TracePlus32/Winsock

Version 2 (February 1996)

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Using TracePlus32 with Netscape Navigator 2.0

Please note that the large number of failed connect() calls that TracePlus displays when tracing Netscape Navigator is accurate. The method that Netscape uses for connecting is to call connect() repeatedly until WSAEICONN is received, signifying connection has been established.

Using TracePlus32 with Visual Basic 4.00

To use TracePlus32 to trace Visual Basic 4.00 applications in DESIGN MODE, do the following:

- 1. Select the **Filters** item from the **Trace** menu.
- 2. Check the box next to the words Launch application below.
- 3. Press the Choose Application button. Find the Visual Basic 4.00 .EXE file, i.e.

VB32.EXE (It usually is in the \VB40 directory). Double-click on it The Choose Application dialog box will disappear, and the filename will appear in the **Filters** dialog

- box.
- 4. Press *Ok* to close the **Filters** dialog box.
- 5. Press the Start button on the toolbar, or select Start from the Trace menu.

Special Notes for the 32 bit version of TracePlus:

• 32 bit versions of TracePlus use the standard Microsoft defined debugging interface for Win32 applications. The Microsoft interface does not permit detaching from a process

after debugging has started. Therefore, if TracePlus is terminated, it will also terminate all processes being traced. Stopping the trace will not detach TracePlus from a process.

Be sure that if you are tracing a server application, leave the TracePlus32 application running after stopping the trace, or terminate the server application, and restart it (be sure that TracePlus32 is not running or the trace is stopped before starting the server application again).

32 bit versions of TracePlus have an option called Trace Processes started from Desktop. This option is found in the **Filters** dialog box on the **Trace** menu. This feature will automatically trace an application under two conditions:

• The application has a main window (i.e., not a Win32 console application).

• The trace will be initiated at the point where the main window receives the WM_CREATE message. This means that any API calls made before this message is received will not be traced.

The procedure for tracing 32 bit applications launched from the desktop is as follows:

1. Make sure that a checkmark is next to the item Trace processes started from desktop in the Filters dialog box.

2. Unselect the option Launch specified application

3. Press OK (not Cancel) to close the Filters dialog box.

4. Click on the Start button on the toolbar, or press Ctrl+S.

5. Launch the Win32 application that you want to trace. Make sure that it creates a main window.

Sample Log File

We have included a trace log file that was generated using the new *Export* feature, so that you can see what this feature provides. To load the sample log file, select **Import** from the **Trace** menu, then choose SAMPLE.RDF (it will be in the same directory as TracePlus). Be sure to view the *PC Configuration* (This log was generated from the author's machine).

New features for version 2.0

1. Recursion level displayed in square brackets next to task name.

2. Traces the messages sent by Winsock when an asynchronous (WSAxxxx) event completes.

3. Displays addresses in both network and IP address format.

4. Can save contents of the trace buffer to a file without previously specifying a file as a destination.

5. Specify the location of the WINSOCK.HLP file.

6. Specify the location of the WINSOCK.DLL file. With this feature you can use

TracePlus/Winsock with multiple TCP/IP stacks. TracePlus will load the WINSOCK.DLL you specify in the **Options** dialog box.

7. Append comments to a trace log while a trace is running.

8. Send your own formatted strings to the trace log via SSTPrintf()/SSTPrintfEx().

SSTPrintfEx() formats the string with the filename and line number prepended to the string.

9. Search for strings in the trace log from the Main Window. This facility previously existed only in the **Details** dialog box.

10. Import Trace logs from another copy of TracePlus/Winsock.

11. Export trace logs from a customer site to a file that can be imported into another copy of TracePlus/Winsock running on your PC.

12. Manually enter application names for tracing.

13. Set TracePlus to remain "on top" of other applications while tracing.

14. Specify a "machine name" for the workstation where TracePlus is running. This is used to differentiate users when tracing multiple workstations by writing to the same log file on a network drive.

15. All bug fixes up to March 15, 1995.

Compatibility

TracePlus32/WINSOCK has been tested with Windows NT 3.1/3.50 Advanced Server, NT 3.50 Workstation, FTP PC/TCP, Novell Winsock version 1.1, and the shareware Trumpet Winsock version 1.0 Rev A. However, TracePlus32/WINSOCK is fully compliant with the Windows Sockets Specification version 1.1, and should therefore work with Winsock libraries from any vendor that adheres to the specification.

Product Modifications

Drag and Drop: Single files can be dragged from the Windows File Manager and dropped on *TracePlus32* window or the *TracePlus32* icon. The specified .EXE file will be launched when the trace is started.

The public domain **WINSOCK.HLP** is included with *TracePlus32*/Winsock and has hypertext links to the API functions that appear in the trace log. By pressing SHIFT+F1 in the main window, or pressing the CALL button in the Details dialog box, you can get detailed help on that Winsock function.

Send and receive buffer display options can be specified by pressing the *Buffers...* button in the Filters dialog box.

Application notes

Tracing applications with large send and receive buffers: *TracePlus32* will consume much more memory if you are tracing applications that send and receive data in large packet sizes (2048, 4096, etc.). To minimize memory usage, press the *Advanced...* button in the **Filters** dialog box. Set a limit for buffer sizes, or turn off the buffer display altogether. Alternatively, you can set the trace buffer size to a smaller value, typically one half of the current buffer size.

Level of detail settings (Options dialog box): Remember that this option does not change the format of the *TracePlus32* main window. This options affects either the File or **Printer** output options.

Setup will fail creating the *TracePlus32/Winsock* program group if you have more than 38 groups.