

libemf

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Contents

1	Hierarchical Index	1
1.1	Class Hierarchy	1
2	Data Structure Index	4
2.1	Data Structures	4
3	Data Structure Documentation	7
3.1	EMF::BRUSH Class Reference	8
3.1.1	Detailed Description	8
3.1.2	Constructor & Destructor Documentation	8
3.1.3	Member Function Documentation	8
3.2	EMF::BYTEARRAY Struct Reference	9
3.2.1	Detailed Description	10
3.2.2	Constructor & Destructor Documentation	10
3.3	EMF::CHARSTR Struct Reference	10
3.3.1	Detailed Description	11
3.3.2	Constructor & Destructor Documentation	11
3.4	EMF::DATASTREAM Class Reference	11
3.4.1	Detailed Description	13
3.4.2	Constructor & Destructor Documentation	13
3.4.3	Member Function Documentation	13
3.5	EMF::DWORDARRAY Struct Reference	31
3.5.1	Detailed Description	31
3.5.2	Constructor & Destructor Documentation	31
3.6	EMF::EMRARC Class Reference	32
3.6.1	Detailed Description	32
3.6.2	Constructor & Destructor Documentation	32
3.6.3	Member Function Documentation	33
3.7	EMF::EMRARCTO Class Reference	34
3.7.1	Detailed Description	34

3.7.2	Constructor & Destructor Documentation	35
3.7.3	Member Function Documentation	35
3.8	EMF::EMRBEGINPATH Class Reference	36
3.8.1	Detailed Description	37
3.8.2	Constructor & Destructor Documentation	37
3.8.3	Member Function Documentation	37
3.9	EMF::EMRCLOSEFIGURE Class Reference	38
3.9.1	Detailed Description	39
3.9.2	Constructor & Destructor Documentation	39
3.9.3	Member Function Documentation	39
3.10	EMF::EMRCREATEBRUSHINDIRECT Class Reference	40
3.10.1	Detailed Description	41
3.10.2	Constructor & Destructor Documentation	41
3.10.3	Member Function Documentation	41
3.11	EMF::EMRCREATEPALETTE Class Reference	43
3.11.1	Detailed Description	43
3.11.2	Constructor & Destructor Documentation	43
3.11.3	Member Function Documentation	44
3.12	EMF::EMRCREATEPEN Class Reference	45
3.12.1	Detailed Description	45
3.12.2	Constructor & Destructor Documentation	45
3.12.3	Member Function Documentation	46
3.13	EMF::EMRDELETEOBJECT Class Reference	47
3.13.1	Detailed Description	47
3.13.2	Constructor & Destructor Documentation	47
3.13.3	Member Function Documentation	48
3.14	EMF::EMRELLIPSE Class Reference	49
3.14.1	Detailed Description	49
3.14.2	Constructor & Destructor Documentation	49
3.14.3	Member Function Documentation	50

3.15 EMF::EMRENDPATH Class Reference	51
3.15.1 Detailed Description	51
3.15.2 Constructor & Destructor Documentation	51
3.15.3 Member Function Documentation	52
3.16 EMF::EMREOF Class Reference	53
3.16.1 Detailed Description	53
3.16.2 Constructor & Destructor Documentation	53
3.16.3 Member Function Documentation	54
3.17 EMF::EMREXTCREATEFONTINDIRECTW Class Reference	55
3.17.1 Detailed Description	55
3.17.2 Constructor & Destructor Documentation	55
3.17.3 Member Function Documentation	56
3.18 EMF::EMREXTCREATEPEN Class Reference	57
3.18.1 Detailed Description	57
3.18.2 Constructor & Destructor Documentation	57
3.18.3 Member Function Documentation	58
3.19 EMF::EMREXTTEXTOUTA Class Reference	59
3.19.1 Detailed Description	59
3.19.2 Constructor & Destructor Documentation	60
3.19.3 Member Function Documentation	60
3.20 EMF::EMREXTTEXTOUTW Class Reference	61
3.20.1 Detailed Description	62
3.20.2 Constructor & Destructor Documentation	62
3.20.3 Member Function Documentation	63
3.21 EMF::EMRFILLPATH Class Reference	64
3.21.1 Detailed Description	64
3.21.2 Constructor & Destructor Documentation	64
3.21.3 Member Function Documentation	65
3.22 EMF::EMRLINETO Class Reference	66
3.22.1 Detailed Description	66

3.22.2	Constructor & Destructor Documentation	66
3.22.3	Member Function Documentation	67
3.23	EMF::EMRMODIFYWORLDTRANSFORM Class Reference	68
3.23.1	Detailed Description	68
3.23.2	Constructor & Destructor Documentation	68
3.23.3	Member Function Documentation	69
3.24	EMF::EMRMOVETOEX Class Reference	70
3.24.1	Detailed Description	70
3.24.2	Constructor & Destructor Documentation	70
3.24.3	Member Function Documentation	71
3.25	EMF::EMRPOLYBEZIER Class Reference	72
3.25.1	Detailed Description	72
3.25.2	Constructor & Destructor Documentation	72
3.25.3	Member Function Documentation	73
3.26	EMF::EMRPOLYBEZIER16 Class Reference	74
3.26.1	Detailed Description	75
3.26.2	Constructor & Destructor Documentation	75
3.26.3	Member Function Documentation	76
3.27	EMF::EMRPOLYBEZIERTO Class Reference	77
3.27.1	Detailed Description	77
3.27.2	Constructor & Destructor Documentation	77
3.27.3	Member Function Documentation	78
3.28	EMF::EMRPOLYBEZIERTO16 Class Reference	79
3.28.1	Detailed Description	80
3.28.2	Constructor & Destructor Documentation	80
3.28.3	Member Function Documentation	81
3.29	EMF::EMRPOLYGON Class Reference	82
3.29.1	Detailed Description	82
3.29.2	Constructor & Destructor Documentation	82
3.29.3	Member Function Documentation	83

3.30 EMF::EMRPOLYGON16 Class Reference	84
3.30.1 Detailed Description	85
3.30.2 Constructor & Destructor Documentation	85
3.30.3 Member Function Documentation	86
3.31 EMF::EMRPOLYLINE Class Reference	87
3.31.1 Detailed Description	87
3.31.2 Constructor & Destructor Documentation	87
3.31.3 Member Function Documentation	88
3.32 EMF::EMRPOLYLINE16 Class Reference	89
3.32.1 Detailed Description	89
3.32.2 Constructor & Destructor Documentation	89
3.32.3 Member Function Documentation	90
3.33 EMF::EMRPOLYLINETO Class Reference	91
3.33.1 Detailed Description	92
3.33.2 Constructor & Destructor Documentation	92
3.33.3 Member Function Documentation	93
3.34 EMF::EMRPOLYLINETO16 Class Reference	94
3.34.1 Detailed Description	94
3.34.2 Constructor & Destructor Documentation	94
3.34.3 Member Function Documentation	95
3.35 EMF::EMRPOLYPOLYGON Class Reference	96
3.35.1 Detailed Description	97
3.35.2 Constructor & Destructor Documentation	97
3.35.3 Member Function Documentation	97
3.36 EMF::EMRPOLYPOLYGON16 Class Reference	98
3.36.1 Detailed Description	99
3.36.2 Constructor & Destructor Documentation	99
3.36.3 Member Function Documentation	100
3.37 EMF::EMRRECTANGLE Class Reference	101
3.37.1 Detailed Description	101

3.37.2	Constructor & Destructor Documentation	101
3.37.3	Member Function Documentation	102
3.38	EMF::EMRRESTOREDC Class Reference	103
3.38.1	Detailed Description	103
3.38.2	Constructor & Destructor Documentation	103
3.38.3	Member Function Documentation	104
3.39	EMF::EMRSAVEDC Class Reference	105
3.39.1	Detailed Description	105
3.39.2	Constructor & Destructor Documentation	105
3.39.3	Member Function Documentation	106
3.40	EMF::EMRSCALEVIEWPORTEXTEX Class Reference	107
3.40.1	Detailed Description	107
3.40.2	Constructor & Destructor Documentation	107
3.40.3	Member Function Documentation	108
3.41	EMF::EMRSCALEWINDOWTEXTEX Class Reference	109
3.41.1	Detailed Description	109
3.41.2	Constructor & Destructor Documentation	109
3.41.3	Member Function Documentation	110
3.42	EMF::EMRSELECTOBJECT Class Reference	111
3.42.1	Detailed Description	111
3.42.2	Constructor & Destructor Documentation	111
3.42.3	Member Function Documentation	112
3.43	EMF::EMRSETBKCOLOR Class Reference	113
3.43.1	Detailed Description	113
3.43.2	Constructor & Destructor Documentation	113
3.43.3	Member Function Documentation	114
3.44	EMF::EMRSETBKMODE Class Reference	115
3.44.1	Detailed Description	115
3.44.2	Constructor & Destructor Documentation	115
3.44.3	Member Function Documentation	116

3.45 EMF::EMRSETMAPMODE Class Reference	117
3.45.1 Detailed Description	117
3.45.2 Constructor & Destructor Documentation	117
3.45.3 Member Function Documentation	118
3.46 EMF::EMRSETMETARGN Class Reference	119
3.46.1 Detailed Description	119
3.46.2 Constructor & Destructor Documentation	119
3.46.3 Member Function Documentation	120
3.47 EMF::EMRSETMITERLIMIT Class Reference	121
3.47.1 Detailed Description	121
3.47.2 Constructor & Destructor Documentation	121
3.47.3 Member Function Documentation	122
3.48 EMF::EMRSETPIXELV Class Reference	123
3.48.1 Detailed Description	123
3.48.2 Constructor & Destructor Documentation	123
3.48.3 Member Function Documentation	124
3.49 EMF::EMRSETPOLYFILLMODE Class Reference	125
3.49.1 Detailed Description	125
3.49.2 Constructor & Destructor Documentation	125
3.49.3 Member Function Documentation	126
3.50 EMF::EMRSETTEXTALIGN Class Reference	127
3.50.1 Detailed Description	127
3.50.2 Constructor & Destructor Documentation	127
3.50.3 Member Function Documentation	128
3.51 EMF::EMRSETTEXTCOLOR Class Reference	129
3.51.1 Detailed Description	129
3.51.2 Constructor & Destructor Documentation	129
3.51.3 Member Function Documentation	130
3.52 EMF::EMRSETVIEWPORTEXTEX Class Reference	131
3.52.1 Detailed Description	131

3.52.2	Constructor & Destructor Documentation	131
3.52.3	Member Function Documentation	132
3.53	EMF::EMRSETVIEWPORTORGEX Class Reference	133
3.53.1	Detailed Description	133
3.53.2	Constructor & Destructor Documentation	133
3.53.3	Member Function Documentation	134
3.54	EMF::EMRSETWINDOWEXTTEX Class Reference	135
3.54.1	Detailed Description	135
3.54.2	Constructor & Destructor Documentation	135
3.54.3	Member Function Documentation	136
3.55	EMF::EMRSETWINDOWORGEX Class Reference	137
3.55.1	Detailed Description	137
3.55.2	Constructor & Destructor Documentation	137
3.55.3	Member Function Documentation	138
3.56	EMF::EMRSETWORLDTRANSFORM Class Reference	139
3.56.1	Detailed Description	139
3.56.2	Constructor & Destructor Documentation	139
3.56.3	Member Function Documentation	141
3.57	EMF::EMRSTROKEANDFILLPATH Class Reference	142
3.57.1	Detailed Description	142
3.57.2	Constructor & Destructor Documentation	142
3.57.3	Member Function Documentation	143
3.58	EMF::EMRSTROKEPATH Class Reference	144
3.58.1	Detailed Description	144
3.58.2	Constructor & Destructor Documentation	144
3.58.3	Member Function Documentation	145
3.59	EMF::ENHMETAHEADER Class Reference	146
3.59.1	Detailed Description	146
3.59.2	Constructor & Destructor Documentation	146
3.59.3	Member Function Documentation	147

3.60	EMF::EXTPEN Class Reference	148
3.60.1	Detailed Description	148
3.60.2	Constructor & Destructor Documentation	148
3.60.3	Member Function Documentation	149
3.61	EMF::FONT Class Reference	149
3.61.1	Detailed Description	150
3.61.2	Constructor & Destructor Documentation	150
3.61.3	Member Function Documentation	150
3.62	EMF::GLOBALOBJECTS Class Reference	151
3.62.1	Detailed Description	153
3.62.2	Member Function Documentation	153
3.63	EMF::GRAPHICSOBJECT Class Reference	155
3.63.1	Detailed Description	156
3.63.2	Member Function Documentation	156
3.63.3	Field Documentation	156
3.64	EMF::INTARRAY Struct Reference	157
3.64.1	Detailed Description	157
3.64.2	Constructor & Destructor Documentation	157
3.65	EMF::METAFILEDEVICECONTEXT Class Reference	157
3.65.1	Detailed Description	159
3.65.2	Constructor & Destructor Documentation	159
3.65.3	Member Function Documentation	160
3.65.4	Field Documentation	162
3.66	EMF::METARECORD Class Reference	163
3.66.1	Detailed Description	164
3.66.2	Constructor & Destructor Documentation	164
3.66.3	Member Function Documentation	164
3.67	EMF::OBJECT Class Reference	166
3.67.1	Detailed Description	166
3.67.2	Constructor & Destructor Documentation	166

3.67.3 Member Function Documentation	166
3.67.4 Field Documentation	167
3.68 EMF::PADDING Struct Reference	167
3.68.1 Detailed Description	168
3.68.2 Constructor & Destructor Documentation	168
3.69 EMF::PALETTE Class Reference	168
3.69.1 Detailed Description	169
3.69.2 Constructor & Destructor Documentation	169
3.69.3 Member Function Documentation	169
3.70 EMF::PEN Class Reference	170
3.70.1 Detailed Description	170
3.70.2 Constructor & Destructor Documentation	170
3.70.3 Member Function Documentation	171
3.71 EMF::POINT16ARRAY Struct Reference	171
3.71.1 Detailed Description	172
3.71.2 Constructor & Destructor Documentation	172
3.72 EMF::POINTLARRAY Struct Reference	172
3.72.1 Detailed Description	172
3.72.2 Constructor & Destructor Documentation	173
3.73 EMF::WCHARSTR Struct Reference	173
3.73.1 Detailed Description	173
3.73.2 Constructor & Destructor Documentation	173
Index	175

1 Hierarchical Index

1.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

EMF::BYTEARRAY	9
EMF::CHARSTR	10

EMF::DATASTREAM	11
EMF::DWORDARRAY	31
EMF::GLOBALOBJECTS	151
EMF::INTARRAY	157
EMF::METARECORD	163
EMF::EMRARC	32
EMF::EMRARCTO	34
EMF::EMRBEGINPATH	36
EMF::EMRCLOSEFIGURE	38
EMF::EMRCREATEBRUSHINDIRECT	40
EMF::EMRCREATEPALETTE	43
EMF::EMRCREATEPEN	45
EMF::EMRDELETEOBJECT	47
EMF::EMRELLIPSE	49
EMF::EMRENDPATH	51
EMF::EMREOF	53
EMF::EMREXTCREATEFONTINDIRECTW	55
EMF::EMREXTCREATEPEN	57
EMF::EMREXTTEXTOUTA	59
EMF::EMREXTTEXTOUTW	61
EMF::EMRFILLPATH	64
EMF::EMRLINETO	66
EMF::EMRMODIFYWORLDTRANSFORM	68
EMF::EMRMOVETOEX	70
EMF::EMRPOLYBEZIER	72
EMF::EMRPOLYBEZIERTO	77
EMF::EMRPOLYBEZIER16	74
EMF::EMRPOLYBEZIERTO16	79
EMF::EMRPOLYBEZIERTO	77
EMF::EMRPOLYBEZIERTO16	79
EMF::EMRPOLYGON	82
EMF::EMRPOLYGON16	84

EMF::EMRPOLYLINE	87
EMF::EMRPOLYLINE16	89
EMF::EMRPOLYLINETO	91
EMF::EMRPOLYLINETO16	94
EMF::EMRPOLYPOLYGON	96
EMF::EMRPOLYPOLYGON16	98
EMF::EMRRECTANGLE	101
EMF::EMRRESTOREDC	103
EMF::EMRSAVEDC	105
EMF::EMRSCALEVIEWPORTEXTEX	107
EMF::EMRSCALEWINDOWEXTEX	109
EMF::EMRSELECTOBJECT	111
EMF::EMRSETBKCOLOR	113
EMF::EMRSETBKMODE	115
EMF::EMRSETMAPMODE	117
EMF::EMRSETMETARGN	119
EMF::EMRSETMITERLIMIT	121
EMF::EMRSETPIXELV	123
EMF::EMRSETPOLYFILLMODE	125
EMF::EMRSETTEXTALIGN	127
EMF::EMRSETTEXTCOLOR	129
EMF::EMRSETVIEWPORTEXTEX	131
EMF::EMRSETVIEWPORTORGEX	133
EMF::EMRSETWINDOWEXTEX	135
EMF::EMRSETWINDOWORGEX	137
EMF::EMRSETWORLDTRANSFORM	139
EMF::EMRSTROKEANDFILLPATH	142
EMF::EMRSTROKEPATH	144
EMF::ENHMETAHEADER	146
EMF::OBJECT	166
EMF::GRAPHICSOBJECT	155
EMF::BRUSH	8

EMF::EXTPEN	148
EMF::FONT	149
EMF::PALETTE	168
EMF::PEN	170
EMF::METAFILEDEVICECONTEXT	157
EMF::PADDING	167
EMF::POINT16ARRAY	171
EMF::POINTLARRAY	172
EMF::WCHARSTR	173

2 Data Structure Index

2.1 Data Structures

Here are the data structures with brief descriptions:

EMF::BRUSH Graphics Brush	8
EMF::BYTEARRAY Represent a byte array in a simple way	9
EMF::CHARSTR Represent an ASCII character string in a simple way	10
EMF::DATASTREAM Support different endian modes when reading and writing the metafile	11
EMF::DWORDARRAY Represent an array of double word integers in a simple way	31
EMF::EMRARC EMF Arc	32
EMF::EMRARCTO EMF Arc To	34
EMF::EMRBEGINPATH EMF Begin Path	36
EMF::EMRCLOSEFIGURE EMF Close Figure	38
EMF::EMRCREATEBRUSHINDIRECT EMF Brush	40
EMF::EMRCREATEPALETTE EMF Palette	43
EMF::EMRCREATEPEN EMF Pen	45

EMF::EMRDELETEOBJECT	
EMF Delete Object	47
EMF::EMRELLIPSE	
EMF Ellipse	49
EMF::EMRENDPATH	
EMF End Path	51
EMF::EMREOF	
EMF End of File Record	53
EMF::EMREXTCREATEFONTINDIRECTW	
EMF Font	55
EMF::EMREXTCREATEPEN	
EMF Extended Pen	57
EMF::EMREXTTEXTOUTA	
EMF Extended Text Output ASCII	59
EMF::EMREXTTEXTOUTW	
EMF Extended Text Output Wide character	61
EMF::EMRFILLPATH	
EMF Fill path	64
EMF::EMRLINETO	
EMF Line To	66
EMF::EMRMODIFYWORLDTRANSFORM	
EMF Modify World Transform	68
EMF::EMRMOVETOEX	
EMF MoveTo (ex)	70
EMF::EMRPOLYBEZIER	
EMF Polybezier	72
EMF::EMRPOLYBEZIER16	
EMF Polybezier16	74
EMF::EMRPOLYBEZIERTO	
EMF PolyBezierTo	77
EMF::EMRPOLYBEZIERTO16	
EMF PolyBezierTo16	79
EMF::EMRPOLYGON	
EMF Filled Polygon	82
EMF::EMRPOLYGON16	
EMF Filled Polygon16	84
EMF::EMRPOLYLINE	
EMF Polyline	87
EMF::EMRPOLYLINE16	
EMF Polyline16	89
EMF::EMRPOLYLINETO	
EMF PolylineTo	91

EMF::EMRPOLYLINETO16	
EMF PolylineTo16	94
EMF::EMRPOLYPOLYGON	
EMF Poly Polygon	96
EMF::EMRPOLYPOLYGON16	
EMF Poly Polygon16	98
EMF::EMRRECTANGLE	
EMF Rectangle	101
EMF::EMRRESTOREDC	
EMF Restore DC	103
EMF::EMRSAVEDC	
EMF Save DC	105
EMF::EMRSCALEVIEWPORTEXTTEX	
EMF Scale Viewport Extents (ex)	107
EMF::EMRSCALEWINDOWEXTTEX	
EMF Scale Window Extents (ex)	109
EMF::EMRSELECTOBJECT	
EMF Select Object	111
EMF::EMRSETBKCOLOR	
EMF Set Background Color	113
EMF::EMRSETBKMODE	
EMF Set Background Mode	115
EMF::EMRSETMAPMODE	
EMF Set Mapping Mode	117
EMF::EMRSETMETARGN	
EMF Set Meta Region	119
EMF::EMRSETMITERLIMIT	
EMF SetMiterLimit	121
EMF::EMRSETPIXELV	
EMF Set Pixel	123
EMF::EMRSETPOLYFILLMODE	
EMF Set the Polygon Fill Mode	125
EMF::EMRSETTEXTALIGN	
EMF Set Text Alignment	127
EMF::EMRSETTEXTCOLOR	
EMF Set Text Color	129
EMF::EMRSETVIEWPORTEXTTEX	
EMF Set Viewport Extents (ex)	131
EMF::EMRSETVIEWPORTORGEX	
EMF Set Viewport Origin (ex)	133
EMF::EMRSETWINDOWEXTTEX	
EMF Set Window Extent (ex)	135

EMF::EMRSETWINDOWORGE EMF Set Window Origin (ex)	137
EMF::EMRSETWORLDTRANSFORM EMF Set World Transform	139
EMF::EMRSTROKEANDFILLPATH EMF Stroke and Fill path	142
EMF::EMRSTROKEPATH EMF Stroke path	144
EMF::ENHMETAHEADER Enhanced Metafile Header Record	146
EMF::EXTPEN Extended Graphics Pen	148
EMF::FONT Graphics Font	149
EMF::GLOBALOBJECTS	151
EMF::GRAPHICSOBJECT A global graphics object	155
EMF::INTARRAY Represent an array of integers in a simple way	157
EMF::METAFILEDEVICECONTEXT Graphics Device Context	157
EMF::METARECORD The base class of all metafile records	163
EMF::OBJECT Global GDI object	166
EMF::PADDING All metafile records must be padded out to a multiple of 4 bytes	167
EMF::PALETTE Graphics Palette	168
EMF::PEN Graphics Pen	170
EMF::POINT16ARRAY Represent an array of 16-bit point in a simple way	171
EMF::POINTLARRAY Represent an array of points in a simple way	172
EMF::WCHARSTR Represent a wide (UNICODE) character string in a simple way	173

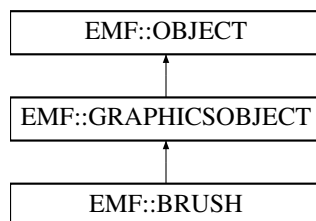
3 Data Structure Documentation

3.1 EMF::BRUSH Class Reference

Graphics Brush.

```
#include <libemf.h>
```

Inheritance diagram for EMF::BRUSH:



Public Member Functions

- [BRUSH](#) (const LOGBRUSH *lbrush)
- OBJECTTYPE [getType](#) (void) const
- [METARECORD](#) * [newEMR](#) (HDC dc, HGDIOBJ emf_handle)

Additional Inherited Members

3.1.1 Detailed Description

Graphics Brush.

Brushes are used for filling shapes.

3.1.2 Constructor & Destructor Documentation

3.1.2.1 BRUSH()

```
EMF::BRUSH::BRUSH (
    const LOGBRUSH * lbrush ) [inline]
```

Parameters

<i>lbrush</i>	the (logical?) brush definition.
---------------	----------------------------------

3.1.3 Member Function Documentation

3.1.3.1 getType()

```
OBJECTTYPE EMF::BRUSH::getType (
    void ) const [inline], [virtual]
```

Return the type of this object (could probably do better with RTTI()).

Implements [EMF::OBJECT](#).

3.1.3.2 newEMR()

```
METARECORD* EMF::BRUSH::newEMR (
    HDC dc,
    HGDIOBJ emf_handle ) [inline], [virtual]
```

Return a new metarecord for this object. And record its selection into the given device context.

Parameters

<i>dc</i>	handle of device context into which this object is being selected.
<i>emf_handle</i>	the EMF handle associated with the BRUSH .

Implements [EMF::GRAPHICSOBJECT](#).

The documentation for this class was generated from the following file:

- libemf.h

3.2 EMF::BYTEARRAY Struct Reference

Represent a byte array in a simple way.

```
#include <libemf.h>
```

Public Member Functions

- [BYTEARRAY](#) (BYTE *const array, const int n)

Data Fields

- BYTE *const [array_](#)
Array of unsigned bytes.
- const int [n_](#)
Number of bytes in array.

3.2.1 Detailed Description

Represent a byte array in a simple way.

Evidently, an unsigned array of bytes with no particular encoding implied.

3.2.2 Constructor & Destructor Documentation

3.2.2.1 BYTEARRAY()

```
EMF::BYTEARRAY::BYTEARRAY (
    BYTE *const array,
    const int n ) [inline]
```

Simple constructor.

Parameters

<i>array</i>	pointer to array of bytes
<i>n</i>	number of bytes in array

The documentation for this struct was generated from the following file:

- libemf.h

3.3 EMF::CHARSTR Struct Reference

Represent an ASCII character string in a simple way.

```
#include <libemf.h>
```

Public Member Functions

- [CHARSTR](#) (CHAR *const string, const int length)

Data Fields

- CHAR *const [string_](#)
Array of single byte characters.
- const int [length_](#)
Number of single byte characters in array.

3.3.1 Detailed Description

Represent an ASCII character string in a simple way.

ASCII strings don't have to be byte swapped, but this structure allows us to provide a uniform stream-like interface for writing out all the components of metafiles.

3.3.2 Constructor & Destructor Documentation

3.3.2.1 CHARSTR()

```
EMF::CHARSTR::CHARSTR (
    CHAR *const string,
    const int length ) [inline]
```

Simple constructor.

Parameters

<i>string</i>	pointer to array of single byte characters.
<i>length</i>	number of bytes in array.

The documentation for this struct was generated from the following file:

- libemf.h

3.4 EMF::DATASTREAM Class Reference

Support different endian modes when reading and writing the metafile.

```
#include <libemf.h>
```

Public Member Functions

- [DATASTREAM](#) (::FILE *fp=0)
- void [setStream](#) (::FILE *fp)
- [DATASTREAM](#) & [operator<<](#) (const BYTE &byte)
- [DATASTREAM](#) & [operator>>](#) (BYTE &byte)
- [DATASTREAM](#) & [operator<<](#) (const WORD &word)
- [DATASTREAM](#) & [operator>>](#) (WORD &word)
- [DATASTREAM](#) & [operator<<](#) (const INT16 &word)
- [DATASTREAM](#) & [operator>>](#) (INT16 &word)
- [DATASTREAM](#) & [operator<<](#) (const DWORD &dword)
- [DATASTREAM](#) & [operator>>](#) (DWORD &dword)
- [DATASTREAM](#) & [operator<<](#) (const LONG &long_)
- [DATASTREAM](#) & [operator>>](#) (LONG &long_)
- [DATASTREAM](#) & [operator<<](#) (const INT &int_)

- [DATASTREAM](#) & [operator>>](#) (INT &int_)
- [DATASTREAM](#) & [operator<<](#) (const UINT &uint)
- [DATASTREAM](#) & [operator>>](#) (UINT &uint)
- [DATASTREAM](#) & [operator<<](#) (const FLOAT &float_)
- [DATASTREAM](#) & [operator>>](#) (FLOAT &float_)
- [DATASTREAM](#) & [operator<<](#) (const [PADDING](#) &padding)
- [DATASTREAM](#) & [operator<<](#) (const RECTL &rectl)
- [DATASTREAM](#) & [operator>>](#) (RECTL &rectl)
- [DATASTREAM](#) & [operator<<](#) (const SIZEL &szel)
- [DATASTREAM](#) & [operator>>](#) (SIZEL &szel)
- [DATASTREAM](#) & [operator<<](#) (const [WCHARSTR](#) &wcharstr)
- [DATASTREAM](#) & [operator>>](#) ([WCHARSTR](#) &wcharstr)
- [DATASTREAM](#) & [operator<<](#) (const [CHARSTR](#) &charstr)
- [DATASTREAM](#) & [operator>>](#) ([CHARSTR](#) &charstr)
- [DATASTREAM](#) & [operator<<](#) (const ::EMR &emr)
- [DATASTREAM](#) & [operator>>](#) (::EMR &emr)
- [DATASTREAM](#) & [operator<<](#) (const POINT &point)
- [DATASTREAM](#) & [operator>>](#) (POINT &point)
- [DATASTREAM](#) & [operator<<](#) (const POINTL &pointl)
- [DATASTREAM](#) & [operator>>](#) (POINTL &pointl)
- [DATASTREAM](#) & [operator<<](#) (const POINT16 &point)
- [DATASTREAM](#) & [operator>>](#) (POINT16 &point)
- [DATASTREAM](#) & [operator<<](#) (const XFORM &xform)
- [DATASTREAM](#) & [operator>>](#) (XFORM &xform)
- [DATASTREAM](#) & [operator<<](#) (const [BYTEARRAY](#) &array)
- [DATASTREAM](#) & [operator>>](#) ([BYTEARRAY](#) &array)
- [DATASTREAM](#) & [operator<<](#) (const [POINTLARRAY](#) &array)
- [DATASTREAM](#) & [operator>>](#) ([POINTLARRAY](#) &array)
- [DATASTREAM](#) & [operator<<](#) (const [POINT16ARRAY](#) &array)
- [DATASTREAM](#) & [operator>>](#) ([POINT16ARRAY](#) &array)
- [DATASTREAM](#) & [operator<<](#) (const [INTARRAY](#) &array)
- [DATASTREAM](#) & [operator>>](#) ([INTARRAY](#) &array)
- [DATASTREAM](#) & [operator<<](#) (const [DWORDARRAY](#) &array)
- [DATASTREAM](#) & [operator>>](#) ([DWORDARRAY](#) &array)
- [DATASTREAM](#) & [operator<<](#) (const ::EMRTEXT &text)
- [DATASTREAM](#) & [operator>>](#) (::EMRTEXT &text)
- [DATASTREAM](#) & [operator<<](#) (const LOGPEN &pen)
- [DATASTREAM](#) & [operator>>](#) (LOGPEN &pen)
- [DATASTREAM](#) & [operator<<](#) (const EXTLOGPEN &pen)
- [DATASTREAM](#) & [operator>>](#) (EXTLOGPEN &pen)
- [DATASTREAM](#) & [operator<<](#) (const LOGBRUSH &brush)
- [DATASTREAM](#) & [operator>>](#) (LOGBRUSH &brush)
- [DATASTREAM](#) & [operator<<](#) (const LOGFONTW &font)
- [DATASTREAM](#) & [operator>>](#) (LOGFONTW &font)
- [DATASTREAM](#) & [operator<<](#) (const PANOSE &panose)
- [DATASTREAM](#) & [operator>>](#) (PANOSE &panose)
- [DATASTREAM](#) & [operator<<](#) (const EXTLOGFONTW &font)
- [DATASTREAM](#) & [operator>>](#) (EXTLOGFONTW &font)
- [DATASTREAM](#) & [operator<<](#) (const LOGPALETTE &palette)
- [DATASTREAM](#) & [operator>>](#) (LOGPALETTE &palette)

3.4.1 Detailed Description

Support different endian modes when reading and writing the metafile.

To support different endian modes, rather than just writing the structures directly to a file via `fwrite(&emr, ...)`, we have to write each element of the structure separately, swapping bytes as necessary. `datastream` supports this. Remarkably similar to the `QDataStream` class from Qt. So, too, for reading.

3.4.2 Constructor & Destructor Documentation

3.4.2.1 DATASTREAM()

```
EMF::DATASTREAM::DATASTREAM (
    ::FILE * fp = 0 ) [inline]
```

Constructor for [DATASTREAM](#).

Parameters

<i>fp</i>	optional file pointer (but must be assigned before any output occurs.)
-----------	------------------------------------------------------------------------

3.4.3 Member Function Documentation

3.4.3.1 operator<<() [1/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const BYTE & byte ) [inline]
```

Output a byte to the stream (not swabbed or anything).

Parameters

<i>byte</i>	byte to output.
-------------	-----------------

3.4.3.2 operator<<() [2/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const WORD & word ) [inline]
```

Output a (short) word to the stream (swabbed).

Parameters

<i>word</i>	(short) word to output.
-------------	-------------------------

3.4.3.3 `operator<<()` [3/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const INT16 & word ) [inline]
```

Output a (short, 16-bit) word to the stream (swabbed).

Parameters

<i>word</i>	(short, 16-bit) word to output.
-------------	---------------------------------

3.4.3.4 `operator<<()` [4/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const DWORD & dword ) [inline]
```

Output a double word (long) to the stream (swabbed).

Parameters

<i>dword</i>	double word (long) to output.
--------------	-------------------------------

3.4.3.5 `operator<<()` [5/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const LONG & long_ ) [inline]
```

Output a long int to the stream (swabbed).

Parameters

<i>long</i> ↔ —	long int to output.
--------------------	---------------------

3.4.3.6 `operator<<()` [6/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const INT & int_ ) [inline]
```


Output a (long) int to the stream (swabbed).

Parameters

<i>int</i> ↔	(long) int to output.
—	

3.4.3.7 operator<<() [7/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const UINT & uint ) [inline]
```

Output a (long) unsigned int to the stream (swabbed).

Parameters

<i>uint</i>	(long) unsigned int to output.
-------------	--------------------------------

3.4.3.8 operator<<() [8/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const FLOAT & float_ ) [inline]
```

Output a single precision float to the stream (swabbed).

Parameters

<i>float</i> ↔	single precision float to output.
—	

3.4.3.9 operator<<() [9/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const PADDING & padding ) [inline]
```

Output a series of '\0's to pad out a record.

Parameters

<i>padding</i>	simple padding structure (length and number of nulls).
----------------	--------------------------------------------------------

References EMF::PADDING::padding_, and EMF::PADDING::size_.

3.4.3.10 operator<<() [10/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const RECTL & rectl ) [inline]
```

Output a RECTL structure.

Parameters

<i>rectl</i>	structure to output.
--------------	----------------------

3.4.3.11 operator<<() [11/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const SIZEL & szel ) [inline]
```

Output a SIZEL structure.

Parameters

<i>szel</i>	structure to output.
-------------	----------------------

3.4.3.12 operator<<() [12/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const WCHARSTR & wcharstr ) [inline]
```

Output a WCHAR string (note: the individual characters are swabbed).

Parameters

<i>wcharstr</i>	structure to output.
-----------------	----------------------

References EMF::WCHARSTR::length_, and EMF::WCHARSTR::string_.

3.4.3.13 operator<<() [13/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const CHARSTR & charstr ) [inline]
```

Output a single byte character string.

Parameters

<i>charstr</i>	structure to output.
----------------	----------------------

References EMF::CHARSTR::length_, and EMF::CHARSTR::string_.

3.4.3.14 operator<<() [14/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const ::EMR & emr ) [inline]
```

Output an Enhanced Metafile Record header.

Parameters

<i>emr</i>	Enhanced Metafile Record header to output.
------------	--------------------------------------------

3.4.3.15 operator<<() [15/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const POINT & point ) [inline]
```

Output a POINT structure.

Parameters

<i>point</i>	POINT to output.
--------------	------------------

3.4.3.16 operator<<() [16/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const POINTL & pointl ) [inline]
```

Output a POINTL structure.

Parameters

<i>pointl</i>	POINTL to output.
---------------	-------------------

3.4.3.17 operator<<() [17/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const POINT16 & point ) [inline]
```

Output a POINT16 structure.

Parameters

<i>point</i>	POINT16 to output.
--------------	--------------------

3.4.3.18 operator<<() [18/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const XFORM & xform ) [inline]
```

Output an XFORM structure.

Parameters

<i>xform</i>	XFORM to output.
--------------	------------------

3.4.3.19 operator<<() [19/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const BYTEARRAY & array ) [inline]
```

Output an array of BYTES.

Parameters

<i>array</i>	array of BYTES to output.
--------------	---------------------------

References EMF::BYTEARRAY::array_, and EMF::BYTEARRAY::n_.

3.4.3.20 operator<<() [20/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const POINTLARRAY & array ) [inline]
```

Output an array of POINTLs.

Parameters

<i>array</i>	array of POINTLs to output.
--------------	-----------------------------

References EMF::POINTLARRAY::n_, and EMF::POINTLARRAY::points_.

3.4.3.21 operator<<() [21/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const POINT16ARRAY & array ) [inline]
```

Output an array of POINT16s.

Parameters

<i>array</i>	array of POINT16s to output.
--------------	------------------------------

References EMF::POINT16ARRAY::n_, and EMF::POINT16ARRAY::points_.

3.4.3.22 operator<<() [22/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const INTARRAY & array ) [inline]
```

Output an array of (long) ints.

Parameters

<i>array</i>	array of (long) ints to output.
--------------	---------------------------------

References EMF::INTARRAY::ints_, and EMF::INTARRAY::n_.

3.4.3.23 operator<<() [23/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const DWORDARRAY & array ) [inline]
```

Output an array of double words (longs).

Parameters

<i>array</i>	array of double words (longs) to output.
--------------	------------------------------------------

References EMF::DWORDARRAY::dwords_, and EMF::DWORDARRAY::n_.

3.4.3.24 operator<<() [24/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const ::EMRTEXT & text ) [inline]
```

Output an Enhanced Metafile Text Record.

Parameters

<i>text</i>	Enhanced Metafile Text Record to output.
-------------	------------------------------------------

3.4.3.25 operator<<() [25/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (  
    const LOGPEN & pen ) [inline]
```

Output a Logical Pen definition.

Parameters

<i>pen</i>	Logical Pen definition to output.
------------	-----------------------------------

3.4.3.26 operator<<() [26/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (  
    const EXTLOGPEN & pen ) [inline]
```

Output an Extended Logical Pen definition.

Parameters

<i>pen</i>	Extended Logical Pen definition to output.
------------	--------------------------------------------

3.4.3.27 operator<<() [27/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (  
    const LOGBRUSH & brush ) [inline]
```

Output a Logical Brush definition.

Parameters

<i>brush</i>	Logical Brush definition to output.
--------------	-------------------------------------

3.4.3.28 operator<<() [28/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (  
    const LOGFONTW & font ) [inline]
```

Output a Logical Font definition (using WCHAR strings).

Parameters

<i>font</i>	Logical Font definition to output.
-------------	------------------------------------

References EMF::WCHARSTR::WCHARSTR().

3.4.3.29 operator<<() [29/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const PANOSE & panose ) [inline]
```

Output a Panose structure.

Parameters

<i>panose</i>	Panose structure to output.
---------------	-----------------------------

3.4.3.30 operator<<() [30/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const EXTLOGFONTW & font ) [inline]
```

Output an Extended Logical Font definition (using WCHAR strings).

Parameters

<i>font</i>	Extended Logical Font definition to output.
-------------	---------------------------------------------

References EMF::WCHARSTR::WCHARSTR().

3.4.3.31 operator<<() [31/31]

```
DATASTREAM& EMF::DATASTREAM::operator<< (
    const LOGPALETTE & palette ) [inline]
```

Output a Logical Palette.

Parameters

<i>palette</i>	Logical Palette to output.
----------------	----------------------------

3.4.3.32 operator>>() [1/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    BYTE & byte ) [inline]
```

Input a byte from the stream (not swabbed or anything).

Parameters

<i>byte</i>	destination for input byte.
-------------	-----------------------------

3.4.3.33 operator>>() [2/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    WORD & word ) [inline]
```

Input a (short) word from the stream (swabbed).

Parameters

<i>word</i>	destination for (short) word.
-------------	-------------------------------

3.4.3.34 operator>>() [3/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    INT16 & word ) [inline]
```

Input a (short, 16-bit) word from the stream (swabbed).

Parameters

<i>word</i>	destination for (short, 16-bit) word.
-------------	---------------------------------------

3.4.3.35 operator>>() [4/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    DWORD & dword ) [inline]
```

Input a double word (long) from the stream (swabbed).

Parameters

<i>dword</i>	destination for double word (long).
--------------	-------------------------------------

3.4.3.36 operator>>() [5/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    LONG & long_ ) [inline]
```

Input a long int from the stream (swabbed).

Parameters

<i>long</i> ↔ —	destination for long int.
--------------------	---------------------------

3.4.3.37 operator>>() [6/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    INT & int_ ) [inline]
```

Input a (long) int from the stream (swabbed).

Parameters

<i>int</i> ↔ —	destination for (long) int.
-------------------	-----------------------------

3.4.3.38 operator>>() [7/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    UINT & uint ) [inline]
```

Input a (long) unsigned int from the stream (swabbed).

Parameters

<i>uint</i>	destination for (long) unsigned int.
-------------	--------------------------------------

3.4.3.39 operator>>() [8/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    FLOAT & float_ ) [inline]
```

Input a single precision float from the stream (swabbed).

Parameters

<i>float</i> ↔	destination for single precision float.
—	

3.4.3.40 operator>>() [9/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    RECTL & rectl ) [inline]
```

Input a RECTL structure.

Parameters

<i>rectl</i>	destination of input RECTL.
--------------	-----------------------------

3.4.3.41 operator>>() [10/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    SIZEL & szel ) [inline]
```

Input a SIZEL structure.

Parameters

<i>szel</i>	destination of input SIZEL.
-------------	-----------------------------

3.4.3.42 operator>>() [11/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    WCHARSTR & wcharstr ) [inline]
```

Input a WCHAR string (note: the individual characters are swabbed.)

Parameters

<i>wcharstr</i>	destination of input WCHAR string.
-----------------	------------------------------------

References EMF::WCHARSTR::length_, and EMF::WCHARSTR::string_.

3.4.3.43 operator>>() [12/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    CHARSTR & charstr ) [inline]
```

Input a single byte character string.

Parameters

<i>charstr</i>	destination of input CHAR string.
----------------	-----------------------------------

References EMF::CHARSTR::length_, and EMF::CHARSTR::string_.

3.4.3.44 operator>>() [13/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    ::EMR & emr ) [inline]
```

Input an Enhanced Metafile Record header.

Parameters

<i>emr</i>	destination of Enhanced Metafile Record header.
------------	-------------------------------------------------

3.4.3.45 operator>>() [14/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    POINT & point ) [inline]
```

Input a POINT structure.

Parameters

<i>point</i>	destination of input POINT.
--------------	-----------------------------

3.4.3.46 operator>>() [15/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    POINTL & pointl ) [inline]
```

Input a POINTL structure.

Parameters

<i>pointl</i>	destination of input POINTL.
---------------	------------------------------

3.4.3.47 operator>>() [16/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    POINT16 & point ) [inline]
```

Input a POINT16 structure.

Parameters

<i>point</i>	destination of input POINT16.
--------------	-------------------------------

3.4.3.48 operator>>() [17/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    XFORM & xform ) [inline]
```

Input an XFORM structure.

Parameters

<i>xform</i>	destination of input XFORM.
--------------	-----------------------------

3.4.3.49 operator>>() [18/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    BYTEARRAY & array ) [inline]
```

Input an array of BYTES.

Parameters

<i>array</i>	destination of array of input BYTES.
--------------	--------------------------------------

References EMF::BYTEARRAY::array_, and EMF::BYTEARRAY::n_.

3.4.3.50 operator>>() [19/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    POINTLARRAY & array ) [inline]
```

Input an array of POINTLs.

Parameters

<i>array</i>	destination of array of input POINTLs.
--------------	----------------------------------------

References EMF::POINTLARRAY::n_, and EMF::POINTLARRAY::points_.

3.4.3.51 operator>>() [20/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    POINT16ARRAY & array ) [inline]
```

Input an array of POINT16s.

Parameters

<i>array</i>	destination of array of input POINT16s.
--------------	-----------------------------------------

References EMF::POINT16ARRAY::n_, and EMF::POINT16ARRAY::points_.

3.4.3.52 operator>>() [21/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    INTARRAY & array ) [inline]
```

Input an array of (long) ints.

Parameters

<i>array</i>	destination of array of input (long) ints.
--------------	--------------------------------------------

References EMF::INTARRAY::ints_, and EMF::INTARRAY::n_.

3.4.3.53 operator>>() [22/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    DWORDARRAY & array ) [inline]
```

Input an array of double words (longs).

Parameters

<i>array</i>	destination of array of input double words (longs).
--------------	-----------------------------------------------------

References EMF::DWORDARRAY::dwords_, and EMF::DWORDARRAY::n_.

3.4.3.54 operator>>() [23/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    ::EMRTEXT & text ) [inline]
```

Input an Enhanced Metafile Text Record.

Parameters

<i>text</i>	destination of Enhanced Metafile Text Record.
-------------	-----------------------------------------------

3.4.3.55 operator>>() [24/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    LOGPEN & pen ) [inline]
```

Input a Logical Pen definition.

Parameters

<i>pen</i>	destination of Logical Pen definition.
------------	----------------------------------------

3.4.3.56 operator>>() [25/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    EXTLOGPEN & pen ) [inline]
```

Input an Extended Logical Pen definition.

Parameters

<i>pen</i>	destination of Extended Logical Pen definition.
------------	-------------------------------------------------

3.4.3.57 operator>>() [26/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    LOGBRUSH & brush ) [inline]
```

Input a Logical Brush definition.

Parameters

<i>brush</i>	destination of Logical Brush definition.
--------------	------------------------------------------

3.4.3.58 operator>>() [27/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    LOGFONTW & font ) [inline]
```

Input a Logical Font definition (using WCHAR strings).

Parameters

<i>font</i>	destination of Logical Font definition.
-------------	-----------------------------------------

3.4.3.59 operator>>() [28/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    PANOSE & panose ) [inline]
```

Input a Panose structure.

Parameters

<i>panose</i>	destinatino of input Panose structure.
---------------	----------------------------------------

3.4.3.60 operator>>() [29/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    EXTLOGFONTW & font ) [inline]
```

Input an Extended Logical Font definition (using WCHAR strings).

Parameters

<i>font</i>	destination of Extended Logical Font definition.
-------------	--------------------------------------------------

3.4.3.61 operator>>() [30/30]

```
DATASTREAM& EMF::DATASTREAM::operator>> (
    LOGPALETTE & palette ) [inline]
```

Input a Logical Palette.

Parameters

<i>palette</i>	destination of input Logical Palette.
----------------	---------------------------------------

3.4.3.62 setStream()

```
void EMF::DATASTREAM::setStream (
    ::FILE * fp ) [inline]
```


Use the given FILE stream as the input/output destination.

Parameters

<i>fp</i>	file point for i/o.
-----------	---------------------

The documentation for this class was generated from the following files:

- libemf.h
- libemf.cpp

3.5 EMF::DWORDARRAY Struct Reference

Represent an array of double word integers in a simple way.

```
#include <libemf.h>
```

Public Member Functions

- [DWORDARRAY](#) (DWORD *const dwords, const DWORD n)

Data Fields

- DWORD *const [dwords_](#)
Array of double words.
- const DWORD [n_](#)
Number of double words in array.

3.5.1 Detailed Description

Represent an array of double word integers in a simple way.

Allow an array of DWORD's to be written out at once.

3.5.2 Constructor & Destructor Documentation

3.5.2.1 DWORDARRAY()

```
EMF::DWORDARRAY::DWORDARRAY (
    DWORD *const dwords,
    const DWORD n ) [inline]
```

simple constructor.

Parameters

<i>dwords</i>	pointer to double words.
<i>n</i>	number double words in array.

The documentation for this struct was generated from the following file:

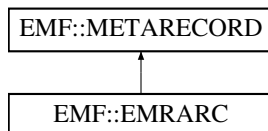
- libemf.h

3.6 EMF::EMRARC Class Reference

EMF Arc.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRARC:

**Public Member Functions**

- [EMRARC](#) (INT left, INT top, INT right, INT bottom, INT xstart, INT ystart, INT xend, INT yend)
- [EMRARC](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.6.1 Detailed Description

EMF Arc.

Draw an arc. Not sure what the specification here means, though.

3.6.2 Constructor & Destructor Documentation**3.6.2.1 EMRARC()** [1/2]

```

EMF::EMRARC::EMRARC (
    INT left,
    INT top,
    INT right,
    INT bottom,
    INT xstart,
    INT ystart,
    INT xend,
    INT yend ) [inline]
  
```

Take these descriptions with a grain of salt...

Parameters

<i>left</i>	x position of left edge of arc box.
<i>top</i>	y position of top edge of arc box.
<i>right</i>	x position of right edge of arc box.
<i>bottom</i>	y position bottom edge of arc box.
<i>xstart</i>	x position of arc start.
<i>ystart</i>	y position of arc start.
<i>xend</i>	x position of arc end.
<i>yend</i>	y position of arc end.

3.6.2.2 EMRARC() [2/2]

```
EMF::EMRARC::EMRARC (
    DATASTREAM & ds ) [inline]
```

Construct an Arc record from the input datastream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.6.3 Member Function Documentation

3.6.3.1 execute()

```
void EMF::EMRARC::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.6.3.2 serialize()

```
bool EMF::EMRARC::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.6.3.3 size()

```
int EMF::EMRARCTO::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

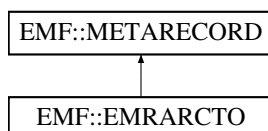
- libemf.h

3.7 EMF::EMRARCTO Class Reference

EMF Arc To.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRARCTO:



Public Member Functions

- [EMRARCTO](#) (INT left, INT top, INT right, INT bottom, INT xstart, INT ystart, INT xend, INT yend)
- [EMRARCTO](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.7.1 Detailed Description

EMF Arc To.

Draw another arc. Not sure what the specification here means, though.

3.7.2 Constructor & Destructor Documentation

3.7.2.1 EMRARCTO() [1/2]

```
EMF::EMRARCTO::EMRARCTO (
    INT left,
    INT top,
    INT right,
    INT bottom,
    INT xstart,
    INT ystart,
    INT xend,
    INT yend ) [inline]
```

Take these descriptions with a grain of salt...

Parameters

<i>left</i>	x position of left edge of arc box.
<i>top</i>	y position of top edge of arc box.
<i>right</i>	x position of right edge of arc box.
<i>bottom</i>	y position bottom edge of arc box.
<i>xstart</i>	x position of arc start.
<i>ystart</i>	y position of arc start.
<i>xend</i>	x position of arc end.
<i>yend</i>	y position of arc end.

3.7.2.2 EMRARCTO() [2/2]

```
EMF::EMRARCTO::EMRARCTO (
    DATASTREAM & ds ) [inline]
```

Construct an ArcTo record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.7.3 Member Function Documentation

3.7.3.1 execute()

```
void EMF::EMRARCTO::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.7.3.2 `serialize()`

```
bool EMF::EMRARCTO::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.7.3.3 `size()`

```
int EMF::EMRARCTO::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

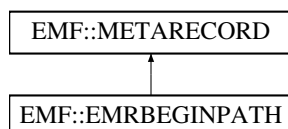
- libemf.h

3.8 EMF::EMRBEGINPATH Class Reference

EMF Begin Path.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRBEGINPATH:



Public Member Functions

- [EMRBEGINPATH](#) (void)
- [EMRBEGINPATH](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.8.1 Detailed Description

EMF Begin Path.

Begin the current path definition.

3.8.2 Constructor & Destructor Documentation

3.8.2.1 [EMRBEGINPATH\(\)](#) [1/2]

```
EMF::EMRBEGINPATH::EMRBEGINPATH (
    void ) [inline]
```

Create a Begin Path record.

3.8.2.2 [EMRBEGINPATH\(\)](#) [2/2]

```
EMF::EMRBEGINPATH::EMRBEGINPATH (
    DATASTREAM & ds ) [inline]
```

Construct a BeginPath record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.8.3 Member Function Documentation

3.8.3.1 [execute\(\)](#)

```
void EMF::EMRBEGINPATH::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.8.3.2 `serialize()`

```
bool EMF::EMRBEGINPATH::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.8.3.3 `size()`

```
int EMF::EMRBEGINPATH::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

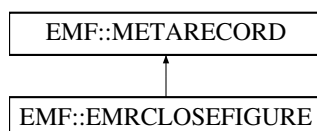
- libemf.h

3.9 `EMF::EMRCLOSEFIGURE` Class Reference

EMF Close Figure.

```
#include <libemf.h>
```

Inheritance diagram for `EMF::EMRCLOSEFIGURE`:



Public Member Functions

- [EMRCLOSEFIGURE](#) (void)
- [EMRCLOSEFIGURE](#) ([DATASTREAM](#) &ds)
- bool [serialize](#) ([DATASTREAM](#) ds)
- int [size](#) (void) const
- void [execute](#) ([METAFILEDEVICECONTEXT](#) *source, HDC dc) const

3.9.1 Detailed Description

EMF Close Figure.

Close the current figure.

3.9.2 Constructor & Destructor Documentation

3.9.2.1 EMRCLOSEFIGURE() [1/2]

```
EMF::EMRCLOSEFIGURE::EMRCLOSEFIGURE (
    void ) [inline]
```

Create a Close Figure record.

3.9.2.2 EMRCLOSEFIGURE() [2/2]

```
EMF::EMRCLOSEFIGURE::EMRCLOSEFIGURE (
    DATASTREAM & ds ) [inline]
```

Construct a CloseFigure record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.9.3 Member Function Documentation

3.9.3.1 execute()

```
void EMF::EMRCLOSEFIGURE::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.9.3.2 `serialize()`

```
bool EMF::EMRCLOSEFIGURE::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.9.3.3 `size()`

```
int EMF::EMRCLOSEFIGURE::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

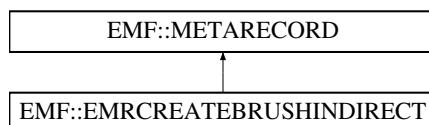
- libemf.h

3.10 `EMF::EMRCREATEBRUSHINDIRECT` Class Reference

EMF Brush.

```
#include <libemf.h>
```

Inheritance diagram for `EMF::EMRCREATEBRUSHINDIRECT`:



Public Member Functions

- [EMRCREATEBRUSHINDIRECT](#) ([BRUSH](#) *brush, HGDIOBJ handle)
- [EMRCREATEBRUSHINDIRECT](#) ([DATASTREAM](#) &ds)
- bool [serialize](#) ([DATASTREAM](#) ds)
- int [size](#) (void) const
- void [execute](#) ([METAFILEDEVICECONTEXT](#) *source, HDC dc) const

3.10.1 Detailed Description

EMF Brush.

Create a new brush (used for filling shapes).

3.10.2 Constructor & Destructor Documentation

3.10.2.1 EMRCREATEBRUSHINDIRECT() [1/2]

```
EMRCREATEBRUSHINDIRECT::EMRCREATEBRUSHINDIRECT (
    BRUSH * brush,
    HGDIOBJ handle )
```

Parameters

<i>brush</i>	an instance of a BRUSH object.
<i>handle</i>	the BRUSH object's handle.

3.10.2.2 EMRCREATEBRUSHINDIRECT() [2/2]

```
EMRCREATEBRUSHINDIRECT::EMRCREATEBRUSHINDIRECT (
    DATASTREAM & ds )
```

Create a CreateBrushIndirect record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.10.3 Member Function Documentation

3.10.3.1 execute()

```
void EMRCREATEBRUSHINDIRECT::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

References [EMF::METAFILEDEVICECONTEXT::emf_handles](#).

3.10.3.2 serialize()

```
bool EMF::EMRCREATEBRUSHINDIRECT::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.10.3.3 size()

```
int EMF::EMRCREATEBRUSHINDIRECT::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following files:

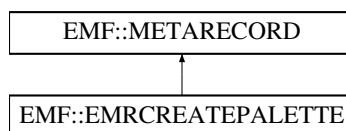
- libemf.h
- libemf.cpp

3.11 EMF::EMRCREATEPALETTE Class Reference

EMF Palette.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRCREATEPALETTE:



Public Member Functions

- [EMRCREATEPALETTE](#) ([PALETTE](#) *palette, HGDIOBJ handle)
- [EMRCREATEPALETTE](#) ([DATASTREAM](#) &ds)
- bool [serialize](#) ([DATASTREAM](#) ds)
- int [size](#) (void) const
- void [execute](#) ([METAFILEDEVICECONTEXT](#) *source, HDC dc) const

3.11.1 Detailed Description

EMF Palette.

Create a new palette.

3.11.2 Constructor & Destructor Documentation

3.11.2.1 EMRCREATEPALETTE() [1/2]

```
EMRCREATEPALETTE::EMRCREATEPALETTE (
    PALETTE * palette,
    HGDIOBJ handle )
```

Parameters

<i>palette</i>	an instance of a PALETTE object.
<i>handle</i>	the PALETTE object's handle.

3.11.2.2 EMRCREATEPALETTE() [2/2]

```
EMF::EMRCREATEPALETTE::EMRCREATEPALETTE (
    DATASTREAM & ds )
```

Construct a CreatePalette record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.11.3 Member Function Documentation

3.11.3.1 execute()

```
void EMRCREATEPALETTE::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

References [EMF::GLOBALOBJECTS::add\(\)](#), [EMF::METAFILEDEVICECONTEXT::appendHandle\(\)](#), [EMF::METAFILEDEVICECONTEXT::appendRecord\(\)](#), [EMF::METAFILEDEVICECONTEXT::bk_color](#), [EMF::METAFILEDEVICECONTEXT::bk_mode](#), [EMF::METAFILEDEVICECONTEXT::brush](#), [EMF::METAFILEDEVICECONTEXT::clearHandle\(\)](#), [EMF::GRAPHICSOBJECT::contexts](#), [EMF::METAFILEDEVICECONTEXT::deleteMetafile\(\)](#), [EMF::METAFILEDEVICECONTEXT::ds](#), [EMF::METAFILEDEVICECONTEXT::emf_handles](#), [EMF::GLOBALOBJECTS::find\(\)](#), [EMF::METAFILEDEVICECONTEXT::font](#), [EMF::METAFILEDEVICECONTEXT::fp](#), [EMF::OBJECT::getType\(\)](#), [EMF::OBJECT::handle](#), [EMF::METAFILEDEVICECONTEXT::header](#), [EMF::METAFILEDEVICECONTEXT::map_mode](#), [EMF::METAFILEDEVICECONTEXT::mergePoint\(\)](#), [EMF::METAFILEDEVICECONTEXT::miter_limit](#), [EMF::GRAPHICSOBJECT::newEMR\(\)](#), [EMF::GLOBALOBJECTS::newRecord\(\)](#), [EMF::METAFILEDEVICECONTEXT::nextHandle\(\)](#), [EMF::METAFILEDEVICECONTEXT::palette](#), [EMF::METAFILEDEVICECONTEXT::pen](#), [EMF::METAFILEDEVICECONTEXT::point](#), [EMF::METAFILEDEVICECONTEXT::polyfill_mode](#), [EMF::METAFILEDEVICECONTEXT::records](#), [EMF::GLOBALOBJECTS::remove\(\)](#), [EMF::METAFILEDEVICECONTEXT::resolution](#), [EMF::METARECORD::serialize\(\)](#), [EMF::METAFILEDEVICECONTEXT::text_alignment](#), [EMF::METAFILEDEVICECONTEXT::text_color](#), [EMF::ENHMETAHEADER::unserialize\(\)](#), [EMF::METAFILEDEVICECONTEXT::viewport_ext](#), [EMF::METAFILEDEVICECONTEXT::viewport_org](#), [EMF::METAFILEDEVICECONTEXT::window_ext](#), and [EMF::METAFILEDEVICECONTEXT::window_org](#).

3.11.3.2 serialize()

```
bool EMF::EMRCREATEPALETTE::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.11.3.3 size()

```
int EMF::EMRCREATEPALETTE::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following files:

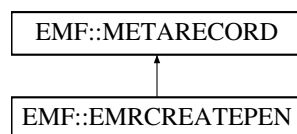
- libemf.h
- libemf.cpp

3.12 EMF::EMRCREATEPEN Class Reference

EMF Pen.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRCREATEPEN:



Public Member Functions

- [EMRCREATEPEN](#) ([PEN](#) *pen, HGDIOBJ handle)
- [EMRCREATEPEN](#) ([DATASTREAM](#) &ds)
- bool [serialize](#) ([DATASTREAM](#) ds)
- int [size](#) (void) const
- void [execute](#) ([METAFILEDEVICECONTEXT](#) *source, HDC dc) const

3.12.1 Detailed Description

EMF Pen.

Create a new pen (used for drawing lines, arcs, rectangles, etc.).

3.12.2 Constructor & Destructor Documentation

3.12.2.1 EMRCREATEPEN() [1/2]

```
EMRCREATEPEN::EMRCREATEPEN (
    PEN * pen,
    HGDIOBJ handle )
```

Parameters

<i>pen</i>	an instance of a PEN object.
<i>handle</i>	the PEN object's handle.

3.12.2.2 EMRCREATEPEN() [2/2]

```
EMRCREATEPEN::EMRCREATEPEN (
    DATASTREAM & ds )
```

Construct a CreatePen record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.12.3 Member Function Documentation

3.12.3.1 execute()

```
void EMRCREATEPEN::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

References [EMF::METAFILEDEVICECONTEXT::emf_handles](#).

3.12.3.2 serialize()

```
bool EMF::EMRCREATEPEN::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.12.3.3 size()

```
int EMF::EMRCREATEPEN::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following files:

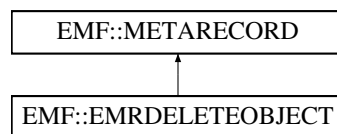
- libemf.h
- libemf.cpp

3.13 EMF::EMRDELETEOBJECT Class Reference

EMF Delete Object.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRDELETEOBJECT:



Public Member Functions

- [EMRDELETEOBJECT](#) (HGDIOBJ object)
- [EMRDELETEOBJECT](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.13.1 Detailed Description

EMF Delete Object.

Delete the given object, such as a pen, brush or font.

3.13.2 Constructor & Destructor Documentation

3.13.2.1 EMRDELETEOBJECT() [1/2]

```
EMF::EMRDELETEOBJECT::EMRDELETEOBJECT (
    HGDIOBJ object ) [inline]
```

Parameters

<i>object</i>	the object to delete.
---------------	-----------------------

3.13.2.2 EMRDELETEOBJECT() [2/2]

```
EMF::EMRDELETEOBJECT::EMRDELETEOBJECT (
    DATASTREAM & ds ) [inline]
```

Construct a DeleteObject record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.13.3 Member Function Documentation

3.13.3.1 execute()

```
void EMRDELETEOBJECT::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

References [EMF::METAFILEDEVICECONTEXT::emf_handles](#).

3.13.3.2 serialize()

```
bool EMF::EMRDELETEOBJECT::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.13.3.3 size()

```
int EMF::EMRDELETEOBJECT::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following files:

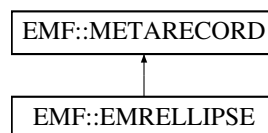
- libemf.h
- libemf.cpp

3.14 EMF::EMRELLIPSE Class Reference

EMF Ellipse.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRELLIPSE:



Public Member Functions

- [EMRELLIPSE](#) (INT left, INT top, INT right, INT bottom)
- [EMRELLIPSE](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.14.1 Detailed Description

EMF Ellipse.

Draw an ellipse. (I have no idea how the ellipse is defined!)

3.14.2 Constructor & Destructor Documentation

3.14.2.1 EMRELLIPSE() [1/2]

```
EMF::EMRELLIPSE::EMRELLIPSE (
    INT left,
    INT top,
    INT right,
    INT bottom ) [inline]
```

Take these descriptions with a grain of salt...

Parameters

<i>left</i>	x position of left extrema of ellipse.
<i>top</i>	y position of top extrema of ellipse.
<i>right</i>	x position of right extrema of ellipse.
<i>bottom</i>	y position of bottom extrema of ellipse.

3.14.2.2 EMRELLIPSE() [2/2]

```
EMF::EMRELLIPSE::EMRELLIPSE (
    DATASTREAM & ds ) [inline]
```

Construct an Ellipse record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.14.3 Member Function Documentation**3.14.3.1 execute()**

```
void EMF::EMRELLIPSE::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.14.3.2 serialize()

```
bool EMF::EMRELLIPSE::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.14.3.3 size()

```
int EMF::EMRELLIPSE::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

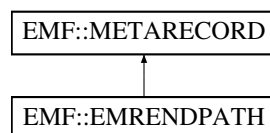
- libemf.h

3.15 EMF::EMRENDPATH Class Reference

EMF End Path.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRENDPATH:



Public Member Functions

- [EMRENDPATH](#) (void)
- [EMRENDPATH](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.15.1 Detailed Description

EMF End Path.

End the current path definition.

3.15.2 Constructor & Destructor Documentation

3.15.2.1 EMRENDPATH() [1/2]

```
EMF::EMRENDPATH::EMRENDPATH (
    void ) [inline]
```

Create an End Path record.

3.15.2.2 EMRENDPATH() [2/2]

```
EMF::EMRENDPATH::EMRENDPATH (
    DATASTREAM & ds ) [inline]
```

Construct an EndPath record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.15.3 Member Function Documentation**3.15.3.1 execute()**

```
void EMF::EMRENDPATH::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.15.3.2 serialize()

```
bool EMF::EMRENDPATH::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.15.3.3 size()

```
int EMF::EMRENDPATH::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

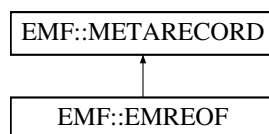
- libemf.h

3.16 EMF::EMREOF Class Reference

EMF End of File Record.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMREOF:



Public Member Functions

- [EMREOF](#) (void)
- [EMREOF](#) ([DATASTREAM](#) &ds)
- bool [serialize](#) ([DATASTREAM](#) ds)
- int [size](#) (void) const
- void [execute](#) ([METAFILEDEVICECONTEXT](#) *source, HDC dc) const

3.16.1 Detailed Description

EMF End of File Record.

Every metafile must have an End of File record. A palette may also be recorded in the EOF record, but it is currently unused by this library (all colors are specified in full RGB coordinates).

3.16.2 Constructor & Destructor Documentation

3.16.2.1 EMREOF() [1/2]

```
EMF::EMREOF::EMREOF (
    void ) [inline]
```

Constructor contains no user serviceable parts.

3.16.2.2 EMREOF() [2/2]

```
EMF::EMREOF::EMREOF (
    DATASTREAM & ds ) [inline]
```

Construct an EOF record from the input stream

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.16.3 Member Function Documentation

3.16.3.1 execute()

```
void EMF::EMREOF::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.16.3.2 serialize()

```
bool EMF::EMREOF::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.16.3.3 size()

```
int EMF::EMREOF::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

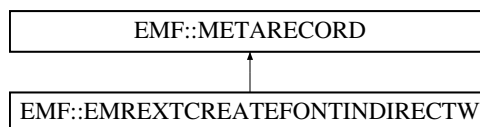
- libemf.h

3.17 EMF::EMREXTCREATEFONTINDIRECTW Class Reference

EMF Font.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMREXTCREATEFONTINDIRECTW:



Public Member Functions

- [EMREXTCREATEFONTINDIRECTW](#) ([FONT](#) *font, HGDIOBJ handle)
- [EMREXTCREATEFONTINDIRECTW](#) ([DATASTREAM](#) &ds)
- bool [serialize](#) ([DATASTREAM](#) ds)
- int [size](#) (void) const
- void [execute](#) ([METAFILEDEVICECONTEXT](#) *source, HDC dc) const

3.17.1 Detailed Description

EMF Font.

Create a new font.

3.17.2 Constructor & Destructor Documentation

3.17.2.1 EMREXTCREATEFONTINDIRECTW() [1/2]

```
EMREXTCREATEFONTINDIRECTW::EMREXTCREATEFONTINDIRECTW (
    FONT * font,
    HGDIOBJ handle )
```

Parameters

<i>font</i>	an instance of a FONT object.
<i>handle</i>	the FONT object's handle.

3.17.2.2 EMREXTCREATEFONTINDIRECTW() [2/2]

```
EMREXTCREATEFONTINDIRECTW::EMREXTCREATEFONTINDIRECTW (
    DATASTREAM & ds )
```

Construct a CreateFontIndirectW record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.17.3 Member Function Documentation

3.17.3.1 execute()

```
void EMREXTCREATEFONTINDIRECTW::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

References [EMF::METAFILEDEVICECONTEXT::emf_handles](#).

3.17.3.2 serialize()

```
bool EMF::EMREXTCREATEFONTINDIRECTW::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.17.3.3 size()

```
int EMF::EMREXTCREATEFONTINDIRECTW::size (
    void ) const [inline], [virtual]
```

Returns

the size of the record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following files:

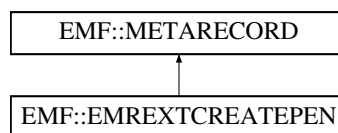
- [libemf.h](#)
- [libemf.cpp](#)

3.18 EMF::EMREXTCREATEPEN Class Reference

EMF Extended Pen.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMREXTCREATEPEN:

**Public Member Functions**

- [EMREXTCREATEPEN](#) ([EXTPEN](#) *pen, HGDIOBJ handle)
- [EMREXTCREATEPEN](#) ([DATASTREAM](#) &ds)
- bool [serialize](#) ([DATASTREAM](#) ds)
- int [size](#) (void) const
- void [execute](#) ([METAFILEDEVICECONTEXT](#) *source, HDC dc) const

3.18.1 Detailed Description

EMF Extended Pen.

Create a new pen (used for drawing lines, arcs, rectangles, etc.). Apparently uses extended attributes such as a bitmap mask.

3.18.2 Constructor & Destructor Documentation**3.18.2.1 EMREXTCREATEPEN() [1/2]**

```

EMREXTCREATEPEN::EMREXTCREATEPEN (
    EXTPEN * pen,
    HGDIOBJ handle )
  
```

Parameters

<i>pen</i>	an instance of a PEN object.
<i>handle</i>	the PEN object's handle.

3.18.2.2 EMREXTCREATEPEN() [2/2]

```
EMREXTCREATEPEN::EMREXTCREATEPEN (
    DATASTREAM & ds )
```

Construct a ExtCreatePen record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.18.3 Member Function Documentation

3.18.3.1 execute()

```
void EMREXTCREATEPEN::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

References [EMF::METAFILEDEVICECONTEXT::emf_handles](#).

3.18.3.2 serialize()

```
bool EMF::EMREXTCREATEPEN::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.18.3.3 size()

```
int EMF::EMREXTCREATEPEN::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following files:

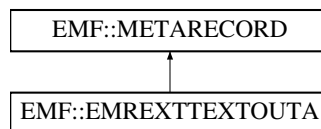
- libemf.h
- libemf.cpp

3.19 EMF::EMREXTTEXTOUTA Class Reference

EMF Extended Text Output ASCII.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMREXTTEXTOUTA:



Public Member Functions

- [EMREXTTEXTOUTA](#) (const RECTL *bounds, DWORD graphicsMode, FLOAT xScale, FLOAT yScale, const PEMRTEXT text, LPCSTR string, const INT *dx)
- [EMREXTTEXTOUTA](#) (DATASTREAM &ds)
- [~EMREXTTEXTOUTA](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.19.1 Detailed Description

EMF Extended Text Output ASCII.

Draw this text string with the current font, in the color of the current pen and with the given text background color. Individual character positioning can be given in the dx array.

3.19.2 Constructor & Destructor Documentation

3.19.2.1 EMREXTTEXTOUTA() [1/2]

```
EMF::EMREXTTEXTOUTA::EMREXTTEXTOUTA (
    const RECTL * bounds,
    DWORD graphicsMode,
    FLOAT xScale,
    FLOAT yScale,
    const PEMRTEXT text,
    LPCSTR string,
    const INT * dx ) [inline]
```

Parameters

<i>bounds</i>	bounding box of text string.
<i>graphicsMode</i>	(not entirely sure?)
<i>xScale</i>	width scale factor (of what?)
<i>yScale</i>	height scale factor (of what?)
<i>text</i>	a text metarecord containing the rendering style.
<i>string</i>	the text to render
<i>dx</i>	an array of positions for each character in string.

3.19.2.2 EMREXTTEXTOUTA() [2/2]

```
EMF::EMREXTTEXTOUTA::EMREXTTEXTOUTA (
    DATASTREAM & ds ) [inline]
```

Construct a ExtTextOutA record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.19.2.3 ~EMREXTTEXTOUTA()

```
EMF::EMREXTTEXTOUTA::~~EMREXTTEXTOUTA ( ) [inline]
```

Destructor frees its copy of the string and its character offset array

3.19.3 Member Function Documentation

3.19.3.1 execute()

```
void EMF::EMREXTTEXTOUTA::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.19.3.2 serialize()

```
bool EMF::EMREXTTEXTOUTA::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.19.3.3 size()

```
int EMF::EMREXTTEXTOUTA::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

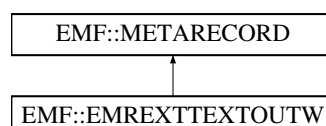
- libemf.h

3.20 EMF::EMREXTTEXTOUTW Class Reference

EMF Extended Text Output Wide character.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMREXTTEXTOUTW:



Public Member Functions

- [EMREXTTEXTOUTW](#) (const RECTL *bounds, DWORD graphicsMode, FLOAT xScale, FLOAT yScale, const PEMRTEXT text, LPCWSTR string, const INT *dx)
- [EMREXTTEXTOUTW](#) (DATASTREAM &ds)
- [~EMREXTTEXTOUTW](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.20.1 Detailed Description

EMF Extended Text Output Wide character.

Draw this text string with the current font, in the color of the current pen and with the given text background color. Individual character positioning can be given in the dx array.

3.20.2 Constructor & Destructor Documentation

3.20.2.1 EMREXTTEXTOUTW() [1/2]

```
EMF::EMREXTTEXTOUTW::EMREXTTEXTOUTW (
    const RECTL * bounds,
    DWORD graphicsMode,
    FLOAT xScale,
    FLOAT yScale,
    const PEMRTEXT text,
    LPCWSTR string,
    const INT * dx ) [inline]
```

Parameters

<i>bounds</i>	bounding box of text string.
<i>graphicsMode</i>	(not entirely sure?)
<i>xScale</i>	width scale factor (of what?)
<i>yScale</i>	height scale factor (of what?)
<i>text</i>	a text metarecord containing the rendering style.
<i>string</i>	the text to render
<i>dx</i>	an array of positions for each character in string.

3.20.2.2 EMREXTTEXTOUTW() [2/2]

```
EMF::EMREXTTEXTOUTW::EMREXTTEXTOUTW (
    DATASTREAM & ds ) [inline]
```

Construct a ExtTextOutA record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.20.2.3 ~EMREXTTEXTOUTW()

```
EMF::EMREXTTEXTOUTW::~~EMREXTTEXTOUTW ( ) [inline]
```

Destructor frees its copy of the string and its character offset array

3.20.3 Member Function Documentation

3.20.3.1 execute()

```
void EMF::EMREXTTEXTOUTW::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.20.3.2 serialize()

```
bool EMF::EMREXTTEXTOUTW::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

References [EMF::WCHARSTR::WCHARSTR\(\)](#).

3.20.3.3 size()

```
int EMF::EMREXTTEXTOUTW::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

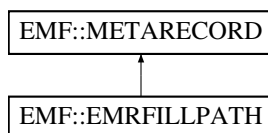
- libemf.h

3.21 EMF::EMRFILLPATH Class Reference

EMF Fill path.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRFILLPATH:



Public Member Functions

- [EMRFILLPATH](#) (const RECTL *bounds)
- [EMRFILLPATH](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.21.1 Detailed Description

EMF Fill path.

Fill the path.

3.21.2 Constructor & Destructor Documentation

3.21.2.1 EMRFILLPATH() [1/2]

```
EMF::EMRFILLPATH::EMRFILLPATH (
    const RECTL * bounds ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polygon.
---------------	----------------------------------

3.21.2.2 EMRFILLPATH() [2/2]

```
EMF::EMRFILLPATH::EMRFILLPATH (  
    DATASTREAM & ds ) [inline]
```

Create a FillPath record from input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.21.3 Member Function Documentation

3.21.3.1 execute()

```
void EMF::EMRFILLPATH::execute (  
    METAFILEDEVICECONTEXT * source,  
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.21.3.2 serialize()

```
bool EMF::EMRFILLPATH::serialize (  
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.21.3.3 size()

```
int EMF::EMRFILLPATH::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

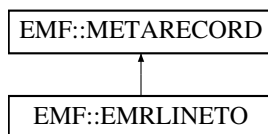
- libemf.h

3.22 EMF::EMRLINETO Class Reference

EMF Line To.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRLINETO:



Public Member Functions

- [EMRLINETO](#) (INT x, INT y)
- [EMRLINETO](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.22.1 Detailed Description

EMF Line To.

Draw a line using the current pen to the given position.

3.22.2 Constructor & Destructor Documentation

3.22.2.1 EMRLINETO() [1/2]

```
EMF::EMRLINETO::EMRLINETO (
    INT x,
    INT y ) [inline]
```

Parameters

<i>x</i>	x position to draw line to in logical coordinates.
<i>y</i>	y position to draw line to in logical coordinates.

3.22.2.2 EMRLINETO() [2/2]

```
EMF::EMRLINETO::EMRLINETO (
    DATASTREAM & ds ) [inline]
```

Construct a LineTo record from the input stream.

Parameters

<i>ds</i>	Metafile datastream
-----------	---------------------

3.22.3 Member Function Documentation

3.22.3.1 execute()

```
void EMF::EMRLINETO::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.22.3.2 serialize()

```
bool EMF::EMRLINETO::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream
-----------	---------------------

Implements [EMF::METARECORD](#).

3.22.3.3 size()

```
int EMF::EMRLINETO::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

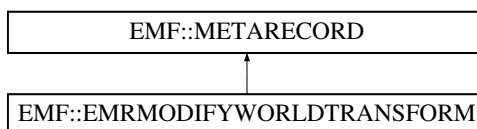
- libemf.h

3.23 EMF::EMRMODIFYWORLDTRANSFORM Class Reference

EMF Modify World Transform.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRMODIFYWORLDTRANSFORM:



Public Member Functions

- [EMRMODIFYWORLDTRANSFORM](#) (const XFORM *transform, DWORD mode)
- [EMRMODIFYWORLDTRANSFORM](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.23.1 Detailed Description

EMF Modify World Transform.

Enhanced metafiles have a Coordinate Transformation which allows the contents to be rotated and transformed. Does not appear to work properly in StarOffice (but it's also possible I don't understand how it's supposed to work either).

3.23.2 Constructor & Destructor Documentation

3.23.2.1 EMRMODIFYWORLDTRANSFORM() [1/2]

```
EMF::EMRMODIFYWORLDTRANSFORM::EMRMODIFYWORLDTRANSFORM (
    const XFORM * transform,
    DWORD mode ) [inline]
```

Parameters

<i>transform</i>	the transformation to apply
<i>mode</i>	the mode of the transformation application (namely, pre- or post-multiply)

3.23.2.2 EMRMODIFYWORLDTRANSFORM() [2/2]

```
EMF::EMRMODIFYWORLDTRANSFORM::EMRMODIFYWORLDTRANSFORM (
    DATASTREAM & ds ) [inline]
```

Construct a ModifyWorldTransform from the input datastream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.23.3 Member Function Documentation

3.23.3.1 execute()

```
void EMF::EMRMODIFYWORLDTRANSFORM::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.23.3.2 serialize()

```
bool EMF::EMRMODIFYWORLDTRANSFORM::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.23.3.3 size()

```
int EMF::EMRMODIFYWORLDTRANSFORM::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

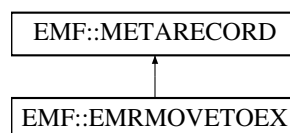
- libemf.h

3.24 EMF::EMRMOVETOEX Class Reference

EMF MoveTo (ex)

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRMOVETOEX:



Public Member Functions

- [EMRMOVETOEX](#) (INT x, INT y)
- [EMRMOVETOEX](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.24.1 Detailed Description

EMF MoveTo (ex)

Move the drawing point to the given position.

3.24.2 Constructor & Destructor Documentation

3.24.2.1 EMRMOVETOEX() [1/2]

```
EMF::EMRMOVETOEX::EMRMOVETOEX (
    INT x,
    INT y ) [inline]
```


Parameters

<i>x</i>	new x position in logical coordinates.
<i>y</i>	new y position in logical coordinates.

3.24.2.2 EMRMOVETOEX() [2/2]

```
EMF::EMRMOVETOEX::EMRMOVETOEX (
    DATASTREAM & ds ) [inline]
```

Construct a MoveToEx record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.24.3 Member Function Documentation

3.24.3.1 execute()

```
void EMF::EMRMOVETOEX::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.24.3.2 serialize()

```
bool EMF::EMRMOVETOEX::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.24.3.3 size()

```
int EMF::EMRMOVETOEX::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

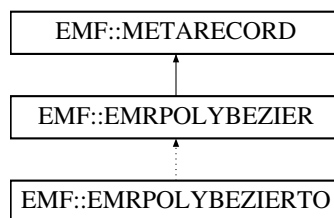
- libemf.h

3.25 EMF::EMRPOLYBEZIER Class Reference

EMF Polybezier.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYBEZIER:



Public Member Functions

- [EMRPOLYBEZIER](#) (const RECTL *bounds, const POINT *points, INT n)
- [EMRPOLYBEZIER](#) (DATASTREAM &ds)
- [~EMRPOLYBEZIER](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.25.1 Detailed Description

EMF Polybezier.

Draw a polygonal Bezier curve to (what?)

3.25.2 Constructor & Destructor Documentation

3.25.2.1 EMRPOLYBEZIER() [1/2]

```
EMF::EMRPOLYBEZIER::EMRPOLYBEZIER (
    const RECTL * bounds,
    const POINT * points,
    INT n ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polybezier curve.
<i>points</i>	array of polybezier vertices.
<i>n</i>	number of vertices in points.

3.25.2.2 EMRPOLYBEZIER() [2/2]

```
EMF::EMRPOLYBEZIER::EMRPOLYBEZIER (
    DATASTREAM & ds ) [inline]
```

Construct a PolyBezier record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.25.2.3 ~EMRPOLYBEZIER()

```
EMF::EMRPOLYBEZIER::~~EMRPOLYBEZIER ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.25.3 Member Function Documentation

3.25.3.1 execute()

```
void EMF::EMRPOLYBEZIER::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

Reimplemented in [EMF::EMRPOLYBEZIERTO](#).

3.25.3.2 serialize()

```
bool EMF::EMRPOLYBEZIER::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

Reimplemented in [EMF::EMRPOLYBEZIERTO](#).

3.25.3.3 size()

```
int EMF::EMRPOLYBEZIER::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

Reimplemented in [EMF::EMRPOLYBEZIERTO](#).

The documentation for this class was generated from the following file:

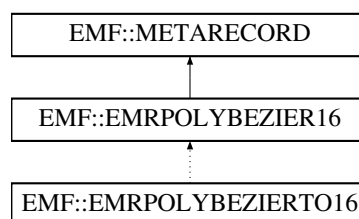
- libemf.h

3.26 EMF::EMRPOLYBEZIER16 Class Reference

EMF Polybezier16.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYBEZIER16:



Public Member Functions

- [EMRPOLYBEZIER16](#) (const RECTL *bounds, const POINT16 *points, INT n)
- [EMRPOLYBEZIER16](#) (const RECTL *bounds, const POINT *points, INT n)
- [EMRPOLYBEZIER16](#) (DATASTREAM &ds)
- [~EMRPOLYBEZIER16](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.26.1 Detailed Description

EMF Polybezier16.

Draw a polygonal Bezier curve to (what?) using 16-bit points.

3.26.2 Constructor & Destructor Documentation

3.26.2.1 EMRPOLYBEZIER16() [1/3]

```
EMF::EMRPOLYBEZIER16::EMRPOLYBEZIER16 (
    const RECTL * bounds,
    const POINT16 * points,
    INT n ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polybezier curve.
<i>points</i>	array of polybezier vertices.
<i>n</i>	number of vertices in points.

3.26.2.2 EMRPOLYBEZIER16() [2/3]

```
EMF::EMRPOLYBEZIER16::EMRPOLYBEZIER16 (
    const RECTL * bounds,
    const POINT * points,
    INT n ) [inline]
```

Convenience constructor with POINTs.

Parameters

<i>bounds</i>	overall bounding box of polybezier curve.
<i>points</i>	array of polybezier vertices.
<i>n</i>	number of vertices in points.

3.26.2.3 EMRPOLYBEZIER16() [3/3]

```
EMF::EMRPOLYBEZIER16::EMRPOLYBEZIER16 (
    DATASTREAM & ds ) [inline]
```

Construct a PolyBezier record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.26.2.4 ~EMRPOLYBEZIER16()

```
EMF::EMRPOLYBEZIER16::~~EMRPOLYBEZIER16 ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.26.3 Member Function Documentation**3.26.3.1 execute()**

```
void EMF::EMRPOLYBEZIER16::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

Reimplemented in [EMF::EMRPOLYBEZIERTO16](#).

3.26.3.2 serialize()

```
bool EMF::EMRPOLYBEZIER16::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

Reimplemented in [EMF::EMRPOLYBEZIERTO16](#).

3.26.3.3 size()

```
int EMF::EMRPOLYBEZIER16::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

Reimplemented in [EMF::EMRPOLYBEZIERTO16](#).

The documentation for this class was generated from the following file:

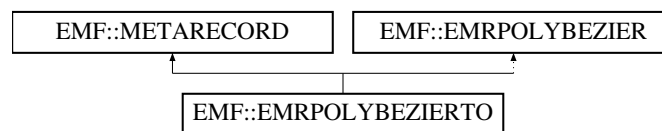
- libemf.h

3.27 EMF::EMRPOLYBEZIERTO Class Reference

EMF PolyBezierTo.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYBEZIERTO:



Public Member Functions

- [EMRPOLYBEZIERTO](#) (const RECTL *bounds, const POINT *points, INT n)
- [EMRPOLYBEZIERTO](#) (DATASTREAM &ds)
- [~EMRPOLYBEZIERTO](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.27.1 Detailed Description

EMF PolyBezierTo.

Draw a polygonal Bezier curve to (what?)

3.27.2 Constructor & Destructor Documentation

3.27.2.1 EMRPOLYBEZIERTO() [1/2]

```
EMF::EMRPOLYBEZIERTO::EMRPOLYBEZIERTO (
    const RECTL * bounds,
    const POINT * points,
    INT n ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polybezier curve.
<i>points</i>	array of polybezier vertices.
<i>n</i>	number of vertices in points.

3.27.2.2 EMRPOLYBEZIERTO() [2/2]

```
EMF::EMRPOLYBEZIERTO::EMRPOLYBEZIERTO (
    DATASTREAM & ds ) [inline]
```

Construct a PolyBezier record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.27.2.3 ~EMRPOLYBEZIERTO()

```
EMF::EMRPOLYBEZIERTO::~~EMRPOLYBEZIERTO ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.27.3 Member Function Documentation**3.27.3.1 execute()**

```
void EMF::EMRPOLYBEZIERTO::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.27.3.2 `serialize()`

```
bool EMF::EMRPOLYBEZIERTO::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.27.3.3 `size()`

```
int EMF::EMRPOLYBEZIERTO::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

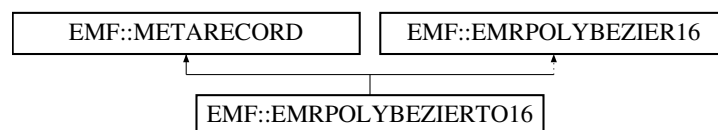
- `libemf.h`

3.28 EMF::EMRPOLYBEZIERTO16 Class Reference

EMF PolyBezierTo16.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYBEZIERTO16:



Public Member Functions

- [EMRPOLYBEZIERTO16](#) (const RECTL *bounds, const POINT16 *points, INT n)
- [EMRPOLYBEZIERTO16](#) (const RECTL *bounds, const POINT *points, INT n)
- [EMRPOLYBEZIERTO16](#) (DATASTREAM &ds)
- [~EMRPOLYBEZIERTO16](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.28.1 Detailed Description

EMF PolyBezierTo16.

Draw a polygonal Bezier curve to (what?) using 16-bit points

3.28.2 Constructor & Destructor Documentation

3.28.2.1 EMRPOLYBEZIERTO16() [1/3]

```
EMF::EMRPOLYBEZIERTO16::EMRPOLYBEZIERTO16 (
    const RECTL * bounds,
    const POINT16 * points,
    INT n ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polybezier curve.
<i>points</i>	array of polybezier vertices.
<i>n</i>	number of vertices in points.

3.28.2.2 EMRPOLYBEZIERTO16() [2/3]

```
EMF::EMRPOLYBEZIERTO16::EMRPOLYBEZIERTO16 (
    const RECTL * bounds,
    const POINT * points,
    INT n ) [inline]
```

Convenience constructor with POINTs.

Parameters

<i>bounds</i>	overall bounding box of polybezier curve.
<i>points</i>	array of polybezier vertices.
<i>n</i>	number of vertices in points.

3.28.2.3 EMRPOLYBEZIERTO16() [3/3]

```
EMF::EMRPOLYBEZIERTO16::EMRPOLYBEZIERTO16 (
    DATASTREAM & ds ) [inline]
```

Construct a PolyBezier record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.28.2.4 ~EMRPOLYBEZIERTO16()

```
EMF::EMRPOLYBEZIERTO16::~~EMRPOLYBEZIERTO16 ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.28.3 Member Function Documentation

3.28.3.1 execute()

```
void EMF::EMRPOLYBEZIERTO16::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.28.3.2 serialize()

```
bool EMF::EMRPOLYBEZIERTO16::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.28.3.3 size()

```
int EMF::EMRPOLYBEZIERTO16::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

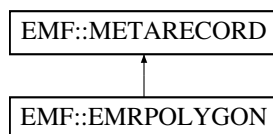
- libemf.h

3.29 EMF::EMRPOLYGON Class Reference

EMF Filled Polygon.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYGON:



Public Member Functions

- [EMRPOLYGON](#) (const RECTL *bounds, const POINT *points, INT n)
- [EMRPOLYGON](#) (DATASTREAM &ds)
- [~EMRPOLYGON](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.29.1 Detailed Description

EMF Filled Polygon.

Draw a filled polygon.

3.29.2 Constructor & Destructor Documentation

3.29.2.1 EMRPOLYGON() [1/2]

```

EMF::EMRPOLYGON::EMRPOLYGON (
    const RECTL * bounds,
    const POINT * points,
    INT n ) [inline]
  
```

Parameters

<i>bounds</i>	overall bounding box of polygon.
<i>points</i>	array of polygon vertices.
<i>n</i>	number of vertices in points.

3.29.2.2 EMRPOLYGON() [2/2]

```
EMF::EMRPOLYGON::EMRPOLYGON (
    DATASTREAM & ds ) [inline]
```

Construct a Polygon record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.29.2.3 ~EMRPOLYGON()

```
EMF::EMRPOLYGON::~~EMRPOLYGON ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.29.3 Member Function Documentation

3.29.3.1 execute()

```
void EMF::EMRPOLYGON::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.29.3.2 `serialize()`

```
bool EMF::EMRPOLYGON::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<code>ds</code>	Metafile datastream.
-----------------	----------------------

Implements [EMF::METARECORD](#).

3.29.3.3 `size()`

```
int EMF::EMRPOLYGON::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

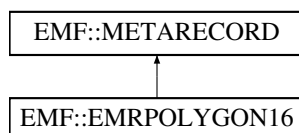
- `libemf.h`

3.30 EMF::EMRPOLYGON16 Class Reference

EMF Filled Polygon16.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYGON16:



Public Member Functions

- [EMRPOLYGON16](#) (const RECTL *bounds, const POINT *points, INT16 n)
- [EMRPOLYGON16](#) (const RECTL *bounds, const POINT16 *points, INT16 n)
- [EMRPOLYGON16](#) (DATASTREAM &ds)
- [~EMRPOLYGON16](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.30.1 Detailed Description

EMF Filled Polygon16.

Draw a filled polygon (with 16-bit points).

3.30.2 Constructor & Destructor Documentation

3.30.2.1 EMRPOLYGON16() [1/3]

```
EMF::EMRPOLYGON16::EMRPOLYGON16 (
    const RECTL * bounds,
    const POINT * points,
    INT16 n ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polygon.
<i>points</i>	array of polygon vertices.
<i>n</i>	number of vertices in points.

3.30.2.2 EMRPOLYGON16() [2/3]

```
EMF::EMRPOLYGON16::EMRPOLYGON16 (
    const RECTL * bounds,
    const POINT16 * points,
    INT16 n ) [inline]
```

Additional constructor which takes a POINT16 array.

Parameters

<i>bounds</i>	overall bounding box of polygon.
<i>points</i>	array of polygon vertices.
<i>n</i>	number of vertices in points.

3.30.2.3 EMRPOLYGON16() [3/3]

```
EMF::EMRPOLYGON16::EMRPOLYGON16 (
    DATASTREAM & ds ) [inline]
```

Construct a Polygon record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.30.2.4 ~EMRPOLYGON16()

```
EMF::EMRPOLYGON16::~~EMRPOLYGON16 ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.30.3 Member Function Documentation**3.30.3.1 execute()**

```
void EMF::EMRPOLYGON16::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.30.3.2 serialize()

```
bool EMF::EMRPOLYGON16::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.30.3.3 size()

```
int EMF::EMRPOLYGON16::size (
    void ) const [inline], [virtual]
```


Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

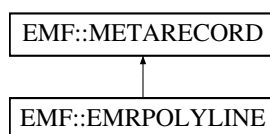
- `libemf.h`

3.31 EMF::EMRPOLYLINE Class Reference

EMF Polyline.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYLINE:



Public Member Functions

- [EMRPOLYLINE](#) (const RECTL *bounds, const POINT *points, INT n)
- [~EMRPOLYLINE](#) ()
- [EMRPOLYLINE](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.31.1 Detailed Description

EMF Polyline.

Draw a series of connected lines.

3.31.2 Constructor & Destructor Documentation

3.31.2.1 EMRPOLYLINE() [1/2]

```

EMF::EMRPOLYLINE::EMRPOLYLINE (
    const RECTL * bounds,
    const POINT * points,
    INT n ) [inline]
  
```

Parameters

<i>bounds</i>	overall bounding box of polyline.
<i>points</i>	array of polyline vertices.
<i>n</i>	number of vertices in points.

3.31.2.2 ~EMRPOLYLINE()

```
EMF::EMRPOLYLINE::~~EMRPOLYLINE ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.31.2.3 EMRPOLYLINE() [2/2]

```
EMF::EMRPOLYLINE::EMRPOLYLINE (
    DATASTREAM & ds ) [inline]
```

Construct a Polyline record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.31.3 Member Function Documentation

3.31.3.1 execute()

```
void EMF::EMRPOLYLINE::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.31.3.2 serialize()

```
bool EMF::EMRPOLYLINE::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.31.3.3 size()

```
int EMF::EMRPOLYLINE::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

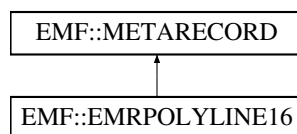
- libemf.h

3.32 EMF::EMRPOLYLINE16 Class Reference

EMF Polyline16.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYLINE16:



Public Member Functions

- [EMRPOLYLINE16](#) (const RECTL *bounds, const POINT16 *points, INT n)
- [EMRPOLYLINE16](#) (const RECTL *bounds, const POINT *points, INT n)
- [~EMRPOLYLINE16](#) ()
- [EMRPOLYLINE16](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.32.1 Detailed Description

EMF Polyline16.

Draw a series of connected lines using 16-bit points.

3.32.2 Constructor & Destructor Documentation

3.32.2.1 EMRPOLYLINE16() [1/3]

```
EMF::EMRPOLYLINE16::EMRPOLYLINE16 (
    const RECTL * bounds,
    const POINT16 * points,
    INT n ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polyline.
<i>points</i>	array of polyline vertices.
<i>n</i>	number of vertices in points.

3.32.2.2 EMRPOLYLINE16() [2/3]

```
EMF::EMRPOLYLINE16::EMRPOLYLINE16 (
    const RECTL * bounds,
    const POINT * points,
    INT n ) [inline]
```

Constructor with POINTs.

Parameters

<i>bounds</i>	overall bounding box of polyline.
<i>points</i>	array of polyline vertices.
<i>n</i>	number of vertices in points.

3.32.2.3 ~EMRPOLYLINE16()

```
EMF::EMRPOLYLINE16::~~EMRPOLYLINE16 ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.32.2.4 EMRPOLYLINE16() [3/3]

```
EMF::EMRPOLYLINE16::EMRPOLYLINE16 (
    DATASTREAM & ds ) [inline]
```

Construct a Polyline record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.32.3 Member Function Documentation

3.32.3.1 execute()

```
void EMF::EMRPOLYLINE16::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.32.3.2 serialize()

```
bool EMF::EMRPOLYLINE16::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.32.3.3 size()

```
int EMF::EMRPOLYLINE16::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

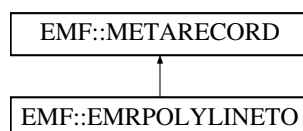
- libemf.h

3.33 EMF::EMRPOLYLINETO Class Reference

EMF PolylineTo.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYLINETO:



Public Member Functions

- [EMRPOLYLINETO](#) (const RECTL *bounds, const POINT *points, INT n)
- [EMRPOLYLINETO](#) (DATASTREAM &ds)
- [~EMRPOLYLINETO](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.33.1 Detailed Description

EMF PolylineTo.

Draw a polygonal line curve to (what?)

3.33.2 Constructor & Destructor Documentation

3.33.2.1 [EMRPOLYLINETO\(\)](#) [1/2]

```
EMF::EMRPOLYLINETO::EMRPOLYLINETO (
    const RECTL * bounds,
    const POINT * points,
    INT n ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polybezier curve.
<i>points</i>	array of polybezier vertices.
<i>n</i>	number of vertices in points.

3.33.2.2 [EMRPOLYLINETO\(\)](#) [2/2]

```
EMF::EMRPOLYLINETO::EMRPOLYLINETO (
    DATASTREAM & ds ) [inline]
```

Construct a PolylineTo record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.33.2.3 [~EMRPOLYLINETO\(\)](#)

```
EMF::EMRPOLYLINETO::~~EMRPOLYLINETO ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.33.3 Member Function Documentation

3.33.3.1 execute()

```
void EMF::EMRPOLYLINETO::execute (  
    METAFILEDEVICECONTEXT * source,  
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.33.3.2 serialize()

```
bool EMF::EMRPOLYLINETO::serialize (  
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.33.3.3 size()

```
int EMF::EMRPOLYLINETO::size (  
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

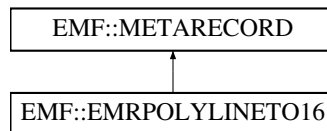
- libemf.h

3.34 EMF::EMRPOLYLINETO16 Class Reference

EMF PolylineTo16.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYLINETO16:



Public Member Functions

- [EMRPOLYLINETO16](#) (const RECTL *bounds, const POINT16 *points, INT n)
- [EMRPOLYLINETO16](#) (const RECTL *bounds, const POINT *points, INT n)
- [EMRPOLYLINETO16](#) (DATASTREAM &ds)
- [~EMRPOLYLINETO16](#) ()
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.34.1 Detailed Description

EMF PolylineTo16.

Draw a polygonal line curve to (what?)

3.34.2 Constructor & Destructor Documentation

3.34.2.1 EMRPOLYLINETO16() [1/3]

```
EMF::EMRPOLYLINETO16::EMRPOLYLINETO16 (
    const RECTL * bounds,
    const POINT16 * points,
    INT n ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polybezier curve.
<i>points</i>	array of polybezier vertices.
<i>n</i>	number of vertices in points.

3.34.2.2 EMRPOLYLINETO16() [2/3]

```
EMF::EMRPOLYLINETO16::EMRPOLYLINETO16 (
    const RECTL * bounds,
    const POINT * points,
    INT n ) [inline]
```

Convenience constructor with POINTs.

Parameters

<i>bounds</i>	overall bounding box of polybezier curve.
<i>points</i>	array of polybezier vertices.
<i>n</i>	number of vertices in points.

3.34.2.3 EMRPOLYLINETO16() [3/3]

```
EMF::EMRPOLYLINETO16::EMRPOLYLINETO16 (
    DATASTREAM & ds ) [inline]
```

Construct a PolylineTo record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.34.2.4 ~EMRPOLYLINETO16()

```
EMF::EMRPOLYLINETO16::~~EMRPOLYLINETO16 ( ) [inline]
```

Destructor frees a copy of the points it buffered.

3.34.3 Member Function Documentation

3.34.3.1 execute()

```
void EMF::EMRPOLYLINETO16::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.34.3.2 serialize()

```
bool EMF::EMRPOLYLINETO16::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.34.3.3 size()

```
int EMF::EMRPOLYLINETO16::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

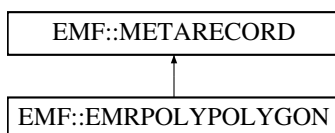
- libemf.h

3.35 EMF::EMRPOLYPOLYGON Class Reference

EMF Poly Polygon.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYPOLYGON:



Public Member Functions

- [EMRPOLYPOLYGON](#) (const RECTL *bounds, const POINT *points, const INT *counts, UINT polygons)
- [~EMRPOLYPOLYGON](#) ()
- [EMRPOLYPOLYGON](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.35.1 Detailed Description

EMF Poly Polygon.

Draw several filled polygons.

3.35.2 Constructor & Destructor Documentation

3.35.2.1 EMRPOLYPOLYGON() [1/2]

```
EMF::EMRPOLYPOLYGON::EMRPOLYPOLYGON (
    const RECTL * bounds,
    const POINT * points,
    const INT * counts,
    UINT polygons ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polygon.
<i>points</i>	array of polygon vertices.
<i>counts</i>	array of number of vertices in each polygon.
<i>polygons</i>	number of polygons.

3.35.2.2 ~EMRPOLYPOLYGON()

```
EMF::EMRPOLYPOLYGON::~~EMRPOLYPOLYGON ( ) [inline]
```

Destructor frees a copy of the counts and points it buffered.

3.35.2.3 EMRPOLYPOLYGON() [2/2]

```
EMF::EMRPOLYPOLYGON::EMRPOLYPOLYGON (
    DATASTREAM & ds ) [inline]
```

Construct a Polygon record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.35.3 Member Function Documentation

3.35.3.1 execute()

```
void EMF::EMRPOLYPOLYGON::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.35.3.2 serialize()

```
bool EMF::EMRPOLYPOLYGON::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.35.3.3 size()

```
int EMF::EMRPOLYPOLYGON::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

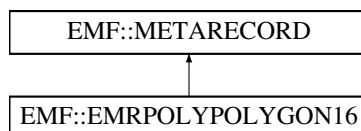
- libemf.h

3.36 EMF::EMRPOLYPOLYGON16 Class Reference

EMF Poly Polygon16.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRPOLYPOLYGON16:



Public Member Functions

- [EMRPOLYPOLYGON16](#) (const RECTL *bounds, const POINT *points, const INT *counts, UINT polygons)
- [EMRPOLYPOLYGON16](#) (const RECTL *bounds, const POINT16 *points, const INT *counts, UINT16 polygons)
- [~EMRPOLYPOLYGON16](#) ()
- [EMRPOLYPOLYGON16](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.36.1 Detailed Description

EMF Poly Polygon16.

Draw several filled polygons (with 16-bit points).

3.36.2 Constructor & Destructor Documentation

3.36.2.1 EMRPOLYPOLYGON16() [1/3]

```
EMF::EMRPOLYPOLYGON16::EMRPOLYPOLYGON16 (
    const RECTL * bounds,
    const POINT * points,
    const INT * counts,
    UINT polygons ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polygon.
<i>points</i>	array of polygon vertices.
<i>counts</i>	array of number of vertices in each polygon.
<i>polygons</i>	number of polygons.

3.36.2.2 EMRPOLYPOLYGON16() [2/3]

```
EMF::EMRPOLYPOLYGON16::EMRPOLYPOLYGON16 (
    const RECTL * bounds,
    const POINT16 * points,
    const INT * counts,
    UINT16 polygons ) [inline]
```

Additional constructor which takes a POINT16 structure.

Parameters

<i>bounds</i>	overall bounding box of polygon.
---------------	----------------------------------

Parameters

<i>points</i>	array of polygon vertices.
<i>counts</i>	array of number of vertices in each polygon.
<i>polygons</i>	number of polygons.

3.36.2.3 ~EMRPOLYPOLYGON16()

```
EMF::EMRPOLYPOLYGON16::~~EMRPOLYPOLYGON16 ( ) [inline]
```

Destructor frees a copy of the counts and points it buffered.

3.36.2.4 EMRPOLYPOLYGON16() [3/3]

```
EMF::EMRPOLYPOLYGON16::EMRPOLYPOLYGON16 (
    DATASTREAM & ds ) [inline]
```

Construct a Polygon record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.36.3 Member Function Documentation

3.36.3.1 execute()

```
void EMF::EMRPOLYPOLYGON16::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.36.3.2 serialize()

```
bool EMF::EMRPOLYPOLYGON16::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.36.3.3 size()

```
int EMF::EMRPOLYPOLYGON16::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

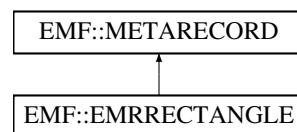
- libemf.h

3.37 EMF::EMRRECTANGLE Class Reference

EMF Rectangle.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRRECTANGLE:



Public Member Functions

- [EMRRECTANGLE](#) (INT left, INT top, INT right, INT bottom)
- [EMRRECTANGLE](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.37.1 Detailed Description

EMF Rectangle.

Draw a rectangle.

3.37.2 Constructor & Destructor Documentation

3.37.2.1 EMRRECTANGLE() [1/2]

```
EMF::EMRRECTANGLE::EMRRECTANGLE (
    INT left,
    INT top,
    INT right,
    INT bottom ) [inline]
```

Parameters

<i>left</i>	x position of left side of rectangle.
<i>top</i>	y position of top side of rectangle.
<i>right</i>	x position of right edge of rectangle.
<i>bottom</i>	y position of bottom edge of rectangle.

3.37.2.2 EMRRECTANGLE() [2/2]

```
EMF::EMRRECTANGLE::EMRRECTANGLE (
    DATASTREAM & ds ) [inline]
```

Construct a Rectangle record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.37.3 Member Function Documentation**3.37.3.1 execute()**

```
void EMF::EMRRECTANGLE::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.37.3.2 serialize()

```
bool EMF::EMRRECTANGLE::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.37.3.3 size()

```
int EMF::EMRRECTANGLE::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

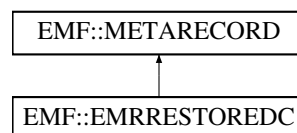
- libemf.h

3.38 EMF::EMRRESTOREDC Class Reference

EMF Restore DC.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRRESTOREDC:



Public Member Functions

- [EMRRESTOREDC](#) (INT n)
- [EMRRESTOREDC](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.38.1 Detailed Description

EMF Restore DC.

Use the stored device context in this context(?)

3.38.2 Constructor & Destructor Documentation

3.38.2.1 EMRRESTOREDC() [1/2]

```
EMF::EMRRESTOREDC::EMRRESTOREDC (
    INT n ) [inline]
```

Create a Restore DC record.

3.38.2.2 EMRRESTOREDC() [2/2]

```
EMF::EMRRESTOREDC::EMRRESTOREDC (
    DATASTREAM & ds ) [inline]
```

Construct an Restoredc record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.38.3 Member Function Documentation**3.38.3.1 execute()**

```
void EMF::EMRRESTOREDC::execute (  
    METAFILEDEVICECONTEXT * source,  
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.38.3.2 serialize()

```
bool EMF::EMRRESTOREDC::serialize (  
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.38.3.3 size()

```
int EMF::EMRRESTOREDC::size (  
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

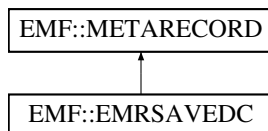
- libemf.h

3.39 EMF::EMRSAVEDC Class Reference

EMF Save DC.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSAVEDC:



Public Member Functions

- [EMRSAVEDC](#) (void)
- [EMRSAVEDC](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.39.1 Detailed Description

EMF Save DC.

Save the device context (i.e., push contents on a stack of some variety?)

3.39.2 Constructor & Destructor Documentation

3.39.2.1 EMRSAVEDC() [1/2]

```
EMF::EMRSAVEDC::EMRSAVEDC (
    void ) [inline]
```

Create a Save DC record.

3.39.2.2 EMRSAVEDC() [2/2]

```
EMF::EMRSAVEDC::EMRSAVEDC (
    DATASTREAM & ds ) [inline]
```

Construct an Savedc record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.39.3 Member Function Documentation

3.39.3.1 execute()

```
void EMF::EMRSAVEDC::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.39.3.2 serialize()

```
bool EMF::EMRSAVEDC::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.39.3.3 size()

```
int EMF::EMRSAVEDC::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

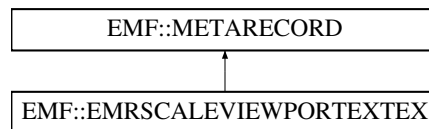
- libemf.h

3.40 EMF::EMRSCALEVIEWPORTEXTEx Class Reference

EMF Scale Viewport Extents (ex)

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSCALEVIEWPORTEXTEx:



Public Member Functions

- [EMRSCALEVIEWPORTEXTEx](#) (LONG x_num, LONG x_den, LONG y_num, LONG y_den)
- [EMRSCALEVIEWPORTEXTEx](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.40.1 Detailed Description

EMF Scale Viewport Extents (ex)

The viewport extent is the device coordinate (i.e. pixels) size of the viewport. Scale the viewport extents by the ratios of the given values. (OpenOffice accepts this, but not SETVIEWPORTEXT(?))

3.40.2 Constructor & Destructor Documentation

3.40.2.1 EMRSCALEVIEWPORTEXTEx() [1/2]

```

EMF::EMRSCALEVIEWPORTEXTEx::EMRSCALEVIEWPORTEXTEx (
    LONG x_num,
    LONG x_den,
    LONG y_num,
    LONG y_den ) [inline]

```

Parameters

<i>x_num</i>	numerator of x scale
<i>x_den</i>	denominator of x scale
<i>y_num</i>	numerator of y scale
<i>y_den</i>	denominator of y scale

3.40.2.2 EMRSCALEVIEWPORTEXTEx() [2/2]

```
EMF::EMRSCALEVIEWPORTEXTEx::EMRSCALEVIEWPORTEXTEx (
    DATASTREAM & ds ) [inline]
```

Construct a ScaleViewportExtEx record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.40.3 Member Function Documentation

3.40.3.1 execute()

```
void EMF::EMRSCALEVIEWPORTEXTEx::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.40.3.2 serialize()

```
bool EMF::EMRSCALEVIEWPORTEXTEx::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.40.3.3 size()

```
int EMF::EMRSCALEVIEWPORTEXTEx::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

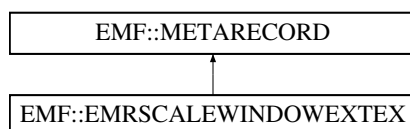
- `libemf.h`

3.41 EMF::EMRSCALEWINDOWEXTEx Class Reference

EMF Scale Window Extents (ex)

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSCALEWINDOWEXTEx:



Public Member Functions

- [EMRSCALEWINDOWEXTEx](#) (LONG x_num, LONG x_den, LONG y_num, LONG y_den)
- [EMRSCALEWINDOWEXTEx](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.41.1 Detailed Description

EMF Scale Window Extents (ex)

The window extent is the logical coordinate size of the window. Scale the window extents by the ratios of the given values.

3.41.2 Constructor & Destructor Documentation

3.41.2.1 EMRSCALEWINDOWEXTEx() [1/2]

```

EMF::EMRSCALEWINDOWEXTEx::EMRSCALEWINDOWEXTEx (
    LONG x_num,
    LONG x_den,
    LONG y_num,
    LONG y_den ) [inline]
  
```

Parameters

<i>x_num</i>	numerator of x scale
<i>x_den</i>	denominator of x scale
<i>y_num</i>	numerator of y scale
<i>y_den</i>	denominator of y scale

3.41.2.2 EMRSCALEWINDOWEXTEx() [2/2]

```
EMF::EMRSCALEWINDOWEXTEx::EMRSCALEWINDOWEXTEx (
    DATASTREAM & ds ) [inline]
```

Construct a ScaleWindowExtEx record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.41.3 Member Function Documentation**3.41.3.1 execute()**

```
void EMF::EMRSCALEWINDOWEXTEx::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.41.3.2 serialize()

```
bool EMF::EMRSCALEWINDOWEXTEx::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.41.3.3 size()

```
int EMF::EMRSCALEWINDOWEXT::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

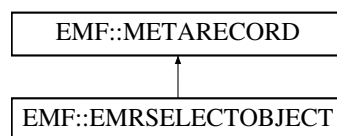
- libemf.h

3.42 EMF::EMRSELECTOBJECT Class Reference

EMF Select Object.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSELECTOBJECT:



Public Member Functions

- [EMRSELECTOBJECT](#) (HGDIOBJ object)
- [EMRSELECTOBJECT](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.42.1 Detailed Description

EMF Select Object.

Activate (make current) the given object, such as a pen, brush or font.

3.42.2 Constructor & Destructor Documentation

3.42.2.1 EMRSELECTOBJECT() [1/2]

```
EMF::EMRSELECTOBJECT::EMRSELECTOBJECT (
    HGDIOBJ object ) [inline]
```

Parameters

<i>object</i>	the object to make active.
---------------	----------------------------

3.42.2.2 EMRSELECTOBJECT() [2/2]

```
EMF::EMRSELECTOBJECT::EMRSELECTOBJECT (
    DATASTREAM & ds ) [inline]
```

Construct a SelectObject record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.42.3 Member Function Documentation

3.42.3.1 execute()

```
void EMF::EMRSELECTOBJECT::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

References [EMF::METAFILEDEVICECONTEXT::emf_handles](#).

3.42.3.2 serialize()

```
bool EMF::EMRSELECTOBJECT::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.42.3.3 size()

```
int EMF::EMRSELECTOBJECT::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following files:

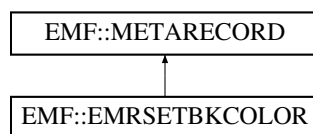
- libemf.h
- libemf.cpp

3.43 EMF::EMRSETBKCOLOR Class Reference

EMF Set Background Color.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETBKCOLOR:



Public Member Functions

- [EMRSETBKCOLOR](#) (COLORREF color)
- [EMRSETBKCOLOR](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.43.1 Detailed Description

EMF Set Background Color.

Sets the background color.

3.43.2 Constructor & Destructor Documentation

3.43.2.1 EMRSETBKCOLOR() [1/2]

```
EMF::EMRSETBKCOLOR::EMRSETBKCOLOR (
    COLORREF color ) [inline]
```

Parameters

<i>color</i>	background color
--------------	------------------

3.43.2.2 EMRSETBKCOLOR() [2/2]

```
EMF::EMRSETBKCOLOR::EMRSETBKCOLOR (
    DATASTREAM & ds ) [inline]
```

Construct a SetBkColor record from the input datastream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.43.3 Member Function Documentation

3.43.3.1 execute()

```
void EMF::EMRSETBKCOLOR::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.43.3.2 serialize()

```
bool EMF::EMRSETBKCOLOR::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.43.3.3 size()

```
int EMF::EMRSETBKCOLOR::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

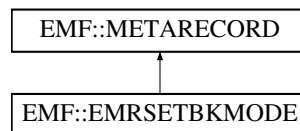
- libemf.h

3.44 EMF::EMRSETBKMODE Class Reference

EMF Set Background Mode.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETBKMODE:



Public Member Functions

- [EMRSETBKMODE](#) (DWORD mode)
- [EMRSETBKMODE](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.44.1 Detailed Description

EMF Set Background Mode.

Set the background mode: transparent or opaque. Seems to be ignored by StarOffice. (Appears to work for text, though.)

3.44.2 Constructor & Destructor Documentation

3.44.2.1 EMRSETBKMODE() [1/2]

```
EMF::EMRSETBKMODE::EMRSETBKMODE (
    DWORD mode ) [inline]
```

Parameters

<i>mode</i>	background mode.
-------------	------------------

3.44.2.2 EMRSETBKMODE() [2/2]

```
EMF::EMRSETBKMODE::EMRSETBKMODE (
    DATASTREAM & ds ) [inline]
```

Construct a SetBkMode record from the input datastream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.44.3 Member Function Documentation

3.44.3.1 execute()

```
void EMF::EMRSETBKMODE::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.44.3.2 serialize()

```
bool EMF::EMRSETBKMODE::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.44.3.3 size()

```
int EMF::EMRSETBKMODE::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

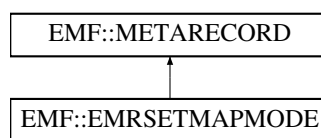
- libemf.h

3.45 EMF::EMRSETMAPMODE Class Reference

EMF Set Mapping Mode.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETMAPMODE:



Public Member Functions

- [EMRSETMAPMODE](#) (DWORD mode)
- [EMRSETMAPMODE](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.45.1 Detailed Description

EMF Set Mapping Mode.

Set the mapping mode: HI (X style), LO (OpenGL style). Totally ignored by StarOffice as near as I can tell.

3.45.2 Constructor & Destructor Documentation

3.45.2.1 EMRSETMAPMODE() [1/2]

```
EMF::EMRSETMAPMODE::EMRSETMAPMODE (
    DWORD mode ) [inline]
```

Parameters

<i>mode</i>	window mapping mode
-------------	---------------------

3.45.2.2 EMRSETMAPMODE() [2/2]

```
EMF::EMRSETMAPMODE::EMRSETMAPMODE (
    DATASTREAM & ds ) [inline]
```

Construct a SetMapMode record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.45.3 Member Function Documentation

3.45.3.1 execute()

```
void EMF::EMRSETMAPMODE::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.45.3.2 serialize()

```
bool EMF::EMRSETMAPMODE::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.45.3.3 size()

```
int EMF::EMRSETMAPMODE::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

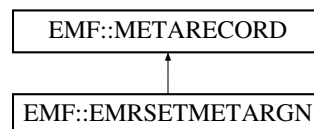
- libemf.h

3.46 EMF::EMRSETMETARGN Class Reference

EMF Set Meta Region.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETMETARGN:



Public Member Functions

- [EMRSETMETARGN](#) (void)
- [EMRSETMETARGN](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.46.1 Detailed Description

EMF Set Meta Region.

I really have no idea.

3.46.2 Constructor & Destructor Documentation

3.46.2.1 EMRSETMETARGN() [1/2]

```
EMF::EMRSETMETARGN::EMRSETMETARGN (
    void ) [inline]
```

Create a Set Meta Rgn record.

3.46.2.2 EMRSETMETARGN() [2/2]

```
EMF::EMRSETMETARGN::EMRSETMETARGN (
    DATASTREAM & ds ) [inline]
```

Construct an Setmetargn record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.46.3 Member Function Documentation**3.46.3.1 execute()**

```
void EMF::EMRSETMETARGN::execute (  
    METAFILEDEVICECONTEXT * source,  
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.46.3.2 serialize()

```
bool EMF::EMRSETMETARGN::serialize (  
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.46.3.3 size()

```
int EMF::EMRSETMETARGN::size (  
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

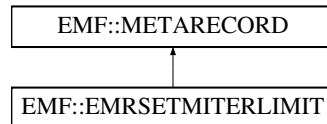
- libemf.h

3.47 EMF::EMRSETMITERLIMIT Class Reference

EMF SetMiterLimit.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETMITERLIMIT:



Public Member Functions

- [EMRSETMITERLIMIT](#) (FLOAT limit)
- [EMRSETMITERLIMIT](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.47.1 Detailed Description

EMF SetMiterLimit.

Sets the length limit for miter joins.

3.47.2 Constructor & Destructor Documentation

3.47.2.1 EMRSETMITERLIMIT() [1/2]

```
EMF::EMRSETMITERLIMIT::EMRSETMITERLIMIT (
    FLOAT limit ) [inline]
```

Parameters

<i>limit</i>	miter length limit.
--------------	---------------------

3.47.2.2 EMRSETMITERLIMIT() [2/2]

```
EMF::EMRSETMITERLIMIT::EMRSETMITERLIMIT (
    DATASTREAM & ds ) [inline]
```

Construct a SetMiterLimit record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.47.3 Member Function Documentation

3.47.3.1 execute()

```
void EMF::EMRSETMITERLIMIT::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.47.3.2 serialize()

```
bool EMF::EMRSETMITERLIMIT::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.47.3.3 size()

```
int EMF::EMRSETMITERLIMIT::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

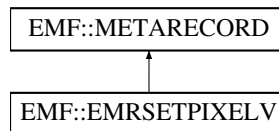
- libemf.h

3.48 EMF::EMRSETPIXELV Class Reference

EMF Set Pixel.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETPIXELV:



Public Member Functions

- [EMRSETPIXELV](#) (INT x, INT y, COLORREF color)
- [EMRSETPIXELV](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.48.1 Detailed Description

EMF Set Pixel.

Set the given pixel to the given color.

3.48.2 Constructor & Destructor Documentation

3.48.2.1 EMRSETPIXELV() [1/2]

```
EMF::EMRSETPIXELV::EMRSETPIXELV (
    INT x,
    INT y,
    COLORREF color ) [inline]
```

Parameters

<i>x</i>	x position at which to draw pixel.
<i>y</i>	y position at which to draw pixel.
<i>color</i>	color of pixel.

3.48.2.2 EMRSETPIXELV() [2/2]

```
EMF::EMRSETPIXELV::EMRSETPIXELV (
```

```
DATASTREAM & ds ) [inline]
```

Construct a SetPixelV record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.48.3 Member Function Documentation

3.48.3.1 execute()

```
void EMF::EMRSETPIXELV::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.48.3.2 serialize()

```
bool EMF::EMRSETPIXELV::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.48.3.3 size()

```
int EMF::EMRSETPIXELV::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

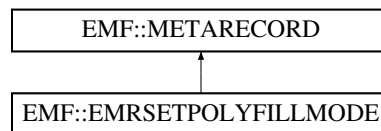
- libemf.h

3.49 EMF::EMRSETPOLYFILLMODE Class Reference

EMF Set the Polygon Fill Mode.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETPOLYFILLMODE:



Public Member Functions

- [EMRSETPOLYFILLMODE](#) (DWORD mode)
- [EMRSETPOLYFILLMODE](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.49.1 Detailed Description

EMF Set the Polygon Fill Mode.

Set the polygon fill mode: ALTERNATE or WINDING

3.49.2 Constructor & Destructor Documentation

3.49.2.1 EMRSETPOLYFILLMODE() [1/2]

```
EMF::EMRSETPOLYFILLMODE::EMRSETPOLYFILLMODE (
    DWORD mode ) [inline]
```

Parameters

<i>mode</i>	background mode.
-------------	------------------

3.49.2.2 EMRSETPOLYFILLMODE() [2/2]

```
EMF::EMRSETPOLYFILLMODE::EMRSETPOLYFILLMODE (
    DATASTREAM & ds ) [inline]
```

Construct a SetPolyFillMode record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.49.3 Member Function Documentation**3.49.3.1 execute()**

```
void EMF::EMRSETPOLYFILLMODE::execute (  
    METAFILEDEVICECONTEXT * source,  
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.49.3.2 serialize()

```
bool EMF::EMRSETPOLYFILLMODE::serialize (  
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.49.3.3 size()

```
int EMF::EMRSETPOLYFILLMODE::size (  
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

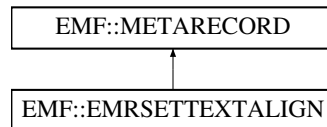
- libemf.h

3.50 EMF::EMRSETTEXTALIGN Class Reference

EMF Set Text Alignment.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETTEXTALIGN:



Public Member Functions

- [EMRSETTEXTALIGN](#) (UINT mode)
- [EMRSETTEXTALIGN](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.50.1 Detailed Description

EMF Set Text Alignment.

Determines the justification of the text with respect to its position.

3.50.2 Constructor & Destructor Documentation

3.50.2.1 EMRSETTEXTALIGN() [1/2]

```
EMF::EMRSETTEXTALIGN::EMRSETTEXTALIGN (
    UINT mode ) [inline]
```

Parameters

<i>mode</i>	text alignment mode.
-------------	----------------------

3.50.2.2 EMRSETTEXTALIGN() [2/2]

```
EMF::EMRSETTEXTALIGN::EMRSETTEXTALIGN (
    DATASTREAM & ds ) [inline]
```

Construct a SetTextAlign record from the input datastream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.50.3 Member Function Documentation

3.50.3.1 execute()

```
void EMF::EMRSETTEXTALIGN::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.50.3.2 serialize()

```
bool EMF::EMRSETTEXTALIGN::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.50.3.3 size()

```
int EMF::EMRSETTEXTALIGN::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

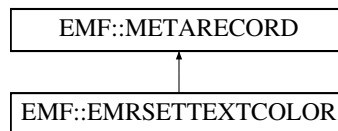
- libemf.h

3.51 EMF::EMRSETTEXTCOLOR Class Reference

EMF Set Text Color.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETTEXTCOLOR:



Public Member Functions

- [EMRSETTEXTCOLOR](#) (COLORREF color)
- [EMRSETTEXTCOLOR](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.51.1 Detailed Description

EMF Set Text Color.

Sets the foreground color of text.

3.51.2 Constructor & Destructor Documentation

3.51.2.1 EMRSETTEXTCOLOR() [1/2]

```
EMF::EMRSETTEXTCOLOR::EMRSETTEXTCOLOR (
    COLORREF color ) [inline]
```

Parameters

<i>color</i>	text foreground color
--------------	-----------------------

3.51.2.2 EMRSETTEXTCOLOR() [2/2]

```
EMF::EMRSETTEXTCOLOR::EMRSETTEXTCOLOR (
    DATASTREAM & ds ) [inline]
```

Construct a SetTextColor record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.51.3 Member Function Documentation**3.51.3.1 execute()**

```
void EMF::EMRSETTEXTCOLOR::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.51.3.2 serialize()

```
bool EMF::EMRSETTEXTCOLOR::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.51.3.3 size()

```
int EMF::EMRSETTEXTCOLOR::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

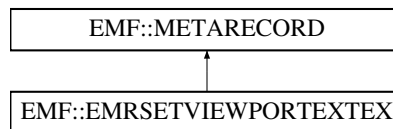
- libemf.h

3.52 EMF::EMRSETVIEWPORTEXTEx Class Reference

EMF Set Viewport Extents (ex)

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETVIEWPORTEXTEx:



Public Member Functions

- [EMRSETVIEWPORTEXTEx](#) (INT cx, INT cy)
- [EMRSETVIEWPORTEXTEx](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.52.1 Detailed Description

EMF Set Viewport Extents (ex)

The viewport extent is the device coordinate (i.e. pixels) size of the viewport. Since W32 doesn't do any clipping, the purpose of this is not clear.

3.52.2 Constructor & Destructor Documentation

3.52.2.1 EMRSETVIEWPORTEXTEx() [1/2]

```
EMF::EMRSETVIEWPORTEXTEx::EMRSETVIEWPORTEXTEx (
    INT cx,
    INT cy ) [inline]
```

Parameters

<code>cx</code>	width of viewport in device coordinates
<code>cy</code>	height of viewport in device coordinates

3.52.2.2 EMRSETVIEWPORTEXTEx() [2/2]

```
EMF::EMRSETVIEWPORTEXTEx::EMRSETVIEWPORTEXTEx (
    DATASTREAM & ds ) [inline]
```

Construct a SetViewportExtEx record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.52.3 Member Function Documentation

3.52.3.1 execute()

```
void EMF::EMRSETVIEWPORTETEX::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.52.3.2 serialize()

```
bool EMF::EMRSETVIEWPORTETEX::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.52.3.3 size()

```
int EMF::EMRSETVIEWPORTETEX::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

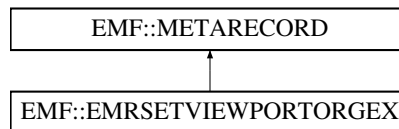
- libemf.h

3.53 EMF::EMRSETVIEWPORTORGEX Class Reference

EMF Set Viewport Origin (ex)

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETVIEWPORTORGEX:



Public Member Functions

- [EMRSETVIEWPORTORGEX](#) (INT x, INT y)
- [EMRSETVIEWPORTORGEX](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.53.1 Detailed Description

EMF Set Viewport Origin (ex)

The viewport origin is a point in device coordinates (i.e., pixels) where the viewport starts. (For example, if you want to put several different views on the same page, you might use different viewports.)

3.53.2 Constructor & Destructor Documentation

3.53.2.1 EMRSETVIEWPORTORGEX() [1/2]

```
EMF::EMRSETVIEWPORTORGEX::EMRSETVIEWPORTORGEX (
    INT x,
    INT y ) [inline]
```

Parameters

<i>x</i>	x position of the viewport in device coordinates
<i>y</i>	y position of the viewport in device coordinates

3.53.2.2 EMRSETVIEWPORTORGEX() [2/2]

```
EMF::EMRSETVIEWPORTORGEX::EMRSETVIEWPORTORGEX (
    DATASTREAM & ds ) [inline]
```

Construct a SetViewportOrgEx record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.53.3 Member Function Documentation

3.53.3.1 execute()

```
void EMF::EMRSETVIEWPORTORGEX::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.53.3.2 serialize()

```
bool EMF::EMRSETVIEWPORTORGEX::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.53.3.3 size()

```
int EMF::EMRSETVIEWPORTORGEX::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

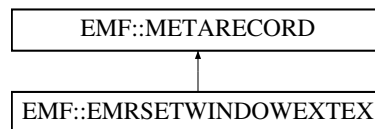
- libemf.h

3.54 EMF::EMRSETWINDOWEXTEx Class Reference

EMF Set Window Extent (ex)

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETWINDOWEXTEx:



Public Member Functions

- [EMRSETWINDOWEXTEx](#) (INT cx, INT cy)
- [EMRSETWINDOWEXTEx](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.54.1 Detailed Description

EMF Set Window Extent (ex)

The window extents define the scale of the logical coordinates. For example, if your XY plot is from [-10,-10] to [10,10], then the window extents are [20,20].

3.54.2 Constructor & Destructor Documentation

3.54.2.1 EMRSETWINDOWEXTEx() [1/2]

```
EMF::EMRSETWINDOWEXTEx::EMRSETWINDOWEXTEx (
    INT cx,
    INT cy ) [inline]
```

Parameters

<code>cx</code>	width of window in logical coordinates.
<code>cy</code>	height of window in logical coordinates.

3.54.2.2 EMRSETWINDOWEXTEx() [2/2]

```
EMF::EMRSETWINDOWEXTEx::EMRSETWINDOWEXTEx (
    DATASTREAM & ds ) [inline]
```

Construct a SetWindowExtEx record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.54.3 Member Function Documentation

3.54.3.1 execute()

```
void EMF::EMRSETWINDOWEXTEx::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.54.3.2 serialize()

```
bool EMF::EMRSETWINDOWEXTEx::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.54.3.3 size()

```
int EMF::EMRSETWINDOWEXTEx::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

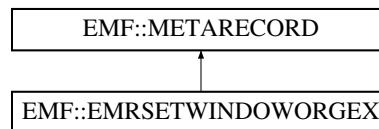
- libemf.h

3.55 EMF::EMRSETWINDOWORGEX Class Reference

EMF Set Window Origin (ex)

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETWINDOWORGEX:



Public Member Functions

- [EMRSETWINDOWORGEX](#) (INT x, INT y)
- [EMRSETWINDOWORGEX](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.55.1 Detailed Description

EMF Set Window Origin (ex)

The window origin specifies the logical (i.e., real) coordinates of the upper, left corner of the viewport. (For example, if you want your XY plot's axis origin to be in the middle of the viewport, you'd set the window origin to something like [-1,-1].)

3.55.2 Constructor & Destructor Documentation

3.55.2.1 EMRSETWINDOWORGEX() [1/2]

```
EMF::EMRSETWINDOWORGEX::EMRSETWINDOWORGEX (
    INT x,
    INT y ) [inline]
```

Parameters

<i>x</i>	x coordinate of window origin in logical coordinates
<i>y</i>	y coordinate of window origin in logical coordinates

3.55.2.2 EMRSETWINDOWORGEX() [2/2]

```
EMF::EMRSETWINDOWORGEX::EMRSETWINDOWORGEX (
```

```
DATASTREAM & ds ) [inline]
```

Construct a SetWindowOrgEx record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.55.3 Member Function Documentation

3.55.3.1 execute()

```
void EMF::EMRSETWINDOWORGEX::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.55.3.2 serialize()

```
bool EMF::EMRSETWINDOWORGEX::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.55.3.3 size()

```
int EMF::EMRSETWINDOWORGEX::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

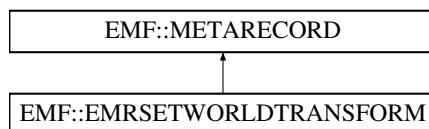
- libemf.h

3.56 EMF::EMRSETWORLDTRANSFORM Class Reference

EMF Set World Transform.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSETWORLDTRANSFORM:



Public Member Functions

- [EMRSETWORLDTRANSFORM](#) (const XFORM *transform)
- [EMRSETWORLDTRANSFORM](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.56.1 Detailed Description

EMF Set World Transform.

Enhanced metafiles have a Coordinate Transformation which allows the contents to be rotated and transformed. Does not appear to work properly in StarOffice (but it's also possible I don't understand how it's supposed to work either).

3.56.2 Constructor & Destructor Documentation

3.56.2.1 EMRSETWORLDTRANSFORM() [1/2]

```
EMF::EMRSETWORLDTRANSFORM::EMRSETWORLDTRANSFORM (
    const XFORM * transform ) [inline]
```

Parameters

<i>transform</i>	the new transformation
------------------	------------------------

3.56.2.2 EMRSETWORLDTRANSFORM() [2/2]

```
EMF::EMRSETWORLDTRANSFORM::EMRSETWORLDTRANSFORM (
    DATASTREAM & ds ) [inline]
```

Construct a SetWorldTransform record from the input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.56.3 Member Function Documentation

3.56.3.1 execute()

```
void EMF::EMRSETWORLDTRANSFORM::execute (  
    METAFILEDEVICECONTEXT * source,  
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.56.3.2 serialize()

```
bool EMF::EMRSETWORLDTRANSFORM::serialize (  
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.56.3.3 size()

```
int EMF::EMRSETWORLDTRANSFORM::size (  
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

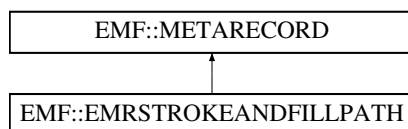
- libemf.h

3.57 EMF::EMRSTROKEANDFILLPATH Class Reference

EMF Stroke and Fill path.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSTROKEANDFILLPATH:



Public Member Functions

- [EMRSTROKEANDFILLPATH](#) (const RECTL *bounds)
- [EMRSTROKEANDFILLPATH](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.57.1 Detailed Description

EMF Stroke and Fill path.

Stroke and Fill the path.

3.57.2 Constructor & Destructor Documentation

3.57.2.1 EMRSTROKEANDFILLPATH() [1/2]

```
EMF::EMRSTROKEANDFILLPATH::EMRSTROKEANDFILLPATH (
    const RECTL * bounds ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polygon.
---------------	----------------------------------

3.57.2.2 EMRSTROKEANDFILLPATH() [2/2]

```
EMF::EMRSTROKEANDFILLPATH::EMRSTROKEANDFILLPATH (
    DATASTREAM & ds ) [inline]
```

Create a StrokeandfillPath record from input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.57.3 Member Function Documentation

3.57.3.1 execute()

```
void EMF::EMRSTROKEANDFILLPATH::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.57.3.2 serialize()

```
bool EMF::EMRSTROKEANDFILLPATH::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.57.3.3 size()

```
int EMF::EMRSTROKEANDFILLPATH::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

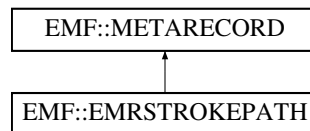
- libemf.h

3.58 EMF::EMRSTROKEPATH Class Reference

EMF Stroke path.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EMRSTROKEPATH:



Public Member Functions

- [EMRSTROKEPATH](#) (const RECTL *bounds)
- [EMRSTROKEPATH](#) (DATASTREAM &ds)
- bool [serialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.58.1 Detailed Description

EMF Stroke path.

Stroke the path.

3.58.2 Constructor & Destructor Documentation

3.58.2.1 EMRSTROKEPATH() [1/2]

```
EMF::EMRSTROKEPATH::EMRSTROKEPATH (
    const RECTL * bounds ) [inline]
```

Parameters

<i>bounds</i>	overall bounding box of polygon.
---------------	----------------------------------

3.58.2.2 EMRSTROKEPATH() [2/2]

```
EMF::EMRSTROKEPATH::EMRSTROKEPATH (
    DATASTREAM & ds ) [inline]
```

Create a StrokePath record from input stream.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

3.58.3 Member Function Documentation

3.58.3.1 execute()

```
void EMF::EMRSTROKEPATH::execute (  
    METAFILEDEVICECONTEXT * source,  
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.58.3.2 serialize()

```
bool EMF::EMRSTROKEPATH::serialize (  
    DATASTREAM ds ) [inline], [virtual]
```

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

3.58.3.3 size()

```
int EMF::EMRSTROKEPATH::size (  
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

The documentation for this class was generated from the following file:

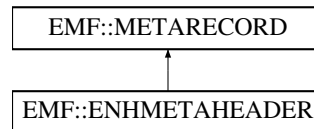
- libemf.h

3.59 EMF::ENHMETAHEADER Class Reference

Enhanced Metafile Header Record.

```
#include <libemf.h>
```

Inheritance diagram for EMF::ENHMETAHEADER:



Public Member Functions

- [ENHMETAHEADER](#) (LPCWSTR description=0)
- [~ENHMETAHEADER](#) ()
- bool [serialize](#) (DATASTREAM ds)
- bool [unserialize](#) (DATASTREAM ds)
- int [size](#) (void) const
- void [execute](#) (METAFILEDEVICECONTEXT *source, HDC dc) const

3.59.1 Detailed Description

Enhanced Metafile Header Record.

The [ENHMETAHEADER](#) serves two purposes in this library: it keeps track of the size of the metafile (in physical dimensions) and number of records and handles that are ultimately to be written to the disk file. It is also a real record that must be written out.

3.59.2 Constructor & Destructor Documentation

3.59.2.1 ENHMETAHEADER()

```
EMF::ENHMETAHEADER::ENHMETAHEADER (
    LPCWSTR description = 0 ) [inline]
```

Parameters

<i>description</i>	an optional description argument is a UNICODE-like string with the following format: "some text\0some more text\0\0". The W32 interface defines UNICODE characters to be two-byte (unsigned short strings). The constructor makes a copy of the argument.
--------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

3.59.2.2 ~ENHMETAHEADER()

```
EMF::ENHMETAHEADER::~~ENHMETAHEADER ( ) [inline]
```

Destructor deletes memory allocated for description.

3.59.3 Member Function Documentation

3.59.3.1 execute()

```
void EMF::ENHMETAHEADER::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [inline], [virtual]
```

Execute this record in the context of the given device context.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	device context for execute.

Implements [EMF::METARECORD](#).

3.59.3.2 serialize()

```
bool EMF::ENHMETAHEADER::serialize (
    DATASTREAM ds ) [inline], [virtual]
```

Serializing the header is an example of an extended record.

Parameters

<i>ds</i>	Metafile datastream.
-----------	----------------------

Implements [EMF::METARECORD](#).

References [EMF::WCHARSTR::WCHARSTR\(\)](#).

3.59.3.3 size()

```
int EMF::ENHMETAHEADER::size (
    void ) const [inline], [virtual]
```

Internally computed size of this record.

Implements [EMF::METARECORD](#).

Referenced by [EMF::METAFILEDEVICECONTEXT::nextHandle\(\)](#).

3.59.3.4 unserialize()

```
bool EMF::ENHMETAHEADER::unserialize (
    DATASTREAM ds ) [inline]
```

Read a header record from the datastream.

Referenced by EMF::EMRCREATEPALETTE::execute().

The documentation for this class was generated from the following file:

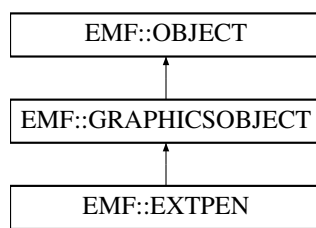
- libemf.h

3.60 EMF::EXTPEN Class Reference

Extended Graphics Pen.

```
#include <libemf.h>
```

Inheritance diagram for EMF::EXTPEN:



Public Member Functions

- [EXTPEN](#) (const EXTLOGPEN *lpen)
- OBJECTTYPE [getType](#) (void) const
- [METARECORD](#) * [newEMR](#) (HDC dc, HGDIOBJ emf_handle)

Additional Inherited Members

3.60.1 Detailed Description

Extended Graphics Pen.

Pens are used for drawing lines, arc, rectangles, etc.

3.60.2 Constructor & Destructor Documentation

3.60.2.1 EXTPEN()

```
EMF::EXTPEN::EXTPEN (
    const EXTLOGPEN * lpen ) [inline]
```

Parameters

<i>lpen</i>	the (logical?) pen definition.
-------------	--------------------------------

3.60.3 Member Function Documentation

3.60.3.1 getType()

```
OBJECTTYPE EMF::EXTPEN::getType (
    void ) const [inline], [virtual]
```

Return the type of this object (could probably do better with RTTI()).

Implements [EMF::OBJECT](#).

3.60.3.2 newEMR()

```
METARECORD* EMF::EXTPEN::newEMR (
    HDC dc,
    HGDIOBJ emf_handle ) [inline], [virtual]
```

Return a new metarecord for this object. And record its selection into the given device context.

Parameters

<i>dc</i>	handle of device context into which this object is being selected.
<i>emf_handle</i>	the EMF handle associated with the PEN .

Implements [EMF::GRAPHICSOBJECT](#).

The documentation for this class was generated from the following file:

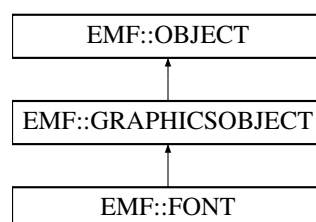
- libemf.h

3.61 EMF::FONT Class Reference

Graphics Font.

```
#include <libemf.h>
```

Inheritance diagram for EMF::FONT:



Public Member Functions

- [FONT](#) (const LOGFONTW *lfont)
- OBJECTTYPE [getType](#) (void) const
- [METARECORD](#) * [newEMR](#) (HDC dc, HGDIOBJ emf_handle)

Additional Inherited Members

3.61.1 Detailed Description

Graphics Font.

Fonts are used for drawing text (obviously).

3.61.2 Constructor & Destructor Documentation

3.61.2.1 FONT()

```
EMF::FONT::FONT (
    const LOGFONTW * lfont ) [inline]
```

Parameters

<i>lfont</i>	the (logical?) font definition.
--------------	---------------------------------

3.61.3 Member Function Documentation

3.61.3.1 getType()

```
OBJECTTYPE EMF::FONT::getType (
    void ) const [inline], [virtual]
```

Return the type of this object (could probably do better with RTTI()).

Implements [EMF::OBJECT](#).

3.61.3.2 newEMR()

```
METARECORD* EMF::FONT::newEMR (
    HDC dc,
    HGDIOBJ emf_handle ) [inline], [virtual]
```

Return a new metarecord for this object. And record its selection into the given device context.

Parameters

<i>dc</i>	handle of device context into which this object is being selected.
<i>emf_handle</i>	the EMF handle associated with the FONT .

Implements [EMF::GRAPHICSOBJECT](#).

The documentation for this class was generated from the following file:

- libemf.h

3.62 EMF::GLOBALOBJECTS Class Reference

```
#include <libemf.h>
```

Public Member Functions

- [HGDIOBJ add](#) ([OBJECT](#) *object)
- [OBJECT * find](#) (const [HGDIOBJ](#) handle)
- void [remove](#) (const [OBJECT](#) *object)
- std::vector< [EMF::OBJECT](#) * >::const_iterator [begin](#) (void) const
- std::vector< [EMF::OBJECT](#) * >::const_iterator [end](#) (void) const
- [METARECORDCTOR newRecord](#) ([DWORD](#) iType) const

Static Public Member Functions

- static [EMF::METARECORD * new_eof](#) ([DATASTREAM](#) &ds)
Create a new [EMREOF](#) record.
- static [EMF::METARECORD * new_setviewportorgex](#) ([DATASTREAM](#) &ds)
Create a new [EMRSETVIEWPORTORGEX](#) record.
- static [EMF::METARECORD * new_setwindoworgex](#) ([DATASTREAM](#) &ds)
Create a new [EMRSETWINDOWORGEX](#) record.
- static [EMF::METARECORD * new_setviewporttex](#) ([DATASTREAM](#) &ds)
Create a new [EMRSETVIEWPORTEXTEX](#) record.
- static [EMF::METARECORD * new_setwindowextex](#) ([DATASTREAM](#) &ds)
Create a new [EMRSETWINDOWEXTEX](#) record.
- static [EMF::METARECORD * new_scaleviewporttex](#) ([DATASTREAM](#) &ds)
Create a new [SCALEVIEWPORTEXTEX](#) record.
- static [EMF::METARECORD * new_scalewindowextex](#) ([DATASTREAM](#) &ds)
Create a new [SCALEWINDOWEXTEX](#) record.
- static [EMF::METARECORD * new_modifyworldtransform](#) ([DATASTREAM](#) &ds)
Create a new [MODIFYWORLDTRANSFORM](#) record.
- static [EMF::METARECORD * new_setworldtransform](#) ([DATASTREAM](#) &ds)
Create a new [SETWORLDTRANSFORM](#) record.
- static [EMF::METARECORD * new_settextalign](#) ([DATASTREAM](#) &ds)
Create a new [SETTEXTALIGN](#) record.
- static [EMF::METARECORD * new_settextcolor](#) ([DATASTREAM](#) &ds)
Create a new [SETTEXTCOLOR](#) record.

- static `EMF::METARECORD * new_setbkcolor (DATASTREAM &ds)`
Create a new SETBKCOLOR record.
- static `EMF::METARECORD * new_setbkmode (DATASTREAM &ds)`
Create a new SETBKMODE record.
- static `EMF::METARECORD * new_setpolyfillmode (DATASTREAM &ds)`
Create a new SETPOLYFILLMODE record.
- static `EMF::METARECORD * new_setmapmode (DATASTREAM &ds)`
Create a new SETMAPMODE record.
- static `EMF::METARECORD * new_selectobject (DATASTREAM &ds)`
Create a new SELECTOBJECT record.
- static `EMF::METARECORD * new_deleteobject (DATASTREAM &ds)`
Create a new DELETEOBJECT record.
- static `EMF::METARECORD * new_movetoex (DATASTREAM &ds)`
Create a new MOVETOEX record.
- static `EMF::METARECORD * new_lineto (DATASTREAM &ds)`
Create a new LINETO record.
- static `EMF::METARECORD * new_arc (DATASTREAM &ds)`
Create a new ARC record.
- static `EMF::METARECORD * new_arcto (DATASTREAM &ds)`
Create a new ARCTO record.
- static `EMF::METARECORD * new_rectangle (DATASTREAM &ds)`
Create a new RECTANGLE record.
- static `EMF::METARECORD * new_ellipse (DATASTREAM &ds)`
Create a new ELLIPSE record.
- static `EMF::METARECORD * new_polyline (DATASTREAM &ds)`
Create a new POLYLINE record.
- static `EMF::METARECORD * new_polyline16 (DATASTREAM &ds)`
Create a new POLYLINE16 record.
- static `EMF::METARECORD * new_polygon (DATASTREAM &ds)`
Create a new POLYGON record.
- static `EMF::METARECORD * new_polygon16 (DATASTREAM &ds)`
Create a new POLYGON16 record.
- static `EMF::METARECORD * new_polypolygon (DATASTREAM &ds)`
Create a new POLYPOLYGON record.
- static `EMF::METARECORD * new_polypolygon16 (DATASTREAM &ds)`
Create a new POLYPOLYGON16 record.
- static `EMF::METARECORD * new_polybezier (DATASTREAM &ds)`
Create a new POLYBEZIER record.
- static `EMF::METARECORD * new_polybezier16 (DATASTREAM &ds)`
Create a new POLYBEZIER16 record.
- static `EMF::METARECORD * new_polybezierto (DATASTREAM &ds)`
Create a new POLYBEZIERTO record.
- static `EMF::METARECORD * new_polybezierto16 (DATASTREAM &ds)`
Create a new POLYBEZIERTO16 record.
- static `EMF::METARECORD * new_polylineto (DATASTREAM &ds)`
Create a new POLYLINETO record.
- static `EMF::METARECORD * new_polylineto16 (DATASTREAM &ds)`
Create a new POLYLINETO16 record.
- static `EMF::METARECORD * new_exttextouta (DATASTREAM &ds)`
Create a new EXTTEXTOUTA record.
- static `EMF::METARECORD * new_exttextoutw (DATASTREAM &ds)`

- Create a new EXTTEXTOUTW record.*

 - static `EMF::METARECORD * new_setpixelv (DATASTREAM &ds)`

Create a new SETPIXELV record.
- static `EMF::METARECORD * new_createpen (DATASTREAM &ds)`

Create a new CREATEPEN record.
- static `EMF::METARECORD * new_extcreatepen (DATASTREAM &ds)`

Create a new EXTCREATEPEN record.
- static `EMF::METARECORD * new_createbrushindirect (DATASTREAM &ds)`

Create a new CREATEBRUSHINDIRECT record.
- static `EMF::METARECORD * new_extcreatefontindirectw (DATASTREAM &ds)`

Create a new EXTCREATEFONTINDIRECTW record.
- static `EMF::METARECORD * new_fillpath (DATASTREAM &ds)`

Create a new FILLPATH record.
- static `EMF::METARECORD * new_strokepath (DATASTREAM &ds)`

Create a new STROKEPATH record.
- static `EMF::METARECORD * new_strokeandfillpath (DATASTREAM &ds)`

Create a new STROKEANDFILLPATH record.
- static `EMF::METARECORD * new_beginpath (DATASTREAM &ds)`

Create a new BEGINPATH record.
- static `EMF::METARECORD * new_endpath (DATASTREAM &ds)`

Create a new ENDPATH record.
- static `EMF::METARECORD * new_closefigure (DATASTREAM &ds)`

Create a new CLOSEFIGURE record.
- static `EMF::METARECORD * new_savedc (DATASTREAM &ds)`

Create a new SAVEDC record.
- static `EMF::METARECORD * new_restoredc (DATASTREAM &ds)`

Create a new RESTOREDC record.
- static `EMF::METARECORD * new_setmetargn (DATASTREAM &ds)`

Create a new SETMETARGN record.
- static `EMF::METARECORD * new_setmiterlimit (DATASTREAM &ds)`

Create a new SETMITERLIMIT record.

3.62.1 Detailed Description

Stores all the objects in a single database within a process.

3.62.2 Member Function Documentation

3.62.2.1 add()

```
HGDIOBJ EMF::GLOBALOBJECTS::add (
    OBJECT * object )
```

Add an object to the global vector. The object's handle is simply its index in the global object vector, which is computed by the very interesting "difference between two iterators" method.

Parameters

<i>object</i>	pointer to a real instance of an object, not its handle.
---------------	----------------------------------------------------------

Referenced by EMF::EMRCREATEPALETTE::execute().

3.62.2.2 begin()

```
std::vector<EMF::OBJECT*>::const_iterator EMF::GLOBALOBJECTS::begin (
    void ) const [inline]
```

Returns

an iterator pointing to the first global object.

3.62.2.3 end()

```
std::vector<EMF::OBJECT*>::const_iterator EMF::GLOBALOBJECTS::end (
    void ) const [inline]
```

Returns

an iterator pointing to (one past) the final global object.

3.62.2.4 find()

```
OBJECT * EMF::GLOBALOBJECTS::find (
    const HGDIOBJ handle )
```

Look up a object by handle in the global object vector. Note: Stock objects (like a gray brush or the black pen) have their high order bit set, so this has to be masked out when using their handles.

Parameters

<i>handle</i>	the object's handle.
---------------	----------------------

Returns

pointer to object.

Referenced by EMF::EMRCREATEPALETTE::execute().

3.62.2.5 newRecord()

```
METARECORDCTOR EMF::GLOBALOBJECTS::newRecord (
    DWORD iType ) const
```

See if we have a constructor for a record of the given type.

Parameters

<i>iType</i>	metarecord type.
--------------	------------------

Returns

pointer to "virtual" constructor.

Referenced by EMF::EMRCREATEPALETTE::execute().

3.62.2.6 remove()

```
void EMF::GLOBALOBJECTS::remove (
    const OBJECT * object )
```

A call to the metafile function DeleteObject() allows a particular object's handle to be reused, so some care has to be taken to erase it.

Parameters

<i>object</i>	pointer to object to delete.
---------------	------------------------------

Referenced by EMF::EMRCREATEPALETTE::execute().

The documentation for this class was generated from the following files:

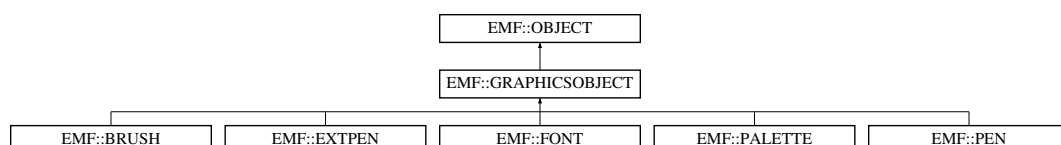
- libemf.h
- libemf.cpp

3.63 EMF::GRAPHICSOBJECT Class Reference

A global graphics object.

```
#include <libemf.h>
```

Inheritance diagram for EMF::GRAPHICSOBJECT:



Public Member Functions

- virtual [~GRAPHICSOBJECT](#) ()
GRAPHICSOBJECTs has a virtual destructor.
- virtual [METARECORD](#) * [newEMR](#) (HDC *dc*, HGDIOBJ *handle*)=0

Data Fields

- std::map< HDC, HGDIOBJ > [contexts](#)

3.63.1 Detailed Description

A global graphics object.

Graphics objects have some additional properties: When an object is Select'ed into a device context, the handle for that context is added to the list of context's in which this object is used.

3.63.2 Member Function Documentation

3.63.2.1 newEMR()

```
virtual METARECORD* EMF::GRAPHICSOBJECT::newEMR (
    HDC dc,
    HGDIOBJ handle ) [pure virtual]
```

Create a new metarecord which describes this object.

Parameters

<i>dc</i>	the handle to the device context.
<i>handle</i>	(appears not to used. Note the handle is really assigned at serialization time.)

Implemented in [EMF::PALETTE](#), [EMF::FONT](#), [EMF::BRUSH](#), [EMF::EXTPEN](#), and [EMF::PEN](#).

Referenced by [EMF::EMRCREATEPALETTE::execute\(\)](#).

3.63.3 Field Documentation

3.63.3.1 contexts

```
std::map< HDC, HGDIOBJ > EMF::GRAPHICSOBJECT::contexts
```

A set of all the contexts into which this object has been selected and the associated metafile handle for the object.

Referenced by [EMF::EMRCREATEPALETTE::execute\(\)](#).

The documentation for this class was generated from the following file:

- [libemf.h](#)

3.64 EMF::INTARRAY Struct Reference

Represent an array of integers in a simple way.

```
#include <libemf.h>
```

Public Member Functions

- [INTARRAY](#) (INT *const ints, const DWORD n)

Data Fields

- INT *const [ints_](#)
Array of ints.
- const DWORD [n_](#)
Number of ints in array.

3.64.1 Detailed Description

Represent an array of integers in a simple way.

Allow an array of INT's to be written out at once.

3.64.2 Constructor & Destructor Documentation

3.64.2.1 INTARRAY()

```
EMF::INTARRAY::INTARRAY (
    INT *const ints,
    const DWORD n ) [inline]
```

simple constructor.

Parameters

<i>ints</i>	pointer to ints.
<i>n</i>	number ints in array.

The documentation for this struct was generated from the following file:

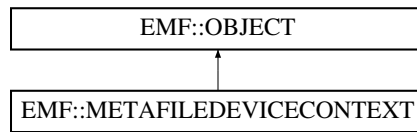
- libemf.h

3.65 EMF::METAFILEDEVICECONTEXT Class Reference

Graphics Device Context.

```
#include <libemf.h>
```

Inheritance diagram for EMF::METAFILEDEVICECONTEXT:



Public Member Functions

- [METAFILEDEVICECONTEXT](#) (FILE *fp_, const RECT *size, LPCWSTR description_w)
- virtual [~METAFILEDEVICECONTEXT](#) ()
- OBJECTTYPE [getType](#) (void) const
- DWORD [nextHandle](#) (void)
- void [clearHandle](#) (DWORD handle)
- void [appendRecord](#) (METARECORD *record)
- void [appendHandle](#) (METARECORD *record)
- void [deleteMetafile](#) (void)
- void [mergePoint](#) (const LONG &x, const LONG &y)
- void [mergePoint](#) (const POINT &p)

Data Fields

- ::FILE * [fp](#)
- DATASTREAM [ds](#)
- ENHMETAHEADER * [header](#)
- std::vector< [EMF::METARECORD](#) *> [records](#)
- SIZEL [resolution](#)
The resolution in DPI of the reference DC.
- SIZEL [viewport_ext](#)
The extent of the viewport.
- POINT [viewport_org](#)
The origin of the viewport.
- SIZEL [window_ext](#)
The extent of the window.
- POINT [window_org](#)
The origin of the window.
- bool [update_frame](#)
Update the frame automatically?
- POINT [min_device_point](#)
The lft/top-most painted point in device units.
- POINT [max_device_point](#)
The rgt/btm-most painted point in device units.
- POINT [point](#)
The current point.
- PEN * [pen](#)
The current pen.
- BRUSH * [brush](#)
The current brush.

- [FONT](#) * [font](#)
The current font.
- [PALETTE](#) * [palette](#)
The current palette.
- [UINT](#) [text_alignment](#)
The current text alignment.
- [COLORREF](#) [text_color](#)
The current text foreground color.
- [COLORREF](#) [bk_color](#)
The current background color.
- [INT](#) [bk_mode](#)
The current background mode.
- [INT](#) [polyfill_mode](#)
The current polygon fill mode.
- [INT](#) [map_mode](#)
The current mapping mode.
- [FLOAT](#) [miter_limit](#)
The current miter length limit.
- `std::vector< bool >` [handles](#)
- `std::map< HGDIOBJ, HGDIOBJ >` [emf_handles](#)

3.65.1 Detailed Description

Graphics Device Context.

Almost all GDI graphics calls require a device context (except those which create graphics objects such as pens and fonts). This is a specific context which renders to a metafile. There is a one-to-one correspondence between the device context and the metafile.

3.65.2 Constructor & Destructor Documentation

3.65.2.1 METAFILEDEVICECONTEXT()

```
EMF::METAFILEDEVICECONTEXT::METAFILEDEVICECONTEXT (
    FILE * fp_,
    const RECT * size,
    LPCWSTR description_w ) [inline]
```

Most graphics programs seem to want to handle the opening and closing of files themselves, so this is an extension to the w32 interface.

Parameters

<i>fp_</i>	stdio pointer to an open file. May be null.
<i>size</i>	the rectangle describing the position and size of the metafile on the "page". May be null.
<i>description_w</i>	a UNICODE string describing the metafile. The format must be "some text\0some more text\0\0". May be null.

3.65.2.2 ~METAFILEDEVICECONTEXT()

```
virtual EMF::METAFILEDEVICECONTEXT::~~METAFILEDEVICECONTEXT ( ) [inline], [virtual]
```

Destructor frees all the graphics objects which may have been allocated. Now, it also frees any metarecords which it might hold, too.

3.65.3 Member Function Documentation

3.65.3.1 appendHandle()

```
void EMF::METAFILEDEVICECONTEXT::appendHandle (
    METARECORD * record ) [inline]
```

Add this record to the metafile.

Parameters

<i>record</i>	this record is an object so it increments the handle count as well.
---------------	---------------------------------------------------------------------

References EMF::METARECORD::size().

Referenced by EMF::EMRCREATEPALETTE::execute().

3.65.3.2 appendRecord()

```
void EMF::METAFILEDEVICECONTEXT::appendRecord (
    METARECORD * record ) [inline]
```

Add this record to the metafile.

Parameters

<i>record</i>	standard graphics record
---------------	--------------------------

References EMF::METARECORD::size().

Referenced by EMF::EMRCREATEPALETTE::execute().

3.65.3.3 clearHandle()

```
void EMF::METAFILEDEVICECONTEXT::clearHandle (
    DWORD handle ) [inline]
```

Clear the usage of this handle

Referenced by EMF::EMRCREATEPALETTE::execute().

3.65.3.4 deleteMetafile()

```
void EMF::METAFILEDEVICECONTEXT::deleteMetafile (
    void ) [inline]
```

Delete all the records from the metafile. This would seem to include deleting the header record as well.

Referenced by EMF::EMRCREATEPALETTE::execute().

3.65.3.5 getType()

```
OBJECTTYPE EMF::METAFILEDEVICECONTEXT::getType (
    void ) const [inline], [virtual]
```

Return the type of this object (could probably do better with RTTI()).

Implements [EMF::OBJECT](#).

3.65.3.6 mergePoint() [1/2]

```
void EMF::METAFILEDEVICECONTEXT::mergePoint (
    const LONG & x,
    const LONG & y ) [inline]
```

Somewhat superfluous, except checker doesn't understand the initialization of automatic structures in the declaration.

Referenced by EMF::EMRCREATEPALETTE::execute().

3.65.3.7 mergePoint() [2/2]

```
void EMF::METAFILEDEVICECONTEXT::mergePoint (
    const POINT & p ) [inline]
```

Take the given point and determine if it enlarges the "painted" area of the device.

3.65.3.8 nextHandle()

```
DWORD EMF::METAFILEDEVICECONTEXT::nextHandle (
    void ) [inline]
```

Scan the bit vector of used handles and return the index of the first free bit as this objects metafile handle.

References EMF::ENHMETAHEADER::size().

Referenced by EMF::EMRCREATEPALETTE::execute().

3.65.4 Field Documentation

3.65.4.1 ds

`DATASTREAM EMF::METAFILEDEVICECONTEXT::ds`

All i/o to the metafile is wrapped by this class so that byte swapping on big-endian machines is transparent.

Referenced by `EMF::EMRCREATEPALETTE::execute()`.

3.65.4.2 emf_handles

`std::map< HGDIOBJ, HGDIOBJ > EMF::METAFILEDEVICECONTEXT::emf_handles`

This map holds the *current* mapping between EMF handles and global object handles as a metafile is played back (with `PlayEnhMetaFile`).

Referenced by `EMF::EMRSELECTOBJECT::execute()`, `EMF::EMRDELETEOBJECT::execute()`, `EMF::EMRCREATEPEN::execute()`, `EMF::EMREXTCREATEPEN::execute()`, `EMF::EMRCREATEBRUSHINDIRECT::execute()`, `EMF::EMREXTCREATEFONTINDIRECTW::execute()`, and `EMF::EMRCREATEPALETTE::execute()`.

3.65.4.3 fp

`::FILE* EMF::METAFILEDEVICECONTEXT::fp`

If it is a file-based metafile, then this pointer is not null.

Referenced by `EMF::EMRCREATEPALETTE::execute()`.

3.65.4.4 handles

`std::vector< bool > EMF::METAFILEDEVICECONTEXT::handles`

For compatibility, it appears that metafile handles are reused as objects are deleted. Attempt to emulate that behavior with a bit vector of used metafile handles.

3.65.4.5 header

`ENHMETAHEADER* EMF::METAFILEDEVICECONTEXT::header`

Serves double duty as the physical device description.

Referenced by `EMF::EMRCREATEPALETTE::execute()`.

```
std::vector< EMF::METARECORD* > EMF::METAFILEDEVICECONTEXT::records
```

Referenced by EMF::EMRCREATEPALETTE::execute().

- libemf.h

```
#include <libemf.h>
```

[illegible]

- virtual void **execute** (**METAFILEDVICECONTEXT** *source, HDC dc) const =0
- virtual bool **serialize** (**DATASTREAM** ds)=0
- virtual int **size** (void) const =0
- virtual **~METARECORD** ()

3.66.1 Detailed Description

The base class of all metafile records.

A metafile consists off a sequence of graphics records "executed" in order. This is a common base class that allows each, different, record to be stored in a common list. An interface is specified for each record to write itself to a file.

3.66.2 Constructor & Destructor Documentation

3.66.2.1 ~METARECORD()

```
virtual EMF::METARECORD::~~METARECORD ( ) [inline], [virtual]
```

The virtual destructor allows records which allocated additional memory to release it when they are deleted. Simple records just use the default destructor defined here.

3.66.3 Member Function Documentation

3.66.3.1 execute()

```
virtual void EMF::METARECORD::execute (
    METAFILEDEVICECONTEXT * source,
    HDC dc ) const [pure virtual]
```

Execute the graphics command in the given context. Used by PlayEnhMetaFile to "copy" one metafile into another.

Parameters

<i>source</i>	the device context from which this record is taken.
<i>dc</i>	the destination context.

Implemented in [EMF::EMRSETMITERLIMIT](#), [EMF::EMRSETMETARGN](#), [EMF::EMRSTOREDC](#), [EMF::EMR←
SAVEDC](#), [EMF::EMRCLOSEFIGURE](#), [EMF::EMRENDPATH](#), [EMF::EMRBEGINPATH](#), [EMF::EMRSTROKEAN←
DFILLPATH](#), [EMF::EMRSTROKEPATH](#), [EMF::EMRFILLPATH](#), [EMF::EMRCREATEPALETTE](#), [EMF::EMREXT←
CREATEFONTINDIRECTW](#), [EMF::EMRCREATEBRUSHINDIRECT](#), [EMF::EMREXTCREATEPEN](#), [EMF::EMR←
CREATEPEN](#), [EMF::EMRSETPIXELV](#), [EMF::EMREXTTEXTOUTW](#), [EMF::EMREXTTEXTOUTA](#), [EMF::EMRPO←
LYLINETO16](#), [EMF::EMRPOLYLINETO](#), [EMF::EMRPOLYBEZIERTO16](#), [EMF::EMRPOLYBEZIERTO](#), [EMF::EM←
RPOLYBEZIER16](#), [EMF::EMRPOLYBEZIER](#), [EMF::EMRPOLYPOLYGON16](#), [EMF::EMRPOLYPOLYGON](#), [EM←
F::EMRPOLYGON16](#), [EMF::EMRPOLYGON](#), [EMF::EMRPOLYLINE16](#), [EMF::EMRPOLYLINE](#), [EMF::EMRELLI←
PSE](#), [EMF::EMRRECTANGLE](#), [EMF::EMRARCTO](#), [EMF::EMRARC](#), [EMF::EMRLINETO](#), [EMF::EMRMOVETOEX](#),
[EMF::EMRDELETEOBJECT](#), [EMF::EMRSELECTOBJECT](#), [EMF::EMRSETMAPMODE](#), [EMF::EMRSETPOLYF←
ILLMODE](#), [EMF::EMRSETBKMODE](#), [EMF::EMRSETBKCOLOR](#), [EMF::EMRSETTEXTCOLOR](#), [EMF::EMRSET←
TEXTALIGN](#), [EMF::EMRSETWORLDTRANSFORM](#), [EMF::EMRMODIFYWORLDTRANSFORM](#), [EMF::EMRSC←
ALEWINDOWEXTTEX](#), [EMF::EMRSETWINDOWEXTTEX](#), [EMF::EMRSCALEVIEWPORTEXTTEX](#), [EMF::EMRSET←
VIEWPORTEXTTEX](#), [EMF::EMRSETWINDOWORGEX](#), [EMF::EMRSETVIEWPORTORGEX](#), [EMF::EMREOF](#), and
[EMF::ENHMETAHEADER](#).

3.66.3.2 `serialize()`

```
virtual bool EMF::METARECORD::serialize (
    DATASTREAM ds ) [pure virtual]
```

Write yourself to the given file. This is virtual since some records are of arbitrary length and need to write additional information after their EMR structure.

Parameters

<i>ds</i>	the datastream to write oneself to.
-----------	-------------------------------------

Implemented in [EMF::EMRSETMITERLIMIT](#), [EMF::EMRSETMETARGN](#), [EMF::EMRRESTOREDC](#), [EMF::EMR←
SAVEDC](#), [EMF::EMRCLOSEFIGURE](#), [EMF::EMRENDPATH](#), [EMF::EMRBEGINPATH](#), [EMF::EMRSTROKEAN←
DFILLPATH](#), [EMF::EMRSTROKEPATH](#), [EMF::EMRFILLPATH](#), [EMF::EMRCREATEPALETTE](#), [EMF::EMREXT←
CREATEFONTINDIRECTW](#), [EMF::EMRCREATEBRUSHINDIRECT](#), [EMF::EMREXTCREATEPEN](#), [EMF::EMR←
CREATEPEN](#), [EMF::EMRSETPIXELV](#), [EMF::EMREXTTEXTOUTW](#), [EMF::EMREXTTEXTOUTA](#), [EMF::EMRPO←
LYLINETO16](#), [EMF::EMRPOLYLINETO](#), [EMF::EMRPOLYBEZIERTO16](#), [EMF::EMRPOLYBEZIERTO](#), [EMF::EM←
RPOLYBEZIER16](#), [EMF::EMRPOLYBEZIER](#), [EMF::EMRPOLYPOLYGON16](#), [EMF::EMRPOLYPOLYGON](#), [EM←
F::EMRPOLYGON16](#), [EMF::EMRPOLYGON](#), [EMF::EMRPOLYLINE16](#), [EMF::EMRPOLYLINE](#), [EMF::EMRELLI←
PSE](#), [EMF::EMRRECTANGLE](#), [EMF::EMRARCTO](#), [EMF::EMRARC](#), [EMF::EMRLINETO](#), [EMF::EMRMOVETOEX](#),
[EMF::EMRDELETEOBJECT](#), [EMF::EMRSELECTOBJECT](#), [EMF::EMRSETMAPMODE](#), [EMF::EMRSETPOLYF←
ILLMODE](#), [EMF::EMRSETBKMODE](#), [EMF::EMRSETBKCOLOR](#), [EMF::EMRSETTEXTCOLOR](#), [EMF::EMRSET←
TEXTALIGN](#), [EMF::EMRSETWORLDTRANSFORM](#), [EMF::EMRMODIFYWORLDTRANSFORM](#), [EMF::EMRSC←
ALEWINDOWEXTX](#), [EMF::EMRSETWINDOWEXTX](#), [EMF::EMRSCALEVIEWPORTEXTX](#), [EMF::EMRSET←
VIEWPORTEXTX](#), [EMF::EMRSETWINDOWORGEX](#), [EMF::EMRSETVIEWPORTORGEX](#), [EMF::EMREOF](#), and
[EMF::ENHMETAHEADER](#).

Referenced by [EMF::EMRCREATEPALETTE::execute\(\)](#).

3.66.3.3 `size()`

```
virtual int EMF::METARECORD::size (
    void ) const [pure virtual]
```

The header record of a metafile records the total size of the metafile in bytes, so as each record is added to the list, it updates the total size.

Implemented in [EMF::EMRSETMITERLIMIT](#), [EMF::EMRSETMETARGN](#), [EMF::EMRRESTOREDC](#), [EMF::EMR←
SAVEDC](#), [EMF::EMRCLOSEFIGURE](#), [EMF::EMRENDPATH](#), [EMF::EMRBEGINPATH](#), [EMF::EMRSTROKEAN←
DFILLPATH](#), [EMF::EMRSTROKEPATH](#), [EMF::EMRFILLPATH](#), [EMF::EMRCREATEPALETTE](#), [EMF::EMREXT←
CREATEFONTINDIRECTW](#), [EMF::EMRCREATEBRUSHINDIRECT](#), [EMF::EMREXTCREATEPEN](#), [EMF::EMR←
CREATEPEN](#), [EMF::EMRSETPIXELV](#), [EMF::EMREXTTEXTOUTW](#), [EMF::EMREXTTEXTOUTA](#), [EMF::EMRPO←
LYLINETO16](#), [EMF::EMRPOLYLINETO](#), [EMF::EMRPOLYBEZIERTO16](#), [EMF::EMRPOLYBEZIERTO](#), [EMF::EM←
RPOLYBEZIER16](#), [EMF::EMRPOLYBEZIER](#), [EMF::EMRPOLYPOLYGON16](#), [EMF::EMRPOLYPOLYGON](#), [EM←
F::EMRPOLYGON16](#), [EMF::EMRPOLYGON](#), [EMF::EMRPOLYLINE16](#), [EMF::EMRPOLYLINE](#), [EMF::EMRELLI←
PSE](#), [EMF::EMRRECTANGLE](#), [EMF::EMRARCTO](#), [EMF::EMRARC](#), [EMF::EMRLINETO](#), [EMF::EMRMOVETOEX](#),
[EMF::EMRDELETEOBJECT](#), [EMF::EMRSELECTOBJECT](#), [EMF::EMRSETMAPMODE](#), [EMF::EMRSETPOLYF←
ILLMODE](#), [EMF::EMRSETBKMODE](#), [EMF::EMRSETBKCOLOR](#), [EMF::EMRSETTEXTCOLOR](#), [EMF::EMRSET←
TEXTALIGN](#), [EMF::EMRSETWORLDTRANSFORM](#), [EMF::EMRMODIFYWORLDTRANSFORM](#), [EMF::EMRSC←
ALEWINDOWEXTX](#), [EMF::EMRSETWINDOWEXTX](#), [EMF::EMRSCALEVIEWPORTEXTX](#), [EMF::EMRSET←
VIEWPORTEXTX](#), [EMF::EMRSETWINDOWORGEX](#), [EMF::EMRSETVIEWPORTORGEX](#), [EMF::EMREOF](#), and
[EMF::ENHMETAHEADER](#).

Referenced by [EMF::METAFILEDEVICECONTEXT::appendHandle\(\)](#), and [EMF::METAFILEDEVICECONTEXT←
::appendRecord\(\)](#).

The documentation for this class was generated from the following file:

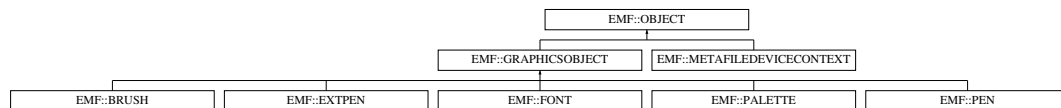
- `libemf.h`

3.67 EMF::OBJECT Class Reference

Global GDI object.

```
#include <libemf.h>
```

Inheritance diagram for EMF::OBJECT:



Public Member Functions

- virtual `~OBJECT()`
OBJECTs have a virtual destructor.
- `OBJECT(void)`
- virtual `OBJECTTYPE getType(void) const = 0`

Data Fields

- `HGDIOBJ handle`

3.67.1 Detailed Description

Global GDI object.

The GDI interface defines objects in terms of handles (rather than pointers). In order to emulate this, each object is placed into a global list and the index in that list becomes their handle.

3.67.2 Constructor & Destructor Documentation

3.67.2.1 OBJECT()

```
EMF::OBJECT::OBJECT (
    void ) [inline]
```

Create a new object. It's up to a subclass to create a real handle for this object.

3.67.3 Member Function Documentation

3.67.3.1 getType()

```
virtual OBJECTTYPE EMF::OBJECT::getType (
    void ) const [pure virtual]
```

Return the type of the object.

Implemented in [EMF::METAFILEDEVICECONTEXT](#), [EMF::PALETTE](#), [EMF::FONT](#), [EMF::BRUSH](#), [EMF::EXTENSION](#), and [EMF::PEN](#).

Referenced by [EMF::EMRCREATEPALETTE::execute\(\)](#).

3.67.4 Field Documentation

3.67.4.1 handle

```
HGDIOBJ EMF::OBJECT::handle
```

The handle of a GDI object.

Referenced by [EMF::EMRCREATEPALETTE::execute\(\)](#).

The documentation for this class was generated from the following file:

- [libemf.h](#)

3.68 EMF::PADDING Struct Reference

All metafile records must be padded out to a multiple of 4 bytes.

```
#include <libemf.h>
```

Public Member Functions

- [PADDING](#) (const int size)

Data Fields

- const int [size_](#)
Number of bytes of padding.

Static Public Attributes

- static const char [padding_](#) [4] = { 0, 0, 0, 0 }
Pad with '0's.

3.68.1 Detailed Description

All metafile records must be padded out to a multiple of 4 bytes.

Write out a few bytes of padding if necessary.

3.68.2 Constructor & Destructor Documentation

3.68.2.1 PADDING()

```
EMF::PADDING::PADDING (
    const int size ) [inline]
```

simple constructor.

Parameters

<i>size</i>	number of bytes of padding to use.
-------------	------------------------------------

The documentation for this struct was generated from the following files:

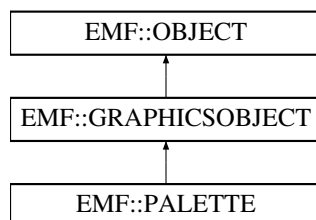
- libemf.h
- libemf.cpp

3.69 EMF::PALETTE Class Reference

Graphics Palette.

```
#include <libemf.h>
```

Inheritance diagram for EMF::PALETTE:



Public Member Functions

- [PALETTE](#) (const LOGPALETTE *lpalette)
- OBJECTTYPE [getType](#) (void) const
- [METARECORD](#) * [newEMR](#) (HDC dc, HGDIOBJ emf_handle)

Additional Inherited Members

3.69.1 Detailed Description

Graphics Palette.

Not entirely sure how palettes are used in general.

3.69.2 Constructor & Destructor Documentation

3.69.2.1 PALETTE()

```
EMF::PALETTE::PALETTE (
    const LOGPALETTE * lpalette ) [inline]
```

Parameters

<i>lpalette</i>	the (logical?) palette definition.
-----------------	------------------------------------

3.69.3 Member Function Documentation

3.69.3.1 getType()

```
OBJECTTYPE EMF::PALETTE::getType (
    void ) const [inline], [virtual]
```

Return the type of this object (could probably do better with RTTI()).

Implements [EMF::OBJECT](#).

3.69.3.2 newEMR()

```
METARECORD\* EMF::PALETTE::newEMR (
    HDC dc,
    HGDIOBJ emf_handle ) [inline], [virtual]
```

Return a new metarecord for this object. And record its selection into the given device context.

Parameters

<i>dc</i>	handle of device context into which this object is being selected.
<i>emf_handle</i>	the EMF handle associated with the FONT .

Implements [EMF::GRAPHICSOBJECT](#).

The documentation for this class was generated from the following file:

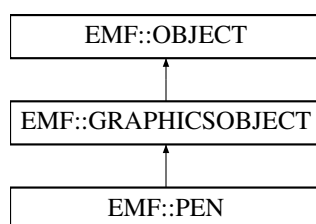
- libemf.h

3.70 EMF::PEN Class Reference

Graphics Pen.

```
#include <libemf.h>
```

Inheritance diagram for EMF::PEN:



Public Member Functions

- [PEN](#) (const LOGPEN *lpen)
- OBJECTTYPE [getType](#) (void) const
- [METARECORD](#) * [newEMR](#) (HDC dc, HGDIOBJ emf_handle)

Additional Inherited Members

3.70.1 Detailed Description

Graphics Pen.

Pens are used for drawing lines, arc, rectangles, etc.

3.70.2 Constructor & Destructor Documentation

3.70.2.1 PEN()

```
EMF::PEN::PEN (
    const LOGPEN * lpen ) [inline]
```

Parameters

<i>lpen</i>	the (logical?) pen definition.
-------------	--------------------------------

3.70.3 Member Function Documentation

3.70.3.1 getType()

```
OBJECTTYPE EMF::PEN::getType (
    void ) const [inline], [virtual]
```

Return the type of this object (could probably do better with RTTI()).

Implements [EMF::OBJECT](#).

3.70.3.2 newEMR()

```
METARECORD* EMF::PEN::newEMR (
    HDC dc,
    HGDIOBJ emf_handle ) [inline], [virtual]
```

Return a new metarecord for this object. And record its selection into the given device context.

Parameters

<i>dc</i>	handle of device context into which this object is being selected.
<i>emf_handle</i>	the EMF handle associated with the PEN .

Implements [EMF::GRAPHICSOBJECT](#).

The documentation for this class was generated from the following file:

- libemf.h

3.71 EMF::POINT16ARRAY Struct Reference

Represent an array of 16-bit point in a simple way.

```
#include <libemf.h>
```

Public Member Functions

- [POINT16ARRAY](#) (POINT16 *const points, const DWORD n)

Data Fields

- POINT16 *const [points_](#)
Array of POINT16s.
- const DWORD [n_](#)
Number of POINT16s in array.

3.71.1 Detailed Description

Represent an array of 16-bit point in a simple way.

Allow an array of POINT16's to be written out at once.

3.71.2 Constructor & Destructor Documentation

3.71.2.1 POINT16ARRAY()

```
EMF::POINT16ARRAY::POINT16ARRAY (
    POINT16 *const points,
    const DWORD n ) [inline]
```

Simple constructor.

Parameters

<i>points</i>	pointer to array of POINT16s.
<i>n</i>	number POINT16s in array.

The documentation for this struct was generated from the following file:

- libemf.h

3.72 EMF::POINTLARRAY Struct Reference

Represent an array of points in a simple way.

```
#include <libemf.h>
```

Public Member Functions

- [POINTLARRAY](#) (POINTL *const points, const DWORD n)

Data Fields

- POINTL *const [points_](#)
Array of POINTLs.
- const DWORD [n_](#)
Number of POINTLs in array.

3.72.1 Detailed Description

Represent an array of points in a simple way.

Allow an array of POINTL's to be written out at once.

3.72.2 Constructor & Destructor Documentation

3.72.2.1 POINTLARRAY()

```
EMF::POINTLARRAY::POINTLARRAY (
    POINTL *const points,
    const DWORD n ) [inline]
```

Simple constructor.

Parameters

<i>points</i>	pointer to array of POINTLs.
<i>n</i>	number POINTLs in array.

The documentation for this struct was generated from the following file:

- libemf.h

3.73 EMF::WCHARSTR Struct Reference

Represent a wide (UNICODE) character string in a simple way.

```
#include <libemf.h>
```

Public Member Functions

- [WCHARSTR](#) (WCHAR *const string, const int length)

Data Fields

- WCHAR *const [string_](#)
String of WCHARs.
- const int [length_](#)
Number of WCHARs in string.

3.73.1 Detailed Description

Represent a wide (UNICODE) character string in a simple way.

Even (wchar_t) strings have to be byte swapped. This structure allows us to provide a uniform stream-like interface for writing out all the components of metafiles.

3.73.2 Constructor & Destructor Documentation

3.73.2.1 WCHARSTR()

```
EMF::WCHARSTR::WCHARSTR (
    WCHAR *const string,
    const int length ) [inline]
```

Simple constructor.

Parameters

<i>string</i>	pointer to string of WCHARS.
<i>length</i>	number of WCHARS in string.

Referenced by EMF::DATASTREAM::operator<<(), EMF::ENHMETAHEADER::serialize(), and EMF::EMREXT↔TEXTOUTW::serialize().

The documentation for this struct was generated from the following file:

- libemf.h

Index

- ~EMREXTTEXTOUTA
 - EMF::EMREXTTEXTOUTA, [58](#)
- ~EMREXTTEXTOUTW
 - EMF::EMREXTTEXTOUTW, [61](#)
- ~EMRPOLYBEZIER
 - EMF::EMRPOLYBEZIER, [71](#)
- ~EMRPOLYBEZIER16
 - EMF::EMRPOLYBEZIER16, [74](#)
- ~EMRPOLYBEZIERTO
 - EMF::EMRPOLYBEZIERTO, [76](#)
- ~EMRPOLYBEZIERTO16
 - EMF::EMRPOLYBEZIERTO16, [79](#)
- ~EMRPOLYGON
 - EMF::EMRPOLYGON, [81](#)
- ~EMRPOLYGON16
 - EMF::EMRPOLYGON16, [84](#)
- ~EMRPOLYLINE
 - EMF::EMRPOLYLINE, [86](#)
- ~EMRPOLYLINE16
 - EMF::EMRPOLYLINE16, [88](#)
- ~EMRPOLYLINETO
 - EMF::EMRPOLYLINETO, [90](#)
- ~EMRPOLYLINETO16
 - EMF::EMRPOLYLINETO16, [93](#)
- ~EMRPOLYPOLYGON
 - EMF::EMRPOLYPOLYGON, [95](#)
- ~EMRPOLYPOLYGON16
 - EMF::EMRPOLYPOLYGON16, [98](#)
- ~ENHMETAHEADER
 - EMF::ENHMETAHEADER, [144](#)
- ~METAFILEDEVICECONTEXT
 - EMF::METAFILEDEVICECONTEXT, [158](#)
- ~METARECORD
 - EMF::METARECORD, [162](#)
- add
 - EMF::GLOBALOBJECTS, [151](#)
- appendHandle
 - EMF::METAFILEDEVICECONTEXT, [158](#)
- appendRecord
 - EMF::METAFILEDEVICECONTEXT, [158](#)
- BRUSH
 - EMF::BRUSH, [7](#)
- BYTEARRAY
 - EMF::BYTEARRAY, [9](#)
- begin
 - EMF::GLOBALOBJECTS, [152](#)
- CHARSTR
 - EMF::CHARSTR, [10](#)
- clearHandle
 - EMF::METAFILEDEVICECONTEXT, [158](#)
- contexts
 - EMF::GRAPHICSOBJECT, [154](#)
- DATASTREAM
 - EMF::DATASTREAM, [12](#)
- DWORDARRAY
 - EMF::DWORDARRAY, [29](#)
- deleteMetafile
 - EMF::METAFILEDEVICECONTEXT, [159](#)
- ds
 - EMF::METAFILEDEVICECONTEXT, [160](#)
- EMF::BRUSH, [7](#)
 - BRUSH, [7](#)
 - getType, [8](#)
 - newEMR, [8](#)
- EMF::BYTEARRAY, [8](#)
 - BYTEARRAY, [9](#)
- EMF::CHARSTR, [9](#)
 - CHARSTR, [10](#)
- EMF::DATASTREAM, [10](#)
 - DATASTREAM, [12](#)
 - operator<<, [12–20](#)
 - operator>>, [20–28](#)
 - setStream, [28](#)
- EMF::DWORDARRAY, [29](#)
 - DWORDARRAY, [29](#)
- EMF::EMRARCTO, [32](#)
 - EMRARCTO, [33](#)
 - execute, [33](#)
 - serialize, [34](#)
 - size, [34](#)
- EMF::EMRARC, [30](#)
 - EMRARC, [30, 31](#)
 - execute, [31](#)
 - serialize, [31](#)
 - size, [32](#)
- EMF::EMRBEGINPATH, [34](#)
 - EMRBEGINPATH, [35](#)
 - execute, [35](#)
 - serialize, [36](#)
 - size, [36](#)
- EMF::EMRCLOSEFIGURE, [36](#)
 - EMRCLOSEFIGURE, [37](#)
 - execute, [37](#)
 - serialize, [38](#)
 - size, [38](#)
- EMF::EMRCREATEBRUSHINDIRECT, [38](#)
 - EMRCREATEBRUSHINDIRECT, [39](#)
 - execute, [39](#)
 - serialize, [40](#)
 - size, [40](#)
- EMF::EMRCREATEPALETTE, [41](#)
 - EMRCREATEPALETTE, [41](#)
 - execute, [42](#)
 - serialize, [42](#)
 - size, [43](#)
- EMF::EMRCREATEPEN, [43](#)

- EMRCREATEPEN, 43, 44
 - execute, 44
 - serialize, 44
 - size, 45
- EMF::EMRDELETEOBJECT, 45
 - EMRDELETEOBJECT, 45, 46
 - execute, 46
 - serialize, 46
 - size, 47
- EMF::EMRELLIPSE, 47
 - EMRELLIPSE, 47, 48
 - execute, 48
 - serialize, 48
 - size, 49
- EMF::EMRENDPATH, 49
 - EMRENDPATH, 49
 - execute, 50
 - serialize, 50
 - size, 50
- EMF::EMREOF, 51
 - EMREOF, 51
 - execute, 52
 - serialize, 52
 - size, 52
- EMF::EMREXTCREATEFONTINDIRECTW, 53
 - EMREXTCREATEFONTINDIRECTW, 53
 - execute, 54
 - serialize, 54
 - size, 54
- EMF::EMREXTCREATEPEN, 55
 - EMREXTCREATEPEN, 55, 56
 - execute, 56
 - serialize, 56
 - size, 57
- EMF::EMREXTTEXTOUTA, 57
 - ~EMREXTTEXTOUTA, 58
 - EMREXTTEXTOUTA, 58
 - execute, 58
 - serialize, 59
 - size, 59
- EMF::EMREXTTEXTOUTW, 59
 - ~EMREXTTEXTOUTW, 61
 - EMREXTTEXTOUTW, 60
 - execute, 61
 - serialize, 61
 - size, 61
- EMF::EMRFILLPATH, 62
 - EMRFILLPATH, 62, 63
 - execute, 63
 - serialize, 63
 - size, 64
- EMF::EMRLINETO, 64
 - EMRLINETO, 64, 65
 - execute, 65
 - serialize, 65
 - size, 66
- EMF::EMRMODIFYWORLDTRANSFORM, 66
 - EMRMODIFYWORLDTRANSFORM, 66, 67
 - execute, 67
 - serialize, 67
 - size, 68
- EMF::EMRMOVETOEX, 68
 - EMRMOVETOEX, 68, 69
 - execute, 69
 - serialize, 69
 - size, 70
- EMF::EMRPOLYBEZIER16, 72
 - ~EMRPOLYBEZIER16, 74
 - EMRPOLYBEZIER16, 73
 - execute, 74
 - serialize, 74
 - size, 74
- EMF::EMRPOLYBEZIERTO16, 77
 - ~EMRPOLYBEZIERTO16, 79
 - EMRPOLYBEZIERTO16, 78
 - execute, 79
 - serialize, 79
 - size, 79
- EMF::EMRPOLYBEZIERTO, 75
 - ~EMRPOLYBEZIERTO, 76
 - EMRPOLYBEZIERTO, 75, 76
 - execute, 76
 - serialize, 76
 - size, 77
- EMF::EMRPOLYBEZIER, 70
 - ~EMRPOLYBEZIER, 71
 - EMRPOLYBEZIER, 70, 71
 - execute, 71
 - serialize, 71
 - size, 72
- EMF::EMRPOLYGON16, 82
 - ~EMRPOLYGON16, 84
 - EMRPOLYGON16, 83
 - execute, 84
 - serialize, 84
 - size, 84
- EMF::EMRPOLYGON, 80
 - ~EMRPOLYGON, 81
 - EMRPOLYGON, 80, 81
 - execute, 81
 - serialize, 81
 - size, 82
- EMF::EMRPOLYLINE16, 87
 - ~EMRPOLYLINE16, 88
 - EMRPOLYLINE16, 87, 88
 - execute, 88
 - serialize, 89
 - size, 89
- EMF::EMRPOLYLINETO16, 92
 - ~EMRPOLYLINETO16, 93
 - EMRPOLYLINETO16, 92, 93
 - execute, 93
 - serialize, 94
 - size, 94
- EMF::EMRPOLYLINETO, 89
 - ~EMRPOLYLINETO, 90

- EMRPOLYLINETO, 90
 - execute, 91
 - serialize, 91
 - size, 91
- EMF::EMRPOLYLINE, 85
 - ~EMRPOLYLINE, 86
 - EMRPOLYLINE, 85, 86
 - execute, 86
 - serialize, 86
 - size, 87
- EMF::EMRPOLYPOLYGON16, 96
 - ~EMRPOLYPOLYGON16, 98
 - EMRPOLYPOLYGON16, 97, 98
 - execute, 98
 - serialize, 98
 - size, 99
- EMF::EMRPOLYPOLYGON, 94
 - ~EMRPOLYPOLYGON, 95
 - EMRPOLYPOLYGON, 95
 - execute, 95
 - serialize, 96
 - size, 96
- EMF::EMRRECTANGLE, 99
 - EMRRECTANGLE, 99, 100
 - execute, 100
 - serialize, 100
 - size, 101
- EMF::EMRRESTOREDC, 101
 - EMRRESTOREDC, 101
 - execute, 102
 - serialize, 102
 - size, 102
- EMF::EMRSAVEDC, 103
 - EMRSAVEDC, 103
 - execute, 104
 - serialize, 104
 - size, 104
- EMF::EMRSCALEVIEWPORTEXT, 105
 - EMRSCALEVIEWPORTEXT, 105
 - execute, 106
 - serialize, 106
 - size, 106
- EMF::EMRSCALEWINDOWEXT, 107
 - EMRSCALEWINDOWEXT, 107, 108
 - execute, 108
 - serialize, 108
 - size, 109
- EMF::EMRSELECTOBJECT, 109
 - EMRSELECTOBJECT, 109, 110
 - execute, 110
 - serialize, 110
 - size, 111
- EMF::EMRSETBKCOLOR, 111
 - EMRSETBKCOLOR, 111, 112
 - execute, 112
 - serialize, 112
 - size, 113
- EMF::EMRSETBKMODE, 113
 - EMRSETBKMODE, 113, 114
 - execute, 114
 - serialize, 114
 - size, 115
- EMF::EMRSETMAPMODE, 115
 - EMRSETMAPMODE, 115, 116
 - execute, 116
 - serialize, 116
 - size, 117
- EMF::EMRSETMETARGN, 117
 - EMRSETMETARGN, 117
 - execute, 118
 - serialize, 118
 - size, 118
- EMF::EMRSETMITERLIMIT, 119
 - EMRSETMITERLIMIT, 119
 - execute, 120
 - serialize, 120
 - size, 120
- EMF::EMRSETPIXELV, 121
 - EMRSETPIXELV, 121
 - execute, 122
 - serialize, 122
 - size, 122
- EMF::EMRSETPOLYFILLMODE, 123
 - EMRSETPOLYFILLMODE, 123
 - execute, 124
 - serialize, 124
 - size, 124
- EMF::EMRSETTEXTALIGN, 125
 - EMRSETTEXTALIGN, 125
 - execute, 126
 - serialize, 126
 - size, 126
- EMF::EMRSETTEXTCOLOR, 127
 - EMRSETTEXTCOLOR, 127
 - execute, 128
 - serialize, 128
 - size, 128
- EMF::EMRSETVIEWPORTEXT, 129
 - EMRSETVIEWPORTEXT, 129
 - execute, 130
 - serialize, 130
 - size, 130
- EMF::EMRSETVIEWPORTORGEX, 131
 - EMRSETVIEWPORTORGEX, 131
 - execute, 132
 - serialize, 132
 - size, 132
- EMF::EMRSETWINDOWEXT, 133
 - EMRSETWINDOWEXT, 133
 - execute, 134
 - serialize, 134
 - size, 134
- EMF::EMRSETWINDOWORGEX, 135
 - EMRSETWINDOWORGEX, 135
 - execute, 136
 - serialize, 136

- size, [136](#)
- EMF::EMRSETWORLDTRANSFORM, [137](#)
 - EMRSETWORLDTRANSFORM, [137](#)
 - execute, [139](#)
 - serialize, [139](#)
 - size, [139](#)
- EMF::EMRSTROKEANDFILLPATH, [140](#)
 - EMRSTROKEANDFILLPATH, [140](#)
 - execute, [141](#)
 - serialize, [141](#)
 - size, [141](#)
- EMF::EMRSTROKEPATH, [142](#)
 - EMRSTROKEPATH, [142](#)
 - execute, [143](#)
 - serialize, [143](#)
 - size, [143](#)
- EMF::ENHMETAHEADER, [144](#)
 - ~ENHMETAHEADER, [144](#)
 - ENHMETAHEADER, [144](#)
 - execute, [145](#)
 - serialize, [145](#)
 - size, [145](#)
 - unserialize, [145](#)
- EMF::EXTPEN, [146](#)
 - EXTPEN, [146](#)
 - getType, [147](#)
 - newEMR, [147](#)
- EMF::FONT, [147](#)
 - FONT, [148](#)
 - getType, [148](#)
 - newEMR, [148](#)
- EMF::GLOBALOBJECTS, [149](#)
 - add, [151](#)
 - begin, [152](#)
 - end, [152](#)
 - find, [152](#)
 - newRecord, [152](#)
 - remove, [153](#)
- EMF::GRAPHICSOBJECT, [153](#)
 - contexts, [154](#)
 - newEMR, [154](#)
- EMF::INTARRAY, [155](#)
 - INTARRAY, [155](#)
- EMF::METAFILEDEVICECONTEXT, [155](#)
 - ~METAFILEDEVICECONTEXT, [158](#)
 - appendHandle, [158](#)
 - appendRecord, [158](#)
 - clearHandle, [158](#)
 - deleteMetafile, [159](#)
 - ds, [160](#)
 - emf_handles, [160](#)
 - fp, [160](#)
 - getType, [159](#)
 - handles, [160](#)
 - header, [160](#)
 - METAFILEDEVICECONTEXT, [157](#)
 - mergePoint, [159](#)
 - nextHandle, [159](#)
 - records, [160](#)
- EMF::METARECORD, [161](#)
 - ~METARECORD, [162](#)
 - execute, [162](#)
 - serialize, [162](#)
 - size, [163](#)
- EMF::OBJECT, [164](#)
 - getType, [164](#)
 - handle, [165](#)
 - OBJECT, [164](#)
- EMF::PADDING, [165](#)
 - PADDING, [166](#)
- EMF::PALETTE, [166](#)
 - getType, [167](#)
 - newEMR, [167](#)
 - PALETTE, [167](#)
- EMF::PEN, [168](#)
 - getType, [169](#)
 - newEMR, [169](#)
 - PEN, [168](#)
- EMF::POINT16ARRAY, [169](#)
 - POINT16ARRAY, [170](#)
- EMF::POINTLARRAY, [170](#)
 - POINTLARRAY, [171](#)
- EMF::WCHARSTR, [171](#)
 - WCHARSTR, [171](#)
- EMRARCTO
 - EMF::EMRARCTO, [33](#)
- EMRARC
 - EMF::EMRARC, [30, 31](#)
- EMRBEGINPATH
 - EMF::EMRBEGINPATH, [35](#)
- EMRCLOSEFIGURE
 - EMF::EMRCLOSEFIGURE, [37](#)
- EMRCREATEBRUSHINDIRECT
 - EMF::EMRCREATEBRUSHINDIRECT, [39](#)
- EMRCREATEPALETTE
 - EMF::EMRCREATEPALETTE, [41](#)
- EMRCREATEPEN
 - EMF::EMRCREATEPEN, [43, 44](#)
- EMRDELETEOBJECT
 - EMF::EMRDELETEOBJECT, [45, 46](#)
- EMRELLIPSE
 - EMF::EMRELLIPSE, [47, 48](#)
- EMRENDPATH
 - EMF::EMRENDPATH, [49](#)
- EMREOF
 - EMF::EMREOF, [51](#)
- EMREXTCREATEFONTINDIRECTW
 - EMF::EMREXTCREATEFONTINDIRECTW, [53](#)
- EMREXTCREATEPEN
 - EMF::EMREXTCREATEPEN, [55, 56](#)
- EMREXTTEXTOUTA
 - EMF::EMREXTTEXTOUTA, [58](#)
- EMREXTTEXTOUTW
 - EMF::EMREXTTEXTOUTW, [60](#)
- EMRFILLPATH
 - EMF::EMRFILLPATH, [62, 63](#)

EMRLINETO
 EMF::EMRLINETO, [64](#), [65](#)
EMRMODIFYWORLDTRANSFORM
 EMF::EMRMODIFYWORLDTRANSFORM, [66](#), [67](#)
EMRMOVETOEX
 EMF::EMRMOVETOEX, [68](#), [69](#)
EMRPOLYBEZIER16
 EMF::EMRPOLYBEZIER16, [73](#)
EMRPOLYBEZIERTO16
 EMF::EMRPOLYBEZIERTO16, [78](#)
EMRPOLYBEZIERTO
 EMF::EMRPOLYBEZIERTO, [75](#), [76](#)
EMRPOLYBEZIER
 EMF::EMRPOLYBEZIER, [70](#), [71](#)
EMRPOLYGON16
 EMF::EMRPOLYGON16, [83](#)
EMRPOLYGON
 EMF::EMRPOLYGON, [80](#), [81](#)
EMRPOLYLINE16
 EMF::EMRPOLYLINE16, [87](#), [88](#)
EMRPOLYLINETO16
 EMF::EMRPOLYLINETO16, [92](#), [93](#)
EMRPOLYLINETO
 EMF::EMRPOLYLINETO, [90](#)
EMRPOLYLINE
 EMF::EMRPOLYLINE, [85](#), [86](#)
EMRPOLYPOLYGON16
 EMF::EMRPOLYPOLYGON16, [97](#), [98](#)
EMRPOLYPOLYGON
 EMF::EMRPOLYPOLYGON, [95](#)
EMRRECTANGLE
 EMF::EMRRECTANGLE, [99](#), [100](#)
EMRRESTOREDC
 EMF::EMRRESTOREDC, [101](#)
EMRSAVEDC
 EMF::EMRSAVEDC, [103](#)
EMRSCALEVIEWPORTEXT
 EMF::EMRSCALEVIEWPORTEXT, [105](#)
EMRSCALEWINDOWEXT
 EMF::EMRSCALEWINDOWEXT, [107](#), [108](#)
EMRSELECTOBJECT
 EMF::EMRSELECTOBJECT, [109](#), [110](#)
EMRSETBKCOLOR
 EMF::EMRSETBKCOLOR, [111](#), [112](#)
EMRSETBKMODE
 EMF::EMRSETBKMODE, [113](#), [114](#)
EMRSETMAPMODE
 EMF::EMRSETMAPMODE, [115](#), [116](#)
EMRSETMETARGN
 EMF::EMRSETMETARGN, [117](#)
EMRSETMITERLIMIT
 EMF::EMRSETMITERLIMIT, [119](#)
EMRSETPIXELV
 EMF::EMRSETPIXELV, [121](#)
EMRSETPOLYFILLMODE
 EMF::EMRSETPOLYFILLMODE, [123](#)
EMRSETTEXTALIGN
 EMF::EMRSETTEXTALIGN, [125](#)
EMRSETTEXTCOLOR
 EMF::EMRSETTEXTCOLOR, [127](#)
EMRSETVIEWPORTEXT
 EMF::EMRSETVIEWPORTEXT, [129](#)
EMRSETVIEWPORTORGE
 EMF::EMRSETVIEWPORTORGE, [131](#)
EMRSETWINDOWEXT
 EMF::EMRSETWINDOWEXT, [133](#)
EMRSETWINDOWORGE
 EMF::EMRSETWINDOWORGE, [135](#)
EMRSETWORLDTRANSFORM
 EMF::EMRSETWORLDTRANSFORM, [137](#)
EMRSTROKEANDFILLPATH
 EMF::EMRSTROKEANDFILLPATH, [140](#)
EMRSTROKEPATH
 EMF::EMRSTROKEPATH, [142](#)
ENHMETAHEADER
 EMF::ENHMETAHEADER, [144](#)
EXTPEN
 EMF::EXTPEN, [146](#)
emf_handles
 EMF::METAFILEDEVICECONTEXT, [160](#)
end
 EMF::GLOBALOBJECTS, [152](#)
execute
 EMF::EMRARCTO, [33](#)
 EMF::EMRARC, [31](#)
 EMF::EMRBEGINPATH, [35](#)
 EMF::EMRCLOSEFIGURE, [37](#)
 EMF::EMRCREATEBRUSHINDIRECT, [39](#)
 EMF::EMRCREATEPALETTE, [42](#)
 EMF::EMRCREATEPEN, [44](#)
 EMF::EMRDELETEOBJECT, [46](#)
 EMF::EMRELLIPSE, [48](#)
 EMF::EMRENDPATH, [50](#)
 EMF::EMREOF, [52](#)
 EMF::EMREXTCREATEFONTINDIRECTW, [54](#)
 EMF::EMREXTCREATEPEN, [56](#)
 EMF::EMREXTTEXTOUTA, [58](#)
 EMF::EMREXTTEXTOUTW, [61](#)
 EMF::EMRFILLPATH, [63](#)
 EMF::EMRLINETO, [65](#)
 EMF::EMRMODIFYWORLDTRANSFORM, [67](#)
 EMF::EMRMOVETOEX, [69](#)
 EMF::EMRPOLYBEZIER16, [74](#)
 EMF::EMRPOLYBEZIERTO16, [79](#)
 EMF::EMRPOLYBEZIERTO, [76](#)
 EMF::EMRPOLYBEZIER, [71](#)
 EMF::EMRPOLYGON16, [84](#)
 EMF::EMRPOLYGON, [81](#)
 EMF::EMRPOLYLINE16, [88](#)
 EMF::EMRPOLYLINETO16, [93](#)
 EMF::EMRPOLYLINETO, [91](#)
 EMF::EMRPOLYLINE, [86](#)
 EMF::EMRPOLYPOLYGON16, [98](#)
 EMF::EMRPOLYPOLYGON, [95](#)
 EMF::EMRRECTANGLE, [100](#)
 EMF::EMRRESTOREDC, [102](#)

- EMF::EMRSAVEDC, [104](#)
- EMF::EMRSCALEVIEWPORTEXT, [106](#)
- EMF::EMRSCALEWINDOWEXT, [108](#)
- EMF::EMRSELECTOBJECT, [110](#)
- EMF::EMRSETBKCOLOR, [112](#)
- EMF::EMRSETBKMODE, [114](#)
- EMF::EMRSETMAPMODE, [116](#)
- EMF::EMRSETMETARGN, [118](#)
- EMF::EMRSETMITERLIMIT, [120](#)
- EMF::EMRSETPIXELV, [122](#)
- EMF::EMRSETPOLYFILLMODE, [124](#)
- EMF::EMRSETTEXTALIGN, [126](#)
- EMF::EMRSETTEXTCOLOR, [128](#)
- EMF::EMRSETVIEWPORTEXT, [130](#)
- EMF::EMRSETVIEWPORTORGEX, [132](#)
- EMF::EMRSETWINDOWEXT, [134](#)
- EMF::EMRSETWINDOWORGEX, [136](#)
- EMF::EMRSETWORLDTRANSFORM, [139](#)
- EMF::EMRSTROKEANDFILLPATH, [141](#)
- EMF::EMRSTROKEPATH, [143](#)
- EMF::ENHMETAHEADER, [145](#)
- EMF::METARECORD, [162](#)
- FONT
 - EMF::FONT, [148](#)
- find
 - EMF::GLOBALOBJECTS, [152](#)
- fp
 - EMF::METAFILEDEVICECONTEXT, [160](#)
- getType
 - EMF::BRUSH, [8](#)
 - EMF::EXTPEN, [147](#)
 - EMF::FONT, [148](#)
 - EMF::METAFILEDEVICECONTEXT, [159](#)
 - EMF::OBJECT, [164](#)
 - EMF::PALETTE, [167](#)
 - EMF::PEN, [169](#)
- handle
 - EMF::OBJECT, [165](#)
- handles
 - EMF::METAFILEDEVICECONTEXT, [160](#)
- header
 - EMF::METAFILEDEVICECONTEXT, [160](#)
- INTARRAY
 - EMF::INTARRAY, [155](#)
- METAFILEDEVICECONTEXT
 - EMF::METAFILEDEVICECONTEXT, [157](#)
- mergePoint
 - EMF::METAFILEDEVICECONTEXT, [159](#)
- newEMR
 - EMF::BRUSH, [8](#)
 - EMF::EXTPEN, [147](#)
 - EMF::FONT, [148](#)
 - EMF::GRAPHICSOBJECT, [154](#)
 - EMF::PALETTE, [167](#)
 - EMF::PEN, [169](#)
- newRecord
 - EMF::GLOBALOBJECTS, [152](#)
- nextHandle
 - EMF::METAFILEDEVICECONTEXT, [159](#)
- OBJECT
 - EMF::OBJECT, [164](#)
- operator<<
 - EMF::DATASTREAM, [12–20](#)
- operator>>
 - EMF::DATASTREAM, [20–28](#)
- PADDING
 - EMF::PADDING, [166](#)
- PALETTE
 - EMF::PALETTE, [167](#)
- PEN
 - EMF::PEN, [168](#)
- POINT16ARRAY
 - EMF::POINT16ARRAY, [170](#)
- POINTLARRAY
 - EMF::POINTLARRAY, [171](#)
- records
 - EMF::METAFILEDEVICECONTEXT, [160](#)
- remove
 - EMF::GLOBALOBJECTS, [153](#)
- serialize
 - EMF::EMRARCTO, [34](#)
 - EMF::EMRARC, [31](#)
 - EMF::EMRBEGINPATH, [36](#)
 - EMF::EMRCLOSEFIGURE, [38](#)
 - EMF::EMRCREATEBRUSHINDIRECT, [40](#)
 - EMF::EMRCREATEPALETTE, [42](#)
 - EMF::EMRCREATEPEN, [44](#)
 - EMF::EMRDELETEOBJECT, [46](#)
 - EMF::EMRELLIPSE, [48](#)
 - EMF::EMRENDPATH, [50](#)
 - EMF::EMREOF, [52](#)
 - EMF::EMREXTCREATEFONTINDIRECTW, [54](#)
 - EMF::EMREXTCREATEPEN, [56](#)
 - EMF::EMREXTTEXTOUTA, [59](#)
 - EMF::EMREXTTEXTOUTW, [61](#)
 - EMF::EMRFILLPATH, [63](#)
 - EMF::EMRLINETO, [65](#)
 - EMF::EMRMODIFYWORLDTRANSFORM, [67](#)
 - EMF::EMRMOVETOEX, [69](#)
 - EMF::EMRPOLYBEZIER16, [74](#)
 - EMF::EMRPOLYBEZIERTO16, [79](#)
 - EMF::EMRPOLYBEZIERTO, [76](#)
 - EMF::EMRPOLYBEZIER, [71](#)
 - EMF::EMRPOLYGON16, [84](#)
 - EMF::EMRPOLYGON, [81](#)
 - EMF::EMRPOLYLINE16, [89](#)
 - EMF::EMRPOLYLINETO16, [94](#)
 - EMF::EMRPOLYLINETO, [91](#)
 - EMF::EMRPOLYLINE, [86](#)

- EMF::EMRPOLYPOLYGON16, [98](#)
- EMF::EMRPOLYPOLYGON, [96](#)
- EMF::EMRRECTANGLE, [100](#)
- EMF::EMRRESTOREDC, [102](#)
- EMF::EMRSAVEDC, [104](#)
- EMF::EMRSCALEVIEWPORTEXTEX, [106](#)
- EMF::EMRSCALEWINDOWEXTX, [108](#)
- EMF::EMRSELECTOBJECT, [110](#)
- EMF::EMRSETBKCOLOR, [112](#)
- EMF::EMRSETBKMODE, [114](#)
- EMF::EMRSETMAPMODE, [116](#)
- EMF::EMRSETMETARGN, [118](#)
- EMF::EMRSETMITERLIMIT, [120](#)
- EMF::EMRSETPIXELV, [122](#)
- EMF::EMRSETPOLYFILLMODE, [124](#)
- EMF::EMRSETTEXTALIGN, [126](#)
- EMF::EMRSETTEXTCOLOR, [128](#)
- EMF::EMRSETVIEWPORTEXTEX, [130](#)
- EMF::EMRSETVIEWPORTORGEX, [132](#)
- EMF::EMRSETWINDOWEXTX, [134](#)
- EMF::EMRSETWINDOWORGEX, [136](#)
- EMF::EMRSETWORLDTRANSFORM, [139](#)
- EMF::EMRSTROKEANDFILLPATH, [141](#)
- EMF::EMRSTROKEPATH, [143](#)
- EMF::ENHMETAHEADER, [145](#)
- EMF::METARECORD, [162](#)
- setStream
 - EMF::DATASTREAM, [28](#)
- size
 - EMF::EMRARCTO, [34](#)
 - EMF::EMRARC, [32](#)
 - EMF::EMRBEGINPATH, [36](#)
 - EMF::EMRCLOSEFIGURE, [38](#)
 - EMF::EMRCREATEBRUSHINDIRECT, [40](#)
 - EMF::EMRCREATEPALETTE, [43](#)
 - EMF::EMRCREATEPEN, [45](#)
 - EMF::EMRDELETEOBJECT, [47](#)
 - EMF::EMRELLIPSE, [49](#)
 - EMF::EMRENDPATH, [50](#)
 - EMF::EMREOF, [52](#)
 - EMF::EMREXTCREATEFONTINDIRECTW, [54](#)
 - EMF::EMREXTCREATEPEN, [57](#)
 - EMF::EMREXTTEXTOUTA, [59](#)
 - EMF::EMREXTTEXTOUTW, [61](#)
 - EMF::EMRFILLPATH, [64](#)
 - EMF::EMRLINETO, [66](#)
 - EMF::EMRMODIFYWORLDTRANSFORM, [68](#)
 - EMF::EMRMOVETOEX, [70](#)
 - EMF::EMRPOLYBEZIER16, [74](#)
 - EMF::EMRPOLYBEZIERTO16, [79](#)
 - EMF::EMRPOLYBEZIERTO, [77](#)
 - EMF::EMRPOLYBEZIER, [72](#)
 - EMF::EMRPOLYGON16, [84](#)
 - EMF::EMRPOLYGON, [82](#)
 - EMF::EMRPOLYLINE16, [89](#)
 - EMF::EMRPOLYLINETO16, [94](#)
 - EMF::EMRPOLYLINETO, [91](#)
 - EMF::EMRPOLYLINE, [87](#)
- EMF::EMRPOLYPOLYGON16, [99](#)
- EMF::EMRPOLYPOLYGON, [96](#)
- EMF::EMRRECTANGLE, [101](#)
- EMF::EMRRESTOREDC, [102](#)
- EMF::EMRSAVEDC, [104](#)
- EMF::EMRSCALEVIEWPORTEXTEX, [106](#)
- EMF::EMRSCALEWINDOWEXTX, [109](#)
- EMF::EMRSELECTOBJECT, [111](#)
- EMF::EMRSETBKCOLOR, [113](#)
- EMF::EMRSETBKMODE, [115](#)
- EMF::EMRSETMAPMODE, [117](#)
- EMF::EMRSETMETARGN, [118](#)
- EMF::EMRSETMITERLIMIT, [120](#)
- EMF::EMRSETPIXELV, [122](#)
- EMF::EMRSETPOLYFILLMODE, [124](#)
- EMF::EMRSETTEXTALIGN, [126](#)
- EMF::EMRSETTEXTCOLOR, [128](#)
- EMF::EMRSETVIEWPORTEXTEX, [130](#)
- EMF::EMRSETVIEWPORTORGEX, [132](#)
- EMF::EMRSETWINDOWEXTX, [134](#)
- EMF::EMRSETWINDOWORGEX, [136](#)
- EMF::EMRSETWORLDTRANSFORM, [139](#)
- EMF::EMRSTROKEANDFILLPATH, [141](#)
- EMF::EMRSTROKEPATH, [143](#)
- EMF::ENHMETAHEADER, [145](#)
- EMF::METARECORD, [163](#)
- unserialize
 - EMF::ENHMETAHEADER, [145](#)
- WCHARSTR
 - EMF::WCHARSTR, [171](#)