



# RELEASE NOTES

## SUPERSTACK II REMOTE ACCESS SYSTEM 1500

This Release Note contains information that does not appear in the SuperStack II Remote Access System 1500 (RAS 1500) documentation. It includes the following:

■ Unsupported Filters .....	2
■ TRAM Reference.....	2
■ Configuring ISDN Ports for Outbound Calls .....	13
■ Dial In/Out Connections.....	16
■ I/O Configuration .....	18
■ Command Line Interface (CLI).....	19
■ Modem Settings .....	19
■ Routing, General Configuration.....	19
■ Frame Relay Configuration .....	21
■ Compatibility .....	22
■ Transcend Remote Access Manager (TRAM).....	22
■ Hunt Groups and Terminal Endpoint Identifiers (TEIs) .....	24

Visit the TotalService web site at **[totalservice.usr.com](http://totalservice.usr.com)** for the latest SuperStack II Remote Access System 1500 code and documentation.

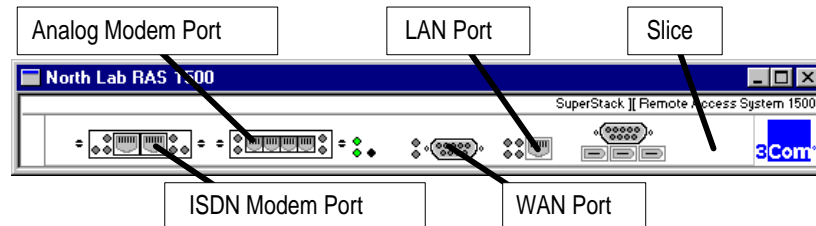
**Unsupported Filters** This release does not support filters associated with Ethernet port or modem port interfaces. Filters should be associated on a per-user basis. Filters associated with Ethernet port and modem port interfaces will be supported in the next release.

**TRAM Reference** This section helps you to more easily use Transcend Remote Access Manager (TRAM) to configure the RAS 1500. It includes a table that lists common features and where to configure those features in TRAM.

**Opening a RAS 1500** You must open the RAS 1500 in TRAM to manage it.

Opening the RAS 1500 in TRAM:

- In TRAM, in the Device Tree (in the left window), double-click the RAS 1500 you want to configure. An image of the RAS 1500 appears in the right window. This image has five manageable objects. (see the following illustration).



Callout	Description
ISDN Modem Port	Select to configure settings related to the ISDN modem ports. For instance, filters or V.120 settings.
Analog Modem Port	Select to configure settings related to the analog modem ports. For instance, filters.
WAN Port	Select to configure settings related to the WAN port. For instance, committed information rate.
LAN Port	Select to configure settings related to the LAN port. For instance, IP-RIP or filters.
Slice	Select to configure settings related to the RAS 1500. For instance, IP/IPX client spoofing or address pools.

To select multiple objects, select one object, then hold down the Shift key while clicking on additional objects (on this or another RAS 1500). These objects must be of the same type. So, you can select two analog modem ports, but not an analog modem port and a LAN port.

**Specific Help Topics**







TRAM's on-line help contains detailed procedures for the following configuration options:





- Dial-in configuration
- Dial-out configuration
- IP Terminal Server configuration
- LAN-to-LAN routing configuration
- Security and accounting configuration




To access the on-line help about these topics:





- 1 In TRAM, left-click any object on the RAS 1500.
- 2 Right-click to display the menu.
- 3 Click Help. The TRAM help window appears.
- 4 Click Help Topics button. The Help Topics window appears.
- 5 Select the appropriate topic from the Contents tab.
- 6 Click Display. The help topic appears.





**TRAM Reference Table** The following table helps you find specific features in TRAM. The left column lists common features; the right column provides a specific procedure to locate the feature in TRAM. The features are listed in alphabetical order.

To configure this...	Do this in TRAM...
Analog Calls only over ISDN	<p>Limited to analog calls on ISDN line.</p> <ol style="list-style-type: none"> <li>1 Click an ISDN modem port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;modem name&gt;, then Properties.</li> <li>4 Select Serial Settings parameter group.</li> <li>5 In the AT Command parameter, type AT*V2=3</li> <li>6 Click  to save the changes.</li> </ol>
Appletalk Address Pools	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;slice name&gt;, then Properties.</li> <li>4 Select the Appletalk System Settings parameter group.</li> <li>5 Set the ARAP Node Network Range parameter.</li> <li>6 Click  to save the changes.</li> </ol>
Appletalk Configuration	<ol style="list-style-type: none"> <li>1 Click the LAN port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then LAN Port, then Properties.</li> <li>4 Select the Appletalk Interface Settings parameter group.</li> <li>5 Click  to add a new row.</li> <li>6 Set the appropriate parameters.</li> <li>7 Click  to save the changes.</li> <li>8 Select the Appletalk Zones parameter group.</li> <li>9 Click  to add a new row.</li> <li>10 Set the appropriate parameters.</li> <li>11 Click  to save the changes.</li> </ol>






To configure this...	Do this in TRAM...
Appletalk Remote Access Protocol (ARAP)	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User Protocol Settings parameter group.</li> <li>5 Set the Remote Access Protocol parameter.</li> <li>6 Click  to save the changes.</li> </ol>
Appletalk Zone Filtering	See Filters, later in this table.
Bandwidth on Demand	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User PPP/MLPPP parameter group.</li> <li>5 Set the Channel Decrement parameter and Channel Expansion parameter.</li> <li>6 Click  to save the changes.</li> </ol>
Bridging Filters	See Filters, later in this table.
Client Spoofing	See IP/IPX Client Spoofing, later in this table.
Configuring TFTP	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Servers.</li> <li>4 Select the TFTP Clients parameter group.</li> <li>5 Set the Add TFTP Access IP Address parameter to 0.0.0.0 for every station to have access. Add a specific address only for specific station access.</li> <li>6 Click  to save the changes.</li> </ol>
Domain Name Service (DNS) Aliases	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Hosts.</li> <li>4 Select the DNS Hosts parameter group.</li> <li>5 Add rows as needed.</li> <li>6 Click  to save the changes.</li> </ol>





To configure this...	Do this in TRAM...
Domain Name Service (DNS)	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;slice name&gt;, then Properties.</li> <li>4 Select the DNS Settings parameter group.</li> <li>5 Set the DNS Domain Name parameter.</li> <li>6 Click  to save the changes.</li> </ol>
Filters (creating, editing, deleting)	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;slice name&gt;, then Filters.</li> <li>4 Use the Filter tool to create, edit, or delete filters.</li> </ol>
Filters (LAN-port level)	<ol style="list-style-type: none"> <li>1 Click the LAN port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then LAN Port, then Properties.</li> <li>4 Select the Network Interface parameter group.</li> <li>5 Set the Port Filter Override parameter.</li> <li>6 Specify filters in the Input Filter parameter or Output Filter parameter or both.</li> <li>7 Click  to save the changes.</li> </ol>
Filters (modem-port level)	<ol style="list-style-type: none"> <li>1 Click the modem port (analog or ISDN-BRI).</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;modem name&gt;, then Properties.</li> <li>4 Select the Serial Settings parameter group.</li> <li>5 Set the Port Filter Override parameter.</li> <li>6 Specify filters in the Input Filter parameter or Output Filter parameter or both.</li> <li>7 Click  to save the changes.</li> </ol>





To configure this...	Do this in TRAM...
Filters (user level)	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User General Settings parameter group.</li> <li>5 Specify filters in the Input Filter Identification parameter or Output Filter Identification parameter or both.</li> <li>6 Click  to save the changes.</li> </ol>
Fixed Dialback	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User General Settings parameter group.</li> <li>5 In the Service Type parameter, select Callback.</li> <li>6 Select the User Dialout Settings pulldown menu.</li> <li>7 Set the Primary Callback Number parameter and, optionally, the Secondary Callback Number parameter.</li> <li>8 Click  to save the changes.</li> </ol>
Frame Relay Configuration	<p>You must create the configuration in the RAS 1500's command line interface (CLI), and then modify it through TRAM.</p> <ol style="list-style-type: none"> <li>1 Click the WAN port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then WAN Port, then Properties.</li> <li>4 Select either the Frame Relay Management Interface Settings parameter group or the Frame Relay DLCIs parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol>
IP Address Pools	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;slice name&gt;, then Properties.</li> <li>4 Select the IP Address Pools parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol>




To configure this...	Do this in TRAM...
IPX Address Pools	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;slice name&gt;, then Properties.</li> <li>4 Select the IPX System Settings parameter group.</li> <li>5 Set the IPX Dynamic Network Range Start parameter.</li> <li>6 Click  to save the changes.</li> </ol>
IP/IPX Client Spoofing	<p>Remote Office Gold software is required for client spoofing.</p> <ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User Client Spoofing parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol>
IP/IPX Filters	See Filters, earlier in this table.
IP/IPX (LAN-port settings)	<ol style="list-style-type: none"> <li>1 Click the LAN port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then LAN Port, then Properties.</li> <li>4 Select either the IP Interface Settings parameter group or the IPX Interface Settings parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol>
IP/IPX LAN Spoofing	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User Protocol Settings parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol>



To configure this...	Do this in TRAM...
IP/IPX (static routes)	<ol style="list-style-type: none"> <li>1 Click the LAN port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then LAN Port, then Properties.</li> <li>4 Select either the IP Routes parameter group or the IPX Static Routes parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol>
IP/IPX (user settings)	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User Protocol Settings parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol>
IP-RIPV1, IP-RIPV2 (system level)	<ol style="list-style-type: none"> <li>1 Click the LAN port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then LAN Port, then Properties.</li> <li>4 Select the IP Interface Settings parameter group.</li> <li>5 Set the IP Network Routing Protocol parameter.</li> <li>6 Click  to save the changes.</li> </ol>
IP-RIPV1, IP-RIPV2 (user level)	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User Protocol Settings parameter group.</li> <li>5 Set the RIP Type parameter.</li> <li>6 Click  to save the changes.</li> </ol>
ISDN Line Setup	<ol style="list-style-type: none"> <li>1 Click an ISDN modem port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;modem name&gt;, then Properties.</li> <li>4 Select the I-Modem Settings parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol>

To configure this...	Do this in TRAM...
LAN-to-LAN routing configuration	Refer to TRAM's on-line help, "Configuring the RAS 1500 for LAN-to-LAN routing."
Multilink Point-to-point Protocol (MLPPP)	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User PPP/MLPPP Settings parameter group.</li> <li>5 Set the Maximum Channel Number parameter to the number of channels you want.</li> <li>6 Click  to save the changes.</li> </ol>
Network Communications Services Interface (NCSI) Dialout	Refer to TRAM's on-line help, "Configuring the RAS 1500 for Network Dial-out."
PAP/CHAP Authentication	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;slice name&gt;, then Properties.</li> <li>4 Select the Authentication Settings parameter group.</li> <li>5 Set the PPP Authentication parameter.</li> <li>6 Click  to save the changes.</li> </ol>
Point-to-point Protocol (PPP) Calls only	<p>Limited to Analog calls on ISDN line.</p> <ol style="list-style-type: none"> <li>1 Click an ISDN modem port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;modem name&gt;, then Properties.</li> <li>4 Select Serial Settings parameter group.</li> <li>5 In the AT Command parameter, type: AT*V2=5</li> <li>6 Click  to save the changes.</li> </ol>
RADIUS Accounting	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;slice name&gt;, then Properties.</li> <li>4 Select the Accounting Settings parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol> <p>Also refer to TRAM's on-line help, "Configuring the RAS 1500 for security and accounting."</p>

To configure this...	Do this in TRAM...
RADIUS Authentication	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;slice name&gt;, then Properties.</li> <li>4 Select the Authentication Settings parameter group.</li> <li>5 Set the appropriate parameters.</li> <li>6 Click  to save the changes.</li> </ol> <p>Also refer to TRAM's on-line help, "Configuring the RAS 1500 for security and accounting."</p>
Roaming Callback	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User General Settings parameter group.</li> <li>5 In the Service Type parameter, select Callback.</li> <li>6 Select the User Dialout Settings pulldown menu.</li> <li>7 In the Callback Type parameter, select Dynamic.</li> <li>8 Click  to save the changes.</li> </ol>
Serial Line IP (SLIP)	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User Protocol Settings parameter group.</li> <li>5 Set the Remote Access Protocol parameter.</li> <li>6 Click  to save the changes.</li> </ol>
STAC, Microsoft, or Ascend Compression	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User PPP/MLPPP parameter group.</li> <li>5 In the Compression Type parameter, select the compression you want.</li> <li>6 Click  to save the changes.</li> </ol>
Telnet Dialout	Refer to TRAM's on-line help, "Configuring the RAS 1500 for Network Dial-out."

To configure this...	Do this in TRAM...
Timed Connection	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User Dialout Settings parameter group.</li> <li>5 In the Dial Out Type parameter, select Timed.</li> <li>6 Select the User General Settings parameter group.</li> <li>7 Set the Start Time and End Time parameters.</li> <li>8 Click  to save the changes.</li> </ol>
V.120/V.110/X.75 Settings	<ol style="list-style-type: none"> <li>1 Click an ISDN modem port.</li> <li>2 Right-click.</li> <li>3 Click Configure, then &lt;modem name&gt;, then Properties.</li> <li>4 Select Serial Settings parameter group.</li> <li>5 In the AT Command parameter: for V.110, type: AT*V2=2 for V.120, type: AT*V2=1 for x.75, type: AT*V2=6</li> <li>6 Click  to save the changes.</li> </ol>
Van Jacobsen Compression	<ol style="list-style-type: none"> <li>1 Click the slice.</li> <li>2 Right-click.</li> <li>3 Click Configure, then Security, then Users.</li> <li>4 Select the User PPP/MLPPP parameter group.</li> <li>5 In the Header Compression parameter, select TCP/IP.</li> <li>6 Click  to save the changes.</li> </ol>

## Configuring ISDN Ports for Outbound Calls

By default, the RAS 1500 cannot connect to an analog device through an ISDN port when making an outbound call. This affects outbound LAN-to-LAN and dial-back connections. 3Com plans to enhance the auto-connect feature to support outbound dialing.

### Modem-sharing applications

To work around this problem for modem-sharing applications, you must modify the modem's initialization string. Where you modify this string depends on your software. For most software, complete the following steps to solve the problem.

- 1 From the Windows desktop, click Start, then Settings, then Control Panel. The Control Panel window opens.
- 2 Double-click the Modems icon. The Modems Properties dialog box appears.
- 3 Select the modem you want to configure.
- 4 Click Properties. The Properties dialog box appears.
- 5 In the Connection tab, click Advanced. The Advanced Connection Settings dialog box appears.
- 6 In the Extra Settings text box, type:  
**\*V2=0\*U1=0\*U2=0\*U3=1**
- 7 Click OK to save the settings and close the Advanced Connection Settings dialog box.
- 8 Click OK to close the Properties dialog box.
- 9 Click Close to close the Modems Properties dialog box.
- 10 Close the Control Panel window.

### Dial-back and LAN dial-out applications

To work around the problem for dial-back and LAN dial-out applications, you must create two separate modem groups, one called "digitaldial" and one called "analogdial".

Normally, each user is assigned to the default modem group "all". For the workaround, assign each outbound user to one of the new groups depending on the device on the other end.

Once you have set up the modem groups, you must program the corresponding modems to make the correct type of outbound call.

First, determine the maximum number of analog connections required at one time. For example, if you dial your ISP with one analog connection and you have two analog dial-back users, the number is three.

Next, determine the maximum number of digital connections required at one time. If the number of digital connections required plus the number of analog connections required is greater than the number of ports in your system, you must compromise.

To ensure that the analog dial-out and dial-back ports are always available for use, your ISDN service provider must set up a fixed-assignment hunt group for you. If you can only have a round-robin or other type of hunt group, one option is to remove the outbound analog ports from the hunt group, and add them to a different hunt group.

In the following example, modems 1-5 complete digital calls and modems 6-8 complete analog calls. Assume that all eight modems are in a fixed-assignment hunt group (modem 1 always takes the first call, and modem 8 only takes the last call).

- 1 Access the RAS 1500's command line interface (CLI).
- 2 Create the modem groups:
  - a Type: **add modem\_group digitaldial interfaces rm0/mod:1  
rm0/mod:2 rm0/mod:3 rm0/mod:4 rm0/mod:5**  
Press Enter.
  - b Type: **add modem\_group analogdial interfaces rm0/mod:6  
rm0/mod:7 rm0/mod:8**  
Press Enter.
- 3 Program the modems for digital connections:
  - a Type: **set imodem interface rm0/mod:1 at  
at\*v2=0\*u1=3\*u2=0\*u3=0&w**  
Press Enter.
  - b Type: **set imodem interface rm0/mod:2 at  
at\*v2=0\*u1=3\*u2=0\*u3=0&w**  
Press Enter.
  - c Type: **set imodem interface rm0/mod:3 at  
at\*v2=0\*u1=3\*u2=0\*u3=0&w**  
Press Enter.

- d Type: **set modem interface rm0/mod:4 at**  
**at\*v2=0\*u1=3\*u2=0\*u3=0&w**  
Press Enter.
  - e Type: **set modem interface rm0/mod:5 at**  
**at\*v2=0\*u1=3\*u2=0\*u3=0&w**  
Press Enter.
- 4 Program the modems for analog connections:
- a Type: **set modem interface rm0/mod:6 at**  
**at\*v2=0\*u1=0\*u2=0\*u3=1&w**  
Press Enter.
  - b Type: **set modem interface rm0/mod:7 at**  
**at\*v2=0\*u1=0\*u2=0\*u3=1&w**  
Press Enter.
  - c Type: **set modem interface rm0/mod:8 at**  
**at\*v2=0\*u1=0\*u2=0\*u3=1&w**  
Press Enter.
- 5 Assign the outbound users to the proper modem group:
- a Type: **set user MyISP1 modem\_group analogdial**  
Press Enter.
  - b Type: **set user JohnCallback modem\_group analogdial**  
Press Enter.
  - c Type: **set user NewYorkOffice modem\_group digitaldial**  
Press Enter.
  - d Type: **set user QueensOffice modem\_group digitaldial**  
Press Enter.
- 6 Save the configuration to the flash file system:
- Type: **save all**  
Press Enter.

---

## Dial In/Out Connections

**Outbound calls** Outbound LAN to LAN ISDN calls to non-RAS 1500 devices may fail to connect if auto-detection of data bearer capability (i.e. Analog, X.75, V.110, Async/Sync PPP, Clear Channel) is not supported by the remote device. Set **\*v2=5** on the dial-out modem to force Async/Sync PPP connection.



*Note: Doing this limits flexibility of connection types with that modem interface.*

**Disconnecting call using NCSI** Using NCSI, disconnecting a call does not automatically release the modem, thus making the modem unusable for other calls. Use the NCSI utility BTTY (included in the NCSI installation on the client PC) to close modem connection.

**MLPPP connections** For continuous or on-demand users, the RAS 1500 does not attempt to use the alternate number for the second link in an MLPPP connection. The telephone company must provide hunt groups to allow MLPPP connections to be properly engaged.

**Call-back** In a Call-back configuration, changing a modem group without first disabling the user can incorrectly leave the user in an ACTIVE state, even after disconnecting. You must disable the user before making any modem group changes. Then re-enable.

**ON DEMAND configurations (IPX only)** IPX LAN to LAN configurations are not supported with ON DEMAND set on one side and MANUAL set on the other side. ON DEMAND configurations require ON DEMAND to be set at both ends of the connection.

**IP networking** There are problems connecting with Windows 95 4.00.950 Dial-Up Networking client. Windows 95 4.00.950a or later versions function properly.

**TFTP to RAS 1500 across an on-demand link** Attempting to perform a TFTP directly to the remote RAS 1500 may cause it to reboot, if it is done across an on-demand connection.



**AppleTalk  
communication**

There are currently Apple servers disconnections observed when running Appletalk communications over an MLPPP LAN/LAN connection. Single link LAN/LAN Appletalk connections are supported. However, MLPPP connections are not currently supported in the Appletalk LAN/LAN environment.

**Using Stampede  
Remote Office Gold**

Using Stampede Remote Office Gold (5.02), there is an issue with Windows 3.1 client allowing spoofed connections to be re-established without traffic. A Stampede patch for this issue will be available on the 3Com support web site.

**System Management  
Guide**

The following CLI command is missing for the configuration of IPX network:

```
SET IPX SYSTEM NUMBER <the last 4 bytes of the RAS 1500 MAC  
Address>
```

Also, note the changes in the following sections of "Configuring Network Dial-Out" in the System Management Guide:

**Using Network Dial-Out**

This section should refer to IP/IPX networks.

**Configuring Dial-Out Service**

To specify one modem group, after *data* type:

```
modem_group="group name"
```

For example, to add the network service "modems," with server type "dialout," that specifies the default modem *all*, type:

```
add network service modems server_type dialout data  
modem_group="all"
```

**Dial-Out Case Study A**

Step #1 should read: add modem\_group boston interface rm0/mod:[1-3]

Step #4 should read: set dial\_out security no

### Dial-Out Case Study B

Step #1 should read: add modem\_group boston interface rm0/mod:[1-4]

Step #3 should read: add ne se modems ser telnetd so 6666 da

service\_type=dialout,login\_banner=\"Hello\\r\\n\",  
modem\_group=\"boston\"



*Note: If you need to change the network service, delete the service and add it again.*

---

## I/O Configuration

### I/O slots 1 and 2

To avoid modem manager crashes when there is a single board in I/O slot 2, the system must operate with I/O slot 1 also populated.



**CAUTION: The RAS 1500 does NOT support hot swap of I/O modules. It could damage the I/O module.**

### Matching modem groups to port count

If system runs with only I/O slot 1 populated (4 available modem channels), the system thinks there are 8 modem channels available for dial-out. To resolve, configure modem groups to match actual port count.

### Analog I/O

Swapping out a BRI interface in favor of an analog I/O can cause port hang if modem settings are not reset for analog. You must reset analog modem configuration to factory default: **AT&F0&W**.

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## Command Line Interface (CLI)

**CLI command errors** Some CLI commands are not fully implemented and may generate system error messages. These errors should not have an impact on system operations. Note the following examples:

```
enable service_loss_busy_out radius
```

```
show service_loss_busyout settings
```

```
show traceroute settings
```

```
list ping service_loss_systems
```

---

## Modem Settings



*When a call is established on one channel, RAS 1500 allows at\*z to be applied to adjacent channel. To avoid confusion, administrators should be aware of nearby modems when applying commands.*

### Altering modem settings

When changing modem settings, the information must be explicitly saved by appending **&w** to the end of the modem string. The **SAVE ALL** command available through the command line interface is only applicable to the router configuration.

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## Routing, General Configuration

### Setting and adding IPX Net

To get the commands "**set ipx**" and "**add ipx net**" to work, perform a Save-All, and then re-boot the RAS 1500 to apply changes.

### Network changes

Network changes (such as IP RIP Policy) will only be implemented if applied to a disabled network. On an active network, there may not be an error message generated, so the change may seem to take effect, but it does not. You should disable the network prior to making any network changes. Then re-enable.

- Filtering** Note these issues:
- Filter rules should not exceed 60.
  - Filter is added even when 'File is in Error.'
- DHCP server** There is currently no command in CLI to delete a defined DHCP server. To disable the DHCP server, submit a bogus address via the CLI.
- Generic bridge filter** On a generic bridge filter, you cannot filter based on a bit value, only a byte value. For a generic bridge filter, the mask can only be set to "ff" or "00."
- NOS authentication settings** The NOS authentication settings are not available through the CLI command "**show configuration.**" They are available through the CLI command "**show authentication.**"
-  *On the Resource CD-Rom, Nos Authentication in the directory Client/Security/DOC readme file gives the incorrect information for RAS 1500 configuration. Please see the System Management Guide for correct NOS Authentication configuration procedures.*
- TFTP Client** A TFTP Client is not set to enabled and "0.0.0.0". To resolve this issue, add the configuration manually via the CLI. For example: **ADD TFTP CLIENT 0.0.0.0**
- HANGUP CLI** You cannot use the HANGUP CLI command with the user name to hangup the user. To disconnect a specific active user from the console, identify which modem group or interface the user is associated with, and issue through CLI the **HANGUP INTERFACE rm0/mod: <modem number>** OR **HANGUP MODEM\_GROUP <modem group name>** command.
- PPP debugging** Monitor PPP is not a feature supported on RAS 1500. In order to set PPP debugging, issue the following commands from the command line interface (CLI):
- ```
SET FACILITY PPP LOGLEVEL DEBUG

SET FACILITY "PPP TRACE" LOGLEVEL DEBUG
```

- LED lights** When calling the number on the second TEI/SPID, the first LED (B1) lights instead of the second one. There is no relationship between the LED and B-Channel #. It means one B-Channel is active.
- Debugging** Do not set the WAN or LAN facilities to verbose or debug; this sends an amount of data that causes the watchdog timer to reboot the RAS 1500. Other facilities might have the same effect under certain conditions.
- FCP** FCP bridging does not work with an IP address assigned to rm0/eth:1. With FCP bridging enabled, the only way to manage the RAS 1500 is through the console port.

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## Frame Relay Configuration

- Basic configuration requirements** As part of basic Frame Relay configuration on the RAS1500, there should be a different IP Sub-network address configured for each Frame Relay PVC. Refer to User Documentation for further Frame Relay configuration requirements.
- Deleting Frame Relay PVC** When deleting a Frame Relay PVC, the command line interface may "hang." To regain control over the CLI:
- Type <CTRL>C*
- Interface cable** An incorrect interface cable type other than RS232 is displayed. This is just a display issue. The interface functions appropriately.
- Display error** When a user is configured for frame relay and the RAS 1500 is rebooted, the following error message is displayed: **Facility IP Routing Process, Severity CRITICAL::ip\_rter\_rip\_intf\_create: ifb\_locate failed"**
- This is a display problem and does not affect the functionality of the RAS 1500.

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## Compatibility

|                                  |                                                                                                                                                                |
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| <b>Megahertz 128 ISDN PCMCIA</b> | The Megahertz 128 ISDN PCMCIA modem does not support MLPPP to the RAS 1500. You must use a single link PPP between Megahertz 128 ISDN PCMCIA and the RAS 1500. |
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## Transcend Remote Access Manager (TRAM)

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|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Upgrading Software</b> | TRAM's software-download facility does not operate correctly over leased lines, dial-up connections, or WAN connections. For TRAM to correctly download software, the TRAM workstation must be on the same LAN as the RAS 1500. |
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| <b>Running on NT workstation</b> | When running on a Windows NT workstation, TRAM requires that Windows NT Service Pack 3 be installed on the platform. This is also reflected in the Getting Started Guide. You need to upgrade the Windows NT system with Service Pack 3 before running TRAM. |
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|                              |                                                                                                                                                                                                                                  |
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| <b>Running IP Assignment</b> | IP Assignment will not run properly if the command line interface (CLI) is at a <b>--MORE--</b> prompt. Before running the IP Assignment, ensure in the CLI that <b>RAS1500&gt;</b> prompt is shown at the bottom of the screen. |
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|                              |                                                                                                                                                    |
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| <b>LAN-to-LAN connection</b> | There is no mechanism in the plug-in to issue a DIAL command to perform a LAN-to-LAN connection. Use the local console's CLI to perform this task. |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|

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| <b>Disabling dial-out security</b> | There is no mechanism in the plug-in to disable dial-out security for dial-out services, which is necessary for NCSI dial-out configuration. Use the local console's CLI to perform this task. |
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| <b>RAS boot file</b> | The boot file "rasboot.dmf" cannot be downloaded via the TRAM. Operational software download (ras1500.dmf) is supported by the TRAM. Utilize the local console's download capability if downloading the "rasboot.dmf" file is required. |
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|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Dial up link</b>                          | When using TRAM, the logged-in user may not make changes to that same account, or will be disconnected or disabled. Either make changes to that account while logged-in as another user or use the CLI to make the changes.                                                    |
| <b>After a configuration backup via TRAM</b> | After a configuration Backup via TRAM, a previously configured TFTP client is deleted. The user must reconfigure the TFTP client of 0.0.0.0.                                                                                                                                   |
| <b>Address Pools</b>                         | There is no mechanism in the plug-in to assign addresses to the user from a Private Pool. Use the local console's CLI to perform this task.                                                                                                                                    |
| <b>Bridge networks</b>                       | There is no mechanism in the plug-in to create and configure bridge networks and users. Use the local console's CLI to perform this task.                                                                                                                                      |
| <b>NOS Authentication setup</b>              | The plug-in cannot create a NOS Authentication setup. Use the local console's CLI to perform this task.                                                                                                                                                                        |
| <b>Viewing current modem settings</b>        | TRAM provides the ability to set AT commands via the Configuration Scripts utility, but does not allow the user to view current modem settings. Use the local console's CLI to perform this task. Type:<br><br><code>SHOW IMODEM INTERFACE rm0/mod:&lt;modem number&gt;</code> |
| <b>IP Route Metric</b>                       | The plug-in cannot change the IP Route Metric. Use the local console's CLI to perform this task. For example:<br><br><code>ADD/SET IP ROUTE 10.104.23.10/B GATEWAY 10.104.255.254<br/>METRIC[1-15]</code>                                                                      |
| <b>User status</b>                           | User status changes from DISABLE to INACTIVE when a field is changed.                                                                                                                                                                                                          |
| <b>TRAM Wizard</b>                           | The TRAM Wizard does not prompt for a RADIUS Accounting secret. To resolve, the RADIUS Accounting secret may be set via the TRAM's configuration tool.                                                                                                                         |

- Discovery process** The Discovery process searches within a range of IP addresses that the user provides. The Discovery process always adds a write community name of public. If you are not using the default read/write community names of public, then do not add a device via Discovery. The user needs to ensure that the READ/WRITE community name is correct before using TRAM. Manually add the device via the device tree. (See "adding a device" in online help.
- On-line help** In the "Filter information for the Remote Access 1500" topic, the "Filter Access Override" parameter should read "Port Filter Override".

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### Hunt Groups and Terminal Endpoint Identifiers (TEIs)

When using hunt groups on an Italian ISDN switch with a multipoint ISDN TEI line, you may need to modify your TEI configuration. By default, when you configure RAS 1500 for the Italian ISDN switch type, RAS 1500 uses point-to-point TEI line. From either modem, configure Multipoint TEI mode with the following command: **AT\*M=1**

This operation is dictated by the modem's AT settings as described below, and can be overridden as required.

AT\*M=0 [Default Setting] Plug-n-play default setting where the TEI mode reflects ISDN switchtype.

AT\*M=1 Multipoint TEI mode

AT\*M=2 Point-to-point TEI mode, where TEI value is defined by AT\*Tm=n (see below)

AT\*Tm=n The value m defines which TEI we are setting. Normally there will only be one TEI. The value n defines the TEI value. Legal values of n are 0...63, where zero is the default value.









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