CHAPTER 3

CiscoWorks Blue SNA View Features

CiscoWorks Blue SNA View, together with CiscoWorks Blue Maps, provides the SNA control and correlation needed to manage SNA devices from a UNIX platform, allowing the network administrator to see beyond the routers and into the SNA resources.

By interacting with the mainframe, SNA View adds vital PU and LU information to the maps created by CiscoWorks Blue Maps. By correlating SNA resource names to router ports, the network administrator can more easily solve and identify problems in the network or in the SNA environment. Resource information is dynamically updated to provide a snapshot of the network as it appears at any given time. This allows the administrator to display a single map that depicts details from the host down to the PU name, providing information such as:

- PU/LU status
- PU/LU dependency relationships

This chapter:

- Provides a quick overview of the features of SNA View
- Provides an overview of how SNA View works
- Describes the components of SNA View
- Describes the online help system and how to access it

Features at a Glance

Table 3-1 lists and describes the features that are provided by CiscoWorks Blue SNA View (in addition to those provided by CiscoWorks Blue Maps).

Table 3-1 Overview of CiscoWorks Blue SNA View Features

Features	Comment/Descriptions	Benefits
Map Enhancements	• SNA View adds vital SNA PU/LU information to CiscoWorks Blue RSRB Map application	• Eases problem determination by providing one console for SNA and IP information • Simplifies correlation of router or path problems to SNA session problem
SNA Control	• View the status of SNA PU/LU sessions — Allows SNA operations from a UNIX workstation — Activate/deactivate PU/LU sessions	• Identifies SNA connectivity problems • Displays SNA session status and allows network administrators control of SNA sessions
Alert Manager	• Shows key SNA alert information	• Eases problem isolation by combining the SNA alert on a UNIX workstation

How SNA View Works

The trend in network management is to reduce the need for separate disparate element managers by providing direct management of heterogeneous multivendor networks from a single network management system. In keeping with this strategy, CiscoWorks Blue SNA View uses information from NetView, VTAM, and MVS to enable network administrators to monitor and manage SNA resources from an SNMP-based management platform. To further simplify and enhance network management, this information is provided to the network administrator through a logical map graphical interface, CiscoWorks Blue Maps.

SNA View and CiscoWorks Blue Maps

CiscoWorks Blue SNA View requires the mapping capability of CiscoWorks Blue Maps. By adding onto the logical maps of the SNA-related protocols, SNA View augments the information that is already presented. MAC addresses are correlated with the corresponding SNA PU data and displayed on the specific protocol map. For large networks, a global map is displayed, and the user can easily navigate through the network using the graphical user interface (GUI).

Virtual telecommunication access method (VTAM) SNA resource information is gathered from the mainframe, correlated and associated with the MAC address information, and displayed at the UNIX workstation. PU and LU status, as well as LU dependencies are listed in the pull-down menus of the CiscoWorks Blue Maps application. By bringing this information together, a clearer picture of the network is presented.

The network operator can then manage SNA devices (activate and deactivate PUs and LUs) and SNMP devices (browse MIBs) from a single console. And, by leveraging the consolidated protocol information with the vital SNA resource information, problem determination and isolation are accomplished more quickly.

Components of SNA View

The following components comprise CiscoWorks Blue SNA View:

- Host Connection Interface
- Command Server and Client
- VTAM Message Server and Client
- MVS Message Server and Client
- Alert Server and Client
- Status Manager
- SNA PU Discovery
- Task Manager

Host Connection Interface

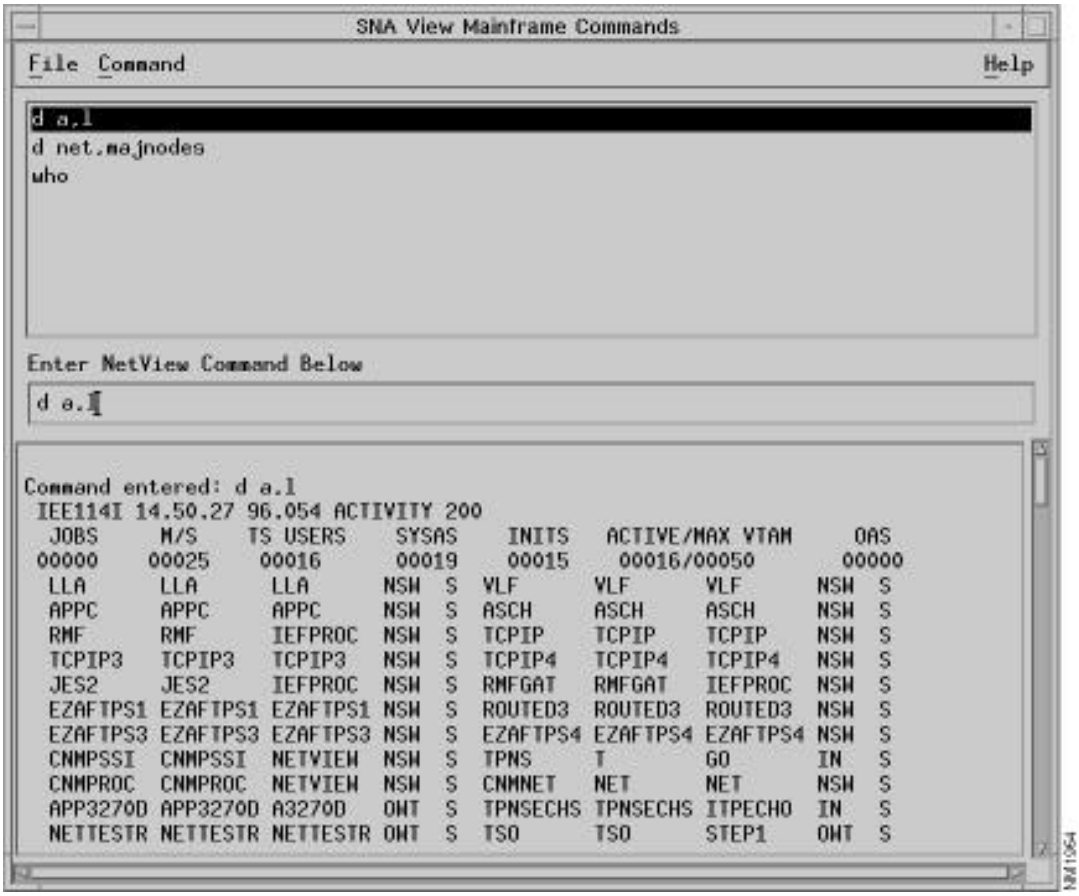
The Host Connection Interface (HCI) is the primary server for the SNA View workstation application. The HCI establishes LU6.2 or TCP/IP communications with the SNA View mainframe application. The HCI also manages LU6.2 and TCP/IP mainframe communications for the SNA View secondary servers. All SNA data received by the HCI is routed to the appropriate server based on the message type (VTAM, MVS, etc.).

Command Server and Client

The Command Server sends commands to the mainframe and receives the responses. The Command Server opens and bonds a UDP socket or LU6.2 connection over which clients can register and issue commands to the mainframe. It also establishes connections with the Host Connection Interface over which it receives the mainframe command responses. Commands can be sent to VTAM, to the MVS operating system, and, if present, to NetView.

The user sends commands and views the responses using the Command Client window, as shown in Figure 3-1.

Figure 3-1 SNA View Mainframe Commands Window

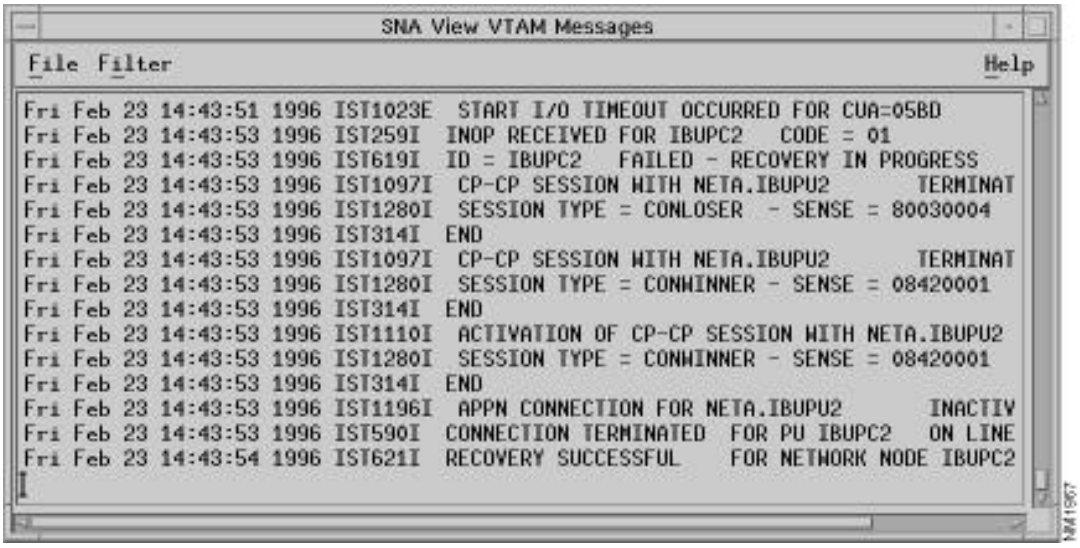


VTAM Message Server and Client

The VTAM Message Server allows clients to receive solicited and unsolicited VTAM messages from the mainframe as they are generated. The VTAM Message Server establishes a socket connection with the HCI and initializes a UDP socket connection over which clients can register for services.

The messages received are displayed in the VTAM Message Client's window, as shown in Figure 3-2. From this window, you can also define filters to eliminate unwanted messages (Refer to "Filtering Mainframe Messages"). Previously viewed messages are saved in a VTAM Message Log file.

Figure 3-2 SNA View VTAM Messages Window

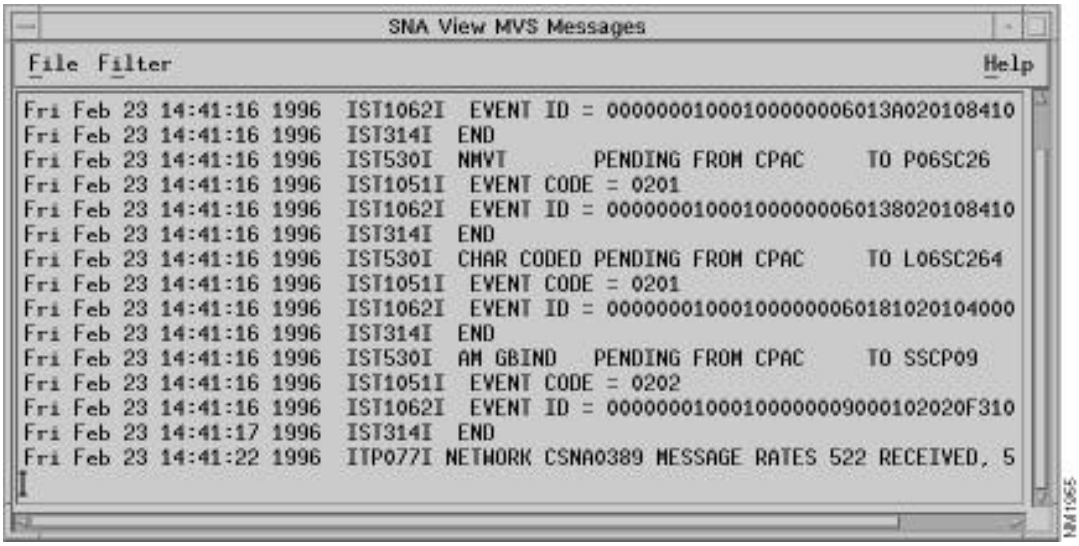


MVS Message Server and Client

The MVS Message Server allows clients to receive solicited and unsolicited MVS messages from the mainframe as they are generated. The MVS Message Server establishes a socket connection with the HCI and initializes a UDP socket connection over which clients can register for services.

The messages received are displayed in the MVS Message Client's window, as shown in Figure 3-3. From this window, you can also define filters to eliminate unwanted messages (Refer to "Filtering Mainframe Messages"). Previously viewed messages are saved in an MVS Message Log file.

Figure 3-3 SNA View MVS Messages Window



Alert Server and Client

The Alert Server allows clients to receive SNA alert data from the mainframe. The Alert Server passes alerts that it receives from the HCI to all active Alert Clients. The Alert Server establishes a socket connection with the HCI and initializes a UDP socket connection over which clients can register for services.

The alerts received are displayed in the Alert Client's window. From this window, you can also display alert details (by double-clicking on an alert). Alert data is stored in the Sybase database.

Status Manager

The Status Manager keeps the CiscoWorks Blue Maps application up-to-date with the existence and status of resources. The Status Manager updates the CiscoWorks Blue Maps database when previously unknown resources are discovered. Also, when the status of an SNA PU or LU changes, the Status Manager receives a notification from the mainframe via the HCI, which, in turn, drives the state of the PU/LU objects managed within CiscoWorks Blue Maps.

SNA PU Discovery

The SNA PU Discovery discovers VTAM information about the SNA PUs and LUs.

Task Manager

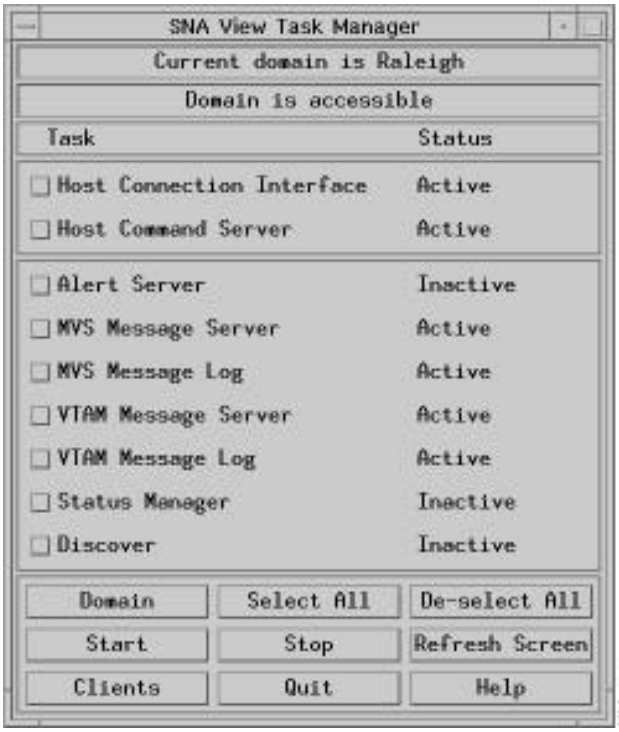
The Task Manager allows users to monitor and manage the SNA View workstation tasks for each managed SNA domain. Using the Task Manager, users can start and stop the:

- Host Connection Interface
- Command Server
- MVS Message Server
- Alert Server
- Status Manager
- SNA PU Discovery

The Task Manager also provides an interface for accessing the following SNA View client windows:

- Mainframe Command Window
- VTAM Messages Window
- MVS Messages Window
- Alert Window

Figure 3-4 SNA View Task Manager Window



Online Help System

CiscoWorks Blue includes online help that is similar to help systems supplied with Windows-based platforms.

Once you start the CiscoWorks Blue online help system, you can jump to any topic within the system. For information on how to use the Help viewer, select **Help>How to Use Help** when the first help window appears.

Online help is available from several parts of CiscoWorks Blue:

- NetView menus, so you can view help before starting a CiscoWorks Blue application.
- CiscoWorks Blue application Help menus that start the help system and display the contents page for that application.
- CiscoWorks Toolbox application so you can view help before starting a CiscoWorks application.

CiscoWorks Blue online help includes a **Find** button that allows you to do full-text searches within the help system. For information on how to do a search, select **Help>How to Use Help** when the first Help window appears.