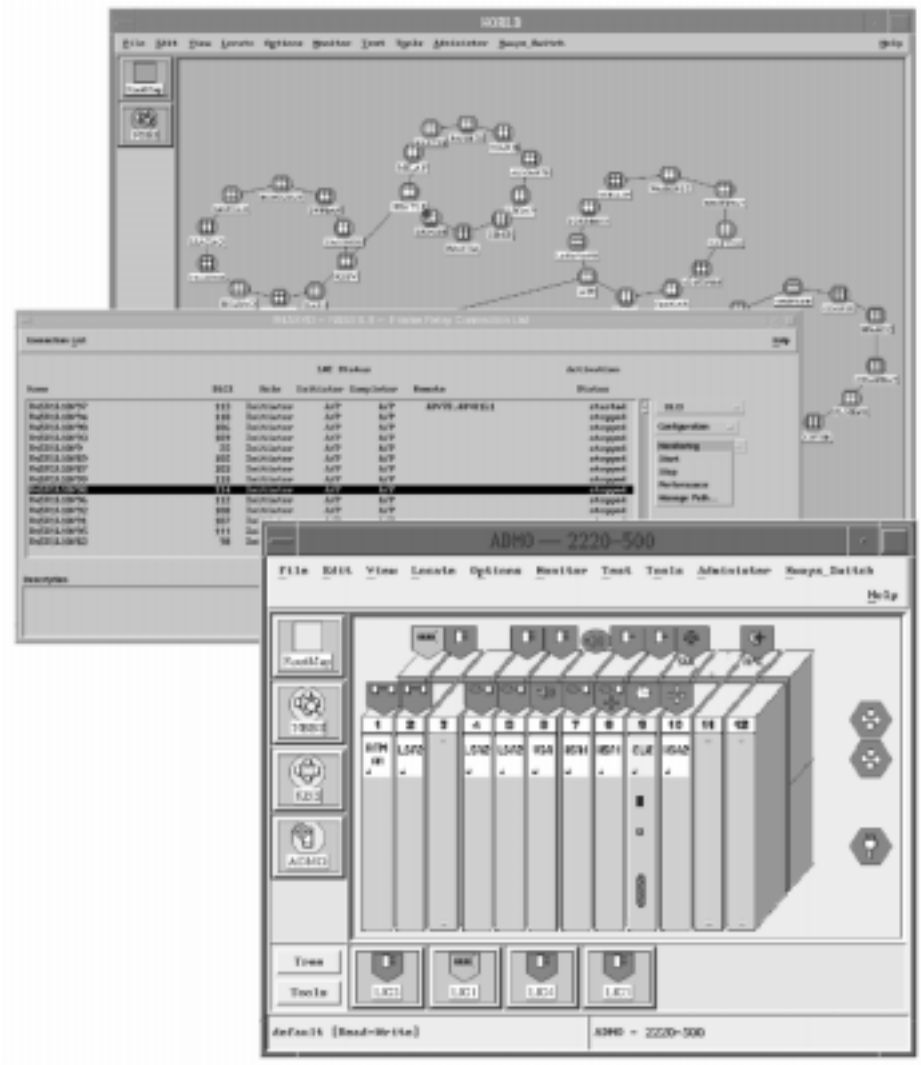
Integrated management for increased effectiveness

IBM Nways 2220 Switch Manager for AIX Version 1

Highlights

- ***Manages IBM 2220 Nways BroadBand Switches centrally and manages ATM, ISDN, Q.SIG, Frame Relay and X.25 resources for the switches***
- ***Reduces network operations and administration costs***
- ***Provides consistency with other Nways managers***
- ***Runs on TME 10 NetView for AIX or TMN NetView Support Facility for AIX (TMN/6000)***
- ***Provides easy to use graphical network management***
- ***Provides comprehensive device management***
- ***Provides online configuration***
- ***Enables you to view your network traffic from a protocol perspective***
- ***Provides security features with operator profiles and audit log***
- ***Year 2000 ready***



Examples of Nways 2220 Switch Manager graphical user interface

Seamless integration into your network management system

IBM Nways 2220 Switch Manager (NSM) for AIX replaces the IBM Nways Enterprise Manager, managing IBM 2220 Nways BroadBand Switches with ATM applications.

Note: Other functions supported by Nways Enterprise Manager are now provided by the LAN component of Nways Manager for AIX, which is available as an upgrade from Nways Enterprise Manager.

NSM runs on TME 10 NetView for AIX or TMN/6000, and it can run concurrently with other management programs for ease of integration into your existing network management environment.

New functions supported by NSM include:

- Support for IBM Nways 2220 Switch Control Program Version 2 Release 2 (5765-C71)
- Configuration import and export functions from NSM with a NetView menu option and command line
- Node status management with acknowledge/unacknowledge and manage/unmanage
- Network discovery feedback
- Alternate 2220 code bank selection to load in the switch
- Event forwarding to another SNMP platform such as HP/OpenView or NetView for AIX through alarm-to-SNMP trap conversion
- Command line support to activate and deactivate or to list all trunks

NSM is available on CD-ROM.

Reduced network operations and administrative costs

Effective network management is a key issue in the implementation of new network technologies. Nways Managers help you save money and increase the effectiveness of your networks at the same time by providing easy-to-use software applications that cost less than a set of separate device managers and allow you to configure, control and maintain resources.

The functionality of the package increases network effectiveness and reduces operating costs because you get one look and feel across the suite of programs. You can reduce training requirements and help with personnel shortages because operators are more productive. The package also shortens the time to find problems and identifies performance problems proactively. Online help and documentation provide easily accessible user assistance. NSM is an efficient and cost-effective solution for managing today's multiprotocol, multi-topology, high-speed networks.

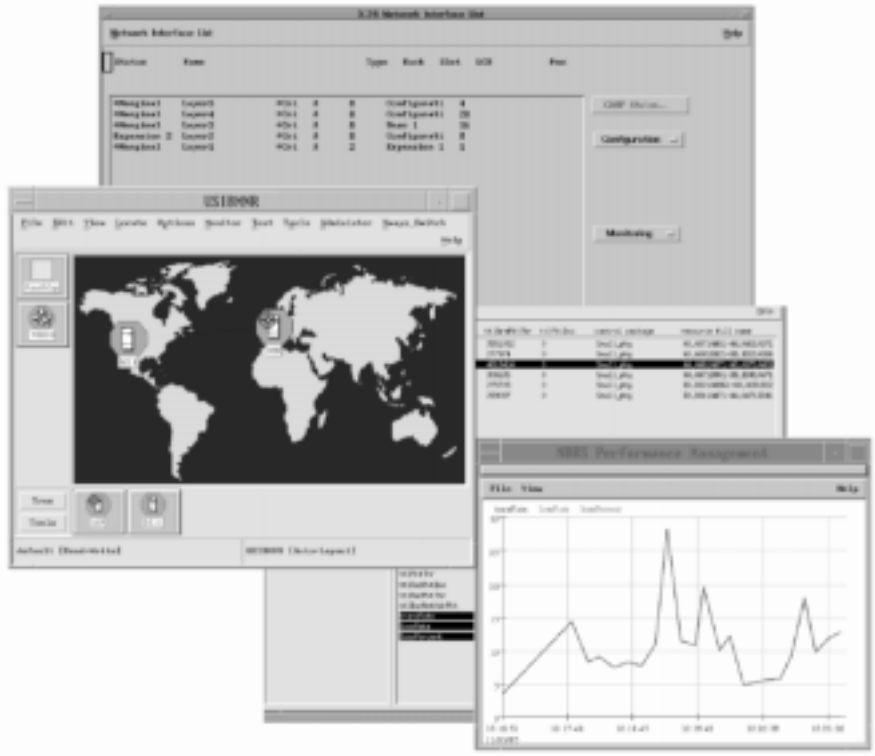
Centralized management for distributed benefits

NSM is consistent with other Nways management applications. There are key features common to the Nways Managers across the workgroup, campus and enterprise networking environments, such as:

- Common installation procedures and help guides
- Consistent look and feel across managed devices
- Ability to install what you need when you need it to manage your network
- Your network displayed with easy-to-follow color maps and submaps

NSM manages the hardware and logical resources (including ATM, voice, Frame Relay and ISDN resources) of the 2220 switches.

IBM provides critical management functions for your expanding enterprise, including management support for the latest ATM.



Managing your worldwide enterprise

2220 switch management made easy

NSM provides state-of-the-art management for as many as two hundred 2220 switches. It provides:

- Current, graphical network topology and display of 2220 switches

  NSM provides total resource management for the 2220 switches, including comprehensive Networking BroadBand Services (NBBS) and ATM management functions.

- A detailed display of resources such as adapters, switches, power supplies, fans and trunks

- Dynamic resource configuration of the Nways switches

  You can dynamically display, create, update and delete any resource in your configuration without going onsite.

- Problem management

  You can use NSM to display alarms and state changes for Nways switches, filter alarms and events, and save events in a file. Upon receipt of an event NSM can trigger automated responses, such as automatic switchover of the active switch card to the backup switch card.

- Performance management

  You can monitor the performance of trunks, ports, connections and physical lines in real time. NSM provides graphs, tables and files that let you analyze the recorded values as well as manage performance for ATM, Frame Relay, ISDN and voice-server resources of the 2220 switch. And you can set performance thresholds to initiate automatic management of resources.

- Accounting management

  You can log traffic information for NBBS, ISDN and ATM connections in an accounting file for billing. You can call an accounting function with line commands to retrieve the accounting file from each 2220 to the network management station. Periodic accounting enables you to get billing information for permanent connections without terminating the connection.

IBM Nways 2220 Switch Manager at a glance

System	1 RS/6000 workstation
Software and operating systems	• AIX V 4.1.5 or 4.2 • TME NetView for AIX V 4.1 or 5 or TMN Support Facility for AIX (TMN/6000) V 2.2 • Internet Connection Server 4.1 • Netscape 3.1 if running on AIX 4.1 (When running AIX 4.2, Netscape is included)
Hardware requirements	• CD-ROM drive • One Ethernet link to be connected to one of the Nways switches *System disk space* • Minimum of 128 MB of memory required • Additional memory (minimum of 64 MB) for each additional operator • At least 2 GB of disk space • Additional disk space (over 1 GB) for keeping an accounting file that must be moved periodically for some billing application switches

- Network monitoring

  NSM enables you to activate, deactivate, lock and unlock resources. You can set up or terminate any connection. You can also display the current path of a connection and ask the 2220 to compute a new one if necessary. With NSM you can reload the 2220 switch with the current or previous configuration or with either one of two different levels of code. And NSM provides Operation, Administration and Maintenance (OAM) support.

- Security management

  With the client/server capability of NSM, the potential number of operators simultaneously performing management increases because multiple operators can manage network resources through the client/server functions. And you can use security files to define access for each category of operators.

Audit log for enhanced management security

A comprehensive audit log records all operations performed by the network operators, as well as the results of each operation. The audit log is an ASCII file and is editable by any editor. For security and management statistics the file can be processed by a shell script.

Year 2000 ready

NSM is capable of correctly processing date data between the 20th and 21st centuries.



For more information

To find out more about the IBM NSM and other high-performance IBM communications and networking products contact your IBM representative or call IBM Direct at • 1 800 IBM-CALL (1 800 426-2255). You can also access IBM's Network Management home page at http://www.networking.ibm.com/netmgt

Copies of this and other related product specification sheets can be obtained from the IBM FAX Information Service by dialing 1 800 IBM-4-FAX (1 800 426-4329) in the U.S. or Canada or by dialing (415) 855-4329 outside the U.S. and Canada and requesting the following document numbers:

6251: *IBM Nways 2220 Switch Manager for AIX*

7265: *IBM Proactive Management Solutions for the Campus and Wide Area Network*

6249: *IBM 2220 Nways BroadBand Switch*

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IBM Corporation
Department TYCA
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