.40.20 kmnfRound = 2

Plugin Version: 15.0. **Function:** One of the number formats. **Notes:** Round
3.40.21  kmnTruncate = 3

Plugin Version: 15.0. **Function:** One of the number formats.
**Notes:** Truncate
3.41 class DynaPDFObjActionsMBS

3.41.1 class DynaPDFObjActionsMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for an object action.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.41.2 Methods

3.41.3 Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.41.4 Properties

3.41.5 Action as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The handle to the action.

**Notes:**

-1 or action handle to be executed if any
(Read only property)

3.41.6 ActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the action.

**Notes:**

Only set if Action is $\geq 0$.
(Read only property)
3.41.7 Events as DynaPDFObjEventMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Additional events if any.  
**Notes:** (Read only property)
3.42. CLASS DYNAPDFOBJEVENTMBS

3.42 class DynaPDFObjEventMBS

3.42.1 class DynaPDFObjEventMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class with information about an object event.
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.42.2 Methods

3.42.3 Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.42.4 Properties

3.42.5 Action as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Action to be executed.
**Notes:** (Read only property)

3.42.6 ActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the action.
**Notes:**
See kat* constants.
(Read only property)

3.42.7 NextObject as DynaPDFObjEventMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Pointer to the next event if any.
**Notes:** (Read only property)
3.42.8 ObjEvent as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The event when the action should be executed.

**Notes:**
See koe* constants.
(Read only property)
3.43. CLASS DYNAPDOCGCONTUSAGEMBS

3.43 class DynaPDFOCGContUsageMBS

3.43.1 class DynaPDFOCGContUsageMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for content usage properties of an optional layer.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.43.2 Methods

3.43.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.43.4 Properties

3.43.5 ExportState as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The export state.  
**Notes:**  
0 = Off, 1 = On, PDF_MAX_INT = not set (2147483647)  
(Read and Write property)

3.43.6 InfoCreator as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The application that created the group.  
**Notes:** (Read and Write property)

3.43.7 InfoSubtype as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A name defining the type of content, e.g. Artwork, Technical etc.  
**Notes:** (Read and Write property)
3.43.8  LangPreferred as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The preferred state if there is a partial but no exact match of the lang id.

**Notes:**

0 = Off, 1 = On, PDF_MAX_INT (2147483647) = not set.
(Read and Write property)

3.43.9  Language as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A language code as described at DynaPDFMBS.SetLanguage.

**Notes:** (Read and Write property)

3.43.10  PageElement as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If the group contains a pagination artefact.

**Notes:** (Read and Write property)

3.43.11  PrintState as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The print state.

**Notes:**

0 = Off, 1 = On, PDF_MAX_INT = not set (2147483647).
(Read and Write property)

3.43.12  PrintSubtype as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of content that is controlled by the OCG, e.g. Trapping, PrintersMarks or Watermark.

**Notes:** (Read and Write property)
3.43.13 UserNamesCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The user names can be accessed with GetOCGUsageUserName. **Notes:** (Read and Write property)

3.43.14 UserType as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The user for whom the OCG is primarily intended. **Notes:**
Can be kutIndividual, kutOrganization, kutTitle or kutNotSet. (constants defined in DynaPDFMBS) (Read and Write property)

3.43.15 ViewState as Integer

Plugin Version: 15.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The view state. **Notes:**
0 = Off, 1 = On, PDF_MAX_INT (2147483647) = not set (Read and Write property)

3.43.16 ZoomMax as Single

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Maximum zoom factor at which the OCG should be On. **Notes:**
-1 = not set (Read and Write property)

3.43.17 ZoomMin as Single

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Minimum zoom factor at which the OCG should be On. **Notes:**
-1 = not set (Read and Write property)
3.44 class DynaPDFOCGMBS

3.44.1 class DynaPDFOCGMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for details on OCG layers.

**Notes:** This is an abstract class. You can't create an instance, but you can get one from various plugin functions.

3.44.2 Methods

3.44.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.44.4 Properties

3.44.5 AppEvents as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If non-zero, the layer is included in one or more app events which control the layer state.

**Notes:**

Only valid if HaveContUsage is true.

see TOCApplEvent constants: kaeExport, kaePrint and kaeView. (constants defined in DynaPDFMBS)

(Read and Write property)

3.44.6 Categories as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Usage Categories which control the layer state.

**Notes:**

Only valid if HaveContUsage is true.

See UsageCategory constants: koucNone, koucExport, koucLanguage, koucPrint, koucUser, koucView or oucZoom. (constants defined in DynaPDFMBS)

(Read and Write property)
3.44. CLASS DYNAPDFOCGMB

3.44.7 Handle as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The internal object reference.
**Notes:** (Read and Write property)

3.44.8 HaveContUsage as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the layer contains a Content Usage dictionary.
**Notes:**
see GetOCGContUsage function.
(Read and Write property)

3.44.9 Intent as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The intent.
**Notes:**
See intent enumeration. Can be koiDesign, koiView, koiAll or koiEmpty. (constants defined in DynaPDFMBS)
(Read and Write property)

3.44.10 IsAll as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** An accessor for intent state koiAll.
**Notes:** (Read only property)

3.44.11 IsDesign as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** An accessor for intent state koiDesign.
**Notes:** (Read only property)
3.44.12 IsEmpty as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** An accessor for intent state koiEmpty.
**Notes:** (Read only property)

3.44.13 IsView as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** An accessor for intent state koiView.
**Notes:** (Read only property)

3.44.14 IsVisible as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** An accessor for intent state koiVisible.
**Notes:** (Read only property)

3.44.15 Name as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The layer name.
**Notes:** (Read and Write property)
3.45. **CLASS DYNAPDOCLAYERCONFIGMBS**

### 3.45 class DynaPDFOCLayerConfigMBS

**3.45.1 class DynaPDFOCLayerConfigMBS**

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for an optional content layer configuration. **Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

### 3.45.2 Methods

### 3.45.3 Constructor

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

### 3.45.4 Properties

#### 3.45.5 Intent as Integer

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The object intent. **Notes:** Possible values koiDesign, koiView, or koiAll. (Read only property)

#### 3.45.6 IsDefault as Boolean

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, this is the default configuration. **Notes:** (Read only property)

#### 3.45.7 Name as String

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional configuration name. **Notes:** (Read only property)
3.45.8 NameLen as Integer

**Notes:** (Read only property)
3.46. CLASS DYNAPDFOCUINODEMBS

3.46 class DynaPDFOCUINodeMBS

3.46.1 class DynaPDFOCUINodeMBS

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for an optional content user interface node.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.46.2 Methods

3.46.3 Constructor

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.46.4 Properties

3.46.5 Label as String

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional label.  
**Notes:** (Read only property)

3.46.6 LabelLength as Integer

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Label Length in characters.  
**Notes:** (Read only property)

3.46.7 NewNode as Boolean

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, a new child node must be created.  
**Notes:** (Read only property)
3.46.8 NextChild as Integer

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If set, the next child node that must be loaded. **Notes:** (Read only property)

3.46.9 NextItem as Integer

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The next item handle in the list. **Notes:** (Read only property)

3.46.10 OCG as Integer

Plugin Version: 17.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional OCG handle. **Notes:** -1 if not set. See GetOCG method. (Read only property)
3.47. CLASS DynaPDFOptimizeParamsMBS

3.47.1 class DynaPDFOptimizeParamsMBS


3.47.2 Methods

3.47.3 Constructor


3.47.4 Properties

3.47.5 Filter1Bit as Integer


**Notes:**

See kcf* constants. Default is kcfJPEG.
(Read and Write property)

3.47.6 FilterColor as Integer


**Notes:**

See kcf* constants. Default is kcfJPEG.
(Read and Write property)

3.47.7 FilterGray as Integer

Plugin Version: 16.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The filter for gray image compression.

**Notes:**
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3.47.8 JP2KQuality as Integer

**Notes:**
Default is 80.
(Read and Write property)

3.47.9 JPEGQuality as Integer

Plugin Version: 16.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The JPEG quality.
**Notes:**
Default is 80.
(Read and Write property)

3.47.10 Min1BitRes as Integer

**Notes:**
Default is 100.
Can be zero to disable.
(Read and Write property)

3.47.11 MinColorRes as Integer

**Notes:**
Default is 100.
Can be zero to disable.
(Read and Write property)
3.47.12 MinGrayRes as Integer


**Notes:**
Default is 100 dpi.
Can be zero to disable.
(Read and Write property)

3.47.13 MinLineWidth as Single


**Notes:**
Zero means no hair line removal.
(Read and Write property)

3.47.14 Res1BitImages as Integer


**Notes:**
Default is 150.
Can be zero to disable.
(Read and Write property)

3.47.15 ResColorImages as Integer

Plugin Version: 16.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Resolution for images with more than one color channel.

**Notes:**
Default is 150.
Can be zero to disable.
(Read and Write property)
3.47.16 ResGrayImages as Integer


**Notes:**
- Default is 150.
- Can be zero to disable.
- (Read and Write property)
3.48. class DynaPDFOutputIntentMBS

3.48.1 class DynaPDFOutputIntentMBS

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for details on an output intent.
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.48.2 Methods

3.48.3 Constructor


3.48.4 Properties

3.48.5 Buffer as String

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** ICC profile buffer (optional)
**Notes:** (Read and Write property)

3.48.6 BufferSize as Integer

**Notes:** (Read and Write property)

3.48.7 Info as String

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Info string or name of the ICC profile.
**Notes:** (Read and Write property)
3.48.8  **NumComponents as Integer**

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of components. 
**Notes:** (Read and Write property)

3.48.9  **OutputCondition as String**

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Description of the output device. 
**Notes:** (Read and Write property)

3.48.10  **OutputConditionID as String**

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Description of the output device. 
**Notes:** (Read and Write property)

3.48.11  **RegistryName as String**

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The registry in which OutputConditionID is defined. 
**Notes:** (Read and Write property)

3.48.12  **SubType as String**

Plugin Version: 14.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The sub type. 
**Notes:**
GTS_PDFX, GTS_PDFA1, or ISO_PDFE1 
(Read and Write property)
3.49 class DynaPDFPageLabelMBS

3.49.1 class DynaPDFPageLabelMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a Page label.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.49.2 Methods

3.49.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.49.4 Properties

3.49.5 FirstPageNum as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** First page number to be displayed in the page label.

**Notes:**
Subsequent pages are numbered sequentially from this value.
(Read only property)

3.49.6 Format as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The format of the page label.

**Notes:** (Read only property)

3.49.7 Prefix as String

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The prefix.

**Notes:**
This string is either an unicode encoded string or an ASCII encoded string.  
(Read only property)

### 3.49.8 PrefixLen as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The length of the prefix in characters.  
**Notes:** (Read only property)

### 3.49.9 PrefixUni as Boolean

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether the prefix is in unicode.  
**Notes:** (Read only property)

### 3.49.10 StartRange as Integer

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The start range.  
**Notes:** (Read only property)
3.50  class DynaPDFPageMBS

3.50.1  class DynaPDFPageMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a DynaPDF page. **Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.50.2  Methods

3.50.3  BBox(type as Integer) as DynaPDFRectMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Returns the requested bounding box. **Notes:** use the constants kpbArtBox, kpbBleedBox, kpbCropBox, kpbMediaBox or kpbTrimBox.

If orientation gives you 90, 270, -90 or -270, you may want to swap width and height of the rectangle.

3.50.4  CalcPagePixelSize(DefScale as UInt32, Scale as single, FrameWidth as UInt32, FrameHeight as UInt32, Flags as UInt32, byref Width as UInt32, byref Height as UInt32)

Plugin Version: 12.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function calculates the image size of a page exactly in the way as RenderPage() does, if called with the same parameters. **Example:**

```java
// your PDF environment
dim pdf as new DynaPDFMBS

// some PDF
dim file as FolderItem = SpecialFolder.Desktop.Child("test.pdf")

call pdf.CreateNewPDF(nil)

call pdf.SetImportFlags(pdf.kifImportAsPage)
call pdf.OpenImportFile(file, 0, "")
call pdf.ImportPDFFile(1,1.0,1.0)

call pdf.CalcPagePixelSize(DefScale, Scale, FrameWidth, FrameHeight, Flags, Width, Height)
```

// get first page
dim p as DynaPDFPageMBS = pdf.GetPage(1)

// and calculate how big it would be:
dim PageWidth, PageHeight as UInteger

dim DefScale as UInteger = DynaPDFMBS.kpsFitBest

dim Scale as Single = 1.0

dim Flags as UInt32 = DynaPDFRasterImageMBS.krfDefault

p.CalcPagePixelSize(DefScale, Scale, window1.Width, window1.Height, Flags, PageWidth, PageHeight)

MsgBox "PageWidth: " + str(PageWidth) + vbCrLf + "PageHeight: " + str(PageHeight)

Notes:
This makes it possible to create the image in the required size so that it can be rendered without a border.

3.50.5 Constructor


3.50.6 GetWidthHeight(Flags as UInteger, byref Width as Single, byref Height as Single, Rotate as Integer = 0) as DynaPDFRectMBS


3.50.7 Orientation as Integer


3.50.8 SetBBox(type as integer, BBox as DynaPDFRectMBS) as Boolean

Notes:
This function is intended to be fast as possible. It requires no open page like DynaPDFMBS.SetBBox(), it does not change the default media or crop box, and it does not adjust the current coordinate system if the media box will be changed.

The function is useful if only one or more bounding boxes must be changed, without editing a page, or when a specific area of a page should be rendered. In the latter case change the crop box and restore it to the previous value when finish.
To delete a bounding box set the bounding box to 0, 0, 0, 0. The parameter BBox is required to be present, it cannot be nil.

If the function succeeds the return value is true. If the function fails the return value is false.

### 3.50.9 Properties

#### 3.50.10 Handle as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The internal object reference.
**Notes:** (Read only property)

#### 3.50.11 Page as Integer

Plugin Version: 14.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The original page number used to query this page.
**Notes:** (Read only property)

#### 3.50.12 PDF as DynaPDFMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The reference back to parent dynaPDF object.
**Notes:** (Read only property)

#### 3.50.13 Constants

#### 3.50.14 kpbArtBox = 0

Plugin Version: 11.1. **Function:** One of the PDF box constants.
**Notes:** Art box.
3.50.15  kpbBleedBox = 1

Plugin Version: 11.1. **Function:** One of the PDF box constants.  
**Notes:** Bleed box.

3.50.16  kpbCropBox = 2

Plugin Version: 11.1. **Function:** One of the PDF box constants.  
**Notes:** Crop Box.

3.50.17  kpbMediaBox = 4

Plugin Version: 11.1. **Function:** One of the PDF box constants.  
**Notes:** Media Box.

3.50.18  kpbTrimBox = 3

Plugin Version: 11.1. **Function:** One of the PDF box constants.  
**Notes:** Trim Box.
3.51. CLASS DYNAPDFPAGESTATISTICMBS

3.51  class DynaPDFPageStatisticMBS

3.51.1 class DynaPDFPageStatisticMBS


**Notes:**
You could count yourself with DynaPDFParseInterfaceMBS class and using the events.
This is just a convenience way to learn about whether for example there is an image on the page.
This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.51.2 Methods

3.51.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.51.4 Properties

3.51.5 BezierCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of bezier curves.

**Notes:** (Read and Write property)

3.51.6 ClipPathCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of path clippings.

**Notes:** (Read and Write property)

3.51.7 ClosePathCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of paths closed.

**Notes:** (Read and Write property)
3.51.8 DrawShadingCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of shading drawings.
**Notes:** (Read and Write property)

3.51.9 FontCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of fonts used.
**Notes:** (Read and Write property)

3.51.10 ImageCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of images used.
**Notes:** (Read and Write property)

3.51.11 LayerCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of layers used.
**Notes:** (Read and Write property)

3.51.12 LineCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of lines.
**Notes:** (Read and Write property)

3.51.13 PatternCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of patterns used.
**Notes:** (Read and Write property)
3.51. CLASS DYNAPDFPAGESTATISTICMBS

3.51.14 RectangleCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of rectangles.  
**Notes:** (Read and Write property)

3.51.15 TemplateCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of templates. 
**Notes:** (Read and Write property)

3.51.16 TextCount as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of text fragments. 
**Notes:** (Read and Write property)

3.51.17 TextLength as Integer

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The length in characters of the text on the page. 
**Notes:** (Read and Write property)
3.52 class DynaPDFParseInterfaceMBS

3.52.1 class DynaPDFParseInterfaceMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A class for parsing pdf content. **Notes:** You need to implement the BeginTemplate event in order to get events for images, vector graphics and text on the templates used on the page.

3.52.2 Events

3.52.3 ApplyPattern(ObjectPtr as Integer, Type as Integer, PatternPtr as Integer) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events. **Notes:** Type is one of the following constants:

\[
\begin{align*}
\text{kptColored} &= 0 \\
\text{kptUnColored} &= 1 \\
\text{kptShadingPattern} &= 2
\end{align*}
\]

3.52.4 BeginLayer(OCHandle as Integer, InVisible as boolean) as Integer

Plugin Version: 11.1, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Called when the PDF parser found a begin layer command. **Notes:** The plugin will process the OCG object for you. So if handle is -1, there is no layer handle. If it is >= 0, you have a handle. If it is <0, something failed.

3.52.5 BeginPattern(ObjectPtr as Integer, Fill as Boolean, PatternType as Integer, BBox as DynaPDFRectMBS, Matrix as DynaPDFMatrixMBS, XStep as Double, YStep as Double) as Integer

Plugin Version: 10.1, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events. **Notes:**
PatternType is one of the following constants:

\[
\begin{align*}
\text{kptColored} & = 0 \\
\text{kptUnColored} & = 1 \\
\text{kptShadingPattern} & = 2
\end{align*}
\]

3.52.6 BeginTemplate(ObjectPtr as Integer, Handle as Integer, BBox as DynaPDFRectMBS, Matrix as DynaPDFMatrixMBS) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.  
**Notes:** You need to implement this event in order to get text, images and vector graphics from inside templates.

3.52.7 BezierTo1(ObjectPtr as Integer, x1 as Double, y1 as Double, x3 as Double, y3 as Double) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.8 BezierTo2(ObjectPtr as Integer, x2 as Double, y2 as Double, x3 as Double, y3 as Double) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.9 BezierTo3(ObjectPtr as Integer, x1 as Double, y1 as Double, x2 as Double, y2 as Double, x3 as Double, y3 as Double) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.
3.52.10  

**ClipPath**(*ObjectPtr as Integer, EvenOdd as boolean, Mode as Integer*)  
as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.  
**Notes:** For the Mode parameter, the kfm* constants are used.

3.52.11  

**ClosePath**(*ObjectPtr as Integer, Mode as Integer*)  
as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.  
**Notes:** For the Mode parameter, the kfm* constants are used.

3.52.12  

**DrawShading**(*ObjectPtr as Integer, Type as Integer, Shading as Integer*)  
as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.  
**Notes:** For the type parameter you use the kst* constants.

3.52.13  

**EndLayer**(*OCHandle as Integer, InVisible as boolean*)

Plugin Version: 11.1, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Called when the PDF parser found an end layer command.

3.52.14  

**EndPattern**

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.15  

**EndTemplate**

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.
3.52. CLASS DYNAPDFPARSEINTERFACEMBS

3.52.16 InsertImage(image as DynaPDFImageMBS) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.
**Notes:** You can return zero on success or 1 to stop processing.

3.52.17 LineTo(ObjectPtr as Integer, x as Double, y as Double) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.18 MoveTo(ObjectPtr as Integer, x as Double, y as Double) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.19 MulMatrix(ObjectPtr as Integer, matrix as DynaPDFMatrixMBS)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A matrix multiplication was found.

3.52.20 Rectangle(ObjectPtr as Integer, x as Double, y as Double, w as Double, h as Double) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The parser found a rectangle.

3.52.21 RestoreGraphicState as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.22 SaveGraphicState as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.
3.52.23 SetCharSpacing(ObjectPtr as Integer, Value as Double)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.24 SetExtGState(ObjectPtr as Integer, GS as DynaPDFExtGState2MBS)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.25 SetFillColor(ObjectPtr as Integer, NumComps as Integer, Color1 as Double, Color2 as Double, Color3 as Double, Color4 as Double, Colors() as Double, ColorspaceType as Integer, ColorSpace as DynaPDFColorSpaceMBS)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

**Notes:**

Colors array contains NumComps color values. First four values are provided directly with Color1, Color2, Color3 and Color4 parameters.

ColorSpaceType uses the kes* constants.

You can use ConvColor to convert colors to RGB or CMYK if needed.

3.52.26 SetFont(ObjectPtr as Integer, fontType as Integer, Embedded as boolean, FontName as string, Style as Integer, FontSize as Double, FontHandle as Integer, FontInfo as DynaPDFFontInfoMBS)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.27 SetLeading(ObjectPtr as Integer, Value as Double)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.
3.52. CLASS DYNAPDFPARSEINTERFACEMBS

3.52.28 SetLineCapStyle(ObjectPtr as Integer, Style as Integer)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.29 SetLineDashPattern(ObjectPtr as Integer, dash as memoryblock, Num-Values as Integer, Phase as Integer)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.30 SetLineJoinStyle(ObjectPtr as Integer, Style as Integer)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.31 SetLineWidth(ObjectPtr as Integer, Value as Double)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.32 SetMiterLimit(ObjectPtr as Integer, Value as Double)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

3.52.33 SetStrokeColor(ObjectPtr as Integer, NumComps as Integer, Color1 as Double, Color2 as Double, Color3 as Double, Color4 as Double, Colors() as Double, ColorspaceType as Integer, ColorSpace as DynaPDF-ColorSpaceMBS)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

**Notes:**

Colors array contains NumComps color values. First four values are provided directly with Color1, Color2, Color3 and Color4 parameters.
ColorSpaceType uses the kes* constants. You can use ConvColor to convert colors to RGB or CMYK if needed.

### 3.52.34 SetTextDrawMode(ObjectPtr as Integer, Mode as Integer)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

### 3.52.35 SetTextScale(ObjectPtr as Integer, Value as Double)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

### 3.52.36 SetWordSpacing(ObjectPtr as Integer, Value as Double)

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

### 3.52.37 ShowTextArrayA(ObjectPtr as Integer, Matrix as DynaPDFMatrixMBS, Kerning() as DynapdfTextRecordAMBS, Count as Integer, Width as Double) as Integer

Plugin Version: 8.7, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.

### 3.52.38 ShowTextArrayW(Source() as DynaPDFTextRecordAMBS, Matrix as DynapdfMatrixMBS, Kerning() as DynapdfTextRecordWMBS, Count as Integer, Width as Double, Decoded as boolean) as Integer

Plugin Version: 8.6, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** One of the parser events.
3.53. **class DynaPDFPointDataDictionaryMBS**

3.53.1 **class DynaPDFPointDataDictionaryMBS**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a dictionary with point data. 
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.53.2 **Methods**

3.53.3 **Arrays as DynaPDFPointDataMBS()**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The array of entries in the point data dictionary.

3.53.4 **Constructor**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.53.5 **Properties**

3.53.6 **Count as Integer**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of point data arrays
**Notes:** (Read and Write property)

3.53.7 **Subtype as String**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The sub type for the point data.
**Notes:**
Should be Cloud.
(Read and Write property)
3.54 class DynaPDFPointDataMBS

3.54.1 class DynaPDFPointDataMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The data class for point data dictionary entries.

**Notes:**

A point data dictionary specifies points in 2D space for geospatial measures. The parameter `DataType` specifies the type of points, such as LAT for latitude in degrees, LON for longitude in degrees, or ALT for altitude in metres.

This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.54.2 Methods

3.54.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.54.4 values as Single()

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Array with values.

3.54.5 Properties

3.54.6 DataType as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Data type as string.

**Notes:**

Specifies the type of points, such as LAT for latitude in degrees, LON for longitude in degrees, or ALT for altitude in metres.

(Read and Write property)
3.54.7 Index as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The index in the dictionary.
**Notes:** (Read and Write property)

3.54.8 ValCount as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of values in the array.
**Notes:** (Read and Write property)
3.55  class DynaPDFPointMBS

3.55.1  class DynaPDFPointMBS

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a point.

3.55.2  Methods

3.55.3  Constructor(x as Double = 0.0, y as Double = 0.0)

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The constructor.

3.55.4  Properties

3.55.5  X as Double

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The X value. **Notes:** (Read and Write property)

3.55.6  Y as Double

Plugin Version: 14.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Y value. **Notes:** (Read and Write property)
3.56. CLASS DYNAPDFPRINTPARAMSMBS

3.56 class DynaPDFPrintParamsMBS

3.56.1 class DynaPDFPrintParamsMBS


3.56.2 Properties

3.56.3 Compress as Boolean

Notes: Meaningful only for image output. If true, compressed images are send to the printer. (Read and Write property)

3.56.4 FilterColor as Integer

Notes: Meaningful only for image output. Supported filters on Windows: kcfFlate and kcfJPEG. (Read and Write property)

3.56.5 FilterGray as Integer

Notes: Meaningful only for image output. Supported filters on Windows: kcfFlate and kcfJPEG. (Read and Write property)

3.56.6 IgnoreDCSize as Boolean

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: If true, PageSize is used to calculate the output format.
3.56.7 JPEGQuality as Integer

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** JPEG Quality in percent (1..100).

**Notes:**
Zero means Default, which is 60%.
(Read and Write property)

3.56.8 MaxRes as Integer


**Notes:**
Zero means Default, which is 600 DPI.
(Read and Write property)

3.56.9 PageSize as DynaPDFRectMBS

Plugin Version: 17.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The page size to use.

**Notes:**
Considered only, if IgnoreDCSize is set to true.
(Read and Write property)
3.57. **CLASS DYNAPDFPRINTSETTINGSMBS**

3.57  **class DynaPDFPrintSettingsMBS**

3.57.1  **class DynaPDFPrintSettingsMBS**

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for the print settings in a PDF document. **Notes:** This requires PDF 1.7.

3.57.2  **Methods**

3.57.3  **PrintRanges(index as Integer) as Integer**

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The array of print ranges. **Notes:** If set, the array contains PrintRangesCount * 2 values. Each pair consists of the first and last pages in the sub-range. The first page in the PDF file is denoted by 0.

3.57.4  **Properties**

3.57.5  **DuplexMode as Integer**

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The duplex mode. **Notes:** Use the kdpm* constants. (Read only property)

3.57.6  **NumCopies as Integer**

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of copies. **Notes:** -1 means not set. Values larger than 5 are ignored in viewer applications. (Read only property)
3.57.7 PickTrayByPDFSize as Integer

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The setting for picking the tray by the PDF size. **Notes:**

-1 means not set. 0 = false, 1 = true.
(Read only property)

3.57.8 PrintRangesCount as Integer

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of ranges available in PrintRanges. **Notes:** (Read only property)

3.57.9 PrintScaling as Integer

Plugin Version: 8.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The print scaling setting. **Notes:**

kdpmNone means not set.
(Read only property)
3.58. CLASS DYNAPDFRASTERIMAGEMBS

3.58 class DynaPDFRasterImageMBS

3.58.1 class DynaPDFRasterImageMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for advanced rendering options.

**Example:**

```vbnet
dim pdf as new DynaPDFMBS // make subclass to catch error event

dim f as FolderItem = SpecialFolder.Desktop.Child("dynapdf_help.pdf")

// create PDF
call pdf.CreateNewPDF(nil)

// set import flags
call pdf.SetImportFlags(pdf.kifImportAll + pdf.kifImportAsPage)

// open import file
call pdf.OpenImportFile(f, 0, "")

// import all pdf pages
call pdf.ImportPDFFile(1, 1.0, 1.0)

dim PageCount as Integer = pdf.GetPageCount

// create rasterizer.
dim r as new DynaPDFRasterizerMBS(pdf, 1000, 1000)

// create options
dim o as new DynaPDFRasterImageMBS

// fill white
o.InitWhite = true

// scale to fit
o.DefScale = o.kpsFitBest

// rotate
o.Flags = o.krfRotate90

// render all pages
for i as Integer = 1 to PageCount

dim p as DynaPDFPageMBS = pdf.GetPage(i)
if r.RenderPage(p, o) then

// save to disc

dim outfile as FolderItem = SpecialFolder.Desktop.Child("page " + Format(i,"0") + ".jpg")
call outfile.SaveAsJPEGMBS(r.Pic, 75)
```
Notes: This class is named RasterImage due to the name in the underlying DynaPDF library. A better name would be RasterizerOptions as it includes options for the rasterizer engine.

3.58.2 Properties

3.58.3 ClipRect as DynaPDFRectMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Optional clipping rectangle defined in device coordinates (Pixels)
Notes: (Read and Write property)

3.58.4 DefScale as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Specifies how the page should be scaled into the image buffer.
Notes:
can be kpsFitBest, kpsFitHeight or kpsFitWidth.
(Read and Write property)

3.58.5 DrawFrameRect as Boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: If true, the area outside the page’s bounding box is filled with the frame color.
Notes:
InitWhite can still be used, with or without a clipping rectangle.
(Read and Write property)

3.58.6 Flags as Integer

Notes:
This is a bit mask. Flags can be combined with a binary or operator.
Use a combination of krf* constants.
(Read and Write property)

### 3.58.7 FrameColor as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The color for drawing the frame.
**Notes:**
Must be defined in the color space of the pixel format but in the natural component order, e.g. RGB.
(Read and Write property)

### 3.58.8 InitWhite as Boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether to clear the buffer first.
**Notes:**
If true, the buffer is initialized with white color (default).
Must be set to false if you want to raster the page over an existing image.
When a clipping rectangle is set, only the area inside the clipping rectangle is initialized to white.
(Read and Write property)

### 3.58.9 Matrix as DynaPDFMatrixMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional transformation matrix.
**Notes:**
The matrix can be used to zoom into the page or to move the picture to a specific area in the image buffer.
(Read and Write property)

### 3.58.10 NumAnnots as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of rendered form annotations (excluding invisible annotation but annotations with no appearance are included)
**Notes:** (Read and Write property)
3.58.11 NumBezierCurves as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of bezier curves which were rendered. Glyph outlines are not taken into account.

**Notes:** (Read and Write property)

3.58.12 NumClipPaths as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of clipping paths used in the page. Should be small as possible!

**Notes:** (Read and Write property)

3.58.13 NumFormFields as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of rendered form fields (excluding invisible fields but fields with no appearance are included)

**Notes:** (Read and Write property)

3.58.14 NumGlyphs as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** When the number of glyphs equals NumTextRecords then there is probably some room for optimization...

**Notes:** (Read and Write property)

3.58.15 NumImages as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of images that were rendered.

**Notes:** (Read and Write property)

3.58.16 NumLineTo as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of LineTo operators.

**Notes:** (Read and Write property)
3.58. **CLASS DYNAPDFRASTERIMAGEMBS**

### 3.58.17 NumPaths as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of paths which were processed.  
**Notes:** (Read and Write property)

### 3.58.18 NumPatterns as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of pattern which were processed.  
**Notes:** (Read and Write property)

### 3.58.19 NumRectangles as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of rectangle operators.  
**Notes:** (Read and Write property)

### 3.58.20 NumRestoreGState as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Should be equal to NumSaveGraphicStates.  
**Notes:** (Read and Write property)

### 3.58.21 NumSaveGState as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of save graphics state operators.  
**Notes:** (Read and Write property)

### 3.58.22 NumShadings as Integer

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of shadings.  
**Notes:** (Read and Write property)
3.58.23 NumSoftMasks as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of soft masks that were processed.
**Notes:**
Alpha channels of images are not taken into account.
(Read and Write property)

3.58.24 NumTextRecords as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of independent text records which were rendered.
**Notes:** (Read and Write property)

3.58.25 PageSpace as DynaPDFMatrixMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The matrix represents the mapping from page space to device space.
**Notes:**
Output parameter.
This matrix is required when further objects should be drawn on the page, e.g. the bounding boxes.
(Read and Write property)

3.58.26 UpdateOnImageCoverage as Single

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** DynaPDF multiplies the output image area with this factor to determine when the window should be updated.
**Notes:**
The factor should be around 0.5 through 5.0. Larger values cause less frequently update events.
(Read and Write property)

3.58.27 UpdateOnPathCount as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Call OnUpdateWindow event when the UpdateOnPathCount limit was reached.
**Notes:**
Clipping paths increment the number too.
Only full paths are considered, independent of the number of vertices they contain. The value should be larger than 50 and smaller than 10000. (Read and Write property)

### 3.58.28 Yield as Boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether to yield time to other threads.  
**Notes:**  
Set to true if you render page in a thread, so time is given to other threads.  
(Read and Write property)

### 3.58.29 Events

#### 3.58.30 UpdateWindow(r as DynaPDFRectMBS, pic as Variant) as Integer

Plugin Version: 11.1, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This event is called regularly so you can update your GUI.  
**Notes:**  
Please set UpdateOnPathCount and UpdateOnImageCoverage to use this event.  
If you draw to a picture, the picture is passed as parameter for your convenience.

Pic is a variant so the plugin compiles in older Xojo versions for console targets.

Returns -1 to stop the processing.

### 3.58.31 Constants

#### 3.58.32 kpsFitBest = 2

Plugin Version: 11.1. **Function:** One of the constants to specify how the page should be scaled into the image buffer.  
**Notes:** Scale the page so that it fits fully into the image buffer.
3.58.33 kpsFitHeight = 1

Plugin Version: 11.1. **Function:** One of the constants to specify how the page should be scaled into the image buffer.
**Notes:** Scale the page to the height of the image buffer.

3.58.34 kpsFitWidth = 0

Plugin Version: 11.1. **Function:** One of the constants to specify how the page should be scaled into the image buffer.
**Notes:** Scale the page to the width of the image buffer.

3.58.35 krfClipToArtBox = 4

Plugin Version: 11.1. **Function:** One of the raster flag constants.
**Notes:**
Clip the page to the art box if any.

Only one of these clip flags must be set at time!

3.58.36 krfClipToBleedBox = 8

Plugin Version: 11.1. **Function:** One of the raster flag constants.
**Notes:**
Clip the page to the bleed box if any.

Only one of these clip flags must be set at time!

3.58.37 krfClipToTrimBox = & h00000010

Plugin Version: 11.1. **Function:** One of the raster flag constants.
**Notes:**
Clip the page to the bleed box if any.

Only one of these clip flags must be set at time!
3.58. **CLASS DYNAPDFRAYERIMAGEMBS**

3.58.38  **krfCompositeWhite = & h0001000**

Plugin Version: 13.1. **Function:** One of the raster flag constants.  
**Notes:** Composite pixel formats with an alpha channel finally with a white background. The alpha channel is 255 everywhere after composition. This flag is mainly provided for debug purposes but it can also be useful if the image must be copied on screen with a function that doesn’t support alpha blending.

3.58.39  **krfDefault = 0**

Plugin Version: 11.1. **Function:** One of the raster flag constants.  
**Notes:** Render the page as usual

3.58.40  **krfDisableAAClipping = & h00200000**

Plugin Version: 15.0. **Function:** One of the raster flag constants.  
**Notes:** Disable Anti-Aliasing for clipping paths. This flag is the most important one since clipping paths cause often visible artefacts in PDF files with flattened transparency.

3.58.41  **krfDisableAAText = & h00400000**

Plugin Version: 15.0. **Function:** One of the raster flag constants.  
**Notes:** Disable Anti-Aliasing for text.

3.58.42  **krfDisableAAVector = & h00800000**

Plugin Version: 15.0. **Function:** One of the raster flag constants.  
**Notes:** Disable Anti-Aliasing for vector graphics.

3.58.43  **krfDisableAntiAliasing = & h00E00000**

Plugin Version: 15.0. **Function:** One of the raster flag constants.  
**Notes:** Fully disable Anti-Aliasing.
3.58.44  \texttt{krfDisableBiLinearFilter = \& h01000000}

Plugin Version: 15.0. \textbf{Function}: One of the raster flag constants.  
\textbf{Notes}: Disable the BiLevel filter for images. Sometimes useful if sharp images are needed, e.g. for bar-codes.

3.58.45  \texttt{krfExclAnnotations = \& h00000020}

Plugin Version: 11.1. \textbf{Function}: One of the raster flag constants.  
\textbf{Notes}: Don’t render annotations.

3.58.46  \texttt{krfExclButtons = \& h00004000}

Plugin Version: 15.0. \textbf{Function}: One of the raster flag constants.  
\textbf{Notes}:  
If you want to render specific field types with \texttt{RenderAnnotOrField()} then use this flag to exclude buttons.  
If all fields should be skipped then set the flag \texttt{rfExclFormFields} instead.

3.58.47  \texttt{krfExclCheckBoxes = \& h00008000}

Plugin Version: 15.0. \textbf{Function}: One of the raster flag constants.  
\textbf{Notes}:  
Exclude check boxes.  
If you want to render specific field types with \texttt{RenderAnnotOrField()} then use this flag to exclude checkboxes.  
If all fields should be skipped then set the flag \texttt{rfExclFormFields} instead.

3.58.48  \texttt{krfExclComboBoxes = \& h00010000}

Plugin Version: 15.0. \textbf{Function}: One of the raster flag constants.  
\textbf{Notes}:  
Exclude combo boxes.  
If you want to render specific field types with \texttt{RenderAnnotOrField()} then use this flag to exclude combobox.  
If all fields should be skipped then set the flag \texttt{rfExclFormFields} instead.
3.58. Class DynaPDFRasterImageMbs

3.58.49 krfExclFormFields = & h00000040

Plugin Version: 11.1. **Function:** One of the raster flag constants.
**Notes:** Don’t render form fields.

3.58.50 krfExclListBoxes = & h00020000

Plugin Version: 15.0. **Function:** One of the raster flag constants.
**Notes:**
Exclude listbox fields.
If you want to render specific field types with RenderAnnotOrField() then use this flag to exclude listbox.
If all fields should be skipped then set the flag rfExclFormFields instead.

3.58.51 krfExclPageContent = & h00002000

Plugin Version: 14.4. **Function:** One of the raster flag constants.
**Notes:** If set, only annotations and form fields will be rendered (if any).

3.58.52 krfExclSigFields = & h00080000

Plugin Version: 15.0. **Function:** One of the raster flag constants.
**Notes:**
Exclude signature fields.
If you want to render specific field types with RenderAnnotOrField() then use this flag to exclude signature fields.
If all fields should be skipped then set the flag rfExclFormFields instead.

3.58.53 krfExclTextFields = & h00040000

Plugin Version: 15.0. **Function:** One of the raster flag constants.
**Notes:**
Exclude text fields.
If you want to render specific field types with RenderAnnotOrField() then use this flag to exclude text fields.
If all fields should be skipped then set the flag rfExclFormFields instead.
3.58.54  krfIgnoreCropBox = 2

Plugin Version: 11.1. **Function:** One of the raster flag constants.  
**Notes:** Ignore the crop box and render anything inside the media box without clipping.

3.58.55  krfInitBlack = & h00000800

Plugin Version: 13.1. **Function:** One of the raster flag constants.  
**Notes:** Initialize the image buffer to black before rendering (RGBA or GrayA must be initialized to black)

3.58.56  krfRenderInvisibleText = & h02000000

Plugin Version: 18.2. **Function:** One of the raster flag constants.  
**Notes:** If set, treat text rendering mode Invisible as Normal.

3.58.57  krfRotate180 = & h00000200

Plugin Version: 11.3. **Function:** One of the raster flag constants.  
**Notes:** Rotate the page 180 degrees.

3.58.58  krfRotate270 = & h00000400

Plugin Version: 11.3. **Function:** One of the raster flag constants.  
**Notes:** Rotate the page 270 degrees.

3.58.59  krfRotate90 = & h00000100

Plugin Version: 11.3. **Function:** One of the raster flag constants.  
**Example:**

```dim pdf as new DynaPDFMBS // make subclass to catch error event
dim f as FolderItem = SpecialFolder.Desktop.Child("dynapdf_help.pdf")
// create PDF
call pdf.CreateNewPDF(nil)
// set import flags
call pdf.SetImportFlags(pdf.kifImportAll + pdf.kifImportAsPage)```
// open import file
call pdf.OpenImportFile(f, 0, "")

// import all pdf pages
call pdf.ImportPDFFile(1, 1.0, 1.0)

dim PageCount as Integer = pdf.GetPageCount

// create rasterizer.
dim r as new DynaPDFRasterizerMBS(pdf, 1000,1000)

// create options
dim o as new DynaPDFRasterImageMBS

// fill white
o.InitWhite = true

// scale to fit
o.DefScale = o.kpsFitBest

// rotate
o.Flags = o.krfRotate90

// render all pages
for i as Integer = 1 to PageCount

dim p as DynaPDFPageMBS = pdf.GetPage(i)
if r.RenderPage(p, o) then
    // save to disc
    dim outfile as FolderItem = SpecialFolder.Desktop.Child("page "+Format(i,"0")+.jpg")
call outfile.SaveAsJPEGMBS(r.Pic, 75)
end
next

Notes: Rotate the page 90 degrees.

3.58.60 krfScaleToBBox = & h00100000

Plugin Version: 15.0. **Function:** One of the raster flag constants.  
**Notes:**  
Considered only, if the flag rfClipToArtBox, rfClipToBleedBox, or rfClipToTrimBox is set. If set, the picture size is set to the size of the wished bounding box.
3.58.61  krfScaleToMediaBox = 1

Plugin Version: 11.1. **Function:** One of the raster flag constants.  
**Notes:** Render the real paper format. Contents outside the crop box is clipped.

3.58.62  krfSkipUpdateBG = & h00000080

Plugin Version: 11.3. **Function:** One of the raster flag constants.  
**Notes:** Don’t generate an update event after initializing the background to white.
3.59. **CLASS DYNAPDFRASTERIZERMBS**

### 3.59 class DynaPDFRasterizerMBS

#### 3.59.1 class DynaPDFRasterizerMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for the rasterizer interface.

#### 3.59.2 Methods

#### 3.59.3 Abort

**Notes:** Stops the function RenderPage as soon as possible when RenderPage() is running in a separate thread.

#### 3.59.4 AddRasImage(Filter as Integer) as boolean

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function adds an image from the rasterizer to the current open image file.  
**Notes:** The output image must be opened with CreateImage() beforehand.

#### 3.59.5 AttachImageBuffer(Pic as Picture, RenderWithAlpha as boolean = false) as boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Attaches a new image buffer of the same pixelformat.  
**Notes:**  
Returns true on success.  
Added RenderWithAlpha parameter in plugin version 19.0.  
If RenderWithAlpha is true, we render with alpha channel. If the destination is a picture has alpha channel, you should get the alpha there. Otherwise for picture without alpha channel, we only copy RGB channels.  
See also:

- 3.59.6 AttachImageBuffer(Rows as Memoryblock, Buffer as Memoryblock, Width as UInt32, Height as UInt32, ScanlineLen as Int32, PixelFormat as UInt32) as boolean
3.59.6 AttachImageBuffer(Rows as Memoryblock, Buffer as Memoryblock, Width as UInt32, Height as UInt32, ScanlineLen as Int32, PixelFormat as UInt32) as boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:**Attaches a new image buffer of the same pixelformat.

**Notes:**

For Pixelformat pass one of the kpx* constants.
You can pass Rows or Buffer, but the other memoryblock should be nil.
Returns true on success.
See also:

- 3.59.5 AttachImageBuffer(Pic as Picture, RenderWithAlpha as boolean = false) as boolean

3.59.7 Constructor(PDF as DynaPDFMBS, DeviceContextHandle as Integer, Width as UInt32, Height as UInt32, PixFmt as UInt32)

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:**Initializes rasterizer targeting a device context.

**Notes:**

Special version to simplify rendering into a device context. It creates a DIB Section into which pages can be rendered.
See also:

- 3.59.8 Constructor(PDF as DynaPDFMBS, Pic as Picture, RenderWithAlpha as boolean = false)
- 3.59.9 Constructor(PDF as DynaPDFMBS, Rows as Memoryblock, Buffer as Memoryblock, Width as UInt32, Height as UInt32, ScanlineLen as Int32, PixelFormat as UInt32)
- 3.59.10 Constructor(PDF as DynaPDFMBS, Width as Integer, Height as Integer)

3.59.8 Constructor(PDF as DynaPDFMBS, Pic as Picture, RenderWithAlpha as boolean = false)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a new rasterizer object targeting the given picture.

**Notes:**

Added RenderWithAlpha parameter in plugin version 19.0.
If RenderWithAlpha is true, we render with alpha channel. If the destination is a picture has alpha channel, you should get the alpha there. Otherwise for picture without alpha channel, we only copy RGB channels.
See also:
3.59. CLASS DYNAPDFRASTERIZERMBS

- 3.59.7 Constructor(PDF as DynaPDFMBS, DeviceContextHandle as Integer, Width as UInt32, Height as UInt32, PixFmt as UInt32)

- 3.59.9 Constructor(PDF as DynaPDFMBS, Rows as Memoryblock, Buffer as Memoryblock, Width as UInt32, Height as UInt32, ScanlineLen as Int32, PixelFormat as UInt32)

- 3.59.10 Constructor(PDF as DynaPDFMBS, Width as Integer, Height as Integer)

3.59.9 Constructor(PDF as DynaPDFMBS, Rows as Memoryblock, Buffer as Memoryblock, Width as UInt32, Height as UInt32, ScanlineLen as Int32, PixelFormat as UInt32)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a new rasterizer object targeting the given memory area.

**Notes:**

For Pixelformat pass one of the kpx* constants.

You can pass Rows or Buffer, but the other memoryblock should be nil.

See also:

- 3.59.7 Constructor(PDF as DynaPDFMBS, DeviceContextHandle as Integer, Width as UInt32, Height as UInt32, PixFmt as UInt32)

- 3.59.8 Constructor(PDF as DynaPDFMBS, Pic as Picture, RenderWithAlpha as boolean = false)

- 3.59.10 Constructor(PDF as DynaPDFMBS, Width as Integer, Height as Integer)

3.59.10 Constructor(PDF as DynaPDFMBS, Width as Integer, Height as Integer)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The constructor.

**Notes:**

Creates a new picture as buffer for you with the given size.

PDF must not be nil and point to a valid DynaPDF context.

See also:

- 3.59.7 Constructor(PDF as DynaPDFMBS, DeviceContextHandle as Integer, Width as UInt32, Height as UInt32, PixFmt as UInt32)

- 3.59.8 Constructor(PDF as DynaPDFMBS, Pic as Picture, RenderWithAlpha as boolean = false)

- 3.59.9 Constructor(PDF as DynaPDFMBS, Rows as Memoryblock, Buffer as Memoryblock, Width as UInt32, Height as UInt32, ScanlineLen as Int32, PixelFormat as UInt32)
3.59.11 Redraw(DeviceContextHandle as Integer, DestX as Integer, DestY as Integer)

Plugin Version: 13.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Because there is no direct access to the internal DIB Section when rendering into a device context, this function can be used to redraw the bitmap on the device context.  
**Notes:**  
If RenderPageEx() was called in a separate thread then this function can be called after the thread returned. While the thread is running you can change the position by directly manipulating the coordinate variables which were passed to RenderPageEx(). The function calls the system function SetDIBitsToDevice() to copy the image into the device context.

3.59.12 RenderPage(page as DynaPDFPageMBS, options as DynaPDFRasterImageMBS) as boolean

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Renders a page of a PDF Document with the given options.  
**Notes:** Returns true on success and false on failure.

3.59.13 RenderPageEx(DeviceContextHandle as Integer, byref DestX as Integer, byref DestY as Integer, page as DynaPDFPageMBS, options as DynaPDFRasterImageMBS) as boolean

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Renders a page into a device context.  
**Notes:**  
Only valid if you called Constructor with DeviceContextHandle. Returns true on success.

3.59.14 RenderPageMT(page as DynaPDFPageMBS, options as DynaPDFRasterImageMBS) as boolean

Plugin Version: 11.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Renders a page of a PDF Document with the given options.  
**Notes:**  
Returns true on success and false on failure.  
Same as RenderPage, but with additional multithreading.
Must be called inside a Xojo (Xojo) thread so time yields to main thread and you can keep the GUI running.

As the actual transfer runs on a preemptive thread, the event UpdateWindow is called asynchronously and run a few milliseconds later.

Do not call other functions on this DynaPDFRasterizerMBS instance while RenderPageMT is running!

### 3.59.15 ResizeBitmap

**Function:** Changes the size of the DIB Section.

**Notes:**
- Only valid if you called Constructor with DeviceContextHandle.
- Returns true on success.

### 3.59.16 Properties

#### 3.59.17 Handle as Integer

**Function:** The internal object reference to the rasterizer object.

**Notes:**
- If the constructor is successful, this value is not zero.
- (Read only property)

#### 3.59.18 Height as Integer

**Function:** The height of the picture or buffer.

**Notes:** (Read only property)

#### 3.59.19 PDF as DynaPDFMBS

**Function:** The reference back to parent dynaPDF object.
3.59.20 Pic as Picture

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The target picture.
**Notes:** (Read only property)

3.59.21 PixelFormat as Integer

Plugin Version: 19.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The pixel format of picture.
**Notes:** (Read only property)

3.59.22 ScanlineLen as Integer

Plugin Version: 19.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The scan line length in bytes of the picture.
**Notes:** (Read only property)

3.59.23 TempBuffer as Ptr

Plugin Version: 19.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The temporary buffer data pointer.
**Notes:**
If the picture pixel format is not directly supported with DynaPDF, we render in a temporary buffer and copy it to the picture.
(Read only property)

3.59.24 TempPixelFormat as Integer

Plugin Version: 19.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The temporary buffer pixel format.
**Notes:** (Read only property)
3.59. **CLASS DYNAPDFRASTERIZERMBS**

### 3.59.25 TempScanlineLen as Integer

Plugin Version: 19.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The temporary buffer scan line length in bytes.  
**Notes:** (Read only property)

### 3.59.26 Width as Integer

Plugin Version: 19.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The width of the picture or buffer.  
**Notes:** (Read only property)

### 3.59.27 Constants

#### 3.59.28 kpxf1Bit = 0

Plugin Version: 11.1. **Function:** One of the pixel format constants.  
**Notes:** 1 bit per pixel black and white.

#### 3.59.29 kpxfABGR = 7

Plugin Version: 11.1. **Function:** One of the pixel format constants.  
**Notes:** ABGR.

#### 3.59.30 kpxfARGB = 6

Plugin Version: 11.1. **Function:** One of the pixel format constants.  
**Notes:** ARGB

#### 3.59.31 kpxfBGR = 3

Plugin Version: 11.1. **Function:** One of the pixel format constants.  
**Notes:** BGR
3.59.32  kpxfBGRA = 5

Plugin Version: 11.1. **Function**: One of the pixel format constants.
**Notes**: BGRA

3.59.33  kpxfCMYK = 9

Plugin Version: 15.0. **Function**: One of the pixel format constants.
**Notes**: CMYK without alpha

3.59.34  kpxfCMYKA = & h0000000A

Plugin Version: 15.0. **Function**: One of the pixel format constants.
**Notes**: CMYK with alpha

3.59.35  kpxfGray = 1

Plugin Version: 11.1. **Function**: One of the pixel format constants.
**Notes**: 8 bit grayscale.

3.59.36  kpxfGrayA = 8

Plugin Version: 11.2. **Function**: One of the pixel format constants.
**Notes**: 8 bit grayscale with alpha.

3.59.37  kpxfRGB = 2

Plugin Version: 11.1. **Function**: One of the pixel format constants.
**Notes**: RGB

3.59.38  kpxfRGBA = 4

Plugin Version: 11.1. **Function**: One of the pixel format constants.
**Notes**: RGBA
3.60. CLASS DYNAPDFRAWIMAGEMBS

3.60 class DynaPDFRawImageMBS

3.60.1 class DynaPDFRawImageMBS


3.60.2 Methods

3.60.3 setBuffer(data as MemoryBlock)

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Sets the buffer to point to the bytes in the memoryblock. Notes: Size is optional. Some memoryblocks have no known size and there you need to specify one. See also:

- 3.60.4 setBuffer(data as MemoryBlock, size as Int64)
- 3.60.5 setBuffer(data as Ptr)
- 3.60.6 setBuffer(data as Ptr, size as Int64)
- 3.60.7 setBuffer(data as string)
- 3.60.8 setBuffer(data as string, size as Int64)

3.60.4 setBuffer(data as MemoryBlock, size as Int64)

Plugin Version: 14.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Sets the buffer to point to the bytes in the memoryblock. Notes: Size is optional. Some memoryblocks have no known size and there you need to specify one. See also:

- 3.60.3 setBuffer(data as MemoryBlock)
- 3.60.5 setBuffer(data as Ptr)
- 3.60.6 setBuffer(data as Ptr, size as Int64)
- 3.60.7 setBuffer(data as string)
- 3.60.8 setBuffer(data as string, size as Int64)
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3.60.5 setBuffer(data as Ptr)

Plugin Version: 14.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Private method to set the buffer using a pointer to some memory. **Notes:** This is a private method to make sure nobody passes a ptr instead of memoryblock or ptr+size. See also:

- 3.60.3 setBuffer(data as MemoryBlock)
- 3.60.4 setBuffer(data as MemoryBlock, size as Int64)
- 3.60.6 setBuffer(data as Ptr, size as Int64)
- 3.60.7 setBuffer(data as string)
- 3.60.8 setBuffer(data as string, size as Int64)

3.60.6 setBuffer(data as Ptr, size as Int64)

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the buffer using a pointer to some memory. **Notes:** Please provide the right size. See also:

- 3.60.3 setBuffer(data as MemoryBlock)
- 3.60.4 setBuffer(data as MemoryBlock, size as Int64)
- 3.60.5 setBuffer(data as Ptr)
- 3.60.7 setBuffer(data as string)
- 3.60.8 setBuffer(data as string, size as Int64)

3.60.7 setBuffer(data as string)

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets buffer to point to contents of this string. **Notes:** If you specify a size, the size can be smaller than thing length to use only first part. See also:

- 3.60.3 setBuffer(data as MemoryBlock)
- 3.60.4 setBuffer(data as MemoryBlock, size as Int64)
- 3.60.5 setBuffer(data as Ptr)
- 3.60.6 setBuffer(data as Ptr, size as Int64)
- 3.60.8 setBuffer(data as string, size as Int64)
3.60. CLASS DYNAPDFRAWIMAGEMBS 755

3.60.8 setBuffer(data as string, size as Int64)

Plugin Version: 14.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets buffer to point to contents of this string. **Notes:** If you specify a size, the size can be smaller than thing length to use only first part. See also:

- 3.60.3 setBuffer(data as MemoryBlock) 753
- 3.60.4 setBuffer(data as MemoryBlock, size as Int64) 753
- 3.60.5 setBuffer(data as Ptr) 754
- 3.60.6 setBuffer(data as Ptr, size as Int64) 754
- 3.60.7 setBuffer(data as string) 754

3.60.9 Properties

3.60.10 BitsPerComponent as Integer

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Bits per component. **Notes:** For example 8 for the usual RGB images. (Read and Write property)

3.60.11 Buffer as Ptr

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The buffer as pointer. **Notes:** Please use setBuffer methods to set this. (Read only property)

3.60.12 BufSize as Int64

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The buffer size. **Notes:** (Read only property)
3.60.13  CS as Integer

**Notes:** (Read and Write property)

3.60.14  CSHandle as Integer

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Color space handle or -1.
**Notes:** (Read and Write property)

3.60.15  HasAlpha as Boolean

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The image has an alpha channel?
**Notes:** (Read and Write property)

3.60.16  Height as Integer

**Notes:** (Read and Write property)

3.60.17  IsBGR as Boolean

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Windows bitmap format?
**Notes:** (Read and Write property)

3.60.18  Memory as MemoryBlock

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The memoryblock used with setBuffer.
**Notes:** (Read only property)
3.60. **CLASS DYNAPDFRAWIMAGEMBS**

3.60.19 **MinIsWhite as Boolean**

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether image has value zero for white instead of black.

**Notes:**
One bit images only.
(Read and Write property)

3.60.20 **NumComponents as Integer**

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of components.

**Notes:**
Maximum is 32 for DynaPDF.
(Read and Write property)

3.60.21 **Stride as Integer**

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of bytes per row.

**Notes:**
A negative value mirrors the image.
(Read and Write property)

3.60.22 **String as String**

Plugin Version: 13.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The String used with setBuffer.

**Notes:** (Read only property)

3.60.23 **Width as Integer**


**Notes:** (Read and Write property)
3.61 class DynaPDFRectMBS

3.61.1 class DynaPDFRectMBS

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A rectangle for DynaPDF.

3.61.2 Methods

3.61.3 Constructor(left as Double = 0.0, top as Double = 0.0, right as Double = 0.0, bottom as Double = 0.0)

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates a new rectangle with the given values.

3.61.4 Properties

3.61.5 Bottom as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The bottom coordinate.
**Notes:** (Read and Write property)

3.61.6 Left as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The left coordinate.
**Notes:** (Read and Write property)

3.61.7 Right as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The right coordinate.
**Notes:** (Read and Write property)
3.61. CLASS DYNAPDFRECTMBS

3.61.8 Top as Double

Plugin Version: 8.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The top coordinate. **Notes:** (Read and Write property)

3.61.9 Width as Double

Plugin Version: 13.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The width of the rectangle.
**Notes:**
This is the difference between right and left.

Height property is missing as it depends on the coordinate origin. For top-down coordinates you would calculate bottom - top while for bottom-up coordinates you calculate top - bottom. (Read and Write property)
3.62 class DynaPDFRelFileNodeMBS

3.62.1 class DynaPDFRelFileNodeMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The information on a related file node. **Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.62.2 Methods

3.62.3 Constructor

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.62.4 Properties

3.62.5 EF as DynaPDFFileSpecMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Embedded file. **Notes:** (Read only property)

3.62.6 Name as String

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Name of this file specification. **Notes:** (Read only property)

3.62.7 NextNode as DynaPDFRelFileNodeMBS

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Next node if any. **Notes:** (Read only property)
3.63. **CLASS DYNAPDFRESETFORMACTIONMBS**

### 3.63 class DynaPDFResetFormActionMBS

#### 3.63.1 class DynaPDFResetFormActionMBS

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for reset form action.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

#### 3.63.2 Methods

#### 3.63.3 Constructor

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

#### 3.63.4 Fields(index as Integer) as DynaPDFFieldExMBS

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries array of fields.

**Notes:** Index is from 0 to FieldsCount-1.

#### 3.63.5 Properties

#### 3.63.6 FieldsCount as Integer

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of fields in the array.

**Notes:** (Read only property)

#### 3.63.7 Include as Boolean

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Include or exclude given fields?

**Notes:**

If true, the fields in the array must be reset. If false, these fields must be excluded.
(Read only property)
3.63.8 NextAction as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The next action.  
**Notes:**  
-1 or next action handle to be executed if any.  
(Read only property)

3.63.9 NextActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the next action.  
**Notes:**  
See kat* constants.  
(Read only property)
3.64.1 class DynaPDFSigDictMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for details on signature fields.

3.64.2 Properties

3.64.3 Cert as String

**Notes:** (Read and Write property)

3.64.4 ContactInfo as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional contact info string, e.g. an email address
**Notes:** (Read and Write property)

3.64.5 Contents as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The signature.
**Notes:**
This is either a DER encoded PKCS# 1 binary data object or a DER-encoded PKCS# 7 binary data object depending on the used SubFilter.
(Read and Write property)

3.64.6 Filter as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The name of the security handler, usually Adobe.PPKLite.
**Notes:** (Read and Write property)
3.64.7 Location as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional location of the signer.  
**Notes:** (Read and Write property)

3.64.8 Name as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional signers name.  
**Notes:** (Read and Write property)

3.64.9 PropAuthTime as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional. The number of seconds since the signer was last authenticated.  
**Notes:** (Read and Write property)

3.64.10 PropAuthType as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional. The method that shall be used to authenticate the signer.  
**Notes:**  
Valid values are PIN, Password, and Fingerprint.  
(Read and Write property)

3.64.11 Reason as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional reason.  
**Notes:** (Read and Write property)

3.64.12 Revision as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional, The version of the signature handler that was used to create the signature.  
**Notes:** (Read and Write property)
3.64.13 SignTime as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Date/Time string.  
**Notes:** (Read and Write property)

3.64.14 SubFilter as String

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A name that describes the encoding of the signature value.  
**Notes:**  
Should be adbe.x509.rsa_sha1, adbe.pkcs7.detached, or adbe.pkcs7.sha1.  
(Read and Write property)

3.64.15 Version as Integer

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The version of the signature dictionary format.  
**Notes:** (Read and Write property)
3.65 class DynaPDFSigParmsMBS

3.65.1 class DynaPDFSigParmsMBS

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for PDF signature parameters.

3.65.2 Properties

3.65.3 ContactInfo as String

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional, e.g. an email address.
**Notes:**
Internally this string is converted to ANSI or Unicode encoding.
(Read and Write property)

3.65.4 Encrypt as Boolean

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the file will be encrypted.
**Notes:** (Read and Write property)

3.65.5 HashType as Integer

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The hash type: khtDetached or khtSHA1.
**Notes:** (Read and Write property)

3.65.6 KeyLen as Integer

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Key length to encrypt the file.
**Notes:**
This value is ignored if Encrypt is set to false.
On of the kkl* constants like kkl128bit.
(Read and Write property)
3.65. Location as String

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional location of the signer.

**Notes:**
Internally this string is converted to ANSI or Unicode encoding.
(Read and Write property)

3.65.8 OpenPwd as String


**Notes:**
This value is ignored if Encrypt is set to false.
(Read and Write property)

3.65.9 OwnerPwd as String


**Notes:**
This value is ignored if Encrypt is set to false.
(Read and Write property)

3.65.10 PKCS7ObjLen as Integer

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Max length of the signed PKCS#7 object.

**Notes:** (Read and Write property)

3.65.11 Range1 as String

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Hash or byte range.

**Notes:** (Read and Write property)
3.65.12 Range1Length as Integer

**Notes:** (Read and Write property)

3.65.13 Range2 as String

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Second range value.
**Notes:**
Set only if HashType = htDetached.
(Read and Write property)

3.65.14 Range2Length as Integer

**Notes:** (Read and Write property)

3.65.15 Reason as String

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional reason why the file was signed.
**Notes:**
Internally this string is converted to ANSI or Unicode encoding.
(Read and Write property)

3.65.16 Restrict as Integer

Plugin Version: 10.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** What should be restricted?
**Notes:**
This value is ignored if Encrypt is set to false.
A combination of krs* constants.
(Read and Write property)
3.65.17 Signer as String


**Notes:**

Internally this string is converted to ANSI or Unicode encoding.

(Read and Write property)
3.66 class DynaPDFStackMBS

3.66.1 class DynaPDFStackMBS

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** A class for the current text found by GetPageText.
**Notes:** Before you can use it, call InitStack.

3.66.2 Methods

3.66.3 KerningAdvance(index as UInt32) as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Negative values move the cursor to the right.

3.66.4 KerningLength(index as UInt32) as Integer


3.66.5 KerningText(index as UInt32) as string

**Notes:**  
May contain chr(0) characters.  
Encoding is UTF8.

3.66.6 KerningWidth(index as UInt32) as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** String width measured in text space.

3.66.7 RawKernAdvance(index as UInt32) as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Negative values move the cursor to the right.
3.66.8  RawKernLength(index as UInt32) as Integer


3.66.9  RawKernText(index as UInt32) as string


3.66.10  Properties

3.66.11  CharSP as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Current character spacing, info only.  
**Notes:** (Read only property)

3.66.12  CIDFont as Boolean

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, a CID font is used to render the text.  
**Notes:**  
It is not possible to replace a text with ReplacePageText() in this case. However, it is still possible to delete the text. If the text should be replaced use either ReplacePageTextEx() or WriteTextMatrixEx().  
(Read only property)

3.66.13  ConvColors as Boolean

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:**  
If true (default), all colors are converted to the destination color space DestSpace.  
**Notes:**  
The default color space is DeviceRGB. This variable can be changed after the structure has been initialized with InitStack(). If set to false, colors of complex color spaces are still converted into the alternate color
space but the color space can then be changed arbitrary often. See also the description of FillCS.
(Read and Write property)

3.66.14 ctm as DynaPDFMatrixMBS

**Notes:**
Pre-multiplied global transformation matrix.
(Read only property)

3.66.15 DeleteKerningAt as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This member can be used in combination with ReplacePageText().
**Notes:**
ReplacePageText() deletes or replaces normally always a complete text record but this is often not required especially if a text must be deleted or replaced in the middle or end of a kerning array. To make text replacement easier it is possible to preserve an arbitrary number of kerning records from deletion. The value of DeleteKerningAt represents the first array index which should be deleted. All kerning records above this index will be deleted too. Take a look into the demo examples/edit_text which is delivered with DynaPDF to determine how this member can be used.
(Read and Write property)

3.66.16 DestSpace as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The destination color space in which all colors should be converted.
**Notes:**
If ConvColor is set to false, the value of this member is ignored. If the destination color space should be DeviceCMYK initialize the members FillColor and StrokeColor with PDF_CMYK(0,0,0,255); which represents black.
(Read and Write property)
3.66. **CLASS DYNAPDFSTACKMBS**

### 3.66.17 DrawMode as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The draw mode used to render the text.  
**Notes:**  
See SetTextDrawMode() for further information.  
(Read only property)

### 3.66.18 Embedded as Boolean

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the font is embedded.  
**Notes:**  
This information is very important if the text should be replaced. The function ReplacePageText() can be used if the font is not embedded and if the member CIDFont is false. Otherwise, the function ReplacePageTextEx() or WriteTextMatrixEx() must be used to replace the text, see the examples on the following pages for further information.  
(Read only property)

### 3.66.19 FillColor as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The fill color represents the text color if the text draw mode is dmNormal.  
**Notes:**  
Depending on the draw mode the fill and stroke color can be invoked to render the text.  
(Read only property)

### 3.66.20 FillCS as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** This is the current color space in which the color value of FillColor is defined.  
**Notes:**  
If ConvColor is set to true (default) the value is always equal to DestSpace. If ConvColor is set to false the fill color is still returned in a device color space but the color space can be changed arbitrary often. Colors of complex color spaces, such as Separation or DeviceN, are always converted into the alternate color space. If the original or alternate color
space is an ICC based color space the color value is returned as is and the color space is set depending on the number of components. The ICC profile is not invoked to calculate the color value in the device color space. Future versions of DynaPDF maybe use the ICC profile to convert the color into device color space.

(Read only property)

### 3.66.21 Font as DynaPDFFontMBS

Plugin Version: 11.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Font object used to print the string.

**Notes:**
Depreciated. Better use FontInfo property.

Reading this property creates a new object each time.
Please put object in local variable and avoid querying the property value several times.
(Read only property)

### 3.66.22 FontFlags as Integer

Plugin Version: 10.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The PDF font flags.

**Notes:** (Read and Write property)

### 3.66.23 FontHandle as Integer

Plugin Version: 17.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The internal font object handle.

**Notes:**
In DynaPDF documentation named IFont, a pointer to the C object for the font.
(Read only property)

### 3.66.24 FontInfo as DynaPDFFontInfoMBS

Plugin Version: 16.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Font object used to print the string.

**Notes:**
Reading this property creates a new object each time. Please put object in local variable and avoid querying the property value several times. (Read only property)

### 3.66.25 FontSize as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The font size used to display the text.
**Notes:** (Read only property)

### 3.66.26 HScale as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Current horizontal scaling, info only.
**Notes:** (Read only property)

### 3.66.27 KerningCount as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The number of kerning records.
**Notes:** RawKern and Kerning contain always the same number of records.
(Read only property)

### 3.66.28 Leading as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The leading is already included in the text transformation matrix `tm`.
**Notes:** The value of leading must not be considered to calculate the text position.
(Read only property)

### 3.66.29 LineWidth as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The current line width; it can be ignored if the text is not stroked.
3.66.30  SpaceWidth as Double


Notes:
The space width can be used to determine whether a space character is emulated at a given position. A default space width is set if the font does not contain a space character. Note that many documents emulate spaces with kerning space. Such documents contain usually no space character. It is usually best to use the half space width to determine whether a space character is emulated. This is especially important if a document uses condensed fonts which contain no space character.
(Read only property)

3.66.31  StrokeColor as Integer


Notes:
The stroke color can be ignored if the text draw mode is not dmStroke, dmFillStroke, dmStrokeClip or dmFillStrokeClip since it is then not used to render the text.
(Read only property)

3.66.32  StrokeCS as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function:

This is the current color space in which the color value of StrokeColor is defined.

Notes:
The color space is set in an identical manner like FillCS.
(Read only property)

3.66.33  Text as String

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The raw text line that was found in the content stream.
3.66. **CLASS DYNAPDFSTACKMBS**

**Notes:**

This string can contain single or multi-byte characters. This member should no longer be used to extract or replace text. Use the Kerning array instead.

(Read only property)

### 3.66.34 TextLen as Integer

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The string length in bytes, not characters!

**Notes:**

If TextLen is zero no text was found or an error occurred.

(Read only property)

### 3.66.35 TextRise as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The text rise is already included in the text transformation matrix tm.

**Notes:**

The value is always 0.0.

(Read only property)

### 3.66.36 TextWidth as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The text width measured in text space.

**Notes:**

This is the width of the entire kerning array incl. kerning space.

(Read only property)

### 3.66.37 tm as DynaPDFMatrixMBS


**Notes:**

Pre-multiplied text transformation matrix.

(Read only property)
3.66.38  WordSP as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Current word spacing, info only. **Notes:** (Read only property)

3.66.39  x as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The position. **Notes:**
These members are no longer used. All positioning operators are already included in the text transformation matrix tm. (Read only property)

3.66.40  y as Double

Plugin Version: 7.7, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The position. **Notes:**
These members are no longer used. All positioning operators are already included in the text transformation matrix tm. (Read only property)
3.67. class DynaPDFSubmitFormActionMBS

3.67.1 class DynaPDFSubmitFormActionMBS

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for submit form action details.
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.67.2 Methods

3.67.3 Constructor

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.67.4 Fields(index as Integer) as DynaPDFFieldExMBS

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries array of field.
**Notes:** Index is from 0 to FieldCount-1.

3.67.5 Properties

3.67.6 CharSet as String

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional charset in which the form should be submitted.
**Notes:** (Read only property)

3.67.7 FieldsCount as Integer

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Number of fields in the array.
**Notes:** (Read only property)
3.67.8 Flags as Integer

**Notes:**  
See CreateSubmitAction() for further information.  
(Read only property)

3.67.9 NextAction as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The next action.  
**Notes:**  
-1 or next action handle to be executed if any.  
(Read only property)

3.67.10 NextActionType as Integer

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the next action.  
**Notes:**  
See kat* constants.  
(Read only property)

3.67.11 URL as String

Plugin Version: 15.3, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The URL of the script at the Web server that will process the submission.  
**Notes:** (Read only property)
3.68. **CLASS DYNAPDFSysFontMBS**

### 3.68 class DynaPDFSysFontMBS

**3.68.1 class DynaPDFSysFontMBS**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for system font info.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

### 3.68.2 Methods

#### 3.68.3 Constructor

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

#### 3.68.4 NextFont as DynaPDFSysFontMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries next font in the chain of fonts.  
**Notes:** Returns nil on the end of list.

### 3.68.5 Properties

#### 3.68.6 BaseType as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Font type.  
**Notes:**  
Can be kfbtTrueType, kfbtType1, kfbtOpenType or kfbtStdFont.  
(Read and Write property)

#### 3.68.7 CIDOrdering as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** CID Ordering.  
**Notes:**  
OpenType CID fonts only.  
(Read and Write property)
3.68.8 CIDRegistry as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The CID Registry. **Notes:**
OpenType CID fonts only
(Read and Write property)

3.68.9 CIDSupplement as UInt32

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The CID Supplement. **Notes:**
OpenType CID fonts only
(Read and Write property)

3.68.10 DataOffset as UInt32

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Data offset. **Notes:** (Read and Write property)

3.68.11 FamilyName as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Family name. **Notes:** (Read and Write property)

3.68.12 FilePath as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Font file path. **Notes:** (Read and Write property)

3.68.13 FileSize as UInt32

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** File size in bytes. **Notes:** (Read and Write property)
3.68.14 Flags as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The flags.

**Notes:**
Can be combination of kefpAnsiPath, kefpUnicodePath, kefpEmbeddable and kefpEditable.
(Read and Write property)

3.68.15 FullName as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Full name.

**Notes:** (Read and Write property)

3.68.16 Index as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Zero based font index if stored in a TrueType collection.

**Notes:** (Read and Write property)

3.68.17 IsFixedPitch as Boolean

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** If true, the font is a fixed pitch font.

**Notes:** (Read and Write property)

3.68.18 Length1 as UInt32

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the clear text portion of a Type1 font.

**Notes:** (Read and Write property)

3.68.19 Length2 as UInt32

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length of the exec encrypted binary portion of a Type1 font.
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Notes: (Read and Write property)

3.68.20 PostScriptName as String

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: The Postscript name. Notes: (Read and Write property)

3.68.21 Style as Integer

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Font style. Notes: See kfs* constants. (Read and Write property)

3.68.22 UnicodeRange1 as UInt32

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Supported unicode ranges, part 1. Notes: (Read and Write property)

3.68.23 UnicodeRange2 as UInt32

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Supported unicode ranges, part 2. Notes: (Read and Write property)

3.68.24 UnicodeRange3 as UInt32

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Supported unicode ranges, part 3. Notes: (Read and Write property)
3.68. CLASS DYNAPDFSYSFONTMBS

3.68.25  UnicodeRange4 as UInt32

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Supported unicode ranges, part 4.  
**Notes:** (Read and Write property)

3.68.26  Constants

3.68.27  kurAlphabeticPresentationForms = & h40000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.28  kurAncientGreekNumbers = & h00000040

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.29  kurAncientSymbols = & h00800000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.30  kurArabic = & h00002000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.31  kurArabicPresentationFormsA = & h80000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.32  kurArabicPresentationFormsB = 8

Plugin Version: 15.0. **Function:** One of the unicode range constants.
3.68.33  kurArmenian = & h00000400

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.34  kurArrows = & h00000020

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.35  kurBalinese = & h08000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.36  kurBasicLatin = 1

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.37  kurBengali = & h00010000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.38  kurBlockElements = & h00001000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.39  kurBopomofo = & h00080000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.40  kurBoxDrawing = & h00000800

Plugin Version: 15.0. **Function:** One of the unicode range constants.
3.68. CLASS DYNAPDFSYSFONTMBS

3.68.41 kurBraillePatterns = & h00040000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.42 kurBuginese = 1

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.43 kurCarian = & h02000000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.44 kurCham = & h00400000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.45 kurCherokee = & h00001000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.46 kurCJKCompatibility = & h00800000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.47 kurCJKStrokes = & h20000000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.48 kurCJKSymbolsAndPunctuation = & h00010000

Plugin Version: 15.0. **Function**: One of the unicode range constants.
3.68.49  \texttt{kurCJKUnifiedIdeographs} = \& \texttt{h08000000}

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.50  \texttt{kurCombDiacritMarksForSymbols} = 4

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.51  \texttt{kurCombiningDiacriticalMarks} = \& \texttt{h00000040}

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.52  \texttt{kurCombiningHalfMarks} = 1

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.53  \texttt{kurControlPictures} = \& \texttt{h00000100}

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.54  \texttt{kurCoptic} = \& \texttt{h00000100}

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.55  \texttt{kurCountingRodNumerals} = \& \texttt{h00008000}

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.56  \texttt{kurCuneiform} = \& \texttt{h00004000}

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.
3.68. CLASS DYNAPDFSYSFONTMBS

3.68.57 kurCurrencySymbols = 2

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.58 kurCypriotSyllabary = & h00000800

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.59 kurCyrillic = & h00000200

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.60 kurDeseret = & h00800000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.61 kurDevanagari = & h00008000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.62 kurDingbats = & h00008000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.63 kurDominoTiles = & h04000000

Plugin Version: 15.0. **Function**: One of the unicode range constants.

3.68.64 kurEnclosedAlphanumerics = & h00000400

Plugin Version: 15.0. **Function**: One of the unicode range constants.
3.68.65  \texttt{kurEnclosedCJKLettersAndMonths} = \& h00400000

Plugin Version: 15.0. \textbf{Function:} One of the unicode range constants.

3.68.66  \texttt{kurEthiopic} = \& h00000800

Plugin Version: 15.0. \textbf{Function:} One of the unicode range constants.

3.68.67  \texttt{kurGeneralPunctuation} = \& h80000000

Plugin Version: 15.0. \textbf{Function:} One of the unicode range constants.

3.68.68  \texttt{kurGeometricShapes} = \& h00002000

Plugin Version: 15.0. \textbf{Function:} One of the unicode range constants.

3.68.69  \texttt{kurGeorgian} = \& h04000000

Plugin Version: 15.0. \textbf{Function:} One of the unicode range constants.

3.68.70  \texttt{kurGlagolitic} = 2

Plugin Version: 15.0. \textbf{Function:} One of the unicode range constants.

3.68.71  \texttt{kurGothic} = \& h00400000

Plugin Version: 15.0. \textbf{Function:} One of the unicode range constants.

3.68.72  \texttt{kurGreekandCoptic} = \& h00000080

Plugin Version: 15.0. \textbf{Function:} One of the unicode range constants.
3.68. CLASS DYNAPDFSYSFONTMBS

3.68.73 kurGreekExtended = & h40000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.74 kurGujarati = & h00040000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.75 kurGurmukhi = & h00020000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.76 kurHalfwidthAndFullwidthForms = & h00000010

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.77 kurHangulCompatibilityJamo = & h00100000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.78 kurHangulJamo = & h10000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.79 kurHangulSyllables = & h01000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.80 kurHebrew = & h00000800

Plugin Version: 15.0. **Function:** One of the unicode range constants.
3.68.81 kurHiragana = & h00020000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.82 kurIPAExtensions = & h00000010

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.83 kurKannada = & h00400000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.84 kurKatakana = & h00040000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.85 kurKayahLi = & h00100000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.86 kurKharoshthi = & h00001000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.87 kurKhmer = & h00010000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.88 kurLao = & h02000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.
3.68. CLASS DYNAPDFSYSFONTMBS

3.68.89  kurLatin1Supplement = 2

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.90  kurLatinExtendedA = 4

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.91  kurLatinExtendedAdditional = & h20000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.92  kurLatinExtendedB = 8

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.93  kurLepcha = & h00020000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.94  kurLetterlikeSymbols = 8

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.95  kurLimbu = & h20000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.96  kurLinearBSyllabary = & h00000020

Plugin Version: 15.0. **Function:** One of the unicode range constants.
3.68.97  \texttt{kurMalayalam} = \& h00800000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.98  \texttt{kurMathematicalAlphanumeric} = \& h02000000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.99  \texttt{kurMathematicalOperators} = \& h00000040

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.100  \texttt{kurMiscellaneousSymbols} = \& h00004000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.101  \texttt{kurMiscellaneousTechnical} = \& h00000080

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.102  \texttt{kurMongolian} = \& h00020000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.103  \texttt{kurMusicalSymbols} = \& h01000000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.104  \texttt{kurMyanmar} = \& h00000400

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.
3.68.105 kurNewTaiLue = \& h80000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.106 kurNKo = \& h00004000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.107 kurNonPlane0 = \& h02000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.108 kurNumberForms = \& h00000010

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.109 kurOgham = \& h00004000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.110 kurOlChiki = \& h00040000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.111 kurOldItalic = \& h00200000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.112 kurOldPersian = \& h00000100

Plugin Version: 15.0. **Function:** One of the unicode range constants.
3.68.113  kurOpticalCharacterRecognition = & h00000200

Plugin Version: 15.0.  Function: One of the unicode range constants.

3.68.114  kurOriya = & h00080000

Plugin Version: 15.0.  Function: One of the unicode range constants.

3.68.115  kurOsmanya = & h00000400

Plugin Version: 15.0.  Function: One of the unicode range constants.

3.68.116  kurPhagsPa = & h00200000

Plugin Version: 15.0.  Function: One of the unicode range constants.

3.68.117  kurPhaistosDisc = & h01000000

Plugin Version: 15.0.  Function: One of the unicode range constants.

3.68.118  kurPhoenician = & h04000000

Plugin Version: 15.0.  Function: One of the unicode range constants.

3.68.119  kurPrivateUseAreaPlane0 = & h10000000

Plugin Version: 15.0.  Function: One of the unicode range constants.

3.68.120  kurPrivateUsePlane15 = & h04000000

Plugin Version: 15.0.  Function: One of the unicode range constants.
3.68.121  \texttt{kurRejang} = \& h00200000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.122  \texttt{kurRunic} = \& h00008000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.123  \texttt{kurSaurashtra} = \& h00080000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.124  \texttt{kurShavian} = \& h00002000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.125  \texttt{kurSinhala} = \& h00002000

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.126  \texttt{kurSmallFormVariants} = 4

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.127  \texttt{kurSpacingModifierLetters} = \& h00000200

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.

3.68.128  \texttt{kurSpecials} = \& h00000200

Plugin Version: 15.0. \textbf{Function}: One of the unicode range constants.
3.68.129 KurSundanese = \& h00010000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.130 KurSuperscriptsAndSubscripts = 1

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.131 KurSylotiNagri = \& h00000010

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.132 KurSyriac = \& h00000080

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.133 KurTagalog = \& h00100000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.134 KurTags = \& h10000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.135 KurTaiLe = \& h40000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.136 KurTaiXuanJingSymbols = \& h00002000

Plugin Version: 15.0. **Function:** One of the unicode range constants.
3.68. **CLASS DYNAPDFSYSFONTMBS**

3.68.137  kurTamil = & h00100000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.138  kurTelugu = & h00200000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.139  kurThaana = & h00000100

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.140  kurThai = & h01000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.141  kurTibetan = & h00000040

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.142  kurTifinagh = 4

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.143  kurUgaritic = & h00000080

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.144  kurUnifiedCanadianAboriginal = & h00002000

Plugin Version: 15.0. **Function:** One of the unicode range constants.
3.68.145 kurVai = & h00001000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.146 kurVariationSelectors = & h08000000

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.147 kurVerticalForms = 2

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.148 kurYijingHexagramSymbols = 8

Plugin Version: 15.0. **Function:** One of the unicode range constants.

3.68.149 kurYiSyllables = & h00080000

Plugin Version: 15.0. **Function:** One of the unicode range constants.
3.69. CLASS DYNAPDFTABLEMBS

3.69 class DynaPDFTableMBS

3.69.1 class DynaPDFTableMBS

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a table in DynaPDF.

**Notes:**
This tables are more for doing a layout, but can also be used to show a list or a worksheet like in Excel. This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.69.2 Methods

3.69.3 AddColumn(left as boolean, width as Double) as Integer

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a column to the table.

See also AddColumn function in DynaPDF manual.

3.69.4 AddRow(height as Double = 0.0) as Integer

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a row with given height.

See also AddRow function in DynaPDF manual.

3.69.5 AddRows(count as UInt32, height as Double) as Integer

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Adds a couple of rows with given height.

See also AddRows function in DynaPDF manual.

3.69.6 ClearColumn(Col as Integer, Types as Integer)

Plugin Version: 13.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function deletes the content in the specified column in all rows.

**Notes:** The parameter Types is described in ClearContent() below.

See also ClearColumn function in DynaPDF manual.
3.69.7 ClearContent(Types as Integer)

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Clears content of table.
**Notes:** See kdc constants for possible flags.
See also ClearContent function in DynaPDF manual.

3.69.8 ClearRow(Row as Integer, Types as Integer)

Plugin Version: 13.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function deletes the content in the specified row.
**Notes:** The parameter Types is described in ClearContent().
See also ClearRow function in DynaPDF manual.

3.69.9 Constructor

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.69.10 DeleteColumn(column as UInt32)

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Deletes the column.

3.69.11 DeleteRow(row as UInt32)

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Deletes the row with the given index.
See also DeleteRow function in DynaPDF manual.

3.69.12 DeleteRows

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Deletes all rows.
See also DeleteRows function in DynaPDF manual.
3.69. CLASS DYNAPDFTABLEMBS

3.69.13 DrawTable(x as Double, y as Double, MaxHeight as Double = 0.0) as Double

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Draws the table at the given position into the PDF:
See also DrawTable function in DynaPDF manual.

3.69.14 GetFirstRow as Integer

Plugin Version: 13.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries first row from last draw operation.
See also GetFirstRow function in DynaPDF manual.

3.69.15 GetFlags(Row as Integer, Column as Integer) as Integer

Plugin Version: 15.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries flag for a cell, a column or a row.
**Notes:** If Row is -1, only column flags are returned. If Column is -1, the row flags are returned for given row.
See also GetFlags function in DynaPDF manual.

3.69.16 GetNextHeight(MaxHeight as Double, byref NextRow as Integer) as Double

Plugin Version: 13.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the next row.
**Example:**
```vba
dim pdf as new DynaPDFMBS
call pdf.CreateNewPDF(nil)
call pdf.Append
// create dummy table with 20 rows, 1 column and 500 points width. 20 points per row by default.
dim table as DynaPDFTableMBS = pdf.CreateTable(20, 1, 500.0, 20.0)

// fill in dummy data
for i as Integer = 1 to 20
    dim rowNum as Integer = table.AddRow
call table.SetCellText(rowNum, 0, pdf.ktaLeft, table.kcoCenter, str(i))
next

// and do some calculations
```
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```
dim nextrow as Integer
dim h as Double = table.GetNextHeight(0, nextrow)
MsgBox str(h)+” with no limit.”
dim h2 as Double = table.GetNextHeight(200, nextrow)
MsgBox str(h2)+” with limit of 200 and rows till ”+str(nextrow-1)
break

Notes:
If MaxHeight is zero, returns the height of table.
If MaxHeight is the height of space available, plugin calculates the effective height of table and which row
would be the next one.
Returns negative number on error.
See also GetNextHeight function in DynaPDF manual.
```

### 3.69.17 GetNextRow as Integer

Plugin Version: 13.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries next row
of last draw operation.
See also GetNextRow function in DynaPDF manual.

### 3.69.18 GetNumCols as Integer

Plugin Version: 13.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries number of
columns of last draw operation.
See also GetNumCols function in DynaPDF manual.

### 3.69.19 GetNumRows as Integer

Plugin Version: 13.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries number of
rows of last draw operation.
See also GetNumRows function in DynaPDF manual.
3.69. **CLASS DYNAPDFTABLEMBS**

### 3.69.20 GetTableHeight as Double

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Queries the table height.

See also `GetTableHeight` function in DynaPDF manual.

### 3.69.21 GetTableWidth as Double

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Calculates table width.

See also `GetTableWidth` function in DynaPDF manual.

### 3.69.22 HaveMore as boolean

Plugin Version: 13.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Whether there are more rows to draw.

**Notes:** If you draw a table, you can loop and fill pages until the whole table is drawn.

See also `HaveMore` function in DynaPDF manual.

### 3.69.23 SetBackColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the back color of the table, a row or cells.

**Example:**

```pascal
dim pdf as DynaPDFMBS // your PDF environment
dim tbl as DynaPDFTableMBS = pdf.CreateTable(3, 3, 500.0, 20.0) // make some table

const allRows = -1
const allColumns = -1

// add a few rows
rowNum = tbl.addRow(-1.0)
rowNum = tbl.addRow(-1.0)
rowNum = tbl.addRow(-1.0)
rowNum = tbl.addRow(-1.0)

// row 0 in 100% Cyan
call tbl.SetBackColor(0, allColumns, array(255,0,0,0), pdf.kcsDeviceCMYK)
// row 1 in 100% Cyan
```
call tbl.SetBackColor(1, allColumns, array(0, 255, 0, 0), pdf.kcsDeviceCMYK)
// row 2 in 100% Cyan

call tbl.SetBackColor(2, allColumns, array(0, 0, 255, 0), pdf.kcsDeviceCMYK)
// row 3 in RGB red with 50% transparency

call tbl.SetBackColor(3, allColumns, array(255, 0, 0))

Notes:
Default is none (transparent)
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:

- 3.69.24 SetBackColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean

3.69.24 SetBackColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Sets the back color of the table, a row or cells.
Example:

dim pdf as DynaPDFMBS // your PDF environment
dim tbl as DynaPDFTableMBS = pdf.CreateTable(3, 3, 500.0, 20.0) // make some table

// now fill all rows and columns with RGB red specified by integer values
const allRows = -1
const allColumns = -1
call tbl.SetBackColor(allRows, allColumns, 255, 0, 0)

Notes:
Default is none (transparent)
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:

- 3.69.23 SetBackColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean
3.69. CLASS DYNAPDFTABLEMBS

3.69.25 SetBackColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the back color of the table, a row or cells.

**Example:**

```vba
dim pdf as DynaPDFMBS // your PDF environment
dim tbl as DynaPDFTableMBS = pdf.CreateTable(3, 3, 500.0, 100.0) // make some table

const allRows = -1
const allColumns = -1

// add a few rows
rowNum = tbl.AddRow(-1.0)
rowNum = tbl.AddRow(-1.0)
rowNum = tbl.AddRow(-1.0)
rowNum = tbl.AddRow(-1.0)

// row 0 in 100% Cyan
call tbl.SetBackColorFloat(0, allColumns, array(1.0, 0.0, 0.0, 0.0), pdf.kcsDeviceCMYK)

// row 1 in 100% Cyan
call tbl.SetBackColorFloat(1, allColumns, array(0.0, 1.0, 0.0, 0.0), pdf.kcsDeviceCMYK)

// row 2 in 100% Cyan
call tbl.SetBackColorFloat(2, allColumns, array(0.0, 0.0, 1.0, 0.0), pdf.kcsDeviceCMYK)

// row 3 in RGB red
call tbl.SetBackColorFloat(3, allColumns, array(1.0, 0.0, 0.0))
```

**Notes:**

Default is none (transparent)
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.26 SetBackColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean

3.69.26 SetBackColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the back color of the table, a row or cells.
Example:

```plaintext
dim pdf as DynaPDFMBS // your PDF environment
dim tbl as DynaPDFTableMBS = pdf.CreateTable(3, 3, 500.0, 20.0) // make some table

// now fill all rows and columns with RGB red specified by double values
const allRows = -1
const allColumns = -1
call tbl.SetBackColorFloat(allRows, allColumns, 1.0, 0.0, 0.0)
```

Notes:
Default is none (transparent)
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:
- 3.69.25 SetBackColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

3.69.27 SetBackColorValue(Row as Integer, Column as Integer, TPDFColorSpace as Integer, ColorValue as UInt32) as boolean

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the back color of the table, a row or cells.

Example:

```plaintext
dim pdf as DynaPDFMBS // your PDF environment
dim tbl as DynaPDFTableMBS = pdf.CreateTable(3, 3, 500.0, 20.0) // make some table

// now fill all rows and columns with RGB red specified by RGB() call
const allRows = -1
const allColumns = -1

dim c as Integer = DynaPDFMBS.RGB(255, 0, 0)
call tbl.SetBackColorValue(allRows, allColumns, DynaPDFMBS.kcsDeviceRGB, c)
```

Notes:
Default is none (transparent)
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a color space and a matching color value.
For example kcsDeviceRGB and RGB(r,g,b), kcsDeviceCMYK and CMYK(c,m,y,k) or kcsDeviceGray with gray color.

### 3.69.28 SetBorderColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the border color of the table, a row or cells.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:
- 3.69.29 SetBorderColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean

### 3.69.29 SetBorderColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the border color of the table, a row or cells.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:
- 3.69.28 SetBorderColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

### 3.69.30 SetBorderColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the border color of the table, a row or cells.

**Notes:**
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Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.31 SetBorderColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean

3.69.31 SetBorderColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the border color of the table, a row or cells.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.30 SetBorderColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

3.69.32 SetBorderColorValue(Row as Integer, Column as Integer, TPDFColorSpace as Integer, ColorValue as UInt32) as boolean

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the border color of the table, a row or cells.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a color space and a matching color value.
For example kcsDeviceRGB and RGB(r,g,b), kcsDeviceCMYK and CMYK(c,m,y,k) or kcsDeviceGray with gray color.
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### 3.69.33 `SetBorderWidth(Row as Integer, Column as Integer, left as Double, top as Double, right as Double, bottom as Double) as boolean`

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the border width of the table, a row or cells.

**Notes:**
- Default value is 0.
- If Row is -1, all rows are modified. If Column is -1, all columns are modified.

### 3.69.34 `SetCellAction(Row as Integer, Column as Integer, ActionHandle as UInt32, Mode as Integer) as boolean`

Plugin Version: 19.1, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Creates an invisible link annotation for the specified cell or table and associates the provided action with that annotation.

**Notes:**
- The result is an interactive area that executes the action if the user clicks on cell or table.
- A cell action is always a background object that is created in the size of the background area when the table is drawn.

Unlike other cell objects like images, text, and so on, a cell link is no persistent object because the action will be deleted when then PDF file in memory will be closed or when destructor will be called.

If the table should be drawn into more than one PDF file then re-create the actions and cell action before drawing the table into the next PDF file.

Actions can be created with functions like CreateGoToAction(), CreateGoToRAction(), and so on.

If the function succeeds the return value is true. If the function fails the return value is false.

### 3.69.35 `SetCellImage(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as FolderItem, index as Integer = 0) as boolean`

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the cell image. See also `SetCellImage` function in DynaPDF manual.

See also:
- 3.69.36 `SetCellImage(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as string, index as Integer = 0) as boolean`
3.69.36  SetCellImage(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as string, index as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the cell image. See also SetCellImage function in DynaPDF manual. See also:

- 3.69.35 SetCellImage(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as FolderItem, index as Integer = 0) as boolean

3.69.37  SetCellImageAnsi(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as string, index as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets cell image. See also SetCellImage function in DynaPDF manual. See also:

- 3.69.35 SetCellImage(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as FolderItem, index as Integer = 0) as boolean

- 3.69.36 SetCellImage(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, path as string, index as Integer = 0) as boolean

3.69.38  SetCellImageData(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, ImageData as MemoryBlock, index as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets cell image. **Example:**

```vba
dim PictureData as memoryblock // from database maybe?
dim w as Double = 300 // destination size
dim h as Double = 200
dim row as Integer
dim column as Integer

dim table as DynaPDFTableMBS // your table

call table.SetCellImageData(row, column, true, table.kcoCenter, table.kcoCenter, w, h, PictureData, 0)
```
3.69. CLASS DYNAPDFTABLEMBS

3.69.39 SetCellImageData(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, ImageData as string, index as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets cell image.  **Example:**

dim PictureData as string // from database maybe?
dim w as Double = 300 // destination size
dim h as Double = 200
dim row as Integer
dim column as Integer
dim table as DynaPDFTableMBS // your table

call table.SetCellImageData(row, column, true, table.kcoCenter, table.kcoCenter, w, h, PictureData, 0)

See also:

- 3.69.38 SetCellImageData(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, Width as Double, Height as Double, ImageData as MemoryBlock, index as Integer = 0) as boolean

3.69.40 SetCellOrientation(Row as Integer, Column as Integer, Orientation as Integer) as boolean

Plugin Version: 13.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function sets the cell orientation.  **Notes:** See dynapdf_help.pdf for details.  
See also **SetCellOrientation** function in DynaPDF manual.
3.69.41  SetCellPadding(Row as Integer, Column as Integer, left as Double, top as Double, right as Double, bottom as Double) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Sets the cell padding of the table, a row or cells.
Notes:
Default is zero.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

3.69.42  SetCellSpacing(Row as Integer, Column as Integer, left as Double, top as Double, right as Double, bottom as Double) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Sets the cell spacing of the table, a row or cells.
Notes:
Default is zero.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

3.69.43  SetCellTable(Row as Integer, Column as Integer, HAlign as Integer, VAlign as Integer, SubTable as DynaPDFTableMBS) as boolean

Notes:
A sub table is always a foreground object that has a strong width and height. That means, if the cell is not large enough then it will be expanded.
Note that the function creates no copy of the table. Do not delete the sub table when it is used by another table.
In programming languages which use reference counting like Xojo, it is important to delete the tables in right order. Delete first the tables which contain references to sub tables. Finally, delete the sub tables.

If the function succeeds the return value is true. If the function fails the return value is false.
See dynapdf_help.pdf for details.
See also SetCellTable function in DynaPDF manual.
3.69. **CLASS DYNAPDFTABLEMBS**

### 3.69.44 SetCellTemplate(Row as Integer, Column as Integer, ForeGround as boolean, HAlign as Integer, VAlign as Integer, TmplHandle as Integer, Width as Double = 0, Height as Double = 0) as boolean

Plugin Version: 13.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The function inserts a template into the specified cell. **Notes:** See dynapdf_help.pdf for details. See also `SetCellTemplate` function in DynaPDF manual.

### 3.69.45 SetCellText(Row as Integer, Column as Integer, HAlign as Integer, VAlign as Integer, text as string) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the text of a cell. See also `SetCellText` function in DynaPDF manual.

### 3.69.46 SetCellTextAnsi(Row as Integer, Column as Integer, HAlign as Integer, VAlign as Integer, text as string) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the text of a cell with ANSI text. See also `SetCellText` function in DynaPDF manual.

### 3.69.47 SetColWidth(column as UInt32, Width as Double, ExtTable as Boolean) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the column width for a column. See also `SetColWidth` function in DynaPDF manual.

### 3.69.48 SetFlags(Row as Integer, Column as Integer, Flags as Integer) as boolean

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the flags for a cell. **Notes:** If Row is -1, all rows are modified. If Column is -1, all columns are modified. See also `SetFlags` function in DynaPDF manual.
3.69.49 SetFont(Row as Integer, Column as Integer, name as string, Style as Integer, Embed as Boolean, CodePage as Integer) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the font of the table, a row or cells.

**Example:**

```pascal
dim tbl as DynaPDFTableMBS // your table

// set font for all cells
_call tblSetFont -1, -1, "Helvetica", pdf.kfsNone, true, pdf.kcpUnicode
// set bold font for a special cell
_call tblSetFont rowNum, 2, "Helvetica", pdf.kfsBold, true, pdf.kcpUnicode
```

**Notes:**

Default is Helvetica, Code page 1252, Embed false.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.
See also `SetFont` function in DynaPDF manual.

3.69.50 SetFontAnsi(Row as Integer, Column as Integer, name as string, Style as Integer, Embed as Boolean, CodePage as Integer) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the font of the table, a row or cells.

**Notes:**

Default is Helvetica, Code page 1252, Embed false.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.
See also `SetFont` function in DynaPDF manual.

3.69.51 SetFontSelMode(Row as Integer, Column as Integer, value as Int32) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the font selection mode of the table, a row or cells.

**Notes:**

Default is ksmFamilyName.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.
See also `SetFontSelMode` function in DynaPDF manual.
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3.69.52 **SetFontSize(Row as Integer, Column as Integer, size as Double) as boolean**

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the font size of the table, a row or cells.

**Notes:**

Default is 10.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.
See also **SetFontSize** function in DynaPDF manual.

3.69.53 **SetGridHorizontalColor(channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean**

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the horizontal grid color.

**Notes:**

Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:

- 3.69.54 **SetGridHorizontalColor(paramarray channels as Integer) as boolean**

3.69.54 **SetGridHorizontalColor(paramarray channels as Integer) as boolean**

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the horizontal grid color.

**Notes:**

Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:

- 3.69.53 **SetGridHorizontalColor(channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean**
3.69.55  SetGridHorizontalColorFloat(channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the horizontal grid color.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.56 SetGridHorizontalColorFloat(paramarray channels as Double) as boolean

3.69.56  SetGridHorizontalColorFloat(paramarray channels as Double) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the horizontal grid color.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.55 SetGridHorizontalColorFloat(channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

3.69.57  SetGridHorizontalColorValue(TPDFColorSpace as Integer, ColorValue as UInt32) as boolean

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the horizontal grid color.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a color space and a matching color value.
For example kcsDeviceRGB and RGB(r,g,b), kcsDeviceCMYK and CMYK(c,m,y,k) or kcsDeviceGray with gray color.
3.69. CLASS DYNAPDFTABLEMBS

3.69.58 SetGridVerticalColor(channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the vertical grid color.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:

- 3.69.59 SetGridVerticalColor(paramarray channels as Integer) as boolean

3.69.59 SetGridVerticalColor(paramarray channels as Integer) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the vertical grid color.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:

- 3.69.58 SetGridVerticalColor(channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

3.69.60 SetGridVerticalColorFloat(channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the vertical grid color.

**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.61 SetGridVerticalColorFloat(paramarray channels as Double) as boolean
3.69.61 SetGridVerticalColorFloat(paramarray channels as Double) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the vertical grid color. **Notes:**

Default is black. If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.60 SetGridVerticalColorFloat(channels() as Double, ExtColorSpace as Integer = 0, ColorSpace-Handle as Integer = 0) as boolean

3.69.62 SetGridVerticalColorValue(TPDFColorSpace as Integer, ColorValue as UInt32) as boolean

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the vertical grid color. **Notes:**

Default is black.

Pass a color space and a matching color value. For example kcsDeviceRGB and RGB(r,g,b), kcsDeviceCMYK and CMYK(c,m,y,k) or kcsDeviceGray with gray color.

3.69.63 SetGridWidth(h as Double, v as Double) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the grid width. **Notes:**

Default is 0. If Row is -1, all rows are modified. If Column is -1, all columns are modified.
See also **SetGridWidth** function in DynaPDF manual.
3.69.64 SetImageColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Notes:
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:
- 3.69.65 SetImageColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean

3.69.65 SetImageColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean

Notes:
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:
- 3.69.64 SetImageColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

3.69.66 SetImageColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Notes:
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.
Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.67 SetImageColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean

3.69.67 SetImageColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean

Plugin Version: 13.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the image color of the table, a row or cells. 
**Notes:**
Default is black. 
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.66 SetImageColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

3.69.68 SetImageColorValue(Row as Integer, Column as Integer, TPDFColorSpace as Integer, ColorValue as UInt32) as boolean

Plugin Version: 13.2, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the image color.
**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a color space and a matching color value.
For example kcsDeviceRGB and RGB(r,g,b), kcsDeviceCMYK and CMYK(c,m,y,k) or kcsDeviceGray with gray color.

3.69.69 SetPDF(pdf as DynaPDFMBS)

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the target PDF for this table.
3.69.70 SetRowHeight(Row as Integer, value as Double) as boolean

See also SetRowHeight function in DynaPDF manual.

3.69.71 SetTableWidth(Value as single, AdjustType as Integer, MinColWidth as single)

Notes:
At least one column must be modified when the width will be changed. The parameter AdjustType specifies how the column width should be modified. If the new width is larger, then the difference can be added to the left or right column, or all columns can get a unique width (TableWidth / NumColumns). The parameter MinColWidth is ignored in this case.
If the new width is smaller then the difference must be subtracted from the columns. The parameter MinColWidth specifies in this case the minimum width of columns that must be adjusted. It is only used if AdjustType is not set to kcoaUniqueWidth. The column widths are adjusted starting from the left or right side as specified. If the width of the first column is not large enough to subtract the difference, then the minimum column width is set to the column. This adjustment continues until the gap is zero. If the new table width is smaller as MinColWidth * NumColumns then the widths of the remaining columns will be set to zero. Such cases should be avoided since the column widths must be adjusted again when the table is drawn.

- kcoaUniqueWidth: Set the column widths to TableWidth / NumColumns
- kcoaAdjLeft: Adjust the widths starting from the left side
- kcoaAdjRight: Adjust the widths starting from the right side

See dynapdf_help manual for details.
Returns true on success or false on failure.
See also SetTableWidth function in DynaPDF manual.

3.69.72 SetTextColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: Sets the text color of the table, a row or cells.
Notes:
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:

- 3.69.73 SetTextColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean

**3.69.73 SetTextColor(Row as Integer, Column as Integer, paramarray channels as Integer) as boolean**

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the text color of the table, a row or cells.
**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass an integer for each channel with 0 to 255.
See also:

- 3.69.72 SetTextColor(Row as Integer, Column as Integer, channels() as Integer, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

**3.69.74 SetTextColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean**

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the text color of the table, a row or cells.
**Notes:**
Default is black.
If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.
See also:

- 3.69.75 SetTextColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean
3.69. **CLASS DYNAPDFTABLEMBS**

3.69.75  **SetTextColorFloat(Row as Integer, Column as Integer, paramarray channels as Double) as boolean**

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the text color of the table, a row or cells.

**Notes:**

Default is black. If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a double value for each channel with range 0.0 to 1.0.

See also:

- 3.69.74 SetTextColorFloat(Row as Integer, Column as Integer, channels() as Double, ExtColorSpace as Integer = 0, ColorSpaceHandle as Integer = 0) as boolean

3.69.76  **SetTextColorValue(Row as Integer, Column as Integer, TPDFColorSpace as Integer, ColorValue as UInt32) as boolean**

Plugin Version: 12.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Sets the horizontal grid color.

**Notes:**

Default is black. If Row is -1, all rows are modified. If Column is -1, all columns are modified.

Pass a color space and a matching color value. For example kcsDeviceRGB and RGB(r,g,b), kcsDeviceCMYK and CMYK(c,m,y,k) or kcsDeviceGray with gray color.

3.69.77  **Properties**

3.69.78  **Parent as Variant**

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Reference to parent object.

**Notes:** (Read only property)

3.69.79  **PDF as DynaPDFMBS**

Plugin Version: 12.4, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Reference to parent PDF object.
3.69.80 Constants

3.69.81 kcctAction = 4

Plugin Version: 19.1. Function: One of the cell content type constants. Notes: Action

3.69.82 kcctImage = 1


3.69.83 kcctTable = 2

Plugin Version: 12.4. Function: One of the cell content type constants. Notes: Table.

3.69.84 kcctTemplate = 3


3.69.85 kcctText = 0

Plugin Version: 12.4. Function: One of the cell content type constants. Notes: Text

3.69.86 kcoaAdjLeft = 1

Plugin Version: 13.2. Function: One of the column adjustment constants. Notes: Adjust the widths starting from the left side.
3.69. **CLASS DYNAPDFTABLEMBS**

### 3.69.87 kcoAdjRight = 2

Plugin Version: 13.2. **Function:** One of the column adjustment constants.  
**Notes:** Adjust the widths starting from the right side.

### 3.69.88 kcoUniqueWidth = 0

Plugin Version: 13.2. **Function:** One of the column adjustment constants.  
**Notes:** Set the column widths to TableWidth / NumColumns.

### 3.69.89 kcoBottom = 1

Plugin Version: 12.4. **Function:** One of the cell orientation constants.  
**Notes:** Bottom

### 3.69.90 kcoCenter = 2

Plugin Version: 12.4. **Function:** One of the cell orientation constants.  
**Notes:** Center

### 3.69.91 kcoLeft = 0

Plugin Version: 12.4. **Function:** One of the cell orientation constants.  
**Notes:** Left

### 3.69.92 kcoRight = 1

Plugin Version: 12.4. **Function:** One of the cell orientation constants.  
**Notes:** Right

### 3.69.93 kcoTop = 0

Plugin Version: 12.4. **Function:** One of the cell orientation constants.  
**Notes:** Top
**3.69.94**  \( \text{kdcAction} = \& h00000010 \)

Plugin Version: 19.1. **Function:** One of the delete option flags for ClearContent function.  
**Notes:** Delete action.

**3.69.95**  \( \text{kdcAllCont} = \& h0000001F \)

Plugin Version: 12.4. **Function:** One of the delete option flags for ClearContent function.  
**Notes:** Delete all content types

**3.69.96**  \( \text{kdcBackGround} = \& h20000000 \)

Plugin Version: 12.4. **Function:** One of the delete option flags for ClearContent function.  
**Notes:** Delete background objects

**3.69.97**  \( \text{kdcBoth} = \& h30000000 \)

Plugin Version: 12.4. **Function:** One of the delete option flags for ClearContent function.  
**Notes:** Delete both foreground and background objects

**3.69.98**  \( \text{kdcForeGround} = \& h10000000 \)

Plugin Version: 12.4. **Function:** One of the delete option flags for ClearContent function.  
**Notes:** Delete foreground objects

**3.69.99**  \( \text{kdcImage} = 2 \)

Plugin Version: 12.4. **Function:** One of the delete option flags for ClearContent function.  
**Notes:** Delete image.

**3.69.100**  \( \text{kdcTable} = 8 \)

Plugin Version: 12.4. **Function:** One of the delete option flags for ClearContent function.  
**Notes:** Delete table.
3.69. CLASS DYNAPDFTABLEMBS

3.69.101 kdcTemplate = 4

Plugin Version: 13.2. **Function:** One of the delete option flags for ClearContent function.  
**Notes:** Template table.

3.69.102 kdcText = 1

Plugin Version: 12.4. **Function:** One of the delete option flags for ClearContent function.  
**Notes:**  
Delete text.  
Text is always a foreground object.

3.69.103 ktfAddFlags = & h00000020

Plugin Version: 15.2. **Function:** One of the cell flags.  
**Notes:**  
If used when setting flags, the flags are not replacing existing values, but added. This way a call can set one flag and later another call can add a second flag without clearing first one.

3.69.104 ktfDefault = 0

Plugin Version: 12.5. **Function:** One of the cell flags.  
**Notes:** Default flag.
3.69.105 ktfHeaderRow = 2

Plugin Version: 13.1. **Function:** One of the cell flags.
**Notes:** Header rows are drawn first after a page break occurred.

3.69.106 ktfNoLineBreak = 4

Plugin Version: 13.2. **Function:** One of the cell flags.
**Notes:** Prohibit line breaks in cells with text. Can be set to the entire table, columns, rows, and cells.

3.69.107 ktfScaleToRect = 8

Plugin Version: 13.2. **Function:** One of the cell flags.
**Notes:**
If set, the specified output width and height represents the maximum size of the image or template.
The image or template is scaled into this rectangle without changing the aspect ratio.

3.69.108 ktfStatic = 1

Plugin Version: 12.5. **Function:** One of the cell flags.
**Notes:** This flag marks a row, column, or cell as static to avoid the deletion of the content with ClearContent().

3.69.109 ktfUseImageCS = &h00000010

Plugin Version: 13.2. **Function:** One of the cell flags.
**Notes:** If set, images are inserted in the native image color space.
3.70. CLASS DYNAPDFTEXTRECORDAMBS

3.70  class DynaPDFTextRecordAMBS

3.70.1  class DynaPDFTextRecordAMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for an ANSI text.

3.70.2  Properties

3.70.3  Advance as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The advance value for this text.
**Notes:**
Negative values move the cursor the right, positive to the left
(Read only property)

3.70.4  Length as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Raw text length in bytes.
**Notes:** (Read and Write property)

3.70.5  Text as String

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Raw text.
**Notes:** (Read and Write property)
3.71 class DynaPDFTextRecordWMBS

3.71.1 class DynaPDFTextRecordWMBS

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for an unicode text.

3.71.2 Properties

3.71.3 Advance as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The advance value for this text.

**Notes:**
Negative values move the cursor the right, positive to the left

(Read only property)

3.71.4 Length as Integer

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Length in characters.

**Notes:** (Read and Write property)

3.71.5 Text as String

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Already translated Unicode string.

**Notes:** (Read and Write property)

3.71.6 Width as Single

Plugin Version: 8.6, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** String width measured in text space.

**Notes:** (Read only property)
3.72. CLASS DYNAPDFURIACTIONMBS

3.72 class DynaPDFURIActionMBS

3.72.1 class DynaPDFURIActionMBS

Notes: This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.72.2 Methods

3.72.3 Constructor


3.72.4 Properties

3.72.5 BaseURL as String

Notes: (Read only property)

3.72.6 IsMap as Boolean

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. Function: A flag specifying whether to track the mouse position when the URI is resolved.
Notes:
e.g. http://test.org?50,70.
(Read only property)

3.72.7 NextAction as Integer

Notes:
-1 or next action handle to be executed if any
(Read only property)

3.72.8 **NextActionType as Integer**

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The type of the next action.
**Notes:**
Only set if NextAction is \( \geq 0 \).
(Read only property)

3.72.9 **URI as String**

Plugin Version: 17.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Uniform Resource Identifier.
**Notes:** (Read only property)
3.73. **CLASS DynaPDFViewportMBS**

3.73.1 **class DynaPDFViewportMBS**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The viewport details class.

**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.73.2 **Methods**

3.73.3 **Constructor**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The private constructor.

3.73.4 **Properties**

3.73.5 **BBox as DynaPDFRectMBS**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Bounding box.

**Notes:** (Read and Write property)

3.73.6 **Measure as DynaPDFMeasureMBS**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional measure dictionary.

**Notes:** (Read and Write property)

3.73.7 **Name as String**

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** Optional name.

**Notes:** (Read and Write property)
3.73.8 PtData as DynaPDFPointDataDictionaryMBS

Plugin Version: 15.0, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The Point Data dictionary.  
**Notes:** (Read and Write property)
3.74. CLASS DYNAPDFXFASTREAMMBS

3.74 class DynaPDFXFAStreamMBS

3.74.1 class DynaPDFXFAStreamMBS

Plugin Version: 16.5, Console & Web: Yes, Mac: Yes, Win: Yes, Linux: Yes. **Function:** The class for a XFA stream.  
**Notes:** This is an abstract class. You can’t create an instance, but you can get one from various plugin functions.

3.74.2 Methods

3.74.3 Constructor


3.74.4 Properties

3.74.5 Buffer as String

**Notes:** (Read and Write property)

3.74.6 Index as Integer

**Notes:** (Read and Write property)

3.74.7 Name as String

**Notes:** (Read and Write property)
3.74.8 Size as Integer


**Notes:** (Read and Write property)
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Chapter 5

The FAQ

5.0.1 Can anyone help me convert seconds to time in this format hh:mm:ss?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Sure, here’s a routine I use (which has an advantage over the previously-posted Date-based solution in that you don’t have to rely on the creation of an object – all that happens is some division and string concatenation):

**Example:**

```vba
Function SecsToTimeString(timeInSecs as Integer, padHours as boolean, padMinutes as boolean) as string
// Given an amount time (in seconds), generates a string representing that amount
// of time. The padHours and padMinutes parameters determine whether to display
// hours and minutes if their values are zero.

// Examples:
// timeInSecs = 90, padHours = true; returns "00:01:30"
// timeInSecs = 1, padHours = false, padMinutes = true; returns "00:01"
// timeInSecs = 3601, padMinutes = false; returns "01:00:01"

dim hours, minutes, seconds as Integer

dim hoursString, minutesString as string

hours = timeInSecs / 3600
minutes = (timeInSecs mod 3600) / 60
seconds = timeInSecs mod 60

if hours = 0 then
    if padHours then
        hoursString = "00:"
    else
        hoursString = " "
    end if
else
    hoursString = hours & ":"
end if
```

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hoursString = Format(hours, ",# # ":")
end if
if minutes = 0 then
if hours <>0 or padMinutes then
minutesString = "00:"
else
minutesString = ""
end if
else
minutesString = Format(minutes, "00:"
end if

return hoursString + minutesString + Format(seconds, "00")
End Function

Notes: (from the rb mailinglist)

5.0.2 How do I get the proper highlight color on Mac OS X for active/inactive selection?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can use functions from NSColor to get proper highlight color in RGB:

Example:

Function ProperHighlightColor(active as Boolean) As Color
# if TargetCocoa
Dim theColor As NSColorMBS
If active Then
theColor = NSColorMBS.alternateSelectedControlColor
Else
theColor = NSColorMBS.secondarySelectedControlColor
End If

Dim rgbColor As NSColorMBS = theColor.colorUsingColorSpaceName(NSColorSpaceMBS.NSCalibratedRGBColorSpace)
If rgbColor <> Nil Then
Dim red as Integer = rgbColor.redComponent * 255.0
Dim green as Integer = rgbColor.greenComponent * 255.0
Dim blue as Integer = rgbColor.blueComponent * 255.0
Return RGB(red, green, blue)
Else
Return HighlightColor
End If
# else
Notes: As you see we convert color to Calibrated RGB for best results. See also:

- 5.0.3 How to catch delete key?
- 5.0.4 How to convert cmyk to rgb?
- 5.0.5 How to delete a folder?
- 5.0.6 How to detect if CPU if 64bit processor?
- 5.0.7 How to refresh a htmlviewer on Windows?

5.0.3 How to catch delete key?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: The following is the code in keydown event catches delete or backspace keys.

Example:

```vba
Function KeyDown(Key As String) As Boolean
    if asc(key) = 8 or asc(key) = 127 then
        MsgBox "Delete"
    Return true
end if
End Function
```

See also:

- 5.0.2 How do I get the proper highlight color on Mac OS X for active/inactive selection? 850
- 5.0.4 How to convert cmyk to rgb? 851
- 5.0.5 How to delete a folder? 853
- 5.0.6 How to detect if CPU if 64bit processor? 854
- 5.0.7 How to refresh a htmlviewer on Windows? 854

5.0.4 How to convert cmyk to rgb?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer:
The following is the code to convert cmyk values to an RGB color datatype.
It’s just a basic estimate of the color values. If you are looking for completely color accurate solution, this
is not it. It should work for most people. :)  
**Example:**

```vba
Function CMYKToRGB(c as Integer, m as Integer, y as Integer, k as Integer) As color
    // converts c,m,y,k values (0-100) to color data type RGB
    // place this in a method. Supply C,M,Y,K values-
    // it returns color datatype

    dim color_RGB as color
    dim r, g, b as Integer

    r=255-round(2.55*(c+k))
    if r<0 then
        r=0
    end if
    g=255-round(2.55*(m+k))
    if g<0 then
        g=0
    end if
    b=255-round(2.55*(y+k))
    if b<0 then
        b=0
    end if

    color_RGB=RGB(r,g,b)

    return color_RGB

End Function
```

**Notes:** (from the rb mailinglist)
See also:

- 5.0.2 How do I get the proper highlight color on Mac OS X for active/inactive selection? 850
- 5.0.3 How to catch delete key? 851
- 5.0.5 How to delete a folder? 853
- 5.0.6 How to detect if CPU if 64bit processor? 854
- 5.0.7 How to refresh a htmlviewer on Windows? 854
5.0.5 How to delete a folder?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: The following is the code deletes a folder recursively.

Example:

```
Sub deletefolder(f as folderitem)
  dim files(-1) as FolderItem

  if f=nil then Return

  // delete single file
  if f.Directory=false then
    f.Delete
    Return
  end if

  // get a list of all items in that folder
  dim i,c as Integer
  c=F.Count
  for i=1 to c
    files.Append f.TrueItem(i)
  next

  // delete each item
  for each fo as FolderItem in files
    if fo=nil then
      ' ignore
    elseif fo.Directory then
      deletefolder fo
    else ' file
      fo.Delete
    end if
  next

  f.Delete
End Sub
```

See also:

- 5.0.2 How do I get the proper highlight color on Mac OS X for active/inactive selection? 850
- 5.0.3 How to catch delete key? 851
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5.0.6 How to detect if CPU if 64bit processor?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Via CPUID you can ask CPU:

**Example:**

```vba
dim c as new CPUIDMBS

if c.Flags(CPUIDMBS.kFeatureLM) then
    MsgBox "64-bit CPU"
else
    MsgBox "32-bit CPU"
end if
```

**Notes:** Should work on all intel compatible CPUs.

See also:

- 5.0.2 How do I get the proper highlight color on Mac OS X for active/inactive selection? 850
- 5.0.3 How to catch delete key? 851
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5.0.7 How to refresh a htmlviewer on Windows?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can ask the browser to reload the website with this code line:

**Example:**

```vba
call htmlViewer1.IERunJavaScriptMBS("javascript:document.location.reload()")
```

See also:

- 5.0.2 How do I get the proper highlight color on Mac OS X for active/inactive selection? 850
- 5.0.3 How to catch delete key? 851
- 5.0.4 How to convert cmyk to rgb? 851
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5.0.8 Is there an example for vector graphics in Xojo?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Try this example inside the paint event of a window:

**Example:**

```vbs
Dim v As Group2D
Dim r As RectShape
Dim s As StringShape

Const pi = 3.14

s = New StringShape
s.Text = "Hello World!"
s.TextFont = "Geneva"
s.TextSize = 24
s.FillColor = RGB(0, 0, 255)
s.Italic = True
s.y = 5
s.x = 0

r = New RectShape

r.X = 0
r.Y = 0
r.Height = 100
r.Width = 180
r.BorderColor = RGB(255, 0, 0)
r.FillColor = RGB(0, 255, 0)
r.BorderWidth = 5
r.Border = 50

v = New Group2d
v.Append r
v.Append s
v.Rotation = pi * -20.0 / 180.0
v.x = 150
v.y = 150

g.DrawObject v
```

5.0.9 Picture functions do not preserve resolution values?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Yes, the picture functions return pictures with no/default resolution values.
Example:

```vbnet
dim l as Picture = LogoMBS(500)

l.HorizontalResolution = 300
l.VerticalResolution = 300

dim r as Picture = l.Rotate90MBS

MsgBox str(r.HorizontalResolution) + " x " + str(r.VerticalResolution)

r.HorizontalResolution = l.HorizontalResolution
r.VerticalResolution = l.VerticalResolution

MsgBox str(r.HorizontalResolution) + " x " + str(r.VerticalResolution)
```

Notes:

So please fix them yourself after calling a function.

Maybe in the future this changes, but currently you can’t really set this easily from plugin code.

5.0.10 A toolbox call needs a rect - how do I give it one?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: No. **Answer:** Fill a memoryblock like this:

Example:

```vbnet
Dim MB As Memoryblock
MB = NewMemoryBlock(8)
MB.Short(0) = window1.Top
MB.Short(2) = window1.Left
MB.Short(4) = window1.Height + window1.Top // bottom
MB.Short(6) = window1.Width + window1.Left // right
```

5.0.11 API client not supported?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** If you get this exception message on SQLConnectionMBS.Connect, we may have a problem.

Notes:

First case is that the given thing is not supported (e.g. MS SQL directly on Mac).
Second case is that the plugin compilation went wrong and the support for the database was not linked into the plugin. Like MySQL missing or MS SQL on Windows missing. In that case please contact us to fix the plugin.

5.0.12 Can I access Access Database with Java classes?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** You can use ucanaccess to access databases created with Microsoft

**Example:**

```vbscript
dim options(-1) as string

// load all the jar files we have in a folder called java:

dim appFolder as FolderItem = GetFolderItem("")

Dim count as Integer = appFolder.Parent.Child("java").Count
dim libjs() as string
For i as Integer = 1 to count
Dim f As FolderItem = appFolder.Parent.Child("java").item(i)
If f <> Nil and f.Exists Then
libjs.append f.NativePath+";"
End If
Next

// now init virtual machine
dim libery as string = Join(libjs, "")
dim vm as new JavaVMMBS(libery)

if vm.Handle = 0 then
MsgBox "Failed to initialize virtual machine"
else
    // now make a new database connection with ucanaccess
    dim d as new JavaDatabaseMBS(vm,"net.ucanaccess.jdbc.UcanaccessDriver")
    Dim DbFile as FolderItem = appFolder.Parent.Child("Database11.accdb")
    dim j as JavaConnectionMBS = d.getConnection("jdbc:ucanaccess://"+DbFile.NativePath)

    // select and show values
    dim r as JavaResultSetMBS = j.MySelectSQL("Select * From test")
    while r.NextRecord
    MsgBox r.getString("FirstName") + " " + r.getString("LastName")
wend
end if
```

Exception e as JavaExceptionMBS
5.0.13 Can I create PDF from Xojo Report using DynaPDF?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Sorry, no. We can’t provide a graphics subclass from plugin.

Notes:
The is a feature request to allow graphics subclasses:
Feedback case 11391: feedback://showreport?report_id=11391

5.0.14 Can I use AppleScripts in a web application?


Example:

```plaintext
dim a as new AppleScriptMBS

// query my application name
a.Compile "tell application ""System Events"" to return name of current application"

// run
a.Execute

// show result
label1.text = a.Result

// shows something like "My Application.fcgi.debug"
```

Notes: This can be useful to control the server from remote, if and only if the your sever is running Mac OS X.
5.0.15 Can I use graphics class with DynaPDF?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Sorry, no. We can’t provide a graphics subclass from plugin.

**Notes:**

The is a feature request to allow graphics subclasses: Feedback case 11391: feedback://showreport?report_id=11391

5.0.16 Can I use sockets on a web application?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Yes, but they run on the server, not on the client.

**Notes:**

You can use HTTPSocket, SMTPSocket, POP3Socket, SMTPSecureSocket, SecurePOP3Socket, EasyTCPSocket, EasyUDPSocket, AutoDiscovery, our Bonjour classes or our CURL* classes. But all of them work on the server, not on the client.

This means if you search for a printer with Bonjour, you can find the printers in the local network on your server hosting site. Using SMTPSocket may be a good idea for sending emails from the server like notifications.

5.0.17 Can I use your ChartDirector plugin on a web application?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Yes, our ChartDirector plugin works just fine on the Xojo Web Edition.

**Example:**

```plaintext
// The data for the pie chart
dim data(-1) as Double=Array(55.0, 18.0, 25.0, 22.0, 18.0, 30.0, 35.0)

// The labels for the pie chart, Words are chosen random to check font!
dim labels(-1) as string=Array("Germany","Italy","France","Spain","UK","Poland","Russia")

// The colors to use for the sectors
dim colors(-1) as Integer

colors.Append & h66aaee
colors.Append & heebb22
colors.Append & hbbbbbb
colors.Append & h8844ff

if TargetLinux then
```
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CDBaseChartMBS.SetFontSearchPath "/usr/share/fonts/truetype/msttcorefonts"
end if

// Create a PieChart object of size 360 x 300 pixels
dim c as new CDPieChartMBS(700, 600)
c.setBackground(c.linearGradientColor(0, 0, 0, c.getHeight(), & h0000cc, & h000044))
c.setRoundedFrame(& hffffff, 16)
dim tt as CDTextBoxMBS = c.addTitle("ChartDirector Demonstration", "timesbi.ttf", 18)
tt.setMargin(0, 0, 16, 0)
tt.setFontColor(& hFFFFFF)

// Set the center of the pie at (180, 140) and the radius to 100 pixels

c.setPieSize 350,300,150

// Set the sector colors

c.setColors(c.kDataColor, colors)

// Draw the pie in 3D with a pie thickness of 20 pixels

c.set3D(20)

dim t as CDTextBoxMBS = c.setLabelStyle("arialbd.ttf", 10, & h000000)
t.setBackground(CDPieChartMBS.kSameAsMainColor, CDPieChartMBS.kTransparent, CDPieChartMBS.softLighting(CDPieChartMBS.kRight, 0))
t.setRoundedCorners(8)

// Use local gradient shading for the sectors, with 5 pixels wide
// semi-transparent white (bbffffff) borders

c.setSectorStyle(CDPieChartMBS.kLocalGradientShading, & bbffffff, 0)

// Set the pie data and the pie labels

c.setData data,labels
call c.setLabelStyle "arialbd.ttf", 18

dim pic as picture = c.makeChartPicture
dim wp as new WebPicture(pic, Picture.FormatJPEG) // JPEG makes it smaller and faster

Notes:
Be aware that our plugin produces pictures for you, which you assign to ImageViews. Transferring those pictures takes time, so you can optimize that with using WebPicture class. There you can decide between different compressions to improve speed (use JPEG instead of PNG).

e.g. if you use ubuntu, you can install the ttf-mscorefonts-installer package and call this method with "/usr/share/fonts/truetype/msttcorefonts" as the path. No backslash on the end of a path, please.
5.0.18 Can I use your DynaPDF plugin on a web application?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Yes, our DynaPDF plugin works just fine on the Xojo Web Edition.

**Notes:**

PDF files are created on the server. You may want to offer a preview to the user which uses reduced resolution images to reduce the time to download the PDF.

See our Create PDF example for the Xojo Web Edition.

5.0.19 Can I use your plugin controls on a web application?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** No.

5.0.20 Can you get an unique machine ID?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** There is nothing like an unique machine ID.

**Notes:**

1: You can use the MAC IDs of the network interfaces. This can be changed by the user with software tools. And the list of network interfaces changes if user reorder the interfaces.

2: You can use the system folder creation date/time. This may stay equal after cloning machines or after migration to new PC.

3: You can use the Mac Serialnumber. Mac only and it can happen that a Mac does not have a serial number.

4: You can use the x86 CPU ID. This is x86 CPU only and does not avoid running on the same CPU in
different PCs.

5.0.21 ChartDirector: Alignment Specification

Plugin Version: 8.2, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** ChartDirector: Alignment Specification

**Notes:**

In many ChartDirector objects, you may specify the alignment of the object’s content relative to its boundary. For example, for a TextBox object, you may specify the text’s alignment relative to the box boundary by using TextBox.setAlignment.

The ChartDirector API defines several constants for the alignment options.

<table>
<thead>
<tr>
<th>Constant</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
</table>

5.0.22 ChartDirector: Color Specification

Plugin Version: 8.2, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** ChartDirector: Color Specification

**Notes:**

Many functions in the ChartDirector API accept colors as parameters. ChartDirector supports colors specified in web and HTML compatible ARGB format, in which ARGB refers to the Alpha transparency, Red, Green and Blue components of the color.

In addition to ARGB colors, ChartDirector supports "dynamic" colors. A dynamic color is a color that changes depending on the position of the pixels. The "dynamic" colors that ChartDirector supports include "pattern colors", "metal colors", "gradient colors", "zone colors" and "dash line colors".

ChartDirector supports specifying colors indirectly using "palette colors". When a "palette color" is used, the color is specified as an index to a palette. The actual color is looked up from the palette. ARGB Color ARGB color consists of 4 components - alpha transparency, red, green and blue. The four components are encoded as a 32-bit number, with each component occupying 8 bits. In hexadecimal notation, it is AARRGGBB, where AA, RR, GG and BB are the alpha transparency, red, green and blue components.

Each component ranges from 00 - FF (0 - 255), representing its intensity. For example, pure red color is 00FF0000, pure green color is 0000FF00, and pure blue color is 000000FF. White color is 00FFFFFF, and black color is 00000000.

Most programming language requires you to put special prefix in front of hexadecimal characters. For C++,
BottomLeft  1  The leftmost point on the bottom line.
BottomCenter  2  The center point on the bottom line.
BottomRight  3  The rightmost point on the bottom line.
Left  4  The leftmost point on the middle horizontal line.
Center  5  The center point on the middle horizontal line.
Right  6  The rightmost point on the middle horizontal line.
TopLeft  7  The leftmost point on the top line.
TopCenter  8  The center point on the top line.
TopRight  9  The rightmost point on the top line.
Bottom  2  The center point on the bottom line. Same as BottomCenter.
Top  8  The center point on the top line. Same as TopCenter.
TopLeft2  10  An alternative top-left position used in Axis.setTitlePos for axis title positioning only. For a vertical axis, TopLeft2 refers to the left of the top side, while TopLeft refers to the top of the left side. The reverse applies for a horizontal axis.
TopRight2  11  An alternative top-right position used in Axis.setTitlePos for axis title positioning only. For a vertical axis, TopRight2 refers to the right of the top side, while TopRight refers to the top of the right side. The reverse applies for a horizontal axis.
BottomLeft2  12  An alternative bottom-left position used in Axis.setTitlePos for axis title positioning only. For a vertical axis, BottomLeft2 refers to the left of the bottom side, while BottomLeft refers to the bottom of the left side. The reverse applies for a horizontal axis.
BottomRight2  13  An alternative bottom-right position used in Axis.setTitlePos for axis title positioning only. For a vertical axis, BottomRight2 refers to the right of the bottom side, while BottomRight refers to the bottom of the right side. The reverse applies for a horizontal axis.

the prefix is "0x". For example, the syntax for the hexadecimal number 00FFFFFF is 0x00FFFFFF, or simply 0xFFFFFF.

For the alpha transparency component, a zero value means the color is not transparent all at. This is equivalent to traditional RGB colors. A non-zero alpha transparency means the color is partially transparent. The larger the alpha transparency, the more transparent the color will be. If a partially transparent color is used to draw something, the underlying background can still be seen.

For example, 80FF0000 is a partially transparent red color, while 00FF0000 is a non-transparent red color.

Note that ChartDirector’s ARGB color is web and HTML compatible. For example, red is FF0000, the same as in HTML. There are many resources on the web that provide tables in which you can click a color and it will show its HTML color code. These color codes can be used in ChartDirector.

If alpha transparency is FF (255), the color is totally transparent. That means the color is invisible. It does not matter what the RGB components are. So in ChartDirector, only one totally transparent color is used
- FF000000. All other colors of the form FFnnnnnn are reserved to represent palette colors and dynamic colors, and should not be interpreted as the normal ARGB colors.

The totally transparent color FF000000 is often used in ChartDirector to disable drawing something. For example, if you want to disable drawing the border of a rectangle, you can set the border color to totally transparent.

For convenience, ChartDirector defines a constant called Transparent, which is equivalent to FF000000.

Pattern Color
A pattern color is a dynamic color that changes according to a 2D periodic pattern. When it is used to fill an area, the area will look like being tiled with a wallpaper pattern.

Pattern colors are created using BaseChart.patternColor, BaseChart.patternColor2, DrawArea.patternColor and DrawArea.patternColor2. The patternColor method creates pattern colors using an array of colors as a bitmap. The patternColor2 method creates pattern colors by loading the patterns from image files.

These methods return a 32-bit integer acting as a handle to the pattern color. The handle can be used in any ChartDirector API that expects a color as its input.

Metal Color
A metal color is a color of which the brightness varies smoothly across the chart surface as to make the surface looks shiny and metallic. ChartDirector supports using any color as the base color of the metal color. In particular, using yellow and grey as the base colors will result in metal colors that look gold and silver.

Metal colors are most often used as background colors of charts. They are created using CDBaseChartMBS.metalColor, CDBaseChartMBS.goldColor and CDBaseChartMBS.silverColor. The first method allows you to specify an arbitrary base color. The second and third methods use yellow and grey as the base colors, resulting in gold and silver metal colors.

These methods return a 32-bit integer acting as a handle to the gradient color. The handle can be used in any ChartDirector API that expects a color as its input.

Gradient Color
A gradient color is a color that changes progressively across a direction.

Gradient colors are created using BaseChart.gradientColor, BaseChart.gradientColor2, DrawArea.gradientColor and DrawArea.gradientColor2. The gradientColor method creates a 2-point gradient color that changes from color A to color B. The gradientColor2 method creates a multi-point gradient colors that changes from color A to B to C ....

These methods return a 32-bit integer acting as a handle to the gradient color. The handle can be used in any ChartDirector API that expects a color as its input.

One common use of multi-point gradient colors is to define colors that have metallic look and feel. Please refer to DrawArea.gradientColor2 for details.

Dash Line Colors
A dash line color is a color that switches on and off periodically. When used to draw a line, the line will
appear as a dash line.

Dash line colors are created using `BaseChart.dashLineColor` and `DrawArea.dashLineColor`. They accept a line color and a dash pattern code as arguments, and return a 32-bit integer acting as a handle to the dash line color. The handle can be used in any `ChartDirector` API that expects a color as its input.

### Zone Colors

A zone color is for XY charts only. It is a color that automatically changes upon reaching a data threshold value along the x-axis or y-axis. Zone colors are created using `Layer.xZoneColor`, `Layer.yZoneColor`, `XYChart.xZoneColor` or `XYChart.yZoneColor`.

Palette colors are colors of the format `FFFFnnnn`, where the least significant 16 bits (`nnnn`) are the index to the palette. A palette is simply an array of colors. For a palette color, the actual color is obtained by looking up the palette using the index. For example, the color `FFFF0001` is the second color in the palette (first color is index 0).

The colors in the palette can be ARGB colors or "dynamic" colors (pattern, gradient and dash line colors).

The first eight palette colors have special significance. The first three palette colors are the background color, default line color, and default text color of the chart. The 4th to 7th palette colors are reserved for future use. The 8th color is a special dynamic color that is equal to the data color of the "current data set".

The 9th color (index = 8) onwards are used for automatic data colors. For example, in a pie chart, if the sector colors are not specified, `ChartDirector` will automatically use the 9th color for the first sector, the 10th color for the second sector, and so on. Similarly, for a multi-line chart, if the line colors are not specified, `ChartDirector` will use the 9th color for the first line, the 10th color for the second line, and so on.

The `ChartDirector` API defines several constants to facilitate using palette colors.

<table>
<thead>
<tr>
<th>Constant</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palette</td>
<td><code>FFFF0000</code></td>
<td>The starting point of the palette. The first palette color is <code>(Palette + 0)</code>. The nth palette color is <code>(Palette + n - 1)</code>.</td>
</tr>
<tr>
<td>BackgroundColor</td>
<td><code>FFFF0000</code></td>
<td>The background color.</td>
</tr>
<tr>
<td>LineColor</td>
<td><code>FFFF0001</code></td>
<td>The default line color.</td>
</tr>
<tr>
<td>TextColor</td>
<td><code>FFFF0002</code></td>
<td>The default text color.</td>
</tr>
<tr>
<td>[ Reserved ]</td>
<td><code>FFFF0003</code> - <code>FFFF0006</code></td>
<td>These palette positions are reserved. Future versions of ChartDirector may use these palette positions for colors that have special significance.</td>
</tr>
<tr>
<td>SameAsMainColor</td>
<td><code>FFFF0007</code></td>
<td>A dynamic color that is equal to the data color of the current data set. This color is useful for objects that are associated with data sets. For example, in a pie chart, if the sector label background color is <code>SameAsMainColor</code>, its color will be the same as the corresponding sector color.</td>
</tr>
<tr>
<td>DataColor</td>
<td><code>FFFF0008</code></td>
<td>The starting point for the automatic data color allocation.</td>
</tr>
</tbody>
</table>

When a chart is created, it has a default palette. You may modify the palette using `BaseChart.setColor`, `BaseChart.setColors`, or `BaseChart.setColors2`. 
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The advantages of using palette colors are that you can change the color schemes of the chart in one place. ChartDirector comes with several built-in palettes represented by the following predefined constants.

<table>
<thead>
<tr>
<th>Constant</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>defaultPalette</td>
<td>An array of colors representing the default palette. This palette is designed for drawing charts on white backgrounds (or lightly colored backgrounds).</td>
</tr>
<tr>
<td>whiteOnBlackPalette</td>
<td>An array of colors useful for drawing charts on black backgrounds (or darkly colored backgrounds).</td>
</tr>
<tr>
<td>transparentPalette</td>
<td>An array of colors useful drawing charts on white backgrounds (or lightly colored backgrounds). The data colors in this palette are all semi-transparent.</td>
</tr>
</tbody>
</table>

5.0.23 ChartDirector: Font Specification


Notes:

Font Name

In ChartDirector, the font name is simply the file name that contains the font. For example, under the Windows platform, the "Arial" font is "arial.ttf", while the "Arial Bold" font is "arialbd.ttf".

NOTE: Mac OS X Specific Information

In Mac OS X, in addition to ".ttf", ChartDirector also supports Mac OS X font file formats, such as Font Suitcase files and Datafork files (.dfont). These files often contain multiple fonts. For example, the "GillSans.dfont" file contains 6 fonts.

So in addition to the file name, an index is needed to determine the font. The index is specified by appending a "|" character to the font name, followed by the index number. For example, the third font in "GillSans.dfont" is denoted as "GillSans.dfont | 2". (Note: The first font starts at 0.) If no index number is provided, the first font is assumed.

ChartDirector also supports using Mac OS X Font Manager names. For example, one may use "Gill Sans Light Italic" instead of using "GillSans.dfont | 1" as the font name. However, the Mac OS X Font Manager is active only if someone has logged into the Mac GUI console, so this method is only recommended for developing applications that run on the GUI console.

The sample programs that come with ChartDirector are designed to run on all operating systems, so they use generic font file names (eg. "arial.ttf") instead of Mac OS X specific names. To allow them to run on Mac OS X, ChartDirector on Mac OS X has a built-in table to map common font file names to Mac OS X font names:
"arial.ttf", "arialbd.ttf", "ariali.ttf" and "arialbi.ttf" are mapped to "Arial | 0" (Arial), "Arial | 1" (Arial Bold), "Arial | 2" (Arial Italic) and "Arial | 3" (Arial Bold Italic)

"times.ttf", "timesbd.ttf", "timesi.ttf" and "timesbi.ttf" are mapped to "Times New Roman | 0" (Times New Roman), "Times New Roman | 1" (Times New Roman Bold), "Times New Roman | 2" (Times New Roman Italic) and "Times New Roman | 3" (Times New Roman Bold Italic)

"cour.ttf", "courbd.ttf", "couri.ttf" and "courbi.ttf" are mapped to "Courier New | 0" (Courier New), "Courier New | 1" (Courier New Bold), "Courier New | 2" (Courier New Italic) and "Courier New | 3" (Courier New Bold Italic)

Font Location
ChartDirector on Windows does not come with any font files. It relies on the operating system’s font files in the "\[windows]\Fonts" directory. To see what fonts are installed in your operating system and their file names, use the File Explorer to view that directory.

ChartDirector on Windows will also search for the font files in the "fonts" subdirectory (if it exists) under the directory where the ChartDirector DLL "chartdir.dll" is installed. This is useful for private fonts. Also, for some especially secure web servers, the web anonymous user may not have access to the "\[windows]\Fonts" directory. In this case, you may copy the font files to the above subdirectory.

ChartDirector on Mac OS X relies on operating system font files in "/Library/Fonts" and "/System/Library/Fonts".

ChartDirector on Linux, FreeBSD and Solaris assume the fonts files are in the "fonts" subdirectory under the directory where the ChartDirector shared object "libchartdir.so" is installed. ChartDirector on Linux, FreeBSD and Solaris come with a number of font files in the "fonts" subdirectory.

To keep the download size small, ChartDirector on Linux, FreeBSD and Solaris only come with some commonly used fonts. You may download additional fonts from the Internet. In particular, the Microsoft fonts at http://sourceforge.net/project/showfiles.php?group_id=34153&release_id=105355 is highly recommended. Please refer to http://www.microsoft.com/typography/faq/faq8.htm on how you could use the fonts legally in your system.

ChartDirector supports True Type fonts (.ttf), Type 1 fonts (.pfa and .pfb) and Windows bitmap fonts (.fon). On Mac OS X, ChartDirector also supports Font Suitcase and Datafork (.dfont) files. On Linux, FreeBSD and Solaris, ChartDirector also supports Portable Compiled Fonts (.pcf fonts).

If you want ChartDirector to search other directories for the font files, you may list the directories in an environment variable called "FONTPATH".
If you specify an absolute path name for the font file, ChartDirector will use the absolute path name and will not search other directories. Artificial Boldening and Italicizing

Whereas most popular font comes with different styles for "normal", "bold", "italic" and "bold italic", some fonts only come with one style (the normal style). For example, the Monotype Corsiva font that comes with MS Office only has the normal style (mtcorsva.ttf). For these cases, you may append the "Bold" and/or "Italic" words after the font file name (separated with a space) to ask ChartDirector to artificially bolden and/or italicize the font. For example, you may specify the font name as "mtcorsva.ttf Bold". Font List

Instead of specifying a single font file as the font name, you may specify a list of font files as the font name, separated by semi-colons. This is useful when using international characters that are only available in some fonts.

For example, if you would like to use the Arial font ("arial.ttf") for western characters, and the MingLiu font "mingliu.ttc" for Chinese characters (since the Arial font does not have Chinese characters), you may specify the font name as "arial.ttf;mingliu.ttc". In this case, ChartDirector will try the Arial font first. If it cannot find a certain character there, it will try the MingLiu font.

Indirect Font Names

ChartDirector supports several special keywords for specifying the font name indirectly. When these keywords are used as font names, ChartDirector will look up the actual font names from a font table. The keywords are as follows:

<table>
<thead>
<tr>
<th>Keywords</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;normal&quot;</td>
<td>This default normal font, which is the first font in the font table. This is initially mapped to &quot;arial.ttf&quot; (Arial).</td>
</tr>
<tr>
<td>&quot;bold&quot;</td>
<td>The default bold font, which is the second font in the font table. This is initially mapped to &quot;arialbd.ttf&quot; (Arial Bold).</td>
</tr>
<tr>
<td>&quot;italic&quot;</td>
<td>The default italic font, which is the third font in the font table. This is initially mapped to &quot;ariali.ttf&quot; (Arial Italic).</td>
</tr>
<tr>
<td>&quot;boldItalic&quot;</td>
<td>The default bold-italic font, which is the fourth font in the font table. This is initially mapped to &quot;arialbi.ttf&quot; (Arial Bold Italic).</td>
</tr>
<tr>
<td>&quot;fontN&quot;</td>
<td>The (N + 1)th font in the font table (the first font is &quot;font0&quot;).</td>
</tr>
</tbody>
</table>

The font table can be modified using BaseChart.setFontTable or DrawArea.setFontTable.

The advantage of using indirect font names is that you can change the fonts in your charts in one place.

Font Index

Most font files contain one font. However, it is possible a font file contains multiple fonts (that is, a font collection). For example, in True Type fonts, font files with extension ".ttc" may represent a font collection.

If a font file contains multiple font, the font index can be used to specify which font to use. By default, the font index is 0, which means the first font in the font file will be used.

Font Size

The font size decides how big a font will appear in the image. The font size is expressed in a font unit called
points. This is the same unit used in common word processors.

Instead of specifying font size, some ChartDirector API (eg. TextBox.setFontSize) allow you to specify font height and font width separately. You may use different point sizes for font height and font width to create special effects.

**Font Color**
This is the color to draw the font. (See Color Specification on how colors are represented in ChartDirector.)

**Font Angle**
This is the angle in degrees by which the font should be rotated anti-clockwise.

**Vertical Layout**
By default, text are laid out horizontally, with characters being drawn from left to right.

ChartDirector also supports vertical layout, with characters being drawn from top to bottom. For example, you may use BaseChart.addText to add text that are laid out vertically. Vertical layout is common for oriental languages such as Chinese, Japanese and Korean.

### 5.0.24 ChartDirector: Mark Up Language

**Plugin Version:** 8.2, **Console & Web:** No, **Mac:** Yes, **Win:** Yes, **Linux:** Yes. **Answer:** ChartDirector: Mark Up Language

**Notes:**
ChartDirector Mark Up Language (CDML) is a language for including formatting information in text strings by marking up the text with tags.

CDML allows a single text string to be rendered using multiple fonts, with different colors, and even embed images in the text.

**Font Styles**
You can change the style of the text by using CDML tags. For example, the line:

```
<font=timesi.ttf,size=16,color=FF0000>Hello <font=arial.ttf,size=12,color=8000*>world!
```

will result in the following text rendered:

In general, all tags in CDML are enclosed by `<*` and `*>`. Attributes within the tags determine the styles of the text following the tags within the same block.

If you want to include `<*` in text without being interpreted as CDML tags, use «* as the escape sequence.

The following table describes the supported font style attributes in CDML. See Font Specification for details on various font attributes.

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;*font=timesi.ttf,size=16,color=FF0000&gt;*</code></td>
<td>Set the following text to be in superscript style. This attribute does not need to have a value. (You may</td>
</tr>
</tbody>
</table>
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font Starts a new style section, and sets the font name. You may use this attribute without a value (that is, use "font" instead of "font=arial.ttf") to create a new style section without modifying the font name.

size The font size.

width The font width. This attribute is used to set the font width and height to different values. If the width and height are the same, use the size attribute.

height The font height. This attribute is used to set the font width and height to different values. If the width and height are the same, use the size attribute.

color The text color in hex format.

bgColor The background color of the text in hex format.

underline The line width of the line used to underline the following characters. Set to 0 to disable underline.

sub Set the following text to be in subscript style. This attribute does not need to have a value. (You may use ”sub” as the attribute instead of ”sub=1”.)

super Set the following text to be in superscript style.

xoffset Draw the following the text by shifting the text horizontally from the original position by the specified offset in pixels.

yoffset Draw the following the text by shifting the text vertically from the original position by the specified offset in pixels.

advance Move the cursor forward (to the right) by the number of pixels as specified by the value this attribute.

advanceTo Move the cursor forward (to the right) to the position as specified by the value this attribute. The position is specified as the number of pixels to the right of the left border of the block. If the cursor has already passed through the specified position, the cursor is not moved.

Note that unlike HTML tags, no double or single quotes are used in the tags. It is because CDML tags are often embedded as string literals in source code. The double or single quotes, if used, will conflict with the string literal quotes in the source code. Therefore in CDML, no quotes are necessary and they must not be used.

Also, unlike HTML tags, CDML uses the comma character as the delimiter between attributes. It is because certain attributes may contain embed spaces (such as the font file name). So space is not used as the delimiter and the comma character is used instead.

Note the font attribute above starts a new style section, while other attributes just modify the current style.
section. You may use <*/font*> to terminate a style section, which will restore the font styles to the state before the style section.

Blocks and Lines

In CDML, a text string may contain multiple blocks. A block may contain multiple lines of text by separating them with new line characters ("\n") or with <*/br/>. The latter is useful for programming languages that cannot represent new line characters easily.

For example, the line:

<*/size=15*><*/block*><*/color=FF*>BLOCK<*/br*>ONE<*/ />and<*/block*><*/color=FF00*>BLOCK<*/br*>TWO<*/ */>

will result in the following text rendered:

The above example contains a line of text. The line contains two blocks with the characters " and " in between. Each block in turn contains two lines. The blocks are defined using <*/block*> as the start tag and <*/ /> as the end tag.

When a block ends, font styles will be restored to the state before entering the block.

Embedding Images

CDML supports embedding images in text using the following syntax:

<*/img=my_image_file.png*> 

where my_image_file.png is the path name of the image file.

For example, the line:

<*/size=20*>A <*/img=sun.png*>day

will result in the following text rendered:

ChartDirector will automatically detect the image file format using the file extension, which must either png, jpg, jpeg, gif, wbmp or wmp (case insensitive).

Please refer to BaseChart.setSearchPath or DrawArea.setSearchPath on the directory that ChartDirector will search for the file.

The <*/img*> tag may optionally contain width and height attributes to specify its pixel width and height. In this case, ChartDirector will stretch or compress the image if necessary to the required width and height.

Blocks Attributes

CDML supports nesting blocks, that is, a block can contain other sub-blocks. Attributes are supported in the <*/block*> tag to control the alignment and orientation of the sub-blocks. The <*/img=my_image_file.png*> is treated as a block for layout purposes.

For example, the line:
The above starts `<*block,valign=absmiddle*>` which specifies its content should align with each others in the vertical direction using the absolute middle alignment. The block contains an image, followed by a space characters, and then another block which has two lines of text.

The following table describes the supported attributes inside `<*block*>` tag:

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>width</td>
<td>The width of the block in pixels. By default, the width is automatically determined to be the width necessary for the contents of the block. If the width attribute is specified, it will be used as the width of the block. If the width is insufficient for the contents, the contents will be wrapped into multiple lines.</td>
</tr>
<tr>
<td>height</td>
<td>The height of the block in pixels. By default, the height is automatically determined to be the height necessary for the contents of the block. If the height attribute is specified, it will be used as the height of the block.</td>
</tr>
<tr>
<td>maxwidth</td>
<td>The maximum width of the block in pixels. If the content is wider than maximum width, it will be wrapped into multiple lines.</td>
</tr>
<tr>
<td>truncate</td>
<td>The maximum number of lines of the block. If the content requires more than the maximum number of lines, it will be truncated. In particular, if truncate is 1, the content will be truncated if it exceeds the maximum width (as specified by maxwidth or width) without wrapping. The last few characters at the truncation point will be replaced with &quot;...&quot;.</td>
</tr>
<tr>
<td>linespacing</td>
<td>The spacing between lines as a ratio to the default line spacing. For example, a line spacing of 2 means the line spacing is two times the default line spacing. The default line spacing is the line spacing as specified in the font used.</td>
</tr>
<tr>
<td>bgColor</td>
<td>The background color of the block in hex format.</td>
</tr>
<tr>
<td>valign</td>
<td>The vertical alignment of sub-blocks. This is for blocks that contain sub-blocks. Supported values are baseline, top, bottom, middle and absmiddle.</td>
</tr>
</tbody>
</table>

The value baseline means the baseline of sub-blocks should align with the baseline of the block. The baseline is the underline position of text. This is normal method of aligning text, and is the default in CDML. For images or blocks that are rotated, the baseline is the same as the bottom.

The value top means the top line of sub-blocks should align with the top line of the block.

The value bottom means the bottom line of sub-blocks should align with the bottom line of the block.
The value middle means the middle line of sub-blocks should align with the middle line of the block. The middle line is the middle position between the top line and the baseline.

The value absmiddle means the absolute middle line of sub-blocks should align with the absolute middle line of the block. The absolute middle line is the middle position between the top line and the bottom line.

`halign` The horizontal alignment of lines. This is for blocks that contain multiple lines. Supported values are left, center and right.

The value left means the left border of each line should align with the left border of the block. This is the default.

The value center means the horizontal center of each line should align with the horizontal center of the block.

The value right means the right border of each line should align with the right border of the block.

`angle` Rotate the content of the block by an angle. The angle is specified in degrees in counter-clockwise direction.

### 5.0.25 ChartDirector: Parameter Substitution and Formatting

Plugin Version: 8.2, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** ChartDirector: Parameter Substitution and Formatting

**Notes:**

ChartDirector charts often contain a lot of text strings. For example, sector labels in pie charts, axis labels for x and y axes, data labels for the data points, HTML image maps, etc, are all text strings.

ChartDirector uses parameter substitution to allow you to configure precisely the information contained in the text and their format.

**Format Strings**

In parameter substitution, format strings are used to specify the entities to be include into labels and how to format numbers and dates.

For example, when drawing a pie chart with side label layout, the default sector label format string is:

```
" { label } ( { percent } % )"
```
When the sector label is actually drawn, ChartDirector will replace " { label } " with the sector name, and " { percent } " with the sector percentage. So the above label format will result in a sector label similar to "ABC (34.56% )".

You may change the sector label format by changing the format string. For example, you may change it to:

" { label } : US$ { value | 2 } K ( { percent } % )"

The sector label will then become something like "ABC: US$ 123.00 (34.56% )".

In general, in ChartDirector parameter substitution, parameters enclosed by curly brackets will be substituted with their actual values when creating the texts.

For parameters that are numbers or dates/times, ChartDirector supports a special syntax in parameter substitution to allow formatting for these values. Please refer to the Number Formatting and Date/Time Formatting sections below for details.

Parameter Expressions
ChartDirector supports numeric expressions in format strings. They are denoted by enclosing the expression with curly brackets and using "=" as the first character. For example:

"USD { value } (Euro { = { value } * 0.9 } )"

In the above, " { value } " will be substituted with the actual value of the sector. The expression " { = { value } * 0.9 } " will be substituted with the actual value of the sector multiplied by 0.9.

ChartDirector parameter expressions support operators "+", "-", "*", "/", "%" (modulo) and "^" (exponentiation). Operators "*", "/", "%" , "^" is computed first, followed by "+" and "-". Operators of the same precedence are computed from left to right. Parenthesis "(" and ")" can be used to change the computation order.

Parameters for Pie Charts
The following table describes the parameters available for pie charts.

Parameters for All XY Chart Layers
The followings are parameters that are apply to all XY Chart layers in general. Some layer types may have additional parameters (see below).

Note that certain parameters are inapplicable in some context. For example, when specifying the aggregate label of a stacked bar chart, the { dataSetName } parameter is inapplicable. It is because a stacked bar is composed of multiple data sets. It does not belong to any particular data set and hence does not have a data set name.
Parameter Description
sector The sector number. The first sector is 0, while the nth sector is (n-1).
dataSet Same as { sector } . See above.
label The text label of the sector.
dataSetName Same as { label } . See above.
value The data value of the sector.
percent The percentage value of the sector.
fieldN The (N + 1)th extra field. For example, { field0 } means the first extra field. An extra field is an array of custom elements added using BaseChart.addExtraField or BaseChart.addExtraField2.

{ fieldN } means the extra field is indexed by the data point number. The Pth data point corresponds to the Pth element of the extra field.

Additional Parameters for Line Layers
The followings are parameters that are in additional to the parameters for all XY Chart layers.

Additional Parameters for Trend Layers
The followings are parameters that are in additional to the parameters for all XY Chart layers.

Additional Parameters for Box-Whisker Layers
The followings are parameters that are in additional to the parameters for all XY Chart layers.

Additional Parameters for HLOC and CandleStick Layers
The followings are parameters that are in additional to the parameters for all XY Chart layers.

Additional Parameters for Vector Layers
The followings are parameters that are in additional to the parameters for all XY Chart layers.

Parameters for All Polar Layers
The followings are parameters that are apply to all Polar Chart layers in general. Some layer types may have additional parameters (see below).

{ fieldN } means the extra field is indexed by the data point number. The Pth data point corresponds to the Pth element of the extra field.

Additional Parameters for PolarVector Layers
The followings are parameters that are in additional to the parameters for all Polar Chart layers.

Parameters for Axis
The following table describes the parameters available for pie charts.

Number Formatting
For parameters that are numbers, ChartDirector supports a number of formatting options in parameter substitution.

For example, if you want a numeric field {{value}} to have a precision of two digits to the right of the decimal point, use ',' (comma) as the thousand separator, and use '.' (dot) as the decimal point, and you may use {{value | 2,.}}. The number 123456.789 will then be displayed as 123,456.79.

For numbers, the formatting options are specified using the following syntax:

```
{ [ param ] | [ a ] [ b ] [ c ] [ d ] }
```

where:

- If this field starts with "E" or "e", followed by a number, it means formatting the value using scientific notation with the specified number of decimal places. If the "E" or "e" is not followed by a number, 3 is assumed. For example, {{value | E4}} will format the value 10.3 to 1.0300E+1, and {{value | e4}} will format the same value to 1.0300e+1.

- If this field starts with "G" or "g", followed by a number, it means formatting the value using the scientific notation only if the value is large and requires more than the specified number of digits, or the value is less than 0.001. If scientific notation is used, the number following "G" or "g" also specifies the number of significant digits to use. If the "G" or "g" is not followed by a number, 4 is assumed. For example, consider the format string {{value | G4}}. The value 10 will be formatted to 10. The value 100000 will be formatted to 1.000E+5. Similarly, for {{value | g4}}, the value 10 will be formatted to 10, while the value 100000 will be formatted to 1.000e+5.

- If you skip this argument, ChartDirector will display the exact value using at most 6 decimal places.

- You may skip [ b ] [ c ] [ d ]. In this case, the default will be used.

Date/Time Formatting
For parameters that are dates/times, the formatting options can be specified using the following syntax:

```
{ [ param ] | [ datetime_format_string ] }
```
where \( \text{datetime\_format\_string} \) must start with an English character (A-Z or a-z) that is not "G", "g", "E" or "e", and may contain any characters except ' } '. (If it starts with "G", "g", "E" or "e", it will be considered as a number format string.)

Certain characters are substituted according to the following table. Characters that are not substituted will be copied to the output.

For example, a parameter substitution format of \{ value | mm-dd-yyyy \} will display a date as something similar to 09-15-2002. A format of \{ value | dd/mm/yy hh:mm:ss a \} will display a date as something similar to 15/09/02 03:04:05 pm.

If you want to include characters in the format string without substitution, you may enclose the characters in single or double quotes.

For example, the format \{ value | mmm '<*color=dd0000*>'yyyy \} will display a date as something like Jan '<*color=dd0000*>'2005 (the '<*color=dd0000*>' is a CDML tag to specify red text color). Note that the '<*color=dd0000*>' tag is copied directly without substitution, even it contains "dd" which normally will be substituted with the day of month.

Escaping URL/HTML/CDML characters
Parameter substitution is often used to create HTML image maps. In HTML, some characters have special meanings and cannot be used reliably. For example, the '>' is used to represent the end of an HTML tag.

Furthermore, if the field happens to be used as an URL, characters such as '?', '& ' and '+' also have special meanings.

By default, ChartDirector will escape template fields used in URL and query parameters when generating image maps. It will modify URL special characters to the URL escape format "% XX" (eg. "?" will become "% 3F"). After that, it will modify HTML special characters to the HTML escape format "&amp;# nn;" (eg. "&gt;" will become "&amp;# 62;"). Similarly, it will escape other attributes in the image map using HTML escape format (but not URL escape format).

In addition to escaping HTML and URL special characters, ChartDirector will also remove CDML fields in creating image maps. It is because CDML is only interpreted in ChartDirector, should not be useful outside of ChartDirector (such as in browser tool tips).

In some cases, you may not want ChartDirector to escape the special characters. For example, if the parameters have already been escaped before passing to ChartDirector, you may want to disable ChartDirector from escaping them again.

ChartDirector supports the following special fields to control the escape methods - " \{ escape\_url \} ", " \{ noescape\_url \} ", " \{ escape\_html \} ", " \{ noescape\_html \} ", " \{ escape\_cdml \} " and \{ noescape\_cdml \} ". These fields enable/disable the escape methods used in the template fields that follow them.
5.0.26 ChartDirector: Shape Specification

Plugin Version: 8.2, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** ChartDirector: Shape Specification

**Notes:**

Several ChartDirector API accept shape specification as arguments. For example, BarLayer.setBarShape and BarLayer.setBarShape2 can be used to specify shapes of bars in bar charts, while DataSet.setDataSymbol, DataSet.setDataSymbol4, PolarLayer.setDataSymbol and PolarLayer.setDataSymbol4 can be used to specify shapes for data symbols.

Note that in addition to shapes, in many cases ChartDirector also accepts images or custom draw objects for data representation. For example, see DataSet.setDataSymbol2, DataSet.setDataSymbol3, PolarLayer.setDataSymbol2 and PolarLayer.setDataSymbol3.

**Built-In Shapes**

Built-in shapes are specified as integers. The integers can be explicit constants, or can be generated by a ChartDirector method for parameterized shapes. For example, a circle is represented by an explicit constant CircleShape (=7). On the other hand, the number representing a polygon depends on the number of sides the polygon has, so it is generated by using the PolygonShape method, passing in the number of sides as argument.

The following table illustrates the various ChartDirector shapes:

**Custom Shapes**

In ChartDirector, custom shapes are specified as an array of integers x0, y0, x1, y1, x2, y2 ... representing the coordinates of the vertices of the custom polygonal shape.

The polygon should be defined with a bounding square of 1000 x 1000 units, in which the x-axis is from -500 to 500 going from left to right, and the y-axis is from 0 to 1000 going from bottom to top.

ChartDirector will automatically scale the polygon so that 1000 units will become to the pixel size as requested by the various ChartDirector API.

As an example, the shape of the standard diamond shape in ChartDirector is represented as an array with 8 numbers:
5.0.27 Copy styled text?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** How to quickly copy styled text from one textarea to another?

**Example:**

```plaintext
# if TargetWin32 then
TextArea1.WinRTFDataMBS = TextArea2.WinRTFDataMBS
# elseif TargetMacOS then
TextArea1.NSTextViewMBS.textStorage.setString(AttributedString(TextArea2.NSTextViewMBS.textStorage))
# else
TextArea1.StyledText = TextArea2.StyledText
# endif
```

**Notes:** The code above uses special plugin functions on Mac and Windows and falls back to framework for Linux.

5.0.28 Do you have code to validate a credit card number?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can check the checksum to tell if a credit card number is not valid.

**Example:**

```plaintext
Dim strNumber As String
Dim nLength as Integer
Dim nValue as Integer
Dim nChecksum as Integer
Dim nIndex as Integer

strNumber = EditText1.Text
nLength = Len(strNumber)

nChecksum = 0

For nIndex = 0 To nLength - 2
    nValue = Val(Mid(strNumber, nLength - (nIndex + 1), 1)) * (2 - (nIndex Mod 2))
    If nValue < 10 Then
        nChecksum = nChecksum + nValue
    Else
        nChecksum = nChecksum + (nValue - 9)
    End If
Next
```
If Val(Mid(strNumber, Len(strNumber), 1)) = (10 - (nChecksum Mod 10)) Mod 10 Then
MsgBox("The credit card number looks valid")
Else
MsgBox("The credit card number is invalid")
End IF

Notes:
Here’s some code that will validate the checksum for a credit card. It works for Visa, MasterCard, American Express and Discover. Not sure about others, but I imagine they use the same basic algorithm. Of course, this doesn’t actually mean that the credit card is valid, it’s only useful for helping the user catch typos.

The above code doesn’t have any error checking and it expects that the credit card number will be entered without spaces, dashes or any other non-numeric characters. Addressing those issues will be an exercise left to the reader. :)

(From Mike Stefanik)

5.0.29 Do you have plugins for X-Rite EyeOne, eXact or i1Pro?

Plugin Version: all, Console & Web: No. Answer: Our EyeOne plugin is available on request for licensees of the X-Rite SDKs.
Notes:
Please first go to X-Rite and get a SDK license.
Then we can talk about the plugin.

5.0.30 Does SQL Plugin handle stored procedures with multiple result sets?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Yes, the plugin can work with multiple recordsets.
Notes:
You need to use SQLCommandMBS class. When you get back results, you use FetchNext to walk over all records in the first result set. Then you simply start again with FetchNext to get the second record set. Even the RecordSet functions should work, just use them twice to get all records from both record sets.
5.0.31  Does the plugin home home?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Yes, we like to know who is using the plugin, so the plugin may contact our server.

**Example:**

none.

**Notes:**

Please note that this does not affect your users as the plugin will only do this in the IDE and the relevant plugin part is never included in your applications.

The plugin if used for some hours, does contact our server to provide statistical data about Xojo version and OS versions. This way we know what versions are used. We can return the version number of the current plugin which may be visible in future versions somehow. And we transmit partial licenses data so we can track use of illegal license keys.

If you do not like to have this, you can block Xojo IDE from contacting our website via your Firewall. Blocking the transfer will not disable the plugin or change the features.

Or contact us for a plugin version which explicitly does not contain this feature.

5.0.32  folderitem.abspathpath is limited to 255 chars. How can I get longer ones?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Paths on a Mac are not unique, so use them only to display them to the user.

**Example:**

```vbs
Function AbsolutePath(f as FolderItem) As String
    Dim s as string
    Dim nf as FolderItem
    nf = f
    s = ""
    while nf<>nil
        s = nf.name + ":" + s
        nf = nf.parent
    wend
    Return s
End Function
```
5.0.33 Has anyone played round with using CoreImage to do things like add dissolve transitions say when changing from one tab to another within a window?

Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: This code implements animations for a tabpanel change:

Example:

```plaintext
// in a tabpanel.change event:

dim r as CGSTransitionRequestMBS
dim co as new CGSConnectionMBS
dim cw as CGSWindowMBS
dim ct as CGSTransitionMBS
static OldTab as Integer

cw=co.CGSWindow(window1)
If cw = Nil Then
    return // 10.3...
End If
r=new CGSTransitionRequestMBS
r.TransitionType=r.CGSFlip
r.HasBackGround=false
r.HasBackColor=false
r.Win=cw
// watch the value of the clicked tab versus the last tab
if tabpanel1.Value=0 or tabpanel1.Value <OldTab then
    r.TransitionOption=r.CGSLeft
    ct=co.NewTransition(r)
    if ct<>Nil then
        Refresh
        ct.Invoke(1)
        ct.Wait(1)
        ct.Release
    else
        MsgBox "Error creating the transition."
    end if
else
    r.TransitionOption=r.CGSRight
    ct=co.NewTransition(r)
    if ct<>Nil then
        Refresh
        ct.Invoke(1)
        ct.Wait(1)
        ct.Release
    else
        MsgBox "Error creating the transition."
    end if
```
end if
// Keep track of the last tab clicked
OldTab = tabpanel1.Value

Notes: See CGS* classes for more details.

5.0.34 How about Plugin support for older OS X?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** We support in general Mac OS X 10.5 and newer.

**Notes:**
All the 64-bit plugins on Mac require OS X 10.7.
Intel 32-bit plugins on Mac require OS X 10.5 or newer.

Currently the ChartDirector 6, GraphicsMagick and GameKit plugins requires Mac OS X 10.6. Also for SQL Plugin the built in SQLite library requires 10.6.

5.0.35 How can I detect whether an Intel CPU is a 64bit CPU?

Plugin Version: all, Console & Web: No. **Answer:** Look on the CPU family returned by sysctl:

**Example:**

```vbscript
Function is64bit() As Boolean

' # if TargetLittleEndian

dim m as MemoryBlock = NewMemoryBlock(8)
dim family as Integer
dim s as string

m=SystemControlNameToMIBMBS("hw.cpfamily")
m=SystemControlMBS(m)
if m<>nil then
    m.LittleEndian=True
    family=m.Long(0)

    const CPUFAMILY_INTEL_6_14 = & h73d67300 /* "Intel Core Solo” and "Intel Core Duo” (32-bit Pentium-M with SSE3) */
    const CPUFAMILY_INTEL_6_15 = & h426f69ef /* "Intel Core 2 Duo” */
    const CPUFAMILY_INTEL_6_23 = & h78ea4fbc /* Penryn */
```
const CPUFAMILY_INTEL_6_26 = & h6b5a4cd2 /**< Nehalem */

Select case family
    case CPUFAMILY_INTEL_6_14
        Return false
    case CPUFAMILY_INTEL_6_15
        Return true
    case CPUFAMILY_INTEL_6_23
        Return true
    case CPUFAMILY_INTEL_6_26
        Return true
// newer CPUs may be missing here
end Select

end if

# endif

Return false

Exception
Return false
End Function

Notes: This code is written for Mac OS X where you only have a limited number of possible CPUs.

5.0.36 How can I disable the close box of a window on Windows?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: The following code will remove the close item from the system menu of the window.

Example:

    # if TargetWin32 then
    Declare Function GetSystemMenu Lib "user32" (hwnd as Integer, bRevert as Integer) as Integer
    Declare Function RemoveMenu Lib "user32" (hMenu as Integer, nPosition as Integer, wFlags as Integer) as Integer
    Dim hSysMenu as Integer
    hSysMenu = GetSystemMenu(me.WinHWND, 0)
    RemoveMenu hSysMenu, & HF060, & H0
    # endif

Notes: The window may not be updated directly.
5.0.37 How can I get all the environment variables from Windows?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** Try this code:

Example:

```vbs
# if targetWin32
declare function GetEnvironmentStrings Lib "kernel32" () as ptr
dim m as memoryBlock
dim n as Integer

m=GetEnvironmentStrings()

n=0
do
msgBox m.cstring(n)
while m.byte(n)<>0
n=n+1
wend
n=n+1
loop until m.byte(n)=0
# endif
```

**Notes:** The MBS Plugin has an EnvironmentMBS class for this.

5.0.38 How can i get similar behavior to Roxio Toast or iTunes where clicking a 'burn' button allows the next inserted blank CD-R to bypass the Finder and be accepted by my application?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You need to get a media reservation.

Example:

```vbs
dim d as DRDeviceMBS // get a device
d.AcquireMediaReservation
```

**Notes:**

Use the plugin function AcquireMediaReservation and later release it using ReleaseMediaReservation. See plugin examples on how to use it and check Apples DiscRecording framework documentation for more details.
5.0.39 How can I get text from a PDF?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Crossplatform you can use DynaPDF Pro.

**Notes:**

On Mac OS X you can also use PDFKit for the same job.
While DynaPDF Pro gives you each bit of text with rotation, font information and encoding details, PDFKit gives you only the text string for a PDF page.

5.0.40 How can I get text from a Word Document?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** to get the text string from a doc file, use the NSAttributedStringMBS class.

**Notes:**

The NSAttributedStringMBS class is Mac OS X only and we have currently no solution for Windows or Linux.

Use the NSAttributedStringMBS.initWithDocFormat(data as string) as boolean method.

5.0.41 How can I get the item string for a given file creator?

Plugin Version: all, Console & Web: No. **Answer:** Try this function:

**Example:**

```vba
Sub pullNativeDocs(aCREA As string)
Dim result as Integer
Dim m, k as memoryBlock
Dim f as folderItem
Dim newType as string
Dim anIcon As picture
Dim ofs as Integer

Declare Function GetFileTypesThatAppCanNativelyOpen Lib "Carbon" (appVRefNumHint as Short, appSignature as OSType, nativeTypes as Ptr) as Short Inline68K("701CABFC")
Declare Function GetDocumentKindString Lib "Carbon" (docVRefNum as Short, docType as OSType, docCreator as OSType, kindString as ptr) as Short Inline68K("7016ABFC")

listBox1.deleteAllRows
m = newMemoryBlock(1024)
result = GetFileTypesThatAppCanNativelyOpen(Volume(0).MacVRefNum, aCREA, m)
if result <>0 then
listBox1.addRow "<Not found.>"
```
return
end if

do
if m.byte(ofs*4) = 0 then
  exit
else
  newType = m.OSTypeMBS(ofs*4)
  listBox1.addRow newType
  k = newMemoryBlock(64)
  result = GetDocumentKindString(Volume(0).MacVRefNum, newType, aCREA, k)
  if result = 0 then
    listBox1.cell(ofs,1) = k.pString(0)
    ofs = ofs + 1
  else
    listBox1.cell(ofs,1) = "(unknown)"
  end if
end if
end if
loop

End Sub

Notes: Change "Translation" to "CarbonLib" for Mac OS X.

5.0.42 How can I launch an app using it’s creator code?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Send an AppleEvent "odoc" with the creator code to the Finder ("MACS"):

Example:

Function LaunchByCreator(C As String) As Boolean
Dim A As AppleEvent
A = NewAppleEvent("aevt","odoc","MACS")
A.ObjectSpecifierParam("—-") = GetUniqueIDObjectDescriptor("appf",nil,C)
return A.Send
End Function

5.0.43 How can I learn what shared libraries are required by a plugin on Linux?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Please use the ldd command in the terminal.
Notes:

You build an app on any platform, but for Linux.
For the resulting .so files in the libs folder, you can run the ldd command with the library path as parameter.
It shows you references lib files and you can make sure you have those installed.

This is a sample run of our graphicsmagick plugin:

cs@Ubuntu32:
textasciitilde /MeinProgramm/MeinProgramm Libs$ ldd libMBSGraphicsMagickPlugin17744.so
linux-gate.so.1 => (0xb76ee000)
libdl.so.2 => /lib/i386-linux-gnu/libdl.so.2 (0xb6f0e000)
libtkt-x11-2.0.so.0 => /usr/lib/i386-linux-gnu/libtkt-x11-2.0.so.0 (0xb66a6000)
lipthread.so.0 => /lib/i386-linux-gnu/libthread.so.0 (0xb66a8000)
lipstdc++.so.6 => /usr/lib/i386-linux-gnu/libstdc++.so.6 (0xb66a5000)
lipm.so.6 => /lib/i386-linux-gnu/libm.so.6 (0xb6697000)
lipgcc_s.so.1 => /lib/i386-linux-gnu/libgcc_s.so.1 (0xb6695b000)
lipbc.so.6 => /lib/i386-linux-gnu/libbc.so.6 (0xb67b1000)
/libld-linux.so.2 (0xb676e000)
lipgdk-x11-2.0.so.0 => /usr/lib/i386-linux-gnu/libgdk-x11-2.0.so.0 (0xb6701000)
lipgaiocairo-1.0.so.0 => /usr/lib/i386-linux-gnu/libgaiocairo-1.0.so.0 (0xb66f4000)
lipX11.so.6 => /usr/lib/i386-linux-gnu/libX11.so.6 (0xb65c0000)
lipXfixes.so.3 => /usr/lib/i386-linux-gnu/libXfixes.so.3 (0xb65ba000)
lipatkt-1.0.so.0 => /usr/lib/i386-linux-gnu/libatkt-1.0.so.0 (0xb659a000)
lipcairo.so.2 => /usr/lib/i386-linux-gnu/libcairo.so.2 (0xb64ce000)
lipgdk_pixbuf-2.0.so.0 => /usr/lib/i386-linux-gnu/libgdk_pixbuf-2.0.so.0 (0xb64ad000)
lipgio-2.0.so.0 => /usr/lib/i386-linux-gnu/libgio-2.0.so.0 (0xb6356000)
lipgaiocairo-1.0.so.0 => /usr/lib/i386-linux-gnu/libgaiocairo-1.0.so.0 (0xb632a000)
lipgaiocairo-1.0.so.0 => /usr/lib/i386-linux-gnu/libgaiocairo-1.0.so.0 (0xb632a000)
lipobject-2.0.so.0 => /usr/lib/i386-linux-gnu/libobject-2.0.so.0 (0xb625c000)
lipglib-2.0.so.0 => /usr/lib/i386-linux-gnu/libglib-2.0.so.0 (0xb6163000)
lipXext.so.6 => /usr/lib/i386-linux-gnu/libXext.so.6 (0xb6151000)
lipXrender.so.1 => /usr/lib/i386-linux-gnu/libXrender.so.1 (0xb6147000)
lipXinerama.so.1 => /usr/lib/i386-linux-gnu/libXinerama.so.1 (0xb6142000)
lipX11.so.6 => /usr/lib/i386-linux-gnu/libX11.so.6 (0xb6132000)
lipXrandr.so.2 => /usr/lib/i386-linux-gnu/libXrandr.so.2 (0xb6129000)
lipXcursor.so.1 => /usr/lib/i386-linux-gnu/libXcursor.so.1 (0xb611e000)
lipXcomposite.so.1 => /usr/lib/i386-linux-gnu/libXcomposite.so.1 (0xb611a000)
lipXdamage.so.1 => /usr/lib/i386-linux-gnu/libXdamage.so.1 (0xb6115000)
lipfreetype.so.6 => /usr/lib/i386-linux-gnu/libfreetype.so.6 (0xb607b000)
lipXcb.so.1 => /usr/lib/i386-linux-gnu/libXcb.so.1 (0xb605a000)
lippixman-1.so.0 => /usr/lib/i386-linux-gnu/libpixman-1.so.0 (0xb5f2000)
lippng.so.12.0.0 => /usr/lib/i386-linux-gnu/libpng12.so.0 (0xb5f98000)
lipXcb-shm.so.0 => /usr/lib/i386-linux-gnu/libXcb-shm.so.0 (0xb5f93000)
lipXcb-render.so.0 => /usr/lib/i386-linux-gnu/libXcb-render.so.0 (0xb5f89000)
lipz.so.1 => /usr/lib/i386-linux-gnu/libz.so.1 (0xb5f73000)
As you see all library have been found and their load address is printed behind the name. If a library is missing, you usually see the address missing there or being zero.

5.0.44 How can I validate an email address?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can try this code:

**Example:**

```vbs
Dim re As RegEx
re = New RegEx
Dim rm As RegExMatch

re.SearchPattern = 
"\[a-z0-9!#$%\^&*\(+\-\] \{ | \} \n\textasciitilde +www\textasciitilde +\+(?:\ [a-z0-9-] \+\ [a-z0-9] \ (?::\ [a-z0-9-] \ *\ [a-z0-9] \ )?\)\+\ [a-z0-9] \ (?::\ [a-z0-9-] \ *\ [a-z0-9] \ )?\]"
rm = re.Search(editField1.Text)

if rm = Nil Then
    StaticText2.text = editField1.Text + ", not valid email"
else
    StaticText2.Text = editField1.Text + ", is valid"
End if
```

**Notes:**

Adapted from:
http://www.regular-expressions.info/email.html
5.0.45 How do I decode correctly an email subject?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** The following code can be used to decode an email subject including several encodings including Base 64.

**Example:**

```vbscript
dim src as string // input

dim theRegex as Regex
dim theRegexMatch as RegexMatch
dim result, infoCharset, encodedPart as string
dim theStart as Integer

if instr(src, "=?") >0 then
    theRegex = new Regex
    theRegex.Options.Greedy = false
    theRegex.searchPattern = "(.*)=?(.+)?(Q | B)?(.+)?="
    theRegexMatch = theRegex.search(src)
    while theRegexMatch <>nil
        theStart = theRegexMatch.subExpressionStartB(0) + len(theRegexMatch.subExpressionString(0))
        result = result + theRegexMatch.subExpressionString(1)
        infoCharset = theRegexMatch.subExpressionString(2)
        encodedPart = theRegexMatch.subExpressionString(4)
        if theRegexMatch.subExpressionString(3) = "B" then
            encodedPart = DecodeBase64(encodedPart)
        elseif theRegexMatch.subExpressionString(3) = "Q" then
            encodedPart = DecodeQuotedPrintable(encodedPart)
        end if
        if right(result, 1) = " " then
            result = mid(result,1, len(result)-1)
        end if
        encodedPart = encodedPart.DefineEncoding(GetInternetTextEncoding(infoCharset))
        result = result + encodedPart
        theRegex.SearchStartPosition = theStart
        theRegexMatch = theRegex.search()
    wend

result = result + mid(src, theStart+1)
else
    result = src
end if

// theRegexMatch = theRegex.search

msgbox result
```
Notes:
May not look nice depending on the controls used.
This is no longer needed when using MimeEmailMBS class which decodes for you.

5.0.46 How do I enable/disable a single tab in a tabpanel?

Example:
TabpanelEnabledMBS(tabpanel1, 1, false)

Notes:
Use Carbon for MachO and CarbonLib for Mac Carbon and AppearanceLib for Mac OS Classic as library. For Cocoa, please use enabled property of NSTabViewItemMBS class.

5.0.47 How do I find the root volume for a file?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Try this function:
Example:
Function GetRootVolume(f as FolderItem) as FolderItem
dim root, dum as folderItem
if f <>nil then
root = f // f might be the volume
do
dum = root.parent
if dum <>nil then
root = dum
end if
loop until dum = nil
return root
end if
End Function
5.0.48 How do I get the current languages list?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Try this code:

**Example:**

```vbnet
dim p as new CFPreferencesMBS
dim a as CFArrayMBS
dim s as CFStringMBS
dim o as CFObjectMBS
dim sa(-1) as string

o=p.CopyAppValue("AppleLanguages",".GlobalPreferences")
if o<>Nil then
    a=CFArrayMBS(o)
    dim i,c as Integer
    c=a.Count-1
    for i=0 to c
        o=a.Item(i)
        if o isa CFStringMBS then
            s=CFStringMBS(o)
            sa.Append s.str
        end if
    next
end if
MsgBox Join(sa,EndOfLine)
```

**Notes:**

On Mac OS X you can get the list of current languages like this list:

deb
en
ja
fr
es
it
pt
pt-PT
nl
sv
nb
Which has German (de) on the top for a German user.
This code has been tested on Mac OS X 10.5 only.

5.0.49 How do I get the Mac OS Version?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Try this code:

**Example:**

```vbscript
dim i as Integer
if system.gestalt("sysv", i) then
    //do this in an 'If' in case you don’t get any value back at all and system.gestalt returns boolean
    if i = &h750 then //If OS is 7.5
        //do stuff
    elseif i = &h761 then //If OS is 7.6.1
        //do stuff
    end if
end if
```

**Notes:** The MBS Plugin has a function `SystemInformationMBS.OSVersionString` for this.

5.0.50 How do I get the printer name?

Plugin Version: all, Console & Web: No. **Answer:** For Mac OS Classic see the code below and for Mac OS X use the Carbon Print Manager Classes from the MBS Plugin.

**Example:**

```vbscript
dim s as String
dim i as Integer

if s <> "" then
    i = ascb(leftb(s, 1))
    s = mid(s, 2, i)
```


CHAPTER 5. THE FAQ

Notes:

A note from Craig Hoyt:

After looking at your example I had a little deja-vu experience. Several years ago I played around with this same code if FutureBasic. I discovered that it did not and still doesn’t provide the 'Printer Name', it does return the print driver name. If it returns 'LaserWriter 8' as the print driver you can look into this file and get the 'PAPA' resource # -8192 to get the actual Printer Name. Unfortunately this does not hold true for other printers. My Epson and HP Printers (the Epson has an Ethernet Card and the HP is USB) do not provide this info in their drivers. As far as I can tell it only returns the name by polling the printer itself.

5.0.51 How do I make a metal window if RB does not allow me this?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: The following declare turns any window on Mac OS X 10.2 or newer into a metal one.

Example:

`declare sub ChangeWindowAttributes lib "Carbon" (win as windowptr, a as Integer, b as Integer)`

`ChangeWindowAttributes window1,256,0`

Notes: May not look nice depending on the controls used.

5.0.52 How do I make a smooth color transition?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer:

I’d like to show in a report some bars, which start with color A and end with color B.

The color change should be very smooth.

My problem: If I would start from 255,0,0 and end by 0,0,0, I would have 255 different colors. If the bars are longer than 255 pixels, would
Example:

```vbnet
// Window.Paint:
Sub Paint(g As Graphics)
    Dim w, w1, x, p As Integer
    Dim c1, c2, c As Color
    Dim p1, p2 As Double

    c1 = RGB(255, 0, 0) '// start color
    c2 = RGB(0, 255, 0) '// end color

    w = g.Width
    w1 = w - 1

    For x = 0 To w1
        p1 = x / w1
        p2 = 1 - p1

        c = RGB(c1.red * p1 + c2.red * p2, c1.green * p1 + c2.green * p2, c1.blue * p1 + c2.blue * p2)

        g.ForeColor = c
        g.DrawLine x, 0, x, g.Height
    Next
End Sub
```

Notes: Try the code above in a window paint event handler.

5.0.53 How do I read the applications in the dock app?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Use CFPreferencesMBS class like in this example:

Example:

```vbscript
// Reads file names from persistent dock applications and puts them into the list
Dim pref As New CFPreferencesMBS
Dim persistentapps As CFStringMBS = NewCFStringMBS("persistent-apps")
Dim ApplicationID As CFStringMBS = NewCFStringMBS("com.apple.dock")
Dim tiledata As CFStringMBS = NewCFStringMBS("tile-data")
Dim filelabel As CFStringMBS = NewCFStringMBS("file-label")

// get the array of persistent applications from dock preferences
```
dim o as CFObjectMBS = pref.CopyValue(persistentapps, ApplicationID, pref.kCFPreferencesCurrentUser, pref.kCFPreferencesAnyHost)

if o isa CFArrayMBS then
dim a as CFArrayMBS = CFArrayMBS(o)

    // walk over all items in array
    dim c as Integer = a.Count-1
    for i as Integer = 0 to c

    // get dictionary describing item
    o = a.Item(i)
    if o isa CFDictionaryMBS then
        dim d as CFDictionaryMBS = CFDictionaryMBS(o)

        // and pick tile data dictionary
        o = d.Value(tiledata)
        if o isa CFDictionaryMBS then
            d = CFDictionaryMBS(o)

        // and pick there the file label
        o = d.Value(filelabel)
        if o isa CFStringMBS then
            // and display it
            dim name as string = CFStringMBS(o).str
            List.AddRow name
        end if
    end if
    end if

next

else
MsgBox "Failed to read dock preferences."
end if

Notes: You can use the CFPreferencesMBS.SetValue to change a value and CFPreferencesMBS.Synchronize to write the values to disc. You may need to restart the Dock.app if you modified things.

5.0.54 How do I truncate a file?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: In a binarystream you can set the length property to truncate.
5.0.55  How do update a Finder’s windows after changing some files?

Answer: Try this code:

Example:

```plaintext
dim f as folderitem // some file
dim ae as appleevent
ae=newappleevent("fndr","fupd","MACS")
ae.folderitemparam("—-")=f
if not ae.send then
    //something went wrong
end if
```

Notes: The folderitem.finderupdate from the MBS Plugin does something like this.

5.0.56  How to access a USB device directly?

Answer: First, it depends on the device.

Notes:

Some devices can be talked directly from user mode code, but some require a kernel driver.

For some devices you can use plugins to access them like:

- Audio and Video sources using the QTGrabberClassMBS
- Mass storage devices using the folderitem class.
- Serial devices using the System.SerialPort function.
- HID USB devices can be used with MacHIDMBS, WinHIDMBS or LinuxHIDInterface class.
- Any USB device may be used with MacUSBMBS or WinUSBMBS classes.

In general it is always the best to take the most high level access to have others do the work for the details.

5.0.57  How to add icon to file on Mac?

Answer: You can use Folderitem.AddCustomIcon or NSWorkspaceMBS.setIcon functions.
Notes: Please close any open stream for the file you want to add an icon.

5.0.58 How to ask the Mac for the Name of the Machine?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Using Apple Events you can use this code:

Example:

Function Computername() As string
    Dim theEvent as AppleEvent
    Dim err as boolean
    theEvent = newAppleEvent("mchn","getd","MACS")
    err = theEvent.send
    return theevent.ReplyString
End Function

Notes:
Code above is for Mac OS 9!
Also the MBS Plugin has a function for this which may be faster and work also on Macs without Filesharing (which handles this event).

5.0.59 How to automatically enable retina in my apps?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: You can run a build script on each build with this code:

Example:

Dim App As String = CurrentBuildLocation + "/" + CurrentBuildAppName + ".app"
Call DoShellCommand("/usr/bin/defaults write " + App + "/Contents/Info ""NSHighResolutionCapable"" YES")

Notes: This will set the NSHighResolutionCapable flag to YES.
5.0.60 How to avoid leaks with Cocoa functions?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can try this code on Mac OS X:

**Example:**

```vbscript
// in a Timer Action event:
Sub Action()
    static LastPool as NSAutoreleasePoolMBS = nil
    static CurrentPool as NSAutoreleasePoolMBS = nil

    LastPool = CurrentPool
    CurrentPool = new NSAutoreleasePoolMBS
End Sub
```

**Notes:**

With Xojo 2009r4 the code above should not be needed as Xojo runtime does automatically handle the NSAutoreleasePools for you. For older Xojo versions you need to use code with a timer with the action event above to avoid memory leaks.

Please do not use Xojo 2009r4 and newer with plugins before version 9.5. You can get crashes there which typically show a line with a objc_msgSend call.

5.0.61 How to avoid trouble connecting to oracle database with SQL Plugin?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** For oracle the most important thing is to point the plugin to the libraries from oracle.

**Notes:**

In environment variables, the paths like ORACLE_HOME must be defined.
On Mac OS X you also need to define DYLD_LIBRARY_PATH to point to the dylib files from oracle.

For that you need to modify /etc/launchd.conf for Mac OS X 10.8 and newer.
In older versions those variables in .MacOSX/environment.plist file in user’s home.

Another way for the case you bundle things inside your app is to use the LSEnvironment key in info.plist.
In info.plist it looks like this:

```
<key>LSEnvironment</key>
<dict>
    <key>test</key>
    <string>Hello World</string>
</dict>
```
5.0.62 How to avoid __NSAutoreleaseNoPool console messages in threads?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You need to use your own NSAutoreleasePool on a thread like this:

**Example:**

```vbnet
sub MyThread.run
    dim pool as new NSAutoreleasePoolMBS
    // do work here
    pool=nil
end sub
```

**Notes:**


5.0.63 How to bring app to front?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** On Mac you can use this code:

**Example:**

```vbnet
// First way:
app.FrontMostMBS = true

// second way:
dim p as new ProcessMBS
p.GetCurrentProcess
p.FrontProcess = true

// third way:
NSApplicationMBS.sharedApplication.activateIgnoringOtherApps(true)

// for Windows:
RemoteControlMBS.WinBringWindowToTop
```

**Notes:** This will bring a Mac app to the front layer.
5.0.64 How to bring my application to front?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** This makes SimpleText (Code txt) to the frontmost application:

**Example:**

```vbs
Dim A As AppleEvent
A = NewAppleEvent("misc","actv","")
If Not A.Send then
    Beep
end if
```

**Notes:** (Code is Mac only)

5.0.65 How to catch Control-C on Mac or Linux in a console app?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can use SignalHandlerMBS class for this.

**Example:**

```vbs
// watch for Control-C on Mac
call SignalHandlerMBS.SetFlagHandler(2)

dim ende as boolean = false
do
    if SignalHandlerMBS.IsFlagSet(2) then
        Print "Flag 2 set. Existing..."
        ende = true
    end if
end do

DoEvents 1
loop until ende
```

**Notes:** The signal is caught, a flag is set and you can ask later in your normal application flow for the result.
5.0.66 How to change name of application menu?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: No. **Answer:** Use this code to change the application menu name on Mac OS X:

**Example:**

```vbnet
dim mb as new MenubarMBS
dim m as MenuMBS = mb.item(1) // 1 is in my tests the app menu
if m<>Nil then
    m.MenuTitle = "Hello World"
end if
```

**Notes:** This code is for Carbon only.

5.0.67 How to change the name in the menubar of my app on Mac OS X?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:**

You mean it screws up if the file name of the bundle itself is different than the name of the executable file in the MacOS folder within the bundle? If so, you should find something like this within your Info.plist file (or the ‘plst’ resource that the RB IDE builds for you):

```xml
<key>CFBundleExecutable</key>
<string>Executable file name here</string>
```

Just make sure that file name matches.

However, if your question involves how you can change the name of the app that appears in the menu and the dock, that’s different. You can make this name different from the file name by changing the CFBundleName key:

```xml
<key>CFBundleName</key>
<string>Name for menu here</string>
```

Note that if you use my free AppBundler program, this second part is taken care of for you – just fill in a custom name in the right field. You can find AppBundler (from Thomas Reed) at http://www.bitjuggler.com/products/appbundler/.
5.0.68 How to check if a folder/directory has subfolders?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can use code like this to check all items in a folder:

**Example:**

```vbscript
Function HasSubFolder(folder as FolderItem) As Boolean
dim c as Integer = folder.Count

for i as Integer = 1 to c
dim item as FolderItem = folder.TrueItem(i)

if item<>Nil and item.Directory then
Return true
end if
next

End Function
```

**Notes:**

We use trueitem() here to avoid resolving alias/link files.
Also we check for nil as we may not have permission to see all items.
And if one is a directory, we return without checking the rest.

5.0.69 How to check if Macbook runs on battery or AC power?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Please use our IOPowerSourcesMBS class like this:

**Example:**

```vbscript
Function PowerSourceState() as Integer
dim p as new IOPowerSourcesMBS

// check all power sources
dim u as Integer = p.Count-1
for i as Integer = 0 to u
dim d as CFDictionaryMBS = p.Item(i)
if d<>nil then
// check if they have a power source state key:
dim o as CFObjectMBS = d.Value(NewCFStringMBS("Power Source State"))
if o isa CFStringMBS then
dim s as string = CFStringMBS(o).str

'MsgBox s
```
if s = "AC Power" then
Return 1
elseif s = "Battery Power" then
Return 2
end if
end if
next
Return 0 // unknown
End Function

Notes: If you want to check the CFDictionaryMBS content, simply use a line like "dim x as dictionary = d.dictionary” and check the contents in the debugger.

5.0.70 How to check if Microsoft Outlook is installed?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: If you need Outlook for Scripting, you should simply check registry for the required Outlook.Application class:

Example:

Function OutlookInstalled() As Boolean
# if TargetWin32 then
try
dim r as new RegistryItem("HKEY_CLASSES_ROOT\Outlook.Application\CLSID", false)
Return true
catch r as RegistryAccessException
// not installed
Return false
end try
# else
// Windows only, so false on other platforms
Return false
# endif
End Function
5.0.71 How to check on Mac OS which country or language is currently selected?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: The code below returns a country value.

Example:

```vba
dim result as Integer

IF TargetMacOS THEN

CONST smScriptLang = 28
CONST smSystemScript = -1

DECLARE FUNCTION GetScriptManagerVariable LIB "Carbon" ( selector as Integer) as Integer
DECLARE FUNCTION GetScriptVariable LIB "Carbon" ( script as Integer, selector as Integer) as Integer

result=GetScriptVariable(smSystemScript, smScriptLang)

END IF

Notes:
Returns values like:

For more values, check "Script.h" in the frameworks.
```

5.0.72 How to code sign my app with plugins?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: When you try to code sign the application with plugin dylibs on Mac OS X, you may see error message that there is actually a signature included.

Notes:
Please use the -f command line parameter with codesign utility to overwrite our MBS signature.
We sign our plugins for Mac and Windows to make sure they have not been modified.

In terminal, you do like this:

cd <Path to folder of app>

codesign -f -s "Developer ID Application: <Your Name>" "<Appname>.app/Contents/Frameworks/*.dylib"
codesign -f -s "Developer ID Application: <Your Name>" "<Appname>.app/Contents/Frameworks/*.framework"
codesign -f -s "Developer ID Application: <Your Name>" "<Appname>.app"

Please use the name of your certificate (See keychain), the name of your app and the path to the app folder.
If you have helper apps you need to sign them first.
You can use a build step to automatically sign your app on build.

5.0.73 How to collapse a window?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Use this function (Mac only):

Example:

Sub CollapseRBwindow(w as window, CollapseStatus as boolean)
  dim state, err as Integer
  dim wh as MemoryBlock

Declare Function CollapseWindow Lib "Carbon" (window as Integer,collapse as Integer) as Integer

IF CollapseStatus THEN
  state = 1
ELSE
  state = 0
END IF

err = CollapseWindow(w.MacWindowPtr, state)

End Sub

Notes:
Also the MBS Plugin has a window.collapsedmbs property you can set.
For Windows the MBS Plugin has a window.isiconicmbs property.

5.0.74 How to compare two pictures?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can try this code:

Example:

Function ComparePictures(p as picture,q as picture) as Integer
  dim r,u as RGBSurface
  dim x,y,n,m,h,w as Integer
  dim w1,w2,h1,h2,d1,d2 as Integer
  dim c1,c2 as color
h1=p.Height
h2=q.Height
w1=p.Width
w2=q.Width
d1=p.Depth
d2=q.Depth

if d1<>d2 then
Return 1
elseif w1<>w2 then
return 2
elseif h1<>h2 then
Return 3
else
r=p.RGBSurface
u=q.RGBSurface

if r=nil or u=nil then
Return -1
else
h=h1-1
w=w1-1
m=min(w,h)

for n=0 to m
c1=r.Pixel(n,n)
c2=u.Pixel(n,n)
if c1<>c2 then
Return 4
end if
next

for y=0 to h
for x=0 to w
c1=r.Pixel(x,y)
c2=u.Pixel(x,y)
if c1<>c2 then
Return 5
end if
next
next

// 0 for equal
// -1 for error (no RGBSurface)
// 1 for different depth
// 2 for different width
// 3 for different height
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// 4 for different pixels (fast test)
// 5 for different pixels (slow test)
end if
end if

Exception
Return -1
End Function

Notes: Remember that this only works on bitmap pictures, so the picture.BitmapMBS function may be useful.

5.0.75 How to compile PHP library?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: You have to download the source code and compile a static version of the library.

Notes:

This instructions were written based on PHP 5.2.6 on Mac OS X:

- Best take a new Mac with current Xcode version installed.
- Download the source code archive. e.g. "php-5.2.6.tar.bz2"
- Expand that archive on your harddisc.
- Open terminal window
- change directory to the php directory. e.g. "cd /php-5.2.6"
- execute this two lines to define the supported CPU types and the minimum Mac OS X version:
  - export CFLAGS="-arch ppc -arch i386 -mmacosx-version-min=10.3"
  - export CXXFLAGS="-arch ppc -arch i386 -mmacosx-version-min=10.3"
- the command "/configure help" does show the configure options.
- use configure with a line like this:
  - ./configure --enable-embed --with-curl --enable-ftp --enable-zip --enable-sockets --enable-static --enable-soap --with-zlib --with-bz2 --enable-exif --enable-bcmath --enable-calendar
- start the compilation with "make all"
- other option is to use "make install" which first does the same as "make all" and than does some installation scripts.
• you may get an error about a duplicate symbol _yytext. Search the file "zend_ini_scanner.c", search a line with "char *yytext;" and change it to "extern char *yytext;".

• On the end you get a lot of error messages, but you have a working library (named libphp5.so) file in the invisible ".libs" folder inside your php source folder.

Possible problems and solutions:

• If the path to your files has spaces, you can get into trouble. e.g. "/RB Plugins/PHP" is bad as files will be searched sometimes in "/RB".

• If you have in /usr/local/lib libraries which conflict with the default libraries, you can get into trouble.

• If you installed some open source tools which compiled their own libraries, you can get into conflicts.

• if you have to reconfigure or after a problem, you may need to use "make clean" before you start "make all" again.

Feel free to install additional libraries and add more packages to the configure line.

5.0.76 How to convert a BrowserType to a String with WebSession.Browser?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Use code like this: Example:

Function GetBrowserName(s as WebSession.BrowserType) As string
Select case s
  case WebSession.BrowserType.Android
    Return "Andriod"
  case WebSession.BrowserType.Blackberry
    Return "Blackberry"
  case WebSession.BrowserType.Chrome
    Return "Chrome"
  case WebSession.BrowserType.ChromeOS
    Return "ChromeOS"
  case WebSession.BrowserType.Firefox
    Return "Firefox"
  case WebSession.BrowserType.InternetExplorer
    Return "InternetExplorer"
  case WebSession.BrowserType.Opera
    Return "Opera"
  case WebSession.BrowserType.Safari
    Return "Safari"
  case WebSession.BrowserType.SafariMobile
    Return "SafariMobile"
  case WebSession.BrowserType.Unknown
5.0.77 How to convert a EngineType to a String with WebSession.Engine?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use code like this:

**Example:**

```vba
Function GetRenderingEngineName(s as WebSession.EngineType) As string
    Select case s
        case WebSession.EngineType.Gecko
            Return "Gecko"
        case WebSession.EngineType.Presto
            Return "Presto"
        case WebSession.EngineType.Trident
            Return "Trident"
        case WebSession.EngineType.Unknown
            Return "Unknown"
        case WebSession.EngineType.WebKit
            Return "WebKit"
        else
            Return "Unknown: "+str(integer(s))
    end Select
End Function
```

5.0.78 How to convert a PlatformType to a String with WebSession.Platform?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use code like this:

**Example:**

```vba
Function GetPlatformName(s as WebSession.PlatformType) As string
    Select case s
        case WebSession.PlatformType.Blackberry
            Return "Blackberry"
        case WebSession.PlatformType.iPad
            Return "iPad"
        case WebSession.PlatformType.iPhone
            Return "iPhone"
        else
            Return "Unknown: "+str(integer(s))
    end Select
End Function
```
case WebSession.PlatformType.iPodTouch
Return "iPodTouch"
case WebSession.PlatformType.Linux
Return "Linux"
case WebSession.PlatformType.Macintosh
Return "Macintosh"
case WebSession.PlatformType.PS3
Return "PS3"
case WebSession.PlatformType.Unknown
Return "Unknown"
case WebSession.PlatformType.WebOS
Return "WebOS"
case WebSession.PlatformType.Wii
Return "Wii"
case WebSession.PlatformType.Windows
Return "Windows"
else
Return "Unknown: \+str(integer(s))"
end Select

End Function

5.0.79 How to convert a text to iso-8859-1 using the TextEncoder?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer:

This code can help you although it’s not perfect.
You need to set lc to the current color you use.
Example:

dim outstring as string
dim theMac, thePC as textencoding
dim Mac2PC as textconverter

theMac = getTextEncoding(0) // MacRoman
thePC = getTextEncoding(& h0201) // ISOLatin1

Mac2PC = getTextConverter(theMac, thePC)
// if you wanted to do the opposite just create a converter
// PC2Mac = getTextConverter(thePC, theMac)

outstring = Mac2PC.convert("Björn, this text should be converted")
Mac2PC.clear
Notes:
You have to call Mac2PC.clear after every conversion to reset the encoding engine. 
See also newer TextConverterMBS class.

### 5.0.80 How to convert ChartTime back to Xojo date?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** We have this example code:

**Example:**

```vbnet
Function ChartTimeToDate(ChartTime as Double) As date
    static diff as Double = 0.0

    if diff = 0.0 then
        dim d2 as Double = CDBaseChartMBS.chartTime(2015, 1, 1)
        dim da as new date(2015, 1, 1)
        dim ts as Double = da.TotalSeconds
        diff = ts - d2
    end if

    dim d as new date
    d.TotalSeconds = diff + ChartTime

    Return d
End Function
```

**Notes:** As you see we calculate the difference in base date from Date and ChartTime and later use difference to convert.

### 5.0.81 How to convert line endings in text files?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can simply read file with TextInputStream and write with new line endings using TextOutputStream class.

**Example:**

```vbnet
dim inputfile as FolderItem = SpecialFolder.Desktop.Child("test.txt")
dim outputfile as FolderItem = SpecialFolder.Desktop.Child("output.txt")
dim it as TextInputStream = TextInputStream.Open(inputfile)
dim ot as TextOutputStream = TextOutputStream.Create(outputfile)

ot.Delimiter = EndOfLine.Windows // new line ending
```
while not it.EOF
  ot.WriteLine it.ReadLine
wend

**Notes:** TextInputStream will read any input line endings and with delimiter property in TextOutputStream you can easily define your new delimiter.

### 5.0.82 How to convert picture to string and back?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use this plugin functions:

**Notes:**

**JPEG:**

JPEGStringToPictureMBS(buf as string) as picture
JPEGStringToPictureMBS(buf as string, allowdamaged as Boolean) as picture
PictureToJPEGStringMBS(pic as picture, quality as Integer) as string

**PNG:**

PictureToPNGStringMBS(pic as picture, gamma as single) as string
PictureToPNGStringMBS(pic as picture, mask as picture, gamma as single) as string
PictureToPNGStringMBS(pic as picture, gamma as single, Interlace as Boolean, FilterType as Integer) as string
PictureToPNGStringMBS(pic as picture, mask as picture, gamma as single, Interlace as Boolean, FilterType as Integer) as string
PNGStringToPictureMBS(data as string, gamma as single) as picture
PNGStringToPNGPictureMBS(data as string, gamma as single) as PNGpictureMBS

**Tiff:**

TIFFStringToPictureMBS(data as string) as picture
TIFFStringToTiffPictureMBS(data as string) as TiffPictureMBS

**BMP:**

BMPStringtoPictureMBS(data as string) as picture
Picture.BMPDataMBS(ResolutionValueDPI as Integer=72) as string
5.0.83  How to copy an array?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can use a function like this to copy an array:

**Example:**

```vba
Function CopyArray(a() as Double) as Double()
    dim r() as Double
    for each v as Double in a
        r.Append v
    next
    Return r
End Function
```

**Notes:**

If needed make several copies of this method with different data types, not just double.

For a deep copy of an array of objects, you need to change code to also make a copy of those objects.

5.0.84  How to copy an dictionary?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can use a function like this to copy a dictionary:

**Example:**

```vba
Function CopyDictionary(d as Dictionary) As Dictionary
    dim r as new Dictionary
    for each key as Variant in d.keys
        r.Value(key) = d.Value(key)
    next
    Return r
End Function
```

**Notes:**

If needed make several copies of this method with different data types, not just double.

For a deep copy of an dictionary of objects, you need to change code to also make a copy of those objects.
5.0.85 How to copy parts of a movie to another one?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: No. **Answer:** The code below copies ten seconds of the snowman movie to the dummy movie starting at the 5th second.

**Example:**

```vbs
Dim f As FolderItem  
Dim md As EditableMovie  
Dim ms As EditableMovie  

f = SpecialFolder.Desktop.Child("Our First Snowman.mov")  
ms = f.OpenEditableMovie  

ms.SelectionStartMBS = 5  
ms.SelectionLengthMBS = 10  

f = SpecialFolder.Desktop.Child("dummy.mov")  
md = f.CreateMovie  

MsgBox str(md.AddMovieSelectionMBS(ms))
```

**Notes:** If result is not 0, the method fails.

5.0.86 How to create a birthday like calendar event?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Try this code:

**Example:**

```vbs
'// start a connection to the calendar database  
Dim s As New CalCalendarStoreMBS  

'// needed for the error details  
Dim e As NSErrorMBS  

Dim r As CalRecurrenceRuleMBS = CalRecurrenceRuleMBS.initYearlyRecurrence(1, nil) // repeat every year without end  

Dim a As New CalAlarmMBS // add alarm  
a.action = a.CalAlarmActionDisplay  
a.relativeTrigger = -3600*24 // 24 Hours before  

 '// create a new calendar
```
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```vbs
    dim c as new CalEventMBS

    dim d as new date(2011, 04, 20) // the date

    dim calendars() as CalCalendarMBS = s.calendars

    // set properties
    c.Title="Test Birthday"
    c.startDate=d
    c.recurrenceRule = r
    c.calendar=calendars(0) // add to first calendar
    c.addAlarm(a)
    c.endDate = d
    c.isAllDay = true

    // save event
    call s.saveEvent(c,s.CalSpanAllEvents, e)
    if e<>nil then
        MsgBox e.localizedDescription
    else
        MsgBox "New event was created."
    end if
```

Notes: This adds an event to iCal for the given date with alarm to remember you and repeats it every year.

5.0.87 How to create a GUID?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Use the UUIDMBS class for this.

5.0.88 How to create a Mac picture clip file?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: You can use code like this one.

Example:

```vbs
    dim f As FolderItem
    dim p As Picture

    f=SpecialFolder.Desktop.Child("Test.pictClipping")
    if f=nil then Return
```
\begin{verbatim}
p=new Picture(300,200,32) 'Make a sample picture
p.Graphics.ForeColor=RGB(0,255,255)
p.Graphics.FillOval 0,0,99,99
p.Graphics.ForeColor=RGB(255,0,0)
p.Graphics.DrawOval 0,0,99,99
dim r As ResourceFork 'ResourceFork is needed for a clip file

// Please define a file type Any
r=f.CreateResourceFork("Any")

// get PICT data using plugin function
dim pictdata as string = p.PicHandleDataMBS
r.AddResource(pictdata,"PICT",256,"Picture")

dim m as new MemoryBlock(8)
m.LittleEndian = false
m.Int16Value(0) = 0
m.Int16Value(2) = 0
m.Int16Value(4) = p.Width
m.Int16Value(6) = p.Height
r.AddResource(m,"RECT",256,"")

'Values taken from a sample file and irrelevant to the problem
dim data as string = DecodeBase64("AQAAAAAAAAAAAAAAAAACAFRDRVIAAAABAAAAAABUQ0lQAAAAAQAAAAAAAAAA")
r.AddResource(data,"drag",128,"") 'ditto
r.Close
\end{verbatim}

Notes: In general Apple has deprecated this, but a few application still support clippings.

\section*{5.0.89 How to create a PDF file in Xojo?}

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Check our DynaPDF plugin and the examples.
Notes:

An alternative can be to use the CoreGraphics and Cocoa functions on Mac OS X.
For Windows, we can only suggest our DynaPDF plugin.
5.0.90 How to create EmailAttachment for PDF Data in memory?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can use code like the one below:

**Example:**

```vbnet
Function EmailAttachmentFromPDFData(PDFData as string, filename as string) As EmailAttachment
    Dim a as new EmailAttachment
    a.data = EncodeBase64(PDFData, 76)
    a.ContentEncoding = "base64"
    a.MIMEType = "application/pdf"
    a.MacType = "PDF"
    a.MacCreator = "prvw"
    a.Name = filename
    Return a
End Function
```

**Notes:**

Compared to sample code from Xojo documentation, we set the mime type correct for PDF. The MacType/MacCreator codes are deprecated, but you can still include them for older Mac email clients. "prvw" is the creator code for Apple's preview app.

5.0.91 How to create PDF for image files?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can use DynaPDF like this:

**Example:**

```vbnet
Function CreatePrintPDF(jpgFiles() asFolderItem, pdfFile asFolderItem, PageWidth as Integer, PageHeight as Integer) As Boolean
    ' have files?
    If pdfFile = Nil Then Return False
    If jpgFiles = Nil Then Return False
    If jpgFiles.Ubound < 0 Then Return False

    ' new DynaPDF
    Dim pdf As New MyDynapdfMBS

    // page width/height in MilliMeter
    Dim pdfWidth as Integer = PageWidth * 72 / 25.4
    Dim pdfHeight as Integer = PageHeight * 72 / 25.4
```

// put your license here
Call pdf.SetLicenseKey "Starter"

// create pdf
Call pdf.CreateNewPDF pdfFile

// set a couple of options
Call pdf.SetPageCoords(MyDynaPDFMBS.kpcTopDown)
Call pdf.SetResolution(300)
Call pdf.SetUseTransparency(False)
Call pdf.SetSaveNewImageFormat(False)
Call pdf.SetGStateFlags(MyDynaPDFMBS.kgfUseImageColorSpace, False)
Call pdf.SetJPEGQuality(100)

// set page size
Call pdf.SetBBox(MyDynaPDFMBS.kpbMediaBox, 0, 0, pdfWidth, pdfHeight)
Call pdf.SetPageWidth(pdfWidth)
Call pdf.SetPageHeight(pdfHeight)

// append pages with one image per page
For i as Integer = 0 To jpgFiles.Ubound
Call pdf.Append
Call pdf.InsertImageEx(0, 0, pdfWidth, pdfHeight, jpgFiles(i), 1)
Call pdf.EndPage
Next

// close
Call pdf.CloseFile

Return True
End Function

Notes:
This is to join image files in paper size to a new PDF.
e.g. scans in A4 into an A4 PDF.

5.0.92 How to CURL Options translate to Plugin Calls?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Below a few tips on how to translate command line CURL calls to plugin calls.

Notes:
• The option -v means verbose. You can use OptionVerbose and listen for messages in the DebugMessage event.

• The option -X PUT means we want to do a HTTP PUT Request. So set OptionPut to true. Also you will want to set OptionUpload to true as you upload data.

• We have the URL which you put into OptionURL property.

• The –data-binary option tells CURL to pass the given data. With the @ before the data, it is interpreted as a file name, so the data is read from the given file. You’ll need to open this file and pass data with the Read event as needed. (See CURLS ftp file upload example project)

• The last option -H specifies an additional header for the upload. Pass this additional header with the SetOptionHTTPHeader method.

curl -X PUT http://127.0.0.1:5984/appserials/f2f4e540bf8bb60f61cfcd4328001c59 -d '{ "type":"Product","description":"Application Serial","acronym":"AppSerial","dateAdded":"2011-03-21 14:57:36" }'

• Option -X PUT like above.

• Pass the URL again in OptionURL

• This time data is passed in command line for CURL. You’d put this data in the quotes into a string and make it available in the Read event. (See CURLS ftp upload example project)

5.0.93 How to delete file with ftp and curl plugin?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can set post/pre quotes to have ftp commands executed before or after the download/upload.

Example:

dim d as CURLMBS  // your curl object

// delete file
dim ws() As String
ws.Append "DELE Temp.txt"

d.SetOptionPostQuote(ws)

Notes:

Use SetOptionPostQuote, SetOptionPreQuote or SetOptionQuote.
The ftp commands you pass here are native ftp commands and not the commands you use with ftp applications. To delete use DELE and the file path.
5.0.94 How to detect display resolution changed?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** On Mac OS X simply listen for display changed notifications.

**Notes:** Use the "Distribution Notification Center.rbp" example project as a base and use it to listen to notifications with the name "O3DeviceChanged".

5.0.95 How to detect retina?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Please use WindowBackingScaleFactorMBS to query the factor.

**Example:**

msgbox str(window1.BackingScaleFactorMBS)

5.0.96 How to disable force quit?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:**

Please visit this website and get the control panel for Mac OS 9 there:
http://www3.sk.sympatico.ca/tinyjohn/DFQ.html

For Mac OS X use the MBS Plugin with the SetSystemUIModeMBS method.

**Notes:** Please use presentationOptions in NSApplicationMBS for Cocoa applications.

5.0.97 How to disable the error dialogs from Internet Explorer on javascript errors?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** You can use this code in the htmlviewer open event:

**Example:**

```ruby
if targetwin32 then
  htmlviewer1._ole.Content.value("Silent") = True
end if
```

**Notes:** This disables the error dialogs from Internet Explorer.
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5.0.98 How to display a PDF file in Xojo?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. 

**Answer:** On Mac OS X you can use CoreGraphics or PDFKit to display a PDF.

**Notes:**

An alternative can be to load the PDF into a htmlviewer so the PDF plugin can display it.
On Windows you may need to use the Acrobat ActiveX control from Adobe or launch Acrobat Reader.

5.0.99 How to do a lottery in RB?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. 

**Answer:** Try this function:

Example:

```rb
Sub Lotto(max as Integer,count as Integer,z() as Integer)
  // Lotto count numbers of max put into the array z beginning at index 0
  dim n(0) as Integer ' all the numbers
  dim m as Integer ' the highest field in the current array
  dim i,a,b,d as Integer ' working variables

  'fill the array with the numbers
  m=max-1
  redim n(m)

  for i=0 to m
    n(i)=i+1
  next

  ' unsort them by exchanging random ones
  m=max*10
  for i=1 to m
    a=rnd*max
    b=rnd*max
    d=n(a)
    n(a)=n(b)
    n(b)=d
  next

  ' get the first count to the dest array
  m=count-1
  redim z(m)
  for i=0 to m
    z(i)=n(i)
  next
```

'sort the result
z.sort
End Sub

Sub Open()
  // Test it

dim za(0) as Integer ' the array of the numbers

lotto 49,6,za ' 6 of 49 in Germany

  ' and display them
staticText1.text=str(za(0))+chr(13)+str(za(1))+chr(13)+str(za(2))+chr(13)+str(za(3))+chr(13)+str(za(4))+chr(13)+str(za(5))+chr(13)
End Sub

5.0.100 How to do an asycron DNS lookup?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: use CFHostMBS class (Mac OS X only).

Notes:
Xojo internal functions and plugin DNS functions are sycronized.
You can use DNSLookupThreadMBS class for doing them asyncron.

5.0.101 How to draw a dushed pattern line?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can try this code: Example:

  // call like this: DrawDushedPatternLine g,0,0,width,height,10

Sub DrawDushedPatternLine(g as graphics,x1 as Integer,y1 as Integer,x2 as Integer,y2 as Integer, partlen as Integer)
  dim x,y,ox,oy as Double
  dim dx,dy as Double
  dim w,h,d as Double
  dim b as Boolean

  w=x2-x1
  h=y2-y1

  d=sqrt(w*w+h*h)
dx=w/d*partlen
dy=h/d*partlen

b=true
x=x1
while (x<x2) and (y<y2)
ox=x
oy=y

x=x+dx
y=y+dy

if b then
g.DrawLine ox,oy,x,y
end if

b=not b
wend

End Sub

Notes: It would be possible to add this to the plugin, but I think it’s better if you do it in plain Xojo code, so it even works on Windows.

5.0.102 How to draw a nice antialiased line?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer:

This code can help you although it’s not perfect.
You need to set lc to the current color you use.
Example:

Sub drawLine(xs as Integer, ys as Integer, xe as Integer, ye as Integer, face as RGBSurface, lineColor as color)
dim intX, intY, count, n, xDiff, yDiff as Integer
dim v, v1, floatX, floatY, xx, yy, xStep, yStep as Double
dim c as color

const st=1.0

xDiff=xe-xs
yDiff=ye-ys
count=max(abs(xDiff), abs(yDiff))
xStep=xDiff/count


yStep=yDiff/count
xx=xs
yy=ys
for n=1 to count
intX=xx
intY=yy
floatX=xx-intX
floatY=yy-intY
v=(1-floatX)*(1-floatY)*st
v1=1-v
c=face.pixel(intX, intY)
face.pixel(intX, intY)=rgb(v*lineColor.red+v1*c.red, v*lineColor.green+v1*c.green, v*lineColor.blue+v1*c.blue)
v=floatX*(1-floatY)*st
v1=1-v
c=face.pixel(intX+1, intY)
face.pixel(intX+1, intY)=rgb(v*lineColor.red+v1*c.red, v*lineColor.green+v1*c.green, v*lineColor.blue+v1*c.blue)
v=(1-floatX)*floatY*st
v1=1-v
c=face.pixel(intX, intY+1)
face.pixel(intX, intY+1)=rgb(v*lineColor.red+v1*c.red, v*lineColor.green+v1*c.green, v*lineColor.blue+v1*c.blue)
v=floatX*floatY*st
v1=1-v
c=face.pixel(intX+1, intY+1)
face.pixel(intX+1, intY+1)=rgb(v*lineColor.red+v1*c.red, v*lineColor.green+v1*c.green, v*lineColor.blue+v1*c.blue)
xx=xx+xStep
yy=yy+yStep
next
End Sub

Notes: PS: st should be 1 and face should be a RGBSurface or a Graphics object.

5.0.103 How to dump java class interface?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: In terminal you can use "javap -s <classname>" to display the class with the method names and parameters.
Notes: For example show ResultSet class: javap -s java.sql.ResultSet
How to duplicate a picture with mask or alpha channel?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can use code like this function:

**Example:**

```plaintext
Function Duplicate(extends p as Picture) As Picture
    # if RBVersion >= 2011.04 then
    if p.HasAlphaChannel then
        // create new picture and copy content:
        dim q as new Picture(p.Width, p.Height)
        q.Graphics.DrawPicture p,0,0
        Return q
    end if
    # endif

    // create new picture
    dim q as new Picture(p.Width, p.Height, 32)

    // get mask
    dim oldMask as Picture = p.mask(false)
    if oldMask = nil then
        // no mask, so simple copy
        q.Graphics.DrawPicture p,0,0
        Return q
    end if

    // remove mask
    p.mask = nil

    // copy picture and mask
    q.Graphics.DrawPicture p, 0, 0
    q.mask.Graphics.DrawPicture oldMask,0,0

    // restore mask
    p.mask = oldmask

    Return q
End Function
```

**Notes:**

Simply copy it to a module and call it like this: `q = p.duplicate`.

The code above works with old Xojo versions because of the `# if` even if your RS version does not support
alpha channel pictures. This way it's future proof.

5.0.105 How to enable assistive devices?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can use AppleScript code like below:

**Notes:**

tell application "System Events"
activate

set UI elements enabled to true

return UI elements enabled
end tell

You can run this with AppleScriptMBS class.

5.0.106 How to encrypt a file with Blowfish?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can use code like this:

**Example:**

dim fi as FolderItem = SpecialFolder.Desktop.Child("test.xojo_binary_project")
dim fo as FolderItem = SpecialFolder.Desktop.Child("test.encrypted")

// read input
dim bi as BinaryStream = BinaryStream.Open(fi)
dim si as string = bi.Read(bi.Length)
bi.Close

// encrypt
dim so as string = BlowfishMBS.Encrypt("MyKey",si)

// write output
dim bo as BinaryStream = BinaryStream.Create(fo)
bo.Write so
bo.Close

**Notes:** Of course you can decrypt same way, just use Decrypt function and of course swap files.
5.0.107  How to extract text from HTML?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use both RemoveHTMLTagsMBS and DecodingFromHTMLMBS like this:

**Example:**

```vba
dim html as string = "<p><B>Grüße</B></P>"
dim htmltext as string = RemoveHTMLTagsMBS(html)
dim text as string = DecodingFromHTMLMBS(htmltext)
```

MsgBox text // shows: Grüße

**Notes:**

You can use it together with RemoveHTMLTagsMBS to remove html tags. What you get will be the text without tags.

DecodingFromHTMLMBS turns HTML escapes back to unicode characters. Like &auml; to ä.

5.0.108  How to find empty folders in a folder?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Try this code:

**Example:**

```vba
dim folder as folderitem // your folder

dim c as Integer = folder.count
for i as Integer = 1 to c
dim item as folderitem = folder.trueitem(i)
if item = nil then
// ignore
elseif item.directory then
// folder
if item.count = 0 then
// found empty folder
end if
end if
next
```
5.0.109  How to find iTunes on a Mac OS X machine fast?


Example:

```vbs
Dim f As FolderItem
f = LaunchServicesFindApplicationForInfoMBS("hook","com.apple.iTunes","iTunes.app")
MsgBox f.AbsolutePath
```

5.0.110  How to find network interface for a socket by it’s name?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: You can use our plugin to build a lookup table.

Example:

```vbs
Function FindNetworkInterface(name As String) As NetworkInterface
    Dim name As String = name.Trim
    If name.Length = 0 Then Return Nothing

    // search by IP/MAC
    Dim u As Integer = System.NetworkInterfaceCount - 1
    For i As Integer = 0 To u
        Dim n As NetworkInterface = System.GetNetworkInterface(i)
        If n.IPAddress = name Or n.MACAddress = name Then
            Return n
        End If
    Next

    // use MBS Plugin to build a mapping
    Dim interfaces() As NetworkInterfaceMBS = NetworkInterfaceMBS.AllInterfaces
    Dim map As New Dictionary
    For Each n As NetworkInterfaceMBS In interfaces
        Dim IPv4s() As String = n.IPV4s
        Dim IPv6s() As String = n.IPV6s
        For Each IPv4 As String In IPv4s
            map.Value(IPv4) = n.Name
        Next
        For Each IPv6 As String In IPv6s
            map.Value(IPv6) = n.Name
        Next
    Next
```

next
if n.MAC<>"" then
map.Value(n.MAC) = n.Name
end if
next

// now search interfaces by name, IPv4 or IPv6
for i as Integer = 0 to u
dim n as NetworkInterface = System.GetNetworkInterface(i)
if map.Lookup(n.IPAddress, "") = namethen
Return n
end if
if map.Lookup(n.MACAddress, "") = namethen
Return n
end if
next
End Function

Notes: The code above uses a lookup table build using NetworkInterfaceMBS class to find the network interface by name.

5.0.111 How to find version of Microsoft Word?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can use code like this:

Example:

// find Word
dim f as FolderItem = LaunchServicesFindApplicationForInfoMBS("","com.microsoft.Word","")

// open bundle
dim c as new NSBundleMBS(f)

// read info
dim d as Dictionary = c.infoDictionary

// show version
MsgBox d.Lookup("CFBundleVersion","")

Notes: Older versions of Word can be found with creator code "MSWD".
5.0.112 How to fix CURL error 60/53 on connecting to server?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You probably connect with SSL and you have no valid certificate.

**Example:**

```mbs
dim d as new CURLSMBS

// Disable SSL verification
d.OptionSSLVerifyHost = 0 // don’t verify server
d.OptionSSLVerifyPeer = 0 // don’t proofs certificate is authentic

// With SSL Verification:
dim cacert as FolderItem = Getfolderitem("cacert.pem")
d.OptionCAInfo = cacert.UnixpathMBS
d.OptionSSLVerifyHost = 2 // verify server
d.OptionSSLVerifyPeer = 1 // proofs certificate is authentic
```

**Notes:**

You can either use the code above to disable the SSL verification and have no security. Or you use the cacert file and enable the verification. Than you only get a connection if the server has a valid certificate.

See also:

http://curl.haxx.se/ca/

5.0.113 How to format double with n digits?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can use the FormatMBS function for this.

**Example:**

```mbs
dim d as Double = 123.4567890
listbox1.AddRow FormatMBS("% f", d)
listbox1.AddRow FormatMBS("% e", d)
listbox1.AddRow FormatMBS("% g", d)
listbox1.AddRow FormatMBS("% 5.5f", d)
listbox1.AddRow FormatMBS("% 5.5e", d)
listbox1.AddRow FormatMBS("% 5.5g", d)
listbox1.AddRow FormatMBS("% 5.5g", d)

listbox1.AddRow FormatMBS("% f", d)
listbox1.AddRow FormatMBS("% e", d)
```

```mbs
d = 0.000000123456
listbox1.AddRow FormatMBS("% f", d)
listbox1.AddRow FormatMBS("% e", d)
```
Notes:

see FormatMBS for details.
In general % f is normal style, % e is scientific and % g is whichever gives best result for given space.

5.0.114 How to get a time converted to user time zone in a web app?


Example:

Sub Open()
    // current date on server
    dim d as new date
    dim s as string = d.LongTime

    // adjust to client GMT offset
    d.GMTOffset = d.GMTOffset + Session.GMTOffset

    dim t as string = D.LongTime

    MsgBox s + EndOfLine + t
End Sub

5.0.115 How to get a handle to the frontmost window on Windows?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: This function returns a handle for the frontmost window:

Example:

Function GetForegroundWindowHandle() as Integer
    # if targetwin32 then
    declare function GetForegroundWindow Lib "user32.dll" as Integer
    Return GetForegroundWindow()
    # endif
End Function
5.0.116  How to get CFAbsoluteTime from date?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: No. **Answer:** Use code like this:

**Example:**

```vbs
Dim d As New Date
Dim t As CFTimeZoneMBS = SystemCFTimeZoneMBS
Dim g As New CFGregorianDateMBS
g.Day = d.Day
g.Month = d.Month
g.Year = d.Year
g.Minute = d.Minute
g.Hour = d.Hour
g.Second = d.Second

Dim at As CFAbsoluteTimeMBS = g.AbsoluteTime(t)
Dim x As Double = at.Value

MsgBox str(x)
```

**Notes:**

As you see we need a timezone and put the date values in a gregorian date record. Now we can query absolute time for the given timezone.

---

5.0.117  How to get client IP address on web app?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use the WebSession.RemoteAddress property.

**Example:**

```vbs
Sub Open()
Title = Session.RemoteAddress
End Sub
```
5.0.118 How to get fonts to load in charts on Linux?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Please use the SetFontSearchPath method in the CDBaseChartMBS class to specify where your fonts are.

Example:

```vbnet
if TargetLinux then
  CDBaseChartMBS.SetFontSearchPath "/usr/share/fonts/truetype"
else
  // on Mac and Windows we use system fonts.
end if
```

Notes:

On Mac OS X and Windows, the fonts are loaded from the system’s font folder.

e.g. if you use ubuntu, you can install the ttf-mscorefonts-installer package and call this method with "/usr/share/fonts/truetype/msttcorefonts" as the path. No backslash on the end of a path, please.

5.0.119 How to get fonts to load in DynaPDF on Linux?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Please use the AddFontSearchPath method in the DynaPDFMBS class to specify where your fonts are.

Example:

```vbnet
dim d as new DynaPDFMBS
if TargetLinux then
  call d.AddFontSearchPath "/usr/share/fonts/truetype", true
else
  // on Mac and Windows we use system fonts.
end if
```

Notes:

On Mac OS X and Windows, the fonts are loaded from the system’s font folder.

e.g. if you use ubuntu, you can install the ttf-mscorefonts-installer package and call this method with "/usr/share/fonts/truetype/msttcorefonts" as the path. No backslash on the end of a path, please.
5.0.120 How to get GMT time and back?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can use the date class and the GMTOffset property.

**Example:**

```vbs
// now
dim d as new date

// now in GMT
dim e as new date
e.GMTOffset = 0

// show
MsgBox str(d.TotalSeconds,"0.0")+" "+str(e.TotalSeconds, "0.0")

dim GMTTimeStamp as Double = e.TotalSeconds

// restore
dim f as new date

// add GMT offset here
f.TotalSeconds = GMTTimeStamp + f.GMTOffset*3600

// because here it's removed
f.GMTOffset = f.GMTOffset

MsgBox d.ShortTime+" ("+str(d.GMTOffset)+") "+str(d.TotalSeconds,"0.0")+EndOfLine+_ e.ShortTime+" ("+str(e.GMTOffset)+") "+str(e.TotalSeconds,"0.0")+EndOfLine+_ f.ShortTime+" ("+str(f.GMTOffset)+") "+str(f.TotalSeconds,"0.0")
```

**Notes:** It’s sometimes a bit tricky with the date class as setting one property often changes the others.

5.0.121 How to get good crash reports?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Check this website from the webkit website:

**Notes:** [http://webkit.org/quality/crashlogs.html](http://webkit.org/quality/crashlogs.html)

5.0.122 How to get list of all threads?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can use the runtime module like in this function:
**Example:**

```vbnet
Function Threads() As Thread()
    # pragma DisableBackgroundTasks
    Dim t() As Thread

    Dim o As Runtime.ObjectIterator = Runtime.IterateObjects
    While o.MoveNext
        If o.Current isa Thread Then
            t.Append thread(o.current)
        End if
    Wend

    Return t
End Function
```

**Notes:**

This returns an array of all thread objects currently in memory. The pragma is important here as it avoids thread switches which may cause a thread to be created or deleted.

---

**5.0.123  How to get parameters from webpage URL in Xojo Web Edition?**

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use the Webpage.ParametersReceived event.

**Example:**

```vbnet
Sub ParametersReceived(Variables As Dictionary)
    For Each key As Variant In Variables.keys
        MessageBox key + " -> " + Variables.Value(key)
    Next
End Sub
```

**Notes:** The text encodings of this strings is not defined in Xojo 2010r5. Please use DefineEncoding.

---

**5.0.124  How to get the color for disabled textcolor?**

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Ask the appearance manager.

**Example:**
Function GetThemeTextColor(inColor as Integer, inDepth as Integer, inColorDev as Boolean) As Color
declare function GetThemeTextColor lib "Carbon" (inColor as Integer, inDepth as Integer, inColorDev as Boolean, outColor as Ptr) as Integer

    dim i as Integer
    dim col as MemoryBlock

    col = newMemoryBlock(6)

    i = GetThemeTextColor(inColor, inDepth, inColorDev, col)

    return RGB(col.UShort(0) \ 256, col.UShort(2) \ 256, col.UShort(4) \ 256)
End Function

Notes:
The color for this is:

    const kThemeTextColorDialogInactive = 2.

    c = GetThemeTextColor(kThemeTextColorDialogInactive, Screen(0).Depth, true)

For Mac OS X you should use "CarbonLib" instead of "AppearanceLib" ...

5.0.125 How to get the current free stack space?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: You can something like the code below:

Example:

Sub ShowStackSize()
    dim threadid as Integer
    dim size as Integer

    declare function GetCurrentThread lib "Carbon" (byref threadid as Integer) as short
    declare function ThreadCurrentStackSpace lib "Carbon" (threadid as Integer, byref size as Integer) as short

    if GetCurrentThread(threadid)=0 then
    if 0=ThreadCurrentStackSpace(threadid,size) then
        MsgBox str(size)
    end if
end if
End Sub
Notes: For Mac OS 9, use "ThreadLib" instead of "CarbonLib". You can use # if you like for that.

5.0.126 How to get the current timezone?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: No. Answer:

You can use the TimeZoneMBS class or the CFTimeZoneMBS class.
Or code like below:
Example:

Function GMTOffsetInMinutes() as Integer
// Returns the offset of the current time to GMT in minutes.
// supports Mac OS and Windows, but not Linux yet (let me know if
// you have code for that, please)
//
// Note that the offset is not always an even multiple of 60, but
// there are also half hour offsets, even one 5:45h offset

// This version by Thomas Tempelmann (rb@tempel.org) on 25 Nov 2005
// with a fix that should also make it work with future Intel Mac targets.
//
// Using code from various authors found on the RB NUG mailing list

dim result, bias, dayLightbias as Integer
dim info as memoryBlock
dim offset as Integer

# if targetMacOS then

Declare Sub ReadLocation lib "Carbon" (location As ptr)

info = NewMemoryBlock(12)
ReadLocation info
if false then
  // bad, because it does not work on Intel Macs:
  offset = info.short(9) * 256 + info.byte(11)
else
  offset = BitwiseAnd (info.long(8), & hFFFFFF)
end

offset = info.short(9) * 256 + info.byte(11)
offset = offset \60
return offset
# endif

# if targetWin32 then

Declare Function GetTimeZoneInformation Lib "Kernel32" ( tzInfoPointer as Ptr ) as Integer
// returns one of
// TIME_ZONE_ID_UNKNOWN 0
// – Note: e.g. New Delhi (GMT+5:30) and Newfoundland (-3:30) return this value 0
// TIME_ZONE_ID_STANDARD 1
// TIME_ZONE_ID_DAYLIGHT 2

info = new MemoryBlock(172)
result = GetTimeZoneInformation(info)

bias = info.Long(0)
// note: the original code I found in the NUG archives used Long(84) and switched to Long(0)
// only for result=1 and result=2, but my tests found that Long(0) is also the right value for result=0

if result = 2 then
daylightBias = info.long(168)
end if
offset = - (bias + dayLightBias)
return offset

# endif

End Function

5.0.127 How to get the current window title?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: The code below returns the current window title for the frontmost window on Mac OS X if Accessibility services are

Example:

Function CurrentWindowTitle() As string
    dim SystemWideElement,FocusedApplicationElement,FocusedWindowElement as AXUIElementMBS
    dim FocusedApplication,FocusedWindow,Title as AXValueMBS
    dim s as String
    dim cs as CFStringMBS

    SystemWideElement=AccessibilityMBS.SystemWideAXUIElement
    if SystemWideElement<>nil then
        FocusedApplication=SystemWideElement.AttributeValue(AccessibilityMBS.kAXFocusedApplicationAttribute)
        if FocusedApplication.Type=AccessibilityMBS.kAXUIElementMBSTypeID then
            FocusedApplicationElement=new AXUIElementMBS
        end if
    end if

    return Title
FocusedApplicationElement.Handle=FocusedApplication.Handle
FocusedApplicationElement.RetainObject

FocusedWindow=FocusedApplicationElement.AttributeValue(AccessibilityMBS.kAXFocusedWindowAttribute)
if FocusedWindow<>nil and AccessibilityMBS.kAXUIElementMBSTypeID=FocusedWindow.Type then

FocusedWindowElement=new AXUIElementMBS
FocusedWindowElement.Handle=FocusedWindow.Handle
FocusedWindowElement.RetainObject

Title=FocusedWindowElement.AttributeValue(AccessibilityMBS.kAXTitleAttribute)
if Title<>nil and Title.Type=kCFStringMBSTypeID then
    cs=new CFStringMBS
    cs.handle=Title.Handle
    cs.RetainObject
    Return cs.str
end if
end if
end if
End Function

5.0.128  How to get the cursor blink interval time?


Example:

declare function GetCaretTime lib "Carbon" () as Integer

MsgBox str(GetCaretTime())+” ticks”

Notes: 60 ticks make one second.

5.0.129  How to get the list of the current selected files in the Finder?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer:

Use the AppleScript like this one:
tell application "finder"
return selection
end tell

Which translates into this AppleEvent:

Process("Finder").SendAE "core,getd,'—-':obj { form:prop, want:type(prop), seld:type(sele), from:'null'() }"

and as Xojo code it looks like this:

Example:

dim ae as appleevent
dim o1 as appleeventObjectSpecifier
dim f as folderItem
dim aList as appleeventdescList
dim i as Integer
dim dateiname as string

// setup the AppleEvent
o1=getpropertyObjectDescriptor( nil, "sele")
ae= newappleEvent("core", "getd", "MACS")
ae.objectSpecifierParam("—-")=o1

// send it
if ae.send then
  // got the list
  alist=ae.replyDescList

  // now show the list of filename into an editfield:

  for i=1 to alist.count
    f=alist.folderItemItem(i)
    dateiname=f.name
    // editfield1 with property "multiline=true"!
    editfield1.text=editfield1.text + dateiname + chr(13)
  next
end if
5.0.130  How to get the Mac OS system version?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No.  **Answer:** The following code queries the value and displays the version number:

**Example:**

```vbs
    dim first as Integer
    dim second as Integer
    dim third as Integer
    dim l as Integer

    if System.Gestalt("sysv",l) then
        Third=Bitwiseand(l,15)
        second=Bitwiseand(l\16,15)
        first=Bitwiseand(l\256,15)+10*Bitwiseand(l\256\16,15)
    end if

    if First>=10 then
        msgbox "Mac OS X "+str(First)+"."+str(second)+"."+str(third)
    else
        msgbox "Mac OS "+str(First)+"."+str(second)+"."+str(third)
    end if
```

5.0.131  How to get the Mac OS Version using System.Gestalt?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No.  **Answer:** Try this code:

**Example:**

```vbs
    Dim s As String
    Dim b As Boolean
    Dim i, resp as Integer

    // Systemversion
    b = System.Gestalt("sysv", resp)
    If b then
        s = Hex(resp)
        For i = Len(s)-1 DownTo 1
            s=Left(s,i)+"."+Mid(s,i+1)
        Next
        MsgBox "Systemversion: Mac OS " + s
    end if
```
Notes: The MBS Plugin has a SystemInformationMBS.OSVersionString function for this.

5.0.132 How to get the screensize excluding the task bar?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: Try this code:
Notes: Use the Screen class with the available* properties.

5.0.133 How to get the size of the frontmost window on Windows?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: Try this code:
Notes:
Make yourself a class for the WindowRect with four properties:

Bottom as Integer
Left as Integer
Right as Integer
Top as Integer

Add the following method to your class:

Sub GetWindowRect(windowhandle as Integer)
dim err as Integer
dim mem as memoryBlock
# if targetwin32 then
Declare Function GetWindowRect Lib "user32.dll" (hwnd as Integer, ipRect As Ptr) as Integer

mem = newmemoryBlock(16)
err = GetWindowRect(windowhandle, mem)
Left = mem.Long(0)
Top = mem.Long(4)
Right = mem.Long(8)
Bottom = mem.Long(12)
# endif
End Sub

Good to use for the MDI Master Window!
5.0.134 How to get the source code of a HTMLViewer?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Try this code:

**Example:**

```
// for Windows:
msgbox HTMLViewer1.IEHTMLTextMBS

// for Mac OS X:
msgbox HTMLViewer1.mainFrameMBS.dataSource.data
```

5.0.135 How to get Xojo apps running Linux?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You need to install some require packages.

**Notes:**

You need CUPS as well as GTK packages. On 64 bit systems also the ia32-libs package.

Please note that you need a x86 compatible Linux. So no PPC, Power, ARM or other CPUs.

5.0.136 How to handle really huge images with GraphicsMagick or ImageMagick?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Sometimes it may be better to use an extra application to process images.

**Notes:**

A typical 32 bit app made with Xojo (Xojo) can use around 1.8 GB on Windows and 3 GB on Mac OS X. Some images may be huge, so that processing them causes several copies of the image to be in memory. With a 500 MB image in memory, doing a scale or rotation may require a temp image. So with source, temp and dest images with each 500 MB plus your normal app memory usage, you may hit the limit of Windows with 1.8 GB.

In that case it may be worth running a tool like gm in the shell class. gm is the command line version of GraphicsMagick. There you can run the 64 bit version which is not limited in memory like your own application. Also you can monitor progress and keep your app responsive.
5.0.137 How to handle tab key for editable cells in listbox?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use code like this function:

**Example:**

```vba
Function HandleTabInList(list as listbox, row as Integer, column as Integer, key as String) As Boolean
// Handle tab character in Listbox.CellKeyDown event

Select case asc(key)
  case 9
    if Keyboard.AsyncShiftKey then
      // back

      // look for column left
      for i as Integer = column-1 downto 0
        if list.ColumnType(i) >= list.TypeEditable then
          list.EditCell(row, i)
          Return true
        end if
      next

      // not found, so look in row before
      row = row - 1
      if row >=0 then
        for i as Integer = list.ColumnCount-1 downto 0
          if list.ColumnType(i) >= list.TypeEditable then
            list.EditCell(row, i)
            Return true
          end if
        next
      end if
    end if

  else
    // forward

    // look for column right
    for i as Integer = column+1 to list.ColumnCount-1
      if list.ColumnType(i) >= list.TypeEditable then
        list.EditCell(row, i)
        Return true
      end if
    next

    // not found, so look in row below
    row = row + 1
    if row < list.ListCount then
      for i as Integer = 0 to list.ColumnCount-1
        if list.ColumnType(i) >= list.TypeEditable then
          list.EditCell(row, i)
          Return true
        end if
      next
    end if
  end if
end Select

Return false
```


list.EditCell(row, i)
Return true
end if
next
end if
end if
end Select
End Function

Notes:
You call it from CellKeyDown event like this:

EventHandler Function CellKeyDown(row as Integer, column as Integer, key as String) As Boolean
if HandleTabInList(me, row, column, key) then Return true
End EventHandler

As you see in the code, we handle tab and shift + tab for moving back and forward. Also we wrap to previous/next row if needed. Feel free to extend this to wrap from last to first row or create a new row for editing.

5.0.138 How to hard link MapKit framework?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Our MapKit classes weak link the framework. If you need hard linking it for the App Store, you can add this method to a class:

Example:

Sub ReferenceMapKit()
// just put this in window or app class

# if TargetMachO and Target64Bit then
Declare sub testing Lib "MapKit" Selector "test" (id as ptr)
testing(nil)
# endif

End Sub

Notes:
No need to call the method.
Just having it in a window or app, will cause the compiler to hard link the framework.
5.0.139  How to have a PDF downloaded to the user in a web application?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can use a WebHTMLViewer control and load the PDF file with the PDF plugin from the browser.

Example:

```vbc
Dim CurrentFile As WebFile // a property of the WebPage

// define the PDF file
CurrentFile = New WebFile
CurrentFile.Filename = "test.pdf"
CurrentFile.MIMEType = "application/pdf"
CurrentFile.Data = "some pdf data" // MyDynaPDF.GetBuffer
CurrentFile.ForceDownload = True

// start the download
ShowUrl(CurrentFile.url)
```

Notes: See our Create PDF example for the Xojo Web Edition.

5.0.140  How to hide all applications except mine?

Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: The code below will on Mac OS hide all applications except your one:

Example:

```vbc
Dim p As New ProcessMBS

p.GetFirstProcess
Do
If Not p.FrontProcess Then
p.Visible = False
End If
Loop Until Not p.GetNextProcess
```

5.0.141  How to hide script errors in HTMLViewer on Windows?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: Set Internet Explorer to silent mode with code like this:

Example:
htmlviewer1._ole.Content.value("Silent") = True

Notes: Simply put this code in the open event of your htmlviewer control (using me instead of htmlviewer1).

5.0.142  How to hide the grid/background/border in ChartDirector?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** If you want to hide something in a chart, simply assign the kTransparent constant as color.

5.0.143  How to hide the mouse cursor on Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Try this declare:

**Example:**

Declare Sub HideCursor Lib "Carbon" () Inline68K("A852")

HideCursor

Notes: The MBS Plugin has this function and supports it on Windows, too.

5.0.144  How to insert image to NSTextView or TextArea?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** With NSTextViewMBS you can use this code to insert file:

**Example:**

// insert a file to textview

Public Sub InsertFile(textview as NSTextViewMBS, f as FolderItem)

// read to file

dim b as BinaryStream = BinaryStream.Open(f)
dim s as string = b.Read(b.Length)

// build wrapper

dim fileWrapper as NSFileWrapperMBS = NSFileWrapperMBS.initRegularFileWithContents(s)
fileWrapper.preferredFilename = f.name

// make attachment

dim fileAttachment as new NSTextAttachmentMBS(fileWrapper)
dim attributedString as NSAttributedStringMBS = NSAttributedStringMBS.attributedStringWithAttachment(fileAttachment)

// add to a NSTextViewMBS
textView.insertText attributedString

End Sub

Notes: For Text Area you can query the underlying NSTextViewMBS object via TextArea.NSTextViewMBS method.

5.0.145 How to jump to an anchor in a htmlviewer?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: No. Answer: You can use javascript to change the current window’s location.
Example:

// load website
htmlviewer1.LoadURL "http://www.monkeybreadsoftware.net/addressbook-abpersonmbs.shtml"

// later jump to anchor named "16":

if TargetWin32 then
call HTMLViewer1.IERunJavaScriptMBS "window.location = "# 16"
elseif TargetMacOS then
call HTMLViewer1.EvaluateJavaScriptMBS "window.location = "# 16"
else
// not supported
end if

5.0.146 How to keep a movieplayer unclickable?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: To keep the user away from clicking on a playing Movie you can just drop a Canvas in front of the Movieplayer and take the clicks there.
Example:

Function Canvas1.MouseDown(X as Integer, Y as Integer) as boolean
return true // take it and do nothing
End Function
5.0.147 How to keep my web app from using 100% CPU time?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** On Linux and Mac OS X you can use renice command in the terminal. On Windows use the task manager to reduce priority.

**Notes:**

If you launch your app with nohup on Linux or Mac OS X like this from the terminal or a script:

```bash	nohup /webapps/MyApp/MyApp &
```

you can simply have a second line saying this:

```bash
renice 20 $!
```

which tells the system to lower priority to lowest value for the latest background process.

5.0.148 How to kill a process by name?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can kill a process (or application) by name if you loop over all the processes and kill the one you need.

**Example:**

```vba
dim p as new ProcessMBS
p.GetfirstProcess ' get first
do
if p.name = "TextEdit" then
call p.KillProcess
Return
end if
loop until not p.GetNextProcess
```

**Notes:** You may want to check the result of killProcess function. Not every user is allowed to kill every application.

5.0.149 How to know how many CPUs are present?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Try this function:

**Example:**

```vba
Function GetCPUCount() as Integer
Declare Function MPProcessors Lib "Carbon" () as Integer
```
Return MPProcessors()
End Function

**Notes:** Your app will than need that library to launch on Classic. To avoid this the MBS plugin checks if this library is available and return 1 if it’s not available.

### 5.0.150 How to know the calling function?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** On Mac you can use a helper function like this this code:

**Example:**

```vba
Public Function CallingFunction() as string
    // Query name of calling function of a function
    # Pragma BreakOnExceptions false
    try
        // raise a dummy exception
        dim r as new NilObjectException
        raise r
        catch x as NilObjectException
            // get stack
            dim stack() as string = x.Stack
            // pick function name and return
            dim name as string = stack(2)
            Return name
        end try
    End Function
```

**Notes:** You need to include function names in your application.
5.0.151 How to launch an app using it’s creator code?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Send an AppleEvent "oapp" with the creator code to the Finder ("MACS"):

Example:

Dim a as AppleEvent
dim creator as string

creator = "MSIE" ' here the Internet Explorer

a = NewAppleEvent("aevt", "odoc", "MACS")
a.Timeout = -1

a.ObjectSpecifierParam("—-") = GetUniqueIDObjectDescriptor("appf", nil, creator)

if not a.send then
    msgBox "An error has occured"
else

end if

5.0.152 How to launch disc utility?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can use this code:

Example:

dim f as FolderItem = LaunchServicesFindApplicationForInfoMBS("","com.apple.DiskUtility","")

if f<>Nil then
    f.Launch
end if

Notes: This works even if people renamed the disc utility or moved it to another folder.

5.0.153 How to make a lot of changes to a REAL SQL Database faster?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You may try to embed your changes to the database between two transaction calls.

Example:
dim db as Database  // some database

db.SQLExecute "BEGIN TRANSACTION"
// Do some Stuff
db.SQLExecute "END TRANSACTION"

Notes: This can increase speed by some factors.

5.0.154 How to make a NSImage object for my retina enabled app?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: You can use code like this:
Example:
Function NewRetinaImage(pic as Picture, mask as Picture = nil) As NSImageMBS
// first make a NSImageMBS from it
dim n as new NSImageMBS(pic, mask)

// now set to half the size, so we have 2x pixels for the image
n.size = new NSSizeMBS(n.width/2, n.height/2)

// and return
Return n
End Function

Notes:
The thing to do is to have 2x the pixels, but assign a size to the image which gives it the right size in points. You can pass the NSImageMBS from here to NSMenuItemMBS. For Retina displays, the full resolution is used. For others it will be reduced.

5.0.155 How to make a window borderless on Windows?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: Try this declares:
Example:
// Sets window to borderless popup type, and sets its initial dimensions.
// Call this method, then Win32SetBorderlessPos, and then RB's Show
// method. Use RB Frame type 7 (Global Floating Window).
Const SWP_NOMOVE = & H2
Const SWP_FRAMECHANGED = & H20
Const HWND_ TOPMOST = -1
Const GWL_STYLE = -16
Const WS_POPUPWINDOW = &H80880000

Dim styleFlags as Integer

# If TargetWin32 Then

Declare Function SetWindowLong Lib "user32" Alias "SetWindowLongA" (hwnd as Integer, nIndex as Integer, dwNewLong as Integer) as Integer
Declare Function SetWindowPos Lib "user32" (hwnd as Integer, hWndInsertAfter as Integer, x as Integer, y as Integer, cx as Integer, cy as Integer, flags as Integer) as Integer

styleFlags = SetWindowLong( w.WinHWND, GWL_STYLE, WS_POPUPWINDOW )
styleFlags = BitwiseOr( SWP_FRAMECHANGED, SWP_NOMOVE )
styleFlags = SetWindowPos( w.WinHWND, HWND_TOPMOST, 0, 0, wd, ht, styleFlags )

# EndIf

5.0.156 How to make an alias using AppleEvents?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Try this code: Example:

Sub MakeAlias(folder as folderitem, target as folderitem, aliasname as string)
dim ev as AppleEvent
dim myResult as boolean
dim properties as AppleEventRecord

ev = NewAppleEvent("core", "crel", "MACS")
ev.MacTypeParam("kocl") = "alis"
ev.FolderItemParam("to ") = target
ev.FolderItemParam("insh") = folder

properties = new AppleEventRecord
properties.StringParam("pnam") = aliasname

ev.RecordParam("prdt") = properties

myResult = ev.send
// true on success, false on error
End Sub

Notes:
Call it like this:
MakeAlias SpecialFolder.Desktop, SpecialFolder.Desktop.Child("Gif Copy.rb"), "test.rb alias"

Seems to not work on Mac OS X 10.6

5.0.157 How to make AppleScripts much faster?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: use "ignoring application responses" like in this example:

Notes:

on run { fn,fpx,fpy } ignoring application responses
tell app "Finder" to set the position of folder fn to fpx,fpy
end ignoring
end run

5.0.158 How to make double clicks on a canvas?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Update: Newer Xojo versions support DoubleClick event, so you don’t need this code.

Here’s my tip from the tips list on how to add a double-click event to the Canvas control. The technique could easily be used for a window or any Rectcontrol:

Because of its built-in drawing methods, the Canvas control is often used to create custom interface controls. But while the Canvas control has event handlers for most mouse events, it doesn’t have an event handler for DoubleClick events. Fortunately, you can add a double-click event handler to a Canvas control easily. Basically, you’re going to create a new class based on Canvas and add a double-click event to that. You can then use the new class anytime you need a Canvas with a double-click event.

To create a new Canvas class with a DoubleClick event handler, do this:

1. Add a new class to your project.
2. Set the Super property of the new class to "Canvas".
3. Change the name of this new class to "DoubleClickCanvas".

A double-click occurs when two clicks occur within the users double-click time (set in the Mouse control panel on both Macintosh and Windows) and within five pixels of each other. So, you’ll need a few properties to store when and where the last click occurred.
4. Add a new property with the following declaration and mark it as private: lastClickTicks as Integer
5. Add a new property with the following declaration and mark it as private: lastClickX as Integer
6. Add a new property with the following declaration and mark it as private: lastClickY as Integer

Since the Canvas control doesn’t have a DoubleClick event, you will need to add one.

7. Add a new event to your class by choosing New Event from the Edit menu and enter ”DoubleClick” as the event name.

Double-clicks occur on MouseUp. In order for the mouseUp event to fire, you must return True in the MouseDown event.

8. In the MouseDown event, add the following code:
   Return True

In the MouseUp event, you will need to determine what the users double-click time is. This value is represented on both the Mac and Windows in ticks. A tick is 1/60th of a second. Since there isn’t a built-in function for this, you’ll need to make a toolbox call. The mouseUp event code below makes the appropriate toolbox call for both Macintosh and Windows. It then compares the time of the users last click to the time of the current click and compares the location of the users last click to the location of the current click.

9. Add the following code to the MouseUp event:

   dim doubleClickTime, currentClickTicks as Integer

   # if targetMacOS then
   Declare Function GetDblTime Lib "Carbon" () as Integer
   doubleClickTime = GetDblTime()
   # endif

   # if targetWin32 then
   Declare Function GetDoubleClickTime Lib "User32.DLL" () as Integer
   doubleClickTime = GetDoubleClickTime()/60 // convert to ticks from milliseconds
   # endif

   currentClickTicks = ticks
   //if the two clicks happened close enough together in time
   if (currentClickTicks - lastClickTicks) <= doubleClickTime then
   //if the two clicks occurred close enough together in space
   if abs(X - lastClickX) <= 5 and abs(Y - lastClickY) <= 5 then
   DoubleClick //a double click has occurred so call the event
   end if
end if
lastClickTicks = currentClickTicks
lastClickX = X
lastClickY = Y

10. Now to test out your new DoubleClickCanvas, drag the class from the Project window to a window in your project to create an instance of it.

11. Double-click on the canvas you just added to your window to open the Code Editor. Notice that the canvas has a DoubleClick event handler. In this event handler, add the following code:

BEEP

5.0.159 How to make my Mac not sleeping?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Just inform the Mac OS about some system activity with code like this:

Example:

Sub UpdateSystemActivity()
  # if TargetCarbon
  declare function myUpdateSystemActivity lib "Carbon" alias "UpdateSystemActivity" (activity as Integer) as short
  const OverallAct = 0 // Delays idle sleep by small amount */
  const UsrActivity = 1 // Delays idle sleep and dimming by timeout time */
  const NetActivity = 2 // Delays idle sleep and power cycling by small amount */
  const HDActivity = 3 // Delays hard drive spin down and idle sleep by small amount */
  const IdleActivity = 4 // Delays idle sleep by timeout time */
  dim e as Integer
  e=myUpdateSystemActivity(UsrActivity)
  // you may react on an error if e is not 0 after the call.
  # endif
End Sub

Notes:

You may use another constant if you prefer some different behavior. Call it maybe every second.
5.0.160 How to make my own registration code scheme?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** There are excellent articles about how to make a registration code scheme, but you can also simply use our RegistrationEngineMBS class.

**Notes:** If you need a license text, why not use the one from Xojo as a starting point?

5.0.161 How to make small controls on Mac OS X?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can try this code on Mac OS X:

**Example:**

```plaintext
'/*
' Use the control’s default drawing variant. This does not apply to
' Scroll Bars, for which Normal is Large.
'*/
const kControlSizeNormal = 0

'/*
' Use the control’s small drawing variant. Currently supported by
' the Check Box, Combo Box, Radio Button, Scroll Bar, Slider and Tab
' controls.
'*/
const kControlSizeSmall = 1

'/*
' Use the control’s small drawing variant. Currently supported by
' the Indeterminate Progress Bar, Progress Bar and Round Button
' controls.
'*/
const kControlSizeLarge = 2

'/*
' Control drawing variant determined by the control’s bounds. This
' ControlSize is only available with Scroll Bars to support their
' legacy behavior of drawing differently within different bounds.
'*/
const kControlSizeAuto = & hFFFF

const kControlSizeTag = "size"

declare function SetControlData lib "Carbon" (controlhandle as Integer, part as short, tagname as OSType, size as Integer, data as ptr) as short

dim m as MemoryBlock
```
m=NewMemoryBlock(2)
m.UShort(0)=kControlSizeSmall
Title=str(SetControlData(CheckBox1.Handle, 0, kControlSizeTag, 2, m))

5.0.162 How to mark my Mac app as background only?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can run a build script on each build with this code:

**Example:**

Dim App As String = CurrentBuildLocation + "/" + CurrentBuildAppName + ".app"
Call DoShellCommand("/usr/bin/defaults write " + App + "/Contents/Info ""NSUIElement"" YES")

**Notes:** This will set the NSUIElement flag to YES.

5.0.163 How to move a file or folder to trash?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use code like below:

**Example:**

Function MoveToTrash(f as FolderItem) As Boolean
# if TargetMacOS then
dim r as FolderItem
dim e as Integer = MacFileOperationMBS.MoveObjectToTrashSync(f, r, MacFileOperationMBS.kFSFileOperationDefaultOptions)
if e = 0 then
Return true // Ok
end if

# elseif TargetWin32 then
dim w as new WindowsFileCopyMBS

dim flags as Integer = w.FileOperationAllowUndo + w.FileOperationNoErrorUI + w.FileOperationSilent + w.FileOperationNoConfirmation
if w.FileOperationDelete(f, flags) then
Return true // OK
end if

flags = w.FileOperationNoErrorUI + w.FileOperationSilent + w.FileOperationNoConfirmation
if w.FileOperationDelete(f, flags) then
    Return true // OK
end if
#
else
// Target not supported
break
Return false
#
endif
End Function

**Notes:**

If you want to move a file to trash, you could use f.movefileto f.trashfolder, but that will overwrite existing files in the trash. You can use our MacFileOperationMBS class to move a file on Mac to the trash. And it uses the same code as the Finder, so files are renamed when the same name is already in use in the trash:

On Windows we use WindowsFileCopyMBS class.
Requires Mac OS X 10.5.

**5.0.164 How to move an application to the front using the creator code?**

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** This makes SimpleText (Code ttxt) to the frontmost application:

**Example:**

```vba
dim a as appleevent

a=newappleEvent("misc","actv","ttxt")

if a.send then
    end if
```

**Notes:** (Code is Mac only)

**5.0.165 How to move file with ftp and curl plugin?**

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can set post/pre quotes to have ftp commands executed before or after the download/upload.

**Example:**
dim d as CURLMBS // your curl object

// rename/move file
dim ws() As String
ws.Append "RNFR Temp.txt"
ws.append "RNTO MyFile.txt"
d.SetOptionPostQuote(ws)

Notes:
Use SetOptionPostQuote, SetOptionPreQuote or SetOptionQuote.
The ftp commands you pass here are native ftp commands and not the commands you use with ftp applications. So rename is two commands. First RNFR to tell where to rename from and second RNTO with the new file name. To delete use DELE and the file path.

5.0.166 How to normalize string on Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use code like below:

**Example:**

```
Function Normalize(t as string) As string
const kCFStringNormalizationFormD = 0 // Canonical Decomposition
const kCFStringNormalizationFormKD = 1 // Compatibility Decomposition
const kCFStringNormalizationFormC = 2 // Canonical Decomposition followed by Canonical Composition
const kCFStringNormalizationFormKC = 3 // Compatibility Decomposition followed by Canonical Composition

dim s as CFStringMBS = NewCFStringMBS(t)
dim m as CFMutableStringMBS = s.Normalize(kCFStringNormalizationFormD)
Return m.str
End Function
```

Notes: This uses Apple’s CFString functions to normalize unicode variants.

5.0.167 How to obscure the mouse cursor on Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Try this declare:

**Example:**
Declare Sub ObscureCursor Lib "Carbon" ()

ObscureCursor

Notes: The MBS Plugin has this function, but it's not supported for Windows.

5.0.168 How to open icon file on Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Use the NSImageMBS class like this:

**Example:**

dim f as FolderItem = SpecialFolder.Desktop.Child("test.ico")
dim n as new NSImageMBS(f)

window1.Backdrop = n.CopyPictureWithMask

5.0.169 How to open PDF in Acrobat Reader?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Try this code:

**Example:**

dim pdf as FolderItem = SpecialFolder.Desktop.Child("test.pdf")

// open PDF in Acrobat Reader on Mac:

// find app
dim bundleID as string = "com.adobe.Reader"
dim app as FolderItem = LaunchServicesFindApplicationForInfoMBS("", bundleID, ")"

if app<>nil then

// launch app with parameters

dim docs() as FolderItem
docs.Append pdf

dim param as new LaunchServicesLaunchParameterMBS
param.Defaults = true
param.Application = app

dim x as FolderItem = LaunchServicesOpenXMBS(docs, param)
// on failure, simply launch it
if x = nil then
  pdf.Launch(true)
end if

else
  pdf.Launch(true)
end if

Notes: On Windows, simply use pdf.launch or WindowsShellExecuteMBS.

5.0.170 How to open printer preferences on Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: You can use our OpenMacOSXPreferencesPaneMBS function like this:

Example:

dim e as Integer = OpenMacOSXPreferencesPaneMBS("PrintAndFax")
if 0 = e then
  MsgBox "OK"
elseif e = -43 then
  MsgBox "File not found."
else
  MsgBox "Error: "+str(e)
end if

5.0.171 How to open special characters panel on Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: We have functions for that in Cocoa and Carbon.

Example:

dim a as new NSApplicationMBS
a.orderFrontCharacterPalette

Notes:

For Cocoa, you can use orderFrontCharacterPalette method in NSApplicationMBS class.
Or simply for Carbon and Cocoa the ShowCharacterPaletteMBS method.

5.0.172  How to optimize picture loading in Web Edition?

Notes:
Take your picture and create a WebPicture object. Store this WebPicture in a property of the WebPage, Session or app (as global as possible). On the first time you use this picture on an user session, the browser will load it. Second time you use it, the browser will most likely pick it from the cache.
Having pictures in App or some module reuses the same picture for all sessions which reduces memory footprint.
This does not work well with pictures you change very often or use only for one webpage on one user.

If you like to see an example, check our Map example.

5.0.173  How to parse XML?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can use code like this:
Example:

```vbnet
dim s as string = "<test><test /></test>"

try
dim x as new XmlDocument(s)
MsgBox "OK"
catch xe as XmlException
MsgBox "invalid XML"
end try
```

Notes: If you got an exception, you have a parse error.

5.0.174  How to play audio in a web app?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can use the HTML5 audio tag and control it with javascript.
Notes:
This is just another example app I made today. It plays a christmas song. The audio file is provided by the
application to the server, so no external web server is needed and this application can run stand alone. To compile and run you need Xojo 2010r5.

In the open event we search the audio files and open them as binary streams. We create the two webfile objects. Those webfiles are part of the app class, so we have them globally. There we set the data with the content of our streams. We also define file names and mime types. They are needed so browser know what we have here:

```xojo
audioFileM4V = new WebFile
audioFileM4V.Data = bM.Read(BM.Length)
audioFileM4V.Filename = "music.m4a"
audioFileM4V.MIMEType = "audio/m4a"

audioFileOGG = new WebFile
audioFileOGG.Data = bO.Read(BO.Length)
audioFileOGG.Filename = "music.ogg"
audioFileOGG.MIMEType = "audio/ogg"
```

Next in the open event of the webpage we have a PageSource control. The location is set to be before content. In the open event we define the html code for this. First we pick the URLs for the audio files. Then we build the html to use the audio tag. As you see, we give it an ID for later use and have it preload automatically. If you add an autoplay tag, you can have the audio play right away. Inside the audio tag we have two sources so we provide audio for both Firefox (OGG) and Safari (MPEG4). Finally we have a text to display if HTML5 audio tag is not supported.

You can set the source in the EditSource event:

```xojo
dim urlo as string = app.audioFileOGG.URL
dim urlm as string = app.audioFileM4V.URL
me.Source = "<audio id=""mymusic"" preload=""auto"">""+urlo+"" type=""audio/ogg"""" +urlm+"" type=""audio/mpeg"" /"">Your browser does not support the audio element.<\/audio>"
```

Next in the Play button we execute code to play the audio. This is a short javascript code which searches in the html document for the element with the ID "mymusic" which is the ID of our audio tag above. Once we got the object, we call it's play method to start playback.

```javascript
me.ExecuteJavaScript("document.getElementById('mymusic').play();")
```

same for pause:

```javascript
me.ExecuteJavaScript("document.getElementById('mymusic').pause();")
```
and finally for changing volume:

```javascript
me.ExecuteJavaScript("document.getElementById('mymusic').volume="+str(me.Value/100.0)+";\n")
```

### 5.0.175 How to pretty print xml?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Use the XML Transform method with the right XLS.  
**Notes:**
Learn more here:  

### 5.0.176 How to print to PDF?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** This code below shows how to redirect printing to a PDF file on Mac OS X.  
**Example:**
```plaintext
// get Xojo printer setup
dim p as new PrinterSetup

// now put it into NSPrintInfo to manipulate
dim n as new NSPrintInfoMBS
n.SetupString = p.SetupString

// change destination to file
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")
n.SetSaveDestination(f)

// move back
p.SetupString = n.SetupString

// and print as usual
dim g as Graphics = OpenPrinter(p)
g.DrawString "Hello World", 20, 20
```

**Notes:** And you can use normal graphics class for that.
5.0.177 How to query Spotlight’s Last Open Date for a file?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: You can use a MDItemMBS object to query this value:

Example:

Function LastOpenedDate(Extends F As FolderItem, DefaultOtherDates As Boolean = True) As Date
    # If TargetMacOS Then
    Dim xMDItem as New MDItemMBS(F)
    Dim xDate as Variant
    If xMDItem <> Nil Then
        xDate = xMDItem.GetAttribute(xMDItem.kMDItemLastUsedDate).DateValue
        If xDate IsA Date Then Return xDate
        Else
        If xDate <> Nil Then Break
        End If
        # EndIf
    If DefaultOtherDates Then
        If F.ModificationDate <> Nil Then Return F.ModificationDate
        If F.CreationDate <> Nil Then Return F.CreationDate
        End If
    End Function

Notes: Thanks for Josh Hoggan for this example code.

5.0.178 How to quit windows?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: Try this code:

Example:

    # if targetwin32 then
    dim i1,i2,r as Integer
    declare function ExitWindowsEx lib "user32" (uFlags as Integer, dwReserved as Integer) as Integer
    i1 = 2
    i2 = 0
    r = ExitWindowsEx(i1,i2)
    if r<>0 then
      ' Error()
    end if
    # endif
uFlags parameters:

'4 = EWX_Force
'0 = EWX_Logoff
'2 = EWX_Reboot
'1 = EWX_shutdown, should shut down computer

Also check the ExitWindowsMBS method.

5.0.179  How to read a CSV file correctly?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** With all the rules for quotes and delimiters, you can simply use the SplitCommaSeparatedValuesMBS method in our plugins like this:

**Example:**

```vba
dim f as FolderItem = SpecialFolder.Desktop.Child(“test.csv”)  
dim t as TextInputStream = f.OpenAsTextFile  
while not t.EOF  
dim s as string = t.ReadLine(encodings.ASCII)  
dim items() as string = SplitCommaSeparatedValuesMBS(s, ”;”, ”””)  
List.AddRow ””  
dim u as Integer = UBound(items)  
for i as Integer = 0 to u  
List.Cell(List.LastIndex,i) = items(i)  
next  
wend
```

**Notes:** Please make sure you choose the right text encoding.

5.0.180  How to read the command line on windows?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** Try this code:

**Example:**

```vba
```
# if targetwin32 then
dim line as string
Dim mem as MemoryBlock

Declare Function GetCommandLineA Lib "kernel32" () As Ptr

mem=GetCommandLineA()
s=mem.cstring(0)

# endif

Notes: Newer Xojo versions have a system.commandline property.

5.0.181 How to render PDF pages with PDF Kit?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. Answer: Try this code:

Example:

// choose a file
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")

// open it as PDF Document
dim sourceFile as New PDFDocumentMBS(f)

if sourceFile.handle <>0 then // it is a PDF file

// get upper bound of pages
dim c as Integer = sourceFile.pageCount-1

// from first to last page
for n as Integer = 0 to c

// pick that page
dim page as PDFPageMBS = sourceFile.pageAtIndex(n)

// render to image
dim p as NSImageMBS = page.Render

// and convert to RB picture and display
Backdrop = p.CopyPictureWithMask

next

end if
Notes: PDFKit works only on Mac OS X.

5.0.182 How to restart a Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Ask the Finder via Apple Events:
Example:

```vbnet
dim ae as appleevent
ae=newappleEvent("FNDR","rest","MACS")
if not ae.send then
    msgBox "The computer couldn’t be restarted."
end if
```

5.0.183 How to resume ftp upload with curl plugin?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: CURL supports that and you simply need to set the right options.
Notes:

First of course OptionUpload must be true. Second OptionFTPAppend must be true so the OptionResumeFrom is used. Store there (or in OptionResumeFromLarge) your start value. Don’t forget to implement the read event and return data there as requested.

5.0.184 How to rotate a PDF page with CoreGraphics?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: This code opens a PDF and draws the first page into a new PDF with 90° rotation.
Example:

```vbnet
// Rotate a PDF page
// our files
dim sourcefile as FolderItem = SpecialFolder.Desktop.Child("test.pdf")
dim destfile as FolderItem = SpecialFolder.Desktop.Child("rotated.pdf")

// open PDF
dim pdf as CGPDFDocumentMBS = sourcefile.OpenAsCGPDFDocumentMBS

// query media size of first page
dim r as CGRectMBS = pdf.MediaBox(1)

// create new PDF
dim c as CGContextMBS = destfile.NewCGPDFDocumentMBS(r,"title","Author","Creator")

// create rotated rectangle
dim nr as new CGRectMBS(0,0,r.Height,r.Width)

// create new page
c.BeginPage nr
c.SaveGState

const pi = 3.14159265

// rotate by 90°
c.RotateCTM pi*1.5

// fix origin
c.TranslateCTM -r.width,0

// draw PDF
c.DrawCGPDFDocument pdf,r,1

// cleanup
c.RestoreGState
c.EndPage
c = nil

// show in PDF viewer
destfile.Launch

**Notes:** This code is Mac only as it needs CoreGraphics.

### 5.0.185  How to rotate image with CoreImage?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Use the code like the one below:

**Example:**

// Rotate image with CoreImage

// load image
dim f as FolderItem = SpecialFolder.Desktop.Child("test.png")
dim image as new CIImageMBS(f)
5.0.186 How to run a 32 bit application on a 64 bit Linux?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Install 32 bit compatibility libraries.

**Notes:**
The package is called ia32-libs for ubuntu (and others).
Some applications need to be run on a 32 bit system as they need some hardware related libraries. Like libUSB or libHID for USB devices.

5.0.187 How to save HTML Viewer to PDF with landscape orientation?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can use NSPrintInfoMBS to change the options for PrintToPDFFile function.

**Example:**

```plaintext
// make it landscape
dim n as NSPrintInfoMBS = NSPrintInfoMBS.sharedPrintInfo
n.orientation = n.NSLandscapeOrientation
```
// save html to file
dim f as FolderItem = SpecialFolder.Desktop.Child("test.pdf")
call HTMLViewer1.PrintToPDFFileMBS(f,10,30,10,30)

Notes:
You may want to reset options later.
This code is only for Mac OS X.

5.0.188 How to save RTFD?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: How to load PDF to htmlviewer on desktop?
Example:

Public Sub LoadPDFData(viewer as HTMLViewer, PDFData as string)
Dim base64string As String = EncodeBase64(PDFData)

// remove line endings to make it a big line
base64string = ReplaceLineEndings(base64string, ",")

// build data URL
Dim dataURL As String = "data:application/pdf;base64," + base64string

// show in webviewer
HTMLViewer1.LoadURL(dataURL)

// may not work everywhere due to URL length limit
// for Web projects, use WebFile instead!
End Sub

Notes:
This avoids a temporary file, which may also work.
For Web Apps, please use WebFile.

5.0.189 How to save RTFD?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: With NSTextViewMBS you can use this code to save to RTFD:
Example:
5.0.190 How to scale a picture proportionally with mask?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** For a proportional scaling, we calculate the new picture size relative to the target maximum size.

**Example:**

```lisp
Function ProportionalScaledWithMask(extends pic as Picture, Width as Integer, Height as Integer) As Picture
    // Calculate scale factor
    dim faktor as Double = min(Height / Pic.Height, Width / Pic.Width)

    // Calculate new size
    dim w as Integer = Pic.Width * faktor
    dim h as Integer = Pic.Height * faktor

    // create new picture
    dim NewPic as new Picture(w, h, 32)

    // check if we have a mask and clear it
    dim m as picture = pic.mask(False)
    pic.mask = nil

    // draw picture in the new size
    NewPic.Graphics.DrawPicture Pic, 0, 0, w, h, 0, 0, Pic.Width, Pic.Height

    if m <> nil then
```

**Notes:** For TextArea you can query the underlying NSTextViewMBS object via TextArea.NSTextViewMBS method.
// restore mask and scale it
pic.mask = m
NewPic.mask.Graphics.DrawPicture m, 0, 0, w, h, 0, 0, Pic.Width, Pic.Height
end if

// return result
Return NewPic
End Function

Notes: This version handles mask. As you see we actually have to remove mask in order to copy the picture part correctly.

5.0.191 How to scale a picture proportionally?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: For a proportional scaling, we calculate the new picture size relative to the target maximum size.

Example:

Function ProportionalScaled(extends pic as Picture, Width as Integer, Height as Integer) As Picture
  // Calculate scale factor
  dim faktor as Double = min(Height / Pic.Height, Width / Pic.Width)

  // Calculate new size
  dim w as Integer = Pic.Width * faktor
  dim h as Integer = Pic.Height * faktor

  // create new picture
  dim NewPic as new Picture(w,h,32)

  // draw picture in the new size
  NewPic.Graphics.DrawPicture Pic, 0, 0, w, h, 0, 0, Pic.Width, Pic.Height

  // return result
  Return NewPic
End Function

Notes:
This does not handle mask, but you can scale the mask the same way and assign it to the new picture. (see other FAQ entry with mask)
5.0.192 How to scale/resize a picture?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** There are several ways to scale or resize a picture. The easiest way may be the ScaleMBS function in the Picture class.

**Example:**
```
Dim Original, Scaled As Picture

Original = LogoMBS(500)
Scaled = Original.ScaleMBS(100, 100, True)
```

**Notes:**
The plugin ways:
- GraphicsMagick can scale/resize.
- CoreImage scale filter may result in the fastest and best images on Mac OS X 10.4.
- NSImageMBS can scale, but is Mac OS X only.
- CGImageMBS can scale, but is Mac OS X only.
- CIImageMBS can scale, but is Mac OS X only.
- QuickTime Graphics exporter and importer can be connected to scale. (this was used more often a few years ago)
- ImageMagick can scale very nice and crossplatform. But the ImageMagick libraries are big.
- The picture.ScaleMBS function is self written and results in equal output on Mac, Windows and Linux without any additional libraries installed.
- Picture.ScalingMBS does crossplatform scaling with several modes.

with pure Xojo:
- make a new picture and draw the old one with new size inside.

5.0.193 How to search with regex and use unicode codepoints?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can specify unicode characters in search string with backslash x and digits.

**Example:**
```
Dim r As RegExMbs
Dim s As String
Dim c As Integer

s = "123 äöü ABC 456"

r = New RegExMBS
if r.Compile(\"ö\") then
    c = r.Execute(s, 0)
MsgBox s + str(r.Offset(0)) + " ß" + str(r.Offset(1))
```

5.0.194  How to see if a file is invisible for Mac OS X?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Try this function:

**Example:**

```vba
Function Invisible(F As FolderItem) As Boolean
Dim TIS As TextInputStream
Dim S, All As String
Dim I as Integer
dim g as folderitem

If Left(F.Name, 1) = "." or not f.visible Then
    Return True
End If

g = F.Parent.Child(".hidden")
If g.Exists Then
    TIS = g.OpenAsTextFile
    if tis <> Nil then
        All = TIS.ReadAll
        For I = 1 to CountFields(All, Chr(11))
            S = NthField(All, Chr(11), I)
            If S = F.name Then
                Return True
            End If
        Next
End If
End Function
```
5.0.195 How to set cache size for SQLite or REALSQLDatabase?


Example:

```
// set cache size to 20000 pages which is about 20 MB for default page size
dim db as REALSQLDatabase
db.SQLExecute "PRAGMA cache_size = 20000"
```

Notes:
Default cache size is 2000 pages which is not much.
You get best performance if whole database fits in memory.
At least you should try to have a cache big enough so you can do queries in memory.
You only need to call this pragma command once after you opened the database.

5.0.196 How to set the modified dot in the window?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Try this declares:

Example:

```
window1.ModifiedMBS=true
```

5.0.197 How to show a PDF file to the user in a Web Application?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can use a WebHTMLViewer control and load the

Example:

```
dim CurrentFile as WebFile // a property of the WebPage

// define the PDF file
CurrentFile = new WebFile
CurrentFile.Filename = "test.pdf"
CurrentFile.MIMEType = "application/pdf"
CurrentFile.Data = "some pdf data" // MyDynaPDF.GetBuffer

// load into html viewer
```
Notes: See our Create PDF example for the Xojo Web Edition.

5.0.198 How to show Keyboard Viewer programmatically?

Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Use Xojo or AppleScript to launch the KeyboardViewerServer.app.

**Example:**

```apple
dim a as new AppleScriptMBS
dim text as string
dim lines(-1) as string

lines.append "set theApplication to ""KeyboardViewerServer"
lines.append "set thePath to "/System/Library/Components/KeyboardViewer.component/Contents/Shared-
Support/KeyboardViewerServer.app"
lines.append ""
lines.append "set POSIXPath to ((POSIX file thePath) as string)"
lines.append "tell application ""System Events"" to set isRunning to 0 <(count (application processes whose
name is theApplication))"
lines.append "if isRunning then tell application POSIXPath to quit"
lines.append "delay 0.15"
lines.append ""
lines.append "ignoring application responses"
lines.append "tell application POSIXPath to run"
lines.append "end ignoring"

text=join(lines,EndOfLine.macintosh)

a.Compile text
a.Execute
```

Notes:

AppleScript code:

```apple
set theApplication to "KeyboardViewerServer"
set thePath to "/System/Library/Components/KeyboardViewer.component/Contents/SharedSupport/KeyboardViewerServer.app"
```
set POSIXPath to ((POSIX file thePath) as string)
tell application "System Events" to set isRunning to 0 <(count (application processes whose name is theApplication))
if isRunning then tell application POSIXPath to quit
delay 0.15

ignoring application responses
tell application POSIXPath to run
end ignoring

5.0.199 How to show the mouse cursor on Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Try this declare:
Example:

Declare Sub ShowCursor Lib "Carbon" ()

ShowCursor

Notes: The MBS Plugin has this function and supports it on Windows, too.

5.0.200 How to shutdown a Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Ask the Finder via Apple Events:
Example:

dim ae as appleevent
ae=newappleEvent("FNDR","shut","MACS")
if not ae.send then
msgBox "The computer couldn’t be shutdown.”
end if

Notes:

Or toolbox call (Attention: This method will stop the computer immediataly: No document asked to be saved, all applications quitting without knowing).

Declare Sub ShutDwnPower Lib "Carbon" ()
ShutDwnPower
5.0.201 How to sleep a Mac?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Ask the Finder via Apple Events:

Example:

```plaintext
dim ae as appleevent
ae=newappleEvent("FNDR","slep","MACS")
if not ae.send then
msgBox "The computer doesn’t want to sleep."
end if
```

5.0.202 How to speed up rasterizer for displaying PDFs with DynaPDF?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Here a few speed tips:

Notes:

- Use the DynaPDFRasterizerMBS function instead of our render functions.
- Reuse DynaPDFRasterizerMBS as long as the target picture size doesn’t change.
- Import only the PDF pages you want to display.
- Let DynaPDF do zooming, rotating or other effects instead of you change it.

5.0.203 How to use PDFLib in my RB application?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: The PDFLib plugin was discontinued in favor of our DynaPDF plugin.

Notes: If you need help to move, please contact us.

5.0.204 How to use quotes in a string?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Just double them.

Example:

```plaintext
msgbox "This String contains ":"quotes":"
```
5.0.205 How to use Sybase in Web App?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Please use our MBS Xojo SQL Plugin to connect to a Sybase Database in your web application.

**Notes:**

If you see `db.Connect` giving the error message "cs_ctx_alloc ->CS_MEM_ERROR", than some things are not setup right for Sybase.
The Apache process may not have all the SYBASE environment variables being set when the CGI was launched.

Adding these lines to `/etc/httpd/conf/httpd.conf` stopped the faux memory errors for us:

```plaintext
SetEnv LD_LIBRARY_PATH /opt/sybase/OCS-15_0/lib:/opt/sybase/OCS-15_0/lib3p64:/opt/sybase/OCS-15_0/lib3p:
SetEnv SYBROOT /opt/sybase
SetEnv SYBASE_OCS /opt/sybase
SetEnv SYBASE /opt/sybase
```

5.0.206 How to use the Application Support folder?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:**

I was saving a registration code for an app to the Preference folder. People on the list have suggested that it would be better in the ApplicationSupportFolder. How do I save the file called CWWPrefs into that folder using MBS?

I have checked for examples and the docs but can’t see how to apply it

```plaintext
//f = SpecialFolder.Preferences.child("CWWPrefs")
f = ApplicationSupportFolderMBS(-32768)

Example:
```
```plaintext
dim folder, file as FolderItem

folder = createApplicationSupportFolderMBS(-32763)

if folder=nil then
  // Some very old Mac OS Versions may not support it
  // or the plugin may fail for any reason
  folder=SpecialFolder.Preferences
end if
```
file = folder.Child("CWWPrefs")

MsgBox file.UnixpathMBS

**Notes:** You may not be able to write there with a normal user account!

### 5.0.207 How to use the IOPMCopyScheduledPowerEvents function in Xojo?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You can use the following code which does this using the SoftDeclareMBS class.

**Example:**

```vbnet
Sub Open()
    dim c as CFDateMBS
    dim t as CFAbsoluteTimeMBS

    // get current date
    c = NewCFDateMBS

    // in absolute time (seconds since x)
    t = c.AbsoluteTime

    // add 600 seconds (= 10 Minutes)
    t.Value = t.Value + 600

    // Make a Date from it
    c = t.Date

    // Schedule the event
    // 0 on success
    // E00002C1 for missing root rights
    Title = hex(schedulePowerEvent(c, "wake"))

    // Just for information, display the scheduled stuff
    CFShowMBS CopyScheduledPowerEvents
End Sub

Function CopyScheduledPowerEvents() As cfarrayMBS
    dim s as SoftDeclareMBS
    dim m as MemoryBlock

    s = new SoftDeclareMBS

    if s.LoadLibrary("IOKit.framework") then
        if s.LoadFunction("IOPMCopyScheduledPowerEvents") then
```

```vbnet
```
if s.CallFunction(0,nil) then
    Return NewCFArrayMBSHandle(s.Result,true)
else
    MsgBox "Failed to Call IOPMCopyScheduledPowerEvents."
end if
else
    MsgBox "Failed to load IOPMCopyScheduledPowerEvents."
end if
else
    MsgBox "Failed to load IOKit."
end if

Return nil
End Function

Function SchedulePowerEvent(time_to_wake as CFDateMBS, Type as CFStringMBS) as Integer
    dim s as SoftDeclareMBS
    dim m as MemoryBlock

    '/*
     * Types of power event
     * These are potential arguments to IOPMSchedulePowerEvent().
     * These are all potential values of the kIOPMPowerEventTypeKey in the CFDictionarys
     * returned by IOPMCopyScheduledPowerEvents().
     */
    '/
    '/! 
    '@define kIOPMAutoWake 
    '@abstract Value for scheduled wake from sleep.
    '/
    '# define kIOPMAutoWake "wake"
    '/
    '/!
    '@define kIOPMAutoPowerOn 
    '@abstract Value for scheduled power on from off state.
    '/
    '# define kIOPMAutoPowerOn "poweron"
    '/
    '/!
    '@define kIOPMAutoWakeOrPowerOn 
    '@abstract Value for scheduled wake from sleep, or power on. The system will either wake OR
    'power on, whichever is necessary.
    '/
    '# define kIOPMAutoWakeOrPowerOn "wakepoweron"
    '/!
    '@define kIOPMAutoSleep 
    '@abstract Value for scheduled sleep.
    */
' # define kIOPMAutoSleep "sleep"
' */
'@define kIOPMAutoShutdown
'@abstract Value for scheduled shutdown.
' */
'
' # define kIOPMAutoShutdown "shutdown"

s=new SoftDeclareMBS
if s.LoadLibrary("IOKit.framework") then
if s.LoadFunction("IOPMSchedulePowerEvent") then

m=NewMemoryBlock(12)
m.Long(0)=time_to_wake.handle
m.Long(4)=0 // nil
m.Long(8)=type.Handle

if s.CallFunction(3,m) then
Return s.Result
end if
end if
end if

End Function

Notes: Requires Mac OS X and to execute root rights.

5.0.208  How to validate a GUID?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: You can use this function below which uses a regular expression to verify that the string is a valid UUID/GUID:
Example:

Function IsGUID(guid as string) As Boolean
dim r as new RegEx

r.SearchPattern = "^\{ { 0,1 } ( [ 0-9a-fA-F ] ) { 8 } - ( [ 0-9a-fA-F ] ) { 4 } - ( [ 0-9a-fA-F ] ) { 4 } - ( [ 0-9a-fA-F ] ) { 4 } - ( [ 0-9a-fA-F ] ) { 12 } \} { 0,1 } \}$

Return r.Search(guid)<>nil
End Function
Notes: Simply parsing the GUID with CFUUIDMBS does not give the same result as CFUUIDMBS will also take a string like "DDDD".

5.0.209 How to walk a folder hierarchy non recursively?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Use code like this one:

Example:

Sub Walk(folder as FolderItem)
        dim folders() as FolderItem

        folders.Append folder
        while UBound(folders) >= 0

        dim currentFolder as FolderItem = folders.pop

        dim c as Integer = currentFolder.Count
        for i as Integer = 1 to c
            dim item as FolderItem = currentFolder.TrueItem(i)

            if item = Nil then
                ' no permission
            elseif item.Visible then ' only visible

            if item.Directory then
                folders.Append item
            else
                ' work with file here
            end if

            end if

        next

        wend
End Sub

Notes:

As you see we go with a long loop which runs until we don’t have more folders to process. We ignore items we can’t access due to permission limits. And we only work visible items. If you like, check folderitem.isBundleMBS on item to handle packages and applications better on Mac OS X.
5.0.210 I got this error: PropVal, QDPictMBS.Name (property value), Type mismatch error. Expected CGDataProviderMBS, but got Variant, Name:QDPictMBS

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** The plugins MacOSX and MacOSXCF belong together. If you use one part, please also install the other part. **Notes:** We splitted the plugin because the Xojo IDE on Windows crashed on compilation.

5.0.211 I registered the MBS Plugins in my application, but later the registration dialog is shown.

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** There are two main reasons. **Notes:**

1. you may use the plugin before registering them. This is often the case if you register in a window open event and use the plugin in a control open event.
   On the console on Mac OS X or Windows, you may see a message like this "MBS Plugins were used by the application before the RegisterMBSPlugin function was called. Please fix this in your code!".

2. you may have mixed different plugin versions which are not compatible.
   In this case you can see a message "Internal plugin registration error." on the console on Mac OS X. Newer plugins may show a message dialog reporting this. Older version simply think they are not registered.

If the installer just merges old and new applications, users may have libraries of older and newer plugin versions in the libs folder. If your application loads the wrong version, the registration fails.

If you use remote debugging, make sure you clear the temporary files there, too. Otherwise you may have old DLLs on your hard disc which may disturb your application.

You can run into issues if you use your registration code on different places of your app. Please register only once in app.open (or app Constructor). If you have several codes, simply call them one after the other.

Also check that you only call RegisterMBSPlugin with valid serial number. If you later call RegisterMBSPlugin with Demo like in example code above, you remove the license.

Next check if you can clear the Xojo caches and that helps. This includes the Xojo Scratch folder and the Plugins & Project caches. Simply locate those folders and delete them. For Windows look in hidden AppData folder in your user folder. For Mac, please check
Finally make sure you use the right serial number. Not an older one or a misspelled one.

### 5.0.212 I want to accept Drag & Drop from iTunes

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You need to accept AcceptMacDataDrop "itun" and Handle the DropObject.

**Example:**

```vba
Sub Open()
    window1.AcceptMacDataDrop "itun"
End Sub

Sub DropObject(obj As DragItem)
    dim s as string
    dim f as folderItem
    dim d as CFDictionaryMBS
    dim o as CFObj ectMBS
    dim key as CFStringMBS
    dim dl as CFDictionaryListMBS
    dim i, c as Integer
    dim u as CFURLMBS
    dim file as FolderItem

    if obj.MacDataAvailable("itun") then
        s = obj.MacData("itun")
    
    // Parse XML
    o=NewCFObj ectMBSFromXML(NewCFBinaryDataMBSStr(s))
    
    // Make dictionary
    if o isa CFDictionaryMBS then
        d=CFDictionaryMBS(o)
    
    // get Tracks Dictionary
    key=NewCFS stringMBS("Tracks")
    o=d.Value(key)

    if o isa CFDictionaryMBS then
        d=CFDictionaryMBS(o)
        dl=d.List

    // Walk over all entries in the Tracks dictionary
    c=dl.Count-1
    for i=0 to c
```
```
o=dl.Value(i)

if o isa CFDictionaryMBS then
d=CFDictionaryMBS(o)

key=NewCFStringMBS("Location")
o=d.Value(key)
if o isa CFStringMBS then
u=NewCFURLMBSCFStringMBS(CFStringMBS(o),nil)

file=u.file
if file<>nil then
MsgBox file.UnixpathMBS
end if
end if
end if
end if
end if
End Sub
```

**Notes:** The code above inside a window on Xojo 5.5 with MBS Plugin 5.3 will do it nice and show the paths.

---

**5.0.213** I’m drawing into a listbox but don’t see something.

Plugin Version: all, Console & Web: No. **Answer:** If you draw this in a listbox cellbackground, you need to draw on the correct position

**Example:**

```
Function CellBackgroundPaint(g As Graphics, row as Integer, column as Integer) As Boolean
    dim f as FolderItem
    f=SpecialFolder.Desktop
    f.DrawWideIconMBS(g,listbox1.left,listbox1.top+row*20,16)
    Return true
End Function
```

**Notes:** Try this in a listbox. The Graphics object there has a cliping and an offset which the plugin doesn’t know about.
5.0.214 I’m searching for a method or so to move a window from position x,y to somewhere else on the screen.

Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:**

The code I produced in RB isn’t smooth enough. Is there a call in MBS, if not, can it be done? The speed of it has to be like the show of a DrawerWindow.

Try the declare below for Carbon. With WindowLib it will work on Mac OS 8.5 and newer. **Notes:** See Window.Transition functions.

5.0.215 If I use one of your plug-ins under windows, would this then impose the use of dll after compilation or my would my compiled soft still be a stand-alone single file software?

Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Stand alone. **Notes:**

Xojo compiles all used plugins into the application binary. Some plugin parts need external dlls but you will find that in the documentation. (e.g. pdflib for some classes)

5.0.216 Is the fn key on a powerbook keyboard down?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** I am unable to figure out how or if it is possible to detect if the fn key is down on a powerbook keyboard. Is it possible? **Example:**

' Window.Open Event of a blank project:

```dim i as Integer
for i=0 to 127
if keyboard.asynckeydown(i) then
  title=str(i) // found
  return
end if
next
title="" // not found```

**Notes:** This test application shows the keycode (decimal) 63 for the fn key.
5.0.217 Is there a case sensitive Dictionary?

Plugin Version: all, Console & Web: No. **Answer:** The MBS Plugin has several classes which can work as a replacement.

**Notes:**

First you could use `VariantToVariantHashMapMBS` or `VariantToVariantOrderedMapMBS`. If you know that all keys are Strings or Integers only, you can use the specialized classes which are a little bit faster due to avoiding variants:

- `IntegerToIntegerHashMapMBS` class
- `IntegerToIntegerOrderedMapMBS` class
- `IntegerToStringHashMapMBS` class
- `IntegerToStringOrderedMapMBS` class
- `IntegerToVariantHashMapMBS` class
- `IntegerToVariantOrderedMapMBS` class
- `StringToStringHashMapMBS` class
- `StringToStringOrderedMapMBS` class
- `StringToVariantHashMapMBS` class
- `StringToVariantOrderedMapMBS` class

5.0.218 Is there a way to use the MBS plugin to get only the visible item and folder count on a volume?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** You can use the `DirectorySizeMBS` class for this as in the example below:

**Example:**

```
Dim d As DirectorySizeMBS

d = New DirectorySizeMBS

// volume(1) as my boot volume is very full
If d.Update(volume(1), true, 0) Then
    MsgBox str(d.VisibleItemCount) + ” visible items,” + str(d.HiddenItemCount) + ” invisible items.”
End If
```

**Notes:**

Complete Question: Is there a way to use the MBS plugin to get only the visible item and folder count on a volume? The `FileCount` and `FolderCount` properties of `VolumeInformationMBS` seem to provide the total # of items including invisible items such as `.DS_Store` and more importantly `.Trashes` which is causing me a great amount of difficulty during a recursive scan of a volume. I’ve got a progress bar which uses the total of the filecount.
and foldercount properties as the maximum value, but my routine needs to filter out all invisible items, as it is creating a catalog of a volume for archiving purposes. Any thoughts how I could get accurate number.

5.0.219  Is there an easy way I can launch the Displays preferences panel?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: Use the code below:

Example:

```vbs
Dim error As Integer

error = OpenMacOSXPreferencesPaneMBS("Displays")
If error <> 0 Then
    MsgBox "Failed to launch QuickTime System Preferences panel."
End If
```

5.0.220  List of Windows Error codes?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: We have a list of windows error codes on our website. Notes: http://www.monkeybreadsoftware.de/xojo/winerror.shtml

5.0.221  Midi latency on Windows problem?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: The issue is system related, not a problem with RB or the plugin. Notes:

Two things will adversely affect the timing:

1. latency of the software synthesizer output driver. The default Windows wavetable synthesizer has considerable latency. I don’t know how many milliseconds, but it is noticeable.

2. latency of the digital audio output driver. Different systems have different drivers for different audio hardware. My Dell laptop has a minimum 15ms latency in the audio driver.

These two things put together were causing a very sluggish MIDI response. I was able to verify these as the culprits by routing MIDI directly out of RB into a sample player, which only introduces the latency of (2)
and does not include latency of (1).

I don’t know how widely known are these facts, if not then you may want to add this information to the documentation, since Windows programmers using the MIDI plugin may not know those problems, and might mistakenly blame your plugin, as I did :) Sorry about that!

(From Aaron Andrew Hunt)

5.0.222 My Xojo Web App does not launch. Why?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Here is a list of checks to do for linux apache installations with Xojo or Xojo Web applications:

**Notes:**

Just a list of checks to do for linux apache installations:

- You have 64bit linux? Than you need 32 bit compatibility libraries.
- The folder of your app is writable? Set permissions to 777.
- The/cgi script is executable? Set permissions to 755.
- The app file itself is executable? Set permissions to 755.
- You uploaded/cgi file as text, so it has unix line endings? (this often gives error "Premature end of script headers" in apache log)
- You uploaded config.cfg file and made it writable? Set permissions to 666.
- Your apache allows execution of/cgi scripts? You enabled/cgi for apache and uncommented addhandler command for CGI on a new apache installation?
- You uploaded the app file and libraries as binary files? Upload as text breaks them.
- You did upload the libs folder?
- You don’t have code in app.open, session.open and other events which crashes app right at launch?
- You don’t have a print command in your app.open event? (see feedback case 23817)
- You allowed .htaccess file to overwrite permissions?

5.0.223 SQLDatabase not initialized error?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Before you can use SQLDatabaseMBS, it must be initialized.

**Example:**
dim d as new SQLDatabaseMBS

Notes:
This happens normally when you use "new SQLDatabaseMBS".
But if you just have a SQLConnectionMBS and get a recordset there, the initialization may not have hap-
pended, yet.
So please simply add a line "dim d as new SQLDatabaseMBS" to your app.open code after registration, so the plugin part can initialize and late provide recordsets.

5.0.224 Textconverter returns only the first x characters. Why?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer:

Some older Xojo versions limit the Textconverter to around 1024 characters in input and output.
This should be fixed with RB5.
Notes: Xojo seems not to support Textconverters at all on Windows.

5.0.225 The type translation between CoreFoundation/Foundation and Xojo data types.

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. Answer: The plugin does conversion between Cocoa/Carbon data types and native Xojo data types. The following list help you knowing what the current plugins support:

Notes:
Cocoa NSObject to Variant:

nil -> nil
NSData -> MemoryBlock
NSString -> String
 NSAttributedString -> NSAttributedStringMBS
NSDate -> Date
NSNumber -> double/integer/Int64/UInt64/UInt32/Boolean
NSURL -> String
NSValue with NSRect -> NSRectMBS
NSValue with NSPoint -> NSPointMBS
NSValue with NSSize -> NSSizeMBS
NSValue with NSRange -> NSRangeMBS
NSValue with QTTime -> QTTimeMBS
NSValue with QTTimeRange -> QTTimeRangeMBS
NSArray -> Array of Variant
Variant to Cocoa NSObject:

- `nil` -> `nil`
- `Dictionary` -> `NSDictionary`
- `Boolean` -> `NSNumber`
- `Integer` -> `NSNumber`
- `Color` -> `NSColor`
- `Int64` -> `NSNumber`
- `Single` -> `NSNumber`
- `Double` -> `NSNumber`
- `Date` -> `NSDate`
- `MemoryBlock` -> `NSData`
- `String` -> `NSString`
- `NSImageMBS` -> `NSImage`
- `NSAttributedStringMBS` -> `NSAttributedString`
- `NSColorMBS` -> `NSColor`
- `NSRectMBS` -> `NSValue with NSRect`
- `NSSizeMBS` -> `NSValue with NSSize`
- `NSPointMBS` -> `NSValue with NSPoint`
- `NSRangeMBS` -> `NSValue with NSRange`
- `NSBurnMBS` -> `NSBurn`
- `NSViewMBS` -> `NSView`
- `NSFontMBS` -> `NSFont`
- `NSParagraphStyleMBS` -> `NSParagraphStyle`
- `NSAttributedStringMBS` -> `NSAttributedString`
- `WebPolicyDelegateMBS` -> `WebPolicyDelegate`
- `WebUIDelegateMBS` -> `WebUIDelegate`
- `WebFrameLoadDelegateMBS` -> `WebFrameLoadDelegate`
- `WebResourceLoadDelegateMBS` -> `WebResourceLoadDelegate`
- `NSIndexSetMBS` -> `NSIndexSet`
- `QTTimeMBS` -> `QTTime`
- `QTTimeRangeMBS` -> `QTTimeRange`
- `Array of Variant` -> `NSArray`
- `Array of String` -> `NSArray`
- `CFStringMBS` -> `NSString`
- `CFNumberMBS` -> `NSNumber`
- `CFDataMBS` -> `NSData`
- `CFURLMBS` -> `NSURL`
- `CFArraryMBS` -> `NSArray`
- `CFDictionaryMBS` -> `NSDictionary`
- `CFBinaryDataMBS` -> `NSDate`
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Carbon CFTypeRef to Variant:

CFDictionaryRef -> Dictionary
CFStringRef -> String
CFDataRef -> String
CFURL -> String
CFNumber -> Integer/Double/Int64
CFArray -> Array
CFDate -> date
nil -> nil
CGColorSpace -> CGColorSpaceMBS
CGColor -> CGColorMBS
CGImage -> CGImageMBS
CF* -> CF*MBS

Variant to Carbon CFTypeRef:

Dictionary -> CFDictionaryRef
Boolean -> CFBooleanRef
Color -> CFNumberRef
Integer -> CFNumberRef
Int64 -> CFNumberRef
Single -> CFNumberRef
Double -> CFNumberRef
String -> CFStringRef
Color -> CGColorRef
Date -> CFDateRef
nil -> nil
Memoryblock -> CFDataRef
FolderItem -> CFURLRef
Dictionary -> CFDictionaryRef
Array of Variant/String/Date/Double/Single/Int64/Integer -> CFArray
CGRectMBS -> CGRect as CFDataRef
CGSizeMBS -> CGSize as CFDataRef
CGPointMBS -> CGPoint as CFDataRef
CGColorMBS -> CGColor
CGColorSpaceMBS -> CGColorSpace
CGImageMBS -> CGImage
CGDataConsumerMBS -> CGDataConsumer
CGDataProviderMBS -> CGDataProvider
CF*MBS -> CF*

Strings without encodings should be put into dictionaries as memoryblocks.
5.0.226  Uploaded my web app with FTP, but it does not run on the server!

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** If you see errors like a simple "Segmentation Fault" on Linux or some other wired errors, you may want to check your FTP upload mode. It must be binary for web apps. ASCII mode corrupts the application.

5.0.227  What classes to use for hotkeys?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Please use Carbon-HotKeyMBS class on Mac and WindowsKeyFilterMBS on Windows.  
**Notes:** CarbonHotKeyMBS will also work fine in Cocoa apps.

5.0.228  What do I need for Linux to get picture functions working?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** In order to get our plugins working on Linux systems without GUI, the plugin loads graphics libraries dynamically.

**Notes:**

To get it working, the plugin tries to load gtk with this paths:

- libgtk-x11-2.0.so"
- libgtk-x11-2.0.so.0"
- /usr/lib/libgtk-x11-2.0.so"
- /usr/lib32/libgtk-x11-2.0.so"
- /usr/lib/libgtk-x11-2.0.so.0"
- /usr/lib32/libgtk-x11-2.0.so.0"

gdk is loaded with this paths:

- libgdk-x11-2.0.so"
- libgdk-x11-2.0.so.0"
- /usr/lib/libgdk-x11-2.0.so"
- /usr/lib32/libgdk-x11-2.0.so"
- /usr/lib/libgdk-x11-2.0.so.0"
- /usr/lib32/libgdk-x11-2.0.so.0"
For the paths without explicit path, the system will search in /lib, /usr/lib and all directories in the LD_LIBRARY_PATH environment variable.

5.0.229 What does the NAN code mean?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:**

5.0.230 What font is used as a 'small font' in typical Mac OS X apps?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:**

Xojo 4.5 has a constant "SmallSystem" to use for a font name. For older versions try this code:

**Example:**

```vbp
Sub GetThemeFont(fontType as Integer, ByRef fontName as String, ByRef fontSize as Integer, ByRef fontStyle as Integer)
    dim err as Integer
    dim theFont, theFontSize, theFontStyle as MemoryBlock

    const smSystemScript = -1

    Declare Function GetThemeFont Lib "Carbon" (inFontID as Integer, inScript as Integer, outFontName as Ptr, outFontSize as Ptr, outStyle as Ptr) as Integer

    theFont = NewMemoryBlock(256) //Str255
    theFontSize = NewMemoryBlock(2) //SInt16
    theFontStyle = NewMemoryBlock(1) //Style

    err = GetThemeFont(fontType, smSystemScript, theFont, theFontSize, theFontStyle)

    if err = 0 then
        fontName = theFont.PString(0)
        fontSize = theFontSize.UShort(0)
        fontStyle = theFontStyle.Byte(0)
    else
        fontName = ""
        fontSize = 0
        fontStyle = 0
    end if
End Sub
```
5.0.231 What is last plugin version to run on Mac OS X 10.4?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** Last Version with 10.4 support is version 15.4.

**Notes:**
With version 15.4 you can build applications for OS X 10.4 and newer.
For Version 16.0 we disabled 10.4 and moved minimum to 10.5. We may be able to enable it again to build a version of 16.x, but may need to charge for this by hour.

5.0.232 What is last plugin version to run on PPC?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** Last Version with PPC is 15.4.

**Notes:**
With version 15.4 you can build PPC applications for OS X 10.4 and newer.
For Version 16.0 we disabled PPC. We may be able to enable it again to build a PPC version of 16.x, but may need to charge for this by hour.

5.0.233 What is the difference between Timer and WebTimer?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Time is server side and WebTimer client side.

**Notes:** Timer is the normal timer class in Xojo. It runs on the server. On the side the WebTimer runs on the client. It triggers a request to the server to perform the action. So a WebTimer is good to keep the connection running and the website updated regularly. A timer on the server is good to make regular jobs like starting a database backup every 24 hours.

5.0.234 What is the list of Excel functions?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Below a list of function names known by LibXL.

**Notes:**
LibXL parses the functions and writes tokens to the excel file. So even if Excel can do more functions, we can only accept the ones known by LibXL.

ABS, ABSREF, ACOS, ACOSH, ACTIVE.CELL, ADD.BAR, ADD.COMMAND, ADD.MENU, ADD.TOOLBAR, ADDRESS, AND, APP.TITLE, AREAS, ARGUMENT, ASC, ASIN, ASINH, ATAN, ATAN2, ATANH, AVEDEV, AVERAGE, AVERAGEA, BAHTTEXT, BETADIST, BETAINV, BINOMDIST, BREAK, CALL, CALLER, CANCEL.KEY, CEILING, CELL, CHAR, CHECK.COMMAND, CHIDIST, CHIINV, CHITEST,
5.0.235 What is the replacement for PluginMBS?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Use the SoftDeclareMBS class to load libraries dynamically.
5.0.236  What to do on Xojo reporting a conflict?
Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes.  **Answer:**

I get an error like "This item conflicts with another item of the same name" when using one of the plugin functions.

Xojo just wants to tell you that you dropped something in the plugins folder what is not a plugin.  **Notes:** Some users dropped the examples, the documentation or other files into the plugins folder. Don’t do it.

5.0.237  What to do with a NSImageCacheException?
Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: No.  **Answer:** You need to add exception handlers for NSExceptionMBS in order to catch this exception.  

**Notes:**

You may also add code to write the stack of the exception into a log file for later locating the error source.

A NSImage has several image representations in memory. So basically you pass in the base image and for whatever size an image is needed, the NSImage class will create a cache image representation of the requested size so on the next query it can use that cache for the same requested size.

5.0.238  What to do with MySQL Error 2014?
Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes.  **Answer:** You can get this error on MySQL if you have a recordset open while you create another one.

5.0.239  What ways do I have to ping?
Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: No.  **Answer:** You have different ways

**Notes:**

1. Use the shell class and the ping utility.

2. Use the MBS Network Plugin and there the SuperSocket part:

a) On Windows the ICMPPingMBS works to ping.
b) On Mac OS X it uses OpenTransport and needs root rights. You need to use sudo to run this application.
This does not work on Intel Macs, because the plugin is not endian safe.

3. The DarwinPingMBS.Ping method:

Compiled for Mac OS X Macho target it works as a synchronized ping method. The Windows version had a bug and was fixed in plugin version 8.2pr4. So it works now.

4. The DarwinPingMBS.SimplePing method:

Works on Mac OS X Macho target.

But this method can be called from a thread to make it working in background.

5.0.240 Where is CGGetActiveDisplayListMBS?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** This is now CGDisplayMBS.GetActiveDisplayList.

5.0.241 Where is CGGetDisplaysWithPointMBS?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** This is now CGDisplayMBS.GetDisplaysWithPoint.

5.0.242 Where is CGGetDisplaysWithRectMBS?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** This is now CGDisplayMBS.GetDisplaysWithRect.

5.0.243 Where is CGGetOnlineDisplayListMBS?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** This is now CGDisplayMBS.GetOnlineDisplayList.
5.0.244 Where is GetObjectClassNameMBS?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: Please use this replacement method:

Example:

Function GetObjectClassNameMBS(o as Object) As string
    dim t as Introspection.TypeInfo = Introspection.GetType(o)
    Return t.FullName
End Function

Notes: GetObjectClassNameMBS was removed from the plugins.

5.0.245 Where is NetworkAvailableMBS?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. Answer: We removed NetworkAvailableMBS some versions ago. It was not working right and basically it’s not useful. If you want to check whether you have a network, then do a DNS resolve:

Example:

// two independent domain names
const domain1 = "www.google.com"
const domain2 = "www.macsw.de"

// resolve IPs
dim ip1 as string = DNSNameToAddressMBS(Domain1)
dim ip2 as string = DNSNameToAddressMBS(Domain2)

// if we got IPs and not the same IPs (error/login pages)
if len(ip1)=0 or len(ip2)=0 or ip1=ip2 then
    MsgBox "no connection"
else
    MsgBox "have connection"
end if

Notes: This way you can detect whether you got something from DNS. And you can make sure that a DNS redirection to a login page won’t catch you.
5.0.246 Where is StringHeight function in DynaPDF?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** Use the function GetFTextHeight or GetFTextHeightEx.
**Notes:** Be aware that GetFTextHeight works with format commands and you may want to escape your text if you don’t use them.

5.0.247 Where is XLSDocumentMBS class?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** This class has been removed in favor of XLBookMBS class.
**Notes:** This classes have been removed XLSCellMBS, XLSDocumentMBS, XLSFormatRecordMBS, XLSMergedCellsMBS, XLSRowMBS and XLSSheetMBS.

5.0.248 Where to get information about file formats?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:**

Please visit this web page:
http://www.wotsit.org

5.0.249 Where to register creator code for my application?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:**

Register at Apple:

5.0.250 Which Mac OS X frameworks are 64bit only?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Some frameworks from Mac OS X do not support 32 bit applications, so we can’t provide plugins for Xojo until 64bit target is available.
**Notes:**

For Mac OS X 10.8:

- Accounts
- EventKit
• GLKit
• Social

and in 10.9:

• Accounts
• AVKit
• EventKit
• GameController
• GLKit
• MapKit
• MediaLibrary
• Social
• SpriteKit

In general Apple makes all new frameworks being 64 bit only.

5.0.251 Which plugins are 64bit only?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Some of our plugins work only in 64 bit modes as operation systems do not provide 32 bit code. **Notes:** This effects currently: EventKit, Accounts, Social frameworks from Apple and our matching plugins.

5.0.252 Why application doesn’t launch because of a missing ddraw.dll!?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** Some RB versions require that you install DirectX from Microsoft on your Windows.

5.0.253 Why application doesn’t launch because of a missing shlwapi.dll!?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** Some RB versions require that you install the Internet Explorer from Microsoft on your Windows. **Notes:** This bug is for several older Windows 95 editions.
5.0.254 Why do I hear a beep on keydown?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** When the user presses a key, RB goes through all keydown event handlers till on returns true. **Notes:** If no keydown event handler returns true for the key, a beep is performed.

5.0.255 Why does folderitem.item return nil?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:** Because Xojo fails to make a folderitem for you. Reason may be an alias file which can’t be resolved or simply that you don’t have enough access rights to read the folder content. **Notes:** A more rarely reason is that the directory changed and the file with the given index or name does no longer exist.

5.0.256 Why doesn’t showurl work?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: Yes. **Answer:**

There are three main reasons:

1. showurl is not supported by Xojo in 68k applications.
2. there is now application defined for the protocol (e.g. http) in the Internet Control panel.
3. You don’t have Internet Config installed.

You can use the InternetConfigMBS class to check for this stuff.

5.0.257 Why don’t the picture functions not work on Linux?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** Please make sure libcairo is installed. **Notes:**

For accessing pictures on Linux, the MBS Plugin relays on the cairo library. Please install the package if you don’t have it already. Our plugin looks for library called libcairo.so or libcairo.so.2.
5.0.258 Why have I no values in my chart?

Plugin Version: all, Console & Web: No, Mac: Yes, Win: Yes, Linux: No. **Answer:** You have no data points visible, there may be several reasons:

**Notes:**

For example one of the data values may be infinite or invalid.
Or the scaling may be out of range, so you simply see nothing.

5.0.259 Will application size increase with using plugins?

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** All plugins used by your application will be included in the application.

**Notes:**

If you use no plugins, your application will not change size.
And if you use one class from the plugins, your application size will increase by a few kilobytes.
The documentation of the plugins include a list of all plugin parts and their sizes for the different platforms.

5.0.260 XLS: Custom format string guidelines

Plugin Version: all, Console & Web: No, Mac: Yes, Win: No, Linux: No. **Answer:** You have to download the source code and compile a static version of the library.

**Notes:**

Up to four sections of format codes can be specified. The format codes, separated by semicolons, define the formats for positive numbers, negative numbers, zero values, and text, in that order. If only two sections are specified, the first is used for positive numbers and zeros, and the second is used for negative numbers. If only one section is specified, it is used for all numbers. Four sections example:

```
# ,# # # .00_; [ Red ] (# ,# # # .00);0.00;"sales "$@ 
```

The following table describes the different symbols that are available for use in custom number formats.

Specify colors

To set the text color for a section of the format, type the name of one of the following eight colors in square brackets in the section. The color code must be the first item in the section.

Instead of using the name of the color, the color index can be used, like this `[ Color3 ]` for Red. Valid numeric indexes for color range from 1 to 56, which reference by index to the legacy color palette.

Specify conditions
To set number formats that will be applied only if a number meets a specified condition, enclose the condition in square brackets. The condition consists of a comparison operator and a value. Comparison operators include: = Equal to; > Greater than; < Less than; >= Greater than or equal to, <= Less than or equal to, and <> Not equal to. For example, the following format displays numbers that are less than or equal to 100 in a red font and numbers that are greater than 100 in a blue font.

\[
\text{[ Red ] \ [ } \leq 100 \ ] ; \ [ \text{ Blue } ] \ [ > 100 ]
\]

If the cell value does not meet any of the criteria, then pound signs ("# ") are displayed across the width of the cell.

Dates and times

Examples

5.0.261 Xojo doesn’t work with your plugins on Windows 98.

Plugin Version: all, Console & Web: No, Mac: No, Win: Yes, Linux: No. **Answer:** Please upgrade your Windows version.

5.0.262 Xojo or my RB application itself crashes on launch on Mac OS Classic. Why?

Plugin Version: all, Console & Web: No. **Answer:**

You may check if the application has enough memory to be loaded.

RB should have on Mac OS Classic more than 20 MB of RAM.

I prefered to use 50 MB and for an application a 10 MB partition is a good way to start.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td>The x value of the data point. For an enumerated x-axis (see Axis.setLabels on what is an enumerated axis), the first data point is 0, and the nth data point is (n-1).</td>
</tr>
<tr>
<td>xLabel</td>
<td>The bottom x-axis label of the data point.</td>
</tr>
<tr>
<td>x2Label</td>
<td>The top x-axis label of the data point.</td>
</tr>
<tr>
<td>value</td>
<td>The value of the data point.</td>
</tr>
<tr>
<td>accValue</td>
<td>The sum of values of all data points that are in the same x position and same data group as the current data point, and with data set number less than or equal to the current data point. This is useful for stacked charts, such as stacked bar chart and stacked area chart.</td>
</tr>
<tr>
<td>totalValue</td>
<td>The sum of values of all data points that are in the same x position and same data group as the current data point. This is useful for stacked charts, such as stacked bar chart and stacked area chart.</td>
</tr>
<tr>
<td>percent</td>
<td>The percentage of the data point based on the total value of all data points that are in the same x position and same data group as the current data point. This is useful for stacked charts, such as stacked bar chart and stacked area chart.</td>
</tr>
<tr>
<td>accPercent</td>
<td>The accumulated percentage of the data point based on the total value of all data points that are in the same x position and same data group as the current data point. This is useful for stacked charts, such as stacked bar chart and stacked area chart.</td>
</tr>
<tr>
<td>gpercent</td>
<td>The percentage of the data point based on the total value of all data points in a layer.</td>
</tr>
<tr>
<td>dataSet</td>
<td>The data set number to which the data point belongs. The first data set is 0. The nth data set is (n-1).</td>
</tr>
<tr>
<td>dataSetName</td>
<td>The name of the data set to which the data point belongs.</td>
</tr>
<tr>
<td>dataItem</td>
<td>The data point number within the data set. The first data point is 0. The nth data point is (n-1).</td>
</tr>
<tr>
<td>dataGroup</td>
<td>The data group number to which the data point belongs. The first data group is 0. The nth data group is (n-1).</td>
</tr>
<tr>
<td>dataGroupName</td>
<td>The name of the data group to which the data point belongs.</td>
</tr>
<tr>
<td>layerId</td>
<td>The layer number to which the data point belongs. The first layer is 0. The nth layer is (n-1).</td>
</tr>
</tbody>
</table>
| fieldN     | The (N + 1)th extra field. For example, { field0 } means the first extra field. An extra field is an array of custom elements added using Layer.addExtraField, Layer.addExtraField2, BaseChart.addExtraField or BaseChart.ad-
|            | dExtraField2.                                                                                                                                                                                           |
diFieldN  
Same as fieldN. See above.

dsFieldN  
Similar to fieldN, except that dsFieldN means the extra field is indexed by data set number. The Pth data set corresponds to the Pth element of the extra field.

dsiFieldN  
Similar to fieldN, except that dsdiFieldN means the extra fields are indexed by both the data set number and data point number. The Pth data item of the Qth data set corresponds to the Pth element of the (N + Q)th extra field.

Parameter    Description
zx            The symbol scale in the x dimension. Applicable for layers with symbol scales set by LineLayer.setSymbolScale.
zy            The symbol scale in the y dimension. Applicable for layers with symbol scales set by LineLayer.setSymbolScale.
z             The symbol scale without distinguishing the dimension to use. Applicable for layers with symbol scales set by LineLayer.setSymbolScale.

Parameter    Description
slope         The slope of the trend line.
intercept     The y-intercept of the trend line.
corr          The correlation coefficient in linear regression analysis.
stderr        The standard error in linear regression analysis.

Parameter    Description
top           The value of the top edge of the box-whisker symbol.
bottom        The value of the bottom edge of the box-whisker symbol.
max           The value of the maximum mark of the box-whisker symbol.
min           The value of the minimum mark of the box-whisker symbol.
med           The value of the median mark of the box-whisker symbol.

Parameter    Description
high          The high value.
low           The low value.
open          The open value.
close         The close value.

dir           The direction of the vector.
len           The length of the vector.
### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>radius</td>
<td>The radial value of the data point.</td>
</tr>
<tr>
<td>value</td>
<td>Same as {radius}. See above.</td>
</tr>
<tr>
<td>angle</td>
<td>The angular value of the data point.</td>
</tr>
<tr>
<td>x</td>
<td>Same as {angle}. See above.</td>
</tr>
<tr>
<td>label</td>
<td>The angular label of the data point.</td>
</tr>
<tr>
<td>xLabel</td>
<td>Same as {label}. See above.</td>
</tr>
<tr>
<td>name</td>
<td>The name of the layer to which the data point belongs.</td>
</tr>
<tr>
<td>dataSetName</td>
<td>Same as {name}. See above.</td>
</tr>
<tr>
<td>i</td>
<td>The data point number. The first data point is 0. The nth data point is (n-1).</td>
</tr>
<tr>
<td>dataItem</td>
<td>Same as {i}. See above.</td>
</tr>
<tr>
<td>z</td>
<td>The symbol scale. Applicable for layers with symbol scales set by PolarLayer.setSymbolScale.</td>
</tr>
<tr>
<td>fieldN</td>
<td>The (N + 1)th extra field. For example, {field0} means the first extra field. An extra field is an array of custom elements added using Layer.addExtraField, Layer.addExtraField2, BaseChart.addExtraField or BaseChart.addExtraField2.</td>
</tr>
<tr>
<td>diFieldN</td>
<td>Same as fieldN. See above.</td>
</tr>
<tr>
<td>dsFieldN</td>
<td>Similar to fieldN, except that dsFieldN means the extra field is indexed by layer index. The Pth layer corresponds to the Pth element of the extra field.</td>
</tr>
<tr>
<td>dsdiFieldN</td>
<td>Similar to fieldN, except that dsdiFieldN means the extra fields are indexed by both the data set number and data point number. The Pth data item of the Qth layer corresponds to the Pth element of the (N + Q)th extra field.</td>
</tr>
</tbody>
</table>

### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>dir</td>
<td>The direction of the vector.</td>
</tr>
<tr>
<td>len</td>
<td>The length of the vector.</td>
</tr>
</tbody>
</table>

### Parameter Description

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>value</td>
<td>The axis value at the tick position.</td>
</tr>
<tr>
<td>label</td>
<td>The axis label at the tick position.</td>
</tr>
</tbody>
</table>

### Parameter Description

| [param]       | The name of the parameter                                                  |
| [a]           | If this field a number, it specifies the number of decimal places (digits to the right of the decimal point). |
Parameter Description

<p>| yyyy | The year in 4 digits (e.g. 2002) |
| yyyy | The year showing only the least significant 3 digits (e.g. 002 for the year 2002) |
| yy  | The year showing only the least significant 2 digits (e.g. 02 for the year 2002) |
| y   | The year showing only the least significant 1 digit (e.g. 2 for the year 2002) |
| mmm | The month formatted as its name. The default is to use the first 3 characters of the english month name (Jan, Feb, Mar ...). The names can be configured using BaseChart.setMonthNames. |
| mm  | The month formatted as 2 digits from 01 - 12, adding leading zero if necessary. |
| m   | The month formatted using the minimum number of digits from 1 - 12. |
| MMM | The first 3 characters of the month name converted to upper case. The names can be configured using BaseChart.setMonthNames. |
| MM  | The first 2 characters of the month name converted to upper case. The names can be configured using BaseChart.setMonthNames. |
| M   | The first character of the month name converted to upper case. The names can be configured using BaseChart.setMonthNames. |
| dd  | The day of month formatted as 2 digits from 01 - 31, adding leading zero if necessary. |
| d   | The day of month formatted using the minimum number of digits from 1 - 31. |
| w   | The name of the day of week. The default is to use the first 3 characters of the english day of week name (Sun, Mon, Tue ...). The names can be configured using BaseChart.setWeekDayNames. |
| hh  | The hour of day formatted as 2 digits, adding leading zero if necessary. The 2 digits will be 00 - 23 if the 'a' option (see below) is not specified, otherwise it will be 01 - 12. |
| h   | The hour of day formatted using the minimum number of digits. The digits will be 0 - 23 if the 'a' option (see below) is not specified, otherwise it will be 01 - 12. |
| nn  | The minute formatted as 2 digits from 00 - 59, adding leading zero if necessary. |
| n   | The minute formatted using the minimum number of digits from 00 - 59. |
| ss  | The second formatted as 2 digits from 00 - 59, adding leading zero if necessary. |
| s   | The second formatted using the minimum number of digits from 00 - 59. |
| a   | Display either ‘am’ or ‘pm’, depending on whether the time is in the morning or afternoon. The text ‘am’ and ‘pm’ can be modified using BaseChart.setAMPM. |</p>
<table>
<thead>
<tr>
<th>Shape Id</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SquareShape</td>
<td>1</td>
<td>Square shape. See (1, 1) above.</td>
</tr>
<tr>
<td>DiamondShape</td>
<td>2</td>
<td>Diamond shape. See (2, 1) above.</td>
</tr>
<tr>
<td>TriangleShape</td>
<td>3</td>
<td>Triangle shape pointing upwards. See (3, 1) above.</td>
</tr>
<tr>
<td>RightTriangleShape</td>
<td>4</td>
<td>Triangle shape pointing rightwards. See (4, 1) above.</td>
</tr>
<tr>
<td>LeftTriangleShape</td>
<td>5</td>
<td>Triangle shape pointing leftwards. See (5, 1) above.</td>
</tr>
<tr>
<td>InvertedTriangleShape</td>
<td>6</td>
<td>Triangle shape pointing downwards. See (1, 2) above.</td>
</tr>
<tr>
<td>CircleShape</td>
<td>7</td>
<td>Circle shape. See (2, 2) above.</td>
</tr>
<tr>
<td>StarShape</td>
<td>[ Method ]</td>
<td>Star shapes of various points. See (2, 3), (2, 4), (2, 5), (3, 1), (3, 2), (3, 3), (3, 4), (3, 5) above for stars with 3 to 10 points.</td>
</tr>
<tr>
<td>PolygonShape</td>
<td>[ Method ]</td>
<td>Polygon shapes symmetrical about a vertical axis with a vertex at the top center position. See (4, 1), (4, 3), (4, 5), (5, 1) for polygons of 5 to 8 sides.</td>
</tr>
<tr>
<td>Polygon2Shape</td>
<td>[ Method ]</td>
<td>Polygon shapes symmetrical about a vertical axis but without any vertex at the top center position. See (4, 2), (4, 4) for polygons of 5 and 6 sides.</td>
</tr>
<tr>
<td>CrossShape</td>
<td>[ Method ]</td>
<td>'+' shapes. See (5, 2), (5, 3), (5, 4), (5, 5), (6, 1), (6, 2), (6, 3) for '+' shape with arm width of 0.1 - 0.7.</td>
</tr>
<tr>
<td>Cross2Shape</td>
<td>[ Method ]</td>
<td>'X' shapes. See (6, 4), (6, 5), (7, 1), (7, 2), (7, 3), (7, 4), (7, 5) for 'X' shapes with arm width of 0.1 - 0.7.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>lang</th>
<th>Value</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>0</td>
<td>Roman script</td>
</tr>
<tr>
<td>French</td>
<td>1</td>
<td>Roman script</td>
</tr>
<tr>
<td>German</td>
<td>2</td>
<td>Roman script</td>
</tr>
<tr>
<td>Italian</td>
<td>3</td>
<td>Roman script</td>
</tr>
<tr>
<td>Dutch</td>
<td>4</td>
<td>Roman script</td>
</tr>
<tr>
<td>Swedish</td>
<td>5</td>
<td>Roman script</td>
</tr>
<tr>
<td>Spanish</td>
<td>6</td>
<td>Roman script</td>
</tr>
<tr>
<td>Danish</td>
<td>7</td>
<td>Roman script</td>
</tr>
<tr>
<td>Portuguese</td>
<td>8</td>
<td>Roman script</td>
</tr>
<tr>
<td>Norwegian</td>
<td>9</td>
<td>Roman script</td>
</tr>
<tr>
<td>Hebrew</td>
<td>10</td>
<td>Hebrew script</td>
</tr>
<tr>
<td>Japanese</td>
<td>11</td>
<td>Japanese script</td>
</tr>
<tr>
<td>Arabic</td>
<td>12</td>
<td>Arabic script</td>
</tr>
<tr>
<td>Finnish</td>
<td>13</td>
<td>Roman script</td>
</tr>
<tr>
<td>Greek</td>
<td>14</td>
<td>Greek script using smRoman script code</td>
</tr>
<tr>
<td>Icelandic</td>
<td>15</td>
<td>modified smRoman/Icelandic script</td>
</tr>
<tr>
<td>Maltese</td>
<td>16</td>
<td>Roman script</td>
</tr>
<tr>
<td>Turkish</td>
<td>17</td>
<td>modified smRoman/Turkish script</td>
</tr>
<tr>
<td>Croatian</td>
<td>18</td>
<td>modified smRoman/Croatian script</td>
</tr>
<tr>
<td>TradChinese</td>
<td>19</td>
<td>Chinese (Mandarin) in traditional characters</td>
</tr>
<tr>
<td>Urdu</td>
<td>20</td>
<td>Arabic script</td>
</tr>
<tr>
<td>Hindi</td>
<td>21</td>
<td>Devanagari script</td>
</tr>
<tr>
<td>Thai</td>
<td>22</td>
<td>Thai script</td>
</tr>
<tr>
<td>Korean</td>
<td>23</td>
<td>Korean script</td>
</tr>
<tr>
<td>Nan</td>
<td>Meaning</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Invalid square root (negative number, usually)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Invalid addition (indeterminate such as infinity + (-infinity))</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Invalid division (indeterminate such as 0/0)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Invalid multiplication (indeterminate such as 0*infinity)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Invalid modulo such as (a mod 0)</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Try to convert invalid string to a number like val(&quot;x7&quot;)</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Invalid argument in a trig function</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>Invalid argument in an inverse trig function</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>Invalid argument in a log function</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Invalid argument in Pow function</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>Invalid argument in toolbox financial function</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Invalid argument in hyperbolic function</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Invalid argument in a gamma function</td>
<td></td>
</tr>
<tr>
<td>Symbol</td>
<td>Description and result</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Digit placeholder. For example, if the value 8.9 is to be displayed as 8.90, use the format # .00</td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>Digit placeholder. This symbol follows the same rules as the 0 symbol. However, the application shall not display extra zeros when the number typed has fewer digits on either side of the decimal than there are # symbols in the format. For example, if the custom format is # .# # , and 8.9 is in the cell, the number 8.9 is displayed.</td>
<td></td>
</tr>
<tr>
<td>?</td>
<td>Digit placeholder. This symbol follows the same rules as the 0 symbol. However, the application shall put a space for insignificant zeros on either side of the decimal point so that decimal points are aligned in the column. For example, the custom format 0.0? aligns the decimal points for the numbers 8.9 and 88.99 in a column.</td>
<td></td>
</tr>
<tr>
<td>. (period)</td>
<td>Decimal point.</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>Percentage. If the cell contains a number between 0 and 1, and the custom format 0% is used, the application shall multiply the number by 100 and adds the percentage symbol in the cell.</td>
<td></td>
</tr>
<tr>
<td>, (comma)</td>
<td>Thousands separator. The application shall separate thousands by commas if the format contains a comma that is enclosed by number signs (#) or by zeros. A comma that follows a placeholder scales the number by one thousand. For example, if the format is # .#, and the cell value is 12,200,000 then the number 12.2 is displayed.</td>
<td></td>
</tr>
<tr>
<td>E- E+ e- e+</td>
<td>Scientific format. The application shall display a number to the right of the &quot;E&quot; symbol that corresponds to the number of places that the decimal point was moved. For example, if the format is 0.00E+00, and the value 12,200,000 is in the cell, the number 1.22E+07 is displayed. If the number format is # 0.0E+0, then the number 12.2E+6 is displayed.</td>
<td></td>
</tr>
<tr>
<td>$ -+/():space</td>
<td>Displays the symbol. If it is desired to display a character that differs from one of these symbols, precede the character with a backslash (). Alternatively, enclose the character in quotation marks. For example, if the number format is (000), and the value 12 is in the cell, the number (012) is displayed.</td>
<td></td>
</tr>
<tr>
<td>\</td>
<td>Display the next character in the format. The application shall not display the backslash. For example, if the number format is 0!, and the value 3 is in the cell, the value 3! is displayed.</td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Repeat the next character in the format enough times to fill the column to its current width. There shall not be more than one asterisk in one section of the format. If more than one asterisk appears in one section of the format, all but the last asterisk shall be ignored. For example, if the number format is 0*x, and the value 3 is in the cell, the value 3xxxxxx is displayed. The number of x characters that are displayed in the cell varies based on the width of the column.</td>
<td></td>
</tr>
<tr>
<td>_ (underline)</td>
<td>Skip the width of the next character. This is useful for lining up negative and positive values in different cells of the same column. For example, the number format <em>(0.0</em>);(0.0) aligns the numbers 2.3 and -4.5 in the column even though the negative number is enclosed by parentheses.</td>
<td></td>
</tr>
<tr>
<td>&quot;text&quot;</td>
<td>Display whatever text is inside the quotation marks. For example, the format 0.00 &quot;dollars&quot; displays 1.23 dollars when the value 1.23 is in the cell.</td>
<td></td>
</tr>
<tr>
<td>@</td>
<td>Text placeholder. If text is typed in the cell, the text from the cell is placed in the format where the at symbol (@) appears. For example, if the number format is &quot;Bob ＠Smith&quot; (including quotation marks), and the value &quot;John&quot; is in the cell, the value Bob John Smith is displayed.</td>
<td></td>
</tr>
<tr>
<td>To display</td>
<td>As</td>
<td>Use this code</td>
</tr>
<tr>
<td>------------</td>
<td>------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Months</td>
<td>1-12</td>
<td>m</td>
</tr>
<tr>
<td>Months</td>
<td>01-12</td>
<td>mm</td>
</tr>
<tr>
<td>Months</td>
<td>Jan-Dec</td>
<td>mmmm</td>
</tr>
<tr>
<td>Months</td>
<td>January-Dec</td>
<td>mmmmm</td>
</tr>
<tr>
<td>Months</td>
<td>J-D</td>
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