
CiscoWorks Blue Internetwork Status Monitor for the S/390 Series

Product Overview

CiscoWorks Blue Internetwork Status Monitor Release 3.0 (ISM) provides mainframe operators with full visibility of a Cisco router network from a single mainframe console. By utilizing many of the TME/10 NetView for OS/390 and SOLVE:Netmaster functions to deliver router management, Internetwork Status Monitor eliminates the need for retraining skilled mainframe operators. Familiar operator consoles with common function keys, help panels, event displays, and network logs help traditional MVS network operators ease their way into distributed network management.

Leveraging your investment in NetView or SOLVE:Netmaster, Internetwork Status Monitor Release 3.0 takes an already powerful management platform and expands on its capabilities. The features of Internetwork Status Monitor offer mainframe operators control of the routed network. Status summary displays provide the “big picture,” while other functions such as event monitoring and command tutorials assist operators to diagnose the most difficult of problems.

ISM provides visibility of the router network to the virtual telecommunications access method (VTAM), enabling management through a SOLVE:Netmaster console or NetView for multiple virtual storage (MVS) console. Commands traditionally entered at the router console can be issued from the mainframe console, and the responses are returned to the mainframe operator as a full-screen panel response. In addition to these responses, NMVT alerts are transported from the router to the mainframe where they are displayed by the NetView or SOLVE:Netmaster event display features.

Key Features and Benefits

Status Monitoring Features

- **Status Summary Display for Routers, Interfaces, and Channel Cards:** This feature provides a single screen summary of the status of Cisco devices. This display is similar to the popular NetView STATMON and SOLVE:Netmaster "Status at a Glance" displays.
- **CIP/CPA Display:** This capability provides the status of all monitored CIPs and CPAs, also referred to as Cisco mainframe channel connections (CMCCs). The display shows a CMCC's hardware and software release, as well as any CPU and memory threshold overrides. The operator can quickly navigate to the CMCC command tutorial menu to troubleshoot problems.
- **Exception-Based Management:** Users can tailor their views to include or exclude routers with selected statuses.
- **Focal Point Management:** Customers that manage multiple networks (for geographically dispersed organizations or service providers) can install Internetwork Status Monitor on each of these networks and manage the resources from a common location
- **Router Grouping/Span of Control:** The Internetwork Status Monitor system administrator has the ability to create groups of routers. The grouping can reflect geographic distributions, device types, or departmental hierarchy. The Internetwork Status Monitor administrator can restrict an operator's access to the devices in a router group. In this manner, operators can be given a span of control so that they are restricted to the monitoring and control of these specific routers.

Operator Productivity Features

- **Menu-Based Operation:** Internetwork Status Monitor provides menus to access features and predefined commands. These menus allow operators to monitor and control Cisco devices without additional training.
- **Router Command Tutorial:** To simplify the task of diagnosing router conditions, Internetwork Status Monitor provides a menu of predefined router show commands. This feature allows the mainframe operator to obtain information from Cisco devices without having to memorize commands or command syntax.
- **Simple Command Interface:** Internetwork Status Monitor provides a full-screen, scrollable interface, which allows experienced users to issue Cisco IOS® software commands. The command interface supports all Cisco IOS commands that can be issued from the routers' console interface. Authorized operators can issue the enable command (and password) to obtain update authority. The command interface also supports routers running the TACACS+ security feature.

- **CMCC Connection Display:** Internetwork Status Monitor provides a connection display depicting the connectivity between the mainframe and the device. The operator can select this option for any channel-attached Cisco device, which will then display the router, CIP or CPA, channel, and subchannel information on a singlepanel.
- **CMCC Command Tutorial:** A menu of predefined channel commands provides operators with detailed information about CIPs and CPAs.

Problem Diagnostic Features

- **Threshold-Based Alerts:** NetView Problem Determination Aid (NPDA) or Network Error Warning System (NEWS) alerts are created when a threshold percentage for CPU utilization or memory usage is exceeded. Network Management Vector Transport Alerts for Routers and Downstream Devices
- **Intensive Mode Recording:** Internetwork Status Monitor allows the operator to collect information from Cisco devices on a frequent basis. If a performance problem is occurring, or continues on a regular basis, the operator can schedule intensive mode recording for that device.
- **Session History and Problem Determination:** ISM works with VTAM to collect information on switched SNA sessions. By default, Internetwork Status Monitor will store the physical unit (PU) session history for the last five successful sessions. The session history contains the IDBLK/IDNUM, media access control (MAC), service access point (SAP), and routing information field (RIF) information for the PU. If an end user cannot establish a session, the session history information can be accessed by PU name or MAC address, providing a direct method for problem determination and isolation.
- **DSPU Management:** A list is provided of all routers supporting DSPU concentration, as well as a list of the PUs and logical units (LUs) for each router. Internetwork Status Monitor also supplies a DSPU command tutorial, allowing operators to obtain DSPU information from the Cisco devices without memorizing commands, command parameters, or command syntax.
- **Command and Event Logging:** This feature logs an audit trail of all events received and the actions taken
- **Router Configuration Archiving:** Router configurations can be archived in a VSAM database for later use in problem diagnosis and disaster recovery of the routed network.

Performance and Utilization Statistics

- **Router Performance Statistics:** Internetwork Status Monitor automatically gathers performance statistics from routers and this data can be used to for capacity planning and trend analysis.
- **CMCC Performance Statistics:** Performance collection of statistical information for CMCC's (CIPs and CPAs).
- **Interface Performance Statistics:** Capture of statistics by interface type and router, and this includes values for maximum transmission unit (MTU), bandwidth, delay, reliability, and load.
- **Interface Transmission Statistics:** Collection of interface performance statistics - includes transmission statistics and a range of error counts.
- **Channel Utilization Statistics:** Gather statistics for channels attached to CMCCs. The information is stored in a VSAM file and includes transmission statistics and error counts.

Specifications

Table 15-20: CiscoWorks Blue Internetwork Status Monitor Release 3.0 for the S/390 Series Specs

Description	Specification
Hardware Requirements	Any mainframe capable of running NetView for MVS Release 2.4 or higher or SOLVE:Netmaster Release 3.1 or higher Any Cisco device capable of running Cisco IOS Release 11.0 or higher • The Plus feature sets on the Cisco 2500, 4000, and 4700 families • The IBM and Enterprise feature sets on the Cisco 7000/7010 and 7500 families

Description	Specification
Software Requirements	Tivoli's TME/10 NetView for OS/390 Release 1.0 or higher, Sterling Software's SOLVE:Netmaster Release 3.1 or higher, or IBM/Tivoli NetView Release 2.4 for MVS or higher Cisco IOS Release 11.0 or higher (Release 11.1(5) if using data-link switching [DLSw]; Release 11.3 for support of RIF data through a CIP or CPA) VTAM Release 4.2 or higher, to use the RIF data function

Ordering Information

Product and Part Numbers

Part Numbers for the CiscoWorks Blue Internetwork Status Monitor

Part Description	Part Number
CiscoWorks Blue Internetwork Status Monitor for NetView (MVS)	BLU-ISM3.0-NVM
Upgrade to CiscoWorks Blue Internetwork Status Monitor for NetView from NSP 2.0	BLU-ISM3.0-NVM-UPG
Upgrade to CiscoWorks Blue Internetwork Status Monitor for NetView from NSP 1.0	BLU-ISM3.0-NVM-UG
Service and Support	
Software Application Service Numbers)	SRV-CW-BLUIISM-NVM
Software Application Support (SAS	CON-SAS-BLUIISM-NVM
Software Application Plus Upgrades(SA-SU)	CON-SAU-BLUIISM-NVM

