If There is a Problem:
Troubleshooting the UT-3302 Sample Configuration

Introduction
At this point, the tunnel between the two UTs should be established and encrypted data passed between the LAN2 (untrusted) ports of a Server unit and a Client unit. From the Main Menu screens of the Server and Client, clicking on **Status** will expand submenus which allow display of the **Tunnel Log** and **Tunnel Nodes** screens similar to those shown in Figures 1, 2 and 3.

Tunnel Logfile

```
01-01-2008 00:00:00 ---Tunnel Started---
01-01-2008 00:00:01 lan1 ready.
01-01-2008 00:00:01 UDP Server: 22 listening.
01-01-2008 00:00:01 client1 connected from address 192.168.2.2:59673
01-02-2008 00:00:02 Session key changed.
```

Figure 1 – The Tunnel Logfile Screen of a Functioning Server UT

Tunnel Logfile

```
01-01-2008 00:00:00 ---Tunnel Started---
01-01-2008 00:00:01 lan1 ready.
01-01-2008 00:00:01 Trying to connect to remote server 192.168.2.1:22
01-01-2008 00:00:01 Connected to remote server 192.168.2.1:22.
01-02-2008 00:00:02 Server 192.168.2.1:22 changed session key.
```

Figure 2 – The Tunnel Logfile Screen of a Functioning Client UT

Tunnel Nodes

Name	Rx Count	Tx Count	Tx Dropped	Address	State
lan1	2049	293121	0	4c:5e:0c:0f:e0:0d	up
client1	293121	854	0	192.168.2.2:59673	up

Figure 3 – The Tunnel Nodes Screen Showing a Functioning Link

In the Logfile screen, the tunnel has started and the Client unit is shown as connected. The Nodes screen shows the state as "up". If it has not been possible to get a similar result, check for the possible problems described below.

P: Web browser not connecting during to the UT configuration.
S: To verify the **physical connection**, check that:
   • The ethernet cable is plugged into one of the LAN1 (trusted) ports, not the LAN2 (untrusted) port on the UT: Note that any of the LAN1 (trusted) jacks may be used (preferably the right-most jack).
   • A faulty ethernet cable isn't being used: Due to the Auto-MDIX feature of the UT-3302 ports, either straight-through or crossover ethernet cables may be used interchangeably.
   • The ethernet cable has been plugged in all the way

S: To verify the **PC configuration**, check that:
- The IP address and Subnet Mask for the UT's default subnet is configured correctly on the PC
- The PC has the proper IP address and does not a previously-defined IP address which conflicts with the one needed here: Because so many devices have a default IP address of 192.168.0.1, this is a common issue.
- The ARP Cache does not contain an entry from an earlier connection: Using a Command Window (as Administrator), type the command *arp -a* to view the entire table of entries.
- The Properties of the LAN connection do not still have "**Obtain an IP address automatically**" selected: Leaving this on is a common issue.
- The PC does not have a different network simultaneously connected: This often happens when the Wireless LAN adapter is left enabled, so it should be turned off during the Quick Start procedure.

S: To verify the **browser configuration** check that:
- The browser is not trying to use a Proxy to connect: For the Quick Start procedure, the Network settings for the browser should be "No Proxy".
- HTTPS is being used to address the UT, not HTTP.

P: The two UTs are connected using an ethernet cable between the untrusted ports but no tunnel connection is established.
S: Check that:
- One UT-3302 unit is configured as a Server and one as a Client: If both are Servers or both are Clients, the link won't be established.
- A correct **Remote Server IP** value has been entered on the Client unit. It should be the LAN2 (untrusted) IP address of the Server.
- The LAN2 (untrusted) IP addresses are compatible with each other: They must be two distinct IP addresses, and if the UTs are directly connected with no router between, they must be on the same subnet.
- The **Shared Secret** and **Encryption** levels are the same on both Client and Server units.
- The **Authorized Client Name1** of the Server matches the **Client Name** of the Client, and the **Authorized Client Password1** of the Server matches the **Client Password** of the Client.
- The **Server Port** of the Server matches the **Remote Server Port** of the Client. They do not need to remain at the default value (Port 22), but they must match.

P: Ping works to remote UT LAN1 interface, but not to a device beyond it.
S: It is possible that:
- The remote PC may have a firewall rule that blocks ICMP Echo Request: This may be verified by temporarily disabling all firewalls. If pings are now successful, inspect the firewall rules to see if an existing rule can be enabled, or create a custom rule. In some cases the rule may be listed under a category called "**File and Printer Sharing**".
- The remote PC may have an incorrect IP address: See the section above, "To verify the **PC configuration**". The PC address must be on the same subnet as the LAN1 (trusted) IP address.