Tekelec EAGLE® 5 Integrated Signaling System

FTP-Based Table Retrieve Application (FTRA) User Guide

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Patents

This product is covered by one or more of the following U.S. and foreign patents:

U.S. Patent Numbers:

5,732,213; 5,953,404; 6,115,746; 6,167,129; 6,324,183; 6,327,350; 6,456,845; 6,606,379; 6,639,981; 6,647,113; 6,662,017; 6,735,441; 6,745,041; 6,765,990; 6,795,546; 6,819,932; 6,836,477; 6,839,423; 6,885,872; 6,901,262; 6,914,973; 6,940,866; 6,944,184; 6,954,526; 6,954,794; 6,959,076; 6,965,592; 6,967,956; 6,968,048; 6,970,542; 6,987,781; 6,987,849; 6,990,089; 6,990,347; 6,993,038; 7,002,988; 7,020,707; 7,031,340; 7,035,239; 7,035,387; 7,043,000; 7,043,001; 7,043,002; 7,046,667; 7,050,456; 7,050,562; 7,054,422; 7,068,773; 7,072,678; 7,075,331; 7,079,524; 7,088,728; 7,092,505; 7,108,468; 7,110,780; 7,113,581; 7,113,781; 7,117,411; 7,123,710; 7,127,057; 7,133,420; 7,136,477; 7,139,388; 7,145,875; 7,146,181; 7,155,206; 7,155,243; 7,155,505; 7,155,512; 7,181,194; 7,190,702; 7,190,772; 7,190,959; 7,197,036; 7,206,394; 7,215,748; 7,219,264; 7,222,192; 7,227,927; 7,231,024; 7,242,695; 7,254,391

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Overview

The FTP-Based Table Retrieve Application (FTRA) is designed in conjunction with the FTP Retrieve and Replace feature to transfer EAGLE 5 ISS database tables using an FTP session to a remote server for offline processing. The FTRA is a stand-alone application that interfaces with one or more STPs. Database tables can be retrieved from the EAGLE 5 ISS, using the EAGLE 5 ISS's retrieve commands. The output of these retrieve commands is converted to CSV (comma separated value) files. EAGLE 5 ISS commands in the form of a command file can be read into the FTRA where they are validated and sent to the selected STP. Logs are provided for event tracking and error message display.

The FTRA provides the following features through the use of a graphical user interface:

- STP Connection Configuration.
- STP Connectivity Test.
- FTP Server Configuration.
- Retrieving the EAGLE 5 ISS database tables with the results converted to CSV files.
- Automated or manual retrieval of database tables from multiple STPs with the command line interface. The results are converted to CSV files.
- Validation of the command files before being sent to the STP.
- Command file editing.

• Viewing the log files for event tracking and error message display.

Related Publications

For information about additional publications that are related to this document, refer to the *Related Publications* document. The *Related Publications* document is published as a part of the *Release Documentation* and is also published as a separate document on the Tekelec Customer Support Site.

User Guide Conventions

In order to clearly differentiate between references to objects, actions, literal entries, and user-supplied information, the following conventions are used in this user guide:

• Menu selections and buttons are shown in bold, and the steps in a menu path are represented with ">". For example:

Select Edit > STP Connection Configuration from the menu.

The Add button is not enabled when the STP Connection Configuration menu opens.

• Commands and entries that must be entered exactly as shown in this document are shown in the 10 point Courier bold font. For example:

Using a text editor (such as Notepad) add the following lines to the AUTOEXEC.BAT file:

SETFTRA_HOME="C:\ <download_directory> "

SETJRE_HOME="C:\Program Files\Java\j2re1.4.0_01"

• User-specific information is shown in italics and enclosed in "<>". For example, the name of the folder you wish to use as the download directory in the previous example is shown as <*download_directory*>.

Documentation Availability, Packaging, and Updates

Tekelec provides documentation with each system and in accordance with contractual agreements. For General Availability (GA) releases, Tekelec publishes a complete EAGLE 5 ISS documentation set. For Limited Availability (LA) releases, Tekelec may publish a documentation subset that is tailored to specific feature content or hardware requirements. Documentation Bulletins announce a new or updated release.

The Tekelec EAGLE 5 ISS documentation set is released on a CD-ROM. This format allows for easy searches through all parts of the documentation set.

The electronic file of each manual is also available from the Tekelec Customer Suport site. This site allows for 24-hour access to the most up-to-date documentation.

Printed documentation is available for GA releases on request only and with a lead time of 4 weeks. The printed documentation set includes pocket guides for commands and alarms. Pocket guides may also be ordered as a set or individually. Exceptions to printed documentation are:

• Hardware or Installation manuals are printed only without the linked attachments found in the electronic version of the manuals.

• The Release Notice is available only on the Customer Support site.

NOTE: Customers may print a reasonable number of each manual for their own use.

Documentation is updated when significant changes are made that affect system operation. Updates resulting from Severity 1 and 2 PRs are made to existing manuals. Other changes are included in the documentation for the next scheduled release. Updates are made by re-issuing an electronic file to the customer support site. Customers with printed documentation should contact their Sales Representative for an addendum. Occasionally, changes are communicated first with a Documentation Bulletin to provide customers with an advanced notice of the issue until officially released in the documentation. Documentation bulletins are posted on the Customer Support site and can be viewed per product and release.

Content changes are indicated with change bars, the revision of the manual part number is incremented, and the month of publication is updated.

Documentation Admonishments

Admonishments are icons and text throughout this manual that alert the reader to assure personal safety, to minimize possible service interruptions, and to warn of the potential for equipment damage.

	DANGER: (This icon and text indicate the possibility of <i>personal injury</i> .)
<u>/</u>	WARNING: (This icon and text indicate the possibility of <i>equipment damage</i> .)
\triangle	CAUTION: (This icon and text indicate the possibility of <i>service interruption</i> .)

Customer Care Center

The Tekelec Customer Care Center offers a point of contact for product and service support through highly trained engineers or service personnel. The Tekelec Customer Care Center is available 24 hours a day, 7 days a week at the following locations:

• Tekelec, USA

Phone:

+1 888 367 8552 (US and Canada only)

+1 919 460 2150 (international)

Email: support@tekelec.com

• Tekelec, Europe

Phone: +44 1784 467804

Email:ecsc@tekelec.com

When a call is received, a Customer Service Report (CSR) is issued to record the request for service. Each CSR includes an individual tracking number.

Once a CSR is issued, the Customer Care Center determines the classification of the trouble. If a critical problem exists, emergency procedures are initiated. If the problem is not critical, information regarding the serial number of the system, COMMON Language Location Identifier (CLLI), initial problem symptoms (includes outputs and messages) is recorded. A primary Customer Care Center engineer is also assigned to work on the CSR and provide a solution to the problem. The CSR is closed when the problem is resolved.

Emergency Response

In the event of a critical service situation, emergency response is offered by Tekelec Technical Services twentyfour hours a day, seven days a week. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with an EAGLE 5 ISS that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical problems affect service and/or system operation resulting in:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Tekelec Technical Services.

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FTRA Initialization

To start the FTRA, double-click the FTRA icon on the desktop. When the application starts, the **FTP-Based Table Retrieve Application** window is displayed. See <u>Figure 2-1</u>. The **Initializing** window opens and displays the message "Initializing, please wait......" until the initialization process has been completed.

Figure 2-1. FTP-Based Table Retrieve Application Window

∰ F1	FTP-based Table Retrieve Application <>				
File	Edit	View	Help		
				Initializing please wait	
				nindaizing, prease wan	

<u>Table 2-1</u> shows the description of the menus in the **FTP-Based Table Retrieve Application** window.

Item	Description	
File	Selects the Exit menu.	
Edit	Selects the STP Connection Configuration menu, the FTP Server Configuration menu, or the Commands menu	
View	Selects these logs: • The Retrieve Tables Log • The Update Tables Log • The System Log.	
Help	Selects the About FTRA window.	

Table 2-1. FTP-Based Table Retrieve Application Menu Description

Exit the FTRA

To close the **FTP-Based Table Retrieve Application** window and exit the FTRA, either select **File > Exit** from the **File** menu, see <u>Figure 2-2</u>, or click the close window button in the upper right hand corner of the window.

Figure 2-2. File Menu in the FTP-Based Table Retrieve Application Window



The **Exit?** confirmation window (see <u>Figure 2-3</u>) opens with "You are about to exit. Continue?" Click **OK** to exit and close the application. The **Exit** window (see <u>Figure 2-4</u>) is displayed until the Exit process is completed. To cancel the exit and resume using the application, click **Cancel**.

Figure 2-3. Exit Confirmation Window



Figure 2-4. Exit Window

8	FTP-ba	sed Tab	le Retri	eve Application <>	- 🗆 ×
File	e Edit	View	Help		
				Exiting, please wait	

STP Connection Configuration Menu

Before database tables can be retrieved from an STP, or command files can be sent to an STP, the STP must be defined as an STP configuration record in the STP Connection Configuration database. The STP configuration record is configured and selected using the **STP Connection Configuration Menu** window.

The **STP Connection Configuration Menu** window is displayed by selecting **Edit > STP Connection Configuration**. See <u>Figure 2-5</u>.

Figure 2-5. Edit Menu

鬣FT	P-bas	ed Tab	le Retrieve Application	<stp1></stp1>	_ _ X
File	Edit	View	Help		
	STP	Conne	ction Configuration		
	FTP Server Configuration		Configuration		
	Con	nmands	\$		

Figure 2-6. STP Connection Configuration Menu Window (FTRA 4.0)

Connection Configuration Menu	r _k X	
Current STP Selected: STP 2		
STP Name		
	▼ Refresh	
Primary IP Address		
	Test	
Back-Up IP Address		
	Test	
Secure Connection		
Secure Connection STP UserName		
Secure Connection STP UserName		
Secure Connection STP UserName STP Password		
Secure Connection STP UserName STP Password		
Step UserName STP Password FTP UserName		
STP UserName		
STP UserName TP UserName TP DesrName TP Password TP Password		
STP UserName STP Password TP UserName STP Password FTP UserName STP Password		
Ste UserName TP UserName TP Password TP Password Use STP and FTP UserNames, Passwords 1	ior all STPs	

<u>Table 2-2</u> shows the description of the fields, buttons, and boxes in the **STP Connection Configuration Menu** window.

Item	Description				
	Fields				
STP Name	Contains the STP Names. The STP name must contain at least one alphanumeric character and a maximum of 64 upper-case alphanumeric characters. The STP Name will always be entered in uppercase regardless of the Caps Lock key setting on your keyboard. This field also provides a drop down list for selecting stored STP configuration records.				
Primary IP Address (FTRA 4.0)	The primary IP address of the associated STP (used for telnet sessions). The FTRA uses this IP address first when connecting to the STP. The primary IP address is the IP address of an IPSM in the associated EAGLE 5 ISS.				
Backup IP Address (FTRA 4.0)	The backup IP address of the associated STP (used for telnet sessions). The FTRA uses this IP address when the connection using the primary IP address fails. The backup IP address should be the IP address of another IPSM in the same EAGLE 5 ISS.				

Item	Description
STP UserName	The user name assigned to the user by the STP system administrator (used for telnet sessions).
STP Password	The password assigned to the user by the STP system administrator (used for telnet sessions).
FTP UserName	The FTP user name assigned to the user by the administrator (used for FTP). Any FTP user name with symbols must be enclosed within double quotation marks (for example, to specify the FTP user name mylogin#1, you would enter "mylogin#1").
FTP Password	The FTP password assigned to the user by the administrator (used for FTP).
	Buttons
Refresh	Displays the data of the STP configuration record typed in the STP Name field. If an STP name is selected from the STP Name drop down list, the data fields are automatically displayed.
Test	Verifies that the FTRA can successfully connect and login to the EAGLE 5 ISS through an available telnet terminal at the specified IP address.
	For FTRA 4.0, the STP Connection Configuration Menu window has only one Test button.
	For FTRA 4.0 or greater, the STP Connection Configuration Menu window has two Test buttons, one for the Primary IP address, and one for the Backup IP address.
Select	Selects the displayed STP name to be connected to the FTRA. The STP Selection Change window opens to verify if you want to proceed.
Add	Adds a newly entered STP configuration record and associated data to the STP Connection Configuration database.
Modify	Modifies the fields of the displayed STP configuration record.
Delete	Deletes the displayed STP configuration record and associated data from the STP Connection Configuration database.
Close	Closes the STP Connection Configuration Menu window.
	Boxes
Secure Connection	Enables the FTRA to use a secure IP connection to the STP.
(F1KA 4.0)	To use a secure connection for the FTRA to EAGLE 5 ISS communication, make sure the EAGLE 5 ISS is running release 30.2 or greater and that the Eagle OA&M IP Security Enhancements feature is enabled and activated. This can be verified by entering the rtrv-ctrl-feat command at the EAGLE 5 ISS. If the Eagle OA&M IP Security Enhancements feature is not enabled or activated, perform the "Activating the Eagle OA&M IP Security Enhancements Controlled Feature" procedure in the <i>Database Administration Manual - System Management</i> and enable and activate the Eagle OA&M IP Security Enhancements feature.
	NOTE: This box should be unchecked if the Eagle OA&M IP Security Enhancements feature is not enabled or activated, and will not be enabled or activated.
	If this box is checked, the public key fingerprint for the EAGLE 5 ISS specified in this window must be installed onto the FTRA for the FTRA and the specified EAGLE 5 ISS to use a secure connection. After this STP is added to the STP Connection Configuration database, add the public key fingerprint to the FTRA by performing the <u>Secure EAGLE 5 ISS Host Key Provisioning</u> procedure.
Use STP and FTP UserNames, Passwords for all STPs Box	All the STP and FTP user names and passwords of all the provisioned STPs are changed to the user name and password of the displayed STP name. This change occurs only when the Add or Modify buttons are used.

Adding an STP Configuration Record

Procedure

1. Select Edit > STP Connection Configuration from the FTP-Based Table Retrieve Application window.

See <u>Figure 2-5</u>. The **STP Connection Configuration Menu** window opens. The Add button is not enabled when the STP Connection Configuration Menu window opens.

2. Enter the STP name in the STP Name field of the STP Connection Configuration Menu window.

The STP name must contain at least one alphanumeric character, with a maximum of 64 upper-case characters (alphanumeric, letters and numbers, and spaces). See <u>Figure 2-8</u> (FTRA 4.0). The STP Name will always be entered in uppercase regardless of the Caps Lock key setting on your keyboard.

If characters other then alphanumeric characters or spaces are included in the STP name, the **Invalid STP Name** warning window is displayed. If the **Invalid STP Name** window appears, click **OK**, and reenter the STP name in the **STP Name** field with the correct characters.

NOTE 1: When the new STP name is entered into the STP Name field, the Add button is enabled. If the STP name matches an existing STP name in the STP Connection Configuration database, the Add button is disabled. If you wish to display the existing STP names, go to the <u>Displaying an Existing STP Configuration Record</u>

NOTE 2: If the "Use STP and FTP UserNames and Passwords for all STPs" box is checked when the Add button is clicked, all the user names and passwords for all provisioned STP Names are changed to those of the added STP name.

NOTE: Existing STP configuration records can be changed. Go to the <u>"Modifying an</u> <u>Existing STP Configuration Record" procedure</u> to change an existing STP configuration record.

Figure 2-7. Invalid STP Name Error Message

₩arning	×
	Invalid STP Name
8	Letters, numbers and spaces only
	Maximum length 64 characters
	ОК

STP Connection Configuration	tion Menu		₽ _K ⊠	1	
Current STP Selected: STP 2					
STP Name					
STP 6		•	Refresh		
Primary IP Address					
10.2.3.4			Test		
Back-Up IP Address			11		
10.2.3.5			Test		
Secure Connection					
STP UserName					
eagle					
STP Password					

FTP UserName					
eagle1					
FTP Password					

Use STP and FTP UserNam	nes, Passwords fo	r all STPs			
	1		10		

Figure 2-8. Adding an STP Configuration Record (FTRA 4.0)

3. Enter the IP address of the STP in the **Primary IP Address** field, and a backup IP address in the **Backup IP Address** field. See <u>Figure 2-8</u> (FTRA 4.0).



CAUTION: If the backup IP address is not entered for FTRAs running 4.0, the FTRA will not be able to connect to the STP when the connection to the STP using the IP address fails. It is recommended that you specify a backup IP address for the STP.

If the primary and backup IP addresses (FTRA 4.0 or greater) is not entered correctly, the **Invalid IP** Address warning window is displayed. See <u>Figure 2-9</u>. If the **Invalid IP** Address window appears, click **OK**, and re-enter the IP address in the primary or backup IP addresses (FTRA 4.0) in the **Primary IP** Address or **Backup IP** Address fields in the correct format.

Figure 2-9.	Invalid IP	Address	Error	Message
-------------	------------	---------	-------	---------

Warning		x
Ō	Invalid IP Address	
	ОК	

4. Enter the STP user name for this STP in the **STP UserName** field.

The user name is assigned to the user by the STP system administrator for telnet sessions. See <u>Figure 2-8</u> (FTRA 4.0). If the format of the STP user name is not correct, the **Invalid STP User Name** warning window is displayed. See <u>Figure 2-7</u>. If the **Invalid STP User Name** window appears, click **OK**, and re-enter the STP user name in the **STP UserName** field.

Figure 2-10.	Invalid STP	User Name	Error Message
--------------	-------------	-----------	---------------

Warning		×
ġ	Invalid STP Username	
	ОК	

5. Enter the STP password for this STP in the **STP Password** field.

The password is assigned to the user by the EAGLE 5 ISS system administrator for telnet sessions. See <u>Figure 2-8</u> (FTRA 4.0). If the format of the STP password is not correct, the **Invalid STP Password** warning window is displayed. See <u>Figure 2-11</u>. If the **Invalid STP Password** window appears, click **OK**, and re-enter the STP password in the **STP Password** field.

NOTE: The STP Password field does not check for invalid EAGLE 5 ISS passwords. The passwords are validated by the EAGLE 5 ISS when the FTRA attempts a connection to the EAGLE 5 ISS. The requirements for the format of EAGLE 5 ISS passwords is shown in the output of the EAGLE 5 ISS's rtrv-secu-dflt command.

Figure 2-11. Invalid STP Password Error Message

Warning		×
Ö	Invalid STP Password	
	ОК	

6. Enter the FTP user name assigned by the FTP server administrator in the FTP UserName field.

See <u>Figure 2-8</u> (FTRA 4.0). Any FTP user name with symbols must be enclosed within double quotation marks (for example, to specify the FTP user name mylogin#1, you would enter "mylogin#1"). If the format of the FTP user name is not correct, the **Invalid FTP User Name** warning window is displayed. See <u>Figure 2-12</u>. If the **Invalid FTP User Name** window appears, click **OK**, and re-enter the FTP user name in the **FTP UserName** field.

NOTE: Any firewall between the FTRA and the FTP server configured in the FTP Server Configuration Menu window (<u>Figure 2-32</u>), must allow FTPs to the IP address specified in the FTP Server Configuration Menu window.

Figure 2-12. Invalid FTP User Name Error Message



7. Enter the FTP password assigned by the FTP server administrator in the **FTP Password** field.

See <u>Figure 2-8</u> (FTRA 4.0). If the format of the STP user name is not correct, the **Invalid FTP Password** warning window is displayed. See <u>Figure 2-13</u>. If the **Invalid FTP Password** window appears, click **OK**, and re-enter the FTP password in the **FTP Password** field.

Figure 2-13. Invalid FTP Password Error Message

Warning		x
Ö	Invalid FTP Password	
	ОК	

NOTE: If you are running FTRA 4.0 and not enabling a secure connection to the STP, skip this step and go to step 9.

8. To enable a secure connection between the FTRA and the STP being added in this procedure, click in the **Secure Connection** box.

Make sure the EAGLE 5 ISS is running release 30.2 or greater and that the Eagle OA&M IP Security Enhancements feature is enabled and activated. This can be verified by entering the **rtrv-ctrlfeat** command at the EAGLE 5 ISS. If the Eagle OA&M IP Security Enhancements feature is not enabled or activated, perform the "Activating the Eagle OA&M IP Security Enhancements Controlled Feature" procedure in the *Database Administration Manual - System Management* and enable and activate the Eagle OA&M IP Security Enhancements feature.

9. Click the Add button.

See <u>Figure 2-8</u> (FTRA 4.0). The newly entered STP Name and associated data is added to the STP Connection Configuration database, and the **STP Added** window (<u>Figure 2-14</u>) is displayed. Click **OK** to continue.



Informa	tion	×
Ê	STP Added	
	ОК	

10. Verify the addition of the new STP name.

See the Displaying an Existing STP Configuration Record .

Displaying an Existing STP Configuration Record

An existing STP configuration record can be displayed by either selecting the STP Name from the STP Name drop down list, or by re-entering the STP name in the **STP Name** field in the **STP Connection Configuration Menu** window and clicking the **Refresh** button.

To Use the STP Name Drop Down List

Procedure

1. In the STP Connection Configuration Menu window, click on the STP Name drop down list. The STP Name drop down list opens. Move the cursor to the STP name to be selected. Click on the desired STP name in the drop down list.

Figure 2-15. Selecting an STP Name from the STP Name Drop Down List (FTRA 4.0)

STP Connection Configuration Menu		
Current STP Selected: STP 2		
STP Name		
	▼ Refresh	
STP 1	Test	
STP 3	nest	
STP 6		
STP 2	Test	
STP 4		
STP 5		
STP UserName		
STD Dasemord		
TP UserName		
TP Password		
Ileo STD and FTD IleorNamos Dassmords for	all STPs	

2. When the STP name is selected in step 1, the STP configuration record for the specified STP is displayed. The Refresh, Test, Select, Delete, and Close buttons are enabled.

Current STP Selected: STP 2 STP Name STP 4 Refresh Primary IP Address 10.2.3.8 Back-Up IP Address 10.2.3.9 Vestore Connection STP UserName eagle STP Password ****** FTP UserName eagle1 FTP Password ******* Use STP and FTP UserNames, Passwords for all STPs	STP Connection Configura	ation Menu		чк. 15	র	
STP Name STP 4 Refresh Primary IP Address 10.2.3.8 Back-Up IP Address 10.2.3.9 V Secure Connection STP UserName eagle STP Password Test TP UserName eagle1 TP Password TTH UserName Use STP and FTP UserNames, Passwords for all STPs	Current STP Selected: STP 2					
STP 4 Primary IP Address 10.2.3.8 Back-Up IP Address 10.2.3.9 Test Secure Connection STP UserName eagle STP Password ******* FTP UserName eagle1 FTP Password ******* Use STP and FTP UserNames, Passwords for all STPs	STP Name					
Primary IP Address 10.2.3.8 Test Back-Up IP Address 10.2.3.9 Test V Secure Connection STP UserName eagle STP Password FTP UserName eagle1 FTP Password test Use STP and FTP UserNames, Passwords for all STPs	STP 4		-	Refresh		
10.2.3.8 Test Back-Up IP Address 10.2.3.9 Test Test Test Test Test Test Test Test Test Test Test Test Test Test Test Test Test Test Test Test Test Test Test	Primary IP Address					
Back-Up IP Address 10.2.3.9 Test 10.2.3.9 Test STP UserName eagle STP Password FTP UserName eagle1 FTP Password ******* Use STP and FTP UserNames, Passwords for all STPs	10.2.3.8			Test		
10.2.3.9 Test	Back-Up IP Address					
	10.2.3.9			Test		
STP UserName eagle STP Password FTP UserName eagle1 TTP Password TTTP Password Use STP and FTP UserNames, Passwords for all STPs	Secure Connection					
eagle STP Password TFP UserName eagle1 TFP Password TTP Password TTP UserNames, Passwords for all STPs	STP UserName					
STP Password FTP UserName eagle1 FTP Password FTP Password Use STP and FTP UserNames, Passwords for all STPs	eagle					
	STP Password					
FTP UserName eagle1 FTP Password TTP Password Use STP and FTP UserNames, Passwords for all STPs	******					
eagle1 FTP Password TTP Password TTP VaserNames, Passwords for all STPs	FTP UserName					
FTP Password	eagle1					
Use STP and FTP UserNames, Passwords for all STPs	FTP Password					
Use STP and FTP UserNames, Passwords for all STPs	******					
	Use STP and FTP UserNar	nes, Passwords f	or all STPs			

Figure 2-16. STP Name Selected from the STP Name Drop Down List (FTRA 4.0)

To Enter the STP Name

Procedure

1. Type the STP name in the STP Name field in the STP Connection Configuration Menu window. The Refresh, Test, Select, Delete, and Close buttons are enabled.

_ on connection connight dubit in	enu	se 🛛	
Current STP Selected: STP 2			
STP Name			
STP 5	-	Refresh	
Primary IP Address			
		Test	
Back-Up IP Address			
		Test	
Secure Connection			
STP UserName			
STP Password			
~			
FTP UserName			
FTP UserName			
FTP UserName FTP Password			
FTP UserName FTP Password			
FTP UserName FTP Password Use STP and FTP UserNames, Pa	sswords for all STP	s	

Figure 2-17. Selecting an STP Configuration Record by Typing in the STP Name Field (FTRA 4.0)

2. Click the Refresh button. The STP configuration record for the specified STP is displayed.

Figure 2-18. STP Configuration Record (FTRA 4.0)

STP Connec	tion Configura	tion Menu			X	
Current STP Sel	ected: STP 2					
STP Name STP 5			•	Refresh		
Primary IP Addr	ess					
10.2.3.10				Test		
Back-Up IP Addr	ess					
10.2.3.11				Test		
Secure Conr STP UserName	lection		-			
STD Dageword						

FTP UserName						
user2						
FTP Password						

Use STP and	I FTP UserNam	ies, Passwords	for all STPs			

3. If the STP name was entered incorrectly, or is not in the STP configuration record database, the "STP Name does not exist" error message is displayed.

Figure 2-19. STP Name Does Not Exist Error Message



Testing an STP Configuration Record

Procedure

- Select Edit > STP Connection Configuration from the FTP-Based Table Retrieve Application window.
 See Figure 2-6. The STP Connection Configuration Menu window opens.
- **2.** Display the STP configuration record being modified.

Go to the Displaying an Existing STP Configuration Record .

3. Click the **Test** button.

The Connectivity Test Log window opens. See <u>Figure 2-20</u> and <u>Figure 2-21</u>.

The Connectivity Test Log contains the events of the Test process and any error messages that may have occurred. The **Connectivity Test Log** window opens at the start of the Test process and is automatically cleared whenever a subsequent Test process is initiated.

& FTP-based Table Retrieve Application <> 📃	١×
File Edit View Help	
🙄 Connectivity Test Log 🗗 🗗	\times
File	
Stp Connectivity Test Process Manager: Stp Connectivity Test Begun Telnet Terminal Session Manager: Initiating Telnet Session with Eagle Telnet Terminal Session Manager: Session Connected: 10.1.2.10:8080 Telnet Terminal Session Manager: User "eagle" Login Attempt: 1 Telnet Terminal Session Manager: User "eagle" Login Accepted Telnet Terminal Session Manager: User "eagle" Logout Attempt: 1 Telnet Terminal Session Manager: User "eagle" Logout Accepted Stp Connectivity Test Process Manager: Stp Connectivity Test Complete Without Errors	

Figure 2-21. Connectivity Test Log Window with Errors

FTP-based Table Retrieve Application <>		
File Edit View Help		
Connectivity Test Log	S 4 4	\times
File		
Stp Connectivity Test Process Manager: Testing stp4 Telnet Terminal Session Manager: Session Not Connected: 10.1.2.1:8080 Stp Connectivity Test Process Manager: Test Complete With Errors		

4. When the test is complete, the **Command Complete** window opens.

See Figure 2-22 . Click OK to continue.

Figure 2-22. Command Complete Connectivity Test Window



Connectivity Test Log File Menu

The File menu in the Connectivity Test Log window, shown in Figure 2-23, provides these selections:

- Clearing the Connectivity Test Log display
- Printing the Connectivity Test Log
- Saving the Connectivity Test Log to a file
- Closing the Connectivity Test Log window.

Figure 2-23. File Menu in the Connectivity Test Log Window

🎇 FTP-based Tab	le Retrieve Application <>
File Edit View	Help
Connectivity	rest Log 🕹 🕹 🗹 🗹
File	
Clear Display Print Save Close Telnet Terminal Telnet Terminal Stp Connectivity	Test Process Manager: Stp Connectivity Test Begun iession Manager: Initiating Telnet Session with Eagle iession Manager: Session Connected: 10.1.2.10:8080 iession Manager: Terminal 17 Enabled iession Manager: User "eagle" Login Attempt: 1 Jession Manager: User "eagle" Login Accepted Session Manager: User "eagle" Logout Attempt: 1 Session Manager: User "eagle" Logout Accepted Test Process Manager: Stp Connectivity Test Complete Without Errors

Clearing the Connectivity Test Log Display

The display can be cleared, enabling new entries to be captured to the log. Once the log is cleared, the existing entries are lost unless the log is save to a file or printed before the display is cleared.

Procedure

1. Select File > Clear Display in the Connectivity Test Log window.

The Connectivity Test Log display clears.

Printing the Connectivity Test Log

Procedure

1. Select **File > Print** in the **Connectivity Test Log** window.

The **Print** window opens. See <u>Figure 2-24</u>.

Figure 2-24. Print Window

Print			? X
Printer			
Name:	\\Mail\Laserjet 8150		Properties
Status:	Ready		
Туре:	HP LaserJet 8150 PCL 6		
Where:	HPLaserJet8150Series		
Comment:			Print to file
Print range		Copies	
• All		Number of co	opies: 1 🗧
O Pages	from: 1 to: 1		
C Select	ion		3 Collate
		OK	Cancel

- **2.** Configure the printer settings.
- **3.** To print the C onnectivity Test Log, click the **OK** button in the **Print** window. The current contents of the Co nnectivity Test Log are printed.
- 4. If you decide not to print the Connectivity Test Log, click the **Cancel** button in the **Print** window.

Saving the Connectivity Test Log to a File

Procedure

1. Select **File > Save** in the **Connectivity Test Log** window.

The Save window opens. See <u>Figure 2-25</u>.

Figure 2-25. Save Window

Save			x
Look <u>i</u> n: (logfiles	-	
🗋 rtrv072	302.doc		
🗋 sys072	302.doc		
File <u>N</u> ame:	Contest083002.doc		
Files of Typ	e: All Files		•
			Save Cancel

2. Select a location for the file, and enter the file name and file type (with either the .doc or .txt extensions).

NOTE: The .doc file type is recommended, although the user can use Microsoft Word to open the file, even if it was saved as a .txt file.

NOTE: If you decide not to save the file, do not perform steps 3 and 4, but click Cancel in the Save window.

- **3.** Click the **Save** button.
 - A Saved file confirmation window opens with "Data saved to file."

Figure 2-26. Saved File Confirmation Window

🎘 Saved		×
Data :	saved to file	
	ОК	

4. To save the file, click **OK** in the **Saved** file confirmation window to continue.

Closing the Connectivity Test Log Window

Procedure

1. Select File > Close in the Connectivity Test Log window, or click the close window button in the upper right hand corner of the Connectivity Test Log window.

The Connectivity Test Log window closes.

Deleting an STP Configuration Record

Procedure

Guide

- 1. Select Edit > STP Connection Configuration from the FTP-Based Table Retrieve Application window. See Figure 2-6. The STP Connection Configuration Prabhat Menu window opens.
- 2. Display the STP configuration record being deleted.

Go to the Displaying an Existing STP Configuration Record. The Delete button is enabled when an existing STP configuration record is displayed.

To delete the STP configuration record, click the Delete button. 3.

The **Delete STP** window opens. See Figure 2-27.

Figure 2-27. Delete STP Window

Delete S	TP X
Ö	Delete this STP and all of its assocaiated data. Continue?
	OK Cancel

Click **OK**, to delete the STP configuration record. The STP configuration record is deleted.

If you do not wish to delete the STP configuration record, click Cancel.

4. Verify the STP name is no longer in the STP Connection Configuration database.

Go to the Displaying an Existing STP Configuration Record

Selecting the Current STP

Before retrieving database tables from an EAGLE 5 ISS, or sending commands to an EAGLE 5 ISS, that STP name must be shown in the STP Connection Configuration Menu window as the current STP. The Current STP Selected: indicator in the STP Connection Configuration Menu window shows which STP is the current STP.

Procedure

1. Display an existing STP configuration record.

Go to the Displaying an Existing STP Configuration Record procedure.

2. Click the **Select** button.

> If the selected STP is different from the STP shown as the current STP, the STP Selection Change window opens and displays "Warning: Selecting a different STP will purge existing table data. Do you want to proceed?" See Figure 2-28.

Figure 2-28. STP Selection Change Window

🍇 STP 9	election Change 🛛 🗙					
Ç	WARNING: Selecting a different STP will purge existing table data.					
	Yes No					

3. To proceed and select the STP name as the current STP, click the **Yes** button in the **STP Selection Change** window.

The existing data table is purged.

NOTE: To purge the data tables, a flag is set so that any of the existing table data already stored in the offline database will not be used.

The selected STP name appears in the title bar of the window, and **Current STP Selected:** *<STP Name>* appears in the **STP Connection Configuration Menu.** See **Figure 2-29** (FTRA 4.0).

Figure 2-29. Current STP Selected (FTRA 4.0)

STP Connection Configur	ation Menu		//////// c	* 🛛		
Current STP Selected: STP 6 STP Name	•				Current	STP Selected
STP 6		-	Refresh			
Primary IP Address			(); 			
10.2.3.6			Test			
Back-Up IP Address						
10.2.3.7			Test			
Secure Connection						
STP UserName						
eagle						
STP Password						

FTP UserName						
user2						
FTP Password						

Use STP and FTP UserNa	mes, Passwords	for all STP	5			
		-				

4. If you do not wish to use the STP name selected in step 2, click the **No** button in the **STP Selection Change** window.

The current STP configuration record is displayed.

Secure EAGLE 5 ISS Host Key Provisioning

An EAGLE 5 ISS using secure connections has a unique host key for each IPSM in the EAGLE 5 ISS. This key is used by the FTRA (FTRA 4.0) to positively identify or authenticate each IPSM's telnet server on the EAGLE 5 ISS. The FTRA will not connect to an unauthenticated server. The FTRA authenticates the server by

matching its preinstalled host key with the key received from the EAGLE 5 ISS when the connection between the EAGLE 5 ISS and the FTRA is made.

This procedure installs the public host key fingerprint, generated when the IPSM is installed into the EAGLE 5 ISS, reinitialized using the **init-card** command, or when the IPSM is brought into service with the alw-card or rst-card commands, into the FTRA. This procedure must be performed for each IPSM on each EAGLE 5 ISS that the FTRA will connect to, but only for EAGLE 5 ISSs using s ecure connections to connect to the FTRA. This procedure must be performed before any secure connection between the EAGLE 5 ISS and the FTRA can be initiated.

> NOTE: Once the IPSM is installed into the EAGLE 5 ISS, the public host key fingerprint for the IPSM will change only when power to the IPSM is disrupted by removing the **IPSM** from the shelf, then reinserting the **IPSM** into the shelf, or as the result of any event that interrupts power to the IPSM. Re initializing the IPSM will not change the public host key fingerprint for the IPSM. This procedure will have to be performed for each public host key fingerprint on the EAGLE 5 ISS that has changed.

The public host key fingerprint is added to the FTRA's hosts.xml file. If the public host key fingerprint has not been added to the FTRA's **hosts.xml** file, and you try to initiate a secure connection to the EAGLE 5 ISS, you will receive the following warning message (**Figure 2-30**).

Figure 2-30. IP Address Warning Message

Missin	ig IP
	STP Primary IP address is missing from host.xml file. You must clear the Secure Connection check box to use this IP address.
	ОК

If the warning message shown in <u>Figure 2-30</u> is received, either clear the Secure Connection check box in STP Configuration Record for the STP (see the "Modifying an Existing STP Configuration Record" the procedure), or add the public host key fingerprint to the FTRA's hosts.xml file.

The verification that the keys are installed on the FTRA is called strict host key checking. By default, strict host key checking is on. This enforces server (EAGLE 5 ISS) strong authentication, designed to provide security between the FTRA and the EAGLE 5 ISS. This also prevents a hostile server from tricking the FTRA into exposing any EAGLE 5 ISS login and password combinations.



Guide

CAUTION: Do not set strict host key checking to off, unless your network is in a controlled and secure environment. If you set strict host key checking to off, the Connectivity Test Log will warn you each time you try to connect that the EAGLE 5 ISS public host key fingerprint has not been added to the hosts.xml file on the FTRA.

To set the strict host key flag:

- 1. Open the application start file using any text file editor. On the Windows platform, open the ftra.bat file. On the UNIX platform, open the ftra file.
- 2. Insert into the application start file, one of these text strings, depending on whether you want strict host key checking on or off.

- **-DstrictHostKeyChecking=1** for setting strict host key checking to on (this is the default setting).
- -DstrictHostKeyChecking=0 for setting strict host key checking to off

This text string can be inserted anywhere between the **%JRE_HOME%\bin\java** and **-cp** text strings as shown in the following example.

%JRE_HOME%\bin\java -Dstricthostkeychecking=1 -Ddebuglevel=2 -Dsshtools.home=%FTRA2_HOME % -Dftra2rootdir=%FTRA2_HOME% -cp ftra3.jar com.tekelec.ftra.gui. InterfaceSelector %1

3. Save the changes and close the application start file.

Procedure

1. On the EAGLE 5 ISS, enter the **rtrv-trm** command.

The location of the IPSM is shown in the LOC column with the TELNET terminal type.

This is an example of the possible output.

rlghr	ncxa03	3w 05.	-09-1	17 15	5:08	:45 (GMT EAGI	LE5 34	.0.0	
TRM	TYPE	(COMM			FC	TMOUT	MXINV	DURAL	
1	VT320) 9	9600-	-7-E-	-1	SW	30	5	99:59:59	
2	KSR	9	9600-	-7-E-	-1	HW	30	5	INDEF	
3	PRIN	rer 4	4800-	-7-E-	-1	HW	30	0	00:00:00	
4	VT320) :	2400-	-7-E-	-1	BOTH	30	5	00:30:00	
5	VT320) (9600-	-7-0-	-1	NONE	30	5	00:00:30	
6	VT320) (9600-	-7-E-	-2	SW	30	9	INDEF	
7	PRIN	FER 9	9600-	-7-N-	-2	HW	30	5	00:30:00	
8	KSR	19	9200-	-7-E-	-2	BOTH	30	5	00:30:00	
9	VT320) (9600-	-7-E-	-1	SW	30	7	00:30:00	
10	VT320) (9600-	-7-E-	-1	HW	30	5	00:30:00	
11	VT320) 4	4800-	-7-E-	-1	HW	30	5	00:30:00	
12	PRIN	FER 9	9600-	-7-E-	-1	HW	30	4	00:30:00	
13	VT320) (9600-	-7-0-	-1	NONE	30	5	00:30:00	
14	VT320) (9600-	-7-E-	-2	SW	30	8	00:30:00	
15	VT320) (9600-	-7-N-	-2	HW	30	5	00:30:00	
16	VT320) (9600-	-7-E-	-2	BOTH	30	3	00:30:00	
TRM	TYPE		LOC				TMOUT	MXINV	DURAL	SECURE
17	TELNI	ΞT	1111	1			60	5	00:30:00	yes
18	TELNI	ΞT	1111	1			60	5	00:30:00	yes
19	TELNI	ΞT	1111	1			60	5	00:30:00	yes
20	TELNI	ΞT	1111	1			60	5	00:30:00	yes
21	TELNI	ΞT	1111	1			60	5	00:30:00	yes
22	TELNI	ΞT	1111	1			60	5	00:30:00	yes
24	TELNI	ΞT	1111	1			60	5	00:30:00	yes
TRM	TRAF	LINK	SA	SYS	PU	DB	UIMRD			
1	NO	YES	NO	YES	NO	YES	YES			
2	NO	NO	NO	NO	NO	NO	NO			
3	YES	YES	YES	NO	YES	YES	YES			
4	YES	NO	NO	NO	NO	NO	NO			
5	NO	YES	NO	NO	NO	NO	YES			
6	NO	NO	YES	NO	NO	NO	NO			
7	YES	YES	YES	YES	YES	YES	YES			
8	NO	NO	NO	NO	YES	NO	YES			
9	NO	YES	NO	NO	NO	YES	NO			
10	NO	NO	NO	NO	NO	NO	YES			
11	YES	YES	YES	YES	YES	YES	YES			
12	YES	YES	YES	YES	YES	YES	YES			
13	NO	YES	NO	NO	NO	NO	YES			
14	NO	NO	YES	NO	NO	NO	NO			
15	YES	YES	YES	NO	YES	YES	YES			
16	NO	NO	NO	NO	YES	NO	YES			
17	NO									
----	----	----	----	----	----	----	----			
18	NO									
19	NO									
20	NO									
21	NO									
22	NO									
23	NO									
24	NO									

2. Display the IP address assigned to the IPSM using the **rtrv-ip-lnk** command, specifying the card location of the IPSM shown in step 1 and the **port=a** parameter.

For this example, enter this command.

rtrv-ip-lnk:loc=1111:port=a

The following is an example of the possible output.

```
rlghncxa03w 05-09-17 15:08:45 GMT EAGLE5 34.0.0
LOC PORT IPADDR SUBMASK DUPLEX SPEED MACTYPE AUTO MCAST
1111 A 192.168.54.96 255.255.255.0 HALF 100 DIX NO NO
```

NOTE: If the Security Administration (SA) setting for all the terminals assigned to the IPSM specified in this procedure is set to YES, see the rtrv-trm output in step 1, skip this step and go to step 4.

3. Change the Security Administration setting on the terminals assigned to the IPSM with the chgtrm command and specifying the number of the terminals whose Security Administration setting is NO, and with the sa=yes parameter.

chg-trm:sa=yes:trm=<TELNET terminal number>

When the **chg-trm** command has successfully completed, this message should appear.

rlghncxa03w 05-09-17 15:08:45 GMT EAGLE5 34.0.0 CHG-TRM: MASP A - COMPLTD

> NOTE 1: When the IPSM is installed into the EAGLE 5 ISS, UIM 1493 is generated. UIM 1493 contains the DSA key fingerprint to be added to the hosts.xml file. If you recorded the DSA key fingerprint for the IPSM when UIM 1493 was generated, skip step 4 and go to step 5.



CAUTION: If you are performing step 4 from a telnet terminal, make sure the step is being performed from a telnet terminal that is not assigned to the IPSM being initialized. When the IPSM is initialized, you will lose all telnet connections supported by the IPSM being initialized.

4. Obtain the DSA key fingerprint for the IPSM by performing the **init-card** command and specifying the location of the IPSM.

For this example, enter this command.

init-card:loc=1111

After the **init-card** command has been executed, UIM 1494 is generated. The DSA key fingerprint is at the end of the output, in the hexadecimal format, and shown in **bold** in this output example.

rlghncxa03w 05-09-17 15:08:45 GMT EAGLE5 34.0.0 0021.1494 CARD 1111 INFO SSH Host Keys Loaded DSA Server Host Key FTRA-formatted Fingerprint= 84 7c 92 8b c 7c d8 19 1c 6 4b de 5c 8f c5 4d Report Date:05-03-17 Time:15:08:45 NOTE: If you wish to change the public host key fingerprint on the IPSM, remove and reinsert the IPSM. The public host key fingerprint does not change until the IPSM loses power. However, contact the <u>Customer Care Center</u> before removing and reinserting the IPSM.

- 5. Edit the FTRA hosts.xml file (in the **\$FTRA_HOME/cfg** directory on Unix or **%FTRA_HOME%** \cfg folder on Windows), using any text file editor. Add the:
 - IPSM IP address from the rtrv-ip-lnk output shown in step 2
 - DSA public key fingerprint, shown in either the output of UIM 1493, when the IPSM was installed, or from the output of UIM 1494 when the **init-card** command was performed in step 4 in the following format:

<AllowHost HostName="<IPSM IP Address>" Fingerprint="767: <DSA public key fingerprint>"/>

NOTE: The value 767 preceding the DSA public key fingerprint is the length of the key in bytes. On your EAGLE 5 ISS, this value may be different. Refer to the FTRA Connectivity Test Log to verify this value. The outputs of UIM 1493 or 1494 do not contain this value.

The following is a sample /ftra/cfg/hosts.xml file before the new DSA fingerprint information is added.

```
<?xml version="1.0" encoding="UTF-8"?>
```

The sample /ftra/cfg/hosts.xml file after the new DSA fingerprint information is added.

NOTE: There should be no duplicate IP addresses in this file.

- 6. Save the file and exit the text editor.
- 7. A secure connection can now be established to the IP address used in this procedure.

Either add the STP containing the IP address to the STP Configuration Record (see <u>Adding an STP</u> <u>Configuration Record</u>), or if the IP address is already defined in the STP Configuration Record, change the existing record for this STP with the IP address used in this procedure (see <u>"Modifying an Existing STP</u> <u>Configuration Record" procedure</u>). Whether adding a new STP record, or changing an existing STP record, make sure the **Secure Connection** check box is checked. **8.** After the STP record has been added or changed to use a secure connection, test the connection by performing the <u>Testing an STP Configuration Record</u> procedure.

If the connection test is passed, the public host key fingerprint is successfully installed. If the connection is refused, make sure that the key information for the EAGLE 5 ISS and the FTRA shown in the Connectivity Test Log match. The Connectivity Test Log shows both the key received from the EAGLE 5 ISS host and the key contained in the hosts.xml file for the EAGLE 5 ISS host. The following is an example from the Connectivity Test Log containing a host key mismatch. The key received from the EAGLE 5 ISS host is shown in bold. The key contained in the hosts.xml file is shown in bold underline.

2003-07-11 14:22:56.117: Stp Connectivity Test Process Manager: Testing STP11805011201 2003-07-11 14:22:56.227: Telnet Terminal Session Manager: Initiating Secure Telnet Session with Eagle: 192.168.53.71:22 2003-07-11 14:22:56.808: HostKeyVerification: ERROR: Host 192.168.53.71 cannot be authenticated due to a mismatched entry for this host in the hosts.xml file. The host key supplied by 192.168.53.71 is: 768: bb 7d 79 a2 7d ae 5d 5a 45 e2 44 58 cd 8a bd 83 . The current allowed key for 192.168.53.71 is: 768: ab 7d 79 a2 7d ae 5d 5a 45 e2 44 58 cd 8a bd 83

2003-07-11 14:22:56.828: HostKeyVerification: Connection rejected...onHostKeyMismatch

FTP Server Configuration

An FTP server must be configured on the EAGLE 5 ISS using the **FTP Server Configuration** menu before database tables can be retrieved from the EAGLE 5 ISS, or command files can be sent to the EAGLE 5 ISS.

NOTE 1: If the Secure Connection box in the STP Connection Configuration Menu window is checked, the IP address specified in the FTP Server Configuration menu must be the IP address of a secure FTP server. If the Secure Connection box in the STP Connection Configuration Menu window is not checked, the I P address specified in the FTP Server Configuration menu must be the IP address of a FTP server.

NOTE: Any firewall between the FTRA and the FTP server configured in the FTP Server Configuration Menu window (<u>Figure 2-32</u>), must allow FTPs to the IP address specified in the FTP Server Configuration Menu window.

Procedure

Select Edit > FTP Server Configuration from the FTP-based Table Retrieve Application menu.
 See Figure 2-31.

Figure 2-31. FTP Server Configuration Menu in the FTP-Based Table Retrieve Application Window



The FTP Server Configuration Menu window opens. See Figure 2-32 and Table 2-3.



FTP-based Table Retrieve Application <stp1></stp1>	
File Edit View Help	
FTP Server Configuration Menu c ^{k^c} ⊠ IP Address	

Table 2-3	FTP Server	Configuration	Monu	Window	Descriptions
1 able 2-3.	FIF Server	Configuration	Menu	w maow	Descriptions

Item	Description
	Fields
IP Address	The IP Address of the associated STP
Path	The complete path to the data tables transfer directory on the STP.
	This directory must be given complete read/write/execute permissions for all users. From Windows, this is commonly administered from within the FTP server software. From Unix, this is done with the chmod command. Please refer to your PC system documentation or Unix man pages for full details on setting directory permissions.
Subpath	The value used by the path parameter of the EAGLE 5 ISS ent-ftp-serv/chg-ftp-serv commands. The subpath is relative to the user's default directory upon FTP login. A file separator (\' or '/') is not used to begin the subpath string.
	Buttons
Browse	Opens the Select Starting Directory window to initiate a directory/file selection dialog for the data tables.
Set	Stores the FTP server configuration data.
Close	Closes the FTP Server Configuration Menu window.

2. Enter the IP address of the STP in the IP Address field.

NOTE: If the format is not entered correctly, the Invalid IP Address warning window is displayed. See <u>Figure 2-33</u>.

Figure 2-33.	Invalid IP	Address	Error Message
--------------	------------	---------	---------------

Warning		×
Ö	Invalid IP Address	
	ОК	

FTP-Based Table Retrieve Application (FTRA) User Guide

3. Enter the path for the FTP temporary data table storage area or click the **Browse** button.

If the **Browse** button is clicked, the **Select Starting Directory** window opens to select the location for the temporary data table storage area to be entered in **Path** field. See <u>Figure 2-34</u> and <u>Table 2-4</u>.

This directory must be given complete read/write/execute permissions for all users. From Windows, this is commonly administered from within the FTP server software. From Unix, this is done with the **chmod** command. Please refer to your PC system documentation or Unix **man** pages for full details on setting directory permissions.

Figure 2-34. Select Starting Directory Window

퉗 Select S	itarting Directory		x
Look <u>i</u> n:	🗖 ftra2	•	
🗂 bin			
☐ ftp			
⊡ log ⊡ stp			
			Select
			 Cancel
File <u>N</u> ame	c:\ftra2\ftp		
Files of Ty	ype: All Files		•

 Table 2-4.
 Select Starting Directory Window Descriptions

Item	Description		
Fields			
Look in:	A drop down menu that allows the user to browse through the directory structures.		
File Name:	he name of the file to be selected.		
Files of type:	A drop down menu that allows the user to select all files of a particular type.		
Buttons			
Select	Takes the contents of the File Name field and loads it into the Path field of the menu		
Cancel	Closes the Select Starting Directory window.		

4. Enter the Subpath.

The subpath must always be the last part of the path. The subpath is relative to the user's default directory upon FTP login. A file separator (' or ')) is not used to begin the subpath string. If an invalid Subpath is entered, a warning window opens. See <u>Figure 2-35</u>.

Figure 2-35. Invalid Subpath Window

Warning	x
Ö	Invalid Sub Path - Sub Path must be a subset of the Path
	ОК

5. Click the Set button.

See **<u>Figure 2-36</u>**.

Figure 2-36. FTP Server Configuration Example

SFTP-based Table Retrieve Application <stp1></stp1>	_ 🗆 🗙
File Edit View Help	
FTP Server Configuration Menu 🖉 🗹	
IP Address	
10.1.2.3	
Path	
c:\tfra2\tfp Browse	
Subpath	
ftp	
Set Close	

The FTP Server Data Set window opens. See Figure 2-37.

Figure 2-37. FTP Server Data Set Window

Information		x
Ê FTP	Server Data Set	
	ОК	

Click OK to continue.

Retrieve Database Tables from an STP

Retrieve Tables Window

The **Retrieve Tables** window (see <u>Figure 2-39</u>) is used to select the database tables you wish to retrieve from the selected STP. The **Retrieve Tables** window contains a list of predefined retrieve commands. Any number of the retrieve commands can be selected from the **Command List** box and moved to the **Selected Commands** box. Clicking the **Retrieve** button causes the database tables associated with the selected retrieve commands to be transferred from the selected STP.

The **Retrieve from STP** and **Retrieve from Local Database** buttons determine whether new database tables are retrieved from the selected STP or if existing tables already retrieved from that STP will be used. If no tables exist for the selected STP, the **Retrieve from Local Database** button will be grayed out.

The output from the retrieve commands is converted to CSV files. When the retrieve operation is completed, the **Command Complete** window opens notifying the user if the retrieve was executed with or without errors. The Retrieve Tables Log opens allowing the user to view the events.



CAUTION: Starting with FTRA 4.0, if you attempt to retrieve and convert the database tables for these GTT commands (rtrv-tt, rtrv-gtt) and these E GTT commands (rtrvgttsel, rtrv-gttset, rtrv-gta) in the same retrieve tables request, you will receive a warning (<u>Figure 2-38</u>) that errors can be caused by attempting to retrieve and convert the GTT and EGTT database tables from the same EAGLE 5 ISS.

You may only retrieve and convert the tables corresponding to which feature is on, GTT or EGTT. If the EGTT feature is on, shown in the rtrv-feat output, the database tables for the rtrv-gttsel, rtrv-gttset, and rtrv-gta commands can be retrieved and converted. If the EGTT feature is off, the database tables for the rtrv-tt and rtrv-gtt commands can be retrieved and converted.

The errors will be caused when the retrieved GTT and EGTT database tables are converted to CSV files. Because only one set of the database tables, GTT or EGTT, can be retrieved, only that set of the database tables can be converted. The error will occur when the attempt is made to convert that database tables that could not be retrieved.

Figure 2-38. GTT Warning Window

Retrieve	Tables		
Q	WARNING: You have selected both GTT and EGTT commands. This will cause errors, continue?		
	Yes No		



Figure 2-39. Retrieve Tables Window

<u>Table 2-5</u> shows the description of the fields and buttons in the **Retrieve Tables** window.

Table 2-5.	Retrieve	Tables	Window	Description
				1

Item	Description
	Fields
Command List	Contains a predefined list of retrieve commands.
Selected Commands	These commands are used to determine which database tables are retrieved from the selected STP.
	From one to all of the retrieve commands can be selected for retrieval.
	Buttons
Add	Moves the highlighted commands from the Command List box to the Selected Commands box.
Remove	Moves any highlighted commands in the Selected Commands box back to the Command List box and places them in the Command List box in alphabetical order.
Reset	Moves all commands in the Command List box to the Selected Commands box. All highlights in the Selected Commands box are removed.

Item	Description
Retrieve	Initiates the retrieval of all the selected database tables represented by the selected retrieve commands. The database tables are transferred using an FTP connection and converted to CSV files.
Store	Stores the commands in the Selected Commands box which will be used by the Command Line Interface. This list is maintained even when the FTRA is shut down and restarted.
Load	Loads the commands into the Selected Commands box which are currently stored for Command Line Interface usage. This allows the user to verify rtrv commands which will be executed by the Command Line Interface.
Retrieve from STP	Retrieves the database tables, based on the selected retrieve commands, from the selected STP instead of using the tables previously retrieved.
Retrieve from Local Database	When selected, the FTRA uses the database table previously retrieved from the selected STP.
Close	Closes the Commands Menu window.

In FTRA 4.0, the EAGLE 5 ISS release 32.0 and later are supported if that release supports CSV file output.

When a Retrieve Tables command is performed, FTRA 4.0 verifies that the EAGLE 5 ISS is running one of the supported releases. If the EAGLE 5 ISS release is not supported, an error message is displayed and the Retrieve Tables command is terminated. See <u>Figure 2-40</u>.

Figure 2-40. Retrieve Table Log - Release Not Compatible Error

FTP-based Table Retrieve Application <danstp1></danstp1>	_ 0	×
File Edit View Help		
Retrieve Tables Log	r ⊠_	×
File		
2005-01-31 15:40:22:442: Retrieve Process Manager: Purging FTP Transfer Area 2005-01-31 15:40:22:473: Retrieve Process Manager: Purging STP Data Area for: DANSTP1 2005-01-31 15:40:22:489: Telnet Terminal Session Manager: Initiating Telnet Session with Eagle: 192.168.5 2005-01-31 15:40:22:505: Telnet Terminal Session Manager: Session Connected: 192.168.54.51:1699 2005-01-31 15:40:23:895: Telnet Terminal Session Manager: Sending Eagle Command: 18 2005-01-31 15:40:23:895: Telnet Terminal Session Manager: User "eagle" Login Attempt: 1 2005-01-31 15:40:24:895: Telnet Terminal Session Manager: Use "eagle" Login Attempt: 1 2005-01-31 15:40:28:223: Telnet Terminal Session Manager: User "eagle" Login Accepted 2005-01-31 15:40:28:223: Telnet Terminal Session Manager: Sending Eagle Command: to Eagle 2005-01-31 15:40:28:223: Telnet Terminal Session Manager: Sending Eagle Command to Eagle 2005-01-31 15:40:28:223: Telnet Terminal Session Manager: Sending Eagle Command to Eagle 2005-01-31 15:40:28:239: Telnet Terminal Session Manager: Sending Eagle Command: rtrv-gpl 2005-01-31 15:40:34:38: Telnet Terminal Session Manager: Sending Eagle Command: trv-gpl 2005-01-31 15:40:34:395: Telnet Terminal Session Manager: Sending Eagle Command: the Eagle 2005-01-31 15:40:34:395: Telnet Terminal Session Manager: Sending Eagle Command: the Eagle 2005-01-31 15:40:34:395: Telnet Terminal Session Manager: Sending Eagle Command: the Eagle 2005-01-31 15:40:34:395: Telnet Terminal Session Manager: Sending Eagle Command: the Eagle Release:null 2005-01-31 15:40:34:505: Retrieve Process Manager: Telnet Terminal Session Complete With Errors 2005-01-31 15:40:34:52: Retrieve Process Manager: Closing Connections, Please Wait	4.51:23	

If the EAGLE 5 ISS release is supported, the Retrieve Tables command is performed and operations on the FTRA can continue.

1. Select Edit > Commands > Retrieve Tables from the FTP-Based Table Retrieve Application window. See <u>Figure 2-41</u>. The Retrieve Tables window opens. See <u>Figure 2-39</u>.

Figure 2-41. Commands Menu in the FTP-Based Table Retrieve Application Window

畿 F1	P-based Table Retrieve Application	n <stp1></stp1>
File	Edit View Help	
	STP Connection Configuration FTP Server Configuration Commands	

2. To select commands in the **Command List** box of the **Retrieve Tables** window, perform one of these steps: To select a single command, click on the command and it is highlighted. See <u>Figure 2-43</u>.

Figure 2-42. Selecting a Command

🅾 FTP-based Table Retrieve Applicatio	n <stp6></stp6>		- O ×
File Edit View Help			
Commands Menu			ък X
Commands Menu Retrieve Tables Update Tables Command List rtrv-card rtrv-card • rtrv-dstn rtrv-dstn rtrv-dstn rtrv-feat rtrv-ls rtrv-rtrv-rte rtrv-slk rtrv-slk rtrv-feat rtrv-stopts rtrv-sid •	Add Remove Control of the second se	cted Commands	ase
Reset	store Store	Load	
			Close

a. To select a range of commands, click on the first command and while holding down the Shift key, click on the last command to be selected. All the commands in between the selected commands are highlighted, along with the selected commands. See <u>Figure 2-46</u>.



🎄 FTP-based Table Retrieve Application <stp6></stp6>	X
File Edit View Help	
File Edit View Help Commands Menu cf ^d I Retrieve Tables Update Tables Command List Selected Commands rtrv-scr-blkdpc rtrv-scr-blkdpc rtrv-scr-dpa Add rtrv-scr-dpc Itrv-scr-dpc Itrv-scr-dpc Itrv-scr-dpc Itrv-scr-	
Reset Retrieve Store Load	
Close	

b. To select multiple commands, select the first command, then hold down the Ctrl key and click on each of commands to be selected. The selected commands are highlighted. See <u>Figure 2-44</u>.

NOTE: If you have selected any of these GTT commands (rtrv-tt, rtrv-gtt) and these GTT commands (rtrv-gttsel, rtrv-gttset, rtrv-gta) in substeps b or c, see the <u>Caution</u>.

Commands Menu				rk ⊠
Retrieve Tables Update	Tables			
Command List		Selected Comm	ands	
rtrv-card	▲			
rtrv-ctrl-feat	822 822			
rtrv-dstn				
rtrv-gtt	Add			
rtrv-ls				
rtrv-map				
rtrv-rte				
rtrv-slk				
rtrv-tt	Remove			
rtrv-feat	-(100			
rtrv-stpopts				
rtrv-sid	•		•	
		Retrieve from	m STP	
		O Retrieve from	m Local Database	
Reset	Retrieve	Store	_oad	
			(lose

Figure 2-44. Selecting Multiple Commands

3. To move the commands selected in step 2 to the **Selected Commands** box, click the **Add** button. The commands are moved to **Selected Commands** box. See <u>Figure 2-45</u>, <u>Figure 2-46</u>, and <u>Figure 2-47</u>.

🕾 FTP-based Table Retrieve Application	<stp6></stp6>	
File Edit View Help		
🔲 Commands Menu		s I
Command List Command List rtrv-card rtrv-card rtrv-dstn rtrv-gtt rtrv-rts rtrv-rte rtrv-slk rtrv-std rtrv-stgt rtrv-rte rtrv-stk rtrv-std rtrv-std rtrv-std rtrv-std rtrv-gta	Add Add Image: Selected Commands rtrv-feat Image: Selected Commands Remove Image: Selected Commands Image: Store Load	Se Close

Figure 2-45. Adding a Command to the Selected Commands Box

FTP-based Table Retrieve Application <stp6> File Edit View Help</stp6>	
Commands Menu Retrieve Tables Update Tables Command List rtrv-ctrl-feat rtrv-gttsel rtrv-gttset rtrv-scr-blkdpc rtrv-scr-blkdpc rtrv-scr-cdpa rtrv-scr-cdpa rtrv-scr-dpc rtrv-scr-dpc rtrv-scr-sio rtrv-scr-sio rtrv-scr-tt	Selected Commands rtrv-card rtrv-dstn rtrv-feat rtrv-gta rtrv-gt rtrv-sgt rtrv-rte rtrv-sid rtrv-sik rtrv-ske rtrv-tt
Reset Retrieve	Store Load Clase
	Ciuse

Figure 2-46. Adding a Range of Commands to the Selected Commands Box

Figure 2-47. Adding Multiple Commands to Selected Commands Box

Commands Menu Retrieve Tables Update Tables	1	4° X
Command List	Selected Commands	
rtrv-ctrl-feat rtrv-dstn rtrv-ls rtrv-rte rtrv-tt rtrv-stpopts rtrv-gta rtrv-gtsel rtrv-gttsel rtrv-gttset rtrv-scr-bikdpc rtrv-scr-bikdpc	Add rtrv-card rtrv-feat rtrv-gtt rtrv-sid rtrv-sik Remove	
ruv-sci-cupa	▼	•
	Retrieve from STP	
	O Retrieve from Local Databas	e
Reset	trieve Store Load	
		Close

NOTE: If no commands are being moved from the Selected Commands box to the Command List box, skip step 4 and go to step 5.

- 4. To remove commands from the **Selected Commands** box, perform one of these steps:
 - a. In the **Selected Commands** box, click on the command to be removed and it is highlighted. Click the **Remove** button. The highlighted command is moved to the **Command List** box. See <u>Figure</u> <u>2-48</u>.
 - b. To select a range of multiple commands to be removed, click on the first command and while holding down the Shift key, click on the last command to be removed. Click the **Remove** button. All highlighted commands are moved to the **Command List** box.
 - c. Hold down the Ctrl key and click on each of commands to be removed. Click the **Remove** button. Only the highlighted commands are moved to **Command List** side. See <u>Figure 2-49</u>.

NOTE: When a command is removed from the Selected Commands box, the command is placed in the Command List box in alphabetical order.

d. Click the **Reset** button. All commands in the **Command List** box are moved to the **Selected Commands** box. All highlights in the **Selected Commands** box are removed.

Figure 2-48. Command Selected to be Removed in the Selected Commands Box

Command List	Jpdate Tables		Folgeted Commande	
rtrv-ctrl-feat rtrv-dstn rtrv-ls rtrv-rte rtrv-tt rtrv-stpopts rtrv-gta rtrv-gtsel rtrv-gtset rtrv-scr-bikdpc rtrv-scr-bikdpc		Add	rtrv-card rtrv-feat rtrv-gtt rtrv-map rtrv-sid rtrv-sik	
			Retrieve from STP	
			O Retrieve from Local Da	tabase

Commands Menu Retrieve Tables Update Tables			, sk [
Command List	5	Selected Commands	
rtrv-ctrl-feat		rtrv-card	^
rtrv-dstn	1	rtrv-feat	
rtrv-gta		rtrv-gtt	
rtrv-gttsel	Add	rtrv-sid trv-sid	
ruv-guset		UV-SIK	
rtoeman			
rtrv-rte			
rtrv-scr-aftpc	D		
rtrv-scr-blkdpc	Remove		
rtrv-scr-blkopc			
rtrv-scr-cdpa	-		-
,	-	Retrieve from STP	
		O Retrieve from Local Data	base
Reset Ret	ieve S	tore Load	

Figure 2-49. Command Removed from the Selected Commands Box



5. To store the selected commands for the Command Line Interface, click the **Store** button on the **Commands Menu** window. The **Command Data Stored** window opens. See <u>Figure 2-50</u>.





Click OK to continue.

To verify what retrieve commands are stored, click the **Load** button. The stored commands appear in the **Selected Commands** box, as shown in <u>Figure 2-45</u>, <u>Figure 2-46</u>, or <u>Figure 2-47</u>.

To use the Command Line Interface, go to the Command Line Interface .

NOTE: If database tables are to be retrieved from the selected STP, skip step 6 and go to step 7.

To generate CSV files from database tables already retrieved from the selected STP, select the Retrieve from Local Database button after selecting the desired commands. See <u>Figure 2-51</u>. Click the Retrieve button.

Retrieve Tables	Update Tables				
Command List			Selected	Commands	
rtrv-card rtrv-ctrl-feat rtrv-dstn rtrv-feat rtrv-gta rtrv-gtt rtrv-gttsel rtrv-gttset rtrv-gtset rtrv-ss rtrv-map		Add Remove]		
rtrv-scr-aftpc		_			•
			⊖ Retrie	ve from STP	
			Retrie	ve from Local Da	itabase
	Reset Ref	trieve	Store	Load	

Figure 2-51. Retrieving Database Tables from the Local Database

NOTE: If step 6 was performed, skip step 7. This procedure is finished.

Retrieve the database tables from the selected STP corresponding to the commands selected in step 2 by selecting the Retrieve from STP button, then click the Retrieve button. The Retrieve Tables Log window opens (see <u>Figure 2-52</u>) and displays the message "Processing Retrieve Request, Please Wait" until the retrieve process completes.

NOTE 1: The telnet terminals on the EAGLE 5 ISS to which FTRA will be connecting should have their terminal settings set to all=no (use the EAGLE 5 ISS command chg-trm:trm=<telnet terminal>:all=no to make this setting; use the EAGLE 5 ISS command rtrv-trm to verify the EAGLE 5 ISS terminal settings). On an STP with heavy UIM output, this prevents the FTRA's terminal from being flooded with unrelated output, which could unnecessarily backlog command responses during FTRA operation.

NOTE: If you are retrieving the database tables for any of these GTT commands (rtrv-tt, rtrv-gtt) and any of these EGTT commands (rtrv-gttsel, rtrv-gttsel, rtrv-gttsel, rtrv-gttsel, see the <u>Caution</u>.

🎇 FTP-based Table Retrieve Appl	ication <stp1></stp1>	_ 🗆 ×
File Edit View Help		
🔲 Retrieve Tables Log		막다 🛛
File		
	Processing Retrieve Request, Please Wait	
2002-09-03 09:04:57.716: Retriev 2002-09-03 09:04:57.306: Telnet 2002-09-03 09:04:57.806: Telnet 2002-09-03 09:04:58.988: Telnet 2002-09-03 09:04:59.989: Telnet	re Process Manager: Purging Existing Tables For: stp1 Terminal Session Manager: Initiating Telnet Session with Eagle Terminal Session Manager: Session Connected: 10.1.2.10:8080 Terminal Session Manager: Terminal 17 Enabled Terminal Session Manager: User "eagle" Login Attempt: 1	

Figure 2-52. Retrieve Tables Log Window - Processing Retrieve Request

This message is displayed until the retrieve process completes. The **Command Complete** window opens.

a. If no errors occurred, the text "Retrieve Tables processing completed without errors." "Please check Retrieve Tables Log for Results." appears in the **Command Complete** window. See <u>Figure 2-53</u>.

Figure 2-53. Command Complete Window Without Errors

Comma	nd Complete X
Ê	Retrieve Tables processing completed without errors. Please check Retrieve Tables Log for results.
	ОК

Click OK, to continue.

b. If errors occurred, the text "Retrieve Tables processing completed with errors." "Please check Retrieve Tables Log for Results." appears in the **Command Complete** window. See <u>Figure 2-54</u>.

Figure 2-54. Command Complete Window With Errors

🎇 Command Complete 🛛 🗙					
Ê	Retrieve Tables processing completed with errors Please check Retrieve Tables Log for results.				
ОК					

The **Retrieve Table Log** window opens. See <u>Figure 2-55</u> and <u>Figure 2-56</u>. Click **OK**, to continue.

Retrieve Tables Log

The Retrieve Tables Log contains the events of the retrieve processing and any error messages that may have occurred. The **Retrieve Tables Log** window is opened after database tables have been retrieved from an STP and is displayed until the retrieve processing is complete (see <u>Figure 2-55</u>).

The Retrieve Tables Log displays the information of the CSV files generated for the selected retrieve commands. The filenames of the CSV files are displayed in ascending order except for the filename of the **rtrv-stp** CSV file. Since the **rtrv-stp** command CSV is not generated by the CSVGEN(X) utility, the CSV filename for the **rtrv-stp** command is not displayed in the sorted order with other CSV filenames, but it is displayed as the last entry in the filenames list. Since the Retrieve Tables Log is generated by the CSVGEN(X) utility, no record of processing the **rtrv-stp** command is displayed in this log. See <u>Figure 2-57</u> for an example of the Retrieve Tables Log when the **rtrv-stp** command is processed.

The log is automatically cleared when the next set of database tables are retrieved from an STP. Selecting View > Retrieve Tables Log from the menu also opens the and Figure 2-55 and Figure 2-56.

🎇 FTP-based Table Retrieve Application <stp1></stp1>	_ [l ×
File Edit View Help		
🗒 Retrieve Tables Log	막다	\times
File		
2002-12-05 08:19:09.488: Retrieve Process Manager: Purging FTP File Transfer Area		
2002-12-05 08:19:09.579: Telnet Terminal Session Manager: Initiating Telnet Session with Eagle		
2002-12-05 08:19:09.639: Telnet Terminal Session Manager: Session Connected: 10.2.1.74:8080		
2002-12-05 08:19:10.8: Telnet Terminal Session Manager: Sending Eagle Command: 17		
2002-12-05 08:19:10.911: Telnet Terminal Session Manager: Terminal 17 Enabled		
2002-12-05 08:19:11.912: Telnet Terminal Session Manager: User "eagle" Login Attempt: 1		
2002-12-05 08:19:12.923: Telnet Terminal Session Manager: Sending Eagle Command: login=uid=eagle		
2002-12-05 08:19:14.205: Telnet Terminal Session Manager: User "eagle" Login Accepted		
2002-12-05 08:19:14.215: Telnet Terminal Session Manager: Analyzing FTP-SERV APP=USER Accounts on Eagle		
2002-12-05 08:19:15.247: Telnet Terminal Session Manager: Sending Eagle Command: rtrv-ftp-serv:app=user		222
2002-12-05 08:19:15.758: Telnet Terminal Session Manager: Updating Eagle FTP SERV Table		
2002-12-05 08:19:16.769: Telnet Terminal Session Manager: Sending Eagle Command: dlt-ftp-serv:app=user:ipaddr=1.2.3.4		
2002-12-05 08:19:16.899: Telnet Terminal Session Manager: Updating Eagle FTP SERV Table		
2002-12-05 08:19:17.911: Telnet Terminal Session Manager: Sending Eagle Command: dlt-ftp-serv:app=user:ipaddr=100.10	1.102.1	
2002-12-05 08:19:18.071: Telnet Terminal Session Manager: Updating Eagle FTP SERV Table		
2002-12-05 08:19:19.082: Telnet Terminal Session Manager: Sending Eagle Command: ent-ftp-serv:app=user:ipaddr=10.2.1	.74:login=e	
2002-12-05 08:19:20.324: Telnet Terminal Session Manager: Instructing Eagle to Activate Table Transfers		
2002-12-05 08:19:21.346: Telnet Terminal Session Manager: Sending Eagle Command: ACT-FTP-TRNS:ACTION=PUT:FILETY	PE=ALL	
2002-12-05 08:19:21.556: Telnet Terminal Session Manager: ALL Fileset Table Transfer Started, This May Take Several Minut	es	
2002-12-05 08:19:21.666: Telnet Terminal Session Manager: ALL Fileset Table Transfer Complete		
2002-12-05 08:19:21.776: Telnet Terminal Session Manager: User "eagle" Logout Attempt: 1		
2002-12-05 08:19:22.828: Telnet Terminal Session Manager: Sending Eagle Command: logout		
2002-12-05 08:19:22.978: Telnet Terminal Session Manager: User "eagle" Logout Accepted		-

Figure 2-55. Retrieve Tables Log Window without Errors



FTP-based Table Retrieve Application <stp3></stp3>	
ile Edit View Help	
Retrieve Tables Log	막다 区
File	
2002-08-20 12:23:58.683: Retrieve Process Manager: Purging Existing Tables 2002-08-20 12:23:58.804: Telnet Terminal Session Manager: Initiating Telnet Session with Eagle 2002-08-20 12:24:19.754: Telnet Terminal Session Manager: Session Not Connected: 10.1.2.10:8080 2002-08-20 12:24:19.774: Retrieve Process Manager: Telnet Terminal Session Test Complete With Errors	

Figure 2-57. Retrieve Table Log with the RTRV-STP Command



Retrieve Tables Log File Menu

The File menu in the Retrieve Tables Log window, shown in Figure 2-58, provides these selections:

- Clearing the Retrieve Tables Log display
- Printing the Retrieve Tables Log
- Saving the Retrieve Tables Log to a file
- Closing the **Retrieve T ables Log** window.

Figure 2-58. File Menu in the Retrieve Tables Log Window

🌺 FTP-based Ta	ble Retrieve Application <stp1></stp1>				
File Edit View	Help				
🗍 Retrieve Ta	vles Log	노다 🗵			
File					
Clear Display Print	22.64 c:\ftra2\bin\feat_20020820_1226.csv tializing DRMS (10 MB).	<u></u>			
Save	Initializing DRMS Tables.				
Close	eved Initializing DRMS.				
PCTEST: Begin	Initializing DRMS (10 MB).				
PCTEST: Skippe	PCTEST: Skipped Initializing DRMS Tables.				
PCTEST: Completed Initializing DRMS.					
LINE 1: rtrv-fea tekelecstp 0 Command A feat_200208 ; LINE 2: exit	t 2-08-20 12:26:21 EST Rel 29.0.0-46.0.0 :cepted 20_1226.csv file generated				

Clearing the Retrieve Tables Log Display

The display can be cleared, enabling new entries to be captured to the log. Once the log is cleared, the existing entries are lost unless the log is saved to a file or printed before the display is cleared.

NOTE: Perform either step 1 or steps 2 and 3.

Procedure

- 1. Select File > Clear Display in the Retrieve Tables Log window.
- 2. Select View > Retrieve Tables Log from the View menu in the FTP-based Table Retrieve Application window.

See <u>Figure 2-59</u>. The Retrieve Tables Log window opens.

Figure 2-59. View Menu

畿FT	FTP-based Table Retrieve Application <stp7></stp7>				
File	Edit	View	Help		
		Retrie	eve Tables Log		
		Updat	te Tables Log		
		Syste	m Log		

3. Select File > Clear Display in the Retrieve Tables Log window.

The Retrieve Tables Log display clears.

Printing the Retrieve Tables Log

NOTE: Perform either step 1 or steps 2 and 3.

Procedure

- Select File > Print in the Retrieve Tables Log window.
 See <u>Figure 2-58</u>.
- 2. Select View > Retrieve Tables Log from the View menu in the FTP-based Table Retrieve Application window.

See <u>Figure 2-59</u>. The Retrieve Tables Log opens.

3. Select **File > Print** in the **Retrieve Tables Log** window.

The **Print** window opens. See Figure 2-60.

Figure 2-60. Print Window

Print	? ×
Printer	
Name: \\Mail\Laserjet 8150	▼ Properties
Status: Ready Tupe: HPL associet 8150 PCL 6	
Where: HPLaserJet8150Series	-
	Print to file
Print range	Copies
• All	Number of copies: 1 🛨
C Pages from: 1 to: 1	
C Selection	
	OK Cancel

- 4. Configure the printer settings.
- 5. To print the Retrieve Tables Log, click the **OK** button in the **Print** window.

The current contents of the Retrieve Tables Log are printed.

6. If you decide not to print the Retrieve Tables Log, click the Cancel button in the Print window.

Saving the Retrieve Tables Log to a File

NOTE: Perform either step 1 or steps 2 and 3.

Procedure

1. Select **File > Save** in the **Retrieve Tables Log** window.

See <u>Figure 2-58</u>.

2. Select View > Retrieve Tables Log from the View menu in the FTP-based Table Retrieve Application window.

The Retrieve Tables Log window opens.

3. Select File > Save in the Retrieve Tables Log window.

The Save window opens. See Figure 2-61.

Figure 2-61. Save Window

Save		x
Look <u>i</u> n:	C logfiles	· # # C # =
rtrv07	2302.doc	
Filo Namo	ttp:0702602 dod	
Files of Ty	pe. All files	•
		Save Cancel
		,

4. Select a location for the file, and enter the file name and file type (with either the .doc or .txt extensions).

NOTE 1: The .doc file type is recommended, although the user can use Microsoft Word to open the file, even if it was saved as a .txt file.

NOTE: If you decide not to save the file, do not perform steps 5 and 6, but click Cancel in the Save window.

- 5. Click the Save button.
 - A Saved file confirmation window opens with "Data saved to file." See Figure 2-62.

Figure 2-62. Saved File Confirmation Window

🎇 Saved	×
Data saved to file	
ОК	

6. To save the file, click **OK** in the **Saved** file confirmation window to continue.

Closing the Retrieve Tables Log Window

Procedure

1. Select File > Close in the Retrieve Tables Log window, or click the close window button in the upper right hand corner of the Retrieve Tables Log window.

See <u>Figure 2-58</u>. The **Re trieve Tables Log** window closes.

Command Line Interface

The FTRA Command Line Interface allows the user to retrieve the same database tables, using the EAGLE 5 ISS's retrieve commands, from all configured STPs in the STP configuration database. The **Store** and **Load** buttons in the **Retrieve Tables** window are used to select these retrieve commands.

The Command Line Interface for FTRA 4.0 allows the user to change the STP Username and Password for an STP already configured in the system.

Before the Command Line Interface can be started, you must exit the FTRA application. To start the Command Line Interface retrieve process, enter the (ftra -c) at the DOS command prompt (in Windows) or at a shell command prompt (in UNIX).

For modifying the Username and Password for an STP, three command line arguments have to be specified with the "-c" option (ftra -c stpname username password).

The user can automate this retrieve process through the use of external scheduling software such as Task Scheduled (on the Windows platform) and " cron" (on the Unix platform). Please refer to the platform's scheduling program for specifics on how to use the external scheduling software. For example, on the Unix platform, enter the **man crontab** command.

- 1. Exit the FTRA application. See Exit the FTRA .
- 2. On the Windows platform, at a DOS prompt, go to the \bin directory of the FTRA <*install_directory*> location.
- 3. On the Unix platform, at a shell prompt, go to the /bin directory of the FTRA <*install_directory*> location.
- 4. Enter the **ftra** -c **stpname username password** command (see <u>Figure 2-63</u> or <u>Figure</u> <u>2-64</u>). The stored **rtrv** commands are then sent to the provisioned STP. The data tables are retrieved and converted to the CSV file format.

Result: The username and password shall be modified in the STP configuration for the specified stpname.

NOTE: The parameters specified in the command line are case sensitive. For example, an stpname specified as EAGLE, Eagle or eagle shall be treated separately.

Figure 2-63. FTRA Windows Command Line Interface

C:\WINNT\System32\cmd.exe	- 1880 -	Sti-		
C:\ftra\bin>ftra -c				A
				-

Figure 2-64. FTRA Windows Command Line Interface to modify STP data





Console	· · 🗆
<u>W</u> indow <u>E</u> dit <u>O</u> ptions	<u>H</u> elp
[75]jerry[/export/home/gwheele3/ftra/bin]: ./ftra	-c

Figure 2-66. FTRA UNIX Command Line Interface to modify STP data

Gon	sole /	
Window Edit Options	He	alp
[75]jerry[/export/home/gwheele eagle eagle123	3/ftra/bin]: ./ftra -c EAGLE	

Figure 2-67. FTRA Windows Scheduled Task

ftra			? ×
Task Sched	lule Settings		
	√INNT\Tasks\ftra.job		
<u>R</u> un:	C:\ftra\bin\ftra.bat -c		
			Browse
S <u>t</u> art in:	C:\ftra\bin		
<u>C</u> omments:			
R <u>u</u> n as:	DOMAIN\username	<u>S</u> et pa	ssword
☑ <u>E</u> nabled (s	scheduled task runs at specified tin	ne)	
	OK	Cancel	

lun:	C:\/tra\bin\ftra.bat -c EAGLE e	agle eagle123
		Browse
tart in:	C:\ftra\bin	
omments:		
		[
iun as:	ASIA\00H10344	Set password

Figure 2-68. FTRA Windows Scheduled Task to modify STP data

Figure 2-69. UNIX cron job scheduled via crontab

NOTE: Last line shows FTRA scheduled to run at 3am Monday through Friday.

-	Text Editor – crontabjiai21	•
F	ile <u>E</u> dit Fo <u>r</u> mat <u>O</u> ptions	<u>H</u> elp
#i # # 10 15 1 30 0	<pre>dent "@(#)root 1.19 03/07/06 SMI" /* SVr4.0 1.1.3.1 The rtc command is run to adjust the real-time clock if and when daylight savings time changes. 3 * * 0,4 /etc/cron.d/logchecker 3 * * 0 /usr/lib/newsyslog 3 * * 0 /usr/lib/fs/nfs/nfsfind 2 * * * [-x /usr/sbin/rtc] && /usr/sbin/rtc -c > /dev/null 2>&1 3 * * * [-x /usr/sbin/rtc] && /usr/lib/gss/gsscred_clean 3 * * 1-5 [/tekelec/ftra/bin/ftra_wrapper > /tmp/wanda.log 2>1&</pre>	
1		

Figure 2-70. FTRA wrapper script example for Unix

NOTE: If you are using " cron" on the Unix workstation, it might be necessary to create a wrapper script for FTRA, in order to correctly set environment variables.

-	Text Editor — ftra_wrapper	• 🗆
E	ile <u>E</u> dit Fo <u>r</u> mat <u>O</u> ptions	<u>H</u> elp
IF1 JF e> /t	TRA_HOME=/tekelec/ftra RE_HOME=/tekelec/java/j2re1.4.0_01 xport FTRA_HOME xport JRE_HOME tekelec/ftra/bin/ftra –c	
51		

Figure 2-71. FTRA wrapper script example on Unix for modifying STP configuration

NOTE: If you are using " cron" on the Unix workstation, it might be necessary to create a wrapper script for FTRA, in order to correctly set environment variables.

THE SECOND SECOND	Terminal	
Hindow Edit Options		Help
FTRA_HOME=/tekelec/ftra JRE_HOME=/tekelec/java/j2re1.4.0_0 export FTRA_HOME export JTE_HOME /tekelec/ftra/bin/ftra -c EAGLE ea ~ ~ ~ ~ ~ ~	1 gle eagle123	
"ftra_wrapper" [New file]		

Procedure

1. To automate the FTRA retrieve process, enter the **ftra** -c command, the path to the **bin** directory of FTRA i.e. <*install_directory*> and the start time in the external scheduling software such as Scheduled Task (in Windows, see <u>Figure 2-67</u>) or " cron" (in Unix, see <u>Figure 2-69</u>).

Result: When the start time is reached, the stored rtrv commands are sent to all the provisioned STPs. The data tables are retrieved and converted to CSV file format for the stored **rtrv** commands.

However, to automate the FTRA retrieve process using three command line parameters, enter the **ftra** - **c stpname username password** command, the path to the bin directory of the FTRA such as <*install_directory*>, and the start time in the external scheduling software such as Scheduled Tasks (on Windows) or "cron" (on Unix).

Result: The username and password shall be modified in the STP configuration for the specified stpname. When the start time is reached, The stored **rtrv** commands are sent to all provisioned STPs. The data tables will be retrieved and converted to CSV file format for the stored rtrv commands.

NOTE: If you are using "cron" on the Unix workstation, it might be necessary to create a wrapper script for FTRA, in order to correctly set environment variables.

	FTRA 1.0	FTRA 1.1	FTRA 2.0	FTRA 2.1	FTRA 2.2	FTRA 3.0	FTRA 4.0
Eagle 28x and earlier	Ν	Ν	Ν	Ν	Ν	Ν	Ν
Eagle 29.0	Y	N	Ν	Ν	N	Y	Y
Eagle 30.0	Ν	Y	Y	Ν	Ν	Y	Y
Eagle 30.2	N	N	Y	N	N	Y	Y
Eagle 31.3	N	N	N	Y	N	Y	Y
Eagle 31.6	N	N	N	N	Y	Y	Y
Eagle 31.9	N	N	N	N	Y	Y	Y
Eagle 32.0	N	N	N	N	N	Y*	Y*
Eagle 35.0 and later	N	N	N	N	N	Y*	Y*, Y**

Table 2-6. FTRA - Eagle Compatibility Matrix

Legend:

N - Not supported.

Y - Supported. (CSVGen installed from FTRA install CD.)

Y* - Supported. (CSVGen transferred from Eagle TDM.)

Y** - Supported. (rtrv-stp command support, command line support for modifying STP data.)

All other releases of Eagle that are not listed are not officially supported by any release of FTRA.

Updating Database Tables in the Selected STP

The **Update Tables** window (see <u>Figure 2-72</u>) is used to send EAGLE 5 ISS commands to the selected STP. The commands, in the form of a command file, are validated before being sent.

To send the command file to the selected STP, the command file is selected by entering the path and file name of the command file, or by selecting the file name of the command file from the **Select** window. The command file is then validated by clicking the **Validate** button in the **Update Tables** window. When the validation is completed, the **Update Validation Complete** window appears. From the **Update Validation Complete** window the command file can be edited, sent to the selected STP, or the **Update Validation Complete** window can be closed without sending the command file to the selected STP. The Update Tables Log contains the events of the command validation and any error messages that may have occurred.



FTP-based Table Retrieve Application <stp7></stp7>	_ 🗆 🗙
File Edit View Help	
Commands Menu	
Retrieve Tables Update Tables	
Command File Browse	
Stop on error	
Validate	
Close	

<u>**Table 2-7**</u> shows the description of the fields and buttons in the **Update Tables** window.

Table 2-7.	Undate	Tables	Window	Descrit	otion
1 abic 2-7.	Opuare	Lauro	vv muow	DUSCIII	JUUII

Item	Description	
Fields		
Command File	The path and file name of the command file are entered here. A command file contains the EAGLE 5 ISS commands used to modify database tables of the STP.	
Stop on error box	If the box is checked, and an error is found during the validation of the commands, the validation stops and no further commands are validated. If the box is not checked, all commands are processed regardless of errors. The error results are displayed in the Update Tables Log.	
	Buttons	
Browse	Opens the Select window to select the command file to send to the selected STP.	
Validate	Validates the EAGLE 5 ISS commands using the offline database.	
Close	Closes the Commands Menu window.	

Validating a Command File

Procedure

Select Edit > Commands > Update Tables in the FTP-based Table Retrieve Application window.
 See Figure 2-73. The Update Tables window opens. See Figure 2-72.

Figure 2-73. Edit Menu

畿FT	'P-bas	ed Tab	le Retrieve Application	n <stp1></stp1>	×
File	Edit	View	Help		
	STP	Conne	ection Configuration		
	FTP	Server	Configuration		
	Con	nmands	S		

- **2.** Perform one of these steps.
 - a. Enter the path and name of the command file in the Command File field.
 - b. Click the **Browse** button.

The **Select** window is opened. See <u>Figure 2-74</u>. Find the folder containing the command file and click on the command file name. The command file name is highlighted. Click the **Select** button. The **Select** window disappears and the **Update Tables** window appears with the path and file name of the selected command file entered in the **Command File** field.

If you wish to cancel the command file selection process in the **Select** window, click the **Cancel** button.

<u>Table 2-8</u> shows the description of the buttons in the **Select** window.

Figure 2-74. Select Window

Select				2	×
Look <u>i</u> n:	SCI	ipts		▼ ♫ ⋬ ◻ 않는	
🗋 card.t	xt	🗋 gttsel.txt	Scr-bikdpc.tx	t 🗋 scr-sio.txt	
🗋 Ctrl-fe	at.txt	🗋 gttset.txt	Scr-blkopc.tx	t 🗋 scr-tt.txt	
🗋 🗋 dstn.t	xt	🗋 ls.txt	🗋 scr-cdpa.txt	🗋 scrset.txt	
🗋 feat.tx	đ	🗋 map.txt	🗋 scr-cgpa.txt	🗋 sid.txt	
🗋 ftpcm	ds.dat	🗋 rte.txt	🗋 scr-destfld.tx	tt 🗋 slk.txt	
🗋 gta.tx	t	rtrvcmds.scr	🗋 scr-dpc.txt	🗋 stpopts.txt	
🗋 gtt.txt		🗋 scr-aftpc.txt	🗋 scr-opc.txt	🗋 tt.txt	
File <u>N</u> ame	: fe	at.txt			
Files of Ty	pe: A	ll Files		•	
				Select Cancel	

Item	Description
	Fields
Look in:	A drop down menu allowing the user to browse through the directory structures.

Item	Description	
File Name:	The name of the file to be selected.	
Files of type: A drop down menu that selects all files.		
	Buttons	
Select	The contents of the File Name field and the path to the filename is loaded into the Command File field of the Update Tables window.	
Cancel	Closes the Select window.	

3. If you wish to have the command validation stop if any errors are found, check the **Stop on error** box in the **Update Tables** window.

See <u>Figure 2-75</u>. If you wish to have the command validation processed regardless of any errors, uncheck the **Stop on error** box. The error results are displayed in the Update Tables Log.

Figure 2-75. Update Tables Window with a Command File Selected and Stop on Error Box Checked

FTP-based Table Retrieve Application <stp7></stp7>	_ 🗆 ×
HIE Edit View Help	
🗂 Commands Menu 🚽 🗵	
Retrieve Tables Update Tables	
Command File	
C:\ftra2\scripts\feat.txt Browse	
Stop on error	
Validate	
Close	

4. Click the Validate button.

The **Update Tables Log** window opens at the beginning of the validate process and displays the "Processing Validate Request, Please Wait" message until the validation of the command file is complete. See **Figure 2-76**.

FTP-based Table Retrieve Application <stp1></stp1>	_ [] ×
File Edit View Help	
🗒 Update Tables Log	막다 🗵
File	
Processing Validate Request, Please Wait	
VGTT = off MGTT = off MPC = off ITUDUPPC = off GFLEX = off LNP18MIL = off GSMSCRN = off GPORT = off LNP48MIL = off MEASPLAT = off TSCSYNC = off ESIS = off ; LINE 6: rtrv-feat tekelecstp 02-09-03 09:20:05 EST Rel 29.0.0-46.0.0 rtv-feat Command entered at terminal #4. EAGLE FEATURE LIST GTT = off GWS = off NRT = off X25G = off LAN = off CRMD = off SEAS = off LAN = off CRMD = off SEAS = off LAN = off CRMD = off LNP = off FAN = on DSTN5000 = off WNP = off FAN = on DSTN5000 = off TLNP = off SCCPCNV = off TCAPCNV = off IPISUP = off DYNRTK = off X252000 = off	

Figure 2-76. Update Tables Log Window - Processing Retrieve Request

- The Update Validation Complete window opens. See the Update Validation Complete Window .
- 5. The Update Tables Log window opens.

It contains the events and error messages generated during the validation. See <u>Figure 2-86</u>, <u>Figure 2-87</u>, and <u>Figure 2-88</u> for Update Tables Log examples.

NOTE: If there is no entry in the Command File field and the Validate button is clicked, a warning message is displayed stating that a command file name must be entered. See <u>Figure 2-77</u>.

Figure 2-77. Must Enter Command Script File Name Message

Warning	×
Ö	Must enter Command Script file name
	ОК

Update Validation Complete Window

When the command validation has completed, the **Update Validation Complete** window opens notifying the user if the commands validated with or without errors. From the **Update Validation Complete** window, the command file can be edited, sent to the selected STP, or the window can be closed without sending the command file to the selected STP. See <u>Figure 2-78</u>.



Update \	Validation Complete
ĥ	Update Tables validation completed without errors.
- Corr	See Update Tables Log for results.
	Press Edit to edit command file;
	Commit to update Eagle;
	Stop to end without commit.
	Edit Commit Stop

<u>Table 2-9</u> shows the description of the buttons in the Update Validation Complete window.

Item	Description
Edit	Opens the Command File Editor window and allows the user to make changes to the command file. To edit a command file, go to the Editing a Command File section.
Commit	Sends the commands in the command file to the STP. A Command Complete window opens and the Update Tables Log is updated. See the <u>Sending a Command File to the Selected STP</u> .
	If the Update Tables validation completed with errors the Commit button is not displayed.
Stop	Closes the Update Validation Complete window without sending the commands in the command file to the STP.

Table 2-9. Update Validation Complete Window Description

Update Validation Complete Window with Errors

If the **Update Validation Complete** window shows that errors have occurred, the command file can be edited or the window can be closed without sending the command file to the selected STP. See <u>Figure 2-79</u>. There is no **Commit** button in this window; this prevents the sending of invalid commands.

To fix the errors in the command file, click the **Edit** button, then go to the <u>Editing a Command File</u> section.

Figure 2-79. Update Validation Complete Window with Errors

Update 1	Validation Complete 🔀
Ĺ	Update Tables validation completed with errors. See Update Tables Log for results. Press Edit to edit command file; Stop to end without commit.
	Edit Stop

Sending a Command File to the Selected STP

To send the command file, click the **Commit** button in the **Update Validation Complete** window. The **Commit** button is shown only on the **Update Validation Complete without Errors** window. See <u>Figure 2-78</u>. The validated command file is sent to the selected STP.

The **Command Complete** window opens and displays: "Update Tables processing completed without errors" and "Please check Update Tables Log for results." See <u>Figure 2-80</u>. Click **OK**, to continue. The Update Tables Log contains the commit processing events. See <u>Figure 2-86</u>.

Figure 2-80. Command Complete Window

🗞 Command Complete 🔀			
<u>ů</u>	Update Tables processing completed without errors. Please check Update Tables Log for results.		
	ОК		

Stop Without Sending or Editing a Command File

To stop the process without sending or editing a command file, click the **Stop** button in the **Update Validation Complete** window. See <u>Figure 2-78</u>. The **Update Validation Complete** window is closed. No changes are made to the command file and the command file is not sent to the selected STP.

Editing a Command File

To edit a command file, click the **Edit** button in the **Update Validation Complete** window. The **Command File Editor** window is opened. See <u>Figure 2-78</u>.

Figure 2-81. Command File Editor Window

#FTP-based Table Retrieve Application <stp7></stp7>	_ 🗆 ×
File Edit View Help	
🗂 Command File Editor 🖉 🖾 🚽	
File	
chg-feat:fan=on rtrv-feat I Browse	
Validate	
Close	

When the editing is complete, the command file can be saved without sending the command file to the selected STP, saved and sent to the selected STP without any further validation, or the command file can be closed without saving the changes to the command file.
Procedure

Click the Edit button in the Update Validation Complete window.
 See <u>Figure 2-78</u>. The Command File Editor window opens. See <u>Figure 2-87</u>.
 NOTE 1: The hourglass is displayed until the Command File Editor window is closed.
 NOTE: If an attempt is made to close the Update Tables window while the Command File Editor window is opened, the Command In progress, Cannot Close Window warning message is displayed. See <u>Figure 2-82</u>.

Figure 2-82. Command In progress, Cannot Close Window

Warning	×
Ö	Command in progress, cannot close window.
	ОК

2. Edit the command file.

Figure 2-83 shows a command file with an invalid command. In this example, the invalid command is **chg-feat:**. This command should be removed from the command file, or have a correct parameter and value added to it.

Figure 2-83. Command File Editor with Invalid Command

STP-based Table Retrieve Application <stp7></stp7>	
File Edit View Help	
☐ Command File Editor	
chg-feat: Invalid Command chg-feat:fan=on rtrv-feat I I I I I I I I I I I I I I I I I I I	
Validate	
Close	

- 3. When the editing is complete, perform one of these steps.
 - a. Select File > Save from the Command File Editor window (see <u>Figure 2-84</u>).

The command file is saved and the **Command File Editor** window remains open. The command file is not sent to the selected STP. The command file can be validated again in the **Update Tables** window.

STP-based Table Retrieve Application <stp7></stp7>		_ 🗆 ×
File Edit View Help		
Command File Editor	Browse	
	Validate	

Figure 2-84. File Menu in the Command File Editor Window

b. Select File > Save and Commit from the Command File Editor window (see Figure 2-84).

The command file is saved and the **Command File Editor** window closes. The **Command Complete** window opens and displays: "Update Tables processing completed without errors. Please check Update Tables Log for results." Click **OK**, to continue. See <u>Figure 2-85</u>. The command file is sent to the selected STP. The Update Tables Log contains the commit processing events. See Figure 2-87

Figure 2-85. Command Complete Window

🌺 Comn	nand Complete	×
Ê	Update Tables processing completed without errors Please check Update Tables Log for results.	. .
	ОК	

c. Select File > Quit from the Command File Editor window (see <u>Figure 2-84</u>).

The **Command File Editor** window closes. The command file is not sent to the selected STP. If changes to the command file have been made, a window is displayed asking if you want to save the changes.

Update Tables Log Window

The Update Tables Log contains the processing events and any error messages that may have occurred during the validation and sending of a command file. The **Update Tables Log** window is opened at the beginning of the validation process and displays "Processing Validate Request, Please Wait" until the command file validation is completed. The **Update Tables Log** window is automatically cleared when the next command file validation is started. Selecting **View > Update Tables Log** from the menu can also open the **Update Tables Log** window.

See <u>Figure 2-86</u>, <u>Figure 2-87</u>, <u>Figure 2-88</u>, and <u>Figure 2-89</u> for the Update Tables Log window examples.

Figure 2-86.	Update	Tables L	Log Wind	low after	the Co	ommit (Command	Completed
—								

🎇 FTP-based Table Retrieve Application <stp1></stp1>	IX
File Edit View Help	
🗂 Update Tables Log 🛛 🖞 🖓	\boxtimes
File	
ITUMTPRS = off SLSOCB = off EGTT = off	
VGTT = off MGTT = off MPC = off	
ITUDUPPC = off GFLEX = off LNP18MIL = off	
GSMSCRN = off GPORT = off LNP48MIL = off	
MEASPLAT = OIT ISCSYNC = OIT ESIS = OIT	
,	
2002-08-21 09:17:50.844: Telnet Terminal Session Manager: Initiating Telnet Session with Fagle	
2002-08-21 09:17:51.034: Telnet Terminal Session Manager: Session Conneted: 66.26.93.175:8080	
2002-08-21 09:17:52.276: Telnet Terminal Session Manager: Terminal 17 Enabled	
2002-08-21 09:17:53.287: Telnet Terminal Session Manager: User "eagle" Login Attempt: 1	
2002-08-21 09:17:55.521: Telnet Terminal Session Manager: User "eagle" Login Accepted	
2002-08-21 09:17:55.651: Telnet Terminal Session Manager: Sending Command Updates to Eagle	
2002-08-21 09:17:55.781: Telnet Terminal Session Manager: Sending Eagle Command:	
2002-08-21 09:17:56.913: Telnet Terminal Session Manager: Sending Eagle Command: chg-feat:fan=on	
2002-08-21 09:17:58.044: Telnet Terminal Session Manager: Sending Eagle Command: rtrv-feat	
2002-08-21 09:17:59-176: Telnet Terminal Session Manager: Sending Eagle Command: exit	3 I I
2002-08-21 09:18:00.308: Telnet Terminal Session Manager: Sending Eagle Command: exit	3 I I
2002-06-21 09:16:01.439: Telnet Terminal Session Manager: User "Badle" Command: exit	31
2002-06-21 09:16:02.371. Telnet remninal Session Manager. User "eagle" Logott Attempt. 1	
2002-08-21 09-18-04 103: Commit Process Manager: Tellet Terminal Session Complete Without Errors	
Loss of Li officion radio recommendation remote remain dession complete without Endis	
	-



STP-based Table Retrieve Application <stp1></stp1>	_ 🗆 🗙
File Edit View Help	
Update Tables Log	ц Х
File	
2002-08-20 12:30:48.803: cmd.exe/C c:\ftra2\bin\update.bat 2002-08-20 12:30:49.414: Table Updates: c:\ftra2\bin\update.bat Exit Code is: 0 2002-08-20 12:30:49.424: Table Updates: c:\ftra2\bin\update.bat Execution Complete 2002-08-20 12:30:49.434: Table Updates: c:\ftra2\bin\update.bat Executed Successfully 2002-08-20 12:30:49.444: Cmd Rej Search: Searching For Input Command Errors PCTEST: Begin Initializing DRMS (10 MB).	
PCTEST: Skipped Initializing DRMS Tables.	
PCTEST: Completed Initializing DRMS.	
PCTEST: Begin Initializing DRMS (10 MB).	
PCTEST: Skipped Initializing DRMS Tables.	
PCTEST: Completed Initializing DRMS.	
LINE 1: dng-feat:fan=on	2227
tekelecstp 02-07-26 09:01:20 EST Rel 29.0.0-46.0.0 chg-feat:fan=on Command entered at terminal #4. CHG-FEAT: MASP A - COMPLTD	

Figure 2-88.	Update Table	Log with Stop of	n Error Box Che	ecked in the Updat	te Tables Window
--------------	--------------	------------------	-----------------	--------------------	------------------

FTP-based Table Retrieve Application <stp1></stp1>	_ # ×		
File Edit View Help			
Update Tables Log	·도 조		
File			
2002-08-21 10:07:03.318: Validate Process Manager: Instructing PCTE 2002-08-21 10:07:03.328: Terminal Security And Feature Change: c:\ft 2002-08-21 10:07:03.348: Terminal Security And Feature Change: Exe 2002-08-21 10:07:03.358: cmd.exe/C c:\ftra2\binub 2002-08-21 10:07:03.619: Terminal Security And Feature Change: c:\ft 2002-08-21 10:07:03.629: Terminal Security And Feature Change: c:\ft 2002-08-21 10:07:03.649: Terminal Security And Feature Change: c:\ft 2002-08-21 10:07:03.669: Table Updates: c:\ftra2\binubdate.bat Crea 2002-08-21 10:07:03.679: Table Updates: c:\ftra2\binubdate.bat Crea 2002-08-21 10:07:03.689: cmd.exe/C c:\ftra2\binubdate.bat Execu 2002-08-21 10:07:04.29: Table Updates: c:\ftra2\binubdate.bat Execu 2002-08-21 10:07:04.32: Table Updates: c:\ftra2\binubdate.bat Execu 2002-08-21 10:07:04.33: Table Updates: c:\ftra2\binubdate.bat Execu 2002-08-21 10:07:04.33: Table Updates: c:\ftra2\binubdate.bat Execu 2002-08-21 10:07:04.33: Table Updates: c:\ftra2\binubdate.bat Execu 2002-08-21 10:07:04.35: Validate Process Manager: Command File C:\ PCTEST: Begin Initializing DRMS (10 MB).	ST to Perform Updates rra2\bin\chgtrm.bat Created Successfully cuting the following cmds: \bin\chgtrm.bat rra2\bin\chgtrm.bat Exit Code is: 0 rra2\bin\chgtrm.bat Execution Complete rra2\bin\chgtrm.bat Executed Successfully ted Successfully s: ode is: 0 tion Complete ted Successfully nd Errors ftra\scripts\feat.bxt Contains Errors, See Results Below		
PCTEST: Skipped Initializing DRMS Tables.			
PCTEST: Completed Initializing DRMS.			
PCTEST: Begin Initializing DRMS (10 MB).	Error message		
PCTEST: Skipped Initializing DRMS Tables.			
PCTEST: Completed Initializing DRMS.			
LINE 1: chg-feat			
tekelecstp 02-08-16 10:07:04 EST Rel 29.0.0-46.0.0 chg-feat ◀ Command entered at terminal #4. E2136 Cmd Rej: At least one optional parameter is required CHG-FEAT: MASP A - Command Aborted	Command from the command file		
	•		

Figure 2-89. Update Tables Log with Stop on Error Box NOT Checked Error in the Update Tables Window

EFP-based Table Retrieve Application <stp1></stp1>	_ 8 ×
File Edit View Help	
Update Tables Log	막다 🛛
File	
2002-08-21 10:12:11.417: Validate Process Manager: Instructing PCTEST to Perform Updates 2002-08-21 10:12:11.417: Terminal Security and Feature Change: c:\fra2\bin\chgtrm.bat Created Successfully 2002-08-21 10:12:11.417: Terminal Security and Feature Change: c:\fra2\bin\chgtrm.bat Created Successfully 2002-08-21 10:12:11.417: Terminal Security and Feature Change: c:\fra2\bin\chgtrm.bat 2002-08-21 10:12:11.417: Terminal Security and Feature Change: c:\fra2\bin\chgtrm.bat 2002-08-21 10:12:11.417: Terminal Security and Feature Change: c:\fra2\bin\chgtrm.bat Execution Complete 2002-08-21 10:12:11.417: Terminal Security and Feature Change: c:\fra2\bin\chgtrm.bat Execution Complete 2002-08-21 10:12:11.417: Terminal Security and Feature Change: c:\fra2\bin\chgtrm.bat Executed Successfully 2002-08-21 10:12:11.417: Terminal Security and Feature Change: c:\fra2\bin\chgtrm.bat Executed Successfully 2002-08-21 10:12:11.417: Terminal Security and Feature Change: c:\fra2\bin\chgtrm.bat Executed Successfully 2002-08-21 10:12:11.417: Table Updates: c:\fra2\bin\update.bat Created Successfully 2002-08-21 10:12:11.417: Table Updates: Executing the following cmds: 2002-08-21 10:12:11.417: crmd.exe/C c:\fra2\bin\update.bat	•
2002-08-21 10:12:11.417: Table Updates: C:\fra2\bin\update.bat Exit Code is: 0 2002-08-21 10:12:11.417: Table Updates: C:\fra2\bin\update.bat Execution Complete 2002-08-21 10:12:11.417: Table Updates: C:\fra2\bin\update.bat Executed Successfully 2002-08-21 10:12:11.417: Cmd Rej Search: Searching For Input Command Errors 2002-08-21 10:12:11.417: Validate Process Manager: Command File C:\fra\scripts\command_files\feat.txt Contains Errors, See PCTEST: Begin Initializing DRMS (10MB)	Results Below.
PCTEST: Skipped Initializing DRMS Tables. Error message	
PCTEST: Completed Initializing DRMS.	
PCTEST: Begin Initializing DRMS (10MB)	
PCTEST: Skipped Initializing DRMS Tables.	
PCTEST: Completed Initializing DRMS.	

Figure 2-83 shows an example of a command file that produced the error shown in Figure 2-89.



File Menu in the Update Tables Log Window

The **File** menu in the **Update Tables Log** window, shown in <u>Figure 2-90</u>, provides the user with the following selections:

- Clearing the Update Tables Log display.
- Printing the Update Tables Log.
- Saving the Update Tables Log to a file.
- Closing the **Update Tables Log** window.

Figure 2-90. File Menu in the Update Tables Log Window

👺 FTP-based Table Ret	trieve Application <stp1></stp1>	X
File Edit View Help		
🔲 Update Tables Log		er 17 🖂
File		
Clear Display	59.184: Table Updates: c:\ftra2\bin\update.bat Execution Complete	<u> </u>
Print	59.194: Table Updates: c:\ftra2\bin\update.bat Executed Successfully	
Save	tializing DRMS (10 MB).	
Close	initializing DRMS Tables.	
PCTEST: Comple	eted Initializing DRMS.	
PCTEST: Begin I	nitializing DRMS (10 MB).	
PCTEST: Skipped	d Initializing DRMS Tables.	
PCTEST: Comple	eted Initializing DRMS.	
LINE 1: rtrv-feat tekelecstp 02 rtrv-feat Command en EAGLE FEATU	2-08-21 10:25:59 EST Rel 29.0.0-46.0.0 tered at terminal #4. IRE LIST	
GTT = on X25G = off EAS = off LNP = off C TLNP = off IPISUP = off INP = off ITUMTPRS = VGTT = off ITUDUPPC = GSMSCRN = ; LINE 2: exit	GWS = off NRT = off LAN = off CRMD = off LFS = off MTPRS = off AN = on DSTN5000 = off SCCPCNV = off TCAPCNV = off DYNRTK = off X252000 = off off SLSOCB = off eff off SLSOCB = off eff MGTT = off MPC = off off GFLEX = off LNP18MIL = off off GFDRT = off LNP48MIL = off off TSCSYNC = off ESIS = off	

Clearing the Update Tables Log Display

The display can be cleared, enabling new entries to be captured to the log. Once the log is cleared, the existing entries are lost unless the log is save to a file or printed before the display is cleared.

NOTE: Perform either step 1 or steps 2 and 3.

Procedure

- 1. Select File > Clear Display in the Update Tables Log window.
- 2. Select View > Update Tables Log in the FTP-based Table Retrieve Application window.

See <u>Figure 2-91</u>. The Update Tables Log window opens.

Figure 2-91. View Menu

畿FT	FTP-based Table Retrieve Application <stp7></stp7>					
File	Edit	View	Help			
		Retrie	eve Tables Log			
		Updat	te Tables Log			
		Syste	em Log			

3. Select File > Clear Display in the Update Tables Log window.

The Update Tables Log display clears.

Printing the Update Tables Log

NOTE: Perform either step 1 or steps 2 and 3.

Procedure

- Select File > Print from the Update Tables Log window.
 See Figure 2-90.
- Select View > Update Tables Log in the FTP-based Table Retrieve Application window.
 See Figure 2-91 The Update Tables Log opens.
- 3. Select **File > Print** from the **Update Tables Log** window.

The **Print** window opens. See <u>Figure 2-92</u>.

Figure 2-92. Print Window

Print	<u>?</u> ×
Printer	
Name: \\Mail\Laserjet 8150	Properties
Status: Ready	
Type: HP LaserJet 8150 PCL 6	
Where: HPLaserJet8150Series	
Comment:	Print to file
Print range	Copies
④ All	Number of copies: 1 🚍
C Pages from: 1 to: 1	
C Selection	
	OK Cancel

- 4. Configure the printer settings.
- 5. To print the Update Tables Log, click the **OK** button.

The current contents of the Update Tables Log are printed.

6. If you do not wish to print the Update Tables Log, click the **Cancel** button.

Saving the Update Tables Log to a File

NOTE: Perform either step 1 or steps 2 and 3.

Procedure

- Select File > Save from the Update Tables Log window.
 See <u>Figure 2-87</u>.
- Select View > Update Tables Log in the FTP-based Table Retrieve Application window.
 See Figure 2-91. The Update Tables Log opens.
- 3. Select File > Save in the Update Tables Log window.

The Save window opens. See Figure 2-93.

Figure 2-93. Save Window

퉗 Save		×
Look <u>i</u> n:	☐ logfiles	
rtrv07	2302.doc	
File <u>N</u> ame	update072502.doc	
Files of Ty	pe: All Files	•
		Save Cancel

4. Select a location for the file, and enter the file name and file type (with either the .doc or .txt extensions).

NOTE: The .doc file type is recommended, although the user can use Microsoft Word to open the file even if it was saved as a .txt file.

5. To save the file, click the **Save** button.

A **Saved** file confirmation window opens with "Data saved to file." See <u>Figure 2-94</u>. Click **OK**, to continue.

Figure 2-94. Saved Confirmation Window

Save	d	x
ů	Data saved to file	
	ОК	

6. If you do not wish to save the file, click the **Cancel** button in the **Save** window.

Closing the Update Tables Log Window

Procedure

1. Select File > Close in the Update Tables Log window, or click the close window button in the upper right hand corner of the Update Tables Log window.

See <u>Figure 2-87</u>. The Update Tables Log window closes.

The System Log

The System Log contains an event history and any errors that have occurred when database tables are retrieved from an STP, or command files are sent to an STP. See <u>Figure 2-95</u>.

Figure 2-95. System Log Window

ETP-based Table Retrieve Application <stp1></stp1>	_ [] .	×
File Edit View Help		
🙄 System Log	rt 5	ब
File		
2002-08-26 08:31:10.509: Communications: Initialization Sequence Started 2002-08-26 08:34:01.168: Command Request Handler: Process Command Request 2002-08-26 08:34:01.178: Retrieve Command Request Handler: Process Command Request 2002-08-26 08:34:01.258: Retrieve Process Manager: Process Begun For: stp1 2002-08-26 08:34:20.126: Retrieve Process Manager: Process Command Request 2002-08-26 08:34:58.612: Command Request Handler: Process Command Request 2002-08-26 08:34:58.612: Update Tables Command Request Handler: Process Command Request 2002-08-26 08:34:58.622: Update Tables Submit Action Handler: Process Command Request 2002-08-26 08:34:58.6622: Validate Process Manager: Process Complete For: stp1 2002-08-26 08:34:59.113: Validate Process Manager: Process Complete For: stp1		

File Menu in the System Log Window

The File menu in the System Log window, shown in Figure 2-96, provides these selections:

- Clearing the System Log display.
- Printing the System Log.
- Saving the System Log to a file.
- Closing the **System Log** window.

Figure 2-96.	File Menu in	the System Log	Window
--------------	--------------	----------------	--------

🎡 FTP-based Tab	le Retrieve Application <stp1></stp1>	
File Edit View	Help	
📄 System Log		막다 🗵
File	_	
Clear Display Print Save 2002-08-26 08:3 2002-08-26 08:3 2002-08-26 08:3 2002-08-26 08:3 2002-08-26 08:3	 10.509: Communications: Initialization Sequence Started 10.539: Communications: Initialization Sequence Complete 10.168: Command Request Handler: Process Command Request 10.178: Retrieve Process Manager: Process Begun For: stp1 *20.126: Retrieve Process Manager: Process Complete For: stp1 *28.612: Command Request Handler: Process Complete For: stp1 4:58.622: Update Tables Command Request Handler: Process Command Request 4:58.632: Update Tables Submit Action Handler: Process Command Request 4:58.632: Validate Process Manager: Process Begun For: stp1 4:59.113: Validate Process Manager: Process Complete For: stp1 	

Clearing the System Log Display

The display can be cleared, enabling new entries to be captured to the log. Once the log is cleared, the existing entries are lost unless the log is saved to a file or printed before the display is cleared.

Procedure

1. Select View > System Log in the FTP-based Table Retrieve Application window.

See Figure 2-97 . The System Log window opens.

Figure 2-97. View Menu

畿FI	'P-bas	ed Tabl	le Retrieve Applica	tion <stp7></stp7>
File	Edit	View	Help	
		Retrie	eve Tables Log	
		Upda	te Tables Log	
		Syste	em Log	

2. Select File > Clear Display in the System Log window.

See <u>Figure 2-96</u>. The System Log display clears.

Printing the System Log

Procedure

- Select View > System Log in the FTP-based Table Retrieve Application window.
 See Figure 2-95. The System Log window opens.
- 2. Select **File > Print** in the **System Log** window.

The **Print** window opens. See Figure 2-98.

Figure 2-98. Print Window

Print		? ×
Printer		
Name:	\\Mail\Laserjet 8150	Properties
Status:	Ready	
Type:	HP LaserJet 8150 PCL 6	
Where:	HPLaserJet8150Series	
Comment:		Print to file
Print range		Copies
• All		Number of copies: 1
C Pages	from: 1 to: 1	
C Selection	on	
		OK Cancel

- **3.** Configure the printer settings.
- 4. To print the System Log, click the **OK** button.

The current contents of the System Log are printed.

5. If you decide not to print the System Log, click the **Cancel** button.

Saving the System Log to a File

Procedure

- Select View > System Log in the FTP-based Table Retrieve Application window.
 See Figure 2-95. The System Log opens.
- Select File > Save in the System Log window.
 The Save window opens. See Figure 2-99.

Figure 2-99. Save Window

Save		x
Look <u>i</u> n:	🗂 logfiles	
rtrv07	2302.doc	
File <u>N</u> ame	sys072302.doc	
Files of <u>T</u> y	pe: All Files	•
		Save Cancel

3. Select a location for the file, and enter the file name and file type (with either the .doc or .txt extensions).

NOTE: The .doc file type is recommended, although the user can use Microsoft Word to open the file even if it was saved as a .txt file.

- 4. To save the System Log to a file, click the Save button.
 - A Saved file confirmation opens with "Data saved to file". See <u>Figure 2-100</u>. Click OK to continue.

Figure 2-100. Saved Confirmation Window

🞘 Saved	x
Data saved to file	
ОК	

5. If you do not wish to save the System Log to a file, click the **Cancel** button in the **Save** window.

Closing the System Log Window

Procedure

1. Select File > Close in the System Log window, or click the close window button in the upper right hand corner of the System Log window.

The System Log window closes.

About FTRA Window

The **About FTRA** window displays the version level of the FTRA and copyright information. To display the **About FTRA** window, select **Help>About** in the **FTP-Based Table Retrieve Application** window.

Figure 2-101. Help Menu

STP-based Table Retrieve Application <stp7></stp7>		le Retrieve Application <stp7></stp7>	
File	Edit View	Help	
		About	
_			

The About FTRA window opens. Click OK to continue.

Figure 2-102. Typical About FTRA Window

About FTRA		×
TEKELEC	FTP-based Table Retrieve Application FTRA Version 4.0-40.9.0 (c) Copyright 2006 Tekelec http://www.tekelec.com	

FTRA release 4.0

The following sub-sections detail the changes that were made to FTRA Release 4.0.

Change summary

The following enhancements have been included in FTRA Release 4.0:

- 1. Support for **rtrv-stp** command.
- 2. Support to change the STP Username and Password for an STP whose configuration already exists in the system through the Command Line.

The second identified enhancement has introduced some minor changes to the Command Line Interface.

RTRV-STP Command

The rtrv-stp command is added to the list of rtrv commands supported on FTRA. The rtrv-stp command provides a consolidated report of STP configuration on a system-wide basis.

NOTE: The rtrv-stp functionality is supported on Eagle Release 35.0 or later.

Retrieve Tables

FIP-based Table Retrieve Application <: le Edit View Help Commands Menu			-K 🗵	_10
Retrieve Tables Update Tables Command List rtrv-scr-cgpa rtrv-scr-dectfld rtrv-scr-dpc rtrv-scr-opc rtrv-scr-sio rtrv-scr-stt rtrv-scr rtrv-sid rtrv-slk rtrv-stpopts rtrv-tt	Add Remove @ Retri	I Commands		
Reset	O Retri ve Store	eve from Local Da	itabase	
			Close	

Figure 2-103. Retrieve Tables window with rtrv-stp command selected for retrieval

RTRV-STP Command Retrieval Session

The FTRA retrieval session when rtrv-stp command is supported on EAGLE is shown in Figures 108. If the command is not supported on EAGLE, an error will be displayed and the retrieval session will be terminated (refer "STP data modified through CLI").

Retrieve Tables

Figure 2-104. Successful Retrieval Session for rtrv-stp command

FTP-based Table Retrieve Application <eagle></eagle>		_10 ×
ile Edit View Help		
Retrieve Tables Log		유다 🖂
File		
Processing Retrieve Request	t, Pl <mark>ease Walt</mark>	
2006-11-30 20:36:33.595: Retrieve Process Manager: Purging FTP Transfer A	Area	
2006-11-30 20:36:33.645: Retrieve Process Manager: Purging STP Data Area	For EAGLE	
2006-11-30 20:36:33.815: Telnet Terminal Session Manager: Initiating Telnet	Session with Eagle: 192.168.63.15	0:23
2006-11-30 20:36:33.885: Telnet Terminal Session Manager: Session Conne	ected: 192.168.63.150:1561	
2006-11-30 20:36:35.097: Telnet Terminal Session Manager: Sending Eagle	Command: 17	
2006-11-30 20:36:35.347: Telnet Terminal Session Manager: Terminal 17 En	abled	
2006-11-30 20:36:36:409: Telnet Terminal Session Manager: User "eagle" Lo	ogin Attempt: 1	
2006-11-30 20:36:37.461: Telnet Terminal Session Manager: Sending Eagle	Command: login:uid=eagle	
2006-11-30 20:36:39.915: Telnet Terminal Session Manager: User "eagle" Lo	ogin Accepted	
2006-11-30 20:36:39.955: Telnet Terminal Session Manager: Sending rtry-gpl	I command to Eagle.	
2006-11-30 20:36:40.996: Telnet Terminal Session Manager: Sending Eagle	Command: rtry-gpl	
2006-11-30 20:36:45.764: Telnet Terminal Session Manager: Received string	: 128-001-000 Successful RT	RV-STP Command.
2006-11-30 20:36:45.914: Teinet Terminal Session Manager: Received string	r 128-001-000 🖊	
2006-11-30 20:36:50.371: Telnet Terminal Session Manager: rtrv-gpl comman	nd complete.	
2006-11-30 20:36:51.433: Telnet Terminal Session Manager: Sending Eagle	Command: rtn-stg	
2006-11-30 20:37:57.586: Telnet Terminal Session Manager: rtrv-stp comma	nd complete.	
2006-11-30 20:37:57.646: Telnet Terminal Session Manager: Sending RTRV-	FTP-SERV command to Eagle	
2006-11-30 20:37:58.708: Telnet Terminal Session Manager: Sending Eagle	Command: rtrv-ftp-serv:app=user	
2006-11-30 20:37:59.639: Telnet Terminal Session Manager: Updating Eagle	FTP SERV Table	

Figure 2-105. Rtrv-stp Command unsupported on EAGLE release

				V -V
Retrieve Tables Log				o" []
File				
Pro	ocessing Retrieve R	equest, Please Wait		
2006-11-30 21:37:52.552: Retrieve Process Manag	ger: Purging STP Da	ta Area For: EAGLE		
2006-11-30 21:37:52.552: Telnet Terminal Session	n Manager: Initiating	Telnet Session with Eagle	e: 192.168.63.150:23	
2006-11-30 21:37:52.562: Telnet Terminal Session	n Manager: Session	Connected: 192.168.63.1	50:1611	
2006-11-30 21:37:53.733: Telnet Terminal Session	n Manager: Sending	Eagle Command: 17		
2006-11-30 21:37:54.014: Telnet Terminal Sessio	n Manager: Terminal	117 Enabled		
2006-11-30 21:37:55.055: Telnet Terminal Session	n Manager: User "ea	gle" Login Attempt: 1		
2006-11-30 21:37:56.117: Telnet Terminal Sessio	n Manager: Sending	Eagle Command: login:u	id=eagle	
2006-11-30 21:37:58.481: Telnet Terminal Session	n Manager: User "ea	gle" Login Accepted		
2006-11-30 21:37:58.531: Telnet Terminal Sessio	n Manager: Sending	rtrv-gpl command to Eagl	е.	
2006-11-30 21:37:59.613: Telnet Terminal Session	n Manager: Sending	Eagle Command: rtrv-gpl		
2006-11-30 21:38:03.929: Telnet Terminal Sessio	n Manager: Received	d string: 125-034-000		
2006-11-30 21:38:04.009: Telnet Terminal Session	n Manager: Received	d string: 125-034-000		
2006-11-30 21:38:07.785: Telnet Terminal Sessio	n Manager: rtrv-gpl c	ommand complete.		
2006-11-30 21:38:08.847: Telnet Terminal Session	n Manager: Sending	Eagle Command: rtry-stp		
2006-11-30 21:38:09.518: Telnet Terminal Sessio	n Manager: rtrv-stp c	ommand is not supported	for this Eagle Release	
2006-11-30 21:38:09.638: Telnet Terminal Session	n Manager: De-selec	t rtrv-stp from command I	ist and start retrieval again	
2006-11-30 21:38:09.718; Teinet Terminal Sessio	n Manager: Commar	nd was Rejected: rtrv-stp		
2006-11-30 21:38:09.718: Telnet Terminal Sessio	n Manager: Commar	nd Reject Error: E2010 Ch	nd Rej: Unrecognized comma	nd
2006-11-30 21:38:09.728: Teinet Terminal Sessio	n Manager: Aborting		5	
2006-11-30 21:38:09.728: Telnet Terminal Session	n Manager: User "ea	gle" Logout Attempt: 1		
2006-11-30 21:38:10.73: Teinet Terminal Session	Manager: Sending E	agle Command: logout	Command not supported	6
2006-11-30 21:38:11:341: Leinet Leiminal Sessio	n Manager: User "ea	gle" Logout Accepted		
2006-11-30 21.38.11.631, Retrieve Process Manaj	ger. Leinet Terminal:	Session Complete With E		

SSH/SFTP Error Codes

<u>**Table 2-10**</u> and <u>**Table 2-11**</u> contain a list of the error codes that can be generated when making a secure connection between the FTRA, version 4.0 or greater, and the EAGLE 5 ISS. Each error code contains a brief description of the error and the suggested recovery action.

This section also contains procedures, following <u>Table 2-10</u> and <u>Table 2-11</u>, for testing connectivity and network problems, and to verify that the setup for making secure connections is correct.

If secure connections to the EAGLE 5 ISS cannot be made, verify that the Eagle OA&M IP Security Enhancements feature is enabled and activated by entering the **rtrv-ctrl-feat** command at the EAGLE 5 ISS before performing any of the actions in <u>Table 2-10</u> and <u>Table 2-11</u>. If the Eagle OA&M IP Security Enhancements feature is not enabled or activated, perform the "Activating the Eagle O&AM IP Security Enhancements Controlled Feature" proce dure in the *Database Administration Manual - System Management* and enable and activate the Eagle OA&M IP Security Enhancements feature.

If any of the errors shown in <u>Table 2-10</u> or <u>Table 2-11</u> are encountered after the recovery procedure is verified, contact the <u>Customer Care Center</u>.

SFTP/SSH Generic Network Client Error Code	Description	Action/Recovery	
	User Er	rors	
594	Invalid Path	Verify that the path is valid in the FTP Server Configuration Menu window (see <u>Figure 2-32</u>).	
598	The SSHD daemon is not running on the destination system or the server IP address unavailable.	Verify that the IP address exists on network with a ping (Refer to the <u>Connectivity Test - I</u> and the <u>Connectivity Test - II</u>). If the IP address exists on network then verify that SSHD daemon is running on the destination machine using the ps -ef grep sshd command.	
629	The SFTP daemon is not running	Verify that the subsystem entry in the sshd_config file on the destination station is specified and points to the SFTP daemon.	
633	User login failure.	Verify that the Username and Password in the STP Connection Configuration Menu window, (see <u>Table 2-2</u>) is valid and an account exists for the username and password on the SSHD server host.	
	SFTP Errors		
595	File open failed.	Invalid file name in the download list, or out of resources. Report this issue to the <u>Customer Care Center</u> immediately.	
596	The file name is already specified.	Report this issue to the <u>Customer Care Center</u> immediately. (Internal SFTP implementation error).	
	SFTP Client Errors		
597	SFTP client packet send failure	Perform these tests:	
598	The SFTP connection is closed.	FTP Server Verification	
599	SFTP packet read failure	<u>SFTP /SSHD Server Verification</u>	

Table 2-10. FTP/SFTP/SSH Error Codes

SFTP/SSH Generic Network Client Error Code	Description	Action/Recovery
		<u>Connectivity Test – I</u>
		• <u>Connectivity Test - II</u>
		<u>Network Outage Trouble Shooting</u>
		Make any fixes necessary and retry the connection.
		If the problem persists, report the issue to the <u>Customer Care</u> <u>Center</u> .
600	SFTP protocol error. The received message is larger than the expected packet size.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing the tests in <u>Network Outage Trouble Shooting</u> . If the error persists, report the issue to the <u>Customer Care Center</u> .
601	Undefined	Notify the Customer Care Center.
608	SFTP received a invalid ID in the response received during a read operation on remote directory.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing the tests in <u>Network Outage Trouble Shooting</u> . If the error persists, report
609	SFTP: Handle mismatch error. This error is displayed when there is a failure to receive an expected handle upon successful READ/WRITE/	the issue to the <u>Customer Care Center</u> .
	CREAT/TRUNC/EXCL of a file using SSH_FXP_OPEN on remote server.	
610	Unexpected SSH2_FXP_ATTRS.	
611	Unexpected SSH_FXP_NAME. SFTP using the SSH_FXP_OPENDIR opens a directory for reading. The server responds to this request with either a SSH_FXP_NAME or a SSH_FXP_STATUS message. This error code implies that an unexpected SSH_FXP_NAME is received.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing the tests in <u>Network Outage Trouble Shooting</u> .
612	The SFTP client uses the SSH_FXP_REALPATH request to have the server localize any given path name to an absolute path. This is useful for converting path names containing "" components or relative pathnames without a leading slash into absolute paths. This error implies that there is a failure during this operation	Check if the access to the path specified in the FTP Server Configuration Menu window (see Figure 2-32) is accessible and re-try the connection.
613	The SSH_FXP_READLINK request is used by the SFTP client to read the target of a symbolic link. The server will respond with a SSH_FXP_NAME packet containing only one name and a dummy attributes value. The name in the returned packet contains the target of the link. This failure implies that there is a failure during the READLINK operation.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing the tests in <u>Network Outage Trouble Shooting</u> .
614	The SFTP client receives SSH_FXP_DATA as a response to any file operations from the server.	

SFTP/SSH Generic Network Client Error Code	Description	Action/Recovery
	This error implies that the client received an unexpected SSH_FXP_NAME from the server.	
615	The SFTP client received more data than expected.	
616	The SFTP client failed to read the data from the file descriptor of the file specified for transfer.	Report this issue to the <u>Customer Care Center</u> immediately.
	SSH Client	Errors
617	Excessive identity files. This error means that there are excessive identity files. OpenSSH implementation contains the maximum of 100 identity files or the client configuration file is corrupted.	Report this issue to the <u>Customer Care Center</u> immediately.
624	The debug levels allowed for SSH protocol in openSSH is 0-9. There is either an error in the client configuration file, or the client configuration file is corrupted.	
625	Failure to read the client configuration file.	Report this issue to the <u>Customer Care Center</u> immediately.
626	Invalid compression level is specified in the client configuration file.	
627	SSH failure to setup the IO with the server.	Verify that the SFTP/SSHD version is compatible with openSSH 30.2n1 Verify there is no network outage by performing these
628	SSH failure to open the channel for the SSH connection with the server.	tests: • ETP Server Verification
629	SSH failure to setup the channel for the SSH connection with the server.	SFTP /SSHD Server Verification
630	SSH failure to verify the SSH client host key.	• <u>Connectivity Test – I</u>
		• <u>Connectivity Test - II</u>
		<u>Network Outage Trouble Shooting</u>
		Make any fixes necessary and retry the connection.
		If the problem persists, report the issue to the <u>Customer Care</u> <u>Center</u> .
631	SSH user authentication failure. Please verify that only the password authentication is set to "yes" in the SSH server configuration file. Refer to the SSHD server configuration provided by vendor of the product. The FTRA and the EAGLE 5 ISS is compatible with openSSH 3.0.2p1 .	Report the issue to the <u>Customer Care Center</u> if the problem persists after the SSHD configuration file is verified.
632	The authentication method is NULL in the client software. This error is a failure to set the null authentication method.	Report this issue to the <u>Customer Care Center</u> .

SFTP/SSH Generic Network Client Error Code	Description	Action/Recovery
633	Permission is denied by the server due to authentication failure.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing these tests:
640	A bad message was received during the SSH authentication.	 <u>FTP Server Verification</u> <u>SFTP /SSHD Server Verification</u> <u>Connectivity Test – I</u> <u>Connectivity Test – II</u> <u>Network Outage Trouble Shooting</u> Make any fixes necessary and retry the connection. If the problem persists, report the issue to the <u>Customer Care</u> <u>Center</u>.
641	Missing authentication context, encountered during the SSH user authorization.	Report this issue to the <u>Customer Care Center</u> immediately.
642	Failure during the public key read/verification operation.	
643	Undefined SFTP/SSH error.	
644	Unexpected SSH_FXP_STATUS error. An invalid status was received by the SFTP server.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing these tests:
645	A bad option was specified in the SSH client on the EAGLE 5 ISS.	• <u>FTP Server Verification</u>
646	An unsupported escape character was used in the SSH client on the EAGLE 5 ISS.	 SFTP /SSHD Server Verification Connectivity Test – I Connectivity Test – II Network Outage Trouble Shooting Make any fixes necessary and retry the connection. If the problem persists, report the issue to the <u>Customer Care</u> <u>Center</u>.
647	An unsupported cipher type was used in the SSH client on the EAGLE 5 ISS.	Report this issue to the <u>Customer Care Center</u> immediately.
648	An unsupported MAC type was used in the SSH client on the EAGLE 5 ISS.	 Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1. Verify there is no network outage by performing these tests: <u>FTP Server Verification</u> <u>SFTP /SSHD Server Verification</u>

SFTP/SSH Generic Network Client Error Code	Description	Action/Recovery
649 656 657 658	A bad port was used in the SSH client on the EAGLE 5 ISS. Bad forwarding was used in the SSH client on the EAGLE 5 ISS. Bad forwarding ports were specified in the SSH client on the EAGLE 5 ISS. A bad dynamic port was specified in the SSH	Connectivity Test – I Connectivity Test – II Network Outage Trouble Shooting Make any fixes necessary and retry the connection. If the problem persists, report the issue to the Customer Care <u>Center</u> . Report this issue to the Customer Care Center immediately.
659	client on the EAGLE 5 ISS. The host was not specified in the SSH client on the EAGLE 5 ISS.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1. Verify there is no network outage by performing these tests: • FTP Server Verification • SFTP /SSHD Server Verification • Connectivity Test – I • Connectivity Test - II • Network Outage Trouble Shooting Make any fixes necessary and retry the connection. If the problem persists, report the issue to the Customer Care Center .
660	An invalid option or argument was specified in the SSH client on the EAGLE 5 ISS.	Report this issue to the <u>Customer Care Center</u> immediately.
661	The hostname was not specified in the SSH client on the EAGLE 5 ISS.	
663	The SSH client was unable to load the cipher type on the EAGLE 5 ISS.	
664	Asynchronous IO is not supported on IPSM, SSH client error.	
665	Compression is already enabled in the SSH client on the EAGLE 5 ISS.	

SFTP/SSH Generic Network Client Error Code	Description	Action/Recovery
666	Unknown cipher number on the SSH client on the EAGLE 5 ISS.	
667	The SSH client key length is invalid.	
668	No key is available on the SSH client on the EAGLE 5 ISS.	Report this issue to the <u>Customer Care Center</u> immediately.
669	The secure connection was closed by the remote server, refer to the error on the SFTP/SSHD server side.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing these tests:
670	Connection failure due to network outage or the connection was lost due to a faulty SSHD/	FTP Server Verification
	SFTP server of network.	• <u>SFTP/SSHD Server Verification</u>
671	An unexpected packet type was received from the SFTP/SSHD server.	<u>Connectivity Test – I</u>
672	A bad packet length was received from the	• <u>Connectivity Test - II</u>
	SSHD/SFTP server.	<u>Network Outage Trouble Shooting</u>
		Make any fixes necessary and retry the connection.
		If the problem persists, report the issue to the <u>Customer Care</u> <u>Center</u> .
673	A cryptographic attack was detected by the SSH client. Please notify the local system administrator.	Report the issue to the <u>Customer Care Center</u> . This is not a software problem but there is a security threat. The keys/ authentication may have to be updated immediately.
674	The SSH/SFTP client on the EAGLE 5 ISS failed to read from the remote side.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing these toote:
675	Corrupted check bytes were detected on the SSH/SFTP client on the EAGLE 5 ISS.	FTP Server Verification
		<u>SFTP /SSHD Server Verification</u>
		• <u>Connectivity Test – I</u>
		• <u>Connectivity Test - II</u>
		<u>Network Outage Trouble Shooting</u>
		Make any fixes necessary and retry the connection.
		If the problem persists, report the issue to the <u>Customer Care</u> <u>Center</u> .
676	Corrupted MAC on input was detected by the SSH/SFTP client on the EAGLE 5 ISS.	Verify that the sshtools.xml file provided with FTRA software has the field as shown:
		The Message Authentication Code configuration, add or<br override default mac implementations>
		<macconfiguration></macconfiguration>
		<defaultalgorithm>hmac-md5</defaultalgorithm>

SFTP/SSH Generic Network Client Error Code	Description	Action/Recovery
677	Corrupted pad on input was detected by the SSH/ SFTP client on the EAGLE 5 ISS.	Report this issue to the <u>Customer Care Center</u> immediately.
678	SSH/SFTP tried to close a connection that is already closed.	
679	The SSH/SFTP client on the EAGLE 5 ISS failed to write to the remote side.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing these tests:
		<u>FTP Server Verification</u>
		<u>SFTP /SSHD Server Verification</u>
		• <u>Connectivity Test – I</u>
		• <u>Connectivity Test - II</u>
		<u>Network Outage Trouble Shooting</u>
		Make any fixes necessary and retry the connection.
		If the problem persists, report the issue to the <u>Customer Care</u> <u>Center</u> .
680	SSH/SFTP tried to set the packet size twice.	Report this issue to the <u>Customer Care Center</u> immediately.
681	A bad packet size was detected by the SSH/ SFTP client on the EAGLE 5 ISS.	
	SSH/SFTP Connecti	on/Setup Errors
682	The connection timed out when SSH tried to connect to SSHD.	Verify that the SFTP/SSHD version is compatible with openSSH 3.0.2p1 . Verify there is no network outage by performing these tests:
683	The SSH connection was refused by the remote server.	FTP Server Verification
684	The SSHD server is unreachable.	<u>SFTP /SSHD Server Verification</u>
685	The network has reset.	• <u>Connectivity Test – I</u>
686	The SSH/SFTP connection has been aborted.	• <u>Connectivity Test - II</u>
687	The SFTP/SSH connection has been reset by the peer.	<u>Network Outage Trouble Shooting</u>
688	Failed to allocate network buffers.	Make any fixes necessary and retry the connection.
689	The SSH/SFTP socket is already connected.	If the problem persists, report the issue to the <u>Customer Care</u> <u>Center</u> .
690	The SSH/SFTP socket is not connected.	
691	The network channel is down.	
692	The SSHD/SFTP server connection host is down.	

SFTP/SSH Generic Network Client Error Code	Description	Action/Recovery
693	SFTP client channel read failure.	
694	SFTP client channel write failure.	
695	SFTP client channel open failure.	

Table 2-11. Generic Network Error Codes

SFTP/SSH/ Generic Network Client Error Code	Description	Action/Recovery
40	A destination address is required.	Verify that there is an FTP server entry on the EAGLE 5 ISS using the rtrv-ftp-serv command, and re-try the connection
41	Protocol wrong type for socket	Report this issue to the <u>Customer Care Center</u> .
42	The protocol is not available.	
43	The protocol is not supported.	
44	The socket type is not supported.	
45	The operation is not supported on the socket.	
46	The protocol family is not supported.	
47	The address family is not supported.	
48	The address is already in use.	
49	The requested address cannot be assigned.	
50	Socket operation on non-socket	
51	The network is unreachable.	Verify that the connection tests and network outage
52	The network dropped the connection on reset.	<u>Connectivity Test – I</u>
		<u>Connectivity Test - II</u>
		<u>Network Outage Trouble Shooting</u>
		Make any fixes necessary and retry the connection.
		If the problem persists, report the issue to the <u>Customer</u> <u>Care Center</u> .
53	Software caused the connection to abort.	Report this issue to the <u>Customer Care Center</u> .
54	The connection was reset by the peer.	Verify that the connection tests pass and network outage numbers are within the allowed limits as shown in these sections:
		<u>Connectivity Test – I</u>

SFTP/SSH/ Generic Network Client Error Code	Description	Action/Recovery
		<u>Connectivity Test - II</u> <u>Network Outage Trouble Shooting</u> Make any fixes necessary and retry the connection. If the problem persists, report the issue to the <u>Customer</u> <u>Care Center</u> .
55	No buffer space available.	Report this issue to the <u>Customer Care Center</u> .
56	The socket is already connected.	
57	The socket is not connected.	
58	Can't send after socket shutdown	
59	Too many references: can't splice	
60	The connection timed out.	 Perform these tests and verify that the FTP server address responds to the ping command from the ISPM. <u>Connectivity Test – I</u> <u>Connectivity Test – II</u>
61	The connection was refused.	Verify that there is a FTP server daemon is running on the remote station by performing the FTP Server Verification test.
62	The network is down.	Verify that the connection tests pass and network outage numbers are within the allowed limits as shown in these sections:
65	There is no route to the host.	
67	The host is down.	• <u>Connectivity Test – I</u>
30	Read-only file system	 <u>Connectivity Test - II</u> <u>Network Outage Trouble Shooting</u> Make any fixes necessary and retry the connection. If the problem persists, report the issue to the <u>Customer</u> <u>Care Center</u>.
32	Broken pipe	Report the issue to the <u>Customer Care Center</u> .
35	Unsupported value	

Troubleshooting Procedures

FTP Server Verification

Component: The FTP server IP address shown in the **FTP Server Configuration Menu** window (see **Figure 2-32**).

Supported Version/Specification: Any FTP server compliant with IETF RFC 959.

Test: On the Unix platform, execute the **netstat** -a | grep 21 command to verify that the FTP server is running on the machine with the IP address shown in the **FTP Server Configuration Menu** window (**Figure 2-32**).

Expected Result:

Unix> netstat -a | grep 21 *.32821 *.* 0 0 0 ULISTEN f5e15218 stream-ord f5ee8880 0 /var/adm/atria/almd , The system and process specific variable will change.

On the Windows platform, check the Task Manager to verify that the FTP daemon is running.

SFTP /SSHD Server Verification

Component: The SSHD/SFTP server IP address shown in the **FTP Server Configuration Menu** window (see <u>Figure 2-32</u>).

Supported Version/Specification: Version compatible with openSSH 3.0.2p1.

Test: On the Unix platform, execute the **ps** -**f** | **grep sshd** command. Please refer to Unix MAN pages for help with **ps** command.

On the Windows platform, use the Task Manager to verify that the sshd daemon process in running.

Expected Result:

Unix> ps -ef|grep sshd user 26912 26886 0 13:28:07 pts/5 0:00 grep sshd root 411 1 0 Jul 24 ? 4:35 /usr/local/sbin/sshd Note: The user/system/path variables depends on the server.

On the Windows platform, check the Task Manager to verify that the FTP daemon is running.

Connectivity Test – I

Component: Connectivity Test - I.

Supported Version/Specification: N/A

Test: To verify that there is a network connection available between the EAGLE 5 ISS and the FTP/SFTP server shown in the **FTP Server Configuration Menu** window (see <u>Table 2-2</u>).

On an EAGLE 5 ISS terminal, enter the pass:loc=xxxx:cmd="ping yy.yy.yy" command, where xxxx is location of IPSM associated with the IP address entered in the STP Connection Configuration Menu window, (see <u>Table 2-2</u>), and yy.yy.yy is the IP address of the FTP/SFTP server shown in the FTP Server Configuration Menu window (see <u>Figure 2-32</u>).

Expected Result:

NOTE: The RTT time and data sizes may vary.

```
> pass:loc=xxxx:cmd="ping yy.yy.yy.yy"
Command Accepted - Processing
   rlghncxa03w 05-09-31 13:57:59 GMT EAGLE5 34.0.0
   pass:loc=xxxx:cmd="ping yy.yy.yy.yy"
   Command entered at terminal #5.
;
   rlghncxa03w 05-09-31 13:57:59 GMT EAGLE5 34.0.0
   PASS: Command sent to card
   rlghncxa03w 05-09-31 13:57:59 GMT EAGLE5 34.0.0
   PING command in progress
;
   rlghncxa03w 05-09-31 13:57:59 GMT EAGLE5 34.0.0
;
   rlghncxa03w 05-09-31 13:58:01 GMT EAGLE5 34.0.0
   PING yy.yy.yy: 56 data bytes
   64 bytes from yy.yy.yy: icmp_seq=0. time=10. ms
   64 bytes from yy.yy.yy: icmp_seq=1. time=5. ms
   64 bytes from yy.yy.yy: icmp_seq=2. time=5. ms
   ----yy.yy.yy.yy PING Statistics----
   3 packets transmitted, 3 packets received, 0% packet loss
   round-trip (ms) min/avg/max = 5/6/10
   PING command complete
```

Connectivity Test - II

Component: Connectivity Test - II.

Supported Version/Specification: N/A.

Test: To verify that there is a network connection available between the EAGLE 5 ISS and FTP/SFTP server shown in the **FTP Server Configuration Menu** window (see <u>Figure 2-32</u>).

Execute the **ping** -s **zz.zz.zz** command on the FTP server machine where **zz.zz.zz** is the IP address of the EAGLE 5 ISS shown in the **STP Connection Configuration Menu** window (see <u>Table 2-2</u>).

Expected Result:

```
ping -s zz.zz.zz.zz
PING zz.zz.zz.zz: 56 data bytes
64 bytes from el011501-3-a (zz.zz.zz.zz): icmp_seq=0. time=5. ms
64 bytes from el011501-3-a (zz.zz.zz.zz): icmp_seq=1. time=4. ms
64 bytes from el011501-3-a (zz.zz.zz.zz): icmp_seq=2. time=5. ms
64 bytes from el011501-3-a (zz.zz.zz.zz): icmp_seq=3. time=4. ms
----zz.zz.zz.zz PING Statistics----
4 packets transmitted, 4 packets received, 0% packet loss
round-trip (ms) min/avg/max = 4/4/5
```

Network Outage Trouble Shooting

Component: Network Outage Troubleshooting

Supported Version/Specification: N/A.

Test: To verify the TCP/IP traffic/network statistics are within the Tekelec supported network statistics.

At the EAGLE 5 ISS, enter the **pass:loc=xxxx:cmd="netstat -p tcp"** command at the EAGLE 5 ISS terminal, where **xxxx** is location of the IPSM associated with the IP address entered in the

STP Connection Configuration Menu window, (see <u>Table 2-2</u>), and analyze the data from output which is similar to the following example output.

NOTE: The specific information for the command may vary depending upon the system used.

```
> pass:loc=3102:cmd="netstat -p tcp"
Command Accepted - Processing
    rlghncxa03w 05-09-31 19:32:52 GMT EAGLE5 34.0.0
   pass:loc=3102:cmd="netstat -p tcp"
   Command entered at terminal #5.
   rlghncxa03w 05-09-31 19:32:52 GMT EAGLE5 34.0.0
   PASS: Command sent to card
;
    rlghncxa03w 05-09-31 19:32:52 GMT EAGLE5 34.0.0
   TCP:
       161 packets sent
                156 data packets (28411 bytes)
                0 data packet (0 byte) retransmitted
                5 ack-only packets (1 delayed)
                0 URG only packet
                0 window probe packet
                0 window update packet
                0 control packet
       161 packets received
                156 acks (for 28255 bytes)
                0 duplicate ack+C2
                0 ack for unsent data
                5 packets (9 bytes) received in-sequence
                0 completely duplicate packet (0 byte)
                0 packet with some dup. data (0 byte duped)
                0 out-of-order packet (0 byte)
                0 packet (0 byte) of data after window
                0 window probe
                0 window update packet
                0 packet received after close
                0 discarded for bad checksum
                0 discarded for bad header offset field
                0 discarded because packet too short
       0 connection request
        1 connection accept
       1 connection established (including accepts)
        0 connection closed (including 0 drop)
       0 embryonic connection dropped
       156 segments updated rtt (of 157 attempts)
       0 retransmit timeout
                0 connection dropped by rexmit timeout
        0 persist timeout
        0 keepalive timeout
                0 keepalive probe sent
                0 connection dropped by keepalive
        0 pcb cache lookup failed
;
    rlghncxa03w 05-09-31 19:32:52 GMT EAGLE5 34.0.0
```

NETSTAT command complete

Expected Result:

The network outage causes the TCP/IP problems like:

- Network latency
- Packet drop

• Duplicate packets.

If the TCP Packet Delay, TCP Packet Loss, TCP Packet Error, or TCP Out of Order values are greater than the values shown in <u>Table 2-12</u>, fix the network problems and retry the connection.

Table 2-12. TCP Fault Tolerance Table for FTP/SFTP

Protocol	Fault	Threshold Value
SFTP/FTP	TCP Packet Delay	175 milliseconds
SFTP/ FTP	TCP Packet Loss	40% packet loss
SFTP/ FTP	TCP Packet Errors	10%
SFTP/ FTP	TCP Out of Order	30% of packets with offset of 30 packets

SSH/SFTP/SFTPD/SSHD Protocol Troubleshooting

For more information on SSH/SFTP/SFTPD/SSHD protocol troubleshooting, refer to *SSH, the Secure Shell: The Definitive Guide*, First Edition, Barrett and Silverman, O'Reilly, February 2001.

Glossary

	Α	
A	Ampere	
	С	
CLLI	Common Language Location Identifier	
CSR	Customer Service Request	
	D	
daemon	A process that runs in the background and performs a specified operation at predefined times or in response to certain events.	
Database	All data that can be administered by the user, including cards, destination point codes, gateway screening tables, global title translation tables, links, LNP services, LNP service providers, location routing numbers, routes, shelves, subsystem applications, and 10 digit telephone numbers.	
	Ε	
EGTT	Enhanced Global Title Translation	
	F	
FTP	Feature Test Plan	
FTP	File Transfer Protocol.	
FTRA	FTP-based Table Retrieve Application	
	An application that runs in a PC outside of the EAGLE 5 ISS and that communicates with the EAGLE 5 ISS through the IPUI feature and the FTP Retrieve and Replace feature.	
	G	
GTT	Global Title Translation.	
	Ι	
ID	Identity	
ID	Identity, identifier	
IETF	Internet Engineering Task Force	
IP	Intelligent Peripheral	
IP	Internet Protocol	
IP^7	Tekelec's Internet Protocol to SS7 Interface	
IP Address	The location of a device on a TCP/IP network. The IP Address is a number in dotted decimal notation which looks something like [192.168.1.1].	

IPSM	IP Services Module	
	A card that provides an IP connection for Telnet and FTP-based Table Retrieve applications. The IPSM is a GPSM-II card with a one Gigabyte (UD1G) expansion memory board in a single-slot assembly running the IPS application.	
ISS	Integrated Signaling System	
	Μ	
MAC	Media Access Control	
MAN	Metropolitan Area Network	
	P	
PC	Point Code.	
	R	
RFC	Request for Comment	
RTT	Ready to Test	
RTT	Round Trip Time	
RTT	Round Trip Time	
	S	
SSH	Secure Shell	
STP	Signal Transfer Point.	
	Τ	
ТСР	Transfer-Cluster-Prohibited	
TCP	Transfer Control Protocol	
TCP	Transmission Control Protocol	
TCP/IP	Transmission Control Protocol/Internet Protocol	
	U	
UIM	Unsolicited Information Message	

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