

# MBS REALbasic GraphicsMagick Plugin Documentation

Christian Schmitz

January 17, 2011

## 0.1 Introduction

This is the PDF version of the documentation for the REALbasic Plug-in from Monkeybread Software Germany. Plugin part: MBS REALbasic GraphicsMagick Plugin

## 0.2 Content

- 1 List of all topics 3
- 2 All items in this plugin 21
- 3 List of all classes 267

# Chapter 1

## List of Topics

• 2 GraphicsMagick	21
– 2.20 class GImageMBS	126
* 2.20.1 adaptiveThreshold(width as UInt32, height as UInt32, offset as UInt32=0)	126
* 2.20.1 addNoise(noise as integer)	127
* 2.20.1 addNoiseChannel(channel as integer, noise as integer)	127
* 2.20.1 adjoin as boolean	128
* 2.20.1 affineTransform(sx as double, sy as double, rx as double, ry as double, tx as double, ty as double)	128
* 2.20.1 animationDelay as UInt32	128
* 2.20.1 animationIterations as UInt32	129
* 2.20.1 annotate(text as string, gravity as integer)	129
* 2.20.1 annotate(text as string, location as GMGeometryMBS)	130
* 2.20.1 annotate(text as string, location as GMGeometryMBS, gravity as integer)	130
* 2.20.1 annotate(text as string, location as GMGeometryMBS, gravity as integer, degrees as double)	131
* 2.20.1 antiAlias as boolean	132
* 2.20.1 attributeValue(name as string) as string	132
* 2.20.1 backgroundColor as GMColorMBS	132
* 2.20.1 backgroundTexture as string	133
* 2.20.1 baseColumns as UInt32	133
* 2.20.1 baseFilename as string	133
* 2.20.1 baseRows as UInt32	134
* 2.20.1 blur(radius as double=0.0, sigma as double=1.0)	134
* 2.20.1 blurChannel(channel as integer, radius as double=0.0, sigma as double=1.0)	134
* 2.20.1 border	135
* 2.20.1 border(geometry as GMGeometryMBS)	135

* 2.20.1 borderColor as GMColorMBS	136
* 2.20.1 boundingBox as GMGeometryMBS	136
* 2.20.1 boxColor as GMColorMBS	136
* 2.20.1 cacheThreshold(threshold as UInt32)	137
* 2.20.1 channel(channel as integer)	137
* 2.20.1 channelDepth(channel as integer) as UInt32	137
* 2.20.1 charcoal(radius as double=0.0, sigma as double=1.0)	137
* 2.20.1 chop(geometry as GMGeometryMBS)	138
* 2.20.1 classType as UInt32	138
* 2.20.1 clipMask as GMImageMBS	139
* 2.20.1 colorFuzz as double	139
* 2.20.1 colorize(opacity as UInt32, penColor as GMColorMBS)	139
* 2.20.1 colorize(opacityRed as UInt32, opacityGreen as UInt32, opacityBlue as UInt32, penColor as GMColorMBS)	140
* 2.20.1 colorMap(index as UInt32) as GMColorMBS	140
* 2.20.1 colorMapSize as UInt32	141
* 2.20.1 colorSpace as integer	141
* 2.20.1 columns as UInt32	142
* 2.20.1 CombinePictureWithMask as picture	142
* 2.20.1 comment as string	143
* 2.20.1 comment(comment as string)	143
* 2.20.1 compare(image as GMImageMBS)	143
* 2.20.1 compose as integer	143
* 2.20.1 composite(compositeImage as GMImageMBS, gravity as integer, CompositeOperator as integer=2)	144
* 2.20.1 composite(compositeImage as GMImageMBS, offset as GMGeometryMBS, CompositeOperator as integer=2)	144
* 2.20.1 composite(compositeImage as GMImageMBS, xOffset as integer, yOffset as integer, CompositeOperator as integer=2)	144
* 2.20.1 compressType as integer	145
* 2.20.1 Constructor	145
* 2.20.1 Constructor(blob as GMBlobMBS)	146
* 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS)	146
* 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32)	147
* 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string)	148
* 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string)	148
* 2.20.1 Constructor(file as folderitem)	149
* 2.20.1 Constructor(other as GMImageMBS)	149
* 2.20.1 Constructor(Path as string)	150
* 2.20.1 Constructor(pic as picture)	151

* 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS)	151
* 2.20.1 contrast(sharpen as UInt32)	152
* 2.20.1 CopyPicture as picture	153
* 2.20.1 CopyPicture(x as integer, y as integer, width as integer, height as integer) as picture	153
* 2.20.1 CopyPictureMask as picture	154
* 2.20.1 CopyPictureMask(x as integer, y as integer, width as integer, height as integer) as picture	154
* 2.20.1 crop(geometry as GMGeometryMBS)	155
* 2.20.1 cycleColormap(amount as integer)	155
* 2.20.1 debug as boolean	155
* 2.20.1 defineSet(magick as string, key as string) as boolean	156
* 2.20.1 defineValue(magick as string, key as string) as string	156
* 2.20.1 density as GMGeometryMBS	156
* 2.20.1 depth as UInt32	157
* 2.20.1 despeckle	157
* 2.20.1 directory as string	157
* 2.20.1 display	158
* 2.20.1 edge(radius as double=0.0)	158
* 2.20.1 emboss(radius as double=0.0, sigma as double=1.0)	158
* 2.20.1 endian as integer	159
* 2.20.1 enhance	159
* 2.20.1 erase	160
* 2.20.1 fileName as string	160
* 2.20.1 fileSize as Int64	160
* 2.20.1 fillColor as GMColorMBS	160
* 2.20.1 fillPattern as GMImageMBS	161
* 2.20.1 filterType as integer	161
* 2.20.1 flip	162
* 2.20.1 floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS)	162
* 2.20.1 floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS)	162
* 2.20.1 floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS)	163
* 2.20.1 floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS)	163
* 2.20.1 floodFillOpacity(x as UInt32, y as UInt32, opacity as UInt32, PaintMethod as Integer)	164
* 2.20.1 floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS)	164
* 2.20.1 floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS)	164
* 2.20.1 floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS)	165
* 2.20.1 floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS)	165

* 2.20.1 flop	166
* 2.20.1 font as string	166
* 2.20.1 fontPointSize as double	166
* 2.20.1 format as string	167
* 2.20.1 frame	167
* 2.20.1 frame(geometry as GMGeometryMBS)	167
* 2.20.1 frame(width as UInt32, height as UInt32, innerBevel as integer=6, outerBevel as integer=6)	169
* 2.20.1 gamma as double	169
* 2.20.1 gamma(gammaRed as double, gammaGreen as double, gammaBlue as double)	170
* 2.20.1 gaussianBlur(width as double, sigma as double)	170
* 2.20.1 gaussianBlurChannel(channel as integer, width as double, sigma as double)	171
* 2.20.1 geometry as GMGeometryMBS	171
* 2.20.1 getChromaBluePrimary(byref x as double, byref y as double)	171
* 2.20.1 getchromaGreenPrimary(byref x as double, byref y as double)	171
* 2.20.1 getchromaRedPrimary(byref x as double, byref y as double)	172
* 2.20.1 getchromaWhitePoint(byref x as double, byref y as double)	172
* 2.20.1 gifDisposeMethod as UInt32	172
* 2.20.1 Graphics as GMGraphicsMBS	172
* 2.20.1 iccColorProfile as GMBlobMBS	173
* 2.20.1 implode(factor as double=0.0)	173
* 2.20.1 interlaceType as integer	174
* 2.20.1 iptcProfile as GMBlobMBS	174
* 2.20.1 isValid as boolean	175
* 2.20.1 label as string	175
* 2.20.1 label(text as string)	175
* 2.20.1 level(black_ point as double, white_ point as double, mid_ point as double=1.0)	176
* 2.20.1 levelChannel(channel as integer, black_ point as double, white_ point as double, mid_ point as double=1.0)	176
* 2.20.1 lineWidth as double	177
* 2.20.1 magick as string	177
* 2.20.1 magnify	177
* 2.20.1 map(mapImage as GMImageMBS, dither as boolean=false)	178
* 2.20.1 matte as boolean	179
* 2.20.1 matteColor as GMColorMBS	179
* 2.20.1 matteFloodfill(target as GMColorMBS, opacity as UInt32, x as integer, y as integer, PaintMethod as Integer)	179
* 2.20.1 meanErrorPerPixel as double	179
* 2.20.1 medianFilter(radius as double=0.0)	180
* 2.20.1 minify	180
* 2.20.1 modequalizeifyImage	180
* 2.20.1 modifyImage	181

* 2.20.1 modulate(brightness as double, saturation as double, hue as double)	181
* 2.20.1 modulusDepth as UInt32	181
* 2.20.1 monochrome as boolean	182
* 2.20.1 montageGeometry as GMGeometryMBS	182
* 2.20.1 motionBlur(radius as double, sigma as double, angle as double)	182
* 2.20.1 negate(grayscale as boolean=false)	183
* 2.20.1 normalize	183
* 2.20.1 normalizedMaxError as double	183
* 2.20.1 normalizedMeanError as double	184
* 2.20.1 oilPaint(radius as double=3.0)	184
* 2.20.1 opacity(opacity as UInt32)	184
* 2.20.1 opaque(opaqueColor as GMColorMBS, penColor as GMColorMBS)	185
* 2.20.1 orientation as UInt32	185
* 2.20.1 page as GMGeometryMBS	185
* 2.20.1 penColor as GMColorMBS	185
* 2.20.1 ping(data as GMBlobMBS)	186
* 2.20.1 ping(file as folderitem)	186
* 2.20.1 ping(Path as string)	186
* 2.20.1 pixelColor(x as UInt32, y as UInt32) as GMColorMBS	187
* 2.20.1 profile(name as string) as GMBlobMBS	187
* 2.20.1 quality as UInt32	188
* 2.20.1 quantize(measureError as boolean=false)	188
* 2.20.1 quantizeColors as UInt32	189
* 2.20.1 quantizeColorSpace as integer	189
* 2.20.1 quantizeDither as boolean	189
* 2.20.1 quantizeTreeDepth as UInt32	190
* 2.20.1 raiseImage	190
* 2.20.1 raiseImage(geometry as GMGeometryMBS, raisedFlag as boolean=false)	191
* 2.20.1 randomThreshold(thresholds as GMGeometryMBS)	191
* 2.20.1 randomThresholdChannel(thresholds as GMGeometryMBS, channel as integer)	192
* 2.20.1 read(blob as GMBlobMBS)	192
* 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS)	193
* 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer)	193
* 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string)	194
* 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string)	194
* 2.20.1 read(file as folderitem)	195
* 2.20.1 read(path as string)	195
* 2.20.1 read(size as GMGeometryMBS, file as folderitem)	196
* 2.20.1 read(size as GMGeometryMBS, Path as string)	196
* 2.20.1 reduceNoise	197
* 2.20.1 reduceNoise(order as double)	197

* 2.20.1 renderingIntent as integer	198
* 2.20.1 resolutionUnits as integer	198
* 2.20.1 roll(columns as UInt32, rows as UInt32)	198
* 2.20.1 roll(roll as GMGeometryMBS)	199
* 2.20.1 rotate(degree as double)	199
* 2.20.1 rows as UInt32	200
* 2.20.1 sample(geometry as GMGeometryMBS)	200
* 2.20.1 scale(geometry as GMGeometryMBS)	200
* 2.20.1 scene as UInt32	201
* 2.20.1 segment(clusterThreshold as double=1.0, smoothingThreshold as double=1.5)	201
* 2.20.1 setChromaBluePrimary(x as double, y as double)	202
* 2.20.1 setchromaGreenPrimary(x as double, y as double)	202
* 2.20.1 setchromaRedPrimary(x as double, y as double)	202
* 2.20.1 setchromaWhitePoint(x as double, y as double)	202
* 2.20.1 SetPicture(pic as picture, x as integer, y as integer)	203
* 2.20.1 SetPictureMask(maskpic as picture, x as integer, y as integer)	203
* 2.20.1 shade(azimuth as double=30.0, elevation as double=30.0, colorShading as boolean=false)	203
* 2.20.1 sharpen(radius as double=0.0, sigma as double=1.0)	203
* 2.20.1 sharpenChannel(channel as integer, radius as double=0.0, sigma as double=1.0)	204
* 2.20.1 shave(geometry as GMGeometryMBS)	204
* 2.20.1 shear(xShearAngle as double, yShearAngle as double)	204
* 2.20.1 signature(force as boolean=false) as string	205
* 2.20.1 size as GMGeometryMBS	206
* 2.20.1 solarize(factor as double=50.0)	206
* 2.20.1 spread(amount as UInt32=3)	207
* 2.20.1 stegano(watermark as GMImageMBS)	207
* 2.20.1 stereo(rightImage as GMImageMBS)	208
* 2.20.1 strokeAntiAlias as boolean	208
* 2.20.1 strokeColor as GMColorMBS	209
* 2.20.1 strokeDashOffset as double	209
* 2.20.1 strokeLineCap as integer	209
* 2.20.1 strokeLineJoin as integer	210
* 2.20.1 strokeMiterLimit as UInt32	210
* 2.20.1 strokePattern as GMImageMBS	210
* 2.20.1 strokeWidth as double	211
* 2.20.1 subImage as UInt32	211
* 2.20.1 subRange as UInt32	211
* 2.20.1 swirl(degree as double)	212
* 2.20.1 syncPixels	212
* 2.20.1 textEncoding as string	212
* 2.20.1 texture(texture as GMImageMBS)	213

* 2.20.1 threshold(degree as double)	213
* 2.20.1 fileName as string	213
* 2.20.1 totalColors as UInt32	214
* 2.20.1 transform(imageGeometry as GMGeometryMBS)	214
* 2.20.1 transform(imageGeometry as GMGeometryMBS, cropGeometry as GMGeometryMBS)	214
* 2.20.1 transformOrigin(tx as double, ty as double)	215
* 2.20.1 transformReset	215
* 2.20.1 transformRotation(angle as double)	215
* 2.20.1 transformScale(tx as double, ty as double)	215
* 2.20.1 transformSkewX(x as double)	215
* 2.20.1 transformSkewY(y as double)	216
* 2.20.1 transparent(color as GMColorMBS)	216
* 2.20.1 trim	216
* 2.20.1 type as integer	217
* 2.20.1 unregisterId	218
* 2.20.1 unsharpmask(radius as double, sigma as double, amount as double, threshold as double)	218
* 2.20.1 unsharpmaskChannel(channel as integer, radius as double, sigma as double, amount as double, threshold as double)	219
* 2.20.1 verbose as boolean	219
* 2.20.1 view as string	219
* 2.20.1 wave(amplitude as double=25.0, wavelength as double=150.0)	220
* 2.20.1 write(blob as GMBlobMBS)	220
* 2.20.1 write(blob as GMBlobMBS, magick as string)	220
* 2.20.1 write(blob as GMBlobMBS, magick as string, depth as UInt32)	221
* 2.20.1 write(file as folderitem)	221
* 2.20.1 write(Path as string)	222
* 2.20.1 x11Display as string	222
* 2.20.1 xResolution as double	222
* 2.20.1 yResolution as double	222
* 2.20.1 zoom(geometry as GMGeometryMBS)	223
* 2.20.2 handle as Integer	223
* 2.20.2 height as integer	223
* 2.20.2 width as integer	224
* 2.20.3 AbsoluteIntent = 3	225
* 2.20.3 AddCompositeOp = 8	225
* 2.20.3 AddNoisePreview = 14	225
* 2.20.3 AllChannels = 9	225
* 2.20.3 AllCompliance = & hfff	226
* 2.20.3 AssociatedAlpha = 1	226
* 2.20.3 AtopCompositeOp = 4	226

* 2.20.3 BackgroundDispose = 2	226
* 2.20.3 BesselFilter = 14	226
* 2.20.3 BilevelType = 1	227
* 2.20.3 BlackChannel = 7	227
* 2.20.3 BlackmanFilter = 7	227
* 2.20.3 BlueChannel = 4	227
* 2.20.3 BlurPreview = 16	228
* 2.20.3 BottomLeftOrientation = 4	228
* 2.20.3 BottomRightOrientation = 3	228
* 2.20.3 BoxFilter = 2	228
* 2.20.3 BrightnessPreview = 6	229
* 2.20.3 BumpmapCompositeOp = 12	229
* 2.20.3 BZipCompression = 2	229
* 2.20.3 CatromFilter = 11	229
* 2.20.3 CenterGravity = 5	229
* 2.20.3 CharcoalDrawingPreview = 28	230
* 2.20.3 ClearCompositeOp = 18	230
* 2.20.3 ColorizeCompositeOp = 28	230
* 2.20.3 ColorSeparationMatteType = 9	230
* 2.20.3 ColorSeparationType = 8	231
* 2.20.3 ConcatenateMode = 3	231
* 2.20.3 CopyBlackCompositeOp = 35	231
* 2.20.3 CopyBlueCompositeOp = 16	231
* 2.20.3 CopyCompositeOp = 13	231
* 2.20.3 CopyCyanCompositeOp = 32	232
* 2.20.3 CopyGreenCompositeOp = 15	232
* 2.20.3 CopyMagentaCompositeOp = 33	232
* 2.20.3 CopyOpacityCompositeOp = 17	232
* 2.20.3 CopyRedCompositeOp = 14	233
* 2.20.3 CopyYellowCompositeOp = 34	233
* 2.20.3 CubicFilter = 10	233
* 2.20.3 CyanChannel = 1	233
* 2.20.3 DarkenCompositeOp = 24	233
* 2.20.3 DespecklePreview = 12	234
* 2.20.3 DifferenceCompositeOp = 10	234
* 2.20.3 DirectClass = 1	234
* 2.20.3 DisplaceCompositeOp = 20	234
* 2.20.3 DissolveCompositeOp = 19	235
* 2.20.3 DivideCompositeOp = 36	235
* 2.20.3 DullPreview = 9	235
* 2.20.3 EastGravity = 6	235
* 2.20.3 EdgeDetectPreview = 18	235

* 2.20.3 FaxCompression = 3	236
* 2.20.3 ForgetGravity = 0	236
* 2.20.3 FrameMode = 1	236
* 2.20.3 GammaPreview = 7	236
* 2.20.3 GaussianFilter = 8	237
* 2.20.3 GaussianNoise = 1	237
* 2.20.3 GrayChannel = 10	237
* 2.20.3 GrayscaleMatteType = 3	237
* 2.20.3 GrayscalePreview = 10	237
* 2.20.3 GrayscaleType = 2	238
* 2.20.3 GreenChannel = 2	238
* 2.20.3 Group4Compression = 4	238
* 2.20.3 HammingFilter = 6	238
* 2.20.3 HanningFilter = 5	239
* 2.20.3 HermiteFilter = 4	239
* 2.20.3 HueCompositeOp = 26	239
* 2.20.3 HuePreview = 4	239
* 2.20.3 ImplodePreview = 25	239
* 2.20.3 ImpulseNoise = 3	240
* 2.20.3 InCompositeOp = 2	240
* 2.20.3 JPEGCompression = 5	240
* 2.20.3 JPEGPreview = 29	240
* 2.20.3 LanczosFilter = 13	241
* 2.20.3 LaplacianNoise = 4	241
* 2.20.3 LeftBottomOrientation = 8	241
* 2.20.3 LeftTopOrientation = 5	241
* 2.20.3 LightenCompositeOp = 25	242
* 2.20.3 LineInterlace = 2	242
* 2.20.3 LosslessJPEGCompression = 6	242
* 2.20.3 LSBEndian = 1	242
* 2.20.3 LuminizeCompositeOp = 29	242
* 2.20.3 LZWCompression = 7	243
* 2.20.3 MagentaChannel = 3	243
* 2.20.3 MatteChannel = 8	243
* 2.20.3 MinusCompositeOp = 7	243
* 2.20.3 MitchellFilter = 12	244
* 2.20.3 ModulateCompositeOp = 21	244
* 2.20.3 MSBEndian = 2	244
* 2.20.3 MultiplicativeGaussianNoise = 2	244
* 2.20.3 MultiplyCompositeOp = 11	244
* 2.20.3 NativeEndian = 3	245
* 2.20.3 NoCompliance = 0	245

* 2.20.3 NoCompositeOp = 23	245
* 2.20.3 NoCompression = 1	245
* 2.20.3 NoInterlace = 1	246
* 2.20.3 NoneDispose = 1	246
* 2.20.3 NorthEastGravity = 3	246
* 2.20.3 NorthGravity = 2	246
* 2.20.3 NorthWestGravity = 1	246
* 2.20.3 OilPaintPreview = 27	247
* 2.20.3 OpacityChannel = 6	247
* 2.20.3 OptimizeType = 10	248
* 2.20.3 OutCompositeOp = 3	248
* 2.20.3 OverCompositeOp = 1	248
* 2.20.3 OverlayCompositeOp = 31	248
* 2.20.3 PaletteMatteType = 5	248
* 2.20.3 PaletteType = 4	249
* 2.20.3 PartitionInterlace = 4	249
* 2.20.3 PerceptualIntent = 2	249
* 2.20.3 PixelsPerCentimeterResolution = 2	249
* 2.20.3 PixelsPerInchResolution = 1	250
* 2.20.3 PlaneInterlace = 3	250
* 2.20.3 PlusCompositeOp = 6	250
* 2.20.3 PointFilter = 1	250
* 2.20.3 PoissonNoise = 5	250
* 2.20.3 PreviousDispose = 3	251
* 2.20.3 PseudoClass = 2	251
* 2.20.3 QuadraticFilter = 9	251
* 2.20.3 QuantizePreview = 11	251
* 2.20.3 RaisePreview = 22	252
* 2.20.3 RedChannel = 0	252
* 2.20.3 ReduceNoisePreview = 13	252
* 2.20.3 RelativeIntent = 4	252
* 2.20.3 RightBottomOrientation = 7	252
* 2.20.3 RightTopOrientation = 6	253
* 2.20.3 RLECompression = 8	253
* 2.20.3 RollPreview = 3	253
* 2.20.3 RotatePreview = 1	253
* 2.20.3 SaturateCompositeOp = 27	254
* 2.20.3 SaturationIntent = 1	254
* 2.20.3 SaturationPreview = 5	254
* 2.20.3 ScreenCompositeOp = 30	254
* 2.20.3 SegmentPreview = 23	255
* 2.20.3 ShadePreview = 21	255

* 2.20.3 SharpenPreview = 15	255
* 2.20.3 ShearPreview = 2	255
* 2.20.3 SincFilter = 15	255
* 2.20.3 SolarizePreview = 20	256
* 2.20.3 SouthEastGravity = 9	256
* 2.20.3 SouthGravity = 8	256
* 2.20.3 SouthWestGravity = 7	256
* 2.20.3 SpiffPreview = 8	257
* 2.20.3 SpreadPreview = 19	257
* 2.20.3 StaticGravity = 10	257
* 2.20.3 SubtractCompositeOp = 9	257
* 2.20.3 SVGCompliance = 1	257
* 2.20.3 SwirlPreview = 24	258
* 2.20.3 ThresholdCompositeOp = 22	258
* 2.20.3 ThresholdPreview = 17	258
* 2.20.3 TopLeftOrientation = 1	258
* 2.20.3 TopRightOrientation = 2	259
* 2.20.3 TriangleFilter = 3	259
* 2.20.3 TrueColorMatteType = 7	259
* 2.20.3 TrueColorType = 6	259
* 2.20.3 UnassociatedAlpha = 2	260
* 2.20.3 UndefinedChannel = 0	260
* 2.20.3 UndefinedClass = 0	260
* 2.20.3 UndefinedCompliance = 0	260
* 2.20.3 UndefinedCompositeOp = 0	260
* 2.20.3 UndefinedCompression = 0	261
* 2.20.3 UndefinedDispose = 0	261
* 2.20.3 UndefinedEndian = 0	261
* 2.20.3 UndefinedFilter = 0	261
* 2.20.3 UndefinedIntent = 0	262
* 2.20.3 UndefinedInterlace = 0	262
* 2.20.3 UndefinedMode = 0	262
* 2.20.3 UndefinedOrientation = 0	262
* 2.20.3 UndefinedPreview = 0	263
* 2.20.3 UndefinedResolution = 0	263
* 2.20.3 UndefinedType = 0	263
* 2.20.3 UnframeMode = 2	263
* 2.20.3 UniformNoise = 0	263
* 2.20.3 UnspecifiedAlpha = 0	264
* 2.20.3 WavePreview = 26	264
* 2.20.3 WestGravity = 4	264
* 2.20.3 X11Compliance = 2	264

* 2.20.3 XorCompositeOp = 5	265
* 2.20.3 XPMCompliance = 4	265
* 2.20.3 YellowChannel = 5	265
* 2.20.3 ZipCompression = 9	265
– 2.1 class GMLockMBS	21
* 2.1.1 Constructor(mutexlock as GMMutexLockMBS)	21
* 2.1.2 handle as Integer	22
* 2.1.2 target as GMMutexLockMBS	22
– 2.2 class GMPixelsMBS	22
* 2.2.1 columns as UInt32	22
* 2.2.1 Constructor(Image as GMImageMBS)	23
* 2.2.1 rows as UInt32	23
* 2.2.1 sync	23
* 2.2.1 x as UInt32	23
* 2.2.1 y as UInt32	24
* 2.2.2 handle as Integer	24
– 2.5 class GMPathArgsMBS	27
* 2.5.1 Constructor	28
* 2.5.1 Constructor(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double)	28
* 2.5.1 Constructor(x1 as double, y1 as double, x as double, y as double)	28
* 2.5.1 Constructor(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double)	29
* 2.5.2 largeArcFlag as Boolean	30
* 2.5.2 radiusX as double	30
* 2.5.2 radiusY as double	30
* 2.5.2 sweepFlag as Boolean	30
* 2.5.2 x as double	31
* 2.5.2 x1 as double	31
* 2.5.2 x2 as double	31
* 2.5.2 xAxisRotation as double	31
* 2.5.2 y as double	32
* 2.5.2 y1 as double	32
* 2.5.2 y2 as double	32
– 2.4 class GMTypeMetricMBS	25
* 2.4.1 ascent as double	25
* 2.4.1 Constructor	26
* 2.4.1 descent as double	26
* 2.4.1 maxHorizontalAdvance as double	26
* 2.4.1 textHeight as double	26
* 2.4.1 textWidth as double	27

* 2.4.2 handle as Integer	27
– 2.7 class GMMutexLockMBS	33
* 2.7.1 lock	33
* 2.7.1 unlock	34
* 2.7.2 handle as Integer	34
– 2.8 class GMGraphicsMBS	34
* 2.8.1 Arc(startX as double, startY as double, endX as double, endY as double, startDegrees as double, endDegrees as double)	34
* 2.8.1 Bezier(values() as GMCoordinateMBS)	35
* 2.8.1 Circle(originX as double, originY as double, perimX as double, perimY as double)	35
* 2.8.1 ClipPath(id as string)	36
* 2.8.1 ColorPixel(x as double, y as double, paintMethod as integer)	36
* 2.8.1 CompositeImage(x as double, y as double, file as folderitem)	36
* 2.8.1 CompositeImage(x as double, y as double, image as GMImageMBS)	37
* 2.8.1 CompositeImage(x as double, y as double, path as string)	38
* 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem)	38
* 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer)	39
* 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GMImageMBS)	40
* 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GMImageMBS, CompositeOperator as integer)	40
* 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string)	41
* 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer)	42
* 2.8.1 Constructor(image as GMImageMBS)	42
* 2.8.1 DashArray(values() as double)	43
* 2.8.1 DashOffset(offset as double)	43
* 2.8.1 Draw	43
* 2.8.1 DrawPath	44
* 2.8.1 Ellipse(originX as double, originY as double, perimX as double, perimY as double)	44
* 2.8.1 FillColor(c as GMColorMBS)	44
* 2.8.1 FillOpacity(opacity as double)	44
* 2.8.1 FillRule(fillRule as integer)	45
* 2.8.1 Font(fontname as string)	45
* 2.8.1 Font(fontname as string, StyleType as integer, weight as integer, StretchType as integer)	45
* 2.8.1 Gravity(GravityType as integer)	45
* 2.8.1 Line(startX as double, startY as double, endX as double, endY as double)	46
* 2.8.1 Matte(x as double, y as double, paintMethod as integer)	46
* 2.8.1 MiterLimit(miterlimit as integer)	47

* 2.8.1 PathArcAbs(c as GMPathArgsMBS)	47
* 2.8.1 PathArcAbs(c()) as GMPathArgsMBS)	47
* 2.8.1 PathArcAbs(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double)	48
* 2.8.1 PathArcRel(c as GMPathArgsMBS)	49
* 2.8.1 PathArcRel(c()) as GMPathArgsMBS)	50
* 2.8.1 PathArcRel(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double)	50
* 2.8.1 PathClosePath	51
* 2.8.1 PathCurvetoAbs(c as GMPathArgsMBS)	51
* 2.8.1 PathCurvetoAbs(c()) as GMPathArgsMBS)	51
* 2.8.1 PathCurvetoAbs(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double)	52
* 2.8.1 PathCurvetoRel(c as GMPathArgsMBS)	52
* 2.8.1 PathCurvetoRel(c()) as GMPathArgsMBS)	53
* 2.8.1 PathCurvetoRel(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double)	53
* 2.8.1 PathLinetoAbs(c as GMCoordinateMBS)	54
* 2.8.1 PathLinetoAbs(c()) as GMCoordinateMBS)	54
* 2.8.1 PathLinetoAbs(x as double, y as double)	54
* 2.8.1 PathLinetoHorizontalAbs(v as double)	55
* 2.8.1 PathLinetoHorizontalRel(v as double)	55
* 2.8.1 PathLinetoRel(c as GMCoordinateMBS)	55
* 2.8.1 PathLinetoRel(c()) as GMCoordinateMBS)	56
* 2.8.1 PathLinetoRel(x as double, y as double)	56
* 2.8.1 PathLinetoVerticalAbs(v as double)	57
* 2.8.1 PathLinetoVerticalRel(v as double)	57
* 2.8.1 PathMovetoAbs(c as GMCoordinateMBS)	57
* 2.8.1 PathMovetoAbs(x as double, y as double)	58
* 2.8.1 PathMovetoRel(c as GMCoordinateMBS)	58
* 2.8.1 PathMovetoRel(x as double, y as double)	59
* 2.8.1 PathQuadraticCurvetoAbs(c as GMPathArgsMBS)	59
* 2.8.1 PathQuadraticCurvetoAbs(c()) as GMPathArgsMBS)	60
* 2.8.1 PathQuadraticCurvetoAbs(x1 as double, y1 as double, x as double, y as double)	60
* 2.8.1 PathQuadraticCurvetoRel(c as GMPathArgsMBS)	61
* 2.8.1 PathQuadraticCurvetoRel(c()) as GMPathArgsMBS)	61
* 2.8.1 PathQuadraticCurvetoRel(x1 as double, y1 as double, x as double, y as double)	62
* 2.8.1 PathSmoothCurvetoAbs(c as GMCoordinateMBS)	62
* 2.8.1 PathSmoothCurvetoAbs(c()) as GMCoordinateMBS)	63
* 2.8.1 PathSmoothCurvetoAbs(x as double, y as double)	63
* 2.8.1 PathSmoothCurvetoRel(c as GMCoordinateMBS)	64
* 2.8.1 PathSmoothCurvetoRel(c()) as GMCoordinateMBS)	64

* 2.8.1 PathSmoothCurvetoRel(x as double, y as double)	65
* 2.8.1 PathSmoothQuadraticCurvetoAbs(c as GMCoordinateMBS)	65
* 2.8.1 PathSmoothQuadraticCurvetoAbs(c()) as GMCoordinateMBS)	66
* 2.8.1 PathSmoothQuadraticCurvetoAbs(x as double, y as double)	66
* 2.8.1 PathSmoothQuadraticCurvetoRel(c as GMCoordinateMBS)	67
* 2.8.1 PathSmoothQuadraticCurvetoRel(c()) as GMCoordinateMBS)	67
* 2.8.1 PathSmoothQuadraticCurvetoRel(x as double, y as double)	68
* 2.8.1 Point(x as double, y as double)	68
* 2.8.1 PointSize(pointSize as double)	69
* 2.8.1 Polygon(values()) as GMCoordinateMBS)	69
* 2.8.1 Polyline(values()) as GMCoordinateMBS)	70
* 2.8.1 PopClipPath	71
* 2.8.1 PopGraphicContext	71
* 2.8.1 PopPattern	72
* 2.8.1 PushClipPath(id as string)	72
* 2.8.1 PushGraphicContext	72
* 2.8.1 PushPattern(id as string, x as integer, y as integer, width as integer, height as integer)	73
* 2.8.1 Rectangle(upperLeftX as double, upperLeftY as double, lowerRightX as double, lowerRightY as double)	73
* 2.8.1 Rotation(angle as double)	74
* 2.8.1 RoundRectangle(centerX as double, centerY as double, width as double, height as double, cornerWidth as double, cornerHeight as double)	75
* 2.8.1 Scaling(x as double, y as double)	75
* 2.8.1 SkewX(angle as double)	76
* 2.8.1 SkewY(angle as double)	77
* 2.8.1 StrokeAntialias(flag as boolean)	77
* 2.8.1 StrokeColor(c as GMColorMBS)	78
* 2.8.1 StrokeLineCap(LineCap as integer)	78
* 2.8.1 StrokeLineJoin(LineJoin as integer)	78
* 2.8.1 StrokeOpacity(opacity as double)	79
* 2.8.1 StrokeWidth(opacity as double)	79
* 2.8.1 Text(x as double, y as double, text as string)	79
* 2.8.1 Text(x as double, y as double, text as string, encoding as string)	79
* 2.8.1 TextAntialias(flag as boolean)	80
* 2.8.1 TextDecoration(DecorationType as integer)	80
* 2.8.1 TextUnderColor(c as GMColorMBS)	81
* 2.8.1 Translation(x as double, y as double)	81
* 2.8.1 Viewbox(x1 as integer, y1 as integer, x2 as integer, y2 as integer)	81
* 2.8.2 Image as GMImageMBS	82
– 2.16 class GMGeometryMBS	108
* 2.16.1 Constructor	108

* 2.16.1 Constructor(geometry as string)	109
* 2.16.1 Constructor(other as GMGeometryMBS)	109
* 2.16.1 Constructor(Width as UInt32, Height as UInt32, XOffset as UInt32=0, YOffset as UInt32=0, xNegative as boolean=false, yNegative as boolean=false)	110
* 2.16.1 Make(geometry as string) as GMGeometryMBS	110
* 2.16.1 Make(Width as UInt32, Height as UInt32, XOffset as UInt32=0, YOffset as UInt32=0, xNegative as boolean=false, yNegative as boolean=false) as GMGeometryMBS	111
* 2.16.2 aspect as boolean	111
* 2.16.2 greater as boolean	112
* 2.16.2 height as UInt32	112
* 2.16.2 isValid as boolean	112
* 2.16.2 less as boolean	113
* 2.16.2 percent as boolean	113
* 2.16.2 StringValue as string	114
* 2.16.2 width as UInt32	114
* 2.16.2 xNegative as boolean	114
* 2.16.2 xOff as UInt32	115
* 2.16.2 yNegative as boolean	115
* 2.16.2 yOff as UInt32	116
– 2.9 class GMBlobMBS	82
* 2.9.1 base64 as string	83
* 2.9.1 Constructor	83
* 2.9.1 Constructor(data as memoryblock, offset as integer, size as integer)	83
* 2.9.1 Constructor(data as string)	84
* 2.9.1 Constructor(other as GMBlobMBS)	84
* 2.9.1 CopyMemory as memoryblock	84
* 2.9.1 CopyString as string	85
* 2.9.1 Data as memoryblock	85
* 2.9.1 length as UInt32	85
* 2.9.1 Update(data as memoryblock, offset as integer, size as integer)	86
* 2.9.1 Update(data as string)	86
* 2.9.2 handle as Integer	86
– 2.10 class GMColorMBS	87
* 2.10.1 Constructor	87
* 2.10.1 Constructor(ColorName as string)	88
* 2.10.1 Constructor(ColorValue as color)	89
* 2.10.1 Constructor(ColorValue as color, alpha as integer)	89
* 2.10.1 Constructor(other as GMColorMBS)	90
* 2.10.1 Constructor(red as integer, green as integer, blue as integer)	90
* 2.10.1 Constructor(red as integer, green as integer, blue as integer, alpha as integer)	91
* 2.10.1 QuantumByteSize as integer	92

* 2.10.1 scaleDoubleToQuantum(value as double) as integer	92
* 2.10.1 scaleQuantumToDouble(value as integer) as double	92
* 2.10.2 alpha as double	93
* 2.10.2 blueQuantum as integer	93
* 2.10.2 colorValue as color	94
* 2.10.2 greenQuantum as integer	94
* 2.10.2 handle as Integer	95
* 2.10.2 intensity as double	95
* 2.10.2 isValid as boolean	95
* 2.10.2 redQuantum as integer	96
– 2.11 class GMColorHSLMBS	96
* 2.11.1 Constructor	97
* 2.11.1 Constructor(hue as double, saturation as double, luminosity as double)	97
* 2.11.1 Constructor(other as GMColorMBS)	98
* 2.11.2 hue as double	98
* 2.11.2 luminosity as double	99
* 2.11.2 saturation as double	99
– 2.13 class GMColorGrayMBS	103
* 2.13.1 Constructor	104
* 2.13.1 Constructor(other as GMColorMBS)	104
* 2.13.1 Constructor(shade as double)	105
* 2.13.2 shade as double	105
– 2.12 class GMCoderInfoMBS	99
* 2.12.1 CoderInfoList as GMCoderInfoMBS()	100
* 2.12.2 description as string	100
* 2.12.2 isMultiFrame as boolean	101
* 2.12.2 isReadable as boolean	101
* 2.12.2 isWritable as boolean	102
* 2.12.2 name as string	102
– 2.15 class GMCoordinateMBS	106
* 2.15.1 Constructor(x as double = 0.0, y as double = 0.0)	106
* 2.15.2 x as double	107
* 2.15.2 y as double	107
– 2.18 class GMColorYUVMBS	119
* 2.18.1 Constructor	119
* 2.18.1 Constructor(other as GMColorMBS)	120
* 2.18.1 Constructor(y as double, u as double, v as double)	120
* 2.18.2 u as double	121
* 2.18.2 v as double	121
* 2.18.2 y as double	122

– 2.17 class GMColorMonoMBS	116
* 2.17.1 Constructor	117
* 2.17.1 Constructor(mono as boolean)	117
* 2.17.1 Constructor(other as GMColorMBS)	118
* 2.17.2 mono as boolean	118
– 2.19 class GMColorRGBMBS	122
* 2.19.1 Constructor	123
* 2.19.1 Constructor(other as GMColorMBS)	123
* 2.19.1 Constructor(red as double, green as double, blue as double)	124
* 2.19.2 blue as double	124
* 2.19.2 green as double	125
* 2.19.2 red as double	125

## Chapter 2

# GraphicsMagick

### 2.1 class GMLockMBS

class GMLockMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The class for locking a certain resource.

**Notes:** The idea is to pass the constructor a mutexlock and keep the only reference to this new lock object on the stack. On the end of the method, the destructor is called by REALbasic and releases the mutexlock automatically.

#### 2.1.1 Methods

**Constructor(mutexlock as GMMutexLockMBS)**

method from class GMLockMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new Lock based on the given mutexlock.

## 2.1.2 Properties

### handle as Integer

property from class GMLockMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The internal object reference.

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

### target as GMMutexLockMBS

property from class GMLockMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The mutexlock this lock is referencing to.

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

## 2.2 class GMPixelsMBS

### class GMPixelsMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates an empty pixels object.

### 2.2.1 Methods

#### columns as Uint32

method from class GMPixelsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Width of view.

### **Constructor(Image as GImageMBS)**

method from class *GMPixelsMBS*, *GraphicsMagick*, *MBS REALbasic GraphicsMagick Plugin* (*GraphicsMagick*), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new *Pixels* object with the pixels from an image.

### **rows as UInt32**

method from class *GMPixelsMBS*, *GraphicsMagick*, *MBS REALbasic GraphicsMagick Plugin* (*GraphicsMagick*), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Height of view.

### **sync**

method from class *GMPixelsMBS*, *GraphicsMagick*, *MBS REALbasic GraphicsMagick Plugin* (*GraphicsMagick*), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Transfers the image cache pixels to the image.

### **x as UInt32**

method from class *GMPixelsMBS*, *GraphicsMagick*, *MBS REALbasic GraphicsMagick Plugin* (*GraphicsMagick*), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Left ordinate of view.

### y as UInt32

method from class GMPixelsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Top ordinate of view.

## 2.2.2 Properties

### handle as Integer

property from class GMPixelsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The internal object reference.

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

## 2.3 class GMUnsupportedExceptionMBS

### class GMUnsupportedExceptionMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** An exception raised if you call the GM functions on an unsupported platform.

**Notes:**

Check the message property for details.

This exception is currently only used on Windows.

(Windows support may come later)

Subclass of the GMErrorExceptionMBS class.

## 2.4 class GMTypeMetricMBS

### class GMTypeMetricMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The TypeMetric class provides the means to pass data from the Image class's TypeMetric method to the user.

**Notes:**

It provides information regarding font metrics such as ascent, descent, text width, text height, and maximum horizontal advance. The units of these font metrics are in pixels, and that the metrics are dependent on the current Image font (default Ghostscript's "Helvetica"), pointsize (default 12 points), and x/y resolution (default 72 DPI) settings.

The pixel units may be converted to points (the standard resolution-independent measure used by the typesetting industry) via the following equation:

$$\text{size\_points} = (\text{size\_pixels} * 72) / \text{resolution}$$

where resolution is in dots-per-inch (DPI). This means that at the default image resolution, there is one pixel per point.

Note that a font's pointsize is only a first-order approximation of the font height (ascender + descender) in points. The relationship between the specified pointsize and the rendered font height is determined by the font designer.

See FreeType Glyph Conventions for a detailed description of font metrics related issues.

### 2.4.1 Methods

#### ascent as double

method from class GMTypeMetricMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Returns the distance in pixels from the text baseline to the highest/upper grid coordinate used

to place an outline point.

**Notes:** Always a positive value.

### Constructor

method from class `GMTypeMetricMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The constructor.

### descent as double

method from class `GMTypeMetricMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Returns the the distance in pixels from the baseline to the lowest grid coordinate used to place an outline point.

**Notes:** Always a negative value.

### maxHorizontalAdvance as double

method from class `GMTypeMetricMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Returns the maximum horizontal advance (advance from the beginning of a character to the beginning of the next character) in pixels.

### textHeight as double

method from class `GMTypeMetricMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Returns text height in pixels.

**textWidth as double**

method from class GMTypeMetricMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Returns text width in pixels.

**2.4.2 Properties****handle as Integer**

property from class GMTypeMetricMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The internal object reference.

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

**2.5 class GMPathArgsMBS****class GMPathArgsMBS**

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** This is a class for arguments to the path arc/curve methods in GMGraphicsMBS.

**Example:**

```
dim g as new GMPathArgsMBS(1,2,3,4) // for a QuadraticCurve
```

```
MsgBox str(g.x1)+EndOfLine+str(g.y1)+EndOfLine+str(g.x)+EndOfLine+str(g.y)
```

**Notes:** Due we use this class for three different ways, we have three constructors to fill in the value you need for the calls.

## 2.5.1 Methods

### Constructor

method from class GMPPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The constructor for creating an empty object.

See also:

- 2.5.1 Constructor(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double) 28
- 2.5.1 Constructor(x1 as double, y1 as double, x as double, y as double) 28
- 2.5.1 Constructor(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double) 29

### Constructor(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double)

method from class GMPPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The constructor to create the arguments object for the PathArc methods in GMGraphicsMBS.

See also:

- 2.5.1 Constructor 28
- 2.5.1 Constructor(x1 as double, y1 as double, x as double, y as double) 28
- 2.5.1 Constructor(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double) 29

### Constructor(x1 as double, y1 as double, x as double, y as double)

method from class GMPPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The constructor to create the arguments object for the QuadraticCurve methods in GMGraphicsMBS.

**Example:**

```
dim g as new GMPathArgsMBS(1,2,3,4)
```

```
MsgBox str(g.x1)+EndOfLine+str(g.y1)+EndOfLine+str(g.x)+EndOfLine+str(g.y)
```

See also:

- 2.5.1 Constructor 28
- 2.5.1 Constructor(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double) 28
- 2.5.1 Constructor(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double) 29

**Constructor(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double)**

method from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The constructor to create the arguments object for the Curveto methods in GMGraphicsMBS.

**Example:**

```
dim g as new GMPathArgsMBS(1,2,3,4,5,6)
```

```
MsgBox str(g.x1)+EndOfLine+str(g.y1)+EndOfLine+str(g.x2)+EndOfLine+str(g.y2)+EndOfLine+str(g.x)+EndOfLine+str(g.y)
```

See also:

- 2.5.1 Constructor 28
- 2.5.1 Constructor(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double) 28
- 2.5.1 Constructor(x1 as double, y1 as double, x as double, y as double) 28

## 2.5.2 Properties

### largeArcFlag as Boolean

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The large arc flag.

**Notes:**

Draw longer of the two matching arcs  
(Read and Write property)

### radiusX as double

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The radius x value.

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

### radiusY as double

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The radius y value.

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

### sweepFlag as Boolean

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The sweep flag value.

**Notes:**

Draw arc matching clock-wise rotation.  
(Read and Write property)

#### **x as double**

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The x value.

**Notes:**

For an arc: End-point X  
(Read and Write property)

#### **x1 as double**

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The x1 value.

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

#### **x2 as double**

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The x2 value.

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

#### **xAxisRotation as double**

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The x Axis Rotation value.

**Notes:**

Rotation relative to X axis.  
(Read and Write property)

### **y as double**

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The y value.

**Notes:**

for an arc: End-point Y  
(Read and Write property)

### **y1 as double**

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The y1 value.

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

### **y2 as double**

property from class GMPathArgsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The y2 value.

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

## 2.6 class GMNotInitializedExceptionMBS

class GMNotInitializedExceptionMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The exception raised if you access a method/property in an object and the object was not initialized properly.

**Notes:**

Check the message property for details.  
Subclass of the GMErrorExceptionMBS class.

## 2.7 class GMMutexLockMBS

class GMMutexLockMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The mutex class for GraphicsMagick.

### 2.7.1 Methods

lock

method from class GMMutexLockMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Locks the lock.

**Notes:** Only one thread at a time can get the lock. The other threads will wait when lock is called.

**unlock**

method from class GMMutexLockMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Unlocks the lock.

**2.7.2 Properties****handle as Integer**

property from class GMMutexLockMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The internal object reference.

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

**2.8 class GMGraphicsMBS****class GMGraphicsMBS**

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The class for drawing commands targeting a GMImageMBS.

**Notes:** Please remember that all commands are collected till you call the Draw method.

**2.8.1 Methods**

**Arc(startX as double, startY as double, endX as double, endY as double, startDegrees as double, endDegrees as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw an arc using the stroke color and based on the circle starting at coordinates startX,startY, and ending with coordinates endX,endY, and bounded by the rotational arc startDegrees,endDegrees.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

draw.arc(250, 250, 100, 100,50,300)
draw.Draw

Backdrop=image.CopyPicture
```

**Bezier(values() as GMCoordinateMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a bezier curve using the stroke color and based on the coordinates specified by the coordinates array.

**Circle(originX as double, originY as double, perimX as double, perimY as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a circle using the stroke color and thickness using specified origin and perimeter coordinates.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
```

```

image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a circle
draw.Circle(250, 250, 120, 150)
draw.Draw

Backdrop=image.CopyPicture

```

**Notes:** If a fill color is specified, then the object is filled.

### ClipPath(id as string)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Select a drawing clip path matching id.

### ColorPixel(x as double, y as double, paintMethod as integer)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Color image according to paintMethod.

**Notes:** The point method recolors the target pixel. The replace method recolors any pixel that matches the color of the target pixel. Floodfill recolors any pixel that matches the color of the target pixel and is a neighbor, whereas filltoborder recolors any neighbor pixel that is not the border color. Finally, reset recolors all pixels.

### CompositeImage(x as double, y as double, file as folderitem)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composite current image with contents of specified image, at specified coordinates.

**Notes:** If the `matte` attribute is set to true, then the image composition will consider an alpha channel, or transparency, present in the image file so that non-opaque portions allow part (or all) of the composite image to show through.

See also:

- 2.8.1 CompositeImage(x as double, y as double, image as GImageMBS) 37
- 2.8.1 CompositeImage(x as double, y as double, path as string) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer) 39
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS, CompositeOperator as integer) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string) 41
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer) 42

### CompositeImage(x as double, y as double, image as GImageMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composite current image with contents of specified image, at specified coordinates.

**Notes:** If the `matte` attribute is set to true, then the image composition will consider an alpha channel, or transparency, present in the image file so that non-opaque portions allow part (or all) of the composite image to show through.

See also:

- 2.8.1 CompositeImage(x as double, y as double, file as folderitem) 36
- 2.8.1 CompositeImage(x as double, y as double, path as string) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer) 39
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS, CompositeOperator as integer) 40

- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string) 41
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer) 42

### CompositeImage(x as double, y as double, path as string)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composite current image with contents of specified image, at specified coordinates.

**Notes:** If the matte attribute is set to true, then the image composition will consider an alpha channel, or transparency, present in the image file so that non-opaque portions allow part (or all) of the composite image to show through.

See also:

- 2.8.1 CompositeImage(x as double, y as double, file as folderitem) 36
- 2.8.1 CompositeImage(x as double, y as double, image as GMImageMBS) 37
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer) 39
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GMImageMBS) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GMImageMBS, CompositeOperator as integer) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string) 41
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer) 42

### CompositeImage(x as double, y as double, w as double, h as double, file as folderitem)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composite current image with contents of specified image, rendered with specified width and height, at specified coordinates.

**Notes:** If the matte attribute is set to true, then the image composition will consider an alpha channel, or transparency, present in the image file so that non-opaque portions allow part (or all) of the composite image to show through. If the specified width or height is zero, then the image is composited at its natural

size, without enlargement or reduction.

See also:

- 2.8.1 CompositeImage(x as double, y as double, file as folderitem) 36
- 2.8.1 CompositeImage(x as double, y as double, image as GMImageMBS) 37
- 2.8.1 CompositeImage(x as double, y as double, path as string) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer) 39
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GMImageMBS) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GMImageMBS, CompositeOperator as integer) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string) 41
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer) 42

**CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composite current image with contents of specified image, rendered with specified width and height, using specified composition algorithm, at specified coordinates.

**Notes:** If the matte attribute is set to true, then the image composition will consider an alpha channel, or transparency, present in the image file so that non-opaque portions allow part (or all) of the composite image to show through. If the specified width or height is zero, then the image is composited at its natural size, without enlargement or reduction.

See also:

- 2.8.1 CompositeImage(x as double, y as double, file as folderitem) 36
- 2.8.1 CompositeImage(x as double, y as double, image as GMImageMBS) 37
- 2.8.1 CompositeImage(x as double, y as double, path as string) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GMImageMBS) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GMImageMBS, CompositeOperator as integer) 40

- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string) 41
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer) 42

### CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composite current image with contents of specified image, rendered with specified width and height, at specified coordinates.

**Notes:** If the matte attribute is set to true, then the image composition will consider an alpha channel, or transparency, present in the image file so that non-opaque portions allow part (or all) of the composite image to show through. If the specified width or height is zero, then the image is composited at its natural size, without enlargement or reduction.

See also:

- 2.8.1 CompositeImage(x as double, y as double, file as folderitem) 36
- 2.8.1 CompositeImage(x as double, y as double, image as GImageMBS) 37
- 2.8.1 CompositeImage(x as double, y as double, path as string) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer) 39
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS, CompositeOperator as integer) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string) 41
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer) 42

### CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS, CompositeOperator as integer)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composite current image with contents of specified image, rendered with specified width and height, using specified composition algorithm, at specified coordinates.

**Notes:** If the `matte` attribute is set to `true`, then the image composition will consider an alpha channel, or transparency, present in the image file so that non-opaque portions allow part (or all) of the composite image to show through. If the specified width or height is zero, then the image is composited at its natural size, without enlargement or reduction.

See also:

- 2.8.1 CompositeImage(x as double, y as double, file as folderitem) 36
- 2.8.1 CompositeImage(x as double, y as double, image as GImageMBS) 37
- 2.8.1 CompositeImage(x as double, y as double, path as string) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer) 39
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string) 41
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer) 42

### CompositeImage(x as double, y as double, w as double, h as double, path as string)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composite current image with contents of specified image, rendered with specified width and height, at specified coordinates.

**Notes:** If the `matte` attribute is set to `true`, then the image composition will consider an alpha channel, or transparency, present in the image file so that non-opaque portions allow part (or all) of the composite image to show through. If the specified width or height is zero, then the image is composited at its natural size, without enlargement or reduction.

See also:

- 2.8.1 CompositeImage(x as double, y as double, file as folderitem) 36
- 2.8.1 CompositeImage(x as double, y as double, image as GImageMBS) 37
- 2.8.1 CompositeImage(x as double, y as double, path as string) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer) 39

- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS, CompositeOperator as integer) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer) 42

### CompositeImage(x as double, y as double, w as double, h as double, path as string, CompositeOperator as integer)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composite current image with contents of specified image, rendered with specified width and height, using specified composition algorithm, at specified coordinates.

**Notes:** If the matte attribute is set to true, then the image composition will consider an alpha channel, or transparency, present in the image file so that non-opaque portions allow part (or all) of the composite image to show through. If the specified width or height is zero, then the image is composited at its natural size, without enlargement or reduction.

See also:

- 2.8.1 CompositeImage(x as double, y as double, file as folderitem) 36
- 2.8.1 CompositeImage(x as double, y as double, image as GImageMBS) 37
- 2.8.1 CompositeImage(x as double, y as double, path as string) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem) 38
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, file as folderitem, CompositeOperator as integer) 39
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, image as GImageMBS, CompositeOperator as integer) 40
- 2.8.1 CompositeImage(x as double, y as double, w as double, h as double, path as string) 41

### Constructor(image as GImageMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new object referencing the given image.

**DashArray(values() as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify the pattern of dashes and gaps used to stroke paths.

**Notes:** The strokeDashArray represents a zero-terminated array of numbers that specify the lengths of alternating dashes and gaps in pixels. If an odd number of values is provided, then the list of values is repeated to yield an even number of values. A typical strokeDashArray array might contain the members 5 3 2 0, where the zero value indicates the end of the pattern array.

**DashOffset(offset as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify the distance into the dash pattern to start the dash.

**Notes:** See documentation on SVG's stroke-dashoffset property for usage details.

**Draw**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws all draw commands collected.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)
```

```
image.strokeWidth = 5
```

```
dim draw as GMGraphicsMBS = image.Graphics
```

```
draw.StrokeColor new GMColorRGBMBS("red")
draw.Line(100,100,400,400)
draw.Draw
```

```
Backdrop=image.CopyPicture
```

## DrawPath

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw on image using vector path.

## Ellipse(originX as double, originY as double, perimX as double, perimY as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw an ellipse using the stroke color and thickness, specified origin, x & y radius, as well as specified start and end of arc in degrees.

**Notes:** If a fill color is specified, then the object is filled.

## FillColor(c as GMColorMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify drawing object fill color.

## FillOpacity(opacity as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify opacity to use when drawing using fill color.

**FillRule(fillRule as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify the algorithm which is to be used to determine what parts of the canvas are included inside the shape.

**Notes:** See documentation on SVG's fill-rule property for usage details.

**Font(fontname as string)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify font name to use when drawing text.

See also:

- 2.8.1 Font(fontname as string, StyleType as integer, weight as integer, StretchType as integer) 45

**Font(fontname as string, StyleType as integer, weight as integer, StretchType as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Sets the font.

**Notes:** Specify font family, style, weight (one of the set { 100 — 200 — 300 — 400 — 500 — 600 — 700 — 800 — 900 } with 400 being the normal size), and stretch to be used to select the font used when drawing text. Wildcard matches may be applied to style via the AnyStyle enumeration, applied to weight if weight is zero, and applied to stretch via the AnyStretch enumeration.

See also:

- 2.8.1 Font(fontname as string) 45

**Gravity(GravityType as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify text positioning gravity.

**Line(startX as double, startY as double, endX as double, endY as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a line using stroke color and thickness using starting and ending coordinates

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a line
draw.Line(100,100,400,400)
draw.Draw

Backdrop=image.CopyPicture
```

**Matte(x as double, y as double, paintMethod as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Change the pixel matte value to transparent.

**Notes:** The point method changes the matte value of the target pixel. The replace method changes the matte value of any pixel that matches the color of the target pixel. Floodfill changes the matte value of any pixel that matches the color of the target pixel and is a neighbor, whereas filltoborder changes the matte value of any neighbor pixel that is not the border color, Finally reset changes the matte value of all pixels.

**MiterLimit(miterlimit as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify miter limit.

**Notes:** When two line segments meet at a sharp angle and miter joins have been specified for 'lineJoin', it is possible for the miter to extend far beyond the thickness of the line stroking the path. The miterLimit' imposes a limit on the ratio of the miter length to the 'lineWidth'. The default value of this parameter is 4.

**PathArcAbs(c as GMPPathArgsMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws an elliptical arc from the current point to (x, y).

**Notes:**

The size and orientation of the ellipse are defined by two radii (radiusX, radiusY) and an xAxisRotation, which indicates how the ellipse as a whole is rotated relative to the current coordinate system. The center (cx, cy) of the ellipse is calculated automatically to satisfy the constraints imposed by the other parameters. largeArcFlag and sweepFlag contribute to the automatic calculations and help determine how the arc is drawn. If largeArcFlag is true then draw the larger of the available arcs. If sweepFlag is true, then draw the arc matching a clock-wise rotation.

In the GMPPathArgsMBS, set the following properties: radiusX, radiusY, xAxisRotation, bool largeArcFlag, sweepFlag, x and y.

See also:

- 2.8.1 PathArcAbs(c()) as GMPPathArgsMBS 47
- 2.8.1 PathArcAbs(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double) 48

**PathArcAbs(c() as GMPPathArgsMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws an elliptical arc from the current point to (x, y).

**Notes:**

The size and orientation of the ellipse are defined by two radii (radiusX, radiusY) and an xAxisRotation, which indicates how the ellipse as a whole is rotated relative to the current coordinate system. The center (cx, cy) of the ellipse is calculated automatically to satisfy the constraints imposed by the other parameters. largeArcFlag and sweepFlag contribute to the automatic calculations and help determine how the arc is drawn. If largeArcFlag is true then draw the larger of the available arcs. If sweepFlag is true, then draw the arc matching a clock-wise rotation.

In the GMPPathArgsMBS, set the following properties: radiusX, radiusY, xAxisRotation, bool largeArcFlag, sweepFlag, x and y.

See also:

- 2.8.1 PathArcAbs(c as GMPPathArgsMBS) 47
- 2.8.1 PathArcAbs(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double) 48

**PathArcAbs(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws an elliptical arc from the current point to (x, y).

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMCColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMCColorRGBMBS("red") // Outline color
image.fillColor = new GMCColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw an arc

draw.PathMovetoAbs 100,100
draw.PathArcAbs(100,100, 0, false, false, 200,200)
draw.DrawPath
draw.Draw
```

Backdrop=image.CopyPicture

**Notes:** The size and orientation of the ellipse are defined by two radii (radiusX, radiusY) and an xAxisRotation, which indicates how the ellipse as a whole is rotated relative to the current coordinate system. The center (cx, cy) of the ellipse is calculated automatically to satisfy the constraints imposed by the other parameters. largeArcFlag and sweepFlag contribute to the automatic calculations and help determine how the arc is drawn. If largeArcFlag is true then draw the larger of the available arcs. If sweepFlag is true, then draw the arc matching a clock-wise rotation.

See also:

- 2.8.1 PathArcAbs(c as GMPPathArgsMBS) 47
- 2.8.1 PathArcAbs(c()) as GMPPathArgsMBS) 47

### PathArcRel(c as GMPPathArgsMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws an elliptical arc from the current point to (x, y).

**Notes:**

The size and orientation of the ellipse are defined by two radii (radiusX, radiusY) and an xAxisRotation, which indicates how the ellipse as a whole is rotated relative to the current coordinate system. The center (cx, cy) of the ellipse is calculated automatically to satisfy the constraints imposed by the other parameters. largeArcFlag and sweepFlag contribute to the automatic calculations and help determine how the arc is drawn. If largeArcFlag is true then draw the larger of the available arcs. If sweepFlag is true, then draw the arc matching a clock-wise rotation.

In the GMPPathArgsMBS, set the following properties: radiusX, radiusY, xAxisRotation, bool largeArcFlag, sweepFlag, x and y.

See also:

- 2.8.1 PathArcRel(c()) as GMPPathArgsMBS) 50
- 2.8.1 PathArcRel(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double) 50

**PathArcRel(c() as GMPPathArgsMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws an elliptical arc from the current point to (x, y).

**Notes:**

The size and orientation of the ellipse are defined by two radii (radiusX, radiusY) and an xAxisRotation, which indicates how the ellipse as a whole is rotated relative to the current coordinate system. The center (cx, cy) of the ellipse is calculated automatically to satisfy the constraints imposed by the other parameters. largeArcFlag and sweepFlag contribute to the automatic calculations and help determine how the arc is drawn. If largeArcFlag is true then draw the larger of the available arcs. If sweepFlag is true, then draw the arc matching a clock-wise rotation.

In the GMPPathArgsMBS, set the following properties: radiusX, radiusY, xAxisRotation, bool largeArcFlag, sweepFlag, x and y.

See also:

- 2.8.1 PathArcRel(c as GMPPathArgsMBS) 49
- 2.8.1 PathArcRel(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double) 50

**PathArcRel(radiusX as double, radiusY as double, xAxisRotation as double, largeArcFlag as boolean, sweepFlag as Boolean, x as double, y as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws an elliptical arc from the current point to (x, y).

**Notes:** The size and orientation of the ellipse are defined by two radii (radiusX, radiusY) and an xAxisRotation, which indicates how the ellipse as a whole is rotated relative to the current coordinate system. The center (cx, cy) of the ellipse is calculated automatically to satisfy the constraints imposed by the other parameters. largeArcFlag and sweepFlag contribute to the automatic calculations and help determine how the arc is drawn. If largeArcFlag is true then draw the larger of the available arcs. If sweepFlag is true, then draw the arc matching a clock-wise rotation.

See also:

- 2.8.1 PathArcRel(c as GMPPathArgsMBS) 49
- 2.8.1 PathArcRel(c() as GMPPathArgsMBS) 50

**PathClosePath**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Close the current subpath by drawing a straight line from the current point to current subpath's most recent starting point (usually, the most recent moveto point).

**PathCurvetoAbs(c as GMPPathArgsMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y) using (x1,y1) as the control point at the beginning of the curve and (x2,y2) as the control point at the end of the curve.

**Notes:**

PathCurvetoAbs indicates that absolutecoordinates will follow; PathCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x2, y2, x and y.  
See also:

- 2.8.1 PathCurvetoAbs(c() as GMPPathArgsMBS) 51
- 2.8.1 PathCurvetoAbs(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double) 52

**PathCurvetoAbs(c() as GMPPathArgsMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y) using (x1,y1) as the control point at the beginning of the curve and (x2,y2) as the control point at the end of the curve.

**Notes:**

PathCurvetoAbs indicates that absolutecoordinates will follow; PathCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the

command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x2, y2, x and y.  
See also:

- 2.8.1 PathCurvetoAbs(c as GMPPathArgsMBS) 51
- 2.8.1 PathCurvetoAbs(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double) 52

### **PathCurvetoAbs(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y) using (x1,y1) as the control point at the beginning of the curve and (x2,y2) as the control point at the end of the curve.

**Notes:** PathCurvetoAbs indicates that absolute coordinates will follow; PathCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

See also:

- 2.8.1 PathCurvetoAbs(c as GMPPathArgsMBS) 51
- 2.8.1 PathCurvetoAbs(c() as GMPPathArgsMBS) 51

### **PathCurvetoRel(c as GMPPathArgsMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y) using (x1,y1) as the control point at the beginning of the curve and (x2,y2) as the control point at the end of the curve.

**Notes:**

PathCurvetoAbs indicates that absolute coordinates will follow; PathCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x2, y2, x and y.  
See also:

- 2.8.1 PathCurvetoRel(c() as GMPPathArgsMBS) 53
- 2.8.1 PathCurvetoRel(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double) 53

### PathCurvetoRel(c() as GMPPathArgsMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y) using (x1,y1) as the control point at the beginning of the curve and (x2,y2) as the control point at the end of the curve.

**Notes:**

PathCurvetoAbs indicates that absolute coordinates will follow; PathCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x2, y2, x and y.  
See also:

- 2.8.1 PathCurvetoRel(c as GMPPathArgsMBS) 52
- 2.8.1 PathCurvetoRel(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double) 53

### PathCurvetoRel(x1 as double, y1 as double, x2 as double, y2 as double, x as double, y as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y) using (x1,y1) as the control point at the beginning of the curve and (x2,y2) as the control point at the end of the curve.

**Notes:** PathCurvetoAbs indicates that absolute coordinates will follow; PathCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

See also:

- 2.8.1 PathCurvetoRel(c as GMPATHArgsMBS) 52
- 2.8.1 PathCurvetoRel(c() as GMPATHArgsMBS) 53

### PathLinetoAbs(c as GMCoordinateMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draw a line from the current point to the given coordinate which becomes the new current point. PathLinetoAbs indicates that absolute coordinates are used; PathLinetoRel indicates that relative coordinates are used. A number of coordinates pairs may be specified in a list to draw a polyline. At the end of the command, the new current point is set to the final set of coordinates provided.

See also:

- 2.8.1 PathLinetoAbs(c() as GMCoordinateMBS) 54
- 2.8.1 PathLinetoAbs(x as double, y as double) 54

### PathLinetoAbs(c() as GMCoordinateMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draw a line from the current point to the given coordinate which becomes the new current point. PathLinetoAbs indicates that absolute coordinates are used; PathLinetoRel indicates that relative coordinates are used. A number of coordinates pairs may be specified in a list to draw a polyline. At the end of the command, the new current point is set to the final set of coordinates provided.

See also:

- 2.8.1 PathLinetoAbs(c as GMCoordinateMBS) 54
- 2.8.1 PathLinetoAbs(x as double, y as double) 54

### PathLinetoAbs(x as double, y as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draw a line from the current point to the given coordinate which becomes the new current point. PathLinetoAbs indicates that absolute coordinates are used; PathLinetoRel indicates that relative coordinates are used. A number of coordinates pairs may be specified in a list to draw a polyline. At the end of the command, the new current point is set to the final set of coordinates provided.

See also:

- 2.8.1 PathLinetoAbs(c as GMCoordinateMBS) 54
- 2.8.1 PathLinetoAbs(c() as GMCoordinateMBS) 54

### PathLinetoHorizontalAbs(v as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draws a horizontal line from the current point (cpx, cpy) to (x, cpy). PathLinetoHorizontalAbs indicates that absolute coordinates are supplied; PathLinetoHorizontalRel indicates that relative coordinates are supplied. At the end of the command, the new current point becomes (x, cpy) for the final value of x.

### PathLinetoHorizontalRel(v as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draws a horizontal line from the current point (cpx, cpy) to (x, cpy). PathLinetoHorizontalAbs indicates that absolute coordinates are supplied; PathLinetoHorizontalRel indicates that relative coordinates are supplied. At the end of the command, the new current point becomes (x, cpy) for the final value of x.

### PathLinetoRel(c as GMCoordinateMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draw a line from the current point to the given coordinate which becomes the new current point.

`PathLinetoAbs` indicates that absolute coordinates are used; `PathLinetoRel` indicates that relative coordinates are used. A number of coordinates pairs may be specified in a list to draw a polyline. At the end of the command, the new current point is set to the final set of coordinates provided.

See also:

- 2.8.1 `PathLinetoRel(c)` as `GMCoordinateMBS`) 56
- 2.8.1 `PathLinetoRel(x as double, y as double)` 56

### **`PathLinetoRel(c)` as `GMCoordinateMBS`)**

method from class `GMGraphicsMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draw a line from the current point to the given coordinate which becomes the new current point. `PathLinetoAbs` indicates that absolute coordinates are used; `PathLinetoRel` indicates that relative coordinates are used. A number of coordinates pairs may be specified in a list to draw a polyline. At the end of the command, the new current point is set to the final set of coordinates provided.

See also:

- 2.8.1 `PathLinetoRel(c as GMCoordinateMBS)` 55
- 2.8.1 `PathLinetoRel(x as double, y as double)` 56

### **`PathLinetoRel(x as double, y as double)`**

method from class `GMGraphicsMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draw a line from the current point to the given coordinate which becomes the new current point. `PathLinetoAbs` indicates that absolute coordinates are used; `PathLinetoRel` indicates that relative coordinates are used. A number of coordinates pairs may be specified in a list to draw a polyline. At the end of the command, the new current point is set to the final set of coordinates provided.

See also:

- 2.8.1 `PathLinetoRel(c as GMCoordinateMBS)` 55
- 2.8.1 `PathLinetoRel(c)` as `GMCoordinateMBS`) 56

**PathLinetoVerticalAbs(v as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draws a vertical line from the current point (cpx, cpy) to (cpx, y). PathLinetoVerticalAbs indicates that absolute coordinates are supplied; PathLinetoVerticalRel indicates that relative coordinates are supplied. At the end of the command, the new current point becomes (cpx, y) for the final value of y.

**PathLinetoVerticalRel(v as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The various "lineto" commands draw straight lines from the current point to a new point.

**Notes:** Draws a vertical line from the current point (cpx, cpy) to (cpx, y). PathLinetoVerticalAbs indicates that absolute coordinates are supplied; PathLinetoVerticalRel indicates that relative coordinates are supplied. At the end of the command, the new current point becomes (cpx, y) for the final value of y.

**PathMovetoAbs(c as GMCoordinateMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The "moveto" commands establish a new current point.

**Notes:**

The effect is as if the "pen" were lifted and moved to a new location. A path data segment must begin with either one of the "moveto" commands or one of the "arc" commands. Subsequent "moveto" commands (i.e., when the "moveto" is not the first command) represent the start of a new subpath.

Start a new sub-path at the given coordinate. PathMovetoAbs indicates that absolute coordinates will follow; PathMovetoRel indicates that relative coordinates will follow. If a relative moveto appears as the first element of the path, then it is treated as a pair of absolute coordinates. If a moveto is followed by multiple pairs of coordinates, the subsequent pairs are treated as implicit lineto commands.

See also:

- 2.8.1 PathMovetoAbs(x as double, y as double)

58

### PathMovetoAbs(x as double, y as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The "moveto" commands establish a new current point.

**Notes:**

The effect is as if the "pen" were lifted and moved to a new location. A path data segment must begin with either one of the "moveto" commands or one of the "arc" commands. Subsequent "moveto" commands (i.e., when the "moveto" is not the first command) represent the start of a new subpath.

Start a new sub-path at the given coordinate. PathMovetoAbs indicates that absolute coordinates will follow; PathMovetoRel indicates that relative coordinates will follow. If a relative moveto appears as the first element of the path, then it is treated as a pair of absolute coordinates. If a moveto is followed by multiple pairs of coordinates, the subsequent pairs are treated as implicit lineto commands.

See also:

- 2.8.1 PathMovetoAbs(c as GMCoordinateMBS)

57

### PathMovetoRel(c as GMCoordinateMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The "moveto" commands establish a new current point.

**Notes:**

The effect is as if the "pen" were lifted and moved to a new location. A path data segment must begin with either one of the "moveto" commands or one of the "arc" commands. Subsequent "moveto" commands (i.e., when the "moveto" is not the first command) represent the start of a new subpath.

Start a new sub-path at the given coordinate. PathMovetoAbs indicates that absolute coordinates will follow; PathMovetoRel indicates that relative coordinates will follow. If a relative moveto appears as the first element of the path, then it is treated as a pair of absolute coordinates. If a moveto is followed by multiple pairs of coordinates, the subsequent pairs are treated as implicit lineto commands.

See also:

- 2.8.1 PathMovetoRel(x as double, y as double)

59

### PathMovetoRel(x as double, y as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The "moveto" commands establish a new current point.

**Notes:**

The effect is as if the "pen" were lifted and moved to a new location. A path data segment must begin with either one of the "moveto" commands or one of the "arc" commands. Subsequent "moveto" commands (i.e., when the "moveto" is not the first command) represent the start of a new subpath.

Start a new sub-path at the given coordinate. PathMovetoAbs indicates that absolute coordinates will follow; PathMovetoRel indicates that relative coordinates will follow. If a relative moveto appears as the first element of the path, then it is treated as a pair of absolute coordinates. If a moveto is followed by multiple pairs of coordinates, the subsequent pairs are treated as implicit lineto commands.

See also:

- 2.8.1 PathMovetoRel(c as GMCoordinateMBS)

58

### PathQuadraticCurvetoAbs(c as GMPATHArgsMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y) using (x1,y1) as the control point.

**Notes:**

PathQuadraticCurvetoAbs indicates that absolute coordinates will follow; PathQuadraticCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPATHArgsMBS object, set the following properties: x1, y1, x and y.

See also:

- 2.8.1 PathQuadraticCurvetoAbs(c() as GMPATHArgsMBS)

60

- 2.8.1 PathQuadraticCurvetoAbs(x1 as double, y1 as double, x as double, y as double) 60

### PathQuadraticCurvetoAbs(c() as GMPPathArgsMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y) using (x1,y1) as the control point.

**Notes:**

PathQuadraticCurvetoAbs indicates that absolute coordinates will follow; PathQuadraticCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x and y.  
See also:

- 2.8.1 PathQuadraticCurvetoAbs(c as GMPPathArgsMBS) 59
- 2.8.1 PathQuadraticCurvetoAbs(x1 as double, y1 as double, x as double, y as double) 60

### PathQuadraticCurvetoAbs(x1 as double, y1 as double, x as double, y as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y) using (x1,y1) as the control point.

**Notes:** PathQuadraticCurvetoAbs indicates that absolute coordinates will follow; PathQuadraticCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

See also:

- 2.8.1 PathQuadraticCurvetoAbs(c as GMPPathArgsMBS) 59
- 2.8.1 PathQuadraticCurvetoAbs(c() as GMPPathArgsMBS) 60

**PathQuadraticCurvetoRel(c as GMPPathArgsMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y) using (x1,y1) as the control point.  
**Notes:**

PathQuadraticCurvetoAbs indicates that absolute coordinates will follow; PathQuadraticCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x and y.

See also:

- 2.8.1 PathQuadraticCurvetoRel(c() as GMPPathArgsMBS) 61
- 2.8.1 PathQuadraticCurvetoRel(x1 as double, y1 as double, x as double, y as double) 62

**PathQuadraticCurvetoRel(c() as GMPPathArgsMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y) using (x1,y1) as the control point.  
**Notes:**

PathQuadraticCurvetoAbs indicates that absolute coordinates will follow; PathQuadraticCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x and y.

See also:

- 2.8.1 PathQuadraticCurvetoRel(c as GMPPathArgsMBS) 61
- 2.8.1 PathQuadraticCurvetoRel(x1 as double, y1 as double, x as double, y as double) 62

**PathQuadraticCurvetoRel(x1 as double, y1 as double, x as double, y as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y) using (x1,y1) as the control point.

**Notes:** PathQuadraticCurvetoAbs indicates that absolute coordinates will follow; PathQuadraticCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

See also:

- 2.8.1 PathQuadraticCurvetoRel(c as GMPPathArgsMBS) 61
- 2.8.1 PathQuadraticCurvetoRel(c() as GMPPathArgsMBS) 61

**PathSmoothCurvetoAbs(c as GMCoordinateMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y).

**Notes:**

The first control point is assumed to be the reflection of the second control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not an PathCurvetoAbs, PathCurvetoRel, PathSmoothCurvetoAbs or PathSmoothCurvetoRel, assume the first control point is coincident with the current point.) (x2,y2) is the second control point (i.e., the control point at the end of the curve). PathSmoothCurvetoAbs indicates that absolute coordinates will follow; PathSmoothCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x2, y2, x and y.

See also:

- 2.8.1 PathSmoothCurvetoAbs(c() as GMCoordinateMBS) 63
- 2.8.1 PathSmoothCurvetoAbs(x as double, y as double) 63

**PathSmoothCurvetoAbs(c() as GMCoordinateMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y).

**Notes:**

The first control point is assumed to be the reflection of the second control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not an PathCurvetoAbs, PathCurvetoRel, PathSmoothCurvetoAbs or PathSmoothCurvetoRel, assume the first control point is coincident with the current point.) (x2,y2) is the second control point (i.e., the control point at the end of the curve). PathSmoothCurvetoAbs indicates that absolute coordinates will follow; PathSmoothCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x2, y2, x and y.

See also:

- 2.8.1 PathSmoothCurvetoAbs(c as GMCoordinateMBS) 62
- 2.8.1 PathSmoothCurvetoAbs(x as double, y as double) 63

**PathSmoothCurvetoAbs(x as double, y as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y).

**Notes:** The first control point is assumed to be the reflection of the second control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not an PathCurvetoAbs, PathCurvetoRel, PathSmoothCurvetoAbs or PathSmoothCurvetoRel, assume the first control point is coincident with the current point.) (x2,y2) is the second control point (i.e., the control point at the end of the curve). PathSmoothCurvetoAbs indicates that absolute coordinates will follow; PathSmoothCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

See also:

- 2.8.1 PathSmoothCurvetoAbs(c as GMCoordinateMBS) 62
- 2.8.1 PathSmoothCurvetoAbs(c() as GMCoordinateMBS) 63

**PathSmoothCurvetoRel(c as GMCoordinateMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y).

**Notes:**

The first control point is assumed to be the reflection of the second control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not an PathCurvetoAbs, PathCurvetoRel, PathSmoothCurvetoAbs or PathSmoothCurvetoRel, assume the first control point is coincident with the current point.) (x2,y2) is the second control point (i.e., the control point at the end of the curve). PathSmoothCurvetoAbs indicates that absolute coordinates will follow; PathSmoothCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x2, y2, x and y.

See also:

- 2.8.1 PathSmoothCurvetoRel(c() as GMCoordinateMBS) 64
- 2.8.1 PathSmoothCurvetoRel(x as double, y as double) 65

**PathSmoothCurvetoRel(c() as GMCoordinateMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y).

**Notes:**

The first control point is assumed to be the reflection of the second control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not an PathCurvetoAbs, PathCurvetoRel, PathSmoothCurvetoAbs or PathSmoothCurvetoRel, assume the first control point is coincident with the current point.) (x2,y2) is the second control point (i.e., the control point at the end of the curve). PathSmoothCurvetoAbs indicates that absolute coordinates will follow; PathSmoothCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x2, y2, x and y.

See also:

- 2.8.1 PathSmoothCurvetoRel(c as GMCoordinateMBS) 64
- 2.8.1 PathSmoothCurvetoRel(x as double, y as double) 65

### PathSmoothCurvetoRel(x as double, y as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a cubic Bzier curve from the current point to (x,y).

**Notes:** The first control point is assumed to be the reflection of the second control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not an PathCurvetoAbs, PathCurvetoRel, PathSmoothCurvetoAbs or PathSmoothCurvetoRel, assume the first control point is coincident with the current point.) (x2,y2) is the second control point (i.e., the control point at the end of the curve). PathSmoothCurvetoAbs indicates that absolute coordinates will follow; PathSmoothCurvetoRel indicates that relative coordinates will follow. Multiple sets of coordinates may be specified to draw a polybezier. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

See also:

- 2.8.1 PathSmoothCurvetoRel(c as GMCoordinateMBS) 64
- 2.8.1 PathSmoothCurvetoRel(c() as GMCoordinateMBS) 64

### PathSmoothQuadraticCurvetoAbs(c as GMCoordinateMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y).

**Notes:**

The control point is assumed to be the reflection of the control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not a PathQuadraticCurvetoAbs, PathQuadraticCurvetoRel, PathSmoothQuadraticCurvetoAbs or PathSmoothQuadraticCurvetoRel, assume the control point is coincident with the current point.) PathSmoothQuadraticCurvetoAbs indicates that absolute coordinates will follow; PathSmoothQuadraticCurvetoRel indicates that relative coordinates will follow. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the `GMPathArgsMBS` object, set the following properties: `x1`, `y1`, `x` and `y`.  
See also:

- 2.8.1 `PathSmoothQuadraticCurvetoAbs(c()` as `GMCoordinateMBS`) 66
- 2.8.1 `PathSmoothQuadraticCurvetoAbs(x` as double, `y` as double) 66

### **PathSmoothQuadraticCurvetoAbs(c() as GMCoordinateMBS)**

method from class `GMGraphicsMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y).

**Notes:**

The control point is assumed to be the reflection of the control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not a `PathQuadraticCurvetoAbs`, `PathQuadraticCurvetoRel`, `PathSmoothQuadraticCurvetoAbs` or `PathSmoothQuadraticCurvetoRel`, assume the control point is coincident with the current point.) `PathSmoothQuadraticCurvetoAbs` indicates that absolute coordinates will follow; `PathSmoothQuadraticCurvetoRel` indicates that relative coordinates will follow. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the `GMPathArgsMBS` object, set the following properties: `x1`, `y1`, `x` and `y`.  
See also:

- 2.8.1 `PathSmoothQuadraticCurvetoAbs(c` as `GMCoordinateMBS`) 65
- 2.8.1 `PathSmoothQuadraticCurvetoAbs(x` as double, `y` as double) 66

### **PathSmoothQuadraticCurvetoAbs(x as double, y as double)**

method from class `GMGraphicsMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y).

**Notes:**

The control point is assumed to be the reflection of the control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not

a PathQuadraticCurvetoAbs, PathQuadraticCurvetoRel, PathSmoothQuadraticCurvetoAbs or PathSmoothQuadraticCurvetoRel, assume the control point is coincident with the current point.) PathSmoothQuadraticCurvetoAbs indicates that absolute coordinates will follow; PathSmoothQuadraticCurvetoRel indicates that relative coordinates will follow. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

See also:

- 2.8.1 PathSmoothQuadraticCurvetoAbs(c as GMCoordinateMBS) 65
- 2.8.1 PathSmoothQuadraticCurvetoAbs(c()) as GMCoordinateMBS) 66

### PathSmoothQuadraticCurvetoRel(c as GMCoordinateMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y).

**Notes:**

The control point is assumed to be the reflection of the control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not a PathQuadraticCurvetoAbs, PathQuadraticCurvetoRel, PathSmoothQuadraticCurvetoAbs or PathSmoothQuadraticCurvetoRel, assume the control point is coincident with the current point.) PathSmoothQuadraticCurvetoAbs indicates that absolute coordinates will follow; PathSmoothQuadraticCurvetoRel indicates that relative coordinates will follow. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the GMPPathArgsMBS object, set the following properties: x1, y1, x and y.

See also:

- 2.8.1 PathSmoothQuadraticCurvetoRel(c()) as GMCoordinateMBS) 67
- 2.8.1 PathSmoothQuadraticCurvetoRel(x as double, y as double) 68

### PathSmoothQuadraticCurvetoRel(c() as GMCoordinateMBS)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y).

**Notes:**

The control point is assumed to be the reflection of the control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not a `PathQuadraticCurvetoAbs`, `PathQuadraticCurvetoRel`, `PathSmoothQuadraticCurvetoAbs` or `PathSmoothQuadraticCurvetoRel`, assume the control point is coincident with the current point.) `PathSmoothQuadraticCurvetoAbs` indicates that absolute coordinates will follow; `PathSmoothQuadraticCurvetoRel` indicates that relative coordinates will follow. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

In the `GMPathArgsMBS` object, set the following properties: `x1`, `y1`, `x` and `y`.  
See also:

- 2.8.1 `PathSmoothQuadraticCurvetoRel(c as GMCoordinateMBS)` 67
- 2.8.1 `PathSmoothQuadraticCurvetoRel(x as double, y as double)` 68

### **PathSmoothQuadraticCurvetoRel(x as double, y as double)**

method from class `GMGraphicsMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draws a quadratic Bzier curve from the current point to (x,y).

**Notes:**

The control point is assumed to be the reflection of the control point on the previous command relative to the current point. (If there is no previous command or if the previous command was not a `PathQuadraticCurvetoAbs`, `PathQuadraticCurvetoRel`, `PathSmoothQuadraticCurvetoAbs` or `PathSmoothQuadraticCurvetoRel`, assume the control point is coincident with the current point.) `PathSmoothQuadraticCurvetoAbs` indicates that absolute coordinates will follow; `PathSmoothQuadraticCurvetoRel` indicates that relative coordinates will follow. At the end of the command, the new current point becomes the final (x,y) coordinate pair used in the polybezier.

See also:

- 2.8.1 `PathSmoothQuadraticCurvetoRel(c as GMCoordinateMBS)` 67
- 2.8.1 `PathSmoothQuadraticCurvetoRel(c() as GMCoordinateMBS)` 67

### **Point(x as double, y as double)**

method from class `GMGraphicsMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a point using stroke color and thickness at coordinate.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.fillColor = new GMColorRGBMBS("red") // set color

dim draw as GMGraphicsMBS = image.Graphics

// draw cross with pixels
for x as integer = 240 to 260
draw.Point(x, 250)
next
for y as integer = 240 to 260
draw.Point(250,y)
next
draw.Draw

Backdrop=image.CopyPicture
```

**PointSize(pointSize as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Set font point size.

**Polygon(values() as GMCoordinateMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw an arbitrary polygon using stroke color and thickness consisting of three or more coordinates contained in an array.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
```

```

dim image as new GMImageMBS(g, c)

image.fillColor = new GMColorRGBMBS("red") // set color
image.strokeColor = new GMColorRGBMBS("green") // set color

dim draw as GMGraphicsMBS = image.Graphics
dim coordinates(-1) as GMCoordinateMBS

coordinates.Append new GMCoordinateMBS(70,70)
coordinates.Append new GMCoordinateMBS(100,340)
coordinates.Append new GMCoordinateMBS(380,200)
coordinates.Append new GMCoordinateMBS(70,70)

draw.Polygon coordinates
draw.Draw

Backdrop=image.CopyPicture

```

**Notes:** If a fill color is specified, then the object is filled.

### **Polyline(values() as GMCoordinateMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw an arbitrary polyline using stroke color and thickness consisting of three or more coordinates contained in an array.

#### **Example:**

```

dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("green") // set color

dim draw as GMGraphicsMBS = image.Graphics
dim coordinates(-1) as GMCoordinateMBS

coordinates.Append new GMCoordinateMBS(70,70)
coordinates.Append new GMCoordinateMBS(100,340)
coordinates.Append new GMCoordinateMBS(380,200)

```

```
draw.Polyline coordinates
draw.Draw
```

```
Backdrop=image.CopyPicture
```

**Notes:** If a fill color is specified, then the object is filled.

### PopClipPath

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Pop (terminate) clip path definition started by PushClipPath.

### PopGraphicContext

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Pop Graphic Context.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorMBS() // transparent fillcolor
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a Rectangle
draw.PushGraphicContext
draw.Translation(250,250)
draw.Rotation(50)
draw.Rectangle(0, 0, 100, 100) // rotated
draw.PopGraphicContext
draw.Rectangle(0, 0, 100, 100) // not rotated
```

draw.Draw

Backdrop=image.CopyPicture

**Notes:** Removing the current graphic context from the graphic context stack restores the options to the values they had prior to the preceding PushGraphicContext operation.

### PopPattern

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Terminate a pattern definition started via PushPattern.

### PushClipPath(id as string)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Push (create) clip path definition with id.

**Notes:** Clip patch definition consists of subsequent drawing commands, terminated by PopClipPath.

### PushGraphicContext

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Push Graphic Context.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)
```

```
image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorMBS() // transparent fillcolor
```

```

image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a Rectangle
draw.PushGraphicContext
draw.Translation(250,250)
draw.Rotation(50)
draw.Rectangle(0, 0, 100, 100) // rotated
draw.PopGraphicContext
draw.Rectangle(0, 0, 100, 100) // not rotated
draw.Draw

Backdrop=image.CopyPicture

```

**Notes:** When a graphic context is pushed, options set after the context is pushed (such as coordinate transformations, color settings, etc.) are saved to a new graphic context. This allows related options to be saved on a graphic context "stack" in order to support hierarchical nesting of options. When PopGraphicContext is used to pop the current graphic context, the options in effect during the last PushGraphicContext operation are restored.

#### **PushPattern(id as string, x as integer, y as integer, width as integer, height as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Start a pattern definition with arbitrary pattern name specified by id, pattern offset specified by x and y, and pattern size specified by width and height.

**Notes:** The pattern is defined within the coordinate system defined by the specified offset and size. Arbitrary drawing objects (including DrawableCompositeImage) may be specified between PushPattern and PopPattern in order to draw the pattern. Normally the pair PushGraphicContext & PopGraphicContext are used to enclose a pattern definition. Pattern definitions are terminated by a PopPattern object.

#### **Rectangle(upperLeftX as double, upperLeftY as double, lowerRightX as double, lowerRightY as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a rectangle using stroke color and thickness from upper-left coordinates to lower-right coordinates.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a rectangle
draw.Rectangle(250, 250, 100, 100)
draw.Draw

Backdrop=image.CopyPicture
```

**Notes:** If a fill color is specified, then the object is filled.

### Rotation(angle as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Set rotation to use when drawing (coordinate transformation).

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

draw.StrokeColor new GMColorRGBMBS("red")
draw.Line(100,100,400,400)
draw.Rotation 5
draw.StrokeColor new GMColorRGBMBS("blue")
```

```
draw.Line(100,100,400,400)
draw.Draw
```

```
Backdrop=image.CopyPicture
```

**RoundRectangle(centerX as double, centerY as double, width as double, height as double, cornerWidth as double, cornerHeight as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a rounded rectangle using stroke color and thickness, with specified center coordinate, specified width and height, and specified corner width and height.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a round rectangle
draw.RoundRectangle(250, 250, 100, 100,20,20)
draw.Draw

Backdrop=image.CopyPicture
```

**Notes:** If a fill color is specified, then the object is filled.

**Scaling(x as double, y as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Apply scaling in x and y direction while drawing objects (coordinate transformation).

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)
```

```
image.strokeWidth = 5
```

```
dim draw as GMGraphicsMBS = image.Graphics
draw.FillColor new GMColorRGBMBS("red")
```

```
draw.StrokeColor new GMColorRGBMBS("red")
draw.Line(100,100,400,400)
draw.StrokeColor new GMColorRGBMBS("blue")
draw.Scaling 1.2,1.1
draw.Line(100,100,400,400)
draw.Draw
```

```
Backdrop=image.CopyPicture
```

### SkewX(angle as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Apply Skew in X direction (coordinate transformation)

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)
```

```
image.strokeWidth = 5
```

```
dim draw as GMGraphicsMBS = image.Graphics
```

```
draw.StrokeColor new GMColorRGBMBS("red")
draw.Line(100,100,400,400)
draw.SkewX 5
draw.StrokeColor new GMColorRGBMBS("blue")
draw.Line(100,100,400,400)
draw.Draw
```

```
Backdrop=image.CopyPicture
```

### SkewY(angle as double)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Apply Skew in Y direction.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)
```

```
image.strokeWidth = 5
```

```
dim draw as GMGraphicsMBS = image.Graphics
```

```
draw.StrokeColor new GMColorRGBMBS("red")
draw.Line(100,100,400,400)
draw.SkewY 5
draw.StrokeColor new GMColorRGBMBS("blue")
draw.Line(100,100,400,400)
draw.Draw
```

```
Backdrop=image.CopyPicture
```

### StrokeAntialias(flag as boolean)

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Antialias while drawing lines or object outlines.

**StrokeColor(c as GMColorMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Set color to use when drawing lines or object outlines.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)
```

```
image.strokeWidth = 5
```

```
dim draw as GMGraphicsMBS = image.Graphics
```

```
draw.StrokeColor new GMColorRGBMBS("red")
draw.Line(100,100,400,400)
draw.Draw
```

```
Backdrop=image.CopyPicture
```

**StrokeLineCap(LineCap as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify the shape to be used at the end of open subpaths when they are stroked.

**Notes:** Values of LineCap are UndefinedCap, ButtCap, RoundCap, and SquareCap.

**StrokeLineJoin(LineJoin as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify the shape to be used at the corners of paths (or other vector shapes) when they are stroked.

**Notes:** Values of LineJoin are UndefinedJoin, MiterJoin, RoundJoin, and BevelJoin.

**StrokeOpacity(opacity as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Opacity to use when drawing lines or object outlines.

**StrokeWidth(opacity as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Set width to use when drawing lines or object outlines.

**Text(x as double, y as double, text as string)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Annotate image with text using stroke color, font, font pointsize, and box color (text background color), at specified coordinates.

**Notes:** If text contains special format characters the image filename, type, width, height, or other image attributes may be incorporated in the text (see label).

See also:

- 2.8.1 Text(x as double, y as double, text as string, encoding as string)

79

**Text(x as double, y as double, text as string, encoding as string)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Annotate image with text represented with text encoding, using current stroke color, font, font pointsize, and box color (text background color), at specified coordinates.

**Notes:**

If text contains special format characters the image filename, type, width, height, or other image attributes

may be incorporated in the text (see `label()`).

The text encoding specifies the code set to use for text annotations. The only character encoding which may be specified at this time is "UTF-8" for representing Unicode as a sequence of bytes. Specify an empty string to set text encoding to the system's default. Successful text annotation using Unicode may require fonts designed to support Unicode.

Seems like you need ghostscript or the DPS library for text handling, so it may no be available for you. See also:

- 2.8.1 `Text(x as double, y as double, text as string)`

79

### **TextAntialias(flag as boolean)**

method from class `GMGraphicsMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Antialias while drawing text (default true).

**Notes:** The main reason to disable text antialiasing is to avoid adding new colors to the image.

### **TextDecoration(DecorationType as integer)**

method from class `GMGraphicsMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify decoration (e.g. `UnderlineDecoration`) to apply to text.

**TextUnderColor(c as GMColorMBS)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a box under rendered text using the specified color.

**Translation(x as double, y as double)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Apply coordinate translation (set new coordinate origin).

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)
```

```
image.strokeWidth = 5
```

```
dim draw as GMGraphicsMBS = image.Graphics
```

```
draw.StrokeColor new GMColorRGBMBS("red")
draw.Line(100,100,400,400)
draw.Translation 5,5
draw.StrokeColor new GMColorRGBMBS("blue")
draw.Line(100,100,400,400)
draw.Draw
```

```
Backdrop=image.CopyPicture
```

**Viewbox(x1 as integer, y1 as integer, x2 as integer, y2 as integer)**

method from class GMGraphicsMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Dimensions of the output viewbox.

**Notes:** If the image is to be written to a vector format (e.g. MVG or SVG), then a PushGraphicContext()

object should be pushed to the head of the list, followed by a `Viewbox()` statement to establish the output canvas size. A matching `PopGraphicContext()` object should be pushed to the tail of the list.

## 2.8.2 Properties

### Image as `GImageMBS`

property from class `GMGraphicsMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin (GraphicsMagick)`, Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The image this graphics object belongs to.

**Notes:** (Read only property)

## 2.9 class `GMBlobMBS`

### class `GMBlobMBS`

class, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin (GraphicsMagick)`, Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The class for binary large objects.

**Notes:**

`Blob` provides the means to contain any opaque data. It is named after the term "Binary Large Object" commonly used to describe unstructured data (such as encoded images) which is stored in a database. While the function of `Blob` is very simple (store a pointer and and size associated with allocated data), the `Blob` class provides some very useful capabilities. In particular, it is fully reference counted just like the `Image` class.

The `Blob` class supports value assignment while preserving any outstanding earlier versions of the object. Since assignment is via a pointer internally, `Blob` is efficient enough to be stored directly in an STL container or any other data structure which requires assignment. In particular, by storing a `Blob` in an associative container (such as STL's 'map') it is possible to create simple indexed in-memory "database" of `Blobs`.

`Magick++` currently uses `Blob` to contain encoded images (e.g. JPEG) as well as ICC and IPTC profiles. Since `Blob` is a general-purpose class, it may be used for other purposes as well.

### 2.9.1 Methods

#### base64 as string

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The blob content as a string in Base64 format.

**Example:**

```
dim b as new GMBlobMBS("Hello")
```

```
MsgBox b.base64 // shows "SGVsbG8="
```

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

#### Constructor

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Default constructor creating an empty blob object.

See also:

- 2.9.1 Constructor(data as memoryblock, offset as integer, size as integer) 83
- 2.9.1 Constructor(data as string) 84
- 2.9.1 Constructor(other as GMBlobMBS) 84

#### Constructor(data as memoryblock, offset as integer, size as integer)

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct object with data, making a copy of the supplied data.

See also:

- 2.9.1 Constructor 83
- 2.9.1 Constructor(data as string) 84
- 2.9.1 Constructor(other as GMBlobMBS) 84

### Constructor(data as string)

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct object with data, making a copy of the supplied data.

See also:

- 2.9.1 Constructor 83
- 2.9.1 Constructor(data as memoryblock, offset as integer, size as integer) 83
- 2.9.1 Constructor(other as GMBlobMBS) 84

### Constructor(other as GMBlobMBS)

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Copy constructor (reference counted).

See also:

- 2.9.1 Constructor 83
- 2.9.1 Constructor(data as memoryblock, offset as integer, size as integer) 83
- 2.9.1 Constructor(data as string) 84

### CopyMemory as memoryblock

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Returns a copy of the data as a memoryblock.

**Notes:** Returns nil on any error like low memory.

### CopyString as string

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Returns a copy of the data as a string.

### Data as memoryblock

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** A memoryblock with the data from this blob.

**Example:**

```
dim b as new GMBlobMBS("Hello")
```

```
MsgBox b.Data.StringValue(0,5) // shows "Hello"
```

**Notes:** This is a memoryblock referencing the data of the blob. It has no size set. The memoryblock can only be used as long as the blob object exists. if you use it after you destroyed the blob object, you can crash you application.

### length as UInt32

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Obtain data length in bytes.

**Example:**

```
dim b as new GMBlobMBS("Hello")
```

```
MsgBox str(B.length) // shows 5
```

**Update(data as memoryblock, offset as integer, size as integer)**

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Replaces the content of this blob with a copy of the bytes in the memoryblock.  
See also:

- 2.9.1 Update(data as string) 86

**Update(data as string)**

method from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Replaces the content of this blob with a copy of the bytes in the string.  
**Notes:** Offset is zero based.  
See also:

- 2.9.1 Update(data as memoryblock, offset as integer, size as integer) 86

**2.9.2 Properties****handle as Integer**

property from class GMBlobMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The internal handle of the blob object.  
**Notes:** (Read and Write property)

## 2.10 class GMColorMBS

### class GMColorMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Color is the base color class.

**Example:**

```
dim c as new GMColorMBS(127,255,127) // light green
MsgBox str(c.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

**Notes:** It is a simple container class for the pixel red, green, blue, and alpha values scaled to fit GraphicsMagick's Quantum size. Normally users will instantiate a class derived from Color which supports the color model that fits the needs of the application. The Color class may be constructed directly from an X11-style color string. As a perhaps odd design decision, the value transparent black is considered to represent an unset value (invalid color) in many cases. This choice was made since it avoided using more memory. The default Color constructor constructs an invalid color (i.e. transparent black) and may be used as a parameter in order to remove a color setting.

### 2.10.1 Methods

#### Constructor

method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with transparent black.

**Example:**

```
dim c as new GMColorMBS
MsgBox str(c.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

See also:

- 2.10.1 Constructor(ColorName as string) 88
- 2.10.1 Constructor(ColorValue as color) 89
- 2.10.1 Constructor(ColorValue as color, alpha as integer) 89
- 2.10.1 Constructor(other as GMColorMBS) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer, alpha as integer) 91

### Constructor(ColorName as string)

method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color based on the X11 color name.

**Example:**

```
dim c as new GMColorMBS("red")
```

```
MsgBox str(c.redQuantum)+"-"+str(c.greenQuantum)+"-"+str(c.blueQuantum) // shows "255-0-0"
```

```
dim d as new GMColorMBS("# 77FF00")
```

```
MsgBox str(d.redQuantum)+"-"+str(d.greenQuantum)+"-"+str(d.blueQuantum) // shows "119-255-0"
```

**Notes:** An alternate way to construct the class is via an X11-compatible color specification string (e.g. Color(red) or Color (# FF0000)). Since the class may be constructed from a string, convenient strings may be passed in place of an explicit Color object in methods which accept a reference to Color. Color may also be converted to a std::string for convenience in user interfaces, and for saving settings to a text file.

See also:

- 2.10.1 Constructor 87
- 2.10.1 Constructor(ColorValue as color) 89
- 2.10.1 Constructor(ColorValue as color, alpha as integer) 89
- 2.10.1 Constructor(other as GMColorMBS) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer, alpha as integer) 91

**Constructor(ColorValue as color)**

method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.1, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with the given values.

**Example:**

```
dim c as new GMColorMBS(& cFF0000)
MsgBox str(c.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

See also:

- 2.10.1 Constructor 87
- 2.10.1 Constructor(ColorName as string) 88
- 2.10.1 Constructor(ColorValue as color, alpha as integer) 89
- 2.10.1 Constructor(other as GMColorMBS) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer, alpha as integer) 91

**Constructor(ColorValue as color, alpha as integer)**

method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.1, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with the given values.

**Example:**

```
dim c as new GMColorMBS(& cFF0102, 127)
MsgBox str(c.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)+" "+str(c.alpha)
```

See also:

- 2.10.1 Constructor 87
- 2.10.1 Constructor(ColorName as string) 88

- 2.10.1 Constructor(ColorValue as color) 89
- 2.10.1 Constructor(other as GMColorMBS) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer, alpha as integer) 91

### Constructor(other as GMColorMBS)

method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color copying the existing color.

**Example:**

```
dim r as new GMColorMBS(1,2,3)
dim c as new GMColorMBS(r)
MsgBox str(C.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

See also:

- 2.10.1 Constructor 87
- 2.10.1 Constructor(ColorName as string) 88
- 2.10.1 Constructor(ColorValue as color) 89
- 2.10.1 Constructor(ColorValue as color, alpha as integer) 89
- 2.10.1 Constructor(red as integer, green as integer, blue as integer) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer, alpha as integer) 91

### Constructor(red as integer, green as integer, blue as integer)

method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with the given values.

**Example:**

```
dim c as new GMColorMBS(1,2,3)
MsgBox str(C.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

See also:

- 2.10.1 Constructor 87
- 2.10.1 Constructor(ColorName as string) 88
- 2.10.1 Constructor(ColorValue as color) 89
- 2.10.1 Constructor(ColorValue as color, alpha as integer) 89
- 2.10.1 Constructor(other as GMColorMBS) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer, alpha as integer) 91

### Constructor(red as integer, green as integer, blue as integer, alpha as integer)

method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with the given values.

**Example:**

```
dim c as new GMColorMBS(1,2,3,4)

// display color, alpha is double...
MsgBox str(C.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)+" "+str(c.alpha)
```

See also:

- 2.10.1 Constructor 87
- 2.10.1 Constructor(ColorName as string) 88
- 2.10.1 Constructor(ColorValue as color) 89
- 2.10.1 Constructor(ColorValue as color, alpha as integer) 89
- 2.10.1 Constructor(other as GMColorMBS) 90
- 2.10.1 Constructor(red as integer, green as integer, blue as integer) 90

**QuantumByteSize as integer**

shared method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The quantum byte size.

**Example:**

```
MsgBox str(GMColorMBS.QuantumByteSize)
```

**Notes:** As the plugin uses 8 bit this value should be 1.

**scaleDoubleToQuantum(value as double) as integer**

shared method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Scales a double value to a value in the range of a quantum.

**Example:**

```
dim d as Double = 1.0
dim v as integer = GMColorMBS.scaleDoubleToQuantum(d)
MsgBox str(v)
```

**Notes:** As the plugin uses 8 bit quantums, this is basically a multiplication by 255.0

**scaleQuantumToDouble(value as integer) as double**

shared method from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Scales a quantum to a double value.

**Example:**

```
dim v as integer = 255
```

```
dim d as Double = GMColorMBS.scaleQuantumToDouble(v)
MsgBox str(d)
```

**Notes:** The plugin uses 8bit quantums, so this is basically the division of value by 255.0

## 2.10.2 Properties

### alpha as double

property from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The alpha value of this color.

**Example:**

```
dim c as new GMColorMBS(1,2,3,4)
MsgBox str(c.alpha)
```

**Notes:**

Range is 0.0 to 1.0  
(Read and Write property)

### blueQuantum as integer

property from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The blue color value.

**Example:**

```
dim c as new GMColorMBS(1,2,3)
MsgBox str(c.redQuantum) // 3
```

**Notes:**

Range is 0 to 255.  
(Read and Write property)

**colorValue as color**

property from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.1, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The REALbasic color for the GraphicsMagick color.

**Example:**

```
dim c as new GMColorMBS(& cFF0102)
MsgBox str(c.ColorValue)
```

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

**greenQuantum as integer**

property from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The green color value.

**Example:**

```
dim r as new GMColorMBS(1,2,3)
MsgBox str(r.greenQuantum) // shows 2
```

**Notes:**

Range is 0 to 255.  
(Read and Write property)

**handle as Integer**

property from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The internal color reference.

**Example:**

```
dim r as new GMColorMBS(1,2,3)
MsgBox str(r.handle)
```

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

**intensity as double**

property from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The intensity of this color.

**Example:**

```
dim c as new GMColorMBS(1,2,3)
MsgBox str(c.intensity)
```

**Notes:** (Read only property)

**isValid as boolean**

property from class GMColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Does object contain valid color?

**Example:**

```
dim c as new GMColorMBS(1,2,3)
```

```
MsgBox str(c.isValid)
```

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

### **redQuantum as integer**

property from class GColorMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The red color value.

**Example:**

```
dim c as new GColorMBS(1,2,3)
MsgBox str(c.redQuantum) // 1
```

**Notes:**

Range is 0 to 255.

(Read and Write property)

## **2.11 class GColorHSLMBS**

### **class GColorHSLMBS**

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The class for a HSL color.

**Example:**

```
dim g as new GColorHSLMBS(0.1,0.2,0.3)
MsgBox str(g.colorValue)
```

**Notes:** Subclass of the GMColorMBS class.

### 2.11.1 Methods

#### Constructor

method from class GMColorHSLMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with transparent black.

**Example:**

```
dim c as new GMColorHSLMBS
MsgBox str(c.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

See also:

- 2.11.1 Constructor(hue as double, saturation as double, luminosity as double) 97
- 2.11.1 Constructor(other as GMColorMBS) 98

#### Constructor(hue as double, saturation as double, luminosity as double)

method from class GMColorHSLMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with the given values.

**Example:**

```
dim g as new GMColorHSLMBS(0.1,0.2,0.3)
MsgBox str(g.hue)+" "+str(g.saturation)+" "+str(g.luminosity)
```

See also:

- 2.11.1 Constructor 97

- 2.11.1 Constructor(other as GMColorMBS) 98

### Constructor(other as GMColorMBS)

method from class GMColorHSLMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color copying the existing color.

**Example:**

```
dim g as new GMColorHSLMBS(0.1,0.2,0.3)
dim o as new GMColorHSLMBS(g)
```

```
MsgBox str(o.colorValue)
```

See also:

- 2.11.1 Constructor 97
- 2.11.1 Constructor(hue as double, saturation as double, luminosity as double) 97

### 2.11.2 Properties

#### hue as double

property from class GMColorHSLMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The hue value.

**Example:**

```
dim g as new GMColorHSLMBS(0.1,0.2,0.3)
MsgBox str(g.hue)
```

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

### luminosity as double

property from class GMColorHSLMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The luminosity value.

**Example:**

```
dim g as new GMColorHSLMBS(0.1,0.2,0.3)
MsgBox str(g.luminosity)
```

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

### saturation as double

property from class GMColorHSLMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The saturation value.

**Example:**

```
dim g as new GMColorHSLMBS(0.1,0.2,0.3)
MsgBox str(g.saturation)
```

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

## 2.12 class GMCoderInfoMBS

### class GMCoderInfoMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The class used to get information about all registered coders.

**Example:**

```

dim coders(-1) as GMCoderInfoMBS = GMCoderInfoMBS.CoderInfoList
dim names(-1) as string

for each coder as GMCoderInfoMBS in coders
names.Append coder.name
next

MsgBox Join(names,EndOfLine)

```

**Notes:** The CoderInfo class provides the means to provide information regarding GraphicsMagick support for an image format (designated by a magick string). It may be used to provide support for a specific named format (provided as an argument to the constructor), or as an element of a container when format support is queried using the coderInfoList() templated function.

**2.12.1 Methods****CoderInfoList as GMCoderInfoMBS()**

shared method from class GMCoderInfoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a list of all coders.

**Example:**

```

dim coders(-1) as GMCoderInfoMBS = GMCoderInfoMBS.CoderInfoList

```

**2.12.2 Properties****description as string**

property from class GMCoderInfoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Format description (e.g. "CompuServe graphics interchange format").

**Example:**

```
dim coders(-1) as GMCoderInfoMBS = GMCoderInfoMBS.CoderInfoList
dim names(-1) as string
```

```
for each coder as GMCoderInfoMBS in coders
names.Append coder.name+" "+coder.description
next
```

```
MsgBox Join(names,EndOfLine)
```

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

#### **isMultiFrame as boolean**

property from class GMCoderInfoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Format supports multiple frames.

**Example:**

```
dim coders(-1) as GMCoderInfoMBS = GMCoderInfoMBS.CoderInfoList
dim names(-1) as string
```

```
for each coder as GMCoderInfoMBS in coders
names.Append coder.name+" "+str(coder.isMultiFrame)
next
```

```
MsgBox Join(names,EndOfLine)
```

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

#### **isReadable as boolean**

property from class GMCoderInfoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Format is readable.

**Example:**

```
dim coders(-1) as GMCoderInfoMBS = GMCoderInfoMBS.CoderInfoList
dim names(-1) as string

for each coder as GMCoderInfoMBS in coders
names.Append coder.name+" "+str(coder.isReadable)
next

MsgBox Join(names,EndOfLine)
```

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

### isWritable as boolean

property from class GMCoderInfoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Format is writeable.

**Example:**

```
dim coders(-1) as GMCoderInfoMBS = GMCoderInfoMBS.CoderInfoList
dim names(-1) as string

for each coder as GMCoderInfoMBS in coders
names.Append coder.name+" "+str(coder.isWritable)
next

MsgBox Join(names,EndOfLine)
```

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

### name as string

property from class GMCoderInfoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Format name (e.g. "GIF").

**Example:**

```
dim coders(-1) as GMCoderInfoMBS = GMCoderInfoMBS.CoderInfoList
dim coder as GMCoderInfoMBS = coders(0) // pick first one
```

```
MsgBox coder.name
```

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

## 2.13 class GMColorGrayMBS

**class GMColorGrayMBS**

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3,  
console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The color subclass for a grayscale color.

**Example:**

```
dim g as new GMColorGrayMBS(0.5)
MsgBox str(g.shade)
```

**Notes:**

Representation of grayscale RGB color.  
Equal parts red, green, and blue specified as a ratio (0 to 1).  
Subclass of the GMColorMBS class.

### 2.13.1 Methods

#### Constructor

method from class GMColorGrayMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with transparent black.

**Example:**

```
dim c as new GMColorGrayMBS
MsgBox str(c.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

See also:

- 2.13.1 Constructor(other as GMColorMBS) 104
- 2.13.1 Constructor(shade as double) 105

#### Constructor(other as GMColorMBS)

method from class GMColorGrayMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color copying the existing color.

**Example:**

```
dim g as new GMColorGrayMBS(0.5)
dim o as new GMColorGrayMBS(g)
MsgBox str(o.shade)
```

See also:

- 2.13.1 Constructor 104
- 2.13.1 Constructor(shade as double) 105

**Constructor(shade as double)**

method from class GMColorGrayMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with the given value.

**Example:**

```
dim g as new GMColorGrayMBS(1.0)
MsgBox str(g.colorValue)
```

**Notes:** Range is 0.0 to 1.0.

See also:

- 2.13.1 Constructor 104
- 2.13.1 Constructor(other as GMColorMBS) 104

**2.13.2 Properties****shade as double**

property from class GMColorGrayMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The gray value for this color.

**Example:**

```
dim g as new GMColorGrayMBS(1.0)
MsgBox str(g.shade)
```

**Notes:**

Range is 0.0 to 1.0  
(Read and Write property)

## 2.14 class GMErrExceptionMBS

### class GMErrExceptionMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The exception to report errors in the GraphicMagick plugin.

**Notes:**

Check the message property for details.  
Subclass of the RuntimeException class.

## 2.15 class GMCoordinateMBS

### class GMCoordinateMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The Graphics Magick class for a coordinate.

**Example:**

```
dim c as new GMCoordinateMBS(5,6)
MsgBox str(c.x)+" " +str(c.y)
```

### 2.15.1 Methods

**Constructor(x as double = 0.0, y as double = 0.0)**

method from class GMCoordinateMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The constructor to create a new coordinate.

**Example:**

```
dim c as new GMCoordinateMBS(5,6)
MsgBox str(c.x)+" "+str(c.y)
```

## 2.15.2 Properties

### x as double

property from class GMCoordinateMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The x value.

**Example:**

```
dim c as new GMCoordinateMBS
c.x = 5
MsgBox str(c.x)
```

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

### y as double

property from class GMCoordinateMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The y value.

**Example:**

```
dim c as new GMCoordinateMBS
c.y = 5
MsgBox str(c.y)
```

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

## 2.16 class GMGeometryMBS

### class GMGeometryMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Geometry provides a convenient means to specify a geometry argument.

**Example:**

```
dim g as new GMGeometryMBS(300,400)
MsgBox str(G.width)+" "+str(G.height)
```

**Notes:** The object may be initialized from a string containing a geometry specification. It may also be initialized by more efficient parameterized constructors.

### 2.16.1 Methods

#### Constructor

method from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates empty geometry.

**Example:**

```
dim g as new GMGeometryMBS
MsgBox str(G.width)+" "+str(G.height)
```

See also:

- 2.16.1 Constructor(geometry as string) 109
- 2.16.1 Constructor(other as GMGeometryMBS) 109
- 2.16.1 Constructor(Width as UInt32, Height as UInt32, XOffset as UInt32=0, YOffset as UInt32=0, xNegative as boolean=false, yNegative as boolean=false) 110

**Constructor(geometry as string)**

method from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct geometry from string.

**Example:**

```
dim g as new GMGeometryMBS("600x600")
```

```
MsgBox str(G.width)+" "+str(G.height)
```

**Notes:**

See the GraphicsMagick website for details.

<http://www.graphicsmagick.org/Magick++/Geometry.html>

See also:

- 2.16.1 Constructor 108
- 2.16.1 Constructor(other as GMGeometryMBS) 109
- 2.16.1 Constructor(Width as UInt32, Height as UInt32, XOffset as UInt32=0, YOffset as UInt32=0, xNegative as boolean=false, yNegative as boolean=false) 110

**Constructor(other as GMGeometryMBS)**

method from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new geometry object by copying an existing one.

**Example:**

```
dim g as new GMGeometryMBS(600,600)
```

```
dim h as new GMGeometryMBS(g)
```

```
MsgBox str(h.width)
```

See also:

- 2.16.1 Constructor 108

- 2.16.1 Constructor(geometry as string) 109
- 2.16.1 Constructor(Width as UInt32, Height as UInt32, XOffset as UInt32=0, YOffset as UInt32=0, xNegative as boolean=false, yNegative as boolean=false) 110

**Constructor(Width as UInt32, Height as UInt32, XOffset as UInt32=0, YOffset as UInt32=0, xNegative as boolean=false, yNegative as boolean=false)**

method from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates geometry with the given values.

**Example:**

```
dim g as new GMGeometryMBS(600,600)
MsgBox str(g.width)
```

See also:

- 2.16.1 Constructor 108
- 2.16.1 Constructor(geometry as string) 109
- 2.16.1 Constructor(other as GMGeometryMBS) 109

**Make(geometry as string) as GMGeometryMBS**

shared method from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct geometry from string.

**Example:**

```
dim g as GMGeometryMBS = GMGeometryMBS.Make("600x600")
MsgBox str(G.width)+" "+str(G.height)
```

**Notes:**

See the GraphicsMagick website for more details:  
<http://www.graphicsmagick.org/Magick++/Geometry.html>  
 See also:

- 2.16.1 Make(Width as UInt32, Height as UInt32, XOffset as UInt32=0, YOffset as UInt32=0, xNegative as boolean=false, yNegative as boolean=false) as GMGeometryMBS 111

**Make(Width as UInt32, Height as UInt32, XOffset as UInt32=0, YOffset as UInt32=0, xNegative as boolean=false, yNegative as boolean=false) as GMGeometryMBS**

shared method from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates geometry with the given values.

**Example:**

```
dim g as GMGeometryMBS = GMGeometryMBS.Make(600,600)
MsgBox str(g.width)
```

See also:

- 2.16.1 Make(geometry as string) as GMGeometryMBS 110

## 2.16.2 Properties

**aspect as boolean**

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Resize without preserving aspect ratio (!).

**Example:**

```
dim g as new GMGeometryMBS(600,600)
MsgBox str(g.aspect)
```

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

### greater as boolean

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Resize if image is greater than size (>).

**Example:**

```
dim g as new GMGeometryMBS(600,600)
MsgBox str(g.greater)
```

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

### height as UInt32

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The height value.

**Example:**

```
dim g as new GMGeometryMBS(600,600)
MsgBox str(g.height)
```

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

### isValid as boolean

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Does object contain a valid geometry?

**Example:**

```
dim g as new GMGeometryMBS(100,200)
MsgBox str(G.isValid)
```

**Notes:**

May be set to false in order to invalidate an existing geometry object.  
(Read and Write property)

**less as boolean**

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Resize if image is less than size (<).

**Example:**

```
dim g as new GMGeometryMBS(600,600)
MsgBox str(g.less)
```

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

**percent as boolean**

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Width and height are expressed as percentages.

**Example:**

```
dim g as new GMGeometryMBS(600,600)
MsgBox str(g.percent)
```

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

### StringValue as string

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The string representation of the geometry object.

**Example:**

```
dim g as new GMGeometryMBS(600,600)
MsgBox str(g.StringValue)
```

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

### width as UInt32

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The width value.

**Example:**

```
dim g as new GMGeometryMBS(600,600)
MsgBox str(g.width)
```

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

### xNegative as boolean

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Sign of X offset negative? (X origin at right)

**Example:**

```
dim g as new GMGeometryMBS(100,200,30,40,true,false)
MsgBox str(G.xNegative)
```

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

### xOff as UInt32

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** X offset from origin.

**Example:**

```
dim g as new GMGeometryMBS(100,200,30,40,true,true)
MsgBox str(G.xOff)+" "+str(G.yOff)
```

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

### yNegative as boolean

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Sign of Y offset negative? (Y origin at bottom)

**Example:**

```
dim g as new GMGeometryMBS(100,200,30,40,false,true)
MsgBox str(G.yNegative)
```

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

### yOff as UInt32

property from class GMGeometryMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Y offset from origin

**Example:**

```
dim g as new GMGeometryMBS(100,200,30,40,true,true)
MsgBox str(G.xOff)+" " +str(G.yOff)
```

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

## 2.17 class GMColorMonoMBS

### class GMColorMonoMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Representation of a black/white color (true/false)

**Example:**

```
dim g as new GMColorMonoMBS(false)
MsgBox str(g.colorValue)
```

**Notes:** Subclass of the GMColorMBS class.

### 2.17.1 Methods

#### Constructor

method from class GMColorMonoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with transparent black.

**Example:**

```
dim c as new GMColorMonoMBS
MsgBox str(c.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

See also:

- 2.17.1 Constructor(mono as boolean) 117
- 2.17.1 Constructor(other as GMColorMBS) 118

#### Constructor(mono as boolean)

method from class GMColorMonoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with the given values.

**Example:**

```
dim g as new GMColorMonoMBS(false)
MsgBox str(g.mono)
```

See also:

- 2.17.1 Constructor 117
- 2.17.1 Constructor(other as GMColorMBS) 118

**Constructor(other as GMColorMBS)**

method from class GMColorMonoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color copying the existing color.

**Example:**

```
dim g as new GMColorMonoMBS(false)
dim o as new GMColorMonoMBS(g)
MsgBox str(o.mono)
```

See also:

- 2.17.1 Constructor 117
- 2.17.1 Constructor(mono as boolean) 117

**2.17.2 Properties****mono as boolean**

property from class GMColorMonoMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The color value.

**Example:**

```
dim g as new GMColorMonoMBS(true)
MsgBox str(g.mono)
```

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

## 2.18 class GMColorYUVMBS

### class GMColorYUVMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Representation of a color in the YUV colorspace

**Example:**

```
dim g as new GMColorYUVMBS(0.1, 0.2, 0.3)
MsgBox str(g.y)+" "+str(g.u)+" "+str(g.v)
```

**Notes:** Subclass of the GMColorMBS class.

### 2.18.1 Methods

#### Constructor

method from class GMColorYUVMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with transparent black.

**Example:**

```
dim c as new GMColorYUVMBS
MsgBox str(c.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

See also:

- 2.18.1 Constructor(other as GMColorMBS) 120
- 2.18.1 Constructor(y as double, u as double, v as double) 120

**Constructor(other as GMColorMBS)**

method from class GMColorYUVMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color copying the existing color.

**Example:**

```
dim g as new GMColorYUVMBS(0.1, 0.2, 0.3)
dim o as new GMColorYUVMBS(g)
MsgBox str(o.colorValue)
```

See also:

- 2.18.1 Constructor 119
- 2.18.1 Constructor(y as double, u as double, v as double) 120

**Constructor(y as double, u as double, v as double)**

method from class GMColorYUVMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with the given values.

**Example:**

```
dim g as new GMColorYUVMBS(0.1, 0.2, 0.3)
```

See also:

- 2.18.1 Constructor 119
- 2.18.1 Constructor(other as GMColorMBS) 120

## 2.18.2 Properties

### u as double

property from class GMColorYUVMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The u color component.

**Example:**

```
dim g as new GMColorYUVMBS(0.1, 0.2, 0.3)
MsgBox str(g.u)
```

**Notes:**

Range is -0.5 to +0.5.  
(Read and Write property)

### v as double

property from class GMColorYUVMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The v color component.

**Example:**

```
dim g as new GMColorYUVMBS(0.1, 0.2, 0.3)
MsgBox str(g.v)
```

**Notes:**

Range is -0.5 to +0.5.  
(Read and Write property)

**y as double**

property from class GMColorYUVMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The y color component.

**Example:**

```
dim g as new GMColorYUVMBS(0.1, 0.2, 0.3)
MsgBox str(g.y)
```

**Notes:**

Range is 0.0 to 1.0.

(Read and Write property)

**2.19 class GMColorRGBMBS****class GMColorRGBMBS**

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The color class for RGB colors.

**Example:**

```
dim c as new GMColorRGBMBS(1.0,0.0,0.0) // red
MsgBox str(C.red)+" "+str(c.green)+" "+str(c.blue)
MsgBox str(C.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

**Notes:**

Representation of RGB color with red, green, and blue specified as ratios (0 to 1)

Subclass of the GMColorMBS class.

### 2.19.1 Methods

#### Constructor

method from class GMColorRGBMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with transparent black.

**Example:**

```
dim c as new GMColorRGBMBS
MsgBox str(c.redQuantum)+" "+str(c.greenQuantum)+" "+str(c.blueQuantum)
```

See also:

- 2.19.1 Constructor(other as GMColorMBS) 123
- 2.19.1 Constructor(red as double, green as double, blue as double) 124

#### Constructor(other as GMColorMBS)

method from class GMColorRGBMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color copying the existing color.

**Example:**

```
dim g as new GMColorRGBMBS(1,2,3)
dim o as new GMColorRGBMBS(g)
MsgBox str(o.colorValue)
```

See also:

- 2.19.1 Constructor 123
- 2.19.1 Constructor(red as double, green as double, blue as double) 124

**Constructor(red as double, green as double, blue as double)**

method from class `GColorRGBMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new color with the given values.

**Example:**

```
dim c as new GColorRGBMBS(0.1,0.2,0.3)
```

**Notes:** Range is 0.0 to 1.0.

See also:

- 2.19.1 Constructor 123
- 2.19.1 Constructor(other as `GColorMBS`) 123

**2.19.2 Properties****blue as double**

property from class `GColorRGBMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The blue color component.

**Example:**

```
dim c as new GColorRGBMBS(0.0,0.0,1.0)
MsgBox str(c.blue)
```

**Notes:**

Range is 0.0 to 1.0.

(Read and Write property)

**green as double**

property from class GMColorRGBMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The green color component.

**Example:**

```
dim c as new GMColorRGBMBS(0.0,1.0,0.0)
MsgBox str(c.green)
```

**Notes:**

Range is 0.0 to 1.0.  
(Read and Write property)

**red as double**

property from class GMColorRGBMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The red color component.

**Example:**

```
dim c as new GMColorRGBMBS(1.0,0.0,0.0) // red
MsgBox str(C.red)
```

**Notes:**

Range is 0.0 to 1.0.  
(Read and Write property)

## 2.20 class GImageMBS

### class GImageMBS

class, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image is the primary object in Magick++ and represents a single image frame (see image design).

**Example:**

```
dim c as new GColorMBS("white")
dim g as new GGeometryMBS(100,100)
dim image as new GImageMBS(g, c)
```

**Notes:** The GImageArrayMBS class must be used to operate on image sequences or images (e.g. of format GIF, TIFF, MIFF, Postscript, & MNG) which are comprized of multiple image frames. Individual frames of a multi-frame image may be requested by adding array-style notation to the end of the file name (e.g. "animation.gif [ 3 ]" retrieves the fourth frame of a GIF animation. Various image manipulation operations may be applied to the image. Attributes may be set on the image to influence the operation of the manipulation operations. The GMPixelsMBS class provides low-level access to image pixels.

### 2.20.1 Methods

#### adaptiveThreshold(width as UInt32, height as UInt32, offset as UInt32=0)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Apply adaptive thresholding to the image.

**Notes:**

see:

<http://www.dai.ed.ac.uk/HIPR2/adpthrsh.htm>

Adaptive thresholding is useful if the ideal threshold level is not known in advance, or if the illumination gradient is not constant across the image. Adaptive thresholding works by evaluating the mean (average) of a pixel region (size specified by width and height) and using the mean as the thresholding value. In order to remove residual noise from the background, the threshold may be adjusted by subtracting a constant offset

(default zero) from the mean to compute the threshold.

### **addNoise(noise as integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Add noise to image with the specified noise type.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.addNoise(image.GaussianNoise)
```

```
Backdrop=image.CopyPicture
```

**Notes:** Use one of this constants: GaussianNoise, ImpulseNoise, LaplacianNoise, MultiplicativeGaussianNoise, PoissonNoise, UniformNoise.

### **addNoiseChannel(channel as integer, noise as integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Add noise to an image channel with the specified noise type. The channel parameter specifies the channel to add noise to.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.addNoiseChannel(image.BlueChannel, image.ImpulseNoise)
```

```
Backdrop=image.CopyPicture
```

**Notes:**

The `noiseType` parameter specifies the type of noise.

Use one of these constants: `GaussianNoise`, `ImpulseNoise`, `LaplacianNoise`, `MultiplicativeGaussianNoise`, `PoissonNoise`, `UniformNoise`.

### **adjoin as boolean**

method from class `GImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Join images into a single multi-image file.

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

### **affineTransform(sx as double, sy as double, rx as double, ry as double, tx as double, ty as double)**

method from class `GImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Applies an affine transformation to the drawing matrix.

**Notes:** Specify a transformation matrix to adjust scaling, rotation, and translation (coordinate transformation) for subsequently drawn objects in the same or decendent drawing context. The `sx` & `sy` parameters represent the x & y scale factors, the `rx` & `ry` parameters represent the x & y rotation, and the `tx` & `ty` parameters represent the x & y translation.

### **animationDelay as UInt32**

method from class `GImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Time in 1/100ths of a second (0 to 65535) which must expire before displaying the next image in an animated sequence.

**Notes:**

This option is useful for regulating the animation of a sequence of GIF images within Netscape. (Read and Write computed property)

**animationIterations as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Number of iterations to loop an animation (e.g. Netscape loop extension) for.

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

**annotate(text as string, gravity as integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Annotate with text (bounding area is entire image) and placement gravity.

**Notes:**

Annotate image (draw text on image)

Gravity effects text placement in bounding area according to these rules:

NorthWestGravity	text bottom-left corner placed at top-left
NorthGravity	text bottom-center placed at top-center
NorthEastGravity	text bottom-right corner placed at top-right
WestGravity	text left-center placed at left-center
CenterGravity	text center placed at center
EastGravity	text right-center placed at right-center
SouthWestGravity	text top-left placed at bottom-left
SouthGravity	text top-center placed at bottom-center
SouthEastGravity	text top-right placed at bottom-right

See also:

- 2.20.1 `annotate(text as string, location as GMGeometryMBS)` 130
- 2.20.1 `annotate(text as string, location as GMGeometryMBS, gravity as integer)` 130
- 2.20.1 `annotate(text as string, location as GMGeometryMBS, gravity as integer, degrees as double)`

**annotate(text as string, location as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Annotate using specified text, and placement location.

**Notes:**

Annotate image (draw text on image)

Gravity effects text placement in bounding area according to these rules:

NorthWestGravity	text bottom-left corner placed at top-left
NorthGravity	text bottom-center placed at top-center
NorthEastGravity	text bottom-right corner placed at top-right
WestGravity	text left-center placed at left-center
CenterGravity	text center placed at center
EastGravity	text right-center placed at right-center
SouthWestGravity	text top-left placed at bottom-left
SouthGravity	text top-center placed at bottom-center
SouthEastGravity	text top-right placed at bottom-right

See also:

- 2.20.1 `annotate(text as string, gravity as integer)` 129
- 2.20.1 `annotate(text as string, location as GMGeometryMBS, gravity as integer)` 130
- 2.20.1 `annotate(text as string, location as GMGeometryMBS, gravity as integer, degrees as double)` 131

**annotate(text as string, location as GMGeometryMBS, gravity as integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Annotate using specified text, bounding area, and placement gravity.

**Notes:**

Annotate image (draw text on image)

Gravity effects text placement in bounding area according to these rules:

NorthWestGravity	text bottom-left corner placed at top-left
NorthGravity	text bottom-center placed at top-center
NorthEastGravity	text bottom-right corner placed at top-right
WestGravity	text left-center placed at left-center
CenterGravity	text center placed at center
EastGravity	text right-center placed at right-center
SouthWestGravity	text top-left placed at bottom-left
SouthGravity	text top-center placed at bottom-center
SouthEastGravity	text top-right placed at bottom-right

See also:

- 2.20.1 `annotate(text as string, gravity as integer)` 129
- 2.20.1 `annotate(text as string, location as GMGeometryMBS)` 130
- 2.20.1 `annotate(text as string, location as GMGeometryMBS, gravity as integer, degrees as double)` 131

**`annotate(text as string, location as GMGeometryMBS, gravity as integer, degrees as double)`**

method from class `GImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Annotate with text using specified text, bounding area, placement gravity, and rotation.

**Notes:**

Annotate image (draw text on image)

Gravity effects text placement in bounding area according to these rules:

See also:

- 2.20.1 `annotate(text as string, gravity as integer)` 129
- 2.20.1 `annotate(text as string, location as GMGeometryMBS)` 130
- 2.20.1 `annotate(text as string, location as GMGeometryMBS, gravity as integer)` 130

NorthWestGravity	text bottom-left corner placed at top-left
NorthGravity	text bottom-center placed at top-center
NorthEastGravity	text bottom-right corner placed at top-right
WestGravity	text left-center placed at left-center
CenterGravity	text center placed at center
EastGravity	text right-center placed at right-center
SouthWestGravity	text top-left placed at bottom-left
SouthGravity	text top-center placed at bottom-center
SouthEastGravity	text top-right placed at bottom-right

### **antiAlias as boolean**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Control antialiasing of rendered Postscript and Postscript or TrueType fonts.

**Notes:**

Enabled by default.

(Read and Write computed property)

### **attributeValue(name as string) as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Access an arbitrary named image attribute.

**Notes:**

Any number of named attributes may be attached to the image. For example, the image comment is a named image attribute with the name "comment". EXIF tags are attached to the image as named attributes. Use the syntax "EXIF:<tag>" to request an EXIF tag similar to "EXIF:DateTime":

(Read and Write computed property)

### **backgroundColor as GMColorMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image background color.

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

### **backgroundTexture as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image file name to use as the background texture.

**Notes:**

Does not modify image pixels.

(Read and Write computed property)

### **baseColumns as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Base image width (before transformations).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
Title = str(image.baseRows)+" x "+str(image.baseColumns)
```

### **baseFilename as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Base image filename (before transformations).

**baseRows as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Base image height (before transformations).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
Title = str(image.baseRows)+" x "+str(image.baseColumns)
```

**blur(radius as double=0.0, sigma as double=1.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Blur an image with the specified blur factor.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.blur(30,10)
```

```
Backdrop=image.CopyPicture
```

**Notes:** The radius parameter specifies the radius of the Gaussian, in pixels, not counting the center pixel. The sigma parameter specifies the standard deviation of the Laplacian, in pixels.

**blurChannel(channel as integer, radius as double=0.0, sigma as double=1.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Blur an image channel with the specified blur factor.

**Example:**

```

dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)

image.blurChannel(image.BlueChannel, 30,10)

Backdrop=image.CopyPicture

```

**Notes:** The channel parameter specifies the channel to modify. The radius parameter specifies the radius of the Gaussian, in pixels, not counting the center pixel. The sigma parameter specifies the standard deviation of the Laplacian, in pixels.

**border**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Border image (add border to image).

**Example:**

```

dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)

image.border

Backdrop=image.CopyPicture

```

**Notes:** The color of the border is specified by the borderColor attribute.  
See also:

- 2.20.1 border(geometry as GMGeometryMBS)

**border(geometry as GMGeometryMBS)**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Border image (add border to image).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)

image.border GMGeometryMBS.Make(10,10)

Backdrop=image.CopyPicture
```

**Notes:** The color of the border is specified by the `borderColor` attribute.  
See also:

- 2.20.1 border

135

### **borderColor as GMColorMBS**

method from class `GMImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image border color.

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

### **boundingBox as GMGeometryMBS**

method from class `GMImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Return smallest bounding box enclosing non-border pixels.

**Notes:** The current fuzz value is used when discriminating between pixels. This is the crop bounding box used by `crop(Geometry(0,0))`.

### **boxColor as GMColorMBS**

method from class `GMImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Base color that annotation text is rendered on (default none).

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

### **cacheThreshold(threshold as UInt32)**

shared method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Pixel cache threshold in megabytes.

**Notes:** Once this memory threshold is exceeded, all subsequent pixels cache operations are to/from disk. This setting is shared by all Image objects.

### **channel(channel as integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Extract channel from image.

**Notes:** Use this option to extract a particular channel from the image. MatteChannel for example, is useful for extracting the opacity values from an image.

### **channelDepth(channel as integer) as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Set or obtain modulus channel depth.

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

### **charcoal(radius as double=0.0, sigma as double=1.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Charcoal effect image (looks like charcoal sketch).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.charcoal
```

```
Backdrop=image.CopyPicture
```

**Notes:** The radius parameter specifies the radius of the Gaussian, in pixels, not counting the center pixel. The sigma parameter specifies the standard deviation of the Laplacian, in pixels.

**chop(geometry as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Chop image (remove vertical or horizontal subregion of image).

**classType as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image class (DirectClass or PseudoClass).

**Notes:**

NOTE: setting a DirectClass image to PseudoClass will result in the loss of color information if the number of colors in the image is greater than the maximum palette size (either 256 or 65536 entries depending on the value of QuantumDepth when ImageMagick was built):  
(Read and Write computed property)

**clipMask as GMImageMBS**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Associate a clip mask image with the current image.

**Notes:**

The clip mask image must have the same dimensions as the current image or an exception is thrown. Clipping occurs wherever pixels are transparent in the clip mask image. Clipping Pass an invalid image to unset an existing clip mask.

(Read and Write computed property)

**colorFuzz as double**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Colors within this distance are considered equal.

**Notes:**

A number of algorithms search for a target color. By default the color must be exact. Use this option to match colors that are close to the target color in RGB space.

(Read and Write computed property)

**colorize(opacity as UInt32, penColor as GMColorMBS)**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Colorize image with pen color, using specified percent opacity.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
image.colorize(10, new GMColorMBS("red"))
```

```
Backdrop=image.CopyPicture
```

See also:

- 2.20.1 `colorize(opacityRed as UInt32, opacityGreen as UInt32, opacityBlue as UInt32, penColor as GMColorMBS)` 140

**colorize(opacityRed as UInt32, opacityGreen as UInt32, opacityBlue as UInt32, penColor as GMColorMBS)**

method from class `GImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Colorize image with pen color, using specified percent opacity for red, green, and blue quantums.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.colorize(10, 0, 5, new GMColorMBS("red"))

Backdrop=image.CopyPicture
```

See also:

- 2.20.1 `colorize(opacity as UInt32, penColor as GMColorMBS)` 139

**colorMap(index as UInt32) as GMColorMBS**

method from class `GImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Color at colormap position index.

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

**colorMapSize as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Number of entries in the colormap.

**Notes:**

Setting the colormap size may extend or truncate the colormap. The maximum number of supported entries is specified by the MaxColormapSize constant, and is dependent on the value of QuantumDepth when GraphicsMagick is compiled. An exception is thrown if more entries are requested than may be supported. Care should be taken when truncating the colormap to ensure that the image colormap indexes reference valid colormap entries.

(Read and Write computed property)

**colorSpace as integer**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The colorspace (e.g. CMYK) used to represent the image pixel colors.

**Notes:**

UndefinedColorspace	= 0
RGBColorspace	= 1 (Plain old RGB colorspace)
GRAYColorspace	= 2 (Plain old full-range grayscale)
TransparentColorspace	= 3 (RGB but preserve matte channel during quantize)
OHTAColorspace	= 4
XYZColorspace	= 5 (CIE XYZ)
YCCColorspace	= 6 (Kodak PhotoCD PhotoYCC)
YIQColorspace	= 7
YPbPrColorspace	= 8
YUVCOLORSPACE	= 9
CMYKColorspace	= 10 (Cyan, magenta, yellow, black, alpha)
sRGBColorspace	= 11 (Kodak PhotoCD sRGB)
HSLColorspace	= 12 (Hue, saturation, luminosity)
HWBColorspace	= 13 (Hue, whiteness, blackness)
LABColorspace	= 14 (LAB colorspace not supported yet other than via lcms)
CineonLogRGBColorspace	= 15 (RGB data with Cineon Log scaling, 2.048 density range)
Rec601LumaColorspace	= 16 (Luma (Y) according to ITU-R 601)
Rec601YCbCrColorspace	= 17 (YCbCr according to ITU-R 601)
Rec709LumaColorspace	= 18 (Luma (Y) according to ITU-R 709)
Rec709YCbCrColorspace	= 19 (YCbCr according to ITU-R 709)

(Read and Write computed property)

### columns as UInt32

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image width.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

Title = str(image.columns)+" x "+str(image.rows)
Backdrop=image.CopyPicture
```

### CombinePictureWithMask as picture

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe in REAL Studio 2010r3 or newer, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a copy of the image with mask.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

dim c as new GColorMBS("white")
image.transparent(c)

Backdrop=image.CombinePictureWithMask
```

**Notes:** Internally this calls Width and Height, CopyPicture and CopyMask.

**comment as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image comment.

See also:

- 2.20.1 comment(comment as string) 143

**comment(comment as string)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Comment image (add comment string to image).

**Notes:** By default, each image is commented with its file name. Use this method to assign a specific comment to the image. Optionally you can include the image filename, type, width, height, or other image attributes by embedding special format characters:

See also:

- 2.20.1 comment as string 143

**compare(image as GImageMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Compare current image with another image.

**Notes:** Sets meanErrorPerPixel, normalizedMaxError, and normalizedMeanError in the current image. False is returned if the images are identical. An ErrorOption exception is thrown if the reference image columns, rows, colorspace, or matte differ from the current image:

**compose as integer**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Composition operator to be used when composition is implicitly used (such as for image flattening).

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

**composite(compositeImage as GImageMBS, gravity as integer, CompositeOperator as integer=2)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Compose an image onto another at specified x and y offset and using a specified algorithm.

See also:

- 2.20.1 composite(compositeImage as GImageMBS, offset as GMGeometryMBS, CompositeOperator as integer=2) 144
- 2.20.1 composite(compositeImage as GImageMBS, xOffset as integer, yOffset as integer, CompositeOperator as integer=2) 144

**composite(compositeImage as GImageMBS, offset as GMGeometryMBS, CompositeOperator as integer=2)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Compose an image onto another at specified x and y offset and using a specified algorithm.

See also:

- 2.20.1 composite(compositeImage as GImageMBS, gravity as integer, CompositeOperator as integer=2) 144
- 2.20.1 composite(compositeImage as GImageMBS, xOffset as integer, yOffset as integer, CompositeOperator as integer=2) 144

**composite(compositeImage as GImageMBS, xOffset as integer, yOffset as integer, CompositeOperator as integer=2)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Compose an image onto another at specified x and y offset and using a specified algorithm.  
See also:

- 2.20.1 composite(compositeImage as GImageMBS, gravity as integer, CompositeOperator as integer=2) 144
- 2.20.1 composite(compositeImage as GImageMBS, offset as GMGeometryMBS, CompositeOperator as integer=2) 144

### compressType as integer

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image compression type.

**Notes:**

The default is the compression type of the input image file.  
(Read and Write computed property)

### Constructor

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Default constructor.

See also:

- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(other as GImageMBS) 149
- 2.20.1 Constructor(Path as string) 150

- 2.20.1 Constructor(pic as picture) 151
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

### Constructor(blob as GMBlobMBS)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct Image from in-memory Blob.

See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(other as GImageMBS) 149
- 2.20.1 Constructor(Path as string) 150
- 2.20.1 Constructor(pic as picture) 151
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

### Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct Image of specified size from in-memory Blob.

See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147

- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(other as GMImageMBS) 149
- 2.20.1 Constructor(Path as string) 150
- 2.20.1 Constructor(pic as picture) 151
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

### Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32)

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct Image of specified size and depth from in-memory Blob.

See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(other as GMImageMBS) 149
- 2.20.1 Constructor(Path as string) 150
- 2.20.1 Constructor(pic as picture) 151
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

**Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct Image of specified size, depth, and format from in-memory Blob.  
See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(other as GImageMBS) 149
- 2.20.1 Constructor(Path as string) 150
- 2.20.1 Constructor(pic as picture) 151
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

**Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct Image of specified size, depth, and format from in-memory Blob.  
See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148

2.20. CLASS GMIMAGEMBS 149

- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(other as GMImageMBS) 149
- 2.20.1 Constructor(Path as string) 150
- 2.20.1 Constructor(pic as picture) 151
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

**Constructor(file as folderitem)**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (Graphics-Magick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct from image file.

See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(other as GMImageMBS) 149
- 2.20.1 Constructor(Path as string) 150
- 2.20.1 Constructor(pic as picture) 151
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

**Constructor(other as GMImageMBS)**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (Graphics-Magick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates an image by making a copy of the existing one.

See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(Path as string) 150
- 2.20.1 Constructor(pic as picture) 151
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

### Constructor(Path as string)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct from image file or image specification.

See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(other as GImageMBS) 149
- 2.20.1 Constructor(pic as picture) 151
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

**Constructor(pic as picture)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe in REAL Studio 2010r3 or newer, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a new GImage with the given picture.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
Backdrop=image.CopyPicture
```

**Notes:** Pixels from both the picture and picture's mask.

See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(other as GImageMBS) 149
- 2.20.1 Constructor(Path as string) 150
- 2.20.1 Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS) 151

**Constructor(size as GMGeometryMBS, ColorValue as GMColorMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Construct a blank image canvas of specified size and color.

**Example:**

```

dim g as new GMGeometryMBS(600,600)
dim c as new GMColorRGBMBS(1.0,0.0,0.0) // red
dim image as new GMImageMBS(g, c)

const TrueColorType=6

// Ensure that there are no other references to this image.
image.modifyImage
// Set the image type to TrueColor DirectClass representation.
image.type=TrueColorType

Backdrop=image.CopyPicture(0,0,600,600)

```

See also:

- 2.20.1 Constructor 145
- 2.20.1 Constructor(blob as GMBlobMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS) 146
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32) 147
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, depth as UInt32, Magick as string) 148
- 2.20.1 Constructor(blob as GMBlobMBS, geometry as GMGeometryMBS, Magick as string) 148
- 2.20.1 Constructor(file as folderitem) 149
- 2.20.1 Constructor(other as GMImageMBS) 149
- 2.20.1 Constructor(Path as string) 150
- 2.20.1 Constructor(pic as picture) 151

### **contrast(sharpen as UInt32)**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Contrast image (enhance intensity differences in image).

**Example:**

```

dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)

```

```
image.contrast(10)
```

```
Backdrop=image.CopyPicture
```

### CopyPicture as picture

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe in REAL Studio 2010r3 or newer, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a copy of the image and returns it as a new picture.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a circle
draw.Rectangle(250, 250, 100, 100)

Backdrop=image.CopyPicture
```

**Notes:** You may need to set image type to RGB to get it working.

See also:

- 2.20.1 CopyPicture(x as integer, y as integer, width as integer, height as integer) as picture 153

### CopyPicture(x as integer, y as integer, width as integer, height as integer) as picture

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe in REAL Studio 2010r3 or newer, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a copy of the image and returns it as a new picture.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.threshold 127

// convert to RGB so CopyPicture works
image.type = image.TrueColorType
Backdrop=image.CopyPicture(0,0,250,250)
```

**Notes:** You may need to set image type to RGB to get it working.

See also:

- 2.20.1 CopyPicture as picture

153

### CopyPictureMask as picture

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe in REAL Studio 2010r3 or newer, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a copy of the image's mask and returns it as a new picture.

See also:

- 2.20.1 CopyPictureMask(x as integer, y as integer, width as integer, height as integer) as picture 154

### CopyPictureMask(x as integer, y as integer, width as integer, height as integer) as picture

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe in REAL Studio 2010r3 or newer, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a copy of the image's mask and returns it as a new picture.

See also:

- 2.20.1 CopyPictureMask as picture

154

**crop(geometry as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Crop image (return subregion of original image).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.crop GMGeometryMBS.Make(100,200)

Backdrop=image.CopyPicture
```

**cycleColormap(amount as integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Cycle (rotate) image colormap.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.cycleColormap(5)

image.type = image.TrueColorType

Backdrop=image.CopyPicture
```

**debug as boolean**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Enable printing of debug messages from GraphicsMagick as it executes.

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

### **defineSet(magick as string, key as string) as boolean**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Set or obtain a definition flag to applied when encoding or decoding the specified format.

**Notes:**

Similar to the defineValue() method except that passing the flag value 'true' creates a value-less define with that format and key. Passing the flag value 'false' removes any existing matching definition. The method returns 'true' if a matching key exists, and 'false' if no matching key exists.

(Read and Write computed property)

### **defineValue(magick as string, key as string) as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Set or obtain a definition string to applied when encoding or decoding the specified format.

**Notes:**

The meanings of the definitions are format specific. The format is designated by the magick argument, the format-specific key is designated by key, and the associated value is specified by value. See the defineSet() method if the key must be removed entirely.

(Read and Write computed property)

### **density as GMGeometryMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Vertical and horizontal resolution in pixels of the image.

**Notes:**

This option specifies an image density when decoding a Postscript or Portable Document page. Often used

with psPageSize.  
(Read and Write computed property)

### depth as UInt32

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image depth (bits allocated to red/green/blue components).

**Notes:**

Used to specify the bit depth when reading or writing raw images or when the output format supports multiple depths. Defaults to the quantum depth that GraphicsMagick is compiled with.  
(Read and Write computed property)

### despeckle

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Despeckle image (reduce speckle noise).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.despeckle
```

```
Backdrop=image.CopyPicture
```

### directory as string

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Tile names from within an image montage.

**display**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Display image on screen.

**Notes:**

Caution: if an image format is is not compatible with the display visual (e.g. JPEG on a colormapped display) then the original image will be altered. Use a copy of the original if this is a problem.

The plugin is not compiled with X11 so this call may not be useful.

**edge(radius as double=0.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Edge image (hilight edges in image).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.edge
```

```
Backdrop=image.CopyPicture
```

**Notes:** The radius is the radius of the pixel neighborhood. Specify a radius of zero for automatic radius selection.

**emboss(radius as double=0.0, sigma as double=1.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Emboss image (hilight edges with 3D effect).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
image.emboss
```

```
Backdrop=image.CopyPicture
```

**Notes:** The radius parameter specifies the radius of the Gaussian, in pixels, not counting the center pixel. The sigma parameter specifies the standard deviation of the Laplacian, in pixels.

**endian as integer**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The endian mode.

**Notes:**

Endianness (LSBEndian like Intel, MSBEndian like SPARC, or NativeEndian for what this computer uses) for image formats which support endian-specific options.  
(Read and Write computed property)

**enhance**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Enhance image (minimize noise).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
image.enhance
```

```
Backdrop=image.CopyPicture
```

**erase**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Set all image pixels to the current background color.

**fileName as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image file name.

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

**fileSize as Int64**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Number of bytes of the image on disk.

**fillColor as GMColorMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Color to use when filling drawn objects.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GImageMBS(g, c)
```

```
image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a circle
draw.Circle(250, 250, 120, 150)

Backdrop=image.CopyPicture
```

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

### fillPattern as GMImageMBS

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Pattern to use while filling drawn objects.

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

### filterType as integer

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The reduction filter employed has a significant effect on the time required to resize an image and the resulting quality. The default filter is Lanczos which has been shown to produce high quality results when reducing most images.

**Notes:**

Filter to use when resizing image.  
(Read and Write computed property)

**flip**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flip image (reflect each scanline in the vertical direction).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.flip
```

```
Backdrop=image.CopyPicture
```

**floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flood-fill color across pixels that match the color of the target pixel and are neighbors of the target pixel.

**Notes:** Uses current fuzz setting when determining color match.

See also:

- 2.20.1 floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS) 162
- 2.20.1 floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS) 163
- 2.20.1 floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS) 163

**floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flood-fill color across pixels starting at target-pixel and stopping at pixels matching specified border color.

**Notes:** Uses current fuzz setting when determining color match:  
See also:

- 2.20.1 floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS) 162
- 2.20.1 floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS) 163
- 2.20.1 floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS) 163

### **floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS)**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flood-fill color across pixels that match the color of the target pixel and are neighbors of the target pixel.

**Notes:** Uses current fuzz setting when determining color match.  
See also:

- 2.20.1 floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS) 162
- 2.20.1 floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS) 162
- 2.20.1 floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS) 163

### **floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS)**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flood-fill color across pixels starting at target-pixel and stopping at pixels matching specified border color.

**Notes:** Uses current fuzz setting when determining color match:  
See also:

- 2.20.1 floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS) 162
- 2.20.1 floodFillColor(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS) 162
- 2.20.1 floodFillColor(x as UInt32, y as UInt32, fillColor as GMColorMBS) 163

**floodFillOpacity(x as UInt32, y as UInt32, opacity as UInt32, PaintMethod as Integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flood-fill pixels matching color (within fuzz factor) of target pixel(x,y) with replacement opacity value using method.

**floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flood-fill texture across pixels that match the color of the target pixel and are neighbors of the target pixel.

**Notes:** Uses current fuzz setting when determining color match.

See also:

- 2.20.1 floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS) 164
- 2.20.1 floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS) 165
- 2.20.1 floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS) 165

**floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flood-fill texture across pixels starting at target-pixel and stopping at pixels matching specified border color.

**Notes:** Uses current fuzz setting when determining color match.

See also:

- 2.20.1 floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS) 164
- 2.20.1 floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS) 165

- 2.20.1 floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS) 165

### **floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flood-fill texture across pixels that match the color of the target pixel and are neighbors of the target pixel.

**Notes:** Uses current fuzz setting when determining color match.

See also:

- 2.20.1 floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS) 164
- 2.20.1 floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS) 164
- 2.20.1 floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS) 165

### **floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS, borderColor as GMColorMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flood-fill texture across pixels starting at target-pixel and stopping at pixels matching specified border color.

**Notes:** Uses current fuzz setting when determining color match.

See also:

- 2.20.1 floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS) 164
- 2.20.1 floodFillTexture(point as GMGeometryMBS, fillColor as GMColorMBS, borderColor as GMColorMBS) 164
- 2.20.1 floodFillTexture(x as UInt32, y as UInt32, fillColor as GMColorMBS) 165

**flop**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Flop image (reflect each scanline in the horizontal direction).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.flop
```

```
Backdrop=image.CopyPicture
```

**font as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Text rendering font.

**Notes:**

If the font is a fully qualified X server font name, the font is obtained from an X server. To use a TrueType font, precede the TrueType filename with an @. Otherwise, specify a Postscript font name (e.g. "helvetica"). (Read and Write computed property)

**fontPointsize as double**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Text rendering font point size.

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

**format as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Long image format description.

**frame**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a decorative frame around the image.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.frame
```

```
Backdrop=image.CopyPicture
```

See also:

- 2.20.1 frame(geometry as GMGeometryMBS) 167
- 2.20.1 frame(width as UInt32, height as UInt32, innerBevel as integer=6, outerBevel as integer=6) 169

**frame(geometry as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a decorative frame around the image.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.frame(GMGeometryMBS.Make("10x10"))
```

```
Backdrop=image.CopyPicture
```

See also:

- 2.20.1 frame 167
- 2.20.1 frame(width as UInt32, height as UInt32, innerBevel as integer=6, outerBevel as integer=6) 169

**frame(width as UInt32, height as UInt32, innerBevel as integer=6, outerBevel as integer=6)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Draw a decorative frame around the image.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.frame(15,15)
```

```
Backdrop=image.CopyPicture
```

See also:

- 2.20.1 frame 167
- 2.20.1 frame(geometry as GMGeometryMBS) 167

**gamma as double**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Gamma correct the image or individual image channels.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.gamma = 3.0
```

```
Backdrop=image.CopyPicture
```

**Notes:**

If you get the value, it is the gamma level of the image. Gamma is a pow() function which converts between the linear light representation and the representation for the computer display. Most computer images are

gamma corrected to 2.2 (1/0.4545) so that each step results in a visually linear step on a computer or video display:

(Read and Write computed property)

See also:

- 2.20.1 gamma(gammaRed as double, gammaGreen as double, gammaBlue as double) 170

### **gamma(gammaRed as double, gammaGreen as double, gammaBlue as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Gamma correct the image or individual image channels.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.gamma(1,2,3)
```

```
Backdrop=image.CopyPicture
```

See also:

- 2.20.1 gamma as double 169

### **gaussianBlur(width as double, sigma as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Gaussian blur image.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.gaussianBlur(30, 10)
```

Backdrop=image.CopyPicture

**Notes:** The number of neighbor pixels to be included in the convolution mask is specified by width. The standard deviation of the gaussian bell curve is specified by sigma

**gaussianBlurChannel(channel as integer, width as double, sigma as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Gaussian blur image channel.

**Notes:** The number of neighbor pixels to be included in the convolution mask is specified by width. The standard deviation of the gaussian bell curve is specified by sigma.

**geometry as GMGeometryMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Preferred size of the image when encoding.

**getChromaBluePrimary(byref x as double, byref y as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Chromaticity blue primary point.

**getchromaGreenPrimary(byref x as double, byref y as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Chromaticity green primary point.

**Notes:** e.g.  $x=0.3$ ,  $y=0.6$

### **getchromaRedPrimary(byref x as double, byref y as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Chromaticity red primary point

**Notes:** e.g.  $x=0.64$ ,  $y=0.33$

### **getchromaWhitePoint(byref x as double, byref y as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Chromaticity white point

**Notes:** e.g.  $x=0.3127$ ,  $y=0.329$

### **gifDisposeMethod as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** GIF disposal method.

**Notes:**

This option (specific to the GIF file format) is used to control how successive frames are rendered (how the preceding frame is disposed of) when creating a GIF animation.

(Read and Write computed property)

### **Graphics as GMGraphicsMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Creates a graphics object for this image.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a circle
draw.Circle(250, 250, 120, 150)

Backdrop=image.CopyPicture
```

**Notes:** Using the graphics object you can draw on the image.

### iccColorProfile as GMBlobMBS

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** ICC color profile.

**Notes:**

Supplied via a Blob since Magick++/ and GraphicsMagick do not currently support formatting this data structure directly. Specifications are available from the International Color Consortium for the format of ICC color profiles.

(Read and Write computed property)

### implode(factor as double=0.0)

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Implode image (special effect).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.implode(0.3)

Backdrop=image.CopyPicture
```

**interlaceType as integer**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The type of interlacing scheme (default NoInterlace ).

**Notes:**

This option is used to specify the type of interlacing scheme for raw image formats such as RGB or YUV. NoInterlace means do not interlace, LineInterlace uses scanline interlacing, and PlaneInterlace uses plane interlacing. PartitionInterlace is like PlaneInterlace except the different planes are saved to individual files (e.g. image.R, image.G, and image.B). Use LineInterlace or PlaneInterlace to create an interlaced GIF or progressive JPEG image.

(Read and Write computed property)

**iptcProfile as GMBlobMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** IPTC profile.

**Notes:**

Supplied via a Blob since Magick++ and GraphicsMagick do not currently support formatting this data structure directly. Specifications are available from the International Press Telecommunications Council for IPTC profiles.

(Read and Write computed property)

**isValid as boolean**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Does object contain valid image?

**Notes:**

Set to false in order to invalidate the image. Images constructed via the default constructor are invalid images and isValid() will return false.  
(Read and Write computed property)

**label as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image label.

See also:

- 2.20.1 label(text as string)

175

**label(text as string)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Assign a label to an image.

**Notes:** Use this option to assign a specific label to the image. Optionally you can include the image filename, type, width, height, or scene number in the label by embedding special format characters. If the first character of string is @, the image label is read from a file titled by the remaining characters in the string. When converting to Postscript, use this option to specify a header string to print above the image.

See also:

- 2.20.1 label as string

175

**level(black\_ point as double, white\_ point as double, mid\_ point as double=1.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Level image to increase image contrast, and/or adjust image gamma.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.level(0, 127.0)
```

```
Backdrop=image.CopyPicture
```

**Notes:** Adjust the levels of the image by scaling the colors falling between specified white and black points to the full available quantum range. The parameters provided represent the black, mid (gamma), and white points. The black point specifies the darkest color in the image. Colors darker than the black point are set to zero. Mid point (gamma) specifies a gamma correction to apply to the image. White point specifies the lightest color in the image. Colors brighter than the white point are set to the maximum quantum value. The black and white point have the valid range 0 to MaxRGB while mid (gamma) has a useful range of 0 to ten:

**levelChannel(channel as integer, black\_ point as double, white\_ point as double, mid\_ point as double=1.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Level image channel to increase image contrast, and/or adjust image gamma.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.levelChannel(image.BlueChannel, 0, 127.0)
```

```
Backdrop=image.CopyPicture
```

**Notes:** Adjust the levels of the image channel by scaling the colors falling between specified white and black points to the full available quantum range. The parameters provided represent the black, mid (gamma), and white points. The black point specifies the darkest color in the image. Colors darker than the black point are set to zero. Mid point (gamma) specifies a gamma correction to apply to the image. White point specifies the lightest color in the image. Colors brighter than the white point are set to the maximum quantum value. The black and white point have the valid range 0 to MaxRGB while mid (gamma) has a useful range of 0 to ten.

### lineWidth as double

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Stroke width for drawing vector objects (default one)

**Notes:**

This method is now deprecated. Please use strokeWidth instead.  
(Read and Write computed property)

### magick as string

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The name of the codec to use for compression.

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

### magnify

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Magnify image by integral size (double the dimensions)

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.magnify
```

```
Backdrop=image.CopyPicture
```

```
map(mapImage as GMImageMBS, dither as boolean=false)
```

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Remap image colors with closest color from a reference image.

**Example:**

```
// some picture we want to map colors
dim pic as Picture = LogoMBS(500)

// build a picture with palette
dim backgroundColor as new GMColorMBS(255,255,255) // white
dim size as new GMGeometryMBS(10,10)

dim i as new GMImageMBS(pic)
dim x as new GMImageMBS(size, backgroundColor)

x.pixelColor(0,0) = new GMColorMBS(0 ,0 ,0 ) // black
x.pixelColor(0,1) = new GMColorMBS(255,0 ,0 ) // red
x.pixelColor(0,2) = new GMColorMBS(0 ,255,0 ) // green
x.pixelColor(0,3) = new GMColorMBS(0 ,0 ,255) // blue
x.pixelColor(0,4) = new GMColorMBS(255,255,0 ) // yellow
x.pixelColor(0,5) = new GMColorMBS(0 ,255,255) // cyan
x.pixelColor(0,6) = new GMColorMBS(255,0 ,255) // magenta

// do the map
i.map(x, false)

// convert result from palette picture to bitmap picture
i.type = i.TrueColorType

// and copy picture to backdrop
Backdrop = i.CopyPicture
```

**Notes:** Set dither to true in to apply Floyd/Steinberg error diffusion to the image. By default, color reduction chooses an optimal set of colors that best represent the original image. Alternatively, you can choose a

particular set of colors from an image file with this option.

### **matte as boolean**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image supports transparency (matte channel)

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

### **matteColor as GColorMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image matte (frame) color.

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

### **matteFloodfill(target as GColorMBS, opacity as UInt32, x as integer, y as integer, Paint-Method as Integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Floodfill designated area with a replacement opacity value.

### **meanErrorPerPixel as double**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The mean error per pixel computed when an image is color reduced.

**Notes:** This parameter is only valid if verbose is set to true and the image has just been quantized.

**medianFilter(radius as double=0.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Filter image by replacing each pixel component with the median color in a circular neighborhood.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.medianFilter(10)
```

```
Backdrop=image.CopyPicture
```

**minify**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Reduce image by integral (half) size.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.minify
```

```
Backdrop=image.CopyPicture
```

**modequalizeifyImage**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Not documented.

**modifyImage**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Prepare to update image (copy if reference >1).

**Notes:** Normally Magick++'s implicit reference counting takes care of all instance management. In the rare case that the automatic instance management does not work, use this method to assure that there is only one reference to the image to be modified. It should be used in the cases where a GraphicsMagick C function is used directly on an image which may have multiple references:

**modulate(brightness as double, saturation as double, hue as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Modulate percent hue, saturation, and brightness of an image.

**Notes:** Modulation of saturation and brightness is as a ratio of the current value (1.0 for no change). Modulation of hue is an absolute rotation of -180 degrees to +180 degrees from the current position corresponding to an argument range of 0 to 2.0 (1.0 for no change).

**modulusDepth as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image modulus depth (minimum number of bits required to support red/green/blue components without loss of accuracy).

**Notes:**

The pixel modulus depth may be decreased by supplying a value which is less than the current value, updating the pixels (reducing accuracy) to the new depth. The pixel modulus depth can not be increased over the current value using this method.

(Read and Write computed property)

**monochrome as boolean**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Transform image to black and white while color reducing (quantizing).

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

**montageGeometry as GMGeometryMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Tile size and offset within an image montage.

**Notes:** Only valid for montage images.

**motionBlur(radius as double, sigma as double, angle as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Motion blur image with specified blur factor.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.motionBlur(30,10,90)
```

```
Backdrop=image.CopyPicture
```

**Notes:** The radius parameter specifies the radius of the Gaussian, in pixels, not counting the center pixel. The sigma parameter specifies the standard deviation of the Laplacian, in pixels. The angle parameter specifies the angle the object appears to be coming from (zero degrees is from the right).

**negate(grayscale as boolean=false)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Negate colors in image.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.negate
```

```
Backdrop=image.CopyPicture
```

**Notes:** Set grayscale to only negate grayscale values in image.

**normalize**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Normalize image (increase contrast by normalizing the pixel values to span the full range of color values).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.normalize
```

```
Backdrop=image.CopyPicture
```

**normalizedMaxError as double**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The normalized max error per pixel computed when an image is color reduced.

**Notes:** This parameter is only valid if verbose is set to true and the image has just been quantized.

### normalizedMeanError as double

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The normalized mean error per pixel computed when an image is color reduced.

**Notes:** This parameter is only valid if verbose is set to true and the image has just been quantized.

### oilPaint(radius as double=3.0)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Oilpaint image (image looks like an oil painting).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.oilPaint
```

```
Backdrop=image.CopyPicture
```

### opacity(opacity as UInt32)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Set or attenuate the opacity channel in the image.

**Notes:** If the image pixels are opaque then they are set to the specified opacity value, otherwise they are blended with the supplied opacity value. The value of opacity ranges from 0 (completely opaque) to MaxRGB. The defines OpaqueOpacity and TransparentOpacity are available to specify completely opaque or completely transparent, respectively.

**opaque(opaqueColor as GMColorMBS, penColor as GMColorMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Change color of specified opaque pixel to specified pen color.

**orientation as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image orientation. Supported by some file formats such as DPX and TIFF. Useful for turning the right way up.

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

**page as GMGeometryMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Preferred size and location of an image canvas.

**Notes:**

Use this option to specify the dimensions and position of the Postscript page in dots per inch or a TEXT page in pixels. This option is typically used in concert with density .

Page may also be used to position a GIF image (such as for a scene in an animation).  
(Read and Write computed property)

**penColor as GMColorMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The pen color.

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

### **ping(data as GMBlobMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Reads information for an image from the blob.

**Notes:** Ping is similar to read except only enough of the image is read to determine the image columns, rows, and filesize. Access the columns, rows, and fileSize attributes after invoking ping. The image pixels are not valid after calling ping.

See also:

- 2.20.1 ping(file as folderitem) 186
- 2.20.1 ping(Path as string) 186

### **ping(file as folderitem)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Reads information for an image from the file.

**Notes:** Ping is similar to read except only enough of the image is read to determine the image columns, rows, and filesize. Access the columns, rows, and fileSize attributes after invoking ping. The image pixels are not valid after calling ping.

See also:

- 2.20.1 ping(data as GMBlobMBS) 186
- 2.20.1 ping(Path as string) 186

### **ping(Path as string)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Reads information for an image from the image specification.

**Notes:** Ping is similar to read except only enough of the image is read to determine the image columns,

rows, and filesize. Access the columns, rows, and fileSize attributes after invoking ping. The image pixels are not valid after calling ping.

See also:

- 2.20.1 ping(data as GMBlobMBS) 186
- 2.20.1 ping(file as folderitem) 186

### pixelColor(x as UInt32, y as UInt32) as GMColorMBS

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Get/set pixel color at location x & y.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
dim c as new GMColorMBS("red")
```

```
for x as integer = 240 to 260
image.pixelColor(x,250)=c
next
```

```
for y as integer = 240 to 260
image.pixelColor(250,y)=c
next
```

```
Backdrop=image.CopyPicture
```

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

### profile(name as string) as GMBlobMBS

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Get or set a named profile.

**Notes:**

Add or remove a named profile to/from the image. Remove the profile by passing an empty Blob (e.g. Blob()). Valid names are "\*", "8BIM", "ICM", "IPTC", or a user/format-defined profile name.

Retrieve a named profile from the image. Valid names are: "8BIM", "8BIMTEXT", "APP1", "APP1JPEG", "ICC", "ICM", & "IPTC" or an existing user/format-defined profile name  
(Read and Write computed property)

### quality as UInt32

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** JPEG/MIFF/PNG compression level (default 75).

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

### quantize(measureError as boolean=false)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Quantize image (reduce number of colors).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.quantize
```

```
image.type = image.TrueColorType
Backdrop=image.CopyPicture
```

**Notes:** Set measureError to true in order to calculate error attributes.

**quantizeColors as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Maximum number of colors to quantize to.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.quantizeColors = 10
image.quantize
```

```
image.type = image.TrueColorType
Backdrop=image.CopyPicture
```

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

**quantizeColorSpace as integer**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Colorspace to quantize in (default RGB).

**Notes:**

Empirical evidence suggests that distances in color spaces such as YUV or YIQ correspond to perceptual color differences more closely than do distances in RGB space. These color spaces may give better results when color reducing an image.

(Read and Write computed property)

**quantizeDither as boolean**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Apply Floyd/Steinberg error diffusion to the image.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.quantizeColors = 10
image.quantizeDither = true
image.quantize

image.type = image.TrueColorType
Backdrop=image.CopyPicture
```

**Notes:**

The basic strategy of dithering is to trade intensity resolution for spatial resolution by averaging the intensities of several neighboring pixels. Images which suffer from severe contouring when reducing colors can be improved with this option. The `quantizeColors` or `monochrome` option must be set for this option to take effect.

(Read and Write computed property)

**quantizeTreeDepth as UInt32**

method from class `GImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Depth of the quantization color classification tree.

**Notes:**

Values of 0 or 1 allow selection of the optimal tree depth for the color reduction algorithm. Values between 2 and 8 may be used to manually adjust the tree depth.

(Read and Write computed property)

**raiseImage**

method from class `GImageMBS`, `GraphicsMagick`, `MBS REALbasic GraphicsMagick Plugin` (`GraphicsMagick`), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Raise image (lighten or darken the edges of an image to give a 3-D raised or lowered effect).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
image.raiseImage
```

```
Backdrop=image.CopyPicture
```

See also:

- 2.20.1 raiseImage(geometry as GMGeometryMBS, raisedFlag as boolean=false)

191

### raiseImage(geometry as GMGeometryMBS, raisedFlag as boolean=false)

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Raise image (lighten or darken the edges of an image to give a 3-D raised or lowered effect).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
image.raiseImage(GMGeometryMBS.Make(5,8))
```

```
Backdrop=image.CopyPicture
```

See also:

- 2.20.1 raiseImage

190

### randomThreshold(thresholds as GMGeometryMBS)

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Random threshold image.

**Example:**

```

dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)

image.randomThreshold(GMGeometryMBS.make("50x200"))

image.type = image.TrueColorType
Backdrop=image.CopyPicture

```

**Notes:** Changes the value of individual pixels based on the intensity of each pixel compared to a random threshold. The result is a low-contrast, two color image. The thresholds argument is a geometry containing LOWxHIGH thresholds. If the string contains 2x2, 3x3, or 4x4, then an ordered dither of order 2, 3, or 4 will be performed instead. If a channel argument is specified then only the specified channel is altered. This is a very fast alternative to 'quantize' based dithering.

### randomThresholdChannel(thresholds as GMGeometryMBS, channel as integer)

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Random threshold image channel.

**Notes:** Changes the value of individual pixels based on the intensity of each pixel compared to a random threshold. The result is a low-contrast, two color image. The thresholds argument is a geometry containing LOWxHIGH thresholds. If the string contains 2x2, 3x3, or 4x4, then an ordered dither of order 2, 3, or 4 will be performed instead. If a channel argument is specified then only the specified channel is altered. This is a very fast alternative to 'quantize' based dithering.

### read(blob as GMBlobMBS)

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Read single image frame from in-memory Blob.

See also:

- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string) 194

2.20. CLASS GMIMAGEMBS 193

- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string) 194
- 2.20.1 read(file as folderitem) 195
- 2.20.1 read(path as string) 195
- 2.20.1 read(size as GMGeometryMBS, file as folderitem) 196
- 2.20.1 read(size as GMGeometryMBS, Path as string) 196

**read(blob as GMBlobMBS, size as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (Graphics-Magick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Read single image frame of specified size from in-memory Blob.

See also:

- 2.20.1 read(blob as GMBlobMBS) 192
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string) 194
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string) 194
- 2.20.1 read(file as folderitem) 195
- 2.20.1 read(path as string) 195
- 2.20.1 read(size as GMGeometryMBS, file as folderitem) 196
- 2.20.1 read(size as GMGeometryMBS, Path as string) 196

**read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (Graphics-Magick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Read single image frame of specified size and depth from in-memory Blob.

See also:

- 2.20.1 read(blob as GMBlobMBS) 192
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string) 194

- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string) 194
- 2.20.1 read(file as folderitem) 195
- 2.20.1 read(path as string) 195
- 2.20.1 read(size as GMGeometryMBS, file as folderitem) 196
- 2.20.1 read(size as GMGeometryMBS, Path as string) 196

**read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Read single image frame of specified size, depth, and format from in-memory Blob.  
See also:

- 2.20.1 read(blob as GMBlobMBS) 192
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string) 194
- 2.20.1 read(file as folderitem) 195
- 2.20.1 read(path as string) 195
- 2.20.1 read(size as GMGeometryMBS, file as folderitem) 196
- 2.20.1 read(size as GMGeometryMBS, Path as string) 196

**read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Read single image frame of specified size, and format from in-memory Blob.  
See also:

- 2.20.1 read(blob as GMBlobMBS) 192
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer) 193

- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string) 194
- 2.20.1 read(file as folderitem) 195
- 2.20.1 read(path as string) 195
- 2.20.1 read(size as GMGeometryMBS, file as folderitem) 196
- 2.20.1 read(size as GMGeometryMBS, Path as string) 196

### read(file as folderitem)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (Graphics-Magick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Read single image frame into current object.

See also:

- 2.20.1 read(blob as GMBlobMBS) 192
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string) 194
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string) 194
- 2.20.1 read(path as string) 195
- 2.20.1 read(size as GMGeometryMBS, file as folderitem) 196
- 2.20.1 read(size as GMGeometryMBS, Path as string) 196

### read(path as string)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (Graphics-Magick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Read single image frame into current object.

See also:

- 2.20.1 read(blob as GMBlobMBS) 192
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer) 193

- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string) 194
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string) 194
- 2.20.1 read(file as folderitem) 195
- 2.20.1 read(size as GMGeometryMBS, file as folderitem) 196
- 2.20.1 read(size as GMGeometryMBS, Path as string) 196

### read(size as GMGeometryMBS, file as folderitem)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Read single image frame of specified size into current object.

See also:

- 2.20.1 read(blob as GMBlobMBS) 192
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string) 194
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string) 194
- 2.20.1 read(file as folderitem) 195
- 2.20.1 read(path as string) 195
- 2.20.1 read(size as GMGeometryMBS, Path as string) 196

### read(size as GMGeometryMBS, Path as string)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Read single image frame of specified size into current object.

See also:

- 2.20.1 read(blob as GMBlobMBS) 192
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS) 193
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer) 193

- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, depth as integer, magick as string) 194
- 2.20.1 read(blob as GMBlobMBS, size as GMGeometryMBS, magick as string) 194
- 2.20.1 read(file as folderitem) 195
- 2.20.1 read(path as string) 195
- 2.20.1 read(size as GMGeometryMBS, file as folderitem) 196

### reduceNoise

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Reduce noise in image using a noise peak elimination filter.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
image.reduceNoise
```

```
Backdrop=image.CopyPicture
```

See also:

- 2.20.1 reduceNoise(order as double) 197

### reduceNoise(order as double)

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Reduce noise in image using a noise peak elimination filter.

See also:

- 2.20.1 reduceNoise 197

**renderingIntent as integer**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The type of rendering intent (used when applying an ICC color profile).

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

**resolutionUnits as integer**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Units of image resolution.

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

**roll(columns as UInt32, rows as UInt32)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Roll image (rolls image vertically and horizontally) by specified number of columns and rows).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.roll(30,30)
```

```
Backdrop=image.CopyPicture
```

See also:

- 2.20.1 roll(roll as GMGeometryMBS)

**roll(roll as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Roll image (rolls image vertically and horizontally) by specified number of columns and rows).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.roll(GMGeometryMBS.Make(0,0,30,30))

Backdrop=image.CopyPicture
```

See also:

- 2.20.1 roll(columns as UInt32, rows as UInt32)

198

**rotate(degree as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Rotate image counter-clockwise by specified number of degrees.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.rotate(30)

Backdrop=image.CopyPicture
```

**rows as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The number of pixel rows in the image.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

Title = str(image.columns)+" x "+str(image.rows)
Backdrop=image.CopyPicture
```

**sample(geometry as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Resize image by using pixel sampling algorithm.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.sample GMGeometryMBS.make(100,100)

Backdrop=image.CopyPicture
```

**scale(geometry as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Resize image by using simple ratio algorithm which provides good quality.

**Example:**

```
dim p as Picture = LogoMBS(500)
```

```
dim image as new GMImageMBS(p)

image.scale new GMGeometryMBS(100,100)

Backdrop=image.CopyPicture
```

### scene as UInt32

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image scene number.

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

### segment(clusterThreshold as double=1.0, smoothingThreshold as double=1.5)

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Segment (coalesce similar image components) by analyzing the histograms of the color components and identifying units that are homogeneous with the fuzzy c-means technique.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)

image.segment

image.type = image.TrueColorType

Backdrop=image.CopyPicture
```

**Notes:** A histogram is built for the image. This histogram is filtered to reduce noise and a second derivative of the histogram plot is built and used to identify potential cluster colors (peaks in the histogram). The cluster colors are then validated by scanning through all of the pixels to see how many pixels fall within each cluster. Some candidate cluster colors may not match any of the image pixels at all and should be discarded. Specify clusterThreshold, as the number of pixels matching a cluster color in order for the cluster to be considered valid. SmoothingThreshold eliminates noise in the second derivative of the histogram. As

the value is increased, you can expect a smoother second derivative. The default is 1.5.

### **setChromaBluePrimary(x as double, y as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Chromaticity blue primary point.

**Notes:** e.g. x=0.15, y=0.06

### **setchromaGreenPrimary(x as double, y as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Chromaticity green primary point.

**Notes:** e.g. x=0.3, y=0.6

### **setchromaRedPrimary(x as double, y as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Chromaticity red primary point

**Notes:** e.g. x=0.64, y=0.33

### **setchromaWhitePoint(x as double, y as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Chromaticity white point

**Notes:** e.g. x=0.3127, y=0.329

**SetPicture(pic as picture, x as integer, y as integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe in REAL Studio 2010r3 or newer, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Copies the picture into the Image at the given position.

**SetPictureMask(maskpic as picture, x as integer, y as integer)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe in REAL Studio 2010r3 or newer, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Copies the picture into the Image's mask at the given position.

**shade(azimuth as double=30.0, elevation as double=30.0, colorShading as boolean=false)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Shade image using distant light source.

**Notes:** Specify azimuth and elevation as the position of the light source. By default, the shading results as a grayscale image.. Set colorShading to true to shade the red, green, and blue components of the image.

**sharpen(radius as double=0.0, sigma as double=1.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Sharpen pixels in image.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.sharpen
```

```
Backdrop=image.CopyPicture
```

**Notes:** The radius parameter specifies the radius of the Gaussian, in pixels, not counting the center pixel. The sigma parameter specifies the standard deviation of the Laplacian, in pixels.

**sharpenChannel(channel as integer, radius as double=0.0, sigma as double=1.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Sharpen pixels in image channel.

**Notes:** The radius parameter specifies the radius of the Gaussian, in pixels, not counting the center pixel. The sigma parameter specifies the standard deviation of the Laplacian, in pixels.

**shave(geometry as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Shave pixels from image edges.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.shave(new GMGeometryMBS(200,200))
```

```
Backdrop=image.CopyPicture
```

**shear(xShearAngle as double, yShearAngle as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Shear image (create parallelogram by sliding image by X or Y axis).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
image.shear(10,20)
```

```
Backdrop=image.CopyPicture
```

**Notes:** Shearing slides one edge of an image along the X or Y axis, creating a parallelogram. An X direction shear slides an edge along the X axis, while a Y direction shear slides an edge along the Y axis. The amount of the shear is controlled by a shear angle. For X direction shears, x degrees is measured relative to the Y axis, and similarly, for Y direction shears y degrees is measured relative to the X axis. Empty triangles left over from shearing the image are filled with the color defined as `borderColor`.

**signature(force as boolean=false) as string**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (Graphics-Magick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Image textual signature.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
MsgBox image.signature
```

```
Backdrop=image.CopyPicture
```

**Notes:** Set `force` to true in order to re-calculate the signature regardless of whether the image data has been modified.

**size as GMGeometryMBS**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Width and height of a raw image (an image which does not support width and height information).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
MsgBox image.size.StringValue
```

```
image.size = new GMGeometryMBS(200,200)
```

```
Backdrop=image.CopyPicture
```

**Notes:**

Size may also be used to affect the image size read from a multi-resolution format (e.g. Photo CD, JBIG, or JPEG).

(Read and Write computed property)

**solarize(factor as double=50.0)**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Solarize image (similar to effect seen when exposing a photographic film to light during the development process)

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)
```

```
image.solarize
```

```
Backdrop=image.CopyPicture
```

**spread(amount as UInt32=3)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Spread pixels randomly within image by specified ammount

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.spread 5
```

```
Backdrop=image.CopyPicture
```

**stegano(watermark as GImageMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Add a digital watermark to the image (based on second image).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim p1 as Picture = NewPicture(550,500,32)
dim p2 as Picture = NewPicture(550,500,32)
```

```
p1.Graphics.DrawPicture p, 0,0
```

```
p2.Graphics.DrawPicture p,50,0
```

```
dim image1 as new GImageMBS(p1)
```

```
dim image2 as new GImageMBS(p2)
```

```
image2.zoom(new GMGeometryMBS(100,100)) // scale down
```

```
// add watermark
image1.stegano(image2)
```

```
// now make a threshold so you see the difference
image1.threshold 254
```

```
image1.type = image1.TrueColorType
```

```
Backdrop=image1.CopyPicture
```

### stereo(rightImage as GImageMBS)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Create an image which appears in stereo when viewed with red-blue glasses (Red image on left, blue on right)

**Example:**

```
dim p as Picture = LogoMBS(500)
dim p1 as Picture = NewPicture(550,500,32)
dim p2 as Picture = NewPicture(550,500,32)
```

```
p1.Graphics.DrawPicture p, 0,0
p2.Graphics.DrawPicture p,50,0
```

```
dim image1 as new GImageMBS(p1)
dim image2 as new GImageMBS(p2)
```

```
image1.stereo(IMAGE2)
```

```
Backdrop=image1.CopyPicture
```

### strokeAntiAlias as boolean

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Enable/disable stroke anti-aliasing.

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

**strokeColor as GMColorMBS**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Color to use when drawing object outlines.

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a circle
draw.Circle(250, 250, 120, 150)

Backdrop=image.CopyPicture
```

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

**strokeDashOffset as double**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** While drawing using a dash pattern, specify distance into the dash pattern to start the dash (default 0).

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

**strokeLineCap as integer**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify the shape to be used at the end of open subpaths when they are stroked. #

**Notes:**

Values of LineCap are UndefinedCap, ButtCap, RoundCap, and SquareCap.  
(Read and Write computed property)

### **strokeLineJoin as integer**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify the shape to be used at the corners of paths (or other vector shapes) when they are stroked. Values of LineJoin are UndefinedJoin, MiterJoin, RoundJoin, and BevelJoin.

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

### **strokeMiterLimit as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Specify miter limit.

**Notes:**

When two line segments meet at a sharp angle and miter joins have been specified for 'lineJoin', it is possible for the miter to extend far beyond the thickness of the line stroking the path. The miterLimit' imposes a limit on the ratio of the miter length to the 'lineWidth'. The default value of this parameter is 4.

(Read and Write computed property)

### **strokePattern as GImageMBS**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Pattern image to use while stroking object outlines.

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

**strokeWidth as double**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Stroke width for drawing vector objects (default one).

**Example:**

```
dim g as new GMGeometryMBS(500,500)
dim c as new GMColorRGBMBS("white") // white
dim image as new GMImageMBS(g, c)

image.strokeColor = new GMColorRGBMBS("red") // Outline color
image.fillColor = new GMColorRGBMBS("green") // Fill color
image.strokeWidth = 5

dim draw as GMGraphicsMBS = image.Graphics

// Draw a circle
draw.Circle(250, 250, 120, 150)

Backdrop=image.CopyPicture
```

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

**subImage as UInt32**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Subimage of an image sequence.

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

**subRange as UInt32**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Number of images relative to the base image.

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

### **swirl(degree as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Swirl image (image pixels are rotated by degrees).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.swirl 200
```

```
Backdrop=image.CopyPicture
```

### **syncPixels**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Transfers the image cache pixels to the image.

### **textEncoding as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Annotation text encoding (e.g. "UTF-16").

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

**texture(texture as GImageMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Channel a texture on pixels matching image background color.

**threshold(degree as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Threshold image channels (below threshold becomes black, above threshold becomes white).

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

image.threshold 127

// convert to RGB so CopyPicture works
image.type = image.TrueColorType
Backdrop=image.CopyPicture
```

**Notes:** The range of the threshold parameter is 0 to MaxRGB.

**tileName as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Tile name.

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

**totalColors as UInt32**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Number of colors in the image.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

Title = str(image.totalColors) // shows 5284
Backdrop=image.CombinePictureWithMask
```

**transform(imageGeometry as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Transform image based on image and crop geometries.

**Notes:** Crop geometry is optional.

See also:

- 2.20.1 transform(imageGeometry as GMGeometryMBS, cropGeometry as GMGeometryMBS) 214

**transform(imageGeometry as GMGeometryMBS, cropGeometry as GMGeometryMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Transform image based on image and crop geometries.

**Notes:** Crop geometry is optional.

See also:

- 2.20.1 transform(imageGeometry as GMGeometryMBS) 214

**transformOrigin(tx as double, ty as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Origin of coordinate system to use when annotating with text or drawing.

**transformReset**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Reset transformation parameters to default.

**transformRotation(angle as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Rotation to use when annotating with text or drawing.

**transformScale(tx as double, ty as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Scale to use when annotating with text or drawing.

**transformSkewX(x as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Skew to use in X axis when annotating with text or drawing.

### **transformSkewY(y as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Skew to use in Y axis when annotating with text or drawing.

### **transparent(color as GMColorMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Add matte channel to image, setting pixels matching color to transparent.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)

dim c as new GMColorMBS("white")
image.transparent(c)
```

```
Backdrop=image.CombinePictureWithMask
```

### **trim**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Trim edges that are the background color from the image.

**Example:**

```
dim p as Picture = LogoMBS(500)
// make the logo picture bigger
dim q as Picture = NewPicture(700,700,32)
```

```
q.Graphics.DrawPicture p,100,100  
  
dim image as new GMImageMBS(q)  
  
// now trim the white border away  
image.trim  
  
Backdrop=image.CopyPicture
```

### type as integer

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The type of this image.

**Example:**

```
dim p as Picture = LogoMBS(500)  
dim image as new GMImageMBS(p)  
  
image.type = image.GrayscaleType  
  
Backdrop=image.CopyPicture
```

### Notes:

You can set this value to convert the image to the type.

Convert the image representation to the specified type or retrieve the current image type. If the image is reduced to an inferior type, then image information may be lost (e.g. color changed to grayscale).

Available enumerations for the type parameter:

(Read and Write computed property)

BilevelType	1	black/white
GrayscaleType	2	grayscale
GrayscaleMatteType	3	grayscale with alpha (opacity) channel
PaletteType	4	colormapped
PaletteMatteType	5	colormapped with transparency
TrueColorType	6	true (full) color
TrueColorMatteType	7	true (full) color with alpha (opacity) channel
ColorSeparationType	8	Cyan, magenta, yellow, and black
ColorSeparationMatteType	9	Cyan, magenta, yellow, and black with alpha (opacity) channel
OptimizeType	10	Optimize the image type to best represent the existing pixels

### unregisterId

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Not documented.

### unsharpmask(radius as double, sigma as double, amount as double, threshold as double)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Replace image with a sharpened version of the original image using the unsharp mask algorithm.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.unsharpmask(10,1,0.5,50)
```

```
Backdrop=image.CopyPicture
```

### Notes:

radius: the radius of the Gaussian, in pixels, not counting the center pixel.

sigma: the standard deviation of the Gaussian, in pixels.

amount: the percentage of the difference between the original and the blur image that is added back into the original.

threshold: the threshold in pixels needed to apply the difference amount.

**unsharpmaskChannel(channel as integer, radius as double, sigma as double, amount as double, threshold as double)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Replace image channel with a sharpened version of the original image using the unsharp mask algorithm.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.unsharpmaskChannel(Image.RedChannel, 10,1,0.5,50)
```

```
Backdrop=image.CopyPicture
```

**Notes:**

- channel: image channel to modify.
- radius: the radius of the Gaussian, in pixels, not counting the center pixel.
- sigma: the standard deviation of the Gaussian, in pixels.
- amount: the percentage of the difference between the original and the blur image that is added back into the original.
- threshold: the threshold in pixels needed to apply the difference amount.

**verbose as boolean**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Print detailed information about the image.

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

**view as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** FlashPix viewing parameters.

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

**wave(amplitude as double=25.0, wavelength as double=150.0)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Map image pixels to a sine wave.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GImageMBS(p)
```

```
image.wave
```

```
Backdrop=image.CopyPicture
```

**write(blob as GMBlobMBS)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Write single image frame to in-memory Blob, with optional format and adjoin parameters.

See also:

- 2.20.1 write(blob as GMBlobMBS, magick as string) 220
- 2.20.1 write(blob as GMBlobMBS, magick as string, depth as UInt32) 221
- 2.20.1 write(file as folderitem) 221
- 2.20.1 write(Path as string) 222

**write(blob as GMBlobMBS, magick as string)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Write single image frame to in-memory Blob, with optional format and adjoin parameters.  
See also:

- 2.20.1 write(blob as GMBlobMBS) 220
- 2.20.1 write(blob as GMBlobMBS, magick as string, depth as UInt32) 221
- 2.20.1 write(file as folderitem) 221
- 2.20.1 write(Path as string) 222

### write(blob as GMBlobMBS, magick as string, depth as UInt32)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Write single image frame to in-memory Blob, with optional format and adjoin parameters.  
See also:

- 2.20.1 write(blob as GMBlobMBS) 220
- 2.20.1 write(blob as GMBlobMBS, magick as string) 220
- 2.20.1 write(file as folderitem) 221
- 2.20.1 write(Path as string) 222

### write(file as folderitem)

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Write single image frame to a file.  
See also:

- 2.20.1 write(blob as GMBlobMBS) 220
- 2.20.1 write(blob as GMBlobMBS, magick as string) 220
- 2.20.1 write(blob as GMBlobMBS, magick as string, depth as UInt32) 221
- 2.20.1 write(Path as string) 222

**write(Path as string)**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Write single image frame to a file.

See also:

- 2.20.1 write(blob as GMBlobMBS) 220
- 2.20.1 write(blob as GMBlobMBS, magick as string) 220
- 2.20.1 write(blob as GMBlobMBS, magick as string, depth as UInt32) 221
- 2.20.1 write(file as folderitem) 221

**x11Display as string**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** X11 display to display to, obtain fonts from, or to capture image from.

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

**xResolution as double**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** x resolution of the image.

**yResolution as double**

method from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** y resolution of the image.

**zoom(geometry as GMGeometryMBS)**

method from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** Zoom (resize) image to specified size.

**Example:**

```
dim p as Picture = LogoMBS(500)
dim image as new GMImageMBS(p)

image.zoom(new GMGeometryMBS(200,200))

Backdrop=image.CopyPicture
```

**2.20.2 Properties****handle as Integer**

property from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The internal object reference.

**Example:**

```
dim c as new GMColorMBS("white")
dim g as new GMGeometryMBS(100,100)
dim image as new GMImageMBS(g, c)
MsgBox hex(Image.handle) // valid if not zero
```

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

**height as integer**

property from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.1, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The height of the image.

**Example:**

```
dim c as new GMColorRGBMBS(1.0,0.0,0.0)
dim size as new GMGeometryMBS(100,100)
dim g as new GMImageMBS(size, c)
```

```
MsgBox str(g.width)+" "+str(g.height)
```

**Notes:**

This is a convenience function for you which calls size.height.  
(Read only property)

**width as integer**

property from class GMImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.1, console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** The width of the image.

**Example:**

```
dim c as new GMColorRGBMBS(1.0,0.0,0.0)
dim size as new GMGeometryMBS(100,100)
dim g as new GMImageMBS(size, c)
```

```
MsgBox str(g.width)+" "+str(g.height)
```

**Notes:**

This is a convenience function for you which calls size.width.  
(Read only property)

### 2.20.3 Constants

#### **AbsoluteIntent = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the intent type constants.

#### **AddCompositeOp = 8**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

#### **AddNoisePreview = 14**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

#### **AllChannels = 9**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

**AllCompliance = & hfff**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the Compliance type constants.

**AssociatedAlpha = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible alpha type constants.

**AtopCompositeOp = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**BackgroundDispose = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the gif dispose type constants.

**BesselFilter = 14**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

#### **BilevelType = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

#### **BlackChannel = 7**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

#### **BlackmanFilter = 7**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

#### **BlueChannel = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

**BlurPreview = 16**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**BottomLeftOrientation = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the orientation type constants.

**Notes:**

Line direction: Left to right

Frame Direction: Bottom to top

**BottomRightOrientation = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the orientation type constants.

**Notes:**

Line direction: Right to left

Frame Direction: Bottom to top

**BoxFilter = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**BrightnessPreview = 6**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**BumpmapCompositeOp = 12**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**BZipCompression = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.

**CatromFilter = 11**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**CenterGravity = 5**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

### **CharcoalDrawingPreview = 28**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **ClearCompositeOp = 18**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **ColorizeCompositeOp = 28**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **ColorSeparationMatteType = 9**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

**ColorSeparationType = 8**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

**ConcatenateMode = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

**CopyBlackCompositeOp = 35**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**CopyBlueCompositeOp = 16**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**CopyCompositeOp = 13**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **CopyCyanCompositeOp = 32**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **CopyGreenCompositeOp = 15**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **CopyMagentaCompositeOp = 33**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **CopyOpacityCompositeOp = 17**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**CopyRedCompositeOp = 14**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**CopyYellowCompositeOp = 34**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**CubicFilter = 10**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**CyanChannel = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

**DarkenCompositeOp = 24**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **DespecklePreview = 12**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **DifferenceCompositeOp = 10**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **DirectClass = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the class type constants.

### **DisplaceCompositeOp = 20**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**DissolveCompositeOp = 19**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**DivideCompositeOp = 36**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**DullPreview = 9**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**EastGravity = 6**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

**EdgeDetectPreview = 18**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **FaxCompression = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.

### **ForgetGravity = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

### **FrameMode = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the mode type constants.

### **GammaPreview = 7**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**GaussianFilter = 8**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**GaussianNoise = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible noise constants.

**GrayChannel = 10**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

**GrayscaleMatteType = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

**GrayscalePreview = 10**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **GrayscaleType = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

### **GreenChannel = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

### **Group4Compression = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.

### **HammingFilter = 6**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**HanningFilter = 5**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**HermiteFilter = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**HueCompositeOp = 26**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**HuePreview = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**ImplodePreview = 25**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **ImpulseNoise = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible noise constants.

### **InCompositeOp = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **JPEGCompression = 5**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.

### **JPEGPreview = 29**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**LanczosFilter = 13**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**LaplacianNoise = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible noise constants.

**LeftBottomOrientation = 8**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the orientation type constants.

**Notes:**

Line direction: Bottom to top  
Frame Direction: Left to right

**LeftTopOrientation = 5**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the orientation type constants.

**Notes:**

Line direction: Top to bottom  
Frame Direction: Left to right

**LightenCompositeOp = 25**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**LineInterlace = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the interlace type constants.

**LosslessJPEGCompression = 6**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.

**LSBEndian = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the endian type constants.

**Notes:** "little" endian

**LuminizeCompositeOp = 29**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **LZWCompression = 7**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.

### **MagentaChannel = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

### **MatteChannel = 8**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

### **MinusCompositeOp = 7**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**MitchellFilter = 12**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**ModulateCompositeOp = 21**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**MSBEndian = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the endian type constants.

**Notes:** "big" endian

**MultiplicativeGaussianNoise = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible noise constants.

**MultiplyCompositeOp = 11**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **NativeEndian = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the endian type constants.

**Notes:** native endian

### **NoCompliance = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the Compliance type constants.

### **NoCompositeOp = 23**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **NoCompression = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.

**NoInterlace = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the interlace type constants.

**NoneDispose = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the gif dispose type constants.

**NorthEastGravity = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

**NorthGravity = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

**NorthWestGravity = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

### **OilPaintPreview = 27**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **OpacityChannel = 6**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

**OptimizeType = 10**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

**OutCompositeOp = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**OverCompositeOp = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**OverlayCompositeOp = 31**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**Notes:** Not yet implemented in GraphicsMagick.

**PaletteMatteType = 5**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

#### **PaletteType = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

#### **PartitionInterlace = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the interlace type constants.

#### **PerceptualIntent = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the intent type constants.

#### **PixelsPerCentimeterResolution = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the resolution type constants.

**PixelsPerInchResolution = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the resolution type constants.

**PlaneInterlace = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the interlace type constants.

**PlusCompositeOp = 6**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**PointFilter = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**PoissonNoise = 5**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible noise constants.

### **PreviousDispose = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the gif dispose type constants.

### **PseudoClass = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the class type constants.

### **QuadraticFilter = 9**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

### **QuantizePreview = 11**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**RaisePreview = 22**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**RedChannel = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

**ReduceNoisePreview = 13**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**RelativeIntent = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the intent type constants.

**RightBottomOrientation = 7**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the orientation type constants.

**Notes:**

Line direction: Bottom to top

Frame Direction: Right to left

**RightTopOrientation = 6**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the orientation type constants.

**Notes:**

Line direction: Top to bottom

Frame Direction: Right to left

**RLECompression = 8**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.

**RollPreview = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**RotatePreview = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **SaturateCompositeOp = 27**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **SaturationIntent = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the intent type constants.

### **SaturationPreview = 5**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **ScreenCompositeOp = 30**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**Notes:** Not yet implemented in GraphicsMagick.

**SegmentPreview = 23**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**ShadePreview = 21**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**SharpenPreview = 15**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**ShearPreview = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**SincFilter = 15**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

### **SolarizePreview = 20**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **SouthEastGravity = 9**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

### **SouthGravity = 8**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

### **SouthWestGravity = 7**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

**SpiffPreview = 8**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**SpreadPreview = 19**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**StaticGravity = 10**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

**SubtractCompositeOp = 9**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**SVGCompliance = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the Compliance type constants.

### **SwirlPreview = 24**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **ThresholdCompositeOp = 22**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

### **ThresholdPreview = 17**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **TopLeftOrientation = 1**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the orientation type constants.

**Notes:**

Line direction: Left to right

Frame Direction: Top to bottom

**TopRightOrientation = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the orientation type constants.

**Notes:**

Line direction: Right to left

Frame Direction: Top to bottom

**TriangleFilter = 3**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**TrueColorMatteType = 7**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

**TrueColorType = 6**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

**UnassociatedAlpha = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible alpha type constants.

**UndefinedChannel = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

**UndefinedClass = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the class type constants.

**UndefinedCompliance = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the Compliance type constants.

**UndefinedCompositeOp = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

#### **UndefinedCompression = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.

#### **UndefinedDispose = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the gif dispose type constants.

#### **UndefinedEndian = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the endian type constants.

#### **UndefinedFilter = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the filter type constants.

**UndefinedIntent = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the intent type constants.

**UndefinedInterlace = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the interlace type constants.

**UndefinedMode = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the mode type constants.

**UndefinedOrientation = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the orientation type constants.

**Notes:**

Line direction: Unknown

Frame Direction: Unknown

**UndefinedPreview = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

**UndefinedResolution = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the resolution type constants.

**UndefinedType = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the image type constants.

**UnframeMode = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the mode type constants.

**UniformNoise = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible noise constants.

### **UnspecifiedAlpha = 0**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible alpha type constants.

### **WavePreview = 26**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the preview type constants.

### **WestGravity = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible gravity constants.

### **X11Compliance = 2**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the Compliance type constants.

**XorCompositeOp = 5**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the composite type constants.

**XPMCompliance = 4**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the Compliance type constants.

**YellowChannel = 5**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 9.3, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the possible channel constants.

**ZipCompression = 9**

const from class GImageMBS, GraphicsMagick, MBS REALbasic GraphicsMagick Plugin (GraphicsMagick), Plugin version: 10.2, not console safe, Mac OS X: Works, Windows: Works, Linux x86: Works.

**Function:** One of the compression type constants.



# Chapter 3

## List of all classes

• GMBlobMBS	82
• GMCoderInfoMBS	99
• GMColorGrayMBS	103
• GMColorHSLMBS	96
• GMColorMBS	87
• GMColorMonoMBS	116
• GMColorRGBMBS	122
• GMColorYUVMBS	119
• GMCoordinateMBS	106
• GMErrorExceptionMBS	106
• GMGeometryMBS	108
• GMGraphicsMBS	34
• GMImageMBS	126
• GMLockMBS	21
• GMMutexLockMBS	33
• GMNotInitializedExceptionMBS	33
• GMPathArgsMBS	27
• GMPixelsMBS	22

- GMTypeMetricMBS 25
- GMUnsupportedExceptionMBS 24