Help for using the Trace application is found below. For Help using Help, press [F1].

<u>Overview</u>

Using Trace

Trace Menu Commands

Trace is an application that provides debugging information for your SLIP/PPP transport (used for running applications over a dial-up line using the SLIP/PPP protocol). Lower-level protocol activity and function calls can be displayed; you can select which activity is shown.

Trace is intended for troubleshooting problems with the applications and TCP/IP; you may not find it useful if you are unfamiliar with the protocol information displayed. Do not delete the application, however, as it may be useful when contacting technical support.

Trace is started from the **Dialer** application; click the **Trace** button or choose **Trace** from the Dialer's **Network** menu.

Initially, Trace will not provide any information to you. You must select which types of activity you want to have displayed. The **Trace** menu lists activity that can be traced: PPP, IP, ICMP, TCP, UDP, DNS, and WinSock activity.

Checking any of these options from the <u>Trace menu</u> (or checking the option in the bar displayed at the bottom of the Trace console) will cause that type of activity to be displayed in the bottom of the Trace Console. You can choose to have as many of these options display as you would like.

Different kinds of activity will display as different colored status messages on your screen. For instance, the following is an IP message displaying sample IP activity; an IP packet being transmitted from one machine to another.

IP 165.121.6.6 --> 158.252.4.12, Length 78, Protocol 6

These messages will occur when the related activity occurs. Sometimes messages will scroll very rapidly across your screen; you can use the scroll bar on the right hand of your screen to view past messages. You can also print your Trace activity, if you wish, or save it to a Log File.

The top of the Trace Console displays statistics for your session. The statistics that are displayed can be set in the <u>Statistics menu</u>. You can move the split bar in the middle of your screen if you wish to see more or less of either part of the Console.

You can minimize the Trace icon, if you would like to keep monitoring your Trace activity, but do not want to have to view it constantly.

File Menu

Edit Menu

Statistics Menu

Trace Menu

Capture Trace

Allows you to capture all of the Trace session activity to a Log file. When you put a check next to this option, the capture will begin. The Log file will be saved to TRACE.LOG in your current DATA directory.

Print

Prints all of the Trace session activity (up to the current message). This information is printed to your current Windows printer. Choose Print Setup to change the current printer.

Print Setup

Specifies which printer is used to print Trace session activity.

Exit

Exits the Trace program (you can also doubleclick the Windows System menu to exit).

Clear Trace Buffer

Clears all the current messages from the buffer (screen). You may want to do this if you have too many messages displayed and do not want to print all of the messages, or if you want new messages to appear at the top of the screen.

Checking one of the options in this menu displays statistics for that option.	The exact statistics shown will vary
according to the activity.	

COMM

PPP

IP/ICMP

TCP/UDP

Sockets

Checking any of the options below will cause messages to be displayed in the Trace console whenever that type of activity occurs, as listed below.

PPP (Point to Point Protocol)

Whenever PPP (Point to Point Protocol) activity occurs, messages will be displayed. This will typically be during your initial PPP negotiation connection, or when there are transmission errors.

This option will also display SLIP (Serial Line Interface Protocol) statistics, if you are using a SLIP transport.

PPP messages are shown in red.

IP (Internet Protocol)

Data is sent to and from your applications in IP packets. IP messages will indicate transmission failures and success.

IP messages are shown in gray.

ICMP (Internet Control Message Protocol)

These are stack-to-stack messages. You will not commonly see ICMP messages.

ICMP messages are shown in black.

TCP (Transmission Control Protocol)

This is the most common application-level data packet used. You will see TCP messages when using your applications.

TCP messages are shown in purple.

UDP (User Data Protocol)

UDP is another application-level data packet, similar to TCP. You will most likely see UDP messages when making DNS requests, since DNS uses this protocol.

UDP messages are shown in cyan.

DNS (Domain Name System)

DNS messages are shown when your applications make a DNS request, or receive DNS information. This is an address resolution protocol, used to determine the IP address of a location you are trying to reach.

DNS messages are shown in green.

WinSock (Windows Sockets)

These messages are displayed whenever the applications make a call to the WinSock layer (the layer between the applications and lower level protocols like TCP).

WinSock messages are shown in blue.