Basics

WinSight gives you debugging information about window classes, windows, and messages. Using WinSight, you can study how any application creates classes and windows and monitor how windows send and receive messages.

WinSight uses three views to study applications:

- Window Tree view
- Class List view
- Message Trace view

WinSight is a passive observer: it intercepts and displays information about messages but does not prevent messages from getting to applications.

To watch windows sending and receiving messages, you can use WinSight to do the following:

- Find the window(s) you want to watch
- Trace the messages that get sent

What you need to know to begin using WinSight

Choose one of these topics for more information:

Getting Started

Messages WinSight Tracks

WinSight Views

Tasks

Choose one of these topics for information about using WinSight:

Getting Started

To start WinSight, double-click the WinSight icon.

The first time you start WinSight, it displays the Window Tree view.

When you exit, WinSight saves your configuration. If you open all three views and exit WinSight, the next time you start it, all three views will be displayed.

Using the Mouse with WinSight

Here is a list of actions with mouse and menu equivalents.

Action	With the mouse	With menus
Select an item	Click	
Select multiple items	Ctrl+click	
Toggle highlighted item		Shift+click
Show details of item	Double-click	Spy|Open Detail
Expand one level	Click on <+>	Tree|Expand One Level
Expand branch	Right-click on <+>	Tree|Expand Branch
Collapse branch	Click on <->	Tree|CollapseBranch

You can also use the mouse to resize the WinSight window or the panes.

Using the keyboard with WinSight

Here is a list of actions with keyboard and menu equivalents.

Action	With the keyboard	With menus
Select an item	Up or Down arrow	
Select multiple items	Ctrl+Shift Up or Down arrow	
Move selection bar	Ctrl+Up or Down arrow	
Toggle highlighted item		Spacebar
Expand one level	+	Tree|Expand One LevelTExpandOneLevel
Expand branch	*	Tree|Expand BranchTExpandBranch
Expand tree completely	Ctrl+*	Tree|Expand AllTExpandAll
Collapse branch	-	Tree|Collapse Branch

The right and left arrows scroll horizontally.

Use Tab or F6 to move the focus between panes. Use Shift+Tab or Shift+F6 to switch the focus in the opposite direction.

Using WinSight

WinSight gives you debugging information about window classes, windows, and messages. You can study how any application creates classes and windows, and monitor how windows send and receive messages.

WinSight uses three views to study applications:

- Window Tree view
- Class List view
- Message Trace view

WinSight is a passive observer: it intercepts and displays information about messages but does not prevent messages from getting to applications.

To watch Windows sending and receiving messages, you can use WinSight to

- Find the window(s) you want to watch
- Trace the messages that get sent.

Note: WinSight 16 (WINSIGHT.EXE) supports 16-bit Windows systems and WinSight 32 (WS32.EXE) supports 32-bit Windows systems.

Find Window Mode

Find Window mode allows you to monitor how specific windows send and receive messages. To enter Find Window mode choose Spy|Find Window.

Note: All other applications are suspended while you are in Find Window mode.

Selecting Windows

In Find Window mode, you can select windows in one of two ways:

- Move the mouse into the boundaries of a window object. A thick border appears around that window object, and the corresponding window name is highlighted in the Window Tree view.
- Use the cursor keys to select windows from the Window Tree view. When you hightlight a window name, WinSight puts a thick border around the corresponding window object.

To leave Find Window mode, click the mouse button, or press Escape. This removes the border from the screen but leaves the current window selected in the Window Tree view.

If you press Enter or double-click the highlighted window in the Window Tree view, you will see the Detail window.

Note: In WinSight 32 (WS32.EXE), you must use the up and down arrow keys to highlight a window when you are in Find Window mode. Select a window in the Window Tree view, then use the arrow keys to move through the Window Tree. The windows you select in the Window Tree will be outlined as you move through the tree.

Tracing Messages

When you monitor how windows or classes send and receive messages, you are tracing the patterns of these messages.

By default WinSight traces all messages and displays them in the Message Trace view.

You can trace messages in one of three ways:

- Choose Messages|Selected Classes or Messages|Selected Windows, then shift-click to select the classes (in the Class List view) or windows (in the Window Tree view) you want to trace.
- Choose Messages|All Windows to select all the messages sent to windows.
- Choose Messages|Options, then select any or all of the ten groups of messages.

Choose Stop! or Messages|Trace Off to control when WinSight stops tracing messages. The Message Trace view remains visible.

To resume tracing, choose one of the following menu commands:

- Start!
- Messages|Selected Classes
- Messages|Selected Windows
- Messages|All Windows

WinSight menu commands

Here is a list of the menus and menu commands in WinSight. The menus are listed in the order they appear.

Spy Menu

    Open Detail

    Find Window

    Follow Focus (WS32.EXE only)

    Switch To (WS32.EXE only)

    Exit

View Menu

    Class List

    Window Tree

    Message Trace

    Split Horizontal

    Split Vertical

Tree Menu

    Expand One Level

    Expand Branch

    Expand All

    Collapse Branch

Messages Menu

    Trace Off

    Selected Classes

    Selected Windows

    All Windows

    Clear

    Options...

    Processes... (WS32.EXE only)

Stop! and Start!

Help Menu

    Index

    Finding Windows

    Tracing Messages

    Menu Commands

    Keyboard

    Mouse

    Using Help

    About WinSight

Spy Menu

Use the Spy menu to display more details for a window, locate the window for which you want to trace messages, or exit WinSight.

The Spy menu commands are:

Open Detail

Find Window

Follow Focus (WS32.EXE only)

Switch To (WS32.EXE only)

Exit

Spy | Open Detail

Choose Spy|Open Detail to display more detail about the selected class or window.

Use this command to open the <u>Detail window</u>. The information in the window depends on the current active view, indicated by the dotted rectangle.

Spy | Find Window

Choose Spy|Find Window to locate the window for which you want to trace messages. Use this command to enter <u>Find Window mode</u>.

Note: In WinSight 32 (WS32.EXE), you must use the up and down arrow keys to highlight a window when you are in Find Window mode. Select a window in the Window Tree view, then use the arrow keys to move through the Window Tree. The windows you select in the Window Tree will be outlined as you move through the tree.

Spy | Follow Focus

You use the Follow Focus command to easily select the window you want to monitor in the Window Tree view. Follow Focus is available only in WinSight 32 (WS32.EXE).

To use Follow Focus:

1. Choose Follow Focus from the Spy menu.
2. Click on the window you want to monitor; WinSight highlights that window in the Window Tree view.

   When you click on a window, that window gains focus. If the window you click on covers the WinSight display, click on the title bar of WinSight to view the Window Tree view.

Follow Focus stays active until you toggle it off via the Spy menu.

Spy | Switch To

The Switch To command gives focus to the window that you select in the Window Tree view. Switch To is available only in WinSight 32 (WS32.EXE).

To use Switch To:

1. Select (highlight) the window you want to give focus to in the Window Tree view of WinSight.

2. Choose Switch To from the Spy menu.

Spy | Exit

Choose Spy|Exit to exit WinSight.

View Menu

Choose the View menu to select a <u>view</u> and how WinSight displays it, either horizontally or vertically.

The View commands are:

<u>Class List</u>

<u>Window Tree</u>

<u>Message Trace</u>

<u>Split Horizontal</u>

<u>Split Vertical</u>

WinSight Views

WinSight can display three views within its main window:

- Class List
- Window Tree
- Message Trace

The Window Tree view is the initial default view, but you can use the View menu to open or close any of these views.

When you exit WinSight, WinSight saves your current desktop configuration.

WinSight automatically tiles the views within the main window, however, you can resize them.

View | Class List

Choose the View|Class List command to display the <u>Class List view.</u>

If the Class List view is displayed, choosing this command hides the view.

Note: The term "class" refers to the class name with which the window class was registered with Windows via the RegisterClass API function. It does not refer to C++ classes.

Class List View

The Class List view displays all the currently registered window classes.

The format for the classes in the Class List view is:

`Class (Module) Function Styles`

You can see more information about a window class in the Detail window by doing one of the following:

- Double-clicking the window class in the Class List view.
- Selecting the window class and press Enter.
- Selecting the window class and choose Spy|Open Detail.

View | Window Tree

Choose View|Window Tree to display the <u>Window Tree view.</u>

If the Window Tree view is displayed, choosing this command hides the view.

Window Tree View

The Window Tree view displays the hierarchy of windows on the desktop.

Use this display to do the following:

- Determine what windows are actually present.
- See the status of windows, including hidden windows.
- See which windows are receiving messages.
- Select the windows you want to trace messages for.

The format for the classes in the Window Tree view is:

`Tree` `Handle` `{Class}` `Module` `Position` `"Title"`

You can see more information about a window in the Detail window by doing one of the following:

- Double-click the window item in the view.
- Select the window item and press Enter.
- Select the window item and choose Spy|Open Detail.

Detail Window

The Detail window displays the class name, executable module, and other information about the selected window or class.

View | Message Trace

Choose the View|Message Trace command to display the <u>Message Trace view.</u>

If the Message Trace view is displayed, choosing this command hides the view.

Message Trace View

The Message Trace view displays information about messages received by selected windows or windows classes.

SendMessage messages are shown twice, once when they are sent and again when they return.

Dispatched messages are shown only once, since their return value is meaningless. The message display is indented to show how messages are nested within other messages.

The format for the messages in the Message Trace window is:

<u>Handle</u> <u>"Title"</u>-or-<u>{Class}</u> <u>Message</u> <u>Status</u> <u>...</u>

Win32 Messages

Winsight checks if the task whose messages are being traced is a Win32 task. If so, it displays **[Win32]** immediately after the window handle on traced messages. These messages, however, are displayed in Win16 message format.

WS32 response time

WS32.EXE also displays the symbols + and * to denote the following:

- * means that WS32.EXE was too slow to catch all the messages
- \+ means a time out occurred in the hook procedure

The HookTimeOut setting in the WinSight.INI file (located in your Windows directory) denotes the time out for the WinSight hook procedure in milliseconds. If you set `HookTimeOut = 1000` (the default), WinSight will time out for 1 second between messages. If you decrease the value of this setting, WinSight will respond faster, at the risk of loosing messages. Increasing this setting will slow down WinSight, but will increase the chance that it will catch all messages.

View | Split Horizontal

Choose View|Split Horizontal to stack the <u>views</u> on top of one another.

View | Split Vertical

Choose View|Split Vertical to display the <u>views</u> side by side.

Class

The name of the window class.

Some predefined Windows classes have numeric names and are shown with the number and a name.

Module
The name of the executable module (.EXE or .DLL) that registered the class or created the window.

Function
The address of the class window function.

Styles

A list of the CS_ styles for the class. The names are the same as the CS_ definitions in WinTypes, except that the CS_ is removed and the name is in mixed case.

Tree

The lines and diamonds on the left of the view show the window tree structure. Each window is connected to its parent, siblings, and children.

Handle
The window handle returned by CreateWindow.

Position

The window's position.

If the window is hidden, the text "(hidden)" is displayed.

If the window is visible, the window coodinates are given as (xBegin,yBegin)-(xEnd,yEnd). Top-level windows use their own screen coordinates. Child windows use coordinates within the parent window client area.

Title

The window title or text, returned by GetWindowText or a WM_GETTEXT message. If the title is the null string, the quotation marks are omitted.

If the title is a null string in the Message Trace window, the class name is displayed in curly braces.

Message

The message name defined in WINDOWS.H.

Known undocumented Windows messages are shown in lower case.

Unknown message numbers (user-defined) are shown in one of the following formats:

- WM_USER+0xXXXX if they are greater than or equal to WM_USER
- WM_0xXXXX if they are less than WM_USER.

Registered message numbers (from RegisterWindowsMessage) are shown with their registered name in single quotation marks.

Status

One or more of the following items may be reported:

Dispatched	The message was received via DispatchMessage
Sent [from XXXX]	The message was received via SendMessage. If it was sent from another window, "from XXXX" gives that window's handle. If it was sent from the same window receiving it, this is shown with "from self." If it was sent from Windows itself, the "from" phrase is omitted.
Returns	The message was received via SendMessage and is now returning.

...
 Additional information specific to each message.

If a "returning message", the return value, either in numeric form, or more specific information for messages such as WM_GETTEXT.

If a "sent and dispatched message", the message parameters. WinSight interprets the parameters to give a readable display. If a message has associated data structures, those structures are included in the display.

Tree Menu

Choose the Tree menu to display, expand, or collapse window entries in the <u>Window Tree view.</u>

The diamonds on the left of the Class List and Window Tree windows invert color momentarily when the window receives a message. They also show if the window class has any children:

◇   The window has no children.

⬦   The window has children, but they are hidden. To expand and see the children, click on the diamond, or select the window and press

⬦. To expand to show all levels of child windows, select a window and right-click.

▪   The window has children, and they are visible. To hide the children again, click the diamond, or select the parent window and press

▪.

The Tree menu commands are:

<u>Expand One Level</u>

<u>Expand Branch</u>

<u>Expand All</u>

<u>Collapse Branch</u>

Tree | Expand One Level (+)

Choose Tree|Expand One Level to expand an entry one level in the <u>Window Tree view.</u>

A plus sign in the diamond (⬦) next to an entry indicates that the window has children, but they are hidden.

Tree | Expand Branch (*)

Choose Tree|Expand Branch to expand an entire branch in the <u>Window Tree view.</u>

A plus sign in the diamond (⬦) next to an entry indicates that the window has children, but they are hidden.

Tree | Expand All (Ctrl+*)

Choose Tree|Expand All to expand all branches that are collapsed in the Window Tree view.

A plus sign in the diamond (⬥) next to an entry indicates that the window has children, but they are hidden.

Tree | Collapse Branch (-)

Choose Tree|Collapse Branch to collapse an entire branch in the <u>Window Tree view.</u>

A minus sign in the diamond (▪) next to an entry indicates that the window's children are currently hidden. Tree|<u>Expand All</u>

Tree|<u>Expand Branch</u>
Tree|<u>Expand One Level</u>

Messages menu

Choose the Messages menu to select the types of messages you want to trace for the selected window(s).

You can configure WinSight to trace messages by:

- Window
- Window class
- Message type
- A combination of these

The Messages menu commands are:

Trace Off

Selected Classes (16-bit WinSight only)

Selected Windows

All Windows

Clear

Options...

Processes,,,

Messages | Trace off

Choose Messages|Trace Off to turn off message tracing. The <u>Message Trace view</u> remains visible.

Tracing resumes when you choose one of the following menu commands:

- Messages|<u>Selected Classes</u>
- Messages|<u>Selected Windows</u>
- Messages|<u>All Windows</u>

You can also use <u>Stop!</u> to turn off message tracing.

Messages | Selected classes

Choose Messages|Selected Classes to trace messages going to a particular class.

This command is available in only WINSIGHT.EXE (the 16-bit WinSight) after you have selected a class in the Class List view.

Changing the selection in the Class List view will immediately change which windows have messages traced.

Choose Messages|Selected Classes to open the Message Trace view when it is hidden.

Messages | Selected windows

Choose Messages|Selected Windows to trace messages going to a particular window.

This command is active only if you select a window in the <u>Window Tree view.</u>

Changing the selection in the Window Tree view will immediately change which windows have messages traced.

Choose Messages|Selected Windows to open the <u>Message Trace view</u> when it is hidden.

Messages | All windows

Choose Messages|All Windows to trace all messages, regardless of what is selected in the Window Tree view or the Class List view.

Choose Windows|All Windows to open the Message Trace view when it is hidden.

Messages | Clear

Choose Messages|Clear to clear all messages in the Message Trace view.

Messages | Options...

Choose Messages|Options... to open the Message Trace Options dialog box.

Use the Messages Trace Options dialog box to choose the types of messages you want to trace.

Tip: For best performance, choose <u>Stop!</u> before you choose the Options command.

Messages to Trace check boxes

Use the <u>Messages to Trace check boxes</u> and the Individual Messages List Box to specify which messages to trace.

Interpret and Hex Values check boxes

Use the <u>Interpret Value, Hex Value, and Show Times checkboxes</u> to determine the message display format.

Log File check box

Use the <u>Log File check box</u> to log traced messages.

Messages | Processes...

Choose the Processes command to display the Trace Process Messages dialog box. You can use this dialog box to select the processes whose messages you want to track:

- Highlight the specific procsses you want to monitor, then choose OK.
- Check All Processes if you want to monitor all running processes.
- Check New Processes if you want to monitor new processes as you start them.

Tip: For best performance, choose <u>Stop!</u> before you choose the Processes command.

Note: The Processes command is available only in WinSight 32 (WS32.EXE).

Messages to Trace checkboxes

Use the Messages to Trace check boxes on the Message Trace Options dialog box to choose the types of messages to trace.

You can configure WinSight to trace any of the following:

- All messages
- Subgroups of messages
- Individual messages
- A combination of groups and individual messages

All Messages

The All Messages checkbox allows you to select or deselect all ten subgroups of messages.

When All Messages is selected, all messages in the Individual Messages Display Box are highlighted. The All Messages checkbox is dimmed when the list box is used to either select or deselect an individual message.

Message Subgroups

To select specific types of messages, uncheck All Messages and check individual message groups. Checking the All Messages checkbox also turns on these checkboxes. Unchecking the All Messages checkbox turns off previously selected subgroup checkboxes.

When a subgroup is selected, the messages in that subgroup are highlighted in the Individual Messages Display Box. The subgroup checkbox is dimmed when the list box is used to either select or deselect an individual message in that group.

"Other" checkbox

The "Other" checkbox allows tracing of all messages that WinSight does not know about, such as unknown WM_USER+xxxx and registered messages. This checkbox must be on for these messages to be traced. Checking the All Messages checkbox also turns on this checkbox.

Individual Messages list box

The Individual Messages List Box displays all of the messages that WinSight knows about. It is here that individual messages are selected or deselected. The All Messages checkbox and corresponding subgroup checkboxes are dimmed to indicate when individual messages are selected or deselected.

Messages WinSight tracks

The messages that WinSight tracks are listed under the following group headings.

Click a group to see the corresponding list of messages tracked by WinSight.

Mouse

Window

Input

System

Pen

Initialization

Clipboard

DDE

Non Client

Control

MultiMedia

Common controls (WS32.EXE only)

Other

Interpret Value, Hex Value, and Show Times checkboxes

The Interpret and Hex Values check boxes determine the format of the Message Trace view display.

Check the Interpret Values checkbox to interpret message parameters and return values in a readable format.

Check the Hex Values checkbox to display message parameters as Hex Values of wParam and lParam, and also return Values as Hex.

Check the Show Times (WS32.EXE only) to display a timestmap with each message.

Log File checkbox

Check Log File to log trace messages to a file.

Enter a file name in the input box below the check box. If the file already exists, messages are appended to the end of the file.

To stop logging messages to the file, turn off the Log File check box.

Mouse messages

Check Mouse on the Message Trace Options dialog box to trace mouse messages.

The mouse messages that WinSight traces are:

WM_HSCROLL
WM_LBUTTONDBLCLK
WM_LBUTTONDOWN
WM_LBUTTONUP
WM_MBUTTONDBLCLK
WM_MBUTTONDOWN
WM_MBUTTONUP
WM_MOUSEACTIVATE
WM_MOUSEMOVE
WM_RBUTTONDBLCLK
WM_RBUTTONDOWN
WM_RBUTTONUP
WM_SETCURSOR
WM_VSCROLL

Window messages

Check Window on the Message Trace Options dialog box to trace window messages.

The window messages that WinSight traces are (those messages in lowercase are undocumented Windows messages):

WM_ACTIVATE
WM_ACTIVATEAPP
WM_CANCELMODE
WM_CHILDACTIVATE
WM_CLOSE
WM_CREATE
WM_CTLCOLOR
WM_DESTROY
WM_ENABLE
WM_ENDSESSION
WM_ERASEBKGND
WM_GETDLGCODE
WM_GETMINMAXINFO
WM_GETTEXT
WM_GETTEXTLENGTH
WM_ICONERASEBKGND
WM_KILLFOCUS
WM_MOVE
WM_PAINT
wm_painticon
WM_QUERYDRAGICON
WM_QUERYENDSESSION
WM_QUERYNEWPALETTE
WM_QUERYOPEN
WM_QUIT
WM_SETFOCUS
WM_SETFONT
WM_SETREDRAW
WM_SETTEXT
WM_SHOWWINDOW
WM_SIZE
WM_WINDOWPOSCHANGED
WM_WINDOWPOSCHANGING

Input messages

Check Input on the Message Trace Options dialog box to trace input messages.

The input messages that WinSight traces are (those messages in lowercase are undocumented Windows messages):

WM_CHAR
WM_CHARTOITEM
WM_COMMAND
WM_DEADCHAR
WM_KEYDOWN
WM_KEYUP
WM_KEYLAST
WM_MENUSELECT
WM_MENUCHAR
WM_PARENTNOTIFY
WM_SYSCHAR
WM_SYSKEYDOWN
WM_SYSKEYUP
WM_SYSDEADCHAR
WM_TIMER
WM_VKEYTOITEM
sm_yomichar

Notification Control Messages
BN_CLICKED
BN_DOUBLECLICKED
BN_CLOSEUP
BN_DBLCLK
BN_DROPDOWN
BN_EDITCHANGE
CBN_CLOSEUP
CBN_DBLCLK
CBN_DROPDOWN
CBN_EDITCHANGE
CBN_EDITUPDATE
CBN_ERRSPACE
CBN_KILLFOCUS
CBN_SELCHANGE
CBN_SELENDCANCEL
CBN_SELENDOK
CBN_SETFOCUS
EN_CHANGE
EN_ERRSPACE
EN_HSCROLL
EN_KILLFOCUS
EN_MAXTEXT

EN_SETFOCUS
EN_UPDATE
EN_VSCROLL
LBN_DBLCLK
LBN_ERRSPACE
LBN_KILLFOCUS
LBN_SELCANCEL
LBN_SELCHANGE
LBN_SETFOCUS

System messages

Check System on the Message Trace Options dialog box to trace system messages.

The system messages that WinSight traces are:

WM_COMPACTING

WM_DEVMODECHANGE

WM_ENTERIDLE

WM_FONTCHANGE

WM_NULL

WM_PALETTECHANGED

WM_PALETTEISCHANGING

WM_POWER

WM_QUEUESYNC

WM_SPOOLERSTATUS

WM_SYSCOLORCHANGE

WM_SYSCOMMAND

WM_TIMECHANGE

WM_WININICHANGE

Pen messages

Check Pen on the Message Trace Options dialog box to trace pen messages.

The pen messages that WinSight traces are:

WM_RCRESULT

WM_HOOKRCRESULT

WM_GLOBALRCCHANGE

WM_SKB

WM_HEDITCTL

Initialization messages

Check Initialization on the Message Trace Options dialog box to trace initialization messages.

The initialization messages that WinSight traces are:

WM_INITDIALOG

WM_INITMENU

WM_INITMENUPOPUP

Clipboard messages

Check Clipboard on the Message Trace Options dialog box to trace initialization messages.

The clipboard messages that WinSight traces are:

WM_ASKCBFORMATNAME
WM_CHANGECBCHAIN
WM_CLEAR
WM_COPY
WM_CUT
WM_DESTROYCLIPBOARD
WM_DRAWCLIPBOARD
WM_HSCROLLCLIPBOARD
WM_PAINTCLIPBOARD
WM_PASTE
WM_RENDERALLFORMATS
WM_RENDERFORMAT
WM_SIZECLIPBOARD
WM_UNDO
WM_VSCROLLCLIPBOARD

DDE messages

Check DDE on the Message Trace Options dialog box to trace dynamic data exchange messages.

The DDE messages that WinSight traces are:

WM_DDE_ACK
WM_DDE_ADVISE
WM_DDE_DATA
WM_DDE_EXECUTE
WM_DDE_INITIATE
WM_DDE_POKE
WM_DDE_REQUEST
WM_DDE_TERMINATE
WM_DDE_UNADVISE

Non Client messages

Check Non Client on the Message Trace Options dialog box to trace non-client messages.

The non-client messages that WinSight traces are:

WM_NCACTIVE
WM_NCCALCSIZE
WM_NCCREATE
WM_NCDESTROY
WM_NCHITTEST
WM_NCLBUTTONDBLCLK
WM_NCLBUTTONDOWN
WM_NCLBUTTONUP
WM_NCMBUTTONDBLCLK
WM_NCMBUTTONDOWN
WM_NCMBUTTONUP
WM_NCMOUSEMOVE
WM_NCPAINT
WM_NCRBUTTONDBLCLK
WM_NCRBUTTONDOWN
WM_NCRBUTTONUP

Controls messages

Check Controls on the Message Trace Options dialog box to trace control messages.

The control messages that WinSight traces are:

BM_GETCHECK
BM_GETSTATE
BM_SETCHECK
BM_SETSTATE
BM_SETSTYLE
CB_ADDSTRING
CB_DELETESTRING
CB_DIR
CB_FINDSTRING
CB_FINDSTRINGEXACT
CB_GETCOUNT
CB_GETCURSEL
CB_GETDROPPEDCONTROLRECT
CB_GETDROPPEDSTATE
CB_GETEDITSEL
CB_GETEXTENDEDUI
CB_GETITEMDATA
CB_GETITEMHEIGHT
CB_GETLBTEXT
CB_GETLBTEXTLEN
CB_INSERTSTRING
CB_LIMITTEXT
CB_RESETCONTENT
CB_SELECTSTRING
CB_SETCURSEL
CB_SETEDITSEL
CB_SETEXTENDEDUI
CB_SETITEMDATA
CB_SETITEMHEIGHT
CB_SHOWDROPDOWN
DM_GETDEFID
DM_SETDEFID
EM_CANUNDO
EM_EMPTYUNDOBUFFER
EM_FMTLINES
EM_GETFIRSTVISIBLELINE
EM_GETHANDLE
EM_GETLINE
EM_GETLINECOUNT
EM_GETMODIFY
EM_GETPASSWORDCHAR

EM_GETRECT
EM_GETSEL
EM_GETWORDBREAKPROC
EM_LIMITTEXT
EM_LINEFROMCHAR
EM_LINEINDEX
EM_LINELENGTH
EM_LINESCROLL
EM_REPLACESEL
EM_SETHANDLE
EM_SETMODIFY
EM_SETPASSWORDCHAR
EM_SETREADONLY
EM_SETRECT
EM_SETSEL
EM_SETRECTNP
EM_SETTABSTOPS
EM_SETWORDBREAK
EM_SETWORDBREAKPROC
EM_UNDO
LB_ADDSTRING
LB_DELETESTRING
LB_DIR
LB_FINDSTRING
LB_FINDSTRINGEXACT
LB_GETCARETINDEX
LB_GETCOUNT
LB_GETCURSEL
LB_GETHORIZONTALEXTENT
LB_GETITEMDATA
LB_GETITEMHEIGHT
LB_GETITEMRECT
LB_GETSEL
LB_GETSELCOUNT
LB_GETSELITEMS
LB_GETTEXT
LB_GETTEXTLEN
LB_GETTOPINDEX
LB_INSERTSTRING
LB_RESETCONTENT
LB_SELECTSTRING
LB_SELITEMRANGE
LB_SETCARETINDEX
LB_SETCOLUMNWIDTH
LB_SETCURSEL

LB_SETHORIZONTALEXTENT
LB_SETITEMDATA
LB_SETITEMHEIGHT
LB_SETSEL
LB_SETTABSTOPS
LB_SETTOPINDEX
STM_GETICON
STM_SETICON

Multimedia messages

Check Multimedia on the Message Trace Options dialog box to trace multimedia messages.

The multimedia messages that WinSight traces are:

MM_JOY1MOVE

MM_JOY1BUTTONDOWN

MM_JOY1BUTTONUP

MM_JOY1ZMOVE

MM_JOY2MOVE

MM_JOY2BUTTONDOWN

MM_JOY2BUTTONUP

MM_JOY2ZMOVE

MM_MCINOTIFY

MM_MIM_CLOSE

MM_MIM_DATA

MM_MIM_ERROR

MM_MIM_LONGDATA

MM_MIM_LONGERROR

MM_MIM_OPEN

MM_MOM_CLOSE

MM_MOM_DONE

MM_MOM_OPEN

MM_WIM_CLOSE

MM_WIM_DATA

MM_WIM_OPEN

MM_WOM_CLOSE

MM_WOM_DONE

MM_WOM_OPEN

Common controls messages

Check Common Controls (WS32.EXE only) to trace the following types of messages:

All ACM_ messages

All HDM_ messages

All HKM_ messages

All LVM_ messages

All PBM_ messages

All SB_ messages

All TB_ messages

All TBM_ messages

All TCM_ messages

Att TTM_ messages

All TVM_ messages

All UDM_ messages

Other Messages

Check Other on the Message Trace Options dialog box to trace other types of messages.

The other messages that WinSight traces are (those messages in lowercase are undocumented Windows messages):

wm_alttabactive

wm_begindrag

WM_COMMNOTIFY

WM_COMPAREITEM

wm_convertrequest

wm_convertresult

WM_DELETEITEM

wm_dragloop

wm_dragmove

wm_dragselect

WM_DRAWITEM

WM_DROPFILES

wm_dropobject

wm_entermenuloop

wm_entersizemove

wm_exitmenuloop

wm_exitsizemove

wm_filesyschange

WM_GETFONT

wm_gethotkey

wm_isactiveicon

wm_lbtrackpoint

WM_MDIACTIVATE

WM_MDICASCADE

WM_MDICREATE

WM_MDIDESTROY

WM_MDIGETACTIVE

WM_MDIICONARRANGE

WM_MDIMAXIMIZE

WM_MDINEXT

WM_MDIRESTORE

WM_MDISETMENU

WM_MDITILE

WM_MEASUREITEM

WM_NEXTDLGCTL

wm_nextmenu

wm_querydropobject

wm_queryparkicon

wm_setvisible

wm_sethotkey

wm_sizewait
wm_syncpaint
wm_synctask
WM_SYSTEMERROR
wm_systimer
wm_testing

Stop! and Start! Menu

Use the Stop! and Start! menu to turn off or on real-time updating in WinSight.

All views are kept current as classes are registered, windows are created and destroyed, and messages are received.

This command is a toggle. When you choose Stop! to suspend activity, the command changes to Start!. When you choose Start! to resume activity, the command changes to Stop!.

Using Stop! allows you to study a particular situation. It also removes the overhead of having WinSight update itself constantly.

You can also use Messages|Trace Off to stop message tracing.

Help menu

The Help menu provides access to online Help, which comes up in a special Help window. One-line menu hints also appear on the status line at the bottom of the screen whenever you select a menu command.

The Help menu commands are:

Index
Finding Windows
Tracing Messages
Menu Commands
Keyboard
Mouse
Using Help
About WinSight

Help | Index (F1)

The WinSight online Help has a <u>contents screen</u> that summarizes the organization and contents of the Help system.

To access the Help system from the index, choose one of the highlighted words or pictures on the contents: click it or Tab to it and then press Enter.

For more information on how to use a Help system under Windows, choose the Help|<u>Using Help</u> menu command.

Help | Finding Windows

The Help|Finding Windows command displays help on <u>locating windows.</u>

Help | Tracing Messages

The Help|Tracing Messages command displays help on <u>tracing messages.</u>

Help | Menu Commands

Help|Menu Commands displays help on WinSight <u>menus.</u>

Help | Keyboard

The Help|Keyboard command displays help on the <u>keyboard.</u>

Help | Mouse

The Help|Mouse command displays help on the <u>mouse.</u>

Help | Using Help

The Help|Using Help command displays information on how to use the WinSight Help system (or any other Help system under Windows).

Help | About

The About command displays a dialog box that shows copyright and version information.

Click OK or Enter to close the About dialog box.