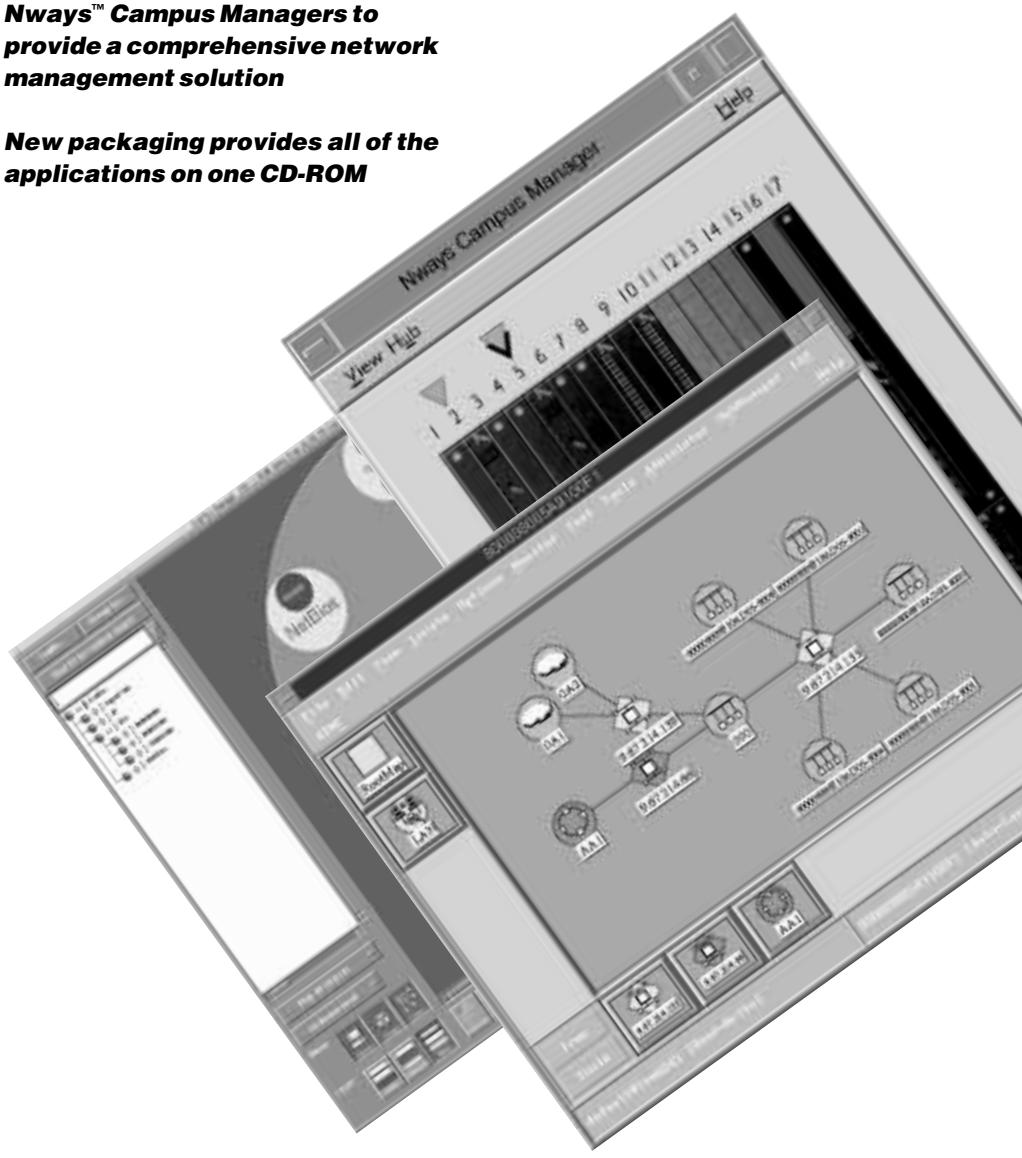
Reliable state-of-the-art Networking Manager for the networking infrastructure

IBM

Nways Campus Managers for AIX

Highlights

- ***Reduces network operation and administration costs***
- ***Easy-to-use graphical network management***
- ***Comprehensive device management through that same easy-to-use graphical user interface***
- ***Support for large networks, including APPN® and Data Link Switching (DLSw)***
- ***Comprehensive management for ATM networks, including ATM Web-based management***
- ***Switched virtual network management, including ATM Forum-compliant emulated LANs (ELANs)***
- ***Remote monitoring of your network's performance through RMON and RMON2 support***
- ***Seamless integration among the Nways™ Campus Managers to provide a comprehensive network management solution***
- ***New packaging provides all of the applications on one CD-ROM***



Take a look at the Nways Campus Manager products for AIX®

Nways Campus Manager LAN for AIX provides an easy-to-use, cost-effective, comprehensive network management solution for customers with IBM networking devices in medium-to-large Ethernet, FDDI and Token-Ring networks, including virtual LANs (VLANs). It also supports APPN and DLSw networks.

Nways Campus Manager ATM for AIX provides easy-to-use, efficient management for ATM networks, including virtual networks formed from ELANs.

Nways Campus Manager Remote Monitor (ReMon), in conjunction with RMON- and RMON2- compliant agents, provides money-saving remote analysis of Token-Ring and Ethernet LANs.

Nways Traffic Monitor for AIX provides monitoring of network performance and can enforce policies regarding business and non-business usage of your network.

Reduces network operation and administration costs

The Nways Managers applications interoperate on a single network management workstation to save you time and money. You get to exploit information sharing and common system interfaces for seamless interaction within the management applications.

You gain system reliability through cooperative management with the TME™ 10™ NetView® mid-level manager (MLM) program, which helps identify network management information from different sources. Identify problems proactively with simple network configuration and change management with graphical device and logical network views, making identification of network elements much easier.

Remote monitoring means that cost savings and staff productivity go up as the number of RMON-managed LAN segments increases. Users are more productive as network operation and administration are reduced because problems are identified before they occur.

Easy-to-use, graphical network management

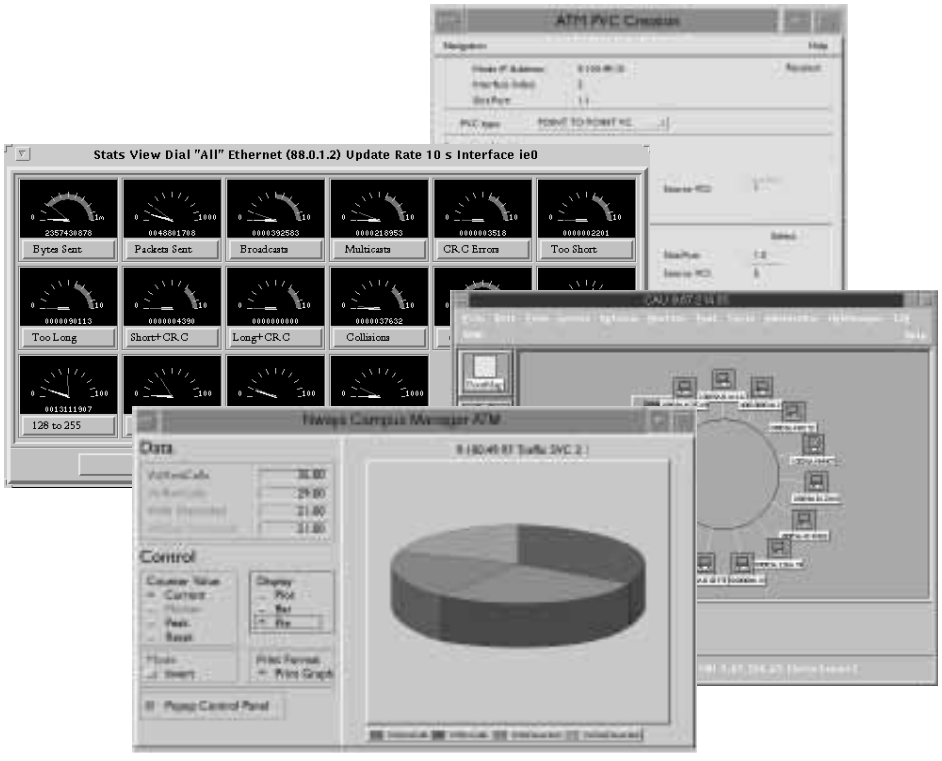
Take remote control of your networks using drag-and-drop graphics that allow you to reassign ports to another switch or hub, set up a VLAN and manage its components remotely, rename networks to customer-defined logical names or track user assignments across hubs without having to go to the wiring closet. With Nways Campus Manager LAN you can manage your Ethernet, Token-Ring or FDDI networks composed of IBM hubs, concentrators, switches, bridges or routers.

The graphical user interface provided with all of the Nways Campus Manager products gives you topology views of your network and realistic views of your network resources, with color-coded status of resources and overall status of each network. The easily recognizable color-coded icons on the network views make navigating the network a snap.

And the auto-discovery capability assists with initial topology and identifies configuration changes. When a network changes the discovery capability identifies the changes and updates your network map. You can allow discovery of particular SNMP agents, can filter discovery based on criteria such as IP address and can set the discovery interval to optimize polling.

You can set performance-thresholding capabilities, collect real-time and historical statistics and display the information your network operator needs to manage your network and networking devices proactively.

Extensive support for problem management includes trap management, polling intervals, threshold notification and the graphical network-monitoring already mentioned. By defining an element as a critical resource, you can have the Nways Campus Manager LAN application perform a specific fault-management task, based on an alert from the resource. This function is especially helpful when monitoring a large network because you can concentrate your fault management on critical resources.



Comprehensive device management through that same easy-to-use graphical user interface

The Nways Campus Manager family of products offers management support for a wide range of IBM LAN and ATM networking hardware, and the same support for non-IBM devices that use ATM forum-compliant MIBs.

You can configure, reset, monitor, set performance-thresholding capabilities for, download microcode to and Telnet to devices in your network. The graphical user interface gives you realistic views of your network devices, with color-coded status of components and overall status of each device. The Nways Campus Manager applications provide a complete set of messages, traps and event notifications for devices in the network.

The following device support is included with the Nways Campus Manager products:

Nways Campus Manager LAN:

- IBM 8210 Nways Multiprotocol Switched Services (MSS) Server
- IBM 8224 Ethernet Stackable Hub
- IBM 8225 Fast Ethernet Stackable Hub
- IBM 8229 LAN Bridge
- IBM 8230 Token-Ring Controlled Access Unit
- IBM 8235 Dial-In Access to LANs (DIALs) Server
- IBM 8237 Ethernet Stackable Hub
- IBM 8238 Nways Token-Ring Stackable Hub
- IBM 8244 FDDI Workgroup Concentrator
- IBM 8250 Multiprotocol Intelligent Hub
- IBM 8260 Nways Multiprotocol Switching Hub
- IBM 8271 Nways Ethernet LAN Switch
- IBM 8272 Nways Token-Ring LAN Switch
- IBM 8281 Nways ATM LAN Bridge
- IBM 2210 Nways Multiprotocol Router
- IBM 6611 Network Processor
- Other equipment manufacturer (OEM) routers, such as those of Cisco, Wellfleet and Proteon

Nways Campus Manager ATM

- IBM 8210 Nways Multiprotocol Switched Services (MSS) Server
- IBM 8281 Nways ATM LAN Bridge
- IBM 8282 Nways ATM Workgroup Concentrator
- IBM 8285 Nways ATM Workgroup Switch
- IBM 8260 Nways Multiprotocol Switching Hub ATM components
- Other ATM devices that implement the ATM MIB or LAN Emulation (LANE) standard MIBs

Nways Campus Manager ReMon supports the following RMON-enabled products:

- IBM 8225 Fast Ethernet Stackable Hub
- IBM 8230 Token-Ring Controlled Access Unit
- IBM 8237 Ethernet Stackable Hub
- IBM 8238 Token-Ring Stackable Hub
- IBM 8250 Multiprotocol Intelligent Hub
- IBM 8260 Nways Multiprotocol Switching Hub
- IBM 8250 Token-Ring Management Module
- IBM 8260 Token-Ring Media Access Daughter Card
- IBM 8260 Ethernet Media Access Daughter Card
- IBM 8270 Nways Token-Ring Switch Universal Feature Card (UFC)
- IBM 8272 Nways Token-Ring LAN Switch UFC
- IBM 8273 Nways Ethernet RouteSwitch
- IBM 8274 Nways LAN RouteSwitch
- Other RMON-compliant probes

Support for large networks, including APPN and DLSw

Included with the Nways Campus Manager LAN is support for APPN and DLSw topologies. The APPN topology feature allows you to view your APPN network end-to-end so you can discover and see participating APPN resources as color-coded icons and view their status. APPN protocol performance and error events (data and graph) are also provided.

The DLSw technology provides transport of SNA, NetBIOS and APPN across an IP network. The DLSw topology feature allows you to view your DLSw network in an interactive user topology display. The DLSw topology view displays connectivity, resources and color-coded status in your DLSw network and refreshes the topology view as new nodes are discovered.

Comprehensive management for ATM networks, including ATM Web-based management

Nways Campus Manager for ATM provides easy-to-use management for ATM networks, including virtual networks formed from ATM Forum-compliant ELANs, and manages ATM devices that use ATM Forum-compliant MIBs.

One of the premiere features of Nways Campus Manager ATM is its ability to fine-tune the auto-discovery capability for ATM. You can allow discovery of particular SNMP agents, such as non-IBM ATM devices, can filter discovery based on criteria such as IP address or device type and can set the discovery interval to optimize polling.

When viewing the topology map you can display an entire ATM network, or you can zoom in on the subnetwork or device of interest. You can choose monitored resources by selecting resource icons using drag-and-drop to place them on the monitor panel.

You can select key performance counters and track their variations over time. This data can be stored and displayed in various graphical forms across a selected time interval.

With the connection-tracking function, you get true ATM end-to-end management capability. This function graphically displays any virtual connections between two endpoints on the ATM network. Connection-tracking shows all the actual hardware resources that support the entire path of the connection, such as adapters, concentrators, switches and bridges. This function launches other management functions on these devices, such as performance-monitoring.

Also included with Nways Campus Manager ATM is support for Web access to ATM topology discovered by TME-10 NetView for AIX, including ATM clusters, peer groups and ATM devices. Each ATM device displayed is represented by a selectable icon and by its IP address.

With the ATM Web-based management support, you can refresh and display the ATM topology, update node agent values, reload the HTML page with the new node values, display a list of ATM modules located in a selected ATM device and list events related to a selected ATM device. The Web-based support also provides access to selected ATM devices using the Telnet protocol.

Switched virtual network management, including ATM Forum-compliant ELANs

You can set up a VLAN remotely using the drag-and-drop feature of the graphical interface to assign components to the VLAN. For networks that contain 8250s, 8260s, 8271s or 8272s, you can assign ports on those devices to VLANs. In an ATM network you can assign ATM devices to ELANs.

Comprehensive support for LANE includes automatic discovery of LAN Emulation Servers (LESs), LAN Emulation Clients (LECs) and proxy clients (in LAN switches). Discovered topologies are dynamically updated to show color-coded device status and devices assigned to VLANs. Templates help automate VLAN configuration by grouping a set of individual actions and executing them with a single command.

Remote monitoring of your network's performance through RMON and RMON2 support

The IBM Nways Campus Manager ReMON is a remote monitoring management application that compliant agents collect, monitor and analyze threshold statistics from Token-Ring and Ethernet LAN segments. It provides full support for the IETF Ethernet and Token-Ring RMON standards, RFC 1757 and RFC 1513. RMON2 allows you to go beyond the previous RMON standard to full seven-layer data collection with Enterprise Communications Analysis Module (ECAM) support, including segment, host and conversations statistics for the major protocols and application types. IBM provides RMON2 functions, using the ECAM. The next release of the ReMON will provide support for the new IETF RMON2 standard.

By viewing the conversations across your network, the real communications patterns and the use of expensive links become apparent. With this information you can tune your network and adjust the location of key resources such as file servers. ECAM also allows network operators to view internetwork traffic for trouble-shooting.

With the ReMON graphical interface you can monitor RMON real-time segment status. ReMON shows threshold categories and their states, which allows for a quick assessment of the threshold status of the segments. The virtual interface means you can create a set of filters that define a type of information you want to capture from a real interface. You then manage data from a virtual interface just as you would on any other interface, real or virtual.

The Nways Traffic monitor application works in conjunction with the Nways Campus Manager applications to allow you to take network monitoring to the next level—the application level. Utilizing the information provided by RMON and RMON2 (ECAM), Nways Traffic Monitor will provide the ability to graphically display end-to-end traffic flows on your network and to manage your network based on its logical characteristics.

With the Nways Traffic Monitor application you have the ability to perform trend analysis and network troubleshooting. And you can tune your network based on real application usage patterns by focusing on the traffic for a particular workgroup, VLAN, subnet or organization.

The devices supported by the Nways Traffic Monitor for AIX include:

- IBM 8250 Ethernet RMON Probe
- IBM 8260 High-End Token-Ring Media Access Daughter Card
- IBM 8260 High-End Ethernet Media Access Daughter Card
- Other RMON2 probes that implement the ECAM

Nways Traffic Monitor for AIX is a native AIX application and does not prerequisite TME-10 Netview for AIX.

Seamless integration among the Nways Campus Managers to provide a comprehensive network management solution

The various components of the Nways Campus Manager for AIX family—Nways Campus Manager LAN, Nways Campus Manager ATM, Nways Campus Manager Remote Monitor and Nways Traffic Monitor—work together seamlessly, helping you configure and manage your network and detect and resolve potential network problems before they occur.

New packaging provides all of the applications on one CD-ROM

New packaging for the Nways Campus Managers for AIX means a simpler ordering system. The new ordering system is based on license keys to access and install the four applications from a single CD-ROM, packaged under the name Nways Managers for AIX. One CD-ROM includes all of the Nways Campus Manager applications—Nways Campus Manager LAN, Nways Campus Manager ATM, Nways Campus Manager Remote Monitor and Nways Traffic Monitor.

IBM Nways Managers are an excellent way to manage medium-to-large LAN-based campuses, including high-speed backbones built with ATM and LAN switches.

Ordering Information

Access to Nways applications requires a decryption key for each of the applications. The process is:

- Determine the desired Nways applications using the ordering information in this section of the announcement.
- Contact IBM Direct, an IBM authorized Workstation software remarketer, or a local IBM office to place an order for the applications. An authorized remarketer or the local IBM office will provide key delivery as a part of the ordering process.
- Decryption key for the ordered applications will be provided by FAX.
- Input the key on the appropriate installation panel.

Example: If you need the Nways Campus Manager LAN and the Nways Campus Manager ATM, you will order the part number 4304028 to get the CD-ROM package, the part number 4304040 and the part number 4304041 to get 2 access keys to "unlock" your Nways applications. If this is your initial ordering, you will get in a single shipment the Nways Manager CD-ROM and your two keys corresponding to your order.

Nways Campus Manager ordering information

Program name	**Program package part number or PID number**
Nways Manager AIX, CD-ROM	4304028
Nways Campus Manager LAN, key only	4304040
Nways Campus Manager ATM, key only	4304041
Nways Campus Manager ReMON, key only	4304042
Nways Campus Manager Traffic, key only	4304043

Nways Campus Managers for AIX at a glance

Hardware requirements (management station)	• Any station supporting NetView for AIX V 4.1 (5697-NVW), available as TME 10 NetView • 256-color (8-bit planes) display device; device must support 8-bit planes or more to use topology maps - An IBM-compatible mouse - Minimum 96-MB memory - Minimum 50-MHz processor speed, recommended - At most, 375-MB free disk space, if all components are installed - Free disk space as follows: • IBM Nways Campus Manager LAN: minimum 226 MB* • IBM Nways Campus Manager ATM: minimum 166 MB • IBM Nways Campus Manager ReMON: minimum 40 MB • IBM Nways Traffic Monitor: minimum 35 MB - A physical connection running TCP/IP between the network and the management station - Swap space equal to 3 times the amount of RAM - One of the following drives to install software: • CD-ROM drive • 4-mm tape drive for any potential PTFs
Software requirements	• AIX V 4.1.5 (5765-393 or 5765-C34) • AIX V 4.2 (5765-655 or 5765-C34) • NetView for AIX V 4.1 (5697-NVW), available as TME 10 NetView • TME 10 Distributed Monitoring feature (5697-EMN) V 2.3.1 if more than one instance of the MLM product is needed • PTF U444149 for running the PSM components • IBM Internet Connection Server V 4.1 for AIX (5765-638) to run the ATM Web-based Manager
Note*	If you install both Nways Campus Manager for LAN and Nways Campus Manager ATM: minimum 300 MB

For more information
To find out more about the IBM Nways Campus Managers 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 the IBM Networking Home Page at http://www.networking.ibm.com.

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.



© International Business Machines Corporation 1997

IBM Corporation
Department TYCA
PO Box 12195
RTP NC 27709

Printed in the United States of America
5-97
All Rights Reserved

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates.

Copying or downloading the images contained in this document is expressly prohibited without the written consent of IBM.

® AIX, APPN, IBM and NetView are registered trademarks of International Business Machines Corporation.

™ Nways is a trademark of International Business Machines Corporation.

® Windows is a registered trademark of Microsoft Corporation.

™ TME and TME 10 are trademarks of Tivoli Systems Inc., an IBM company.

All other company names or products are trademarks or registered trademarks of their respective companies.



Printed on recycled paper



G224-4531-00