

Copyright 1990-1995 Frontier Technologies Corporation
SuperTCP Suite for Windows
Release 1.2.1
README.WRI
October 17, 1995

Contents

- Precedence
- Recommended Procedures / Comments
- LAN Installation of NetBIOS Using WINS
- Installing the On-Line Manuals
- Trouble Shooting Suggestions
- Known Problems with SuperTCP Suite for Windows Version 1.2.1
- TraceRoute Information
- Scripting Information

Precedence

For information on the SuperTCP Suite for Windows applications, consult the printed manual, the on-line manual and the on-line Help files after reading this file. If any discrepancies exist between the Help files and the printed and the on-line manuals, the Help files will contain the most up to date information. If any discrepancies exist between the Help files or printed manual and this README.WRI file, this file will contain the correct information.

Recommended Procedures / Comments:

- 1) To install the File Server, you must complete the Administrative install with the following command: "d:\suite\install /a" (without the quotation marks) where d: is your CD-ROM drive.
- 3) Due to the implementation of Frontier's VxD with PPP and SLIP, services such as Windows for Workgroups Network, NetBIOS, NFS Server and NFS Client are not available over serial lines. You can work around this issue by installing Frontier's VxD PPP, or by using Shiva's PPP interface or one of the various SLIP Packet Driver implementations.
- 5) If you want to use an WinISDN line, you must select PSI ISDN upon installation if you want to use preconfigured telephone numbers. If you install SuperTCP Suite without selecting PSI ISDN, you must complete the configuration manually.
- 6) If you are installing SuperTCP Suite 1.2.1 over an older version, you may be updating applications that have been renamed (for example, the Browser used to be called WinTapestry). You will see both icons, but you can delete the old one.
- 7) If you do a Home install and you want to autoregister with PSI, chose PSI in the preinstall and enter a bogus user name and password. Once you have finished installation, click on the register button on the SuperTCP Suite toolbar and register on-line with PSI to obtain a real account.
- 8) SuperTCP Suite's NFS applications don't support using the 32 bit file access with Windows for Workgroups. If you are using NFS, especially the NFS server application, you must turn off

the 32 bit file access. The 32 bit file access can be found in the Virtual Memory part of Control Panel, Enhanced. Once in the Virtual Memory section, uncheck the 32 bit file access box . The NFS should then work properly.

LAN Installation of NetBIOS Using WINS

NetBIOS supports LAN installations using B, H, M and P nodes. This allows you to take advantage of WINS on the NT Server. Using WINS can reduce network traffic and enhance the performance of your network.

The SuperTCP Kernel supports B, H, M and P nodes. The Microsoft stack only supports B and M nodes. Other stacks may support only some of these nodes. Check the documentation for other stacks to find out which nodes are supported.

To configure a node using the SuperTCP Kernel, use the NetBIOS option in SetupTCP. The following provides additional information about each kind of node.

b The B node broadcasts to your local LAN.

To route the B node outside your local LAN, use SetupTCP and put an entry in the NetBIOS Host Table. B nodes can only communicate with other B nodes or with M nodes.

p The P node communicates directly with the WINS database.

P node machines register with the WINS database and use the WINS database to translate the NetBIOS name into an IP address. A P node can only communicate with H nodes, M nodes or other P nodes.

m The M node has attributes like the B and P node.

M node machines register with the WINS database like P node machines. However, to find its destination host, M node machines broadcast to the local LAN first. If the destination host is not on the local LAN, the M node queries the WINS database for the IP address of the destination host. An M node can communicate with all other types of nodes.

h The H node also has attributes like the B and P node.

An H node machine registers with the WINS database like the P node. However it queries the WINS database first for the IP address of the destination host. If the IP address of the destination host is not found, the H node broadcasts locally to try and find the destination host. An H node can communicate with an M node, a P node and another H node.

Installing the On-Line Manuals

There are two on-line manuals included on your SuperTCP CD. They are both located on d:\data (where d is your CD-ROM drive). The user manual is called userman.pdf and the technical manual is called techman.pdf. If you want to install them, please see the on-line or printed manual for directions.

Trouble Shooting Suggestions for SuperTCP Suite for Windows Version 1.2.1:

As always, Frontier Technologies tries to ship the best product; however, here are some common trouble shooting suggestions to make the installation and use of SuperTCP Suite easier.

1) After accessing a floppy disk, some applications may try to access that drive again during unrelated operations. You can continue to run with a floppy in the drive or restart the application to clear the problem.

2) Initialize On Demand may drop the first packets that are sent before the connection is made. This should not be a problem in most cases as the packets are transmitted multiple times. However, if there is a function that does not work when it is the first activity with Initialize On Demand, retry it after the connection is made.

3) To increase DNS Resolver timeouts:

```
edit      SUPERTCP.INI

goto     [DNS-RESOLVER]

add      min_Retrans=2000
         max_Retry=5
```

where increasing the min_Retrans or max_Retry, increases the timeout length. By increasing the DNS Resolver timeouts, you decrease the amount of time name resolution takes. This is useful, for example, when you are viewing a web page in the Browser and you click on a hyperlink because the name needs to be resolved before the page can be downloaded.

5) SuperTCP Suite does not support shared File Server Installations on Windows for Workgroups network drives. The network drive (such as Netware) used to access the shared executables must be available from DOS, before running Windows.

6) In the Setup program, Hosts file configuration, if you highlight the End Of File and add an entry, the new entry is selected, but the Cut button is left disabled. The buttons will be correctly updated if you click on an entry in the list.

7) In the Setup program, ODI Configuration; if your NET.CFG contains sections which are commented out, tags may be added to those sections anyway. If this occurs, move the tags to the correct section and reboot your computer.

8) In the Setup program, User Configuration or NetPrint Server, the access rights for a given path associated with a user may not take effect immediately. After access rights for a path have been modified, a Restart Windows message should have been displayed. Simply restart Windows to have the access rights change take effect.

9) Attempting to print via NFS printing to an NFS Server may result in an "Authentication failed.." message. Make sure that you are using a username and password that matches a user account on the NFS Server machine. To verify this, go to the NFS Client configuration and make sure that the Global Username and password correspond to a valid User Name and Password on the NFS Server machine.

10) Sharing/Unsharing of local printers via Microsoft Windows Network (version 3.11) cannot be performed while the NetPrint Client and/or the NFS Client are enabled. If you are having trouble sharing or removing shared local printers from Print Manager via the Windows for Workgroups network driver (Microsoft Windows Network (version 3.11)), you will need to remove the Microsoft Windows Network (version 3.11) and then re-install it as the primary network. To do this, perform the following steps:

- 1) Go to Network group box and run Network Setup.
- 2) Click the Networks button and remove the Microsoft Windows Network (version 3.11). Exit Network setup.
- 3) Without restarting Windows, re-enable the Microsoft Windows

Network (version 3.11) and any secondary networks. Re-install the adapter you were using along with any protocols. Exit Network Setup.

- 4) Run the SetupTCP application in the SuperTCP Suite group box. In the Interfaces configuration, remove the appropriate interface and then add it back in.
- 5) Restart your machine.

Performing the above actions to share local printers via Windows for Workgroups disables the NFS Client and/or the NetPrint Client. If you had either of these applications enabled prior to performing the above steps you will need to re-enable them from the SetupTCP application if you wish to use them. Once printers have been shared via the above procedure, you can re-enable the NFS Client/Server and/or the NetPrint Client without affecting the status of printers shared using the above procedure. The above procedure is only necessary when you wish to add another shared printer or remove a shared printer via Windows for Workgroups.

11) The Email program, when deleting multiple messages ("Yes to All") from a folder when a view window is open with those messages, may give a "Unable to read message" dialog box. To correct this, simply press return or click OK, to the message dialog box.

12) The Email program may have problems when attaching files from a removable drive (such as a floppy drive). If you experience a problem, simply copy the file from the floppy drive to your hard disk drive and send the message with the hard drive file attached.

13) The Browser application can cause a GPF in some video drivers upon invoking. The Windows For Workgroups 3.11 README states:

"Most VGA-compatible display-adapter cards and main-adapter chips use additional memory to enhance their performance. When Windows is configured for VGA, Windows detects most of these cards and automatically excludes the additional memory.

However, if you have an enhanced VGA that Windows does not recognize, you must exclude the additional memory yourself by adding the following line to the [386Enh] section of the SYSTEM.INI file:

```
emmexclude=C400-C7FF
```

For more information about modifying the SYSTEM.INI file, see the SYSINI.WRI online document."

Try this memory exclusion or contact your video driver vendor for updated drivers. In the short term, you can return your system to standard VGA.

14) If you hit the Search button on the Browser toolbar (the one with the search lights on it), you will be prompted to put a SuperHighway Access or CyberSearch CD into your CD-ROM drive if you don't have one already there. If you don't have either CD, you can eliminate this dialog box by going to Options, Preferences, Search tab and clicking Remote (Network) Search.

15) Due to a change in the WinISDN specifications made in June 1995, any winisdn.dll dated earlier may not work with the WinISDN driver. Get the latest version from your hardware manufacturer. Note that the latest version from ISDN*tek must be V1.26 or greater.

16) In SuperTCP Setup, if you want to move the cursor back to the scroll list on the left side, you must use <CTRL> <HOME>. Tabbing will only work within the dialog boxes.

17) After upgrading from a previous version of Suite, you may see a dialog saying "No VxD TSR" is loaded. If you don't want to enable NFS, you can eliminate this error message by enabling the NFS Client, rebooting Windows, disabling the NFS Client, and rebooting windows.

Known Problems with SuperTCP Suite for Windows Version 1.2.1:

As always, Frontier Technologies tries to ship the best product, however the following list describes those problems which Frontier was unable to remedy prior to SuperTCP Suite going into production.

- 1) The tn3270 application may have problems with XGA video drivers.
- 2) The R-Utilities program RCP protocol may not use the correct time when the "Preserve File Creation Date/Time" option is selected when copying a file to remote machine. This results in an incorrect date and time.
- 3) The Fax Printer Driver may have problems generating the print output on some PCs.
- 4) In the SuperX configuration, we recommend that you use a mouse.
- 5) In the Module Install Screen, changing the source path doesn't work.
- 6) Before Uninstalling SuperTCP Suite, be sure to disable NFS. Uninstalling when NFS is enabled may leave behind Netmux in the SYSTEM.INI, under the [NETWORK] tag, "network drivers = Supertcp nfs for windows". Uninstall may also leave behind SUPERX.INI.
- 7) SuperTCP Suite can run over Windows 95 for the most part. However, Fax Manager, Net Print Client, and FTP Server do not function well. NTP Set Time does not function at all. In addition, we suggest that you do not install the kernel, NFS, NetBIOS, or DOS applications.
- 8) When printing images from the Browser using certain printers, you may find the images darker than expected. You may also experience margin problems when printing Web pages. If you are running the Browser on a Windows 95 or NT platform, you may also encounter repainting problems.
- 9) The tn3270 keyboard mapper contains a button that reads "<<1." This button should instead read "Map."
- 10) In VT320, defined macros don't always immediately appear in the macros pop-up menu in the keyboard mapper.
- 11) Continuous pinging doesn't work in VT320 under Windows 95.
- 12) This version of the Browser doesn't support tables or inline JPEG images.
- 13) When you hang up in the DialApp, you may need to wait up to two minutes before your modem will be disconnected. You will know if the hang up is complete if the button says "Dial" instead of "Hang up."

- 14) If you attempt to uninstall SuperTCP Suite 1.2.1 by doing the following:
1. reinstalling and selecting all of the installed modules on the right side
 2. Hitting the Uninstall button
- not all of SuperTCP Suite will be removed from your hard drive.
- 15) DHCP is supported over a local LAN; however, in this release of SuperTCP Suite, it isn't supported over a dial-in.
- 16) When the NFS Client is enabled and a disk is mounted, some users have experienced a "No Disk in Drive A" error when entering File Manager.
- 17) When you change NFS Server parameters in Setup which require restarting Windows to take affect, you aren't prompted to do so.
- 18) When using the Network Connection dialog box in NFS, the connect button becomes active after you disconnect from a drive, even if you don't have anything entered in the path name field.
- 19) If a username and password are invalid on a mounted drive in NFS, the user is prompted to enter the correct information on start up; however, the user isn't told which drive is invalid.
- 20) In File Manager, if you look up a directory set up for long file names and then switch to a directory with short file names, the short directory names appear in capital letters in NFS.
- 21) Dial-up users accessing MindSpring(CSLIP) or Communication Accessibles (SLIP), you may experince difficulties at the ICMP and TCP level.
- 22) You may not be able to run DOS applications. If you experience this problem, you may installing and enabling NetBIOS.

TraceRoute Information

TraceRoute is a tool for finding out the path your packets are taking to reach a specific host. You can't modify the path, but you can see where your packets are going. TraceRoute can help you do troubleshooting. For example, if you can't connect to a particular host, you can do a TraceRoute to find out where the problem is. If the problem is on your machine or network, you can take the appropriate action. This application is similar to Ping. If you can Ping a host, you should also be able to do a TraceRoute.

How TraceRoute Works

TraceRoute operates by sending out User Datagram Protocol (UDP) packets to the target machine. For example, if you are using FTP to transfer a file from a remote host, the target machine is the remote host that has the file. You can define a certain number of test packets for each hop, and each packet in the group has the same predefined time to live (TTL). For example, all of the test packets for the first hop have a TTL of 1. All of the test packets for the second hop have a TTL of 2 and so on.

When the packet's TTL has expired, the machine at the hop sends back an Internet Control Message Protocol (ICMP) packet. The message in the ICMP packet tells the user's machine where the test packet timed out.

How to Use TraceRoute

1. Click the Start Trace menu option.
A window opens and asks you for the target machine's name or address.
2. Click OK.

To abort the trace at any time, click the Stop Trace menu option. This option replaces the Start Trace option after you start a trace.

NOTE: If you get the error message, "You must either enter in a valid target name or the target's IP number" check to see if you typed the name or IP address correctly.

3. After the Trace is done, you can:
 - View the trace
 - Save the trace by clicking File, "Save Trace As..."

Advanced Use: The Preferences menu option will open a preferences menu. The user can change the maximum number of hops to try, the number of times to test each hop, the number of seconds to wait before timing out the test, the base port number to start at and the Packet Size. It is recommended that the packet size remain at 0 or be a small value. The user can also choose to show the time it took to do each test at each hop and can choose to show IP address only.

If times are shown, the user may see a * in place of the time. This means that that test timed out. At other times, the user may see the following after the time number:

- ! The ttl of the returned packet was <=1
- !H The host was unreachable for the test
- !N The network was unreachable for the test
- !P The protocol was unreachable for the test
- !S The source route failed (gateway is having a problem)
- !F Fragmentation needed (gateway is having a problem)

These codes were added for the advanced users familiar with the UNIX versions.

The same trace problems can occur in this program that can occur in the UNIX program. For example, some hops may be slightly buggy and forward packets with a ttl of 0. In this case, you might see the same machine listed twice (which is counted as a separate hop). Another example is that some hops don't return ICMP packets with a long enough ttl to reach the program, or use the ttl that the program sent as the ICMP ttl. This could cause the program to show empty extra hops until the ttl is long enough to either get past the hop or have the ICMP packet return.

Scripting Information:

Frontier Technologies tries to test the scripting for Internet Service Provider connections as thoroughly as possible. Please find below a list of scripts tested in house and/or by the provider.

Protocol	IS Provider	Date Tested
CSLIP		
	APK	9/1/94
	CICNet	8/2/95
	CO Super Net	6/15/95
	Comm Ass. Montreal	6/20/95
	Databank	11/1/94
	Delta Internet Services	9/1/94
	DIAL N' CERF	1/1/95
	FishNet	7/28/95
	Hawaii OnLine	11/1/94
	Hevanet	6/15/95
	Interactive Networks, Inc	6/30/95
	Internet Connect	1/1/95
	Internet Express	1/1/95
	Internet On Ramp	8/2/95
	Interpath	9/1/94
	Interport Com. NYC	8/2/95
	Intuitive Info	9/1/94
	MHVNet	8/2/95
	MindSpring	6/27/95
	MV Comm	6/30/95
	NJ Computer Connection	7/5/95
	NW Nexus	9/1/94
	OneNet Com. Inc.	8/1/95
	Primenet	8/1/95
	ProLog	6/14/95
	QNSnet	7/31/95
	Real Time	12/1/94
	South Carolina SuperNet	8/4/95
	SunBelt	8/4/95
	Telerama	1/1/95
	USA OnRamp, Pittsburgh, PA	6/20/95
	West Coast On line	6/12/95
	XMission	8/1/95

CSLIP (B)
Real Time 12/1/94
USNet 7/31/95

CSLIP (F)
ANSRemote 7/28/95
APlatform 6/26/95
CCnet 9/1/94
Delta Internet Services 1/1/95
IDS 12/1/94
TIAC The Internet Access Co. 6/1/95

Protocol	IS Provider	Date Tested
	UltraNet Com.	8/4/95
PPP	APK	7/28/95
	Beckemeyer Development	7/28/95
	Carroll-Net	8/9/95
	CCnet	8/2/95
	CICNet	8/2/95
	CO Super Net	6/15/95
	Comm Ass. Montreal	6/20/95
	CRL	9/1/94
	CyberNet Communication Corp.	7/31/95
	Cyberstore	6/22/95
	Databank	11/1/94
	DataWeb	5/1/95
	Delta Internet Services	9/1/94
	Eclipse Internet Access	7/31/95
	elroNet, USA	1/1/95
	EUnet, Belgium	5/1/95
	EURONET	5/1/95
	EURONET, Amsterdam	5/1/95
	Exec PC	7/28/95
	FishNet	7/28/95
	FullFeed	6/15/95
	Hawaii OnLine	11/1/94
	INnet (Belgium)	5/1/95
	InterAccess	11/1/94
	Interactive Networks, Inc	6/30/95
	Internet Access (Iowa)	9/1/94
	Internet America	6/13/95
	Internet Connect	6/15/95
	Internet Express	1/1/95
	Internet On Ramp	8/2/95
	INTERPAC (Belgium)	5/1/95
	Interpath	9/1/94
	Interport Com. NYC	6/13/95
	Intuitive Info	9/1/94
	KnoWare	5/1/95
	Lightspeed Net	6/14/95
	MHVNet	8/2/95
	MV Comm	6/30/95
	Nedernet	5/1/95
	NetNet.Net	8/5/95
	NJ Computer Connection	7/5/95
	NL Net	5/1/95
	On Ramp	1/1/95
	On Ramp	1/1/95
	On Ramp (Out of Town)	1/1/95
	OneNet Com. Inc.	8/1/95
	PacketWorks	6/26/95
	PING (Belgium)	5/1/95

Protocol	IS Provider	Date Tested
	Primenet	8/1/95
	ProLog	6/14/95
	PSI	7/31/95
	QNSnet	7/31/95
	Red River	1/1/95
	South Carolina SuperNet	8/4/95
	Synet	8/1/95
	TelaLink	8/4/95
	Telarama	8/1/95
	Times.net	8/1/95
	USA OnRamp, Pittsburgh, PA	7/31/95
	West Coast On Line	6/12/95
	XMission	7/31/95
	XS4ALL	5/1/95
	XS4ALL, Amsterdam	5/1/95

PPP (B)

USNet 7/31/95

PPP (F)

ANSRemote 7/25/95
 APlatform 6/26/95
 City Net 6/15/95
 CO Super Net 1/1/95
 Delta Internet Services 1/1/95
 IDS 1/1/95
 Internet Connect 1/1/95
 MCSNet 12/1/94
 Portal 1/1/95
 RAINet, Inc. 6/28/95
 TIAC The Internet Access Co. 8/2/95
 UltraNet Com. 7/31/95
 UUNET Tech. 7/28/95
 You Tools FASTNET 7/28/95

SLIP

Buffnet 6/23/95
 CICNet 8/2/95
 CO Super Net 6/15/95
 Comm Ass. Montreal 6/15/95
 CRL 9/1/94
 Databank 11/1/94
 Delta Internet Services 9/1/94
 DIAL N' CERF 1/1/95
 elroNet, USA 1/1/95
 Global Enterprise Services 6/15/95
 Hawaii OnLine 11/1/94
 Hevanet 6/21/95
 Indy Net 6/13/95
 Internet Connect 8/2/95

Protocol	IS Provider	Date Tested
	Internet Express	1/1/95
	Internet On Ramp	8/2/95
	Interpath	9/1/94
	Interport Com. NYC	8/2/95
	Intuitive Info	9/1/94
	MHVNet	8/2/95
	MindSpring	8/4/95
	MV Comm	6/30/95
	NJ Computer Connection	7/5/95
	NL Net, Amsterdam	5/1/95
	NW Nexus	1/1/95
	OneNet Com. Inc.	8/1/95
	Primenet	8/1/95
	ProLog	6/14/95
	QNSnet	7/31/95
	SunBelt	8/4/95
	TelaLink	6/19/95
	Telerama	8/1/95
	Times.net	8/1/95
	USA OnRamp, Pittsburgh PA	7/31/95
	West Coast On Line	6/12/95
	XMission	8/1/95
	XS4ALL, Amsterdam	5/1/95
	You Tools FASTNET	7/28/95

SLIP (B)

USNet 7/31/95

SLIP (F)

ANSRemote 7/25/95
 APK 9/1/94
 CCnet 9/1/94
 Delta Internet Services 12/1/94
 IDS 12/1/94
 Internet Access Co. 12/1/94