

Using CiscoWorks Blue: Maps, SNA View, and Internetwork Status Monitor

This chapter briefly describes some of the enhanced network management tools available for the management of DLSw+. CiscoWorks Blue Maps provides a logical view of the portion of your router network relevant to DLSw+ (there is a similar tool for RSRB and APPN). CiscoWorks Blue SNA View provides an end-to-end view of SNA sessions that traverse the DLSw+ network by correlating SNA PU and LU names with DLSw+ circuits and DLSw+ peers. CiscoWorks Blue Internetwork Status Monitor (ISM) support allows you to manage your router network from the mainframe console.

Note: ISM Version 2.0 works only with IBM's Tivoli NetView for OS/390 (NetView). Earlier releases of ISM also worked with Sterling's SOLVE:Netmaster, which is now Computer Associates' NetworkIT NetMaster. This document discusses the functionality of the latest release, ISM Version 2.0. However, much of the information also applies to the earlier releases.

Using Maps and SNA View

Quite often, the challenge with network management is that there is too much information. Maps and SNA View address this problem by providing information relevant to the problem you are trying to solve in an easy-to-use, graphical interface or a tabular Web interface. Maps and SNA View allow you to correlate DLSw+ circuits and peer connections with PU and LU names. A mainframe component queries VTAM to build a database of SNA PUs and LUs and maintains this database by capturing VTAM messages that indicate state changes. See the "CiscoWorks Blue Maps and SNA View User Guide" for more details. Also see the section "Using the DLSw Application in Maps" within the guide for instructions on how to use the application for DLSw+.

Note: DLSw+ routers must be IP-addressable to be viewed using Maps and you must use either FST or TCP encapsulation to show peers.

CiscoWorks Blue Maps offers both Motif-based and Web-based network management applications.

Managing DLSw+ in Motif-Based Mode

CiscoWorks Blue Maps offers a set of network management applications that use the X Window System and Motif graphical interfaces to display graphical maps of the nodes and links in your network. Each application focuses on a particular protocol: DLSw, RSRB, or APPN. See the "CiscoWorks Blue Maps and SNA View Workstation Installation and Administration Guide" for more details.

Managing DLSw in Web-Based Mode

CiscoWorks Blue Maps offers a set of Web-based client/server applications that let you use Web browsers to display information about DLSw, RSRB and APPN networks. The network information is presented in a tabular format. The Web server runs on your Maps UNIX workstation and collects information from the Cisco routers in the network. You can use a Web browser from any workstation in the network to connect to the Web server to view the network. Through the Web browser interface from office or home, users can retrieve information about their DLSw, APPN, and RSRB networks on a platform of their choice. See the “CiscoWorks Blue Maps and SNA View User Guide” for more details.

Using Internetwork Status Monitor

In Cisco IOS Release 11.0 and later, every Cisco router that shipped with the IBM software feature set also shipped with an SNA service point capability. The service point capability allows a Cisco router to communicate directly to NetView. ISM uses this capability to monitor your Cisco devices from the mainframe.

To use the service point, you must configure your router to use the SNA host function. You must also configure VTAM to recognize the ISM router as a service point PU.

When VTAM initializes, it activates a system services control points (SSCP)-to-PU session between itself and each router that has been configured to use the ISM function. NetView uses this SSCP-to-PU session to establish an SNA session with the router. ISM uses this SNA session to send commands to the router or receive messages from the router.

If you configure the service point in your routers, your routers send SNA alerts directly to VTAM, greatly improving visibility from your mainframe network management applications. To use ISM in conjunction with DLSw+ requires Cisco IOS Release 11.1(5).

ISM allows you to access the command-line interface of a Cisco router from your NetView console. Using ISM, you can issue any command from your NetView console that you can issue from a Telnet interface to the router. You can configure the router, issue show commands, and issue debug commands.

ISM is an ideal solution for SNA environments that are just beginning to deploy multiprotocol networks and have NetView expertise but not Simple Network Management Protocol (SNMP) expertise. It minimizes training and equipment costs for network management while providing status monitoring, dynamic alerting, and the gathering of statistical information for trend analysis and capacity planning. The router interface through ISM is more user friendly than a Telnet interface (with features such as command retrieval and the ability to store output to a Virtual Sequential Access Method [VSAM] database).

See the “CiscoWorks Blue ISM User Guide” for more details.