

Just browsing Stack Overflow? Help us improve your experience. [Sign up for research](#)

# getting a windows message name [duplicate]

Asked 12 years, 10 months ago Modified 4 years, 1 month ago Viewed 7k times



11



This question already has answers here:

[Convert Windows Message IDs to Text](#) (3 answers)

Closed 4 years ago.

I have a windows program that I'm extending with a DLL. I include debug code through a debug stream objects that print through OutputDebugString and I can view with DebugView. Part of the interface is a message processing function.

```
__declspec(dllexport) LRESULT messageProc(UINT Message, WPARAM wParam, LPARAM lParam) {  
    dbg << "Message received " << Message << endl;  
    return TRUE;  
}
```

My question is if there is a function to retrieve the name of an message from the code. For example instead of the output "message received 534" I would like to see "message received WM\_MOVING" to more appropriately distinguish and filter the debug output.

c++

windows

winapi

Share Improve this question Follow

asked Jan 11, 2012 at 17:59



[Andrew Redd](#)

4,692 9 42 65

## 3 Answers

Sorted by: Highest score (default)



C++ 11

15



From [List Of Window Messages](#) thx to @arx for the link.

Usage:

```
#include <map>  
  
int messagenumber = 5;  
const char* translatedMessage = wmTranslation[messagenumber];  
if (translatedMessage == NULL)  
{
```

```
translatedMessage = "UnknownMessage";
}
```

## Translation-Data:

```
static std::map<int, const char*> wmTranslation = {
{0, "WM_NULL" },
{1, "WM_CREATE" },
{2, "WM_DESTROY" },
{3, "WM_MOVE" },
{5, "WM_SIZE" },
{6, "WM_ACTIVATE" },
{7, "WM_SETFOCUS" },
{8, "WM_KILLFOCUS" },
{10, "WM_ENABLE" },
{11, "WM_SETREDRAW" },
{12, "WM_SETTEXT" },
{13, "WM_GETTEXT" },
{14, "WM_GETTEXTLENGTH" },
{15, "WM_PAINT" },
{16, "WM_CLOSE" },
{17, "WM_QUERYENDSESSION" },
{18, "WM_QUIT" },
{19, "WM_QUERYOPEN" },
{20, "WM_ERASEBKGND" },
{21, "WM_SYSCOLORCHANGE" },
{22, "WM_ENDSESSION" },
{24, "WM_SHOWWINDOW" },
{25, "WM_CTLCOLOR" },
{26, "WM_WININICHANGE" },
{27, "WM_DEVMODECHANGE" },
{28, "WM_ACTIVATEAPP" },
{29, "WM_FONTCHANGE" },
{30, "WM_TIMECHANGE" },
{31, "WM_CANCELMODE" },
{32, "WM_SETCURSOR" },
{33, "WM_MOUSEACTIVATE" },
{34, "WM_CHILDACTIVATE" },
{35, "WM_QUEUESYNC" },
{36, "WM_GETMINMAXINFO" },
{38, "WM_PAINTICON" },
{39, "WM_ICONERASEBKGND" },
{40, "WM_NEXTDLGCTL" },
{42, "WM_SPOOLERSTATUS" },
{43, "WM_DRAWITEM" },
{44, "WM_MEASUREITEM" },
{45, "WM_DELETEITEM" },
{46, "WM_VKEYTOITEM" },
{47, "WM_CHARTOITEM" },
{48, "WM_SETFONT" },
{49, "WM_GETFONT" },
{50, "WM_SETHOTKEY" },
{51, "WM_GETHOTKEY" },
{55, "WM_QUERYDRAGICON" },
{57, "WM_COMPAREITEM" },
{61, "WM_GETOBJECT" },
{65, "WM_COMPACTING" },
{68, "WM_COMMNOTIFY" },
{70, "WM_WINDOWPOSCHANGING" },
{71, "WM_WINDOWPOSCHANGED" },
{72, "WM_POWER" },
{73, "WM_COPYGLOBALDATA" },
{74, "WM_COPYDATA" },
{75, "WM_CANCELJOURNAL" },
```

```
{78, "WM_NOTIFY" },
{80, "WM_INPUTLANGCHANGEREQUEST" },
{81, "WM_INPUTLANGCHANGE" },
{82, "WM_TCARD" },
{83, "WM_HELP" },
{84, "WM_USERCHANGED" },
{85, "WM_NOTIFYFORMAT" },
{123, "WM_CONTEXTMENU" },
{124, "WM_STYLECHANGING" },
{125, "WM_STYLECHANGED" },
{126, "WM_DISPLAYCHANGE" },
{127, "WM_GETICON" },
{128, "WM_SETICON" },
{129, "WM_NCCREATE" },
{130, "WM_NCDESTROY" },
{131, "WM_NCCALCSIZE" },
{132, "WM_NCHITTEST" },
{133, "WM_NCPAINT" },
{134, "WM_NCACTIVATE" },
{135, "WM_GETDLGCODE" },
{136, "WM_SYNCPAINT" },
{160, "WM_NCMOUSEMOVE" },
{161, "WM_NCLBUTTONDOWN" },
{162, "WM_NCLBUTTONUP" },
{163, "WM_NCLBUTTONDBLCLK" },
{164, "WM_NCRBUTTONDOWN" },
{165, "WM_NCRBUTTONUP" },
{166, "WM_NCRBUTTONDBLCLK" },
{167, "WM_NCMBUTTONDOWN" },
{168, "WM_NCMBUTTONUP" },
{169, "WM_NCMBUTTONDBLCLK" },
{171, "WM_NCXBUTTONDOWN" },
{172, "WM_NCXBUTTONUP" },
{173, "WM_NCXBUTTONDBLCLK" },
{176, "EM_GETSEL" },
{177, "EM_SETSEL" },
{178, "EM_GETRECT" },
{179, "EM_SETRECT" },
{180, "EM_SETRECTNP" },
{181, "EM_SCROLL" },
{182, "EM_LINESCROLL" },
{183, "EM_SCROLLCARET" },
{185, "EM_GETMODIFY" },
{187, "EM_SETMODIFY" },
{188, "EM_GETLINECOUNT" },
{189, "EM_LINEINDEX" },
{190, "EM_SETHANDLE" },
{191, "EM_GETHANDLE" },
{192, "EM_GETTHUMB" },
{193, "EM_LINELENGTH" },
{194, "EM_REPLACESEL" },
{195, "EM_SETFONT" },
{196, "EM_GETLINE" },
{197, "EM_LIMITTEXT" },
{197, "EM_SETLIMITTEXT" },
{198, "EM_CANUNDO" },
{199, "EM_UNDO" },
{200, "EM_FMTLINES" },
{201, "EM_LINEFROMCHAR" },
{202, "EM_SETWORDBREAK" },
{203, "EM_SETTABSTOPS" },
{204, "EM_SETPASSWORDCHAR" },
{205, "EM_EMPTYUNDOBUFFER" },
{206, "EM_GETFIRSTVISIBLELINE" },
{207, "EM_SETREADONLY" },
{209, "EM_SETWORDBREAKPROC" },
```

```
{209, "EM_GETWORDBREAKPROC" },
{210, "EM_GETPASSWORDCHAR" },
{211, "EM_SETMARGINS" },
{212, "EM_GETMARGINS" },
{213, "EM_GETLIMITTEXT" },
{214, "EM_POSFROMCHAR" },
{215, "EM_CHARFROMPOS" },
{216, "EM_SETIMESTATUS" },
{217, "EM_GETIMESTATUS" },
{224, "SBM_SETPOS" },
{225, "SBM_GETPOS" },
{226, "SBM_SETRANGE" },
{227, "SBM_GETRANGE" },
{228, "SBM_ENABLE_ARROWS" },
{230, "SBM_SETRANGEREDRAW" },
{233, "SBM_SETSCROLLINFO" },
{234, "SBM_GETSCROLLINFO" },
{235, "SBM_GETSCROLLBARINFO" },
{240, "BM_GETCHECK" },
{241, "BM_SETCHECK" },
{242, "BM_GETSTATE" },
{243, "BM_SETSTATE" },
{244, "BM_SETSTYLE" },
{245, "BM_CLICK" },
{246, "BM_GETIMAGE" },
{247, "BM_SETIMAGE" },
{248, "BM_SETDONTCLICK" },
{255, "WM_INPUT" },
{256, "WM_KEYDOWN" },
{256, "WM_KEYFIRST" },
{257, "WM_KEYUP" },
{258, "WM_CHAR" },
{259, "WM_DEADCHAR" },
{260, "WM_SYSKEYDOWN" },
{261, "WM_SYSKEYUP" },
{262, "WM_SYSCHAR" },
{263, "WM_SYSDEADCHAR" },
{264, "WM_KEYLAST" },
{265, "WM_UNICHAR" },
{265, "WM_WNT_CONVERTREQUESTEX" },
{266, "WM_CONVERTREQUEST" },
{267, "WM_CONVERTRESULT" },
{268, "WM_INTERIM" },
{269, "WM_IME_STARTCOMPOSITION" },
{270, "WM_IME_ENDCOMPOSITION" },
{271, "WM_IME_COMPOSITION" },
{271, "WM_IME_KEYLAST" },
{272, "WM_INITDIALOG" },
{273, "WM_COMMAND" },
{274, "WM_SYSCOMMAND" },
{275, "WM_TIMER" },
{276, "WM_HSCROLL" },
{277, "WM_VSCROLL" },
{278, "WM_INITMENU" },
{279, "WM_INITMENUPOPUP" },
{280, "WM_SYSTIMER" },
{287, "WM_MENUSELECT" },
{288, "WM_MENUCHAR" },
{289, "WM_ENTERIDLE" },
{290, "WM_MENURBUTTONUP" },
{291, "WM_MENUDRAG" },
{292, "WM_MENUGETOBJECT" },
{293, "WM_UNINITMENUPOPUP" },
{294, "WM_MENUCOMMAND" },
{295, "WM_CHANGEUISTATE" },
{296, "WM_UPDATEUISTATE" },
```

```
{297, "WM_QUERYUISTATE" },
{306, "WM_CTLCOLORMSGBOX" },
{307, "WM_CTLCOLOREDIT" },
{308, "WM_CTLCOLORLISTBOX" },
{309, "WM_CTLCOLORBTN" },
{310, "WM_CTLCOLORDLG" },
{311, "WM_CTLCOLORSCROLLBAR" },
{312, "WM_CTLCOLORSTATIC" },
{512, "WM_MOUSEFIRST" },
{512, "WM_MOUSEMOVE" },
{513, "WM_LBUTTONDOWN" },
{514, "WM_LBUTTONUP" },
{515, "WM_LBUTTONDOWNBLCLK" },
{516, "WM_RBUTTONDOWN" },
{517, "WM_RBUTTONUP" },
{518, "WM_RBUTTONDOWNBLCLK" },
{519, "WM_MBUTTONDOWN" },
{520, "WM_MBUTTONUP" },
{521, "WM_MBUTTONDOWNBLCLK" },
{521, "WM_MOUSELAST" },
{522, "WM_MOUSEWHEEL" },
{523, "WM_XBUTTONDOWN" },
{524, "WM_XBUTTONUP" },
{525, "WM_XBUTTONDOWNBLCLK" },
{528, "WM_PARENTNOTIFY" },
{529, "WM_ENTERMENULOOP" },
{530, "WM_EXITMENULOOP" },
{531, "WM_NEXTMENU" },
{532, "WM_SIZING" },
{533, "WM_CAPTURECHANGED" },
{534, "WM_MOVING" },
{536, "WM_POWERBROADCAST" },
{537, "WM_DEVICECHANGE" },
{544, "WM_MDICREATE" },
{545, "WM_MDIDESTROY" },
{546, "WM_MDIACTIVATE" },
{547, "WM_MDIRESTORE" },
{548, "WM_MDINEXT" },
{549, "WM_MDIMAXIMIZE" },
{550, "WM_MDITILE" },
{551, "WM_MDICASCADE" },
{552, "WM_MDIICONARRANGE" },
{553, "WM_MDIGETACTIVE" },
{560, "WM_MDISETMENU" },
{561, "WM_ENTERSIZEMOVE" },
{562, "WM_EXITSIZEMOVE" },
{563, "WM_DROPFILES" },
{564, "WM_MDIREFRESHMENU" },
{640, "WM_IME_REPORT" },
{641, "WM_IME_SETCONTEXT" },
{642, "WM_IME_NOTIFY" },
{643, "WM_IME_CONTROL" },
{644, "WM_IME_COMPOSITIONFULL" },
{645, "WM_IME_SELECT" },
{646, "WM_IME_CHAR" },
{648, "WM_IME_REQUEST" },
{656, "WM_IMEKEYDOWN" },
{656, "WM_IME_KEYDOWN" },
{657, "WM_IMEKEYUP" },
{657, "WM_IME_KEYUP" },
{672, "WM_NCMOUSEHOVER" },
{673, "WM_MOUSEHOVER" },
{674, "WM_NCMOUSELEAVE" },
{675, "WM_MOUSELEAVE" },
{768, "WM_CUT" },
{769, "WM_COPY" },
```

```

{770, "WM_PASTE" },
{771, "WM_CLEAR" },
{772, "WM_UNDO" },
{773, "WM_RENDERFORMAT" },
{774, "WM_RENDERALLFORMATS" },
{775, "WM_DESTROYCLIPBOARD" },
{776, "WM_DRAWCLIPBOARD" },
{777, "WM_PAINTCLIPBOARD" },
{778, "WM_VSCROLLCLIPBOARD" },
{779, "WM_SIZECLIPBOARD" },
{780, "WM_ASKCBFORMATNAME" },
{781, "WM_CHANGECBCHAIN" },
{782, "WM_HSCROLLCLIPBOARD" },
{783, "WM_QUERYNEWPALETTE" },
{784, "WM_PALETTEISCHANGING" },
{785, "WM_PALETTECHANGED" },
{786, "WM_HOTKEY" },
{791, "WM_PRINT" },
{792, "WM_PRINTCLIENT" },
{793, "WM_APPCOMMAND" },
{856, "WM_HANDHELDFIRST" },
{863, "WM_HANDHELDLAST" },
{864, "WM_AFXFIRST" },
{895, "WM_AFXLAST" },
{896, "WM_PENWINFIRST" },
{897, "WM_RCRESULT" },
{898, "WM_HOOKRCRESULT" },
{899, "WM_GLOBALRCCHANGE" },
{899, "WM_PENMISCINFO" },
{900, "WM_SKB" },
{901, "WM_HEDITCTL" },
{901, "WM_PENCTL" },
{902, "WM_PENMISC" },
{903, "WM_CTLINIT" },
{904, "WM_PENEVENT" },
{911, "WM_PENWINLAST" },
{1024, "DDM_SETFMT" },
{1024, "DM_GETDEFID" },
{1024, "NIN_SELECT" },
{1024, "TBM_GETPOS" },
{1024, "WM_PSD_PAGESETUPDLG" },
{1024, "WM_USER" },
{1025, "CBEM_INSERTITEMA" },
{1025, "DDM_DRAW" },
{1025, "DM_SETDEFID" },
{1025, "HKM_SETHOTKEY" },
{1025, "PBM_SETRANGE" },
{1025, "RB_INSERTBANDA" },
{1025, "SB_SETTEXTA" },
{1025, "TB_ENABLEBUTTON" },
{1025, "TBM_GETRANGEMIN" },
{1025, "TTM_ACTIVATE" },
{1025, "WM_CHOOSEFONT_GETLOGFONT" },
{1025, "WM_PSD_FULLPAGERECT" },
{1026, "CBEM_SETIMAGELIST" },
{1026, "DDM_CLOSE" },
{1026, "DM_REPOSITION" },
{1026, "HKM_GETHOTKEY" },
{1026, "PBM_SETPOS" },
{1026, "RB_DELETEBAND" },
{1026, "SB_GETTEXTA" },
{1026, "TB_CHECKBUTTON" },
{1026, "TBM_GETRANGEMAX" },
{1026, "WM_PSD_MINMARGINRECT" },
{1027, "CBEM_GETIMAGELIST" },
{1027, "DDM_BEGIN" },

```

```
{1027, "HKM_SETRULES" },
{1027, "PBM_DELTAPOS" },
{1027, "RB_GETBARINFO" },
{1027, "SB_GETTEXTLENGTHA" },
{1027, "TBM_GETTIC" },
{1027, "TB_PRESSBUTTON" },
{1027, "TTM_SETDELAYTIME" },
{1027, "WM_PSD_MARGINRECT" },
{1028, "CBEM_GETITEMA" },
{1028, "DDM_END" },
{1028, "PBM_SETSTEP" },
{1028, "RB_SETBARINFO" },
{1028, "SB_SETPARTS" },
{1028, "TB_HIDEBUTTON" },
{1028, "TBM_SETTIC" },
{1028, "TTM_ADDTOOLA" },
{1028, "WM_PSD_GREEKTEXTRECT" },
{1029, "CBEM_SETITEMA" },
{1029, "PBM_STEPIT" },
{1029, "TB_INDETERMINATE" },
{1029, "TBM_SETPOS" },
{1029, "TTM_DELTOOLA" },
{1029, "WM_PSD_ENVSTAMPRECT" },
{1030, "CBEM_GETCOMBOCONTROL" },
{1030, "PBM_SETRANGE32" },
{1030, "RB_SETBANDINFOA" },
{1030, "SB_GETPARTS" },
{1030, "TB_MARKBUTTON" },
{1030, "TBM_SETRANGE" },
{1030, "TTM_NEWTOOLRECTA" },
{1030, "WM_PSD_YAFULLPAGERECT" },
{1031, "CBEM_GETEDITCONTROL" },
{1031, "PBM_GETRANGE" },
{1031, "RB_SETPARENT" },
{1031, "SB_GETBORDERS" },
{1031, "TBM_SETRANGEMIN" },
{1031, "TTM_RELAYEVENT" },
{1032, "CBEM_SETEXSTYLE" },
{1032, "PBM_GETPOS" },
{1032, "RB_HITTEST" },
{1032, "SB_SETMINHEIGHT" },
{1032, "TBM_SETRANGEMAX" },
{1032, "TTM_GETTOOLINFOA" },
{1033, "CBEM_GETEXSTYLE" },
{1033, "CBEM_GETEXTENDEDSTYLE" },
{1033, "PBM_SETBARCOLOR" },
{1033, "RB_GETRECT" },
{1033, "SB_SIMPLE" },
{1033, "TB_ISBUTTONENABLED" },
{1033, "TBM_CLEARTEXT" },
{1033, "TTM_SETTOOLINFOA" },
{1034, "CBEM_HASEDITCHANGED" },
{1034, "RB_INSERTBANDW" },
{1034, "SB_GETRECT" },
{1034, "TB_ISBUTTONCHECKED" },
{1034, "TBM_SETSEL" },
{1034, "TTM_HITTESTA" },
{1034, "WIZ_QUERYNUMPAGES" },
{1035, "CBEM_INSERTITEMW" },
{1035, "RB_SETBANDINFOW" },
{1035, "SB_SETTEXTW" },
{1035, "TB_ISBUTTONPRESSED" },
{1035, "TBM_SETSELSTART" },
{1035, "TTM_GETTEXTA" },
{1035, "WIZ_NEXT" },
{1036, "CBEM_SETITEMW" },
```

```
{1036, "RB_GETBANDCOUNT" },
{1036, "SB_GETTEXTLENGTHW" },
{1036, "TB_ISBUTTONHIDDEN" },
{1036, "TBM_SETSELEND" },
{1036, "TTM_UPDATETIPTEXTA" },
{1036, "WIZ_PREV" },
{1037, "CBEM_GETITEMW" },
{1037, "RB_GETROWCOUNT" },
{1037, "SB_GETTEXTW" },
{1037, "TB_ISBUTTONINDETERMINATE" },
{1037, "TTM_GETTOOLCOUNT" },
{1038, "CBEM_SETEXTENDEDSTYLE" },
{1038, "RB_GETROWHEIGHT" },
{1038, "SB_ISSIMPLE" },
{1038, "TB_ISBUTTONHIGHLIGHTED" },
{1038, "TBM_GETPTICS" },
{1038, "TTM_ENUMTOOLS" },
{1039, "SB_SETICON" },
{1039, "TBM_GETTICPOS" },
{1039, "TTM_GETCURRENTTOOL" },
{1040, "RB_IDTOINDEX" },
{1040, "SB_SETTIPTEXTA" },
{1040, "TBM_GETNUMTICS" },
{1040, "TTM_WINDOWFROMPOINT" },
{1041, "RB_GETTOOLTIPS" },
{1041, "SB_SETTIPTEXTW" },
{1041, "TBM_GETSELSTART" },
{1041, "TB_SETSTATE" },
{1041, "TTM_TRACKACTIVATE" },
{1042, "RB_SETTOOLTIPS" },
{1042, "SB_GETTIPTEXTA" },
{1042, "TB_GETSTATE" },
{1042, "TBM_GETSELEND" },
{1042, "TTM_TRACKPOSITION" },
{1043, "RB_SETBKCOLOR" },
{1043, "SB_GETTIPTEXTW" },
{1043, "TB_ADDBITMAP" },
{1043, "TBM_CLEARSEL" },
{1043, "TTM_SETTIPBKCOLOR" },
{1044, "RB_GETBKCOLOR" },
{1044, "SB_GETICON" },
{1044, "TB_ADDBUTTONSA" },
{1044, "TBM_SETTICFREQ" },
{1044, "TTM_SETTIPTEXTCOLOR" },
{1045, "RB_SETTEXTCOLOR" },
{1045, "TB_INSERTBUTTONA" },
{1045, "TBM_SETPAGESIZE" },
{1045, "TTM_GETDELAYTIME" },
{1046, "RB_GETTEXTCOLOR" },
{1046, "TB_DELETEBUTTON" },
{1046, "TBM_GETPAGESIZE" },
{1046, "TTM_GETTIPBKCOLOR" },
{1047, "RB_SIZETO RECT" },
{1047, "TB_GETBUTTON" },
{1047, "TBM_SETLINE SIZE" },
{1047, "TTM_GETTIPTEXTCOLOR" },
{1048, "RB_BEGIN DRAG" },
{1048, "TB_BUTTONCOUNT" },
{1048, "TBM_GETLINE SIZE" },
{1048, "TTM_SETMAX TIP WIDTH" },
{1049, "RB_END DRAG" },
{1049, "TB_COMMAND TO INDEX" },
{1049, "TBM_GET THUMB RECT" },
{1049, "TTM_GETMAX TIP WIDTH" },
{1050, "RB_DRAG MOVE" },
{1050, "TBM_GET CHANNEL RECT" },
```



```
{1050, "TB_SAVERESTOREA" },
{1050, "TTM_SETMARGIN" },
{1051, "RB_GETBARHEIGHT" },
{1051, "TB_CUSTOMIZE" },
{1051, "TBM_SETTHUMBLENGTH" },
{1051, "TTM_GETMARGIN" },
{1052, "RB_GETBANDINFOW" },
{1052, "TB_ADDSTRINGA" },
{1052, "TBM_GETTHUMBLENGTH" },
{1052, "TTM_POP" },
{1053, "RB_GETBANDINFOA" },
{1053, "TB_GETITEMRECT" },
{1053, "TBM_SETTOOLTIPS" },
{1053, "TTM_UPDATE" },
{1054, "RB_MINIMIZEBAND" },
{1054, "TB_BUTTONSTRUCTSIZE" },
{1054, "TBM_GETTOOLTIPS" },
{1054, "TTM_GETBUBBLESIZE" },
{1055, "RB_MAXIMIZEBAND" },
{1055, "TBM_SETTIPSIDE" },
{1055, "TB_SETBUTTONSIZE" },
{1055, "TTM_ADJUSTRECT" },
{1056, "TBM_SETBUDDY" },
{1056, "TB_SETBITMAPSIZE" },
{1056, "TTM_SETTITLEA" },
{1057, "MSG_FTS_JUMP_VA" },
{1057, "TB_AUTOSIZE" },
{1057, "TBM_GETBUDDY" },
{1057, "TTM_SETTITLEW" },
{1058, "RB_GETBANDBORDERS" },
{1059, "MSG_FTS_JUMP_QWORD" },
{1059, "RB_SHOWBAND" },
{1059, "TB_GETTOOLTIPS" },
{1060, "MSG_REINDEX_REQUEST" },
{1060, "TB_SETTOOLTIPS" },
{1061, "MSG_FTS_WHERE_IS_IT" },
{1061, "RB_SETPALETTE" },
{1061, "TB_SETPARENT" },
{1062, "RB_GETPALETTE" },
{1063, "RB_MOVEBAND" },
{1063, "TB_SETROWS" },
{1064, "TB_GETROWS" },
{1065, "TB_GETBITMAPFLAGS" },
{1066, "TB_SETCMDID" },
{1067, "RB_PUSHCHEVRON" },
{1067, "TB_CHANGEBITMAP" },
{1068, "TB_GETBITMAP" },
{1069, "MSG_GET_DEFFONT" },
{1069, "TB_GETBUTTONTEXTA" },
{1070, "TB_REPLACEBITMAP" },
{1071, "TB_SETINDENT" },
{1072, "TB_SETIMAGELIST" },
{1073, "TB_GETIMAGELIST" },
{1074, "TB_LOADIMAGES" },
{1074, "EM_CANPASTE" },
{1074, "TTM_ADDTOOLW" },
{1075, "EM_DISPLAYBAND" },
{1075, "TB_GETRECT" },
{1075, "TTM_DELTOLW" },
{1076, "EM_EXGETSEL" },
{1076, "TB_SETHOTIMAGELIST" },
{1076, "TTM_NEWTOOLRECTW" },
{1077, "EM_EXLIMITTEXT" },
{1077, "TB_GETHOTIMAGELIST" },
{1077, "TTM_GETTOOLINFOW" },
{1078, "EM_EXLINEFROMCHAR" },
```

```
{1078, "TB_SETDISABLEDIMAGELIST" },
{1078, "TTM_SETTOOLINFOW" },
{1079, "EM_EXSETSEL" },
{1079, "TB_GETDISABLEDIMAGELIST" },
{1079, "TTM_HITTESTW" },
{1080, "EM_FINDTEXT" },
{1080, "TB_SETSTYLE" },
{1080, "TTM_GETTEXTW" },
{1081, "EM_FORMATRANGE" },
{1081, "TB_GETSTYLE" },
{1081, "TTM_UPDATETIPTTEXTW" },
{1082, "EM_GETCHARFORMAT" },
{1082, "TB_GETBUTTONSIZE" },
{1082, "TTM_ENUMTOOLSW" },
{1083, "EM_GETEVENTMASK" },
{1083, "TB_SETBUTTONWIDTH" },
{1083, "TTM_GETCURRENTTOOLW" },
{1084, "EM_GETOLEINTERFACE" },
{1084, "TB_SETMAXTEXTROWS" },
{1085, "EM_GETPARAFORMAT" },
{1085, "TB_GETTEXTROWS" },
{1086, "EM_GETSELTEXT" },
{1086, "TB_GETOBJECT" },
{1087, "EM_HIDESELECTION" },
{1087, "TB_GETBUTTONINFOW" },
{1088, "EM_PASTESPECIAL" },
{1088, "TB_SETBUTTONINFOW" },
{1089, "EM_REQUESTRESIZE" },
{1089, "TB_GETBUTTONINFOA" },
{1090, "EM_SELECTIONTYPE" },
{1090, "TB_SETBUTTONINFOA" },
{1091, "EM_SETBKGDNDCOLOR" },
{1091, "TB_INSERTBUTTONW" },
{1092, "EM_SETCHARFORMAT" },
{1092, "TB_ADDBUTTONSW" },
{1093, "EM_SETEVENTMASK" },
{1093, "TB_HITTEST" },
{1094, "EM_SETOLECALLBACK" },
{1094, "TB_SETDRAWTEXTFLAGS" },
{1095, "EM_SETPARAFORMAT" },
{1095, "TB_GETHOTITEM" },
{1096, "EM_SETTARGETDEVICE" },
{1096, "TB_SETHOTITEM" },
{1097, "EM_STREAMIN" },
{1097, "TB_SETANCHORHIGHLIGHT" },
{1098, "EM_STREAMOUT" },
{1098, "TB_GETANCHORHIGHLIGHT" },
{1099, "EM_GETTEXTRANGE" },
{1099, "TB_GETBUTTONTEXTW" },
{1100, "EM_FINDWORDBREAK" },
{1100, "TB_SAVERESTOREW" },
{1101, "EM_SETOPTIONS" },
{1101, "TB_ADDSTRINGW" },
{1102, "EM_GETOPTIONS" },
{1102, "TB_MAPACCELERATORA" },
{1103, "EM_FINDTEXT" },
{1103, "TB_GETINSERTMARK" },
{1104, "EM_GETWORDBREAKPROCEX" },
{1104, "TB_SETINSERTMARK" },
{1105, "EM_SETWORDBREAKPROCEX" },
{1105, "TB_INSERTMARKHITTEST" },
{1106, "EM_SETUNDOLIMIT" },
{1106, "TB_MOVEBUTTON" },
{1107, "TB_GETMAXSIZE" },
{1108, "EM_REDO" },
{1108, "TB_SETEXTENDEDSTYLE" },
```

```
{1109, "EM_CANREDO" },
{1109, "TB_GETEXTENDEDSTYLE" },
{1110, "EM_GETUNDONAME" },
{1110, "TB_GETPADDING" },
{1111, "EM_GETREDONAME" },
{1111, "TB_SETPADDING" },
{1112, "EM_STOPGROUPTYPING" },
{1112, "TB_SETINSERTMARKCOLOR" },
{1113, "EM_SETTEXTMODE" },
{1113, "TB_GETINSERTMARKCOLOR" },
{1114, "EM_GETTEXTMODE" },
{1114, "TB_MAPACCELERATORW" },
{1115, "EM_AUTOURLDETECT" },
{1115, "TB_GETSTRINGW" },
{1116, "EM_GETAUTOURLDETECT" },
{1116, "TB_GETSTRINGA" },
{1117, "EM_SETPALETTE" },
{1118, "EM_GETTEXTTEX" },
{1119, "EM_GETTEXTLENGTHEX" },
{1120, "EM_SHOWSCROLLBAR" },
{1121, "EM_SETTEXTTEX" },
{1123, "TAPI_REPLY" },
{1124, "ACM_OPENA" },
{1124, "BFFM_SETSTATUSTEXTA" },
{1124, "CDM_FIRST" },
{1124, "CDM_GETSPEC" },
{1124, "EM_SETPUNCTUATION" },
{1124, "IPM_CLEARADDRESS" },
{1124, "WM_CAP_UNICODE_START" },
{1125, "ACM_PLAY" },
{1125, "BFFM_ENABLEOK" },
{1125, "CDM_GETFILEPATH" },
{1125, "EM_GETPUNCTUATION" },
{1125, "IPM_SETADDRESS" },
{1125, "PSM_SETCURSEL" },
{1125, "UDM_SETRANGE" },
{1125, "WM_CHOOSEFONT_SETLOGFONT" },
{1126, "ACM_STOP" },
{1126, "BFFM_SETSELECTIONA" },
{1126, "CDM_GETFOLDERPATH" },
{1126, "EM_SETWORDWRAPMODE" },
{1126, "IPM_GETADDRESS" },
{1126, "PSM_REMOVEPAGE" },
{1126, "UDM_GETRANGE" },
{1126, "WM_CAP_SET_CALLBACK_ERRORW" },
{1126, "WM_CHOOSEFONT_SETFLAGS" },
{1127, "ACM_OPENW" },
{1127, "BFFM_SETSELECTIONW" },
{1127, "CDM_GETFOLDERIDLIST" },
{1127, "EM_GETWORDWRAPMODE" },
{1127, "IPM_SETRANGE" },
{1127, "PSM_ADDPAGE" },
{1127, "UDM_SETPOS" },
{1127, "WM_CAP_SET_CALLBACK_STATUSW" },
{1128, "BFFM_SETSTATUSTEXTW" },
{1128, "CDM_SETCONTROLTEXT" },
{1128, "EM_SETIMECOLOR" },
{1128, "IPM_SETFOCUS" },
{1128, "PSM_CHANGED" },
{1128, "UDM_GETPOS" },
{1129, "CDM_HIDECONTROL" },
{1129, "EM_GETIMECOLOR" },
{1129, "IPM_ISBLANK" },
{1129, "PSM_RESTARTWINDOWS" },
{1129, "UDM_SETBUDDY" },
{1130, "CDM_SETDEFEXT" },
```

```
{1130, "EM_SETIMEOPTIONS" },
{1130, "PSM_REBOOTSYSYSTEM" },
{1130, "UDM_GETBUDDY" },
{1131, "EM_GETIMEOPTIONS" },
{1131, "PSM_CANCELTOCLOSE" },
{1131, "UDM_SETACCEL" },
{1132, "EM_CONVPOSITION" },
{1132, "EM_CONVPOSITION" },
{1132, "PSM_QUERYSIBLINGS" },
{1132, "UDM_GETACCEL" },
{1133, "MCIWINDM_GETZOOM" },
{1133, "PSM_UNCHANGED" },
{1133, "UDM_SETBASE" },
{1134, "PSM_APPLY" },
{1134, "UDM_GETBASE" },
{1135, "PSM_SETTITLEA" },
{1135, "UDM_SETRANGE32" },
{1136, "PSM_SETWIZBUTTONS" },
{1136, "UDM_GETRANGE32" },
{1136, "WM_CAP_DRIVER_GET_NAMEW" },
{1137, "PSM_PRESSBUTTON" },
{1137, "UDM_SETPOS32" },
{1137, "WM_CAP_DRIVER_GET_VERSIONW" },
{1138, "PSM_SETCURSELID" },
{1138, "UDM_GETPOS32" },
{1139, "PSM_SETFINISHTEXTA" },
{1140, "PSM_GETTABCONTROL" },
{1141, "PSM_ISDIALOGMESSAGE" },
{1142, "MCIWINDM_REALIZE" },
{1142, "PSM_GETCURRENTPAGEHWND" },
{1143, "MCIWINDM_SETTIMEFORMATA" },
{1143, "PSM_INSERTPAGE" },
{1144, "EM_SETLANGOPTIONS" },
{1144, "MCIWINDM_GETTIMEFORMATA" },
{1144, "PSM_SETTITLEW" },
{1144, "WM_CAP_FILE_SET_CAPTURE_FILEW" },
{1145, "EM_GETLANGOPTIONS" },
{1145, "MCIWINDM_VALIDATEMEDIA" },
{1145, "PSM_SETFINISHTEXTW" },
{1145, "WM_CAP_FILE_GET_CAPTURE_FILEW" },
{1146, "EM_GETTIMECOMPmode" },
{1147, "EM_FINDTEXTW" },
{1147, "MCIWINDM_PLAYTO" },
{1147, "WM_CAP_FILE_SAVEASW" },
{1148, "EM_FINDTEXTW" },
{1148, "MCIWINDM_GETFILENAMEA" },
{1149, "EM_RECONVERSION" },
{1149, "MCIWINDM_GETDEVICEA" },
{1149, "PSM_SETHADERTITLEA" },
{1149, "WM_CAP_FILE_SAVEDIBW" },
{1150, "EM_SETIMEMODEBIAS" },
{1150, "MCIWINDM_GETPALETTE" },
{1150, "PSM_SETHADERTITLEW" },
{1151, "EM_GETIMEMODEBIAS" },
{1151, "MCIWINDM_SETPALETTE" },
{1151, "PSM_SETHADERSUBTITLEA" },
{1152, "MCIWINDM_GETERRORA" },
{1152, "PSM_SETHADERSUBTITLEW" },
{1153, "PSM_HWNDTOINDEX" },
{1154, "PSM_INDEXTOHWND" },
{1155, "MCIWINDM_SETINACTIVETIMER" },
{1155, "PSM_PAGETOINDEX" },
{1156, "PSM_INDEXTOPAGE" },
{1157, "DL_BEGINDRAG" },
{1157, "MCIWINDM_GETINACTIVETIMER" },
{1157, "PSM_IDTOINDEX" },
```

```
{1158, "DL_DRAGGING" },
{1158, "PSM_INDEXTOID" },
{1159, "DL_DROPPED" },
{1159, "PSM_GETRESULT" },
{1160, "DL_CANCELDRAG" },
{1160, "PSM_RECALCPAGESIZES" },
{1164, "MCIWNDM_GET_SOURCE" },
{1165, "MCIWNDM_PUT_SOURCE" },
{1166, "MCIWNDM_GET_DEST" },
{1167, "MCIWNDM_PUT_DEST" },
{1168, "MCIWNDM_CAN_PLAY" },
{1169, "MCIWNDM_CAN_WINDOW" },
{1170, "MCIWNDM_CAN_RECORD" },
{1171, "MCIWNDM_CAN_SAVE" },
{1172, "MCIWNDM_CAN_EJECT" },
{1173, "MCIWNDM_CAN_CONFIG" },
{1174, "IE_GETINK" },
{1174, "IE_MSGFIRST" },
{1174, "MCIWNDM_PALETTEKICK" },
{1175, "IE_SETINK" },
{1176, "IE_GETPENTIP" },
{1177, "IE_SETPENTIP" },
{1178, "IE_GETERASERTIP" },
{1179, "IE_SETERASERTIP" },
{1180, "IE_GETBKGND" },
{1181, "IE_SETBKGND" },
{1182, "IE_GETGRIDORIGIN" },
{1183, "IE_SETGRIDORIGIN" },
{1184, "IE_GETGRIDPEN" },
{1185, "IE_SETGRIDPEN" },
{1186, "IE_GETGRIDSIZE" },
{1187, "IE_SETGRIDSIZE" },
{1188, "IE_GETMODE" },
{1189, "IE_SETMODE" },
{1190, "IE_GETINKRECT" },
{1190, "WM_CAP_SET_MCI_DEVICEW" },
{1191, "WM_CAP_GET_MCI_DEVICEW" },
{1204, "WM_CAP_PAL_OPENW" },
{1205, "WM_CAP_PAL_SAVEW" },
{1208, "IE_GETAPPDATA" },
{1209, "IE_SETAPPDATA" },
{1210, "IE_GETDRAWOPTS" },
{1211, "IE_SETDRAWOPTS" },
{1212, "IE_GETFORMAT" },
{1213, "IE_SETFORMAT" },
{1214, "IE_GETINKINPUT" },
{1215, "IE_SETINKINPUT" },
{1216, "IE_GETNOTIFY" },
{1217, "IE_SETNOTIFY" },
{1218, "IE_GETRECOG" },
{1219, "IE_SETRECOG" },
{1220, "IE_GETSECURITY" },
{1221, "IE_SETSECURITY" },
{1222, "IE_GETSEL" },
{1223, "IE_SETSEL" },
{1224, "CDM_LAST" },
{1224, "EM_SETBIDIOptions" },
{1224, "IE_DOCOMMAND" },
{1224, "MCIWNDM_NOTIFYMODE" },
{1225, "EM_GETBIDIOptions" },
{1225, "IE_GETCOMMAND" },
{1226, "EM_SETTYPOGRAPHYOptions" },
{1226, "IE_GETCOUNT" },
{1227, "EM_GETTYPOGRAPHYOptions" },
{1227, "IE_GETGESTURE" },
{1227, "MCIWNDM_NOTIFYMEDIA" },
```

```

{1228, "EM_SETEditStyle" },
{1228, "IE_GETMENU" },
{1229, "EM_GETEditStyle" },
{1229, "IE_GETPAINTDC" },
{1229, "MCIWDM_NOTIFYERROR" },
{1230, "IE_GETPDEVENT" },
{1231, "IE_GETSELCOUNT" },
{1232, "IE_GETSELITEMS" },
{1233, "IE_GETSTYLE" },
{1243, "MCIWDM_SETTIMEFORMATW" },
{1244, "EM_OUTLINE" },
{1244, "EM_OUTLINE" },
{1244, "MCIWDM_GETTIMEFORMATW" },
{1245, "EM_GETSCROLLPOS" },
{1245, "EM_GETSCROLLPOS" },
{1246, "EM_SETSCROLLPOS" },
{1246, "EM_SETSCROLLPOS" },
{1247, "EM_SETFONTSIZE" },
{1247, "EM_SETFONTSIZE" },
{1248, "EM_GETZOOM" },
{1248, "MCIWDM_GETFILENAMEW" },
{1249, "EM_SETZOOM" },
{1249, "MCIWDM_GETDEVICEW" },
{1250, "EM_GETVIEWKIND" },
{1251, "EM_SETVIEWKIND" },
{1252, "EM_GETPAGE" },
{1252, "MCIWDM_GETERRORW" },
{1253, "EM_SETPAGE" },
{1254, "EM_GETHYPHENATEINFO" },
{1255, "EM_SETHYPHENATEINFO" },
{1259, "EM_GETPAGEROTATE" },
{1260, "EM_SETPAGEROTATE" },
{1261, "EM_GETCTFMODEBIAS" },
{1262, "EM_SETCTFMODEBIAS" },
{1264, "EM_GETCTFOPENSTATUS" },
{1265, "EM_SETCTFOPENSTATUS" },
{1266, "EM_GETIMECOMPTEXT" },
{1267, "EM_ISIME" },
{1268, "EM_GETIMEPROPERTY" },
{1293, "EM_GETQUERYRTFOBJ" },
{1294, "EM_SETQUERYRTFOBJ" },
{1536, "FM_GETFOCUS" },
{1537, "FM_GETDRIVEINFOA" },
{1538, "FM_GETSELCOUNT" },
{1539, "FM_GETSELCOUNTLFN" },
{1540, "FM_GETFILESELA" },
{1541, "FM_GETFILESELLFNA" },
{1542, "FM_REFRESH_WINDOWS" },
{1543, "FM_RELOAD_EXTENSIONS" },
{1553, "FM_GETDRIVEINFOW" },
{1556, "FM_GETFILESELW" },
{1557, "FM_GETFILESELLFNW" },
{1625, "WLX_WM_SAS" },
{2024, "SM_GETSELCOUNT" },
{2024, "UM_GETSELCOUNT" },
{2024, "WM_CPL_LAUNCH" },
{2025, "SM_GETSERVERSELA" },
{2025, "UM_GETUSERSELA" },
{2025, "WM_CPL_LAUNCHED" },
{2026, "SM_GETSERVERSELW" },
{2026, "UM_GETUSERSELW" },
{2027, "SM_GETCURFOCUA" },
{2027, "UM_GETGROUPSELA" },
{2028, "SM_GETCURFOCUSW" },
{2028, "UM_GETGROUPSELW" },
{2029, "SM_GETOPTIONS" },

```

```
{2029, "UM_GETCURFOCUS" },
{2030, "UM_GETCURFOCUSW" },
{2031, "UM_GETOPTIONS" },
{2032, "UM_GETOPTIONS2" },
{4096, "LVM_FIRST" },
{4096, "LVM_GETBKCOLOR" },
{4097, "LVM_SETBKCOLOR" },
{4098, "LVM_GETIMAGELIST" },
{4099, "LVM_SETIMAGELIST" },
{4100, "LVM_GETITEMCOUNT" },
{4101, "LVM_GETITEMA" },
{4102, "LVM_SETITEMA" },
{4103, "LVM_INSERTITEMA" },
{4104, "LVM_DELETEITEM" },
{4105, "LVM_DELETEALLITEMS" },
{4106, "LVM_GETCALLBACKMASK" },
{4107, "LVM_SETCALLBACKMASK" },
{4108, "LVM_GETNEXTITEM" },
{4109, "LVM_FINDITEMA" },
{4110, "LVM_GETITEMRECT" },
{4111, "LVM_SETITEMPOSITION" },
{4112, "LVM_GETITEMPOSITION" },
{4113, "LVM_GETSTRINGWIDTHA" },
{4114, "LVM_HITTEST" },
{4115, "LVM_ENSUREVISIBLE" },
{4116, "LVM_SCROLL" },
{4117, "LVM_REDRAWITEMS" },
{4118, "LVM_ARRANGE" },
{4119, "LVM_EDITLABELA" },
{4120, "LVM_GETEDITCONTROL" },
{4121, "LVM_GETCOLUMNA" },
{4122, "LVM_SETCOLUMNA" },
{4123, "LVM_INSERTCOLUMNA" },
{4124, "LVM_DELETECOLUMN" },
{4125, "LVM_GETCOLUMNWIDTH" },
{4126, "LVM_SETCOLUMNWIDTH" },
{4127, "LVM_GETHEADER" },
{4129, "LVM_CREATEDRAGIMAGE" },
{4130, "LVM_GETVIEWRECT" },
{4131, "LVM_GETTEXTCOLOR" },
{4132, "LVM_SETTEXTCOLOR" },
{4133, "LVM_GETTEXTBKCOLOR" },
{4134, "LVM_SETTEXTBKCOLOR" },
{4135, "LVM_GETTOPINDEX" },
{4136, "LVM_GETCOUNTPERPAGE" },
{4137, "LVM_GETORIGIN" },
{4138, "LVM_UPDATE" },
{4139, "LVM_SETITEMSTATE" },
{4140, "LVM_GETITEMSTATE" },
{4141, "LVM_GETITEMTEXTA" },
{4142, "LVM_SETITEMTEXTA" },
{4143, "LVM_SETITEMCOUNT" },
{4144, "LVM_SORTITEMS" },
{4145, "LVM_SETITEMPOSITION32" },
{4146, "LVM_GETSELECTEDCOUNT" },
{4147, "LVM_GETITEMSPACING" },
{4148, "LVM_GETSEARCHSTRINGA" },
{4149, "LVM_SETICONSPACING" },
{4150, "LVM_SETEXTENDEDLISTVIEWSTYLE" },
{4151, "LVM_GETEXTENDEDLISTVIEWSTYLE" },
{4152, "LVM_GETSUBITEMRECT" },
{4153, "LVM_SUBITEMHITTEST" },
{4154, "LVM_SETCOLUMNORDERARRAY" },
{4155, "LVM_GETCOLUMNORDERARRAY" },
{4156, "LVM_SETHOTITEM" },
{4157, "LVM_GETHOTITEM" },
```

```
{4158, "LVM_SETHOTCURSOR" },
{4159, "LVM_GETHOTCURSOR" },
{4160, "LVM_APPROXIMATEVIEWRECT" },
{4161, "LVM_SETWORKAREAS" },
{4162, "LVM_GETSELECTIONMARK" },
{4163, "LVM_SETSELECTIONMARK" },
{4164, "LVM_SETBKIMAGEA" },
{4165, "LVM_GETBKIMAGEA" },
{4166, "LVM_GETWORKAREAS" },
{4167, "LVM_SETHOVERTIME" },
{4168, "LVM_GETHOVERTIME" },
{4169, "LVM_GETNUMBEROFWORKAREAS" },
{4170, "LVM_SETTOOLTIPS" },
{4171, "LVM_GETITEMW" },
{4172, "LVM_SETITEMW" },
{4173, "LVM_INSERTITEMW" },
{4174, "LVM_GETTOOLTIPS" },
{4179, "LVM_FINDITEMW" },
{4183, "LVM_GETSTRINGWIDTHW" },
{4191, "LVM_GETCOLUMNW" },
{4192, "LVM_SETCOLUMNW" },
{4193, "LVM_INSERTCOLUMNW" },
{4211, "LVM_GETITEMTEXTW" },
{4212, "LVM_SETITEMTEXTW" },
{4213, "LVM_GETSEARCHSTRINGW" },
{4214, "LVM_EDITLABELW" },
{4235, "LVM_GETBKIMAGEW" },
{4236, "LVM_SETSELECTEDCOLUMN" },
{4237, "LVM_SETTILEWIDTH" },
{4238, "LVM_SETVIEW" },
{4239, "LVM_GETVIEW" },
{4241, "LVM_INSERTGROUP" },
{4243, "LVM_SETGROUPINFO" },
{4245, "LVM_GETGROUPINFO" },
{4246, "LVM_REMOVEGROUP" },
{4247, "LVM_MOVEGROUP" },
{4250, "LVM_MOVEITEMTOGROUP" },
{4251, "LVM_SETGROUPMETRICS" },
{4252, "LVM_GETGROUPMETRICS" },
{4253, "LVM_ENABLEGROUPVIEW" },
{4254, "LVM_SORTGROUPS" },
{4255, "LVM_INSERTGROUPSORTED" },
{4256, "LVM_REMOVEALLGROUPS" },
{4257, "LVM_HASGROUP" },
{4258, "LVM_SETTILEVIEWINFO" },
{4259, "LVM_GETTILEVIEWINFO" },
{4260, "LVM_SETTILEINFO" },
{4261, "LVM_GETTILEINFO" },
{4262, "LVM_SETINSERTMARK" },
{4263, "LVM_GETINSERTMARK" },
{4264, "LVM_INSERTMARKHITTEST" },
{4265, "LVM_GETINSERTMARKRECT" },
{4266, "LVM_SETINSERTMARKCOLOR" },
{4267, "LVM_GETINSERTMARKCOLOR" },
{4269, "LVM_SETINFOTIP" },
{4270, "LVM_GETSELECTEDCOLUMN" },
{4271, "LVM_ISGROUPVIEWENABLED" },
{4272, "LVM_GETOUTLINECOLOR" },
{4273, "LVM_SETOUTLINECOLOR" },
{4275, "LVM_CANCELEDITLABEL" },
{4276, "LVM_MAPINDEXTOID" },
{4277, "LVM_MAPIDTOINDEX" },
{4278, "LVM_ISITEMVISIBLE" },
{8192, "OCM__BASE" },
{8197, "LVM_SETUNICODEFORMAT" },
{8198, "LVM_GETUNICODEFORMAT" },
```



```
{8217, "OCM_CTLCOLOR" },
{8235, "OCM_DRAWITEM" },
{8236, "OCM_MEASUREITEM" },
{8237, "OCM_DELETEITEM" },
{8238, "OCM_VKEYTOITEM" },
{8239, "OCM_CHARTOITEM" },
{8249, "OCM_COMPAREITEM" },
{8270, "OCM_NOTIFY" },
{8465, "OCM_COMMAND" },
{8468, "OCM_HSCROLL" },
{8469, "OCM_VSCROLL" },
{8498, "OCM_CTLCOLORMSGBOX" },
{8499, "OCM_CTLCOLOREDIT" },
{8500, "OCM_CTLCOLORLISTBOX" },
{8501, "OCM_CTLCOLORBTN" },
{8502, "OCM_CTLCOLORDLG" },
{8503, "OCM_CTLCOLORSCROLLBAR" },
{8504, "OCM_CTLCOLORSTATIC" },
{8720, "OCM_PARENTNOTIFY" },
{32768, "WM_APP" },
{52429, "WM_RASDIALEVENT" },
};
```

**NOTE:**

- There are some duplicates in the list, which i did not remove.
- `std::map` discards them automatically...

Share Improve this answer Follow

edited Jun 17, 2019 at 9:35

answered Nov 4, 2016 at 15:03

 Sebastian Ax  
1,330 12 12

- 1 Didn't compile for me with VS2013. Had to change `wchar_t*` to `const char*`, since the map is initialized with single-byte strings. Changing to `L"Wide string literals"` might also help.  
– Disenchanted Apr 3, 2017 at 16:17
- 2 This should not be an answer, it is a copy paste from [wiki.winehq.org/List Of Windows Messages](http://wiki.winehq.org/List_Of_Windows_Messages) and has not been checked at all. It contains duplicates, if converted to a map in any language it will have a duplicate key exception. There many items as such. – Marino Šimić Oct 29, 2018 at 17:00
- 2 @MarinoŠimić Duplicates won't cause an exception in C++ map initialization. It just discards duplicates (see [example](#)). Nevertheless, a better data type would be `std::multimap`, which allows a M:N mapping. – zett42 Jun 15, 2019 at 9:30

@MarinoŠimić Your comment should not be a comment; it adds nothing to the discussion and just distracts and wastes everyone's time. The answer was useful to me, and judging by the upvote count, many others as well. – chili Jan 27, 2022 at 1:15

@chili if you copy pasted this into your code beware of duplicates that are not duplicates. I did not post my comment for nothing. Just one example: `{209, "EM_SETWORDBREAKPROC" }`, `{209, "EM_GETWORDBREAKPROC" }`, GET AND SET with the same ID.... with the `std::map` you will loose the first one, in other languages this will give an exception, which would be preferable to simply silently swallowing items. – Marino Šimić Jan 31, 2022 at 10:11



There is no function as far as I know, but you can make one relatively easily. You need to copy all the message definitions from `Windows.h` and put them in a C++ file like this:

11

```
#define X(x) { x, #x },
struct WindowsMessage
{
    int msgid;
    char* pname;
} WindowsMessages[] =
{
    X( WM_PAINT )
    X( WM_NCPAINT )
    ...
};
#undef X
```

Then you write a function which, given a message id, searches through this table and returns the corresponding text. # in the macro is the famous "stringize" operator of C, which converts the identifier that follows it into a string literal. How convenient!

Share Improve this answer Follow

edited Mar 15, 2017 at 10:43

answered Jan 11, 2012 at 18:05



Mike Nakis

61.7k 11 124 162

I've done this before but did it the hard way by copying the whole block of constants and putting quotes around them, etc. This approach is much cleaner. – Kelly S. French Jan 11, 2012 at 19:53

1 Yes, and do not forget that Visual Studio has block-mode editing capabilities, (Alt+mouse, and as of VS2010 Alt+Shift+cursor keys) which make that kind of stuff a lot easier. – Mike Nakis Jan 11, 2012 at 20:01

7 Here is a handy list of windows messages, to save you poking around in windows.h: [wiki.winehq.org/List Of Windows Messages](http://wiki.winehq.org/List_Of_Windows_Messages) – arx Jan 11, 2012 at 22:50

▲

```
// https://rextester.com/DVKG30016
#include <iostream>
```

3

```
const char*id2str_impl(int id){
#define F(A,B)case A:return #B;
switch(id){
    F(0,WM_NULL)
    F(1,WM_CREATE)
    F(2,WM_DESTROY)
    F(3,WM_MOVE)
    F(5,WM_SIZE)
    F(6,WM_ACTIVATE)
    F(7,WM_SETFOCUS)
    F(8,WM_KILLFOCUS)
    F(10,WM_ENABLE)
    F(11,WM_SETREDRAW)
    F(12,WM_SETTEXT)
    F(13,WM_GETTEXT)
    F(14,WM_GETTEXTLENGTH)
    F(15,WM_PAINT)
    F(16,WM_CLOSE)
    F(17,WM_QUERYENDSESSION)
    F(18,WM_QUIT)
    F(19,WM_QUERYOPEN)
    F(20,WM_ERASEBKGND)
    F(21,WM_SYSCOLORCHANGE)
```

F(22, WM\_ENDSESSION)  
F(24, WM\_SHOWWINDOW)  
F(25, WM\_CTLCOLOR)  
F(26, WM\_WININICHANGE)  
F(27, WM\_DEVMODECHANGE)  
F(28, WM\_ACTIVATEAPP)  
F(29, WM\_FONTCHANGE)  
F(30, WM\_TIMECHANGE)  
F(31, WM\_CANCELMODE)  
F(32, WM\_SETCURSOR)  
F(33, WM\_MOUSEACTIVATE)  
F(34, WM\_CHILDACTIVATE)  
F(35, WM\_QUEUESYNC)  
F(36, WM\_GETMINMAXINFO)  
F(38, WM\_PAINTICON)  
F(39, WM\_ICONERASEBKGND)  
F(40, WM\_NEXTDLGCTL)  
F(42, WM\_SPOOLERSTATUS)  
F(43, WM\_DRAWITEM)  
F(44, WM\_MEASUREITEM)  
F(45, WM\_DELETEITEM)  
F(46, WM\_VKEYTOITEM)  
F(47, WM\_CHARTOITEM)  
F(48, WM\_SETFONT)  
F(49, WM\_GETFONT)  
F(50, WM\_SETHOTKEY)  
F(51, WM\_GETHOTKEY)  
F(55, WM\_QUERYDRAGICON)  
F(57, WM\_COMPAREITEM)  
F(61, WM\_GETOBJECT)  
F(65, WM\_COMPACTING)  
F(68, WM\_COMMNOTIFY)  
F(70, WM\_WINDOWPOSCHANGING)  
F(71, WM\_WINDOWPOSCHANGED)  
F(72, WM\_POWER)  
F(73, WM\_COPYGLOBALDATA)  
F(74, WM\_COPYDATA)  
F(75, WM\_CANCELJOURNAL)  
F(78, WM\_NOTIFY)  
F(80, WM\_INPUTLANGCHANGEREQUEST)  
F(81, WM\_INPUTLANGCHANGE)  
F(82, WM\_TCARD)  
F(83, WM\_HELP)  
F(84, WM\_USERCHANGED)  
F(85, WM\_NOTIFYFORMAT)  
F(123, WM\_CONTEXTMENU)  
F(124, WM\_STYLECHANGING)  
F(125, WM\_STYLECHANGED)  
F(126, WM\_DISPLAYCHANGE)  
F(127, WM\_GETICON)  
F(128, WM\_SETICON)  
F(129, WM\_NCCREATE)  
F(130, WM\_NCDESTROY)  
F(131, WM\_NCCALCSIZE)  
F(132, WM\_NCHITTEST)  
F(133, WM\_NCPAINT)  
F(134, WM\_NCACTIVATE)  
F(135, WM\_GETDLGCODE)  
F(136, WM\_SYNCPAINT)  
F(160, WM\_NCMOUSEMOVE)  
F(161, WM\_NCLBUTTONDOWN)  
F(162, WM\_NCLBUTTONUP)  
F(163, WM\_NCLBUTTONDBLCLK)  
F(164, WM\_NCRBUTTONDOWN)  
F(165, WM\_NCRBUTTONUP)  
F(166, WM\_NCRBUTTONDBLCLK)

F(167, WM\_NCMBUTTONDOWN)  
F(168, WM\_NCMBUTTONUP)  
F(169, WM\_NCMBUTTONDBLCLK)  
F(171, WM\_NCXBUTTONDOWN)  
F(172, WM\_NCXBUTTONUP)  
F(173, WM\_NCXBUTTONDBLCLK)  
F(176, EM\_GETSEL)  
F(177, EM\_SETSEL)  
F(178, EM\_GETRECT)  
F(179, EM\_SETRECT)  
F(180, EM\_SETRECTNP)  
F(181, EM\_SCROLL)  
F(182, EM\_LINESCROLL)  
F(183, EM\_SCROLLCARET)  
F(185, EM\_GETMODIFY)  
F(187, EM\_SETMODIFY)  
F(188, EM\_GETLINECOUNT)  
F(189, EM\_LINEINDEX)  
F(190, EM\_SETHANDLE)  
F(191, EM\_GETHANDLE)  
F(192, EM\_GETTHUMB)  
F(193, EM\_LINELENGTH)  
F(194, EM\_REPLACESEL)  
F(195, EM\_SETFONT)  
F(196, EM\_GETLINE)  
F(197, (EM\_LIMITTEXT, EM\_SETLIMITTEXT))  
F(198, EM\_CANUNDO)  
F(199, EM\_UNDO)  
F(200, EM\_FMTLINES)  
F(201, EM\_LINEFROMCHAR)  
F(202, EM\_SETWORDBREAK)  
F(203, EM\_SETTABSTOPS)  
F(204, EM\_SETPASSWORDCHAR)  
F(205, EM\_EMPTYUNDOBUFFER)  
F(206, EM\_GETFIRSTVISIBLELINE)  
F(207, EM\_SETREADONLY)  
F(209, (EM\_SETWORDBREAKPROC, EM\_GETWORDBREAKPROC))  
F(210, EM\_GETPASSWORDCHAR)  
F(211, EM\_SETMARGINS)  
F(212, EM\_GETMARGINS)  
F(213, EM\_GETLIMITTEXT)  
F(214, EM\_POSFROMCHAR)  
F(215, EM\_CHARFROMPOS)  
F(216, EM\_SETIMESTATUS)  
F(217, EM\_GETIMESTATUS)  
F(224, SBM\_SETPOS)  
F(225, SBM\_GETPOS)  
F(226, SBM\_SETRANGE)  
F(227, SBM\_GETRANGE)  
F(228, SBM\_ENABLE\_ARROWS)  
F(230, SBM\_SETRANGEREDRAW)  
F(233, SBM\_SETSCROLLINFO)  
F(234, SBM\_GETSCROLLINFO)  
F(235, SBM\_GETSCROLLBARINFO)  
F(240, BM\_GETCHECK)  
F(241, BM\_SETCHECK)  
F(242, BM\_GETSTATE)  
F(243, BM\_SETSTATE)  
F(244, BM\_SETSTYLE)  
F(245, BM\_CLICK)  
F(246, BM\_GETIMAGE)  
F(247, BM\_SETIMAGE)  
F(248, BM\_SETDONTCLICK)  
F(255, WM\_INPUT)  
F(256, WM\_KEYDOWN)  
F(257, WM\_KEYUP)

F(258, WM\_CHAR)  
F(259, WM\_DEADCHAR)  
F(260, WM\_SYSKEYDOWN)  
F(261, WM\_SYSKEYUP)  
F(262, WM\_SYSCHAR)  
F(263, WM\_SYSDEADCHAR)  
F(265, (WM\_UNICHAR, WM\_WNT\_CONVERTREQUESTEX))  
F(266, WM\_CONVERTREQUEST)  
F(267, WM\_CONVERTRESULT)  
F(268, WM\_INTERIM)  
F(269, WM\_IME\_STARTCOMPOSITION)  
F(270, WM\_IME\_ENDCOMPOSITION)  
F(271, WM\_IME\_COMPOSITION)  
F(272, WM\_INITDIALOG)  
F(273, WM\_COMMAND)  
F(274, WM\_SYSCOMMAND)  
F(275, WM\_TIMER)  
F(276, WM\_HSCROLL)  
F(277, WM\_VSCROLL)  
F(278, WM\_INITMENU)  
F(279, WM\_INITMENUPOPUP)  
F(280, WM\_SYSTIMER)  
F(287, WM\_MENUSELECT)  
F(288, WM\_MENUCHAR)  
F(289, WM\_ENTERIDLE)  
F(290, WM\_MENURBUTTONUP)  
F(291, WM\_MENUDRAG)  
F(292, WM\_MENUGETOBJECT)  
F(293, WM\_UNINITMENUPOPUP)  
F(294, WM\_MENUCOMMAND)  
F(295, WM\_CHANGEUISTATE)  
F(296, WM\_UPDATEUISTATE)  
F(297, WM\_QUERYUISTATE)  
F(306, WM\_CTLCLORMSGBOX)  
F(307, WM\_CTLCLOREDIT)  
F(308, WM\_CTLCLORLISTBOX)  
F(309, WM\_CTLCLORBTN)  
F(310, WM\_CTLCLORDLG)  
F(311, WM\_CTLCLORSCROLLBAR)  
F(312, WM\_CTLCLORSTATIC)  
F(512, WM\_MOUSEMOVE)  
F(513, WM\_LBUTTONDOWN)  
F(514, WM\_LBUTTONUP)  
F(515, WM\_LBUTTONDBLCLK)  
F(516, WM\_RBUTTONDOWN)  
F(517, WM\_RBUTTONUP)  
F(518, WM\_RBUTTONDBLCLK)  
F(519, WM\_MBUTTONDOWN)  
F(520, WM\_MBUTTONUP)  
F(521, WM\_MBUTTONDBLCLK)  
F(522, WM\_MOUSEWHEEL)  
F(523, WM\_XBUTTONDOWN)  
F(524, WM\_XBUTTONUP)  
F(525, WM\_XBUTTONDBLCLK)  
F(526, WM\_MOUSEHWHEEL)  
F(528, WM\_PARENTNOTIFY)  
F(529, WM\_ENTERMENULOOP)  
F(530, WM\_EXITMENULOOP)  
F(531, WM\_NEXTMENU)  
F(532, WM\_SIZING)  
F(533, WM\_CAPTURECHANGED)  
F(534, WM\_MOVING)  
F(536, WM\_POWERBROADCAST)  
F(537, WM\_DEVICECHANGE)  
F(544, WM\_MDICREATE)  
F(545, WM\_MDIDESTROY)

```

F(546,WM_MDIACTIVATE)
F(547,WM_MDIRESTORE)
F(548,WM_MDINEXT)
F(549,WM_MDIMAXIMIZE)
F(550,WM_MDITILE)
F(551,WM_MDICASCADE)
F(552,WM_MDIICONARRANGE)
F(553,WM_MDIGETACTIVE)
F(560,WM_MDISETMENU)
F(561,WM_ENTERSIZEMOVE)
F(562,WM_EXITSIZEMOVE)
F(563,WM_DROPFILES)
F(564,WM_MDIREFRESHMENU)
F(640,WM_IME_REPORT)
F(641,WM_IME_SETCONTEXT)
F(642,WM_IME_NOTIFY)
F(643,WM_IME_CONTROL)
F(644,WM_IME_COMPOSITIONFULL)
F(645,WM_IME_SELECT)
F(646,WM_IME_CHAR)
F(648,WM_IME_REQUEST)
F(656,(WM_IMEKEYDOWN,WM_IME_KEYDOWN))
F(657,(WM_IMEKEYUP,WM_IME_KEYUP))
F(672,WM_NCMOUSEHOVER)
F(673,WM_MOUSEHOVER)
F(674,WM_NCMOUSELEAVE)
F(675,WM_MOUSELEAVE)
F(768,WM_CUT)
F(769,WM_COPY)
F(770,WM_PASTE)
F(771,WM_CLEAR)
F(772,WM_UNDO)
F(773,WM_RENDERFORMAT)
F(774,WM_RENDERALLFORMATS)
F(775,WM_DESTROYCLIPBOARD)
F(776,WM_DRAWCLIPBOARD)
F(777,WM_PAINTCLIPBOARD)
F(778,WM_VSCROLLCLIPBOARD)
F(779,WM_SIZECLIPBOARD)
F(780,WM_ASKCBFORMATNAME)
F(781,WM_CHANGECBCHAIN)
F(782,WM_HSCROLLCLIPBOARD)
F(783,WM_QUERYNEWPALETTE)
F(784,WM_PALETTEISCHANGING)
F(785,WM_PALETTECHANGED)
F(786,WM_HOTKEY)
F(791,WM_PRINT)
F(792,WM_PRINTCLIENT)
F(793,WM_APPCOMMAND)
F(856,WM_HANDHELDFIRST)
F(863,WM_HANDHELDLAST)
F(864,WM_AFXFIRST)
F(895,WM_AFXLAST)
F(896,WM_PENWINFIRST)
F(897,WM_RCRESULT)
F(898,WM_HOOKRCRESULT)
F(899,(WM_GLOBALRCCHANGE,WM_PENMISCINFO))
F(900,WM_SKB)
F(901,(WM_HEDITCTL,WM_PENCTL))
F(902,WM_PENMISC)
F(903,WM_CTLINIT)
F(904,WM_PENEVENT)
F(911,WM_PENWINLAST)
F(1024,
(DDM_SETFMT,DM_GETDEFID,NIN_SELECT,TBM_GETPOS,WM_PSD_PAGESETUPDLG,WM_USER))
F(1025,

```

```

(CBEM_INSERTITEMA, DDM_DRAW, DM_SETDEFID, HKM_SETHOTKEY, PBM_SETRANGE, RB_INSERTBANDA, SB_
F(1026,
(CBEM_SETIMAGELIST, DDM_CLOSE, DM_REPOSITION, HKM_GETHOTKEY, PBM_SETPOS, RB_DELETEBAND, SE
F(1027,
(CBEM_GETIMAGELIST, DDM_BEGIN, HKM_SETRULES, PBM_DELTAPOS, RB_GETBARINFO, SB_GETTEXTLENGT
F(1028,
(CBEM_GETITEMA, DDM_END, PBM_SETSTEP, RB_SETBARINFO, SB_SETPARTS, TB_HIDEBUTTON, TBM_SETTI
F(1029,
(CBEM_SETITEMA, PBM_STEPIT, TB_INDETERMINATE, TBM_SETPOS, TTM_DELTOOLA, WM_PSD_ENVSTAMPRE
F(1030,
(CBEM_GETCOMBOCONTROL, PBM_SETRANGE32, RB_SETBANDINFOA, SB_GETPARTS, TB_MARKBUTTON, TBM_S
F(1031,
(CBEM_GETEDITCONTROL, PBM_GETRANGE, RB_SETPARENT, SB_GETBORDERS, TBM_SETRANGEMIN, TTM_REL
F(1032,
(CBEM_SETEXSTYLE, PBM_GETPOS, RB_HITTEST, SB_SETMINHEIGHT, TBM_SETRANGEMAX, TTM_GETTOOLIN
F(1033,
(CBEM_GETEXSTYLE, CBEM_GETEXTENDEDSTYLE, PBM_SETBARCOLOR, RB_GETRECT, SB_SIMPLE, TB_ISBUT
F(1034,
(CBEM_HASEDITCHANGED, RB_INSERTBANDW, SB_GETRECT, TB_ISBUTTONCHECKED, TBM_SETSEL, TTM_HIT
F(1035,
(CBEM_INSERTITEMW, RB_SETBANDINFOW, SB_SETTEXTW, TB_ISBUTTONPRESSED, TBM_SETSELSTART, TTM
F(1036,
(CBEM_SETITEMW, RB_GETBANDCOUNT, SB_GETTEXTLENGTHW, TB_ISBUTTONHIDDEN, TBM_SETSELEND, TTM
F(1037,
(CBEM_GETITEMW, RB_GETROWCOUNT, SB_GETTEXTW, TB_ISBUTTONINDETERMINATE, TTM_GETTOOLCOUNT)
F(1038,
(CBEM_SETEXTENDEDSTYLE, RB_GETROWHEIGHT, SB_ISSIMPLE, TB_ISBUTTONHIGHLIGHTED, TBM_GETPTI
F(1039, (SB_SETICON, TBM_GETTICPOS, TTM_GETCURRENTTOOLA))
F(1040, (RB_IDTOINDEX, SB_SETTIPTEXTA, TBM_GETNUMTICS, TTM_WINDOWFROMPOINT))
F(1041,
(RB_GETTOOLTIPS, SB_SETTIPTEXTW, TBM_GETSELSTART, TB_SETSTATE, TTM_TRACKACTIVATE))
F(1042,
(RB_SETTOOLTIPS, SB_GETTIPTEXTA, TB_GETSTATE, TBM_GETSELEND, TTM_TRACKPOSITION))
F(1043,
(RB_SETBKCOLOR, SB_GETTIPTEXTW, TB_ADDBITMAP, TBM_CLEARSEL, TTM_SETTIPBKCOLOR))
F(1044,
(RB_GETBKCOLOR, SB_GETICON, TB_ADDBUTTONSA, TBM_SETTICFREQ, TTM_SETTIPTEXTCOLOR))
F(1045, (RB_SETTEXTCOLOR, TB_INSERTBUTTONA, TBM_SETPAGESIZE, TTM_GETDELAYTIME))
F(1046, (RB_GETTEXTCOLOR, TB_DELETEBUTTON, TBM_GETPAGESIZE, TTM_GETTIPBKCOLOR))
F(1047, (RB_SIZETOEXT, TB_GETBUTTON, TBM_SETLINESIZE, TTM_GETTIPTEXTCOLOR))
F(1048, (RB_BEGINDRAG, TB_BUTTONCOUNT, TBM_GETLINESIZE, TTM_SETMAXTIPWIDTH))
F(1049, (RB_ENDDRAG, TB_COMMANDTOINDEX, TBM_GETTHUMBRECT, TTM_GETMAXTIPWIDTH))
F(1050, (RB_DRAGMOVE, TBM_GETCHANNELRECT, TB_SAVERESTOREA, TTM_SETMARGIN))
F(1051, (RB_GETBARHEIGHT, TB_CUSTOMIZE, TBM_SETTHUMBLENGTH, TTM_GETMARGIN))
F(1052, (RB_GETBANDINFOW, TB_ADDSTRINGA, TBM_GETTHUMBLENGTH, TTM_POP))
F(1053, (RB_GETBANDINFOA, TB_GETITEMRECT, TBM_SETTOOLTIPS, TTM_UPDATE))
F(1054,
(RB_MINIMIZEBAND, TB_BUTTONSTRUCTSIZE, TBM_GETTOOLTIPS, TTM_GETBUBBLESIZE))
F(1055, (RB_MAXIMIZEBAND, TBM_SETTIPSIDE, TB_SETBUTTONSIZE, TTM_ADJUSTRECT))
F(1056, (TBM_SETBUDDY, TB_SETBITMAPSIZE, TTM_SETTITLEA))
F(1057, (MSG_FTS_JUMP_VA, TB_AUTOSIZE, TBM_GETBUDDY, TTM_SETTITLEW))
F(1058, RB_GETBANDBORDERS)
F(1059, (MSG_FTS_JUMP_QWORD, RB_SHOWBAND, TB_GETTOOLTIPS))
F(1060, (MSG_REINDEX_REQUEST, TB_SETTOOLTIPS))
F(1061, (MSG_FTS_WHERE_IS_IT, RB_SETPALETTE, TB_SETPARENT))
F(1062, RB_GETPALETTE)
F(1063, (RB_MOVEBAND, TB_SETROWS))
F(1064, TB_GETROWS)
F(1065, TB_GETBITMAPFLAGS)
F(1066, TB_SETCMDID)
F(1067, (RB_PUSHCHEVRON, TB_CHANGEBITMAP))
F(1068, TB_GETBITMAP)
F(1069, (MSG_GET_DEFFONT, TB_GETBUTTONTEXTA))
F(1070, TB_REPLACEBITMAP)
F(1071, TB_SETINDENT)
F(1072, TB_SETIMAGELIST)

```



```

F(1073, TB_GETIMAGELIST)
F(1074, (TB_LOADIMAGES, EM_CANPASTE, TTM_ADDTOOLW))
F(1075, (EM_DISPLAYBAND, TB_GETRECT, TTM_DELTOOLW))
F(1076, (EM_EXGETSEL, TB_SETHOTIMAGELIST, TTM_NEWTOOLRECTW))
F(1077, (EM_EXLIMITTEXT, TB_GETHOTIMAGELIST, TTM_GETTOOLINFOW))
F(1078, (EM_EXLINEFROMCHAR, TB_SETDISABLEDIMAGELIST, TTM_SETTOOLINFOW))
F(1079, (EM_EXSETSEL, TB_GETDISABLEDIMAGELIST, TTM_HITTESTW))
F(1080, (EM_FINDTEXT, TB_SETSTYLE, TTM_GETTEXTW))
F(1081, (EM_FORMATRANGE, TB_GETSTYLE, TTM_UPDATETIPTEXTW))
F(1082, (EM_GETCHARFORMAT, TB_GETBUTTONSIZE, TTM_ENUMTOOLSW))
F(1083, (EM_GETEVENTMASK, TB_SETBUTTONWIDTH, TTM_GETCURRENTTOOLW))
F(1084, (EM_GETOLEINTERFACE, TB_SETMAXTEXTROWS))
F(1085, (EM_GETPARAFORMAT, TB_GETTEXTROWS))
F(1086, (EM_GETSELTEXT, TB_GETOBJECT))
F(1087, (EM_HIDESELECTION, TB_GETBUTTONINFOW))
F(1088, (EM_PASTESPECIAL, TB_SETBUTTONINFOW))
F(1089, (EM_REQUESTRESIZE, TB_GETBUTTONINFOA))
F(1090, (EM_SELECTIONTYPE, TB_SETBUTTONINFOA))
F(1091, (EM_SETBKGDNDCOLOR, TB_INSERTBUTTONW))
F(1092, (EM_SETCHARFORMAT, TB_ADDBUTTONSW))
F(1093, (EM_SETEVENTMASK, TB_HITTEST))
F(1094, (EM_SETOLECALLBACK, TB_SETDRAWTEXTFLAGS))
F(1095, (EM_SETPARAFORMAT, TB_GETHOTITEM))
F(1096, (EM_SETTARGETDEVICE, TB_SETHOTITEM))
F(1097, (EM_STREAMIN, TB_SETANCHORHIGHLIGHT))
F(1098, (EM_STREAMOUT, TB_GETANCHORHIGHLIGHT))
F(1099, (EM_GETTEXTRANGE, TB_GETBUTTONTEXTW))
F(1100, (EM_FINDWORDBREAK, TB_SAVERESTOREW))
F(1101, (EM_SETOPTIONS, TB_ADDSTRINGW))
F(1102, (EM_GETOPTIONS, TB_MAPACCELERATORA))
F(1103, (EM_FINDTEXTEX, TB_GETINSERTMARK))
F(1104, (EM_GETWORDBREAKPROCEX, TB_SETINSERTMARK))
F(1105, (EM_SETWORDBREAKPROCEX, TB_INSERTMARKHITTEST))
F(1106, (EM_SETUNDOLIMIT, TB_MOVEBUTTON))
F(1107, TB_GETMAXSIZE)
F(1108, (EM_REDO, TB_SETEXTENDEDSTYLE))
F(1109, (EM_CANREDO, TB_GETEXTENDEDSTYLE))
F(1110, (EM_GETUNDONAME, TB_GETPADDING))
F(1111, (EM_GETREDONAME, TB_SETPADDING))
F(1112, (EM_STOPGROUPTYPING, TB_SETINSERTMARKCOLOR))
F(1113, (EM_SETTEXTMODE, TB_GETINSERTMARKCOLOR))
F(1114, (EM_GETTEXTMODE, TB_MAPACCELERATORW))
F(1115, (EM_AUTOURLDETECT, TB_GETSTRINGW))
F(1116, (EM_GETAUTOURLDETECT, TB_GETSTRINGA))
F(1117, EM_SETPALETTE)
F(1118, EM_GETTEXTEX)
F(1119, EM_GETTEXTLENGTHEX)
F(1120, EM_SHOWSCROLLBAR)
F(1121, EM_SETTEXTEX)
F(1123, TAPI_REPLY)
F(1124,
(ACM_OPENA, BFFM_SETSTATUSTEXTA, CDM_GETSPEC, EM_SETPUNCTUATION, IPM_CLEARADDRESS, WM_CAF
F(1125,
(ACM_PLAY, BFFM_ENABLEOK, CDM_GETFILEPATH, EM_GETPUNCTUATION, IPM_SETADDRESS, PSM_SETCURS
F(1126,
(ACM_STOP, BFFM_SETSELECTIONA, CDM_GETFOLDERPATH, EM_SETWORDWRAPMODE, IPM_GETADDRESS, PSM
F(1127,
(ACM_OPENW, BFFM_SETSELECTIONW, CDM_GETFOLDERIDLIST, EM_GETWORDWRAPMODE, IPM_SETRANGE, PS
F(1128,
(BFFM_SETSTATUSTEXTW, CDM_SETCONTROLTEXT, EM_SETIMECOLOR, IPM_SETFOCUS, PSM_CHANGED, UDM_
F(1129,
(CDM_HIDECONTROL, EM_GETIMECOLOR, IPM_ISBLANK, PSM_RESTARTWINDOWS, UDM_SETBUDDY))
F(1130, (CDM_SETDEFEXT, EM_SETIMEOPTIONS, PSM_REBOOTSYSTEM, UDM_GETBUDDY))
F(1131, (EM_GETIMEOPTIONS, PSM_CANCELTOCLOSE, UDM_SETACCEL))
F(1132, (EM_CONVPOSITION, EM_CONVPOSITION, PSM_QUERYIBLINGS, UDM_GETACCEL))
F(1133, (MCIWNDM_GETZOOM, PSM_UNCHANGED, UDM_SETBASE))

```



```

F(1134, (PSM_APPLY, UDM_GETBASE))
F(1135, (PSM_SETTITLEA, UDM_SETRANGE32))
F(1136, (PSM_SETWIZBUTTONS, UDM_GETRANGE32, WM_CAP_DRIVER_GET_NAMEW))
F(1137, (PSM_PRESSBUTTON, UDM_SETPOS32, WM_CAP_DRIVER_GET_VERSIONW))
F(1138, (PSM_SETCURSELID, UDM_GETPOS32))
F(1139, PSM_SETFINISHTEXTA)
F(1140, PSM_GETTABCONTROL)
F(1141, PSM_ISDIALOGMESSAGE)
F(1142, (MCIWNDM_REALIZE, PSM_GETCURRENTPAGEHWND))
F(1143, (MCIWNDM_SETTIMEFORMATA, PSM_INSERTPAGE))
F(1144,
(EM_SETLANGOPTIONS, MCIWNDM_GETTIMEFORMATA, PSM_SETTITLEW, WM_CAP_FILE_SET_CAPTURE_FILE
F(1145,
(EM_GETLANGOPTIONS, MCIWNDM_VALIDATEMEDIA, PSM_SETFINISHTEXTW, WM_CAP_FILE_GET_CAPTURE_
F(1146, EM_GETIMECOMPMode)
F(1147, (EM_FINDTEXTW, MCIWNDM_PLAYTO, WM_CAP_FILE_SAVEASW))
F(1148, (EM_FINDTEXTW, MCIWNDM_GETFILENAMEA))
F(1149,
(EM_RECONVERSION, MCIWNDM_GETDEVICEA, PSM_SETHEADERTITLEA, WM_CAP_FILE_SAVEDIBW))
F(1150, (EM_SETIMEMODEBIAS, MCIWNDM_GETPALETTE, PSM_SETHEADERTITLEW))
F(1151, (EM_SETIMEMODEBIAS, MCIWNDM_SETPALETTE, PSM_SETHEADERSUBTITLEA))
F(1152, (MCIWNDM_GETERRORA, PSM_SETHEADERSUBTITLEW))
F(1153, PSM_HWNDTOINDEX)
F(1154, PSM_INDEXTOHWND)
F(1155, (MCIWNDM_SETINACTIVETIMER, PSM_PAGETOINDEX))
F(1156, PSM_INDEXTOPAGE)
F(1157, (DL_BEGINDRAG, MCIWNDM_GETINACTIVETIMER, PSM_IDTOINDEX))
F(1158, (DL_DRAGGING, PSM_INDEXTOID))
F(1159, (DL_DROPPED, PSM_GETRESULT))
F(1160, (DL_CANCELDRAG, PSM_RECALCPAGESIZES))
F(1164, MCIWNDM_GET_SOURCE)
F(1165, MCIWNDM_PUT_SOURCE)
F(1166, MCIWNDM_GET_DEST)
F(1167, MCIWNDM_PUT_DEST)
F(1168, MCIWNDM_CAN_PLAY)
F(1169, MCIWNDM_CAN_WINDOW)
F(1170, MCIWNDM_CAN_RECORD)
F(1171, MCIWNDM_CAN_SAVE)
F(1172, MCIWNDM_CAN_EJECT)
F(1173, MCIWNDM_CAN_CONFIG)
F(1174, (IE_GETINK, MCIWNDM_PALETTEKICK))
F(1175, IE_SETINK)
F(1176, IE_GETPENTIP)
F(1177, IE_SETPENTIP)
F(1178, IE_GETERASERTIP)
F(1179, IE_SETERASERTIP)
F(1180, IE_GETBKGND)
F(1181, IE_SETBKGND)
F(1182, IE_GETGRIDORIGIN)
F(1183, IE_SETGRIDORIGIN)
F(1184, IE_GETGRIDPEN)
F(1185, IE_SETGRIDPEN)
F(1186, IE_GETGRIDSZ)
F(1187, IE_SETGRIDSZ)
F(1188, IE_GETMODE)
F(1189, IE_SETMODE)
F(1190, (IE_GETINKRECT, WM_CAP_SET_MCI_DEVICEW))
F(1191, WM_CAP_GET_MCI_DEVICEW)
F(1204, WM_CAP_PAL_OPENW)
F(1205, WM_CAP_PAL_SAVEW)
F(1208, IE_GETAPPDATA)
F(1209, IE_SETAPPDATA)
F(1210, IE_GETDRAWOPTS)
F(1211, IE_SETDRAWOPTS)
F(1212, IE_GETFORMAT)
F(1213, IE_SETFORMAT)

```

```

F(1214, IE_GETINKINPUT)
F(1215, IE_SETINKINPUT)
F(1216, IE_GETNOTIFY)
F(1217, IE_SETNOTIFY)
F(1218, IE_GETRECOG)
F(1219, IE_SETRECOG)
F(1220, IE_GETSECURITY)
F(1221, IE_SETSECURITY)
F(1222, IE_GETSEL)
F(1223, IE_SETSEL)
F(1224, (EM_SETBIDIOptions, IE_DOCommand, MCIWDM_NOTIFYMODE))
F(1225, (EM_GETBIDIOptions, IE_GETCommand))
F(1226, (EM_SETTYPOGRAPHYOptions, IE_GETCOUNT))
F(1227, (EM_GETTYPOGRAPHYOptions, IE_GETGESTURE, MCIWDM_NOTIFYMEDIA))
F(1228, (EM_SETEDITSTYLE, IE_GETMENU))
F(1229, (EM_GETEDITSTYLE, IE_GETPAINTDC, MCIWDM_NOTIFYERROR))
F(1230, IE_GETPDEVENT)
F(1231, IE_GETSELCOUNT)
F(1232, IE_GETSELITEMS)
F(1233, IE_GETSTYLE)
F(1243, MCIWDM_SETTIMEFORMATW)
F(1244, (EM_OUTLINE, MCIWDM_GETTIMEFORMATW))
F(1245, EM_GETSCROLLPOS)
F(1246, (EM_SETSCROLLPOS, EM_SETSCROLLPOS))
F(1247, EM_SETFONTSIZE)
F(1248, (EM_GETZOOM, MCIWDM_GETFILENAMEW))
F(1249, (EM_SETZOOM, MCIWDM_GETDEVICEW))
F(1250, EM_GETVIEWKIND)
F(1251, EM_SETVIEWKIND)
F(1252, (EM_GETPAGE, MCIWDM_GETERRORW))
F(1253, EM_SETPAGE)
F(1254, EM_GETHYPHENATEINFO)
F(1255, EM_SETHYPHENATEINFO)
F(1259, EM_GETPAGEROTATE)
F(1260, EM_SETPAGEROTATE)
F(1261, EM_GETCTFMODEBIAS)
F(1262, EM_SETCTFMODEBIAS)
F(1264, EM_GETCTFOPENSTATUS)
F(1265, EM_SETCTFOPENSTATUS)
F(1266, EM_GETIMECOMPTXT)
F(1267, EM_ISIME)
F(1268, EM_GETIMEPROPERTY)
F(1293, EM_GETQUERYRTFOBJ)
F(1294, EM_SETQUERYRTFOBJ)
F(1536, FM_GETFOCUS)
F(1537, FM_GETDRIVEINFOA)
F(1538, FM_GETSELCOUNT)
F(1539, FM_GETSELCOUNTLFN)
F(1540, FM_GETFILESELA)
F(1541, FM_GETFILESELLFNA)
F(1542, FM_REFRESH_WINDOWS)
F(1543, FM_RELOAD_EXTENSIONS)
F(1553, FM_GETDRIVEINFOW)
F(1556, FM_GETFILESELW)
F(1557, FM_GETFILESELLFNW)
F(1625, WLX_WM_SAS)
F(2024, (SM_GETSELCOUNT, UM_GETSELCOUNT, WM_CPL_LAUNCH))
F(2025, (SM_GETSERVERSELA, UM_GETUSERSELA, WM_CPL_LAUNCHED))
F(2026, (SM_GETSERVERSELW, UM_GETUSERSELW))
F(2027, (SM_GETCURFOCUS, UM_GETGROUPSELA))
F(2028, (SM_GETCURFOCUSW, UM_GETGROUPSELW))
F(2029, (SM_GETOPTIONS, UM_GETCURFOCUS))
F(2030, UM_GETCURFOCUSW)
F(2031, UM_GETOPTIONS)
F(2032, UM_GETOPTIONS2)
F(4096, LVM_GETBKCOLOR)

```

F(4097, LVM\_SETBKCOLOR)  
F(4098, LVM\_GETIMAGELIST)  
F(4099, LVM\_SETIMAGELIST)  
F(4100, LVM\_GETITEMCOUNT)  
F(4101, LVM\_GETITEMA)  
F(4102, LVM\_SETITEMA)  
F(4103, LVM\_INSERTITEMA)  
F(4104, LVM\_DELETEITEM)  
F(4105, LVM\_DELETEALLITEMS)  
F(4106, LVM\_GETCALLBACKMASK)  
F(4107, LVM\_SETCALLBACKMASK)  
F(4108, LVM\_GETNEXTITEM)  
F(4109, LVM\_FINDITEMA)  
F(4110, LVM\_GETITEMRECT)  
F(4111, LVM\_SETITEMPOSITION)  
F(4112, LVM\_GETITEMPOSITION)  
F(4113, LVM\_GETSTRINGWIDTHA)  
F(4114, LVM\_HITTEST)  
F(4115, LVM\_ENSUREVISIBLE)  
F(4116, LVM\_SCROLL)  
F(4117, LVM\_REDRAWITEMS)  
F(4118, LVM\_ARRANGE)  
F(4119, LVM\_EDITLABELA)  
F(4120, LVM\_GETEDITCONTROL)  
F(4121, LVM\_GETCOLUMNA)  
F(4122, LVM\_SETCOLUMNA)  
F(4123, LVM\_INSERTCOLUMNA)  
F(4124, LVM\_DELETECOLUMN)  
F(4125, LVM\_GETCOLUMNWIDTH)  
F(4126, LVM\_SETCOLUMNWIDTH)  
F(4127, LVM\_GETHEADER)  
F(4129, LVM\_CREATEDRAGIMAGE)  
F(4130, LVM\_GETVIEWRECT)  
F(4131, LVM\_GETTEXTCOLOR)  
F(4132, LVM\_SETTEXTCOLOR)  
F(4133, LVM\_GETTEXTBKCOLOR)  
F(4134, LVM\_SETTEXTBKCOLOR)  
F(4135, LVM\_GETTOPINDEX)  
F(4136, LVM\_GETCOUNTPERPAGE)  
F(4137, LVM\_GETORIGIN)  
F(4138, LVM\_UPDATE)  
F(4139, LVM\_SETITEMSTATE)  
F(4140, LVM\_GETITEMSTATE)  
F(4141, LVM\_GETITEMTEXTA)  
F(4142, LVM\_SETITEMTEXTA)  
F(4143, LVM\_SETITEMCOUNT)  
F(4144, LVM\_SORTITEMS)  
F(4145, LVM\_SETITEMPOSITION32)  
F(4146, LVM\_GETSELECTEDCOUNT)  
F(4147, LVM\_GETITEMSPACING)  
F(4148, LVM\_GETISEARCHSTRINGA)  
F(4149, LVM\_SETICONSPACING)  
F(4150, LVM\_SETEXTENDEDLISTVIEWSTYLE)  
F(4151, LVM\_GETEXTENDEDLISTVIEWSTYLE)  
F(4152, LVM\_GETSUBITEMRECT)  
F(4153, LVM\_SUBITEMHITTEST)  
F(4154, LVM\_SETCOLUMNORDERARRAY)  
F(4155, LVM\_GETCOLUMNORDERARRAY)  
F(4156, LVM\_SETHOTITEM)  
F(4157, LVM\_GETHOTITEM)  
F(4158, LVM\_SETHOTCURSOR)  
F(4159, LVM\_GETHOTCURSOR)  
F(4160, LVM\_APPROXIMATEVIEWRECT)  
F(4161, LVM\_SETWORKAREAS)  
F(4162, LVM\_GETSELECTIONMARK)  
F(4163, LVM\_SETSELECTIONMARK)

F(4164, LVM\_SETBKIMAGEA)  
F(4165, LVM\_GETBKIMAGEA)  
F(4166, LVM\_GETWORKAREAS)  
F(4167, LVM\_SETHOVERTIME)  
F(4168, LVM\_GETHOVERTIME)  
F(4169, LVM\_GETNUMBEROFWORKAREAS)  
F(4170, LVM\_SETTOOLTIPS)  
F(4171, LVM\_GETITEMW)  
F(4172, LVM\_SETITEMW)  
F(4173, LVM\_INSERTITEMW)  
F(4174, LVM\_GETTOOLTIPS)  
F(4179, LVM\_FINDITEMW)  
F(4183, LVM\_GETSTRINGWIDTHW)  
F(4191, LVM\_GETCOLUMNW)  
F(4192, LVM\_SETCOLUMNW)  
F(4193, LVM\_INSERTCOLUMNW)  
F(4211, LVM\_GETITEMTEXTW)  
F(4212, LVM\_SETITEMTEXTW)  
F(4213, LVM\_GETISEARCHSTRINGW)  
F(4214, LVM\_EDITLABELW)  
F(4235, LVM\_GETBKIMAGEW)  
F(4236, LVM\_SETSELECTEDCOLUMN)  
F(4237, LVM\_SETTILEWIDTH)  
F(4238, LVM\_SETVIEW)  
F(4239, LVM\_GETVIEW)  
F(4241, LVM\_INSERTGROUP)  
F(4243, LVM\_SETGROUPINFO)  
F(4245, LVM\_GETGROUPINFO)  
F(4246, LVM\_REMOVEGROUP)  
F(4247, LVM\_MOVEGROUP)  
F(4250, LVM\_MOVEITEMTOGROUP)  
F(4251, LVM\_SETGROUPMETRICS)  
F(4252, LVM\_GETGROUPMETRICS)  
F(4253, LVM\_ENABLEGROUPVIEW)  
F(4254, LVM\_SORTGROUPS)  
F(4255, LVM\_INSERTGROUPSORTED)  
F(4256, LVM\_REMOVEALLGROUPS)  
F(4257, LVM\_HASGROUP)  
F(4258, LVM\_SETTILEVIEWINFO)  
F(4259, LVM\_GETTILEVIEWINFO)  
F(4260, LVM\_SETTILEINFO)  
F(4261, LVM\_GETTILEINFO)  
F(4262, LVM\_SETINSERTMARK)  
F(4263, LVM\_GETINSERTMARK)  
F(4264, LVM\_INSERTMARKHITTEST)  
F(4265, LVM\_GETINSERTMARKRECT)  
F(4266, LVM\_SETINSERTMARKCOLOR)  
F(4267, LVM\_GETINSERTMARKCOLOR)  
F(4269, LVM\_SETINFOTIP)  
F(4270, LVM\_GETSELECTEDCOLUMN)  
F(4271, LVM\_ISGROUPVIEWENABLED)  
F(4272, LVM\_GETOUTLINECOLOR)  
F(4273, LVM\_SETOUTLINECOLOR)  
F(4275, LVM\_CANCELEDITLABEL)  
F(4276, LVM\_MAPINDEXTOID)  
F(4277, LVM\_MAPIDTOINDEX)  
F(4278, LVM\_ISITEMVISIBLE)  
F(8192, OCM\_\_BASE)  
F(8197, LVM\_SETUNICODEFORMAT)  
F(8198, LVM\_GETUNICODEFORMAT)  
F(8217, OCM\_CTLCOLOR)  
F(8235, OCM\_DRAWITEM)  
F(8236, OCM\_MEASUREITEM)  
F(8237, OCM\_DELETEITEM)  
F(8238, OCM\_VKEYTOITEM)  
F(8239, OCM\_CHARTOITEM)

```

F(8249, OCM_COMPAREITEM)
F(8270, OCM_NOTIFY)
F(8465, OCM_COMMAND)
F(8468, OCM_HSCROLL)
F(8469, OCM_VSCROLL)
F(8498, OCM_CTLCOLORMSGBOX)
F(8499, OCM_CTLCOLOREDIT)
F(8500, OCM_CTLCOLORLISTBOX)
F(8501, OCM_CTLCOLORBTN)
F(8502, OCM_CTLCOLORDLG)
F(8503, OCM_CTLCOLORSCROLLBAR)
F(8504, OCM_CTLCOLORSTATIC)
F(8720, OCM_PARENTNOTIFY)
F(32768, WM_APP)
F(52429, WM_RASDIALEVENT)
}
#undef F
return 0;
}

std::string id2str(int id){
    auto*p=id2str_impl(id);
    return p?p:"unk("+std::to_string(id)+")";
}

int main(){
    std::cout << "id2str(512) == " << id2str(512) << std::endl;
}

```

diff (compared to [https://wiki.winehq.org/List Of Windows Messages](https://wiki.winehq.org/List_Of_Windows_Messages)):  
<https://www.diffchecker.com/VvLzYadB>

Share Improve this answer Follow

edited Oct 3, 2020 at 11:51

answered Oct 2, 2020 at 23:36



Adler

79 1 7