1353 NM CT
Guide

PN 3EM16057AA 01
R07.01, Issue 01, April 2004

THIS PRODUCT COMPLIES WITH D.H.H.S. RADIATION PERFORMANCE STANDARDS 21 CFR, 1040.10, FOR A CLASS 1 LASER PRODUCT.

DANGER

Invisible laser radiation is present when the optic connector is open. AVOID DIRECT EXPOSURE TO BEAM.

WARNING

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case users will be required to correct the interference at their own expense.

NOTICE

This manual applies to 1353 NM CT R07.01 software. Release notes describing revisions to this software may impact operations described in this manual.

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1. INTRODUCTION

1.1 The 1353 Network Manager (NM) R07.01.00 Craft Terminal (CT) interfaces with a Network Element (NE) through an NE-specific Element Manager Application (EMA). The interface allows monitoring, provisioning, configuration, and maintenance functions to be performed on the NE.

Requirements

Software

1.2 1353 NM CT software operates on a customer-furnished PC or laptop with Microsoft®[1] Windows®[2] 2000 Service Pack 3 or 4. Either Microsoft Internet Explorer 6.0 Service Pack 1 or Netscape Navigator®[3] R4.79 is required for the help browser. The 1353 NM CT installation CD-ROM contains the required version of Java.

1.3 Local administrator privileges for the PC on which the software is being installed are required for 1353 NM CT software installation.

Hardware

1.4 Refer to Table 1-A for minimum hardware requirements.

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1. *Microsoft is a registered trademark of Microsoft Corporation.*
2. *Windows is a registered trademark of Microsoft Corporation.*
3. *Netscape Navigator is a registered trademark of Netscape Communications Corporation.*

Table 1-A. 1353 NM CT Minimum Hardware Requirements

HARDWARE	MINIMUM REQUIREMENTS
Processor	Pentium 4 or equivalent; 1.5 GHz processor
RAM	512 MB for existing systems; 1 GB is recommended for upgrades of existing systems or new purchases
Hard drive	10 GB
Free disk space	200 MB available for installation plus 200 MB available for log files
Graphics	Resolution supporting 64K colors with 16 MB RAM on video card
LAN card	IEEE 802.3 LAN card (TCP/IP over 10baseT ethernet)
Serial line	Standard RS-232-C
CD-ROM drive	24× CD-ROM drive
Monitor	17” display for desktop PC or 14” display for laptop PC
Keyboard	Required
Mouse	Required

1353 NM CT Interface

1.5 The 1353 NM CT has two main windows:

- Network Element Synthesis (NES)—used to access the 1353 NM CT EMA
- Alarms Surveillance (AS)—used to monitor the alarms of the NE

1.6 In addition, both the Alcatel Management Console (AMC) window and the Alcatel TL1 Direct Access Terminal (TL1DAT) are available.

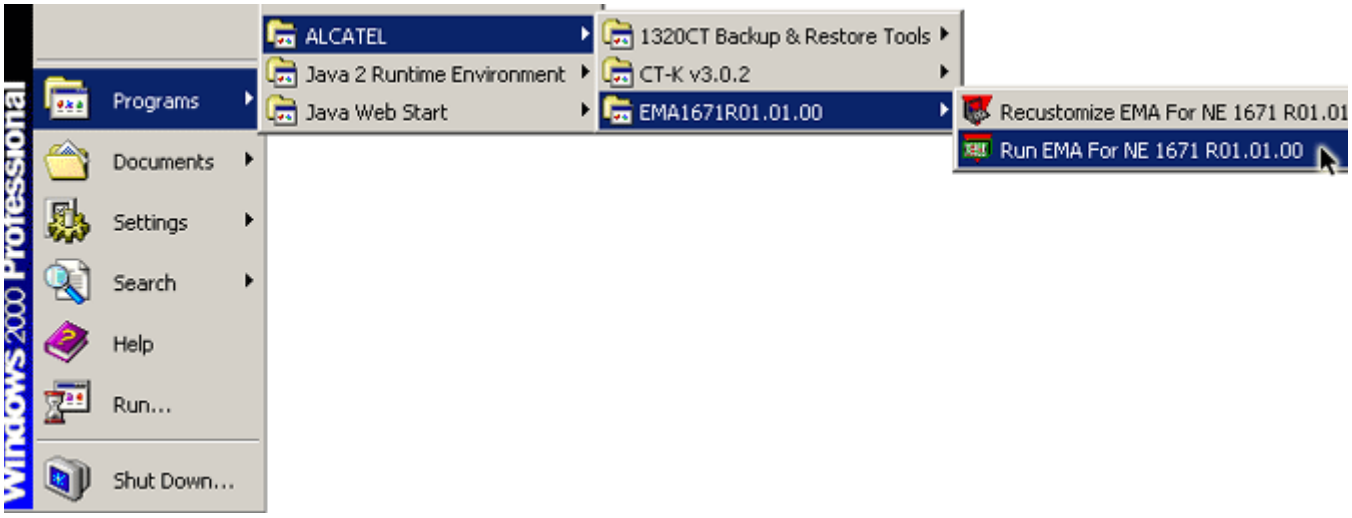
2. Network Element Synthesis (NES) Window

Launching the NES Window

2.1 The NES window appears when the 1353 NM CT is launched. The NES window for an NE can be launched by one of the following methods:

- From the Start menu located at the lower left corner of the PC desktop, select **Programs>Alcatel>EMA>Run EMA...**, where *EMA* indicates the NE type and release.

Figure 2-1. Example of Running EMA from Start Menu



- Double-click on the desired NE shortcut icon on the PC desktop.

2.2 The 1353 NM CT supports operation of only one NE type and release at a time. Up to three NEs of the same type and release can be supervised simultaneously.

Window Components

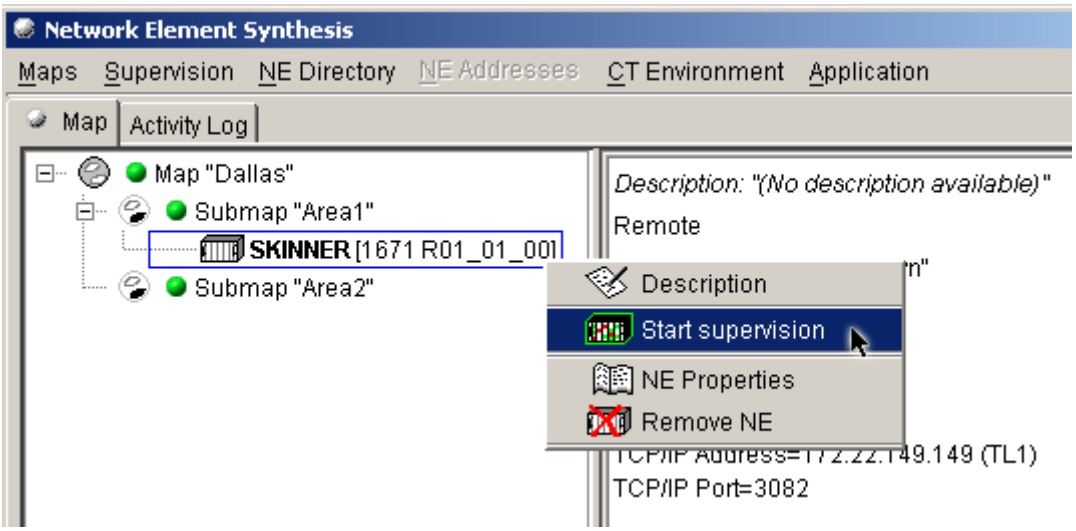
2.3 The NES window contains several graphical components for navigation, viewing and performing actions.

2.4 **Menus** provides access to these types of functions:

- Create and save maps, submaps, and NEs
- Manage the CT environment
- Start/stop supervision of an NE
- Launch the AMC window for the selected NE
- Launch the AS window
- Launch the TL1 Direct Access Terminal (TL1DAT)

2.5 Many of these functions are also accessible through a **popup menu** that appears when you right-click on an object in the NES window.

Figure 2-2. A Popup Menu Example



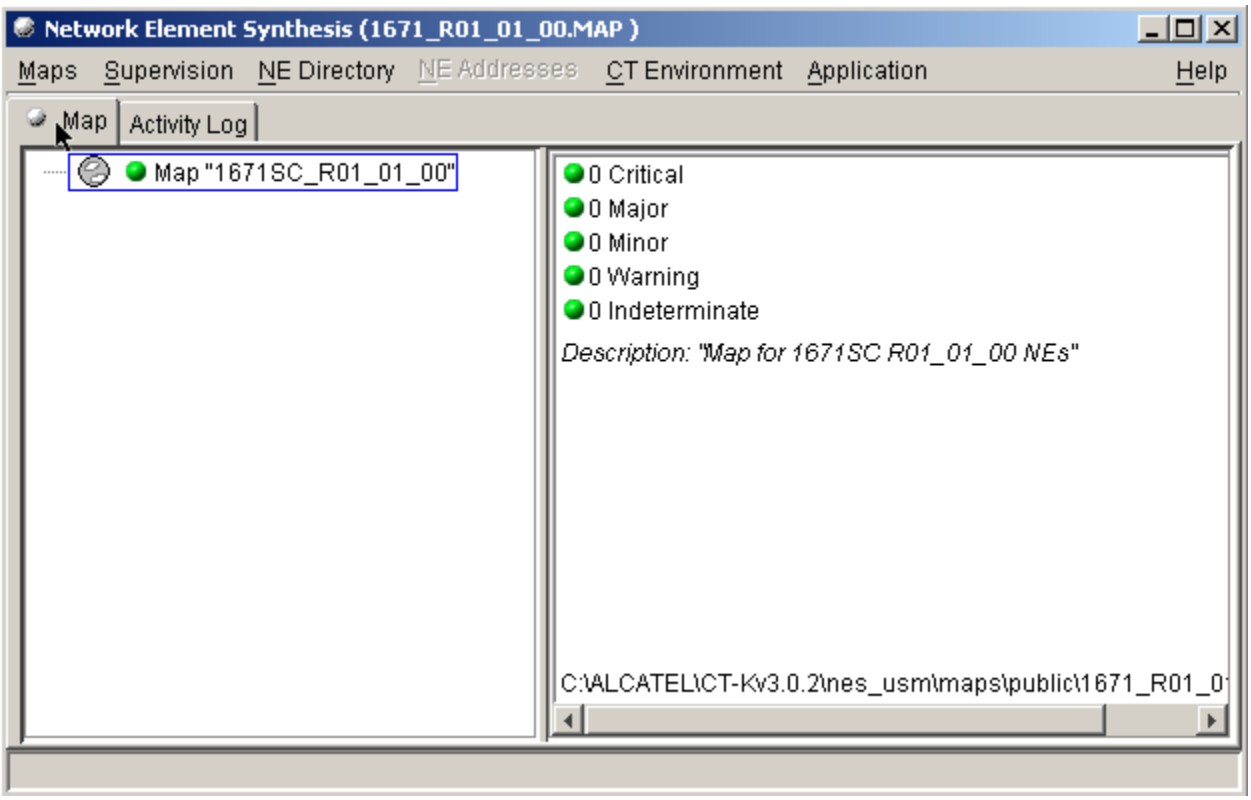
2.6 There are two panels:

– the Map panel

– the Activity Log panel

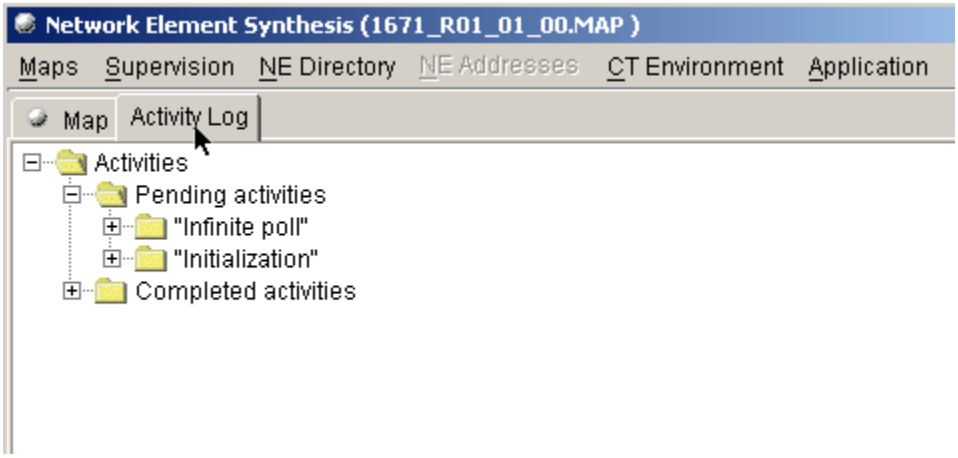
2.7 The **Map** panel is accessed by clicking on the Map tab. It contains two sub-panels. The left panel displays maps and NE symbols. Clicking on a map or symbols displays information in the right panel.

Figure 2-3. Map Panels



2.8 The Activity Log panel is accessed by clicking on the Activity Log tab. It provides information about 1353 NM CT processes and actions.

Figure 2-4. Activity Log Panel



Map Management

2.9 The network mapping scheme is used categorize NEs of a network. Some networks may require submaps, which further categorize NEs under a main network map.

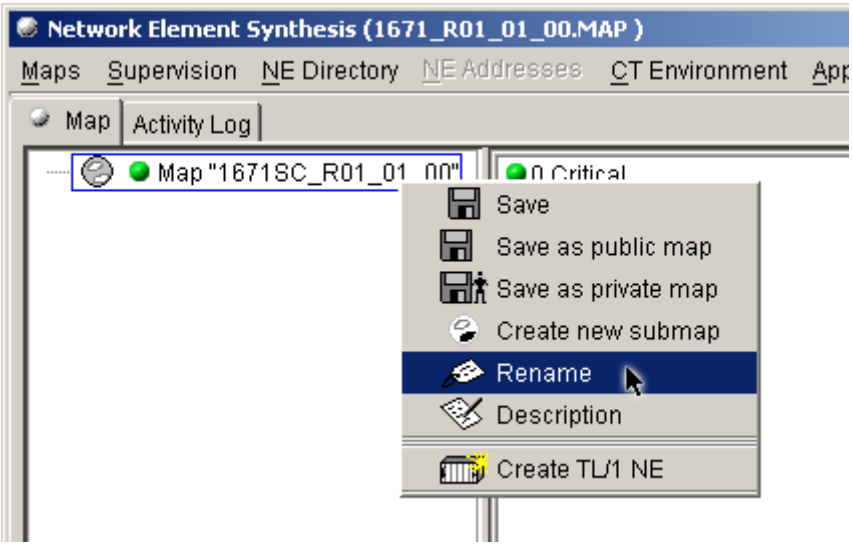
2.10 Each EMA provides a default map that opens when the NES window is launched. In addition, customized maps can be created. Because the 1353 NM CT supports only one NE type and release at a time, only maps containing NEs supported by the current application may be opened or created. The Rename and Description menu options can be used to add more details about a map or submap.

Name the Default Map

2.11 When you first run the 1353 NM CT, the NES window displays a default map. You can rename this map.

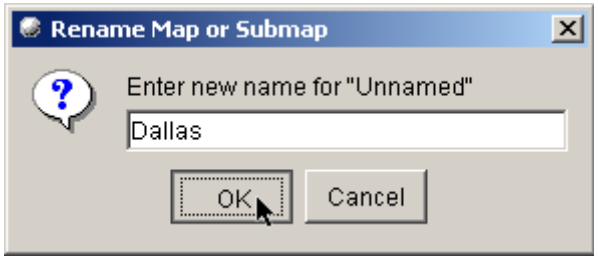
1 Right-click on the map icon.

Figure 2-5. Naming the Default Map



2 In the Rename Map or Submap dialog box that appears, type in the map name and click the OK button.

Figure 2-6. Rename Map or Submap Dialog Box



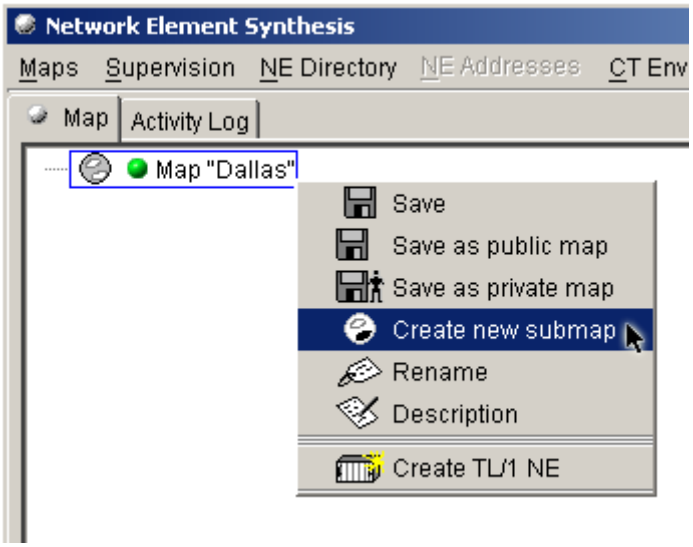
The new name is displayed.

Adding Submaps

2.12 You can create submaps beneath an existing map. For example, you may want to create submaps to group NE symbols based on location or subnet

1 Right-click on the map and select the **Create new submap** option from the popup menu.

Figure 2-7. Adding a Submap



A new submap is created.

2 Right-click on the new submap and select the **Rename** option from the popup menu.

3 Type in the name and click the OK button.

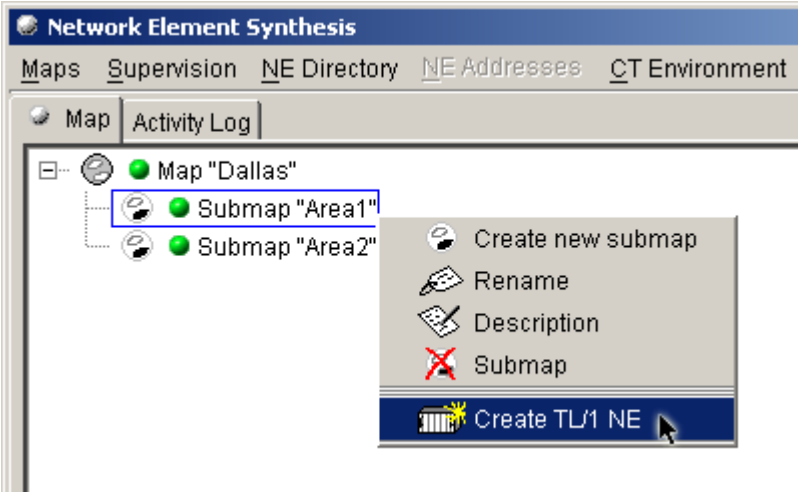
4 Repeat steps 1-3 for each submap that you want to create.

Adding NEs to maps or submaps

2.13 You can add NE symbols to a map or submap.

1 Right-click on the map or submap to which you are adding the NE and select the **Create TL/1 NE** option from the popup menu.

Figure 2-8. Adding an NE Symbol



The NE Settings dialog box appears.

2 Enter data for these fields:

– **TCP/IP Address** - This is the LAN address on the NE's network communications card.

– **TCP/IP Port** - This is the port for the address. (For example, 1671 NEs use port 3082)

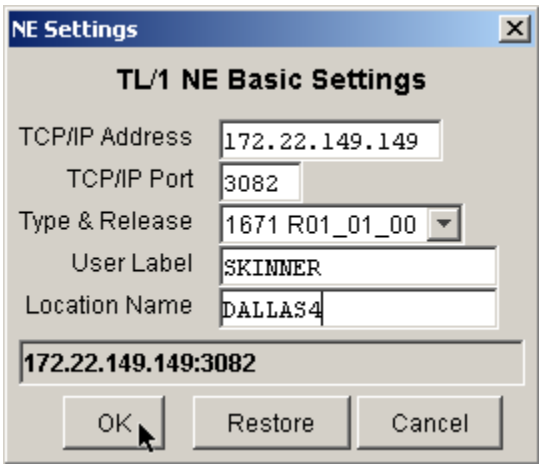
– **Type & Release** - This is the NE type and and the release number for the software that is installed on it.

– **User Label** - This is the Target Identifer (TID) name of the NE. This must match the NE's TID *exactly*.

– **Location Name** - This field is optional.

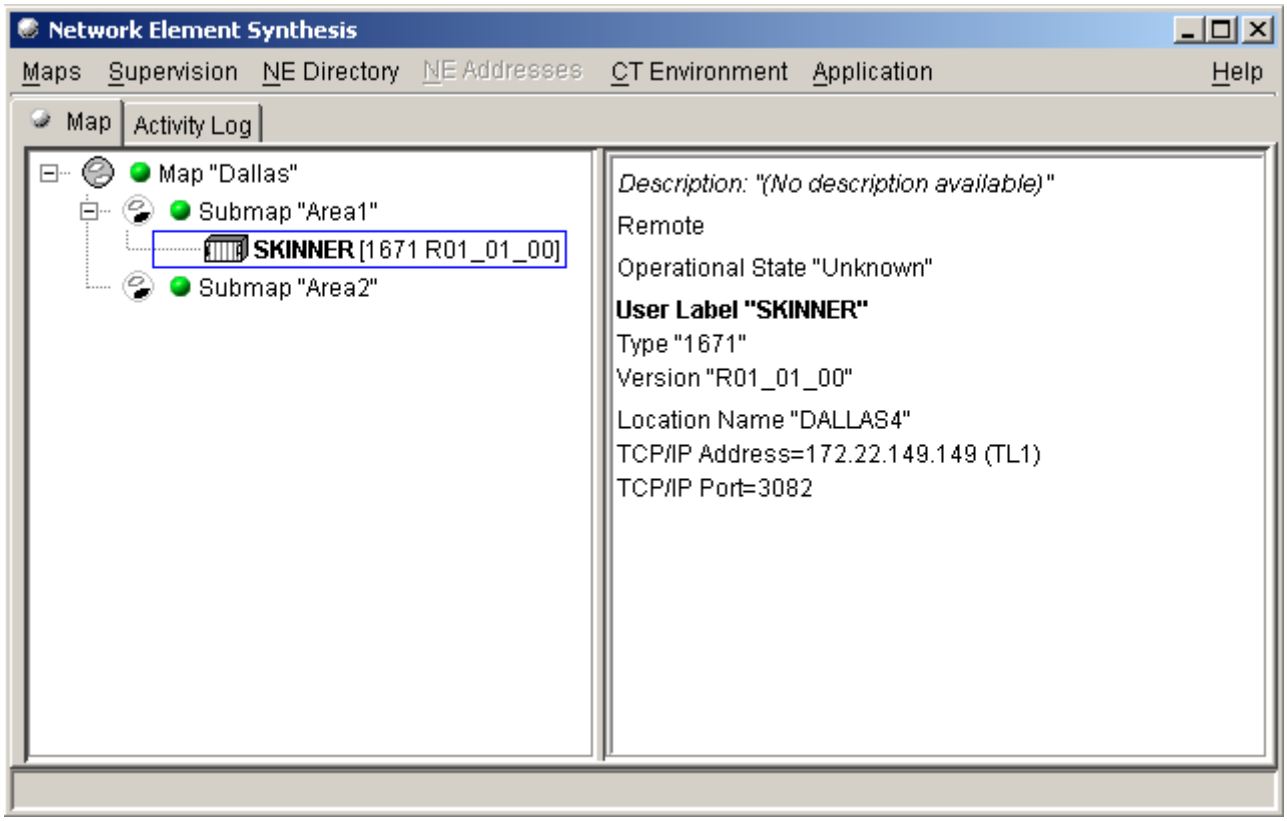
3 Click the OK button.

Figure 2-9. NE Setting Dialog Box



The NES window displays the new NE symbol.

Figure 2-10. NE Symbol Displayed



After creating the NE symbol, the Operational State indicates 'Unknown'. This is because the NE is still unsupervised. Communications have not yet been established between the 1353 NM CT and the NE.

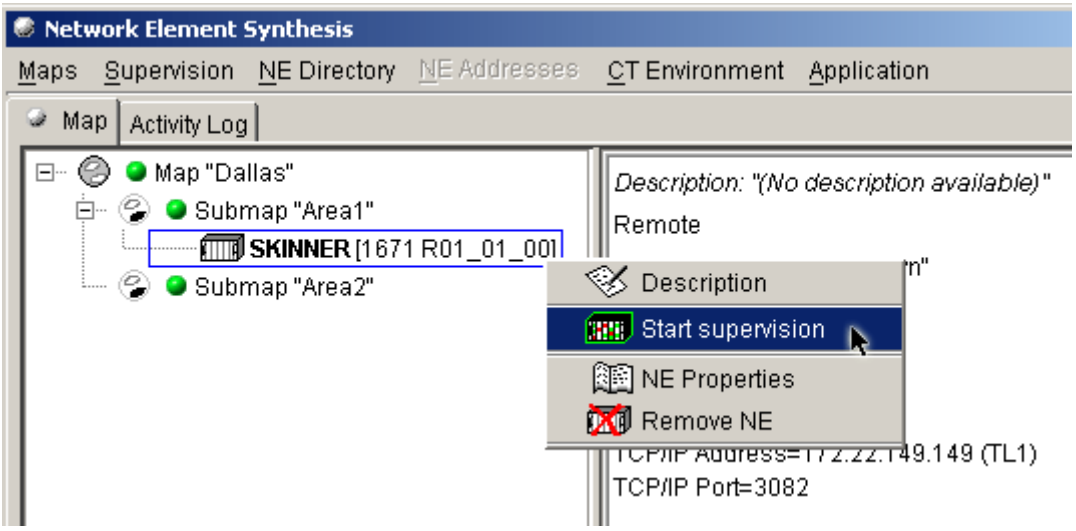
Starting Supervision

2.14 Before starting supervision, make sure that the 1353 NM CT is connected to the NE.

2.15 The 1353 NM CT can connect to the NE through an RS-232-C port or over a LAN through TCP/IP. Once the NE is available through an RS-232-C or LAN connection, monitoring and provisioning are performed through supervision.

1 Begin supervision by right-clicking on the NE in the NES window and selecting the **Start Supervision** option from the popup menu.

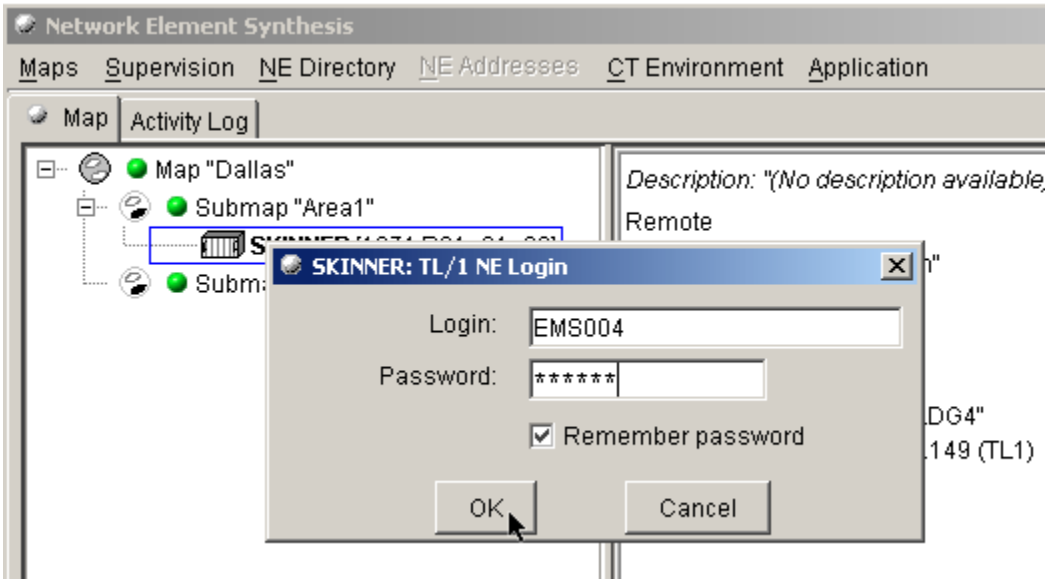
Figure 2-11. Starting Supervision



The NE login prompt appears.

2 Type in a valid username and password. (This name and password must already exist on the NE.)

Figure 2-12. Entering Login Information



2.16 When a connection has been established, and the NE is fully aligned, the Operational State will change to enabled. An enabled NE symbol is displayed with green highlights.

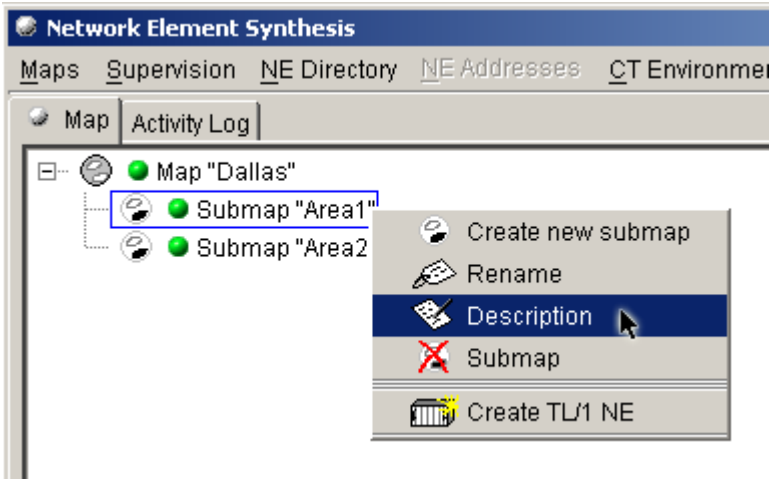
2.17 You can modify NE properties by right-clicking on the NE and selecting the popup menu's **NE Properties** option.

2.18 You can delete an NE symbol by right-clicking on the NE and selecting the popup menu's **Remove NE** option.

Adding Descriptions to Symbols

1 Right-click on a symbol and select the **Description** option from the popup menu.

Figure 2-13. Adding a Description

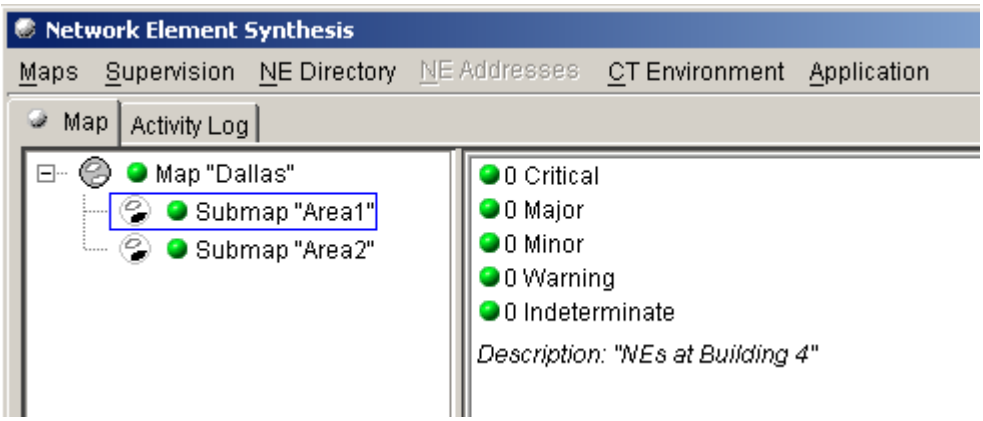


The Set Item Description dialog box appears.

2 Type in a description for the symbol and click the OK button.

The description appears in the right side panel when the symbol is selected.

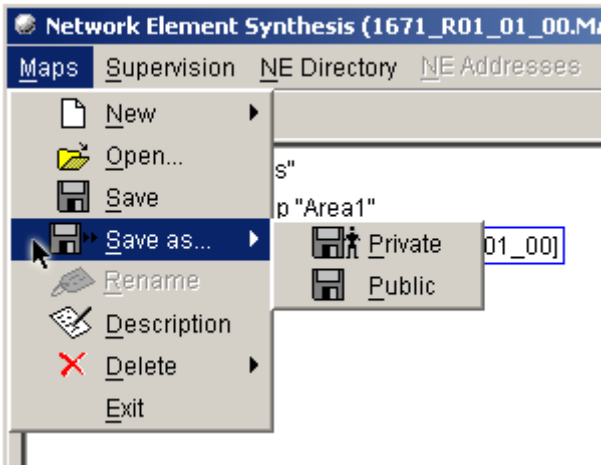
Figure 2-14. Description Displayed



Saving a Map

2.19 You can save a map as Private or Public by selecting the Maps menu's **Save as** option and chosing the Private or Public option.

Figure 2-15. Saving a Map



2.20 When the map is saved with the **Private** option, only users with permissions to that map can view it.

2.21 When the map is saved with the **Public** option, any user will be able to view it.

CT Environment Management

2.22 The following options are available in the CT Environment menu:

- **Process Control**—used to view the state of processes
- **List Software**—shows the current version of software for the 1353 NM CT and EMA
- **Backup**—used to create a backup file that contains all of the current public maps and that user's private maps
- **Restore**—used to restore a backup file

Launching the AMC Window

2.23 After starting supervision for an NE, right-click on the NE in the NES window and select **Show Equipment** from the menu. This launches the AMC window, which allows monitoring, configuration, and provisioning of the NE.

Launching the AS Window

2.24 To begin alarm management on the NE, launch the AS window by one of the following methods:

- In the NES window, select the Supervision menu's **Alarm Surveillance** option. This launches the AS Counter Summary main window.
- In the NES window, right-click on the NE and select the popup menu's **Show NE Alarms** option. This launches both the AS Current Alarms Summary window and an NE-specific alarms sublist window.

Launching TL1DAT

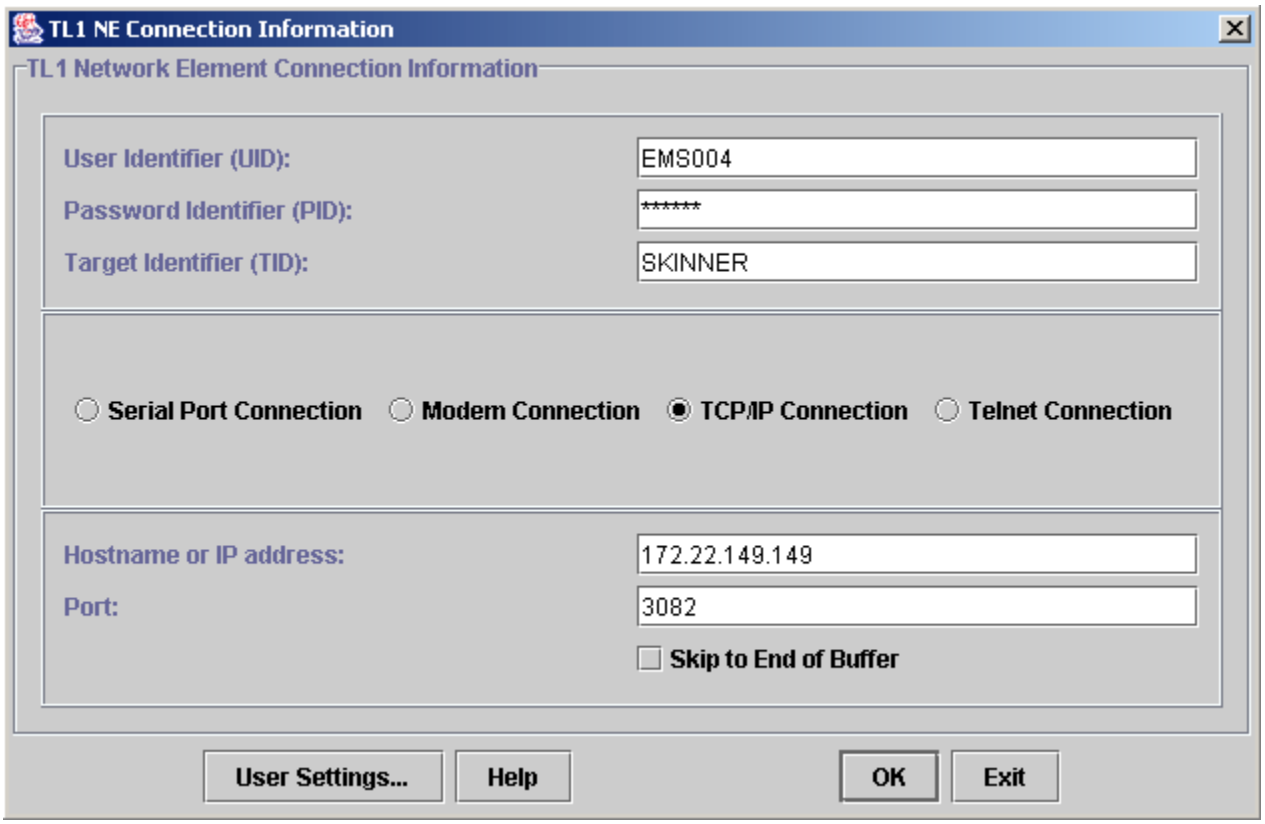
2.25 The TL1DAT application is used for direct entry of TL1 commands. Follow the instructions below to launch the TL1DAT.

1 Select the Application menu's **ALCATEL TL1DAT** option.

The TL1 NE Connection Information dialog box appears.

2 Enter the User Identifier (UID), Password Identifier (PID), Target Identifier (TID), and connection information for the desired NE.

Figure 2-16. TL1 NE Conection Information Dialog Box



3 Click the **OK** button.

The TL1 Window launches.

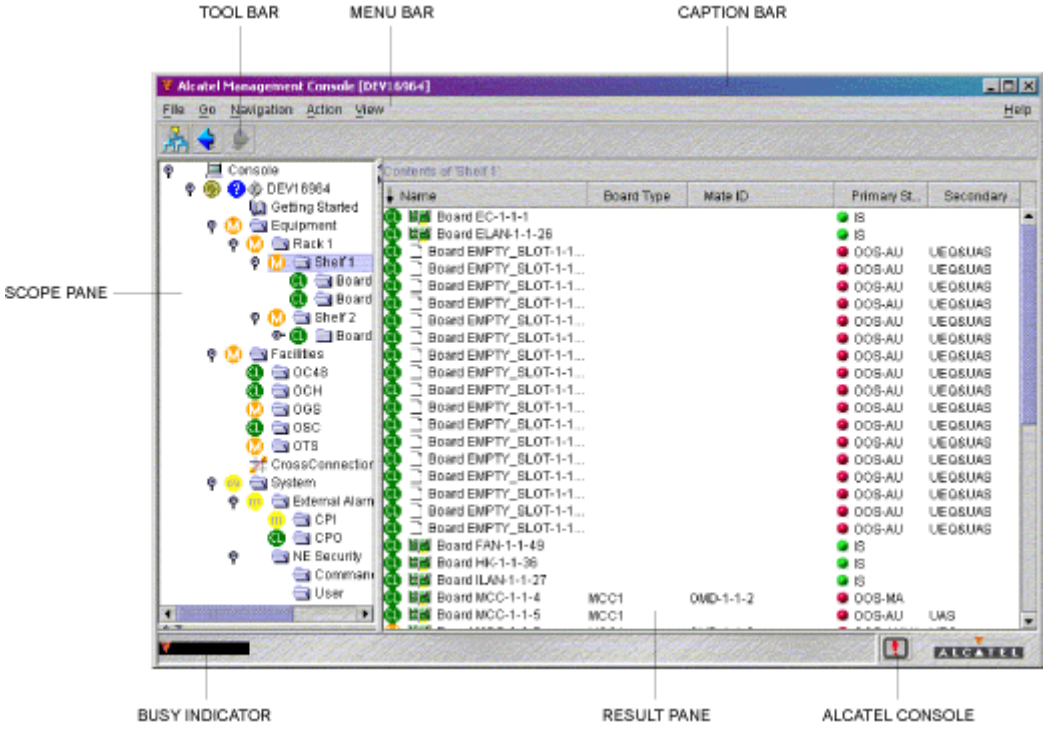
3. Alcatel Management Console Window

3.1 The AMC window is the interface between the 1353 NM CT and an NE. The AMC window varies between NEs. The components of the AMC window are listed below.

- **Caption Bar**—shows the name of the NE for which the console has been launched
- **Menu Bar**—provides control options for the NE
- **Tool Bar**—provides go to Root, Go Backward, and Go Forward buttons
- **Scope Pane**—displays the Navigation Tree and node configurations
- **Result Pane**—displays the contents of the node selected in the Scope Pane in either details view or graphics view. In details view, data can be sorted by clicking on the desired column heading.
- **Alcatel Console**—displays a log of user actions. An exclamation point appears when new actions are entered. **Note that the Alcatel Console button does not appear on the AMC window for the 1671 NE.**
- **Busy Indicator**—shows the operational state of the NE. An orange triangle in the lower left corner of the window displays one of two operational states. A spinning orange triangle indicates that one or more actions are pending. A stationary orange triangle indicates that there are no pending actions.

3.2 For more information about the AMC window, refer to the product documentation for the NE or select and refer to the on-line help for the NE from the Help menu of the AMC window menu bar.

Figure 3-17. Alcatel Management Console



4. Alarm Surveillance Window

4.1 This section provides an overview of the Alarm Surveillance (AS) capabilities. For more detailed information about AS, the Help menu launched from the AS application provides the full version of the Alarm Surveillance User's Guide.

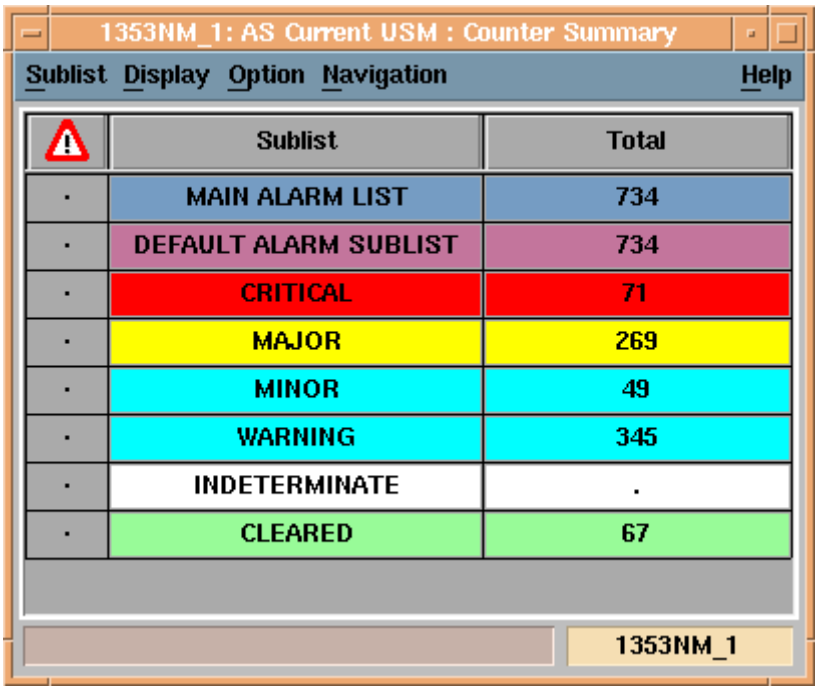
4.2 The 1353 NM CT provides a full range of functions for alarm surveillance, management, and archiving. The 1353 NM CT Alarm Management Application includes the following:

- AS application
- AS Current Alarms Summary Window
- Alarm sublists
- Navigating alarm data
- Managing current alarms
- AS administration

Counter Summary Window

4.3 The AS Current Alarms Summary window appears when the 1353 NM CT AS application is started.

Figure 4-18. Current Alarms Summary Window

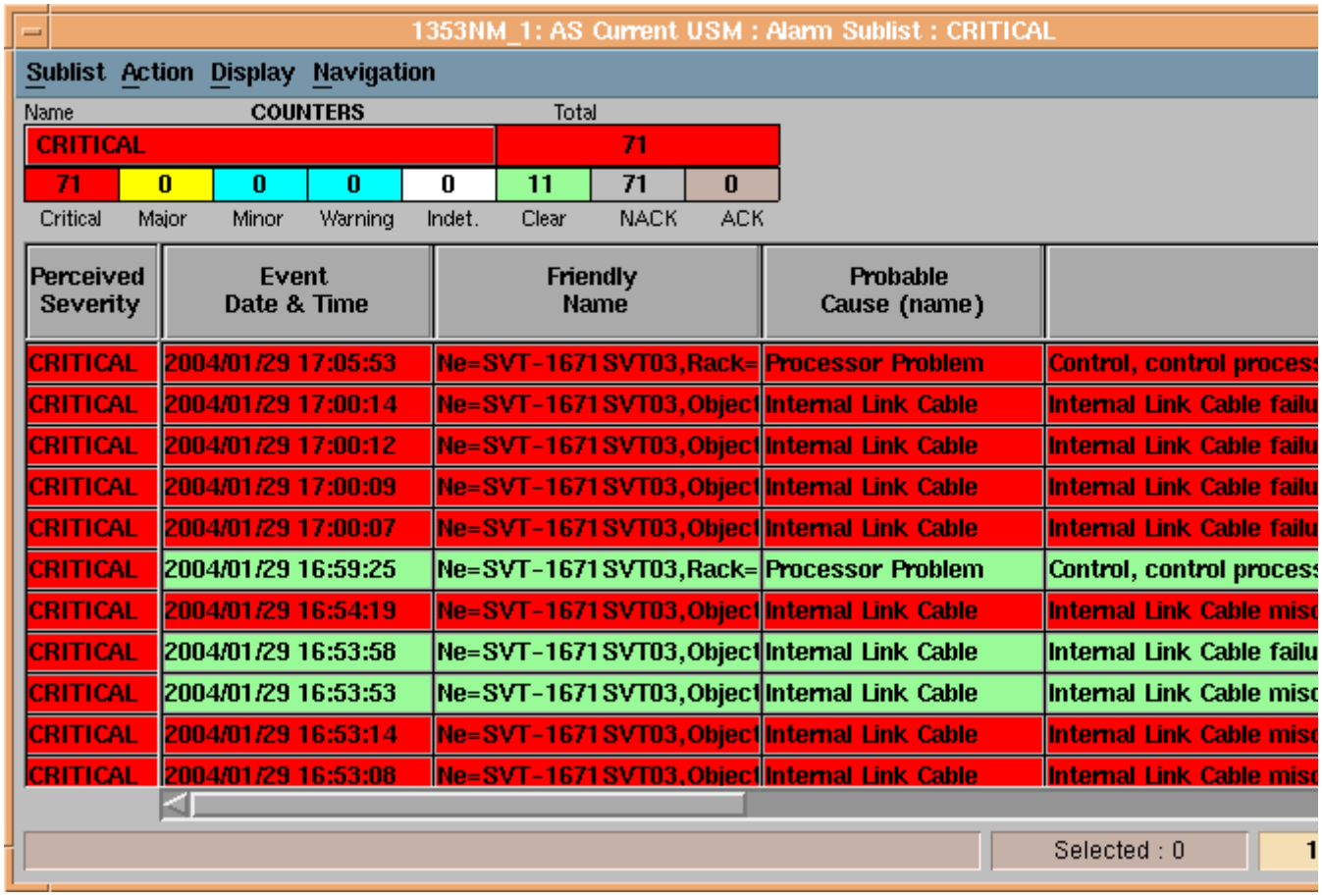


4.4 The AS Current Alarms Summary window window lists all available alarm sublists, including user-defined sublists, and the number of alarms on each sublist. Control of whether or not incoming alarms are reported in a given alarm sublist is also provided.

Alarm Sublist

4.5 An alarm sublist is a subset of the current alarm database and are grouped based on alarm severity or some other filter criteria. All alarms in a given sublist share at least one common attribute. In addition to the default sublists that appear in the AS Current Alarms Summary window window, sublists can be user-defined based on desired criteria and listed in the AS Current Alarms Summary window window. Sublists can be created, modified, activated, or deactivated depending on user preference. See the figure below.

Figure 4-19. Alarm Sublist Window



4.6 Common alarm management tasks such as acknowledging alarms, purging alarms, reserving alarms, and exporting alarm information can be performed through the menu bar of the alarm sublist window.

4.7 Alarm sublists can be modified according to the operator's preference of displayed information. Displayed information is modified using the following characteristics and property sheet:

- Change which attribute (columns) are displayed
- Filter the alarm data
- Perform ascending/descending sorts with multiple sort keys
- Set audible alarm tone

Managing Current Alarms

4.8 Managing current alarms includes the following tasks:

- Acknowledging the alarm
- Manually purging alarms
- Manually clearing alarms (for alarms with Warning status only)
- Exporting alarm information

AS Administration

4.9 The following are AS administration functions included in the 1353 NM CT:

- Setting AS administration parameters—administration parameters include specifying characteristics of Current Alarm List (CAL), specifying the archiving filter, establishing auto-purge criteria, and configuring automatic alarm acknowledgement.
- Re-synchronizing the current alarm list
- Setting up alarm aging actions

4.10 To access AS administration functions, select the Option menu from the menu bar of the AS Current Alarms Summary window window.

5. Alcatel TL1 Direct Access Terminal

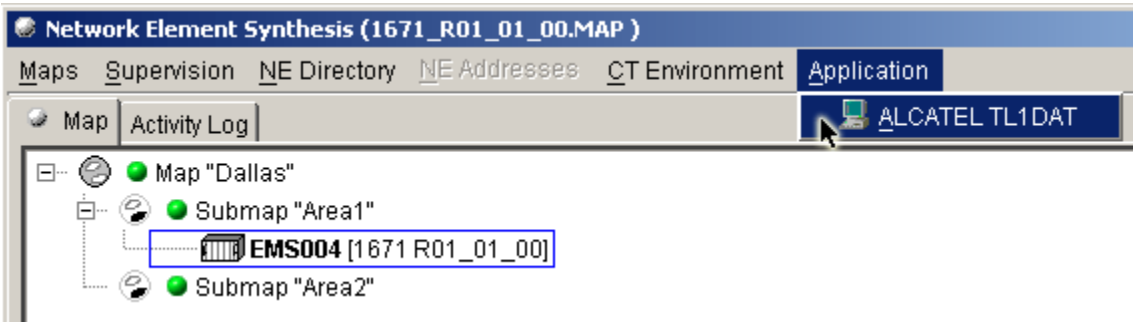
5.1 The full version of the TL1 Direct Access Terminal (TL1DAT) User's Guide is provided by the on-line help for this application. Click the HELP button from any screen after launching this application to access more detailed information.

5.2 TL1DAT allows direct entry of TL1 commands as an alternative to using the GUI interface or in the event that the GUI does not support the desired command function. If the correct syntax to the command is known, the command may be directly entered and executed. If the correct syntax is not known, menu options and fields are available to aid in building the command.

Accessing the TL1 Direct Access Terminal Window

5.3 The TL1 DAT window is accessed by selecting the Application menu's ALCATEL TL1DAT option in the NES window.

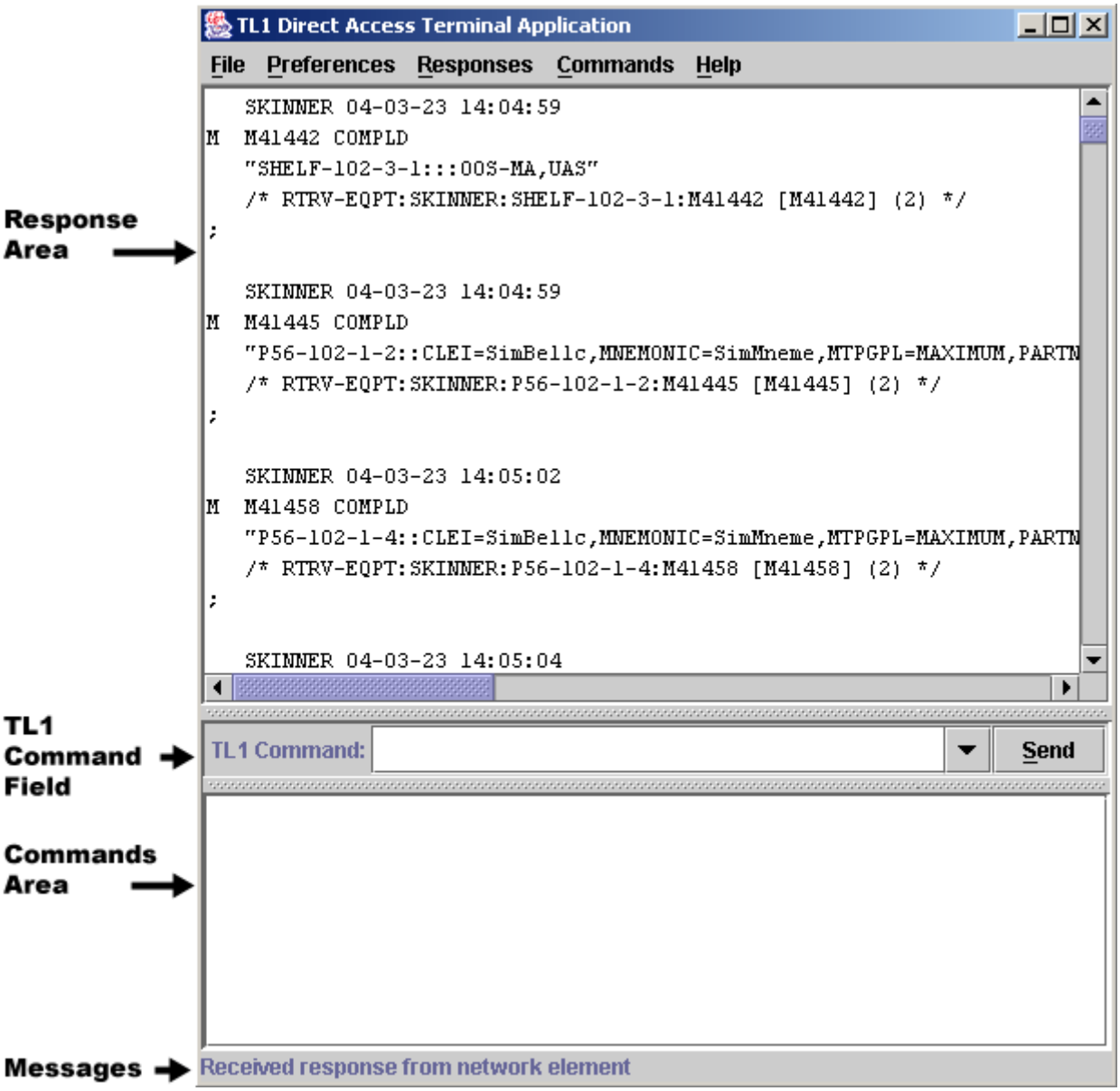
Figure 5-20. Accessing the TL1 DAT Window



The TL1 DAT Window

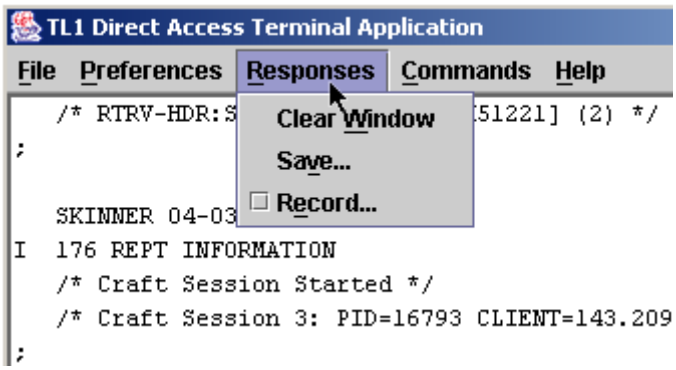
5.4 A typical TL1 Direct Access Terminal Application window is displayed in the figure below. The TL1 DAT window has 6 areas.

Figure 5-21. TL1 Direct Access Terminal Application Window



5.5 The **Response Area** shows the NE's responses. You can select options from the Responses menu to clear the Responses Area of the window, save existing responses to a file or record incoming responses to a file.

Figure 5-22. Responses Menu Options



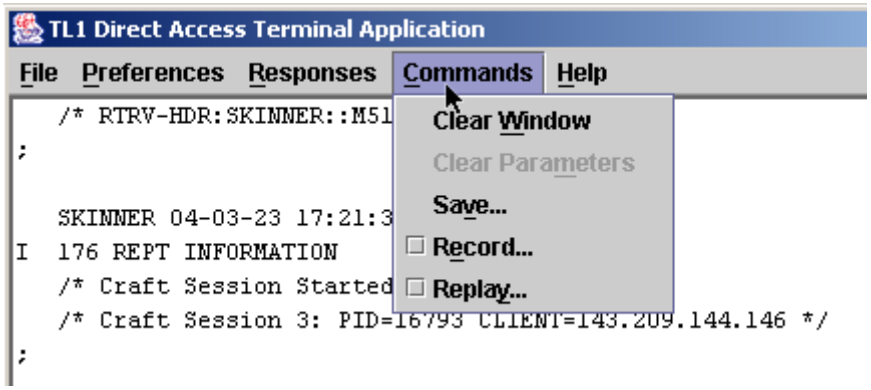
5.6 In the **Command Parameters Field**, a scope pane lists all available system command codes is given. The user scrolls the list to select the desired command. After the command is selected, the command code is divided into parameter fields and/or menu options displayed in the results pane. Fields displayed in red require manual entries or selected options from the menus for successful execution.

5.7 As parameters are entered and menu options are selected, the command syntax builds in the **TL1 Command Field**. If the exact command syntax is known, the command can be entered into the TL1 Command field manually. The **TL1 Command Field** can also be used to enter commands directly if you know the specific TL1 to use.

5.8 After typing a command into the field, click the **Send** key.

5.9 A list of each command sent by the user during that session displays in the **Commands Area** of the window. This list can be used as a reference, but it cannot be manipulated. You can select options from the Commands menu to clear the Commands Area of the window, save commands that have been entered or record commands as they are entered. You can then replay back your recording.

Figure 5-23. Commands Menu Options

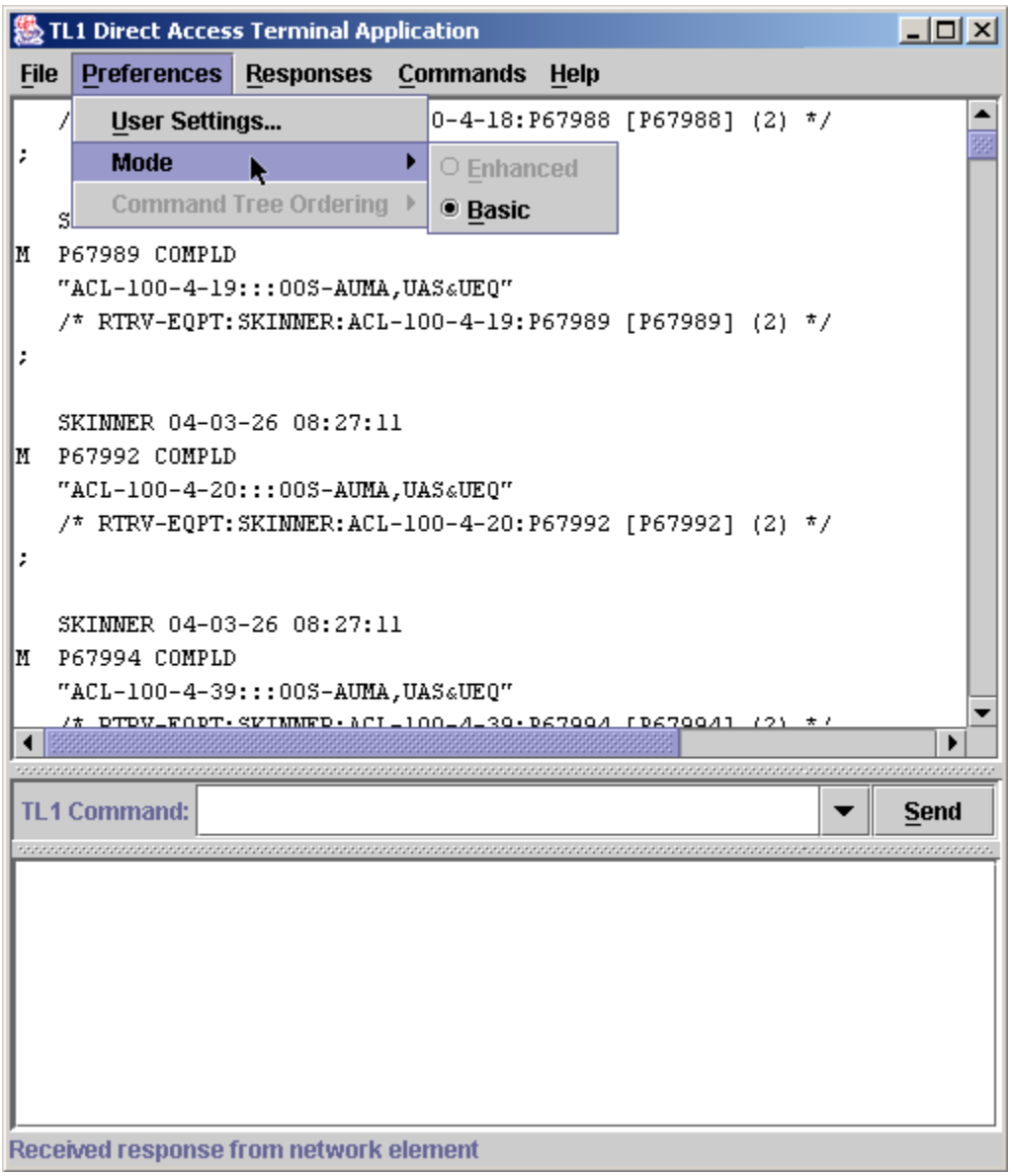


Loading an I/O Manual for TL1 DAT (Optional)

5.10 The I/O manual for the network element is installed with the 1353 NM CT. If for some reason it is not installed or you wish to install a different I/O Manual, refer to the instructions below.

5.11 In the TL1 DAT window, if you select the Preferences menu's **Mode >> Enhanced** option and the Enhanced option appears grayed out, the TL1 Command set has not been loaded for this NE type.

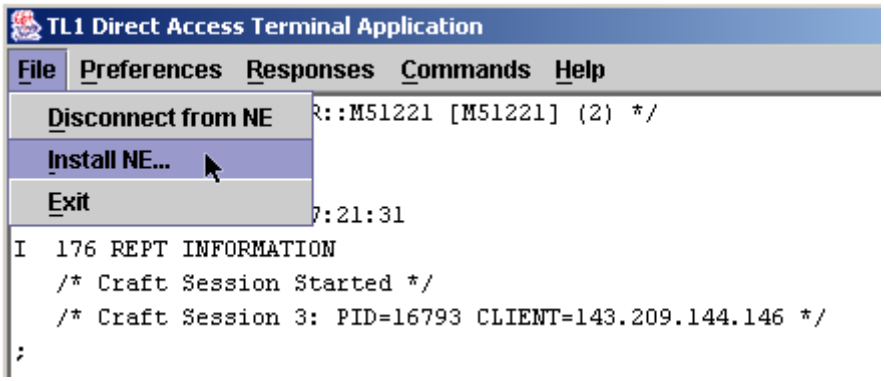
Figure 5-24. TL1 DAT Window with Inaccessible Enhanced Mode



5.12 Perform the steps below to install the I/O Manual.

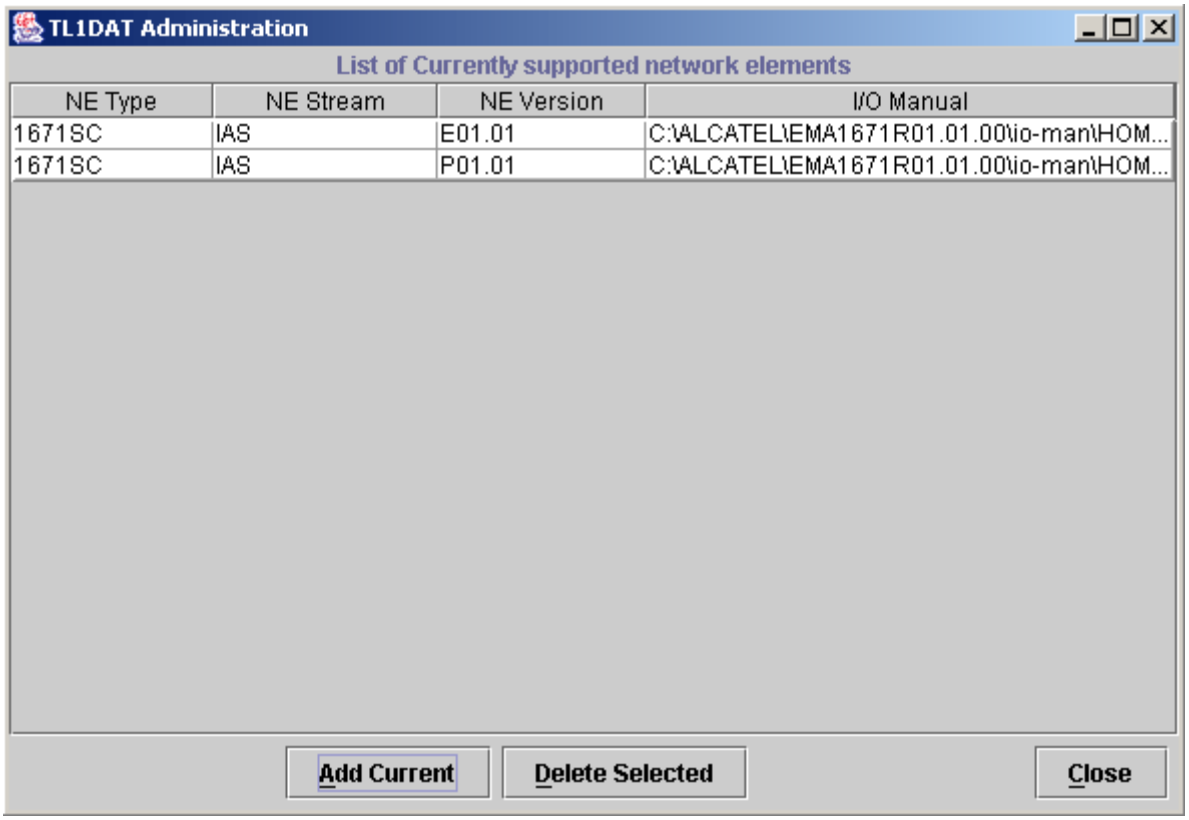
1. Select the File menu's **Install NE** option.

Figure 5-25. Install NE Option



The TL1 DAT Administration window shows the NE types and the location of their IO manuals.

Figure 5-26. TL1 DAT Administration



2. Click on the Add Current button (without selecting an NE type from the list)

   This enables you to load the IO manual for the NE type to which you are currently connected.

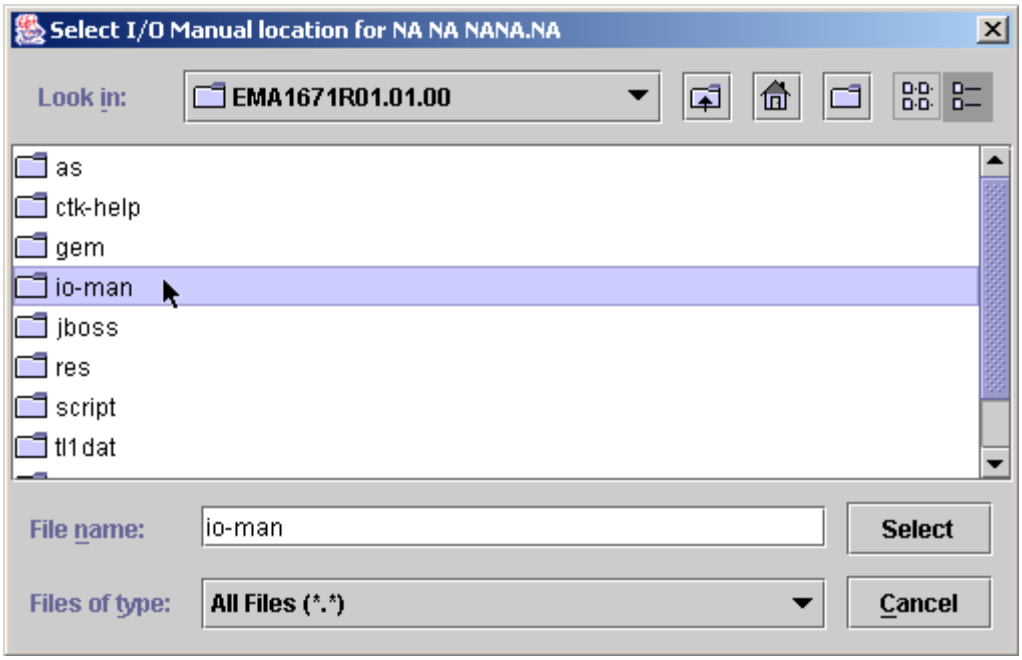
   The file dialog box appears.

3. In the file dialog box, click on the 'up folder' icon to navigate up to the NE folder under /Alcatel.

4. Click on the EMA<NEtype_release> folder.

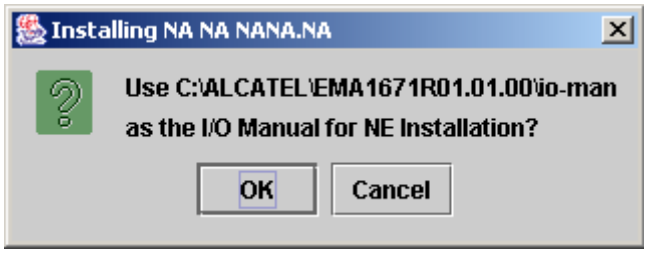
5. Click on the io-man folder and click the Select button.

Figure 5-27. Accessing the I/O Manual



6. At the I/O Manual Installation prompt, click the OK button.

Figure 5-28. I/O Manual Installation Prompt



The TL1 DAT window can now display in Enhanced mode.

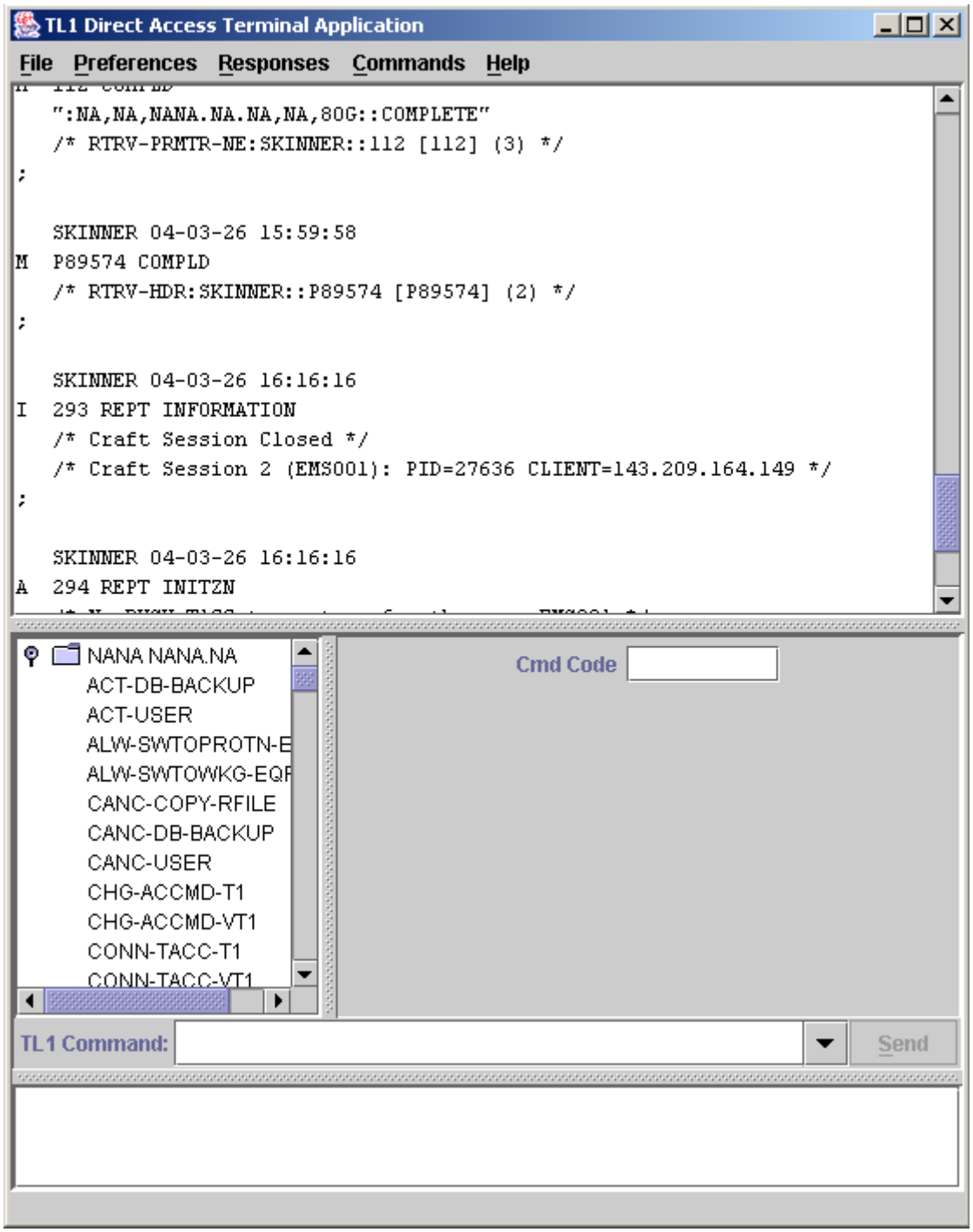



Figure 5-29. TL1 DAT Window (Enhanced Mode)