

DDEWatch 1.3

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Overview:

DDEWatch is a Microsoft Windows program designed to monitor Dynamic Data Exchange (DDE) messages. It is a useful tool to aid in the development of DDE based applications. 'C' language programmers, Excel macro developers and others can use DDEWatch as both a debugging tool and a way to learn DDE.

DDEWatch displays each DDE message as it occurs. The information displayed contains the window handles of both the sender and receiver, the message type and any additional parameters. These parameters include keyword representations of flag fields, command strings, data format, and data strings. DDEWatch displays each new DDE message below the previous one. When the screen is full, the next message replaces the first. A line separates the first and last messages captured.

DDEWatch also displays a list of the client-server window handles of all active DDE sessions. DDEWatch maintains this list to reflect every new DDE session detected. When a DDE session ends, DDEWatch removes the client-server window handles from the list.

The DDEWatch Display:

Once DDEWatch is invoked, it displays all DDE message traffic in real time. The DDEWatch display is divided vertically into two sections.

The left section of the display shows a list of active DDE sessions. The hexadecimal numbers are the client and server window handles. The following figure shows two active sessions: Client "630c" communicating with Server "2f30", and Client "5f10" communicating with the same server.

		DDEWatch		\ / / \	
File					
Client	Server	630c<-2f30	Data	Advise AckReq	Release Fmt=Te
		5f10->2f30	Request	Fmt=Text	Position
* 630c	2f30	5f10<-2f30	Data	Response AckReq	Release Fmt=
* 5f10	2f30	5f10->2f30	Ack	App=00	Position
		5f10->2f30	Execute	"[l][d]"	
		5f10<-2f30	Ack	App=00	"[l][d]"
		630c->2f30	Ack	App=00	0

The asterisk to the left of the client numbers indicates that DDEWatch is displaying messages for that session. To suppress the display for a particular session, position the mouse pointer over the client-server pair and click the left mouse button. To resume the display, repeat the procedure.

To temporarily suppress the display of messages for all sessions, position the mouse pointer over the right section of the DDEWatch display and hold the left mouse button down. To resume, release the button.

The right section of the DDEWatch display shows detailed information about each DDE message. The client's window handle is always to the left of the server's. The arrow shows the direction of the message. A left arrow (<-) indicates a message from the server to the client. A right arrow (->) indicates a message from the client to the server.

The type of message and its parameters are shown immediately to the right of the window handles. The parameters are dependant on the type of message and are listed in the following table:

Message Type	Parameters
Initiate	Application Name (vertical bar) Topic Name

Terminate	(nothing)
Advise	AckReq (iff the fAckReq bit is set) DeferUpd (iff the fDeferUpd bit is set) Fmt=format name* (vertical bar) Item Name
Unadvise	Item Name
Ack (Initiate)	Application Name (vertical bar) Topic Name
Ack (Execute)	Negative (iff fAck is not set) (Busy) (iff fBusy is set) App=xx (where xx is the hex value of bAppReturnCode) (vertical bar) "Command string"
Ack (Other)	Negative (iff fAck is not set) (Busy) (iff fBusy is set) App=xx (where xx is the hex value of bAppReturnCode) (vertical bar) Item Name
Data	Response (iff fResponse is set) Advise (iff fResponse is not set) AckReq (iff fAckReq is set) Release (iff fRelease is set) Fmt=format name* "Data" (iff the format of the data is text) (vertical bar) Item Name
Request	Fmt=format name* (vertical bar) Item Name
Poke	Release (iff fRelease is set) Fmt=format name* "Data" (iff the format of the data is text) (vertical bar) Item Name
Execute	"Command string"

* The standard format names that are displayed for the DDE messages Advise, Data, Request and Poke are Text, BitMap, MetaFile, Sylk, Dif, Tiff and OemText

The DDEWatch Menu:

Monitoring DDE messages degrades system performance considerably. It may, therefore, be desirable to disable DDEWatch temporarily. This can be accomplished by selecting Watch from the File menu. This will also remove the checkmark next to the Watch menu item to indicate that monitoring has been disabled. To resume, repeat the procedure.

All output from DDEWatch may be captured in an ASCII text file. This can be accomplished by selecting Log from the File menu. This will also place a checkmark next to the Log menu item to indicate that file logging has been activated. By default, the output will be appended to the file DDEWATCH.LOG in the current directory. To suspend file logging, repeat the procedure.

The DDEWatch Section in Win.Ini:

DDEWatch supports the following entries in Win.Ini under the [DDEWATCH] section.

Watch= Sets the initial mode for monitoring DDE messages. 1 (the default) indicates that monitoring will begin upon program invocation. 0 indicates that monitoring will be initially disabled.

Log= Sets the initial mode for file logging of DDE messages. 0 (the default) indicates that file logging will be inactive upon program invocation. 1 indicates that file logging will be initially active.

LogFile= Sets the DOS file name for DDE message logging to something other than the default DDEWATCH.LOG.

Example:

```
[DDEWatch]
Watch=0
Log=0
LogFile=ExcelDDE.log
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