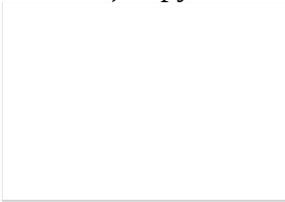


Lack of EMR_GDICOMMENT in emfreader.cxx — suspicion

Minimal working example:

Rectangle (blank shape: without borders and area set to „none”):

a) copy from original Mike Kaganski's [attachment 201279](#)



b) extracted from DOCX

- (1. open in LO [attachment 201279](#) (in this example LibreOffice 25.2.4.3)
2. Save as DOCX
3. Open docx archive in 7-zip
4. go to ..\rectangle.DOCX\word\media\
5. copy „image1.emf” to folder
6. paste this image into Writer.

RESULT is a gray rectangle:



Figure 1:
"EXTRACTED-
image1.emf"

<https://bugs.documentfoundation.org/attachment.cgi?id=201279>

Minimal reproducer (8.06 KB, application/vnd.oasis.opendocument.text)

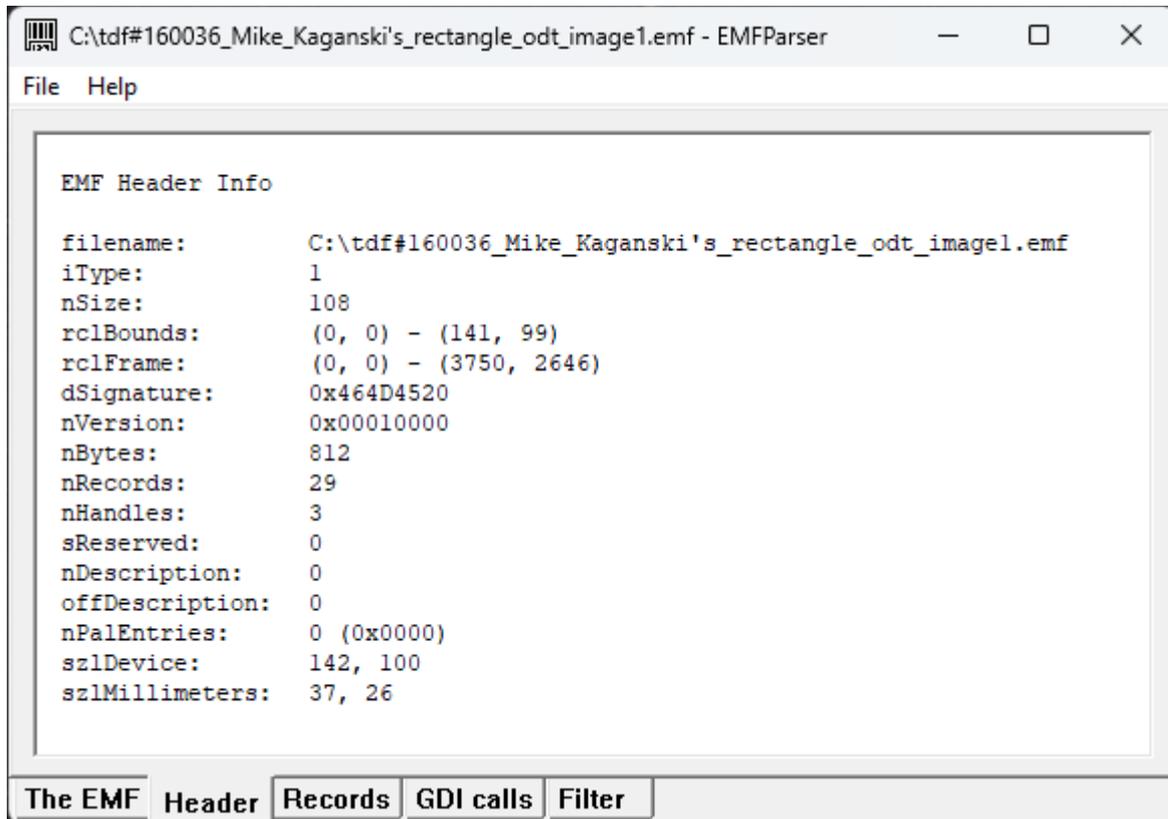
[2025-06-14 20:21 UTC](#)

„EMF Parser” analysis

'EMF Parser' for Windows By Bob Dong (Last updated on 2015-07-23 Thursday)
https://download.cnet.com/download/emf-parser/3000-2383_4-10558240.html

Of the file:

"EXTRACTED-image1.emf"



HEADER

EMF Header Info

```
filename:      C:\tdf#160036_Mike_Kaganski's_rectangle_odt_image1.emf
iType:        1
nSize:        108
rclBounds:    (0, 0) - (141, 99)
rclFrame:    (0, 0) - (3750, 2646)
dSignature:   0x464D4520
nVersion:     0x00010000
nBytes:       812
nRecords:    29
nHandles:    3
sReserved:    0
nDescription: 0
offDescription: 0
nPalEntries:  0 (0x0000)
szlDevice:    142, 100
szlMillimeters: 37, 26
```

RECORDS

EMF Records List

Number of Records: 30

iType	nSize	Data
0 EMR_HEADER	0x006C(108)	01 00 00 00 6C 00 00 00-00 00 00 00 00 00 00 00l..... 8D 00 00 00 63 00 00 00-00 00 00 00 00 00 00 00 □.....c..... A6 0E 00 00 56 0A 00 00-20 45 4D 46 00 00 01 00 ...V... EMF.... 2C 03 00 00 1D 00 00 00-03 00 00 00 00 00 00 00 ,..... 00 00 00 00 00 00 00 00-8E 00 00 00 64 00 00 00□.d... 25 00 00 00 1A 00 00 00-00 00 00 00 00 00 00 00 %..... 00 00 00 00 86 92 00 00-66 67 00 00fg..
1 EMR_GDICOMMENT	0x002C(44)	46 00 00 00 2C 00 00 00-20 00 00 00 45 4D 46 2B F...,... EMF+ 01 40 01 00 1C 00 00 00-10 00 00 00 02 10 C0 DB .@.....ÄÛ 01 00 00 00 5F 00 00 00-60 00 00 00`.....
2 EMR_GDICOMMENT	0x004C(76)	46 00 00 00 4C 00 00 00-40 00 00 00 45 4D 46 2B F..L...@...EMF+ 22 40 00 00 0C 00 00 00-00 00 00 00 1E 40 09 00 "@.....@.. 0C 00 00 00 00 00 00 00-24 40 00 01 0C 00 00 00\$@..... 00 00 00 00 21 40 00 00-0C 00 00 00 00 00 00 00!@..... 04 40 00 00 0C 00 00 00-00 00 00 00@.....
3 EMR_SETMAPMODE	0x000C(12)	11 00 00 00 0C 00 00 00-08 00 00 00
4 EMR_SETVIEWPORTEXT	0x0010(16)	0B 00 00 00 10 00 00 00-60 00 00 00 60 00 00 00`.....`...
5 EMR_SETWINDOWTEXT	0x0010(16)	09 00 00 00 10 00 00 00-EC 09 00 00 EC 09 00 00i...i...
6 EMR_SETVIEWPORTGEX	0x0010(16)	0C 00 00 00 10 00 00 00-00 00 00 00 00 00 00 00
7 EMR_SETWINDOWGEX	0x0010(16)	0A 00 00 00 10 00 00 00-00 00 00 00 00 00 00 00
8 EMR_SETROP2	0x000C(12)	14 00 00 00 0C 00 00 00-0D 00 00 00
9 EMR_SETBKMODE	0x000C(12)	12 00 00 00 0C 00 00 00-01 00 00 00
10 EMR_SAVEDC	0x0008(8)	21 00 00 00 08 00 00 00- !.....
11 EMR_GDICOMMENT	0x0038(56)	46 00 00 00 38 00 00 00-2C 00 00 00 45 4D 46 2B F...8...,...EMF+ 0C 40 00 C0 28 00 00 00-1C 00 00 00 40 40 40 3F .@.Ä.....@@? 05 00 00 00 00 00 00 00-8E 00 00 00 8E 00 64 00□.□.d. 00 00 64 00 00 00 00 00-d.....
12 EMR_CREATEBRUSHINDIRECT	0x0018(24)	27 00 00 00 18 00 00 00-01 00 00 00 00 00 00 00 '..... 40 40 40 00 00 00 00 00- @@@.....
13 EMR_SELECTOBJECT	0x000C(12)	25 00 00 00 0C 00 00 00-01 00 00 00 %.....
14 EMR_CREATEPEN	0x001C(28)	26 00 00 00 1C 00 00 00-02 00 00 00 05 00 00 00 &..... 00 00 00 00 00 00 00 00-FF FF FF 00ÿÿÿ.
15 EMR_SELECTOBJECT	0x000C(12)	25 00 00 00 0C 00 00 00-02 00 00 00 %.....
16 EMR_SELECTOBJECT	0x000C(12)	25 00 00 00 0C 00 00 00-01 00 00 80 %.....€
17 EMR_DELETEOBJECT	0x000C(12)	28 00 00 00 0C 00 00 00-01 00 00 00 (.
18 EMR_CREATEBRUSHINDIRECT	0x0018(24)	27 00 00 00 18 00 00 00-01 00 00 00 00 00 00 00 '..... 40 40 40 00 00 00 00 00- @@@.....
19 EMR_SELECTOBJECT	0x000C(12)	25 00 00 00 0C 00 00 00-01 00 00 00 %.....
20 EMR_SELECTOBJECT	0x000C(12)	25 00 00 00 0C 00 00 00-07 00 00 80 %.....€
21 EMR_DELETEOBJECT	0x000C(12)	28 00 00 00 0C 00 00 00-02 00 00 00 (.
22 EMR_CREATEPEN	0x001C(28)	26 00 00 00 1C 00 00 00-02 00 00 00 05 00 00 00 &..... 00 00 00 00 00 00 00 00-FF FF FF 00ÿÿÿ.
23 EMR_SELECTOBJECT	0x000C(12)	25 00 00 00 0C 00 00 00-02 00 00 00 %.....
24 EMR_POLYPOLYGON	0x0078(120)	08 00 00 00 78 00 00 00-00 00 00 00 00 00 00 00x..... A6 0E 00 00 56 0A 00 00-02 00 00 00 0A 00 00 00 ...V..... 05 00 00 00 05 00 00 00-00 00 00 00 00 00 00 00 A6 0E 00 00 00 00 00 00-A6 0E 00 00 56 0A 00 00 V... 00 00 00 00 56 0A 00 00-00 00 00 00 00 00 00 00V..... 00 00 00 00 00 00 00 00-A6 0E 00 00 00 00 00 00 A6 0E 00 00 3C 0A 00 00-00 00 00 00 3C 0A 00 00 ...<.....<... 00 00 00 00 00 00 00 00-
25 EMR_GDICOMMENT	0x001C(28)	46 00 00 00 1C 00 00 00-10 00 00 00 45 4D 46 2B F.....EMF+ 04 40 00 00 0C 00 00 00-00 00 00 00@.....
26 EMR_RESTOREDC	0x000C(12)	22 00 00 00 0C 00 00 00-FF FF FF FF ".....ÿÿÿÿ
27 EMR_SETROP2	0x000C(12)	14 00 00 00 0C 00 00 00-0D 00 00 00
28 EMR_GDICOMMENT	0x001C(28)	46 00 00 00 1C 00 00 00-10 00 00 00 45 4D 46 2B F.....EMF+ 02 40 00 00 0C 00 00 00-00 00 00 00@.....
29 EMR_EOF	0x0014(20)	0E 00 00 00 14 00 00 00-00 00 00 00 10 00 00 00 14 00 00 00

List of EMR Records

1. EMR_HEADER
2. EMR_GDICOMMENT
3. EMR_GDICOMMENT
4. EMR_SETMAPMODE
5. EMR_SETVIEWPORTEXTEX
6. EMR_SETWINDOWEXTEX
7. EMR_SETVIEWPORTORGEX
8. EMR_SETWINDOWORGEX
9. EMR_SETROP2
10. EMR_SETBKMODE
11. EMR_SAVEDC
12. EMR_GDICOMMENT
13. EMR_CREATEBRUSHINDIRECT
14. EMR_SELECTOBJECT
15. EMR_CREATEPEN
16. EMR_SELECTOBJECT
17. EMR_SELECTOBJECT
18. EMR_DELETEOBJECT
19. EMR_CREATEBRUSHINDIRECT
20. EMR_SELECTOBJECT
21. EMR_SELECTOBJECT
22. EMR_DELETEOBJECT
23. EMR_CREATEPEN
24. EMR_SELECTOBJECT
25. EMR_POLYPOLYGON
26. EMR_GDICOMMENT
27. EMR_RESTOREDC
28. EMR_SETROP2
29. EMR_GDICOMMENT
30. EMR_EOF

Unique EMR records list

- 1 EMR_HEADER
- 2 **EMR_GDICOMMENT**
- 3 EMR_SETMAPMODE
- 4 EMR_SETVIEWPORTEXTEX
- 5 EMR_SETWINDOWEXTEX
- 6 EMR_SETVIEWPORTORGEX
- 7 EMR_SETWINDOWORGEX
- 8 EMR_SETROP2
- 9 EMR_SETBKMODE
- 10 EMR_SAVEDC
- 11 EMR_CREATEBRUSHINDIRECT
- 12 EMR_SELECTOBJECT
- 13 EMR_CREATEPEN
- 14 EMR_DELETEOBJECT
- 15 EMR_POLYPOLYGON
- 16 EMR_RESTOREDC
- 17 EMR_EOF

Rectangle EMR records vs [emfreader.cxx](#) EMR records

EMR Records Absent in [emfreader.cxx](#)

Records from the list that have no definition in the code:

1. **EMR_GDICOMMENT** - appears multiple times in the list (positions 2, 3, 12, 26, 29), but has no #define definition in the code

Notes:

- The code contains **EMR_COMMENT** (value 70), but the list has **EMR_GDICOMMENT**
- EMR_COMMENT in the code has the comment "Contains arbitrary private data" and includes comment identifiers such as EMR_COMMENT_EMFPLUS
- EMR_GDICOMMENT is likely an alternative name for EMR_COMMENT or a special type of GDI comment

All other records from the list have their counterparts in the code:

- EMR_HEADER (1)
- EMR_SETMAPMODE (17)
- EMR_SETVIEWPORTEXTEX (11)
- EMR_SETWINDOWEXTEX (9)
- EMR_SETVIEWPORTORGEX (12)
- EMR_SETWINDOWORGEX (10)
- EMR_SETROP2 (20)
- EMR_SETBKMODE (18)
- EMR_SAVEDC (33)
- EMR_CREATEBRUSHINDIRECT (39)
- EMR_SELECTOBJECT (37)
- EMR_CREATEPEN (38)
- EMR_DELETEOBJECT (40)
- EMR_POLYPOLYGON (8)
- EMR_RESTOREDC (34)
- EMR_EOF (14)

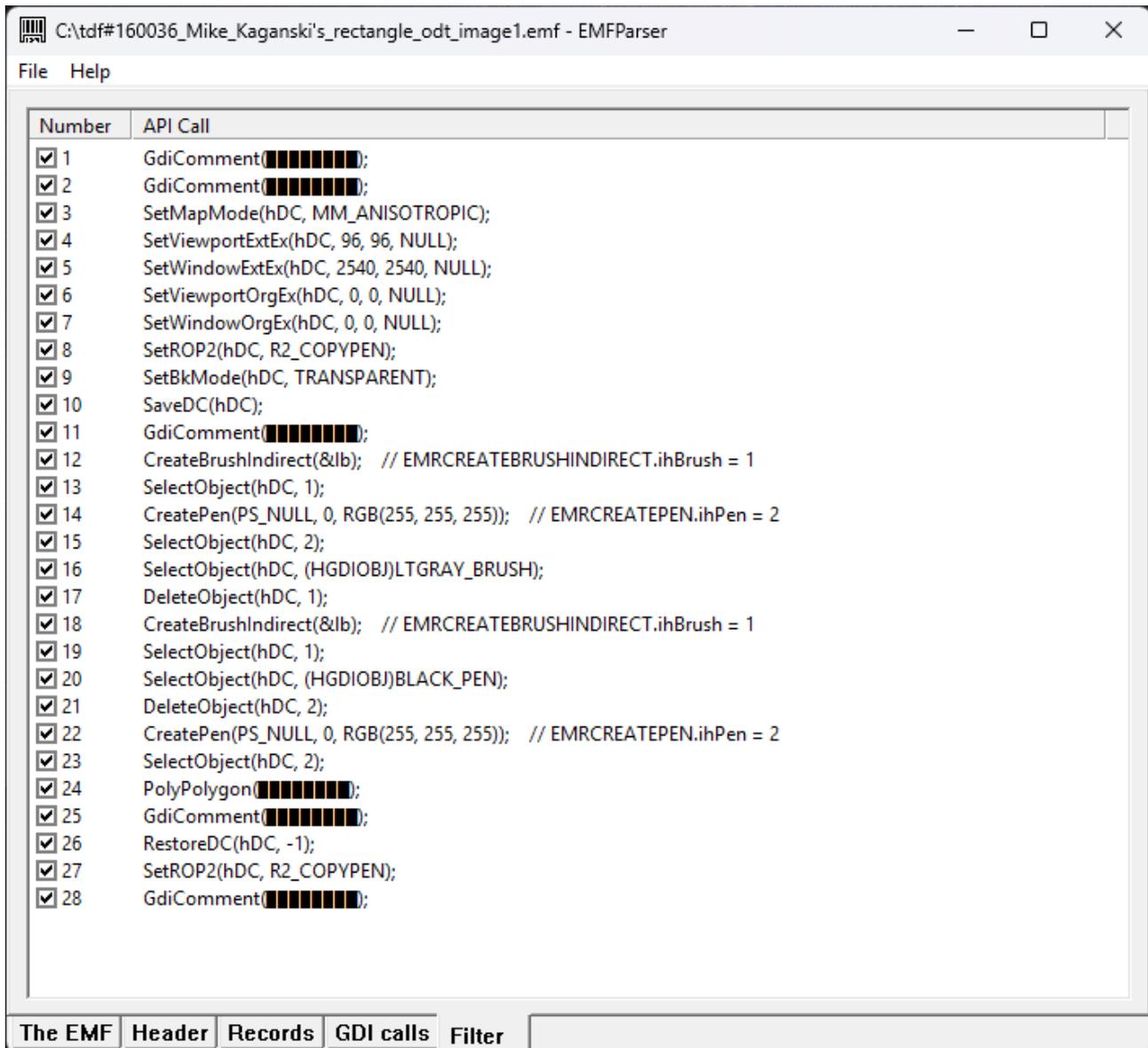
GDI calls

EMF GDI Calls

Number of Calls: 28

```
1      GdiComment(████████);
2      GdiComment(████████);
3      SetMapMode(hDC, MM_ANISOTROPIC);
4      SetViewportExtEx(hDC, 96, 96, NULL);
5      SetWindowExtEx(hDC, 2540, 2540, NULL);
6      SetViewportOrgEx(hDC, 0, 0, NULL);
7      SetWindowOrgEx(hDC, 0, 0, NULL);
8      SetROP2(hDC, R2_COPYPEN);
9      SetBkMode(hDC, TRANSPARENT);
10     SaveDC(hDC);
11     GdiComment(████████);
12     CreateBrushIndirect(&lb);      // EMRCREATEBRUSHINDIRECT.ihBrush = 1
        // Parameter(s):
        LOGBRUSH lb;
        lb.lbStyle = BS_SOLID;
        lb.lbColor = RGB(64, 64, 64);
        lb.lbHatch = 0;
13     SelectObject(hDC, 1);
14     CreatePen(PS_NULL, 0, RGB(255, 255, 255));      // EMRCREATEPEN.ihPen = 2
15     SelectObject(hDC, 2);
16     SelectObject(hDC, (HGDIOBJ)LTGRAY_BRUSH);
17     DeleteObject(hDC, 1);
18     CreateBrushIndirect(&lb);      // EMRCREATEBRUSHINDIRECT.ihBrush = 1
        // Parameter(s):
        LOGBRUSH lb;
        lb.lbStyle = BS_SOLID;
        lb.lbColor = RGB(64, 64, 64);
        lb.lbHatch = 0;
19     SelectObject(hDC, 1);
20     SelectObject(hDC, (HGDIOBJ)BLACK_PEN);
21     DeleteObject(hDC, 2);
22     CreatePen(PS_NULL, 0, RGB(255, 255, 255));      // EMRCREATEPEN.ihPen = 2
23     SelectObject(hDC, 2);
24     PolyPolygon(████████);
25     GdiComment(████████);
26     RestoreDC(hDC, -1);
27     SetROP2(hDC, R2_COPYPEN);
28     GdiComment(████████);
```

Filter



The screenshot shows the EMFParser application window. The title bar reads "C:\tdf#160036_Mike_Kaganski's_rectangle_odt_image1.emf - EMFParser". The menu bar contains "File" and "Help". The main area is a table with two columns: "Number" and "API Call". Each row has a checked checkbox in the "Number" column. The API calls listed are:

Number	API Call
1	GdiComment(■■■■■■■■■■);
2	GdiComment(■■■■■■■■■■);
3	SetMapMode(hDC, MM_ANISOTROPIC);
4	SetViewportExtEx(hDC, 96, 96, NULL);
5	SetWindowExtEx(hDC, 2540, 2540, NULL);
6	SetViewportOrgEx(hDC, 0, 0, NULL);
7	SetWindowOrgEx(hDC, 0, 0, NULL);
8	SetROP2(hDC, R2_COPYPEN);
9	SetBkMode(hDC, TRANSPARENT);
10	SaveDC(hDC);
11	GdiComment(■■■■■■■■■■);
12	CreateBrushIndirect(&lfb); // EMRCREATEBRUSHINDIRECT.ihBrush = 1
13	SelectObject(hDC, 1);
14	CreatePen(PS_NULL, 0, RGB(255, 255, 255)); // EMRCREATEPEN.ihPen = 2
15	SelectObject(hDC, 2);
16	SelectObject(hDC, (HGDIOBJ)LTGRAY_BRUSH);
17	DeleteObject(hDC, 1);
18	CreateBrushIndirect(&lfb); // EMRCREATEBRUSHINDIRECT.ihBrush = 1
19	SelectObject(hDC, 1);
20	SelectObject(hDC, (HGDIOBJ)BLACK_PEN);
21	DeleteObject(hDC, 2);
22	CreatePen(PS_NULL, 0, RGB(255, 255, 255)); // EMRCREATEPEN.ihPen = 2
23	SelectObject(hDC, 2);
24	PolyPolygon(■■■■■■■■■■);
25	GdiComment(■■■■■■■■■■);
26	RestoreDC(hDC, -1);
27	SetROP2(hDC, R2_COPYPEN);
28	GdiComment(■■■■■■■■■■);

At the bottom of the window, there is a tabbed interface with five tabs: "The EMF", "Header", "Records", "GDI calls", and "Filter". The "Filter" tab is currently selected.

Considerations

Does the lack of **EMR_GDICOMMENT** in [emfreader.cxx](#) makes this rectangle background appears in gray color?