

# SONY®

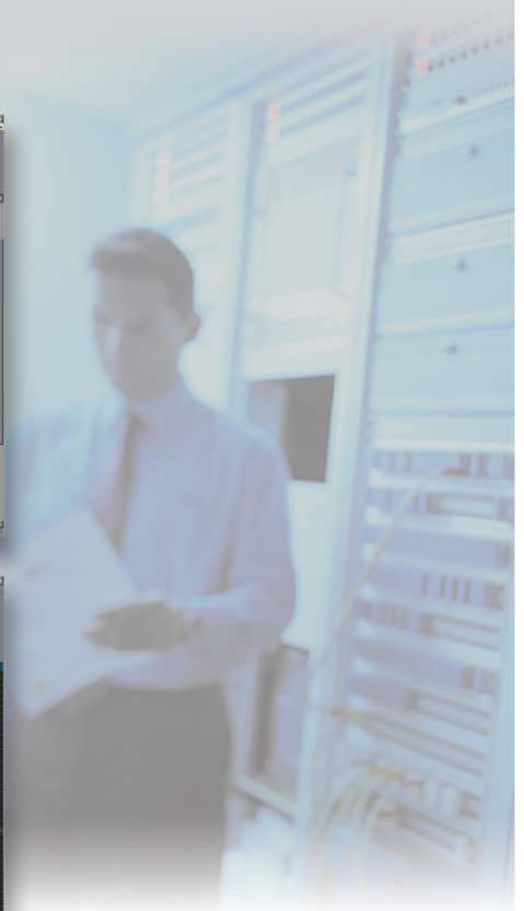
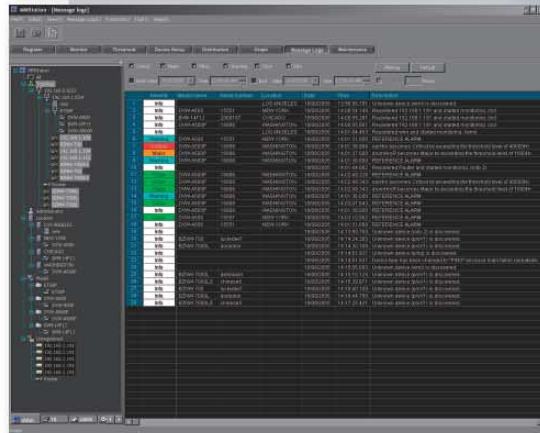
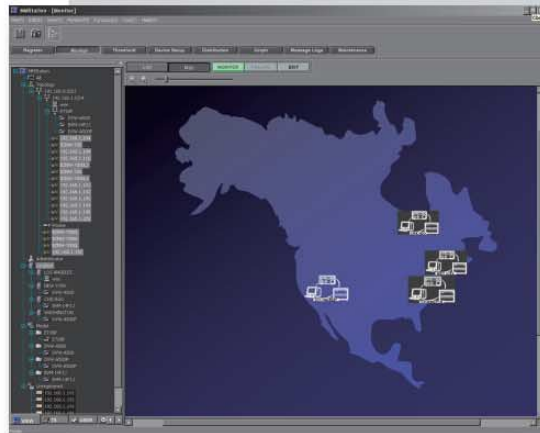
Maintenance Management Software

## MMStation™

BZNW-7000 Series

## MMStation *petit*

BZNW-700



## MMStation

**ISR** Interactive  
Status  
Reporting

## *Responsive and Proactive Service Operations*

*As the video industry evolves toward the broadband digital era, there is a high demand for responsive network-based service operations to maintain equipment at optimal performance levels. Building on Sony's widely proven professional A/V and IT technology, Sony has taken another step forward to optimize total service performance with newly developed maintenance management application software products, the MMStation (Maintenance Management Station) and MMStation petit.*

*The MMStation application enables facility engineers to monitor the status and error/warning information of many products over a network from multiple locations, while the MMStation petit application allows video engineers in local offices or on location to perform standalone monitoring of such information for up to ten devices.*

*The MMStation application provides a variety of automatic notification capabilities for support staff and technicians to detect potential problems. When a malfunction occurs, specific programs are activated to display an alert message on the PC screen, send an e-mail to a PC or PDA, or call a pager for immediate action – no matter where the equipment and the support staff are located.*

*The MMStation petit application provides a convenient function that allows video engineers in local offices to download device setup data from the MMStation located in the central office via a network. This makes it possible to easily reset local equipment such as camcorders and VTRs with house reference settings, offering more efficient maintenance. These innovative applications allow you to optimize the performance and prolong the life of your equipment, while minimizing unscheduled downtime.*

*The BZNW-7000 Series MMStation and BZNW-700 MMStation petit application software support all professional A/V and IT equipment that is compliant with SNMP (Simple Network Management Protocol), as well as Microsoft® Windows®-based PCs from Sony and other manufacturers. In addition, the MMStation and MMStation petit also support Sony professional A/V equipment that is compliant with ISR™ (Interactive Status Reporting).*



# FEATURES

## MMStation (BZNW-7000S/7000SS/7000M/7000MS/7000L/7000LS)

Installing the MMStation application software on a PC enables professional AV equipment and network devices that are compliant with SNMP or ISR to be monitored and managed over a standard TCP/IP network. They include VTRs, disc recorders, switchers, AV routers, nonlinear editing systems, AV server systems, network switches, network routers, network storage devices, and fiber-channel switches. Microsoft Windows-based PCs\* can also be monitored.

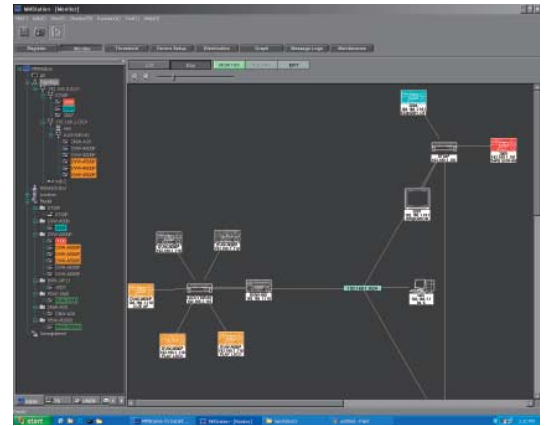
\*Windows 2000/2000 Pro/Server 2003/XP must be installed on the PC.

### Centralized Maintenance Management

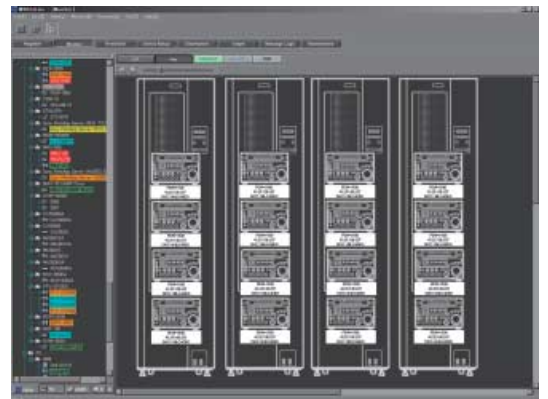
The MMStation (BZNW-7000 Series) application supports centralized maintenance management of up to 20 (BZNW-7000S/7000SS), up to 80 (BZNW-7000M/7000MS), or up to 320 (BZNW-7000L/7000LS) professional AV and IT devices. You are freed from walking around your facility to collect maintenance-service information from each device in order to conduct first-line failure analysis. When the application is running, information such as operation status, hours meter, channel condition, error/warning messages, or software information can be monitored on a single terminal running the MMStation via an intuitive GUI, increasing efficiency in your device-management operations.

### Optimum Maintenance Management

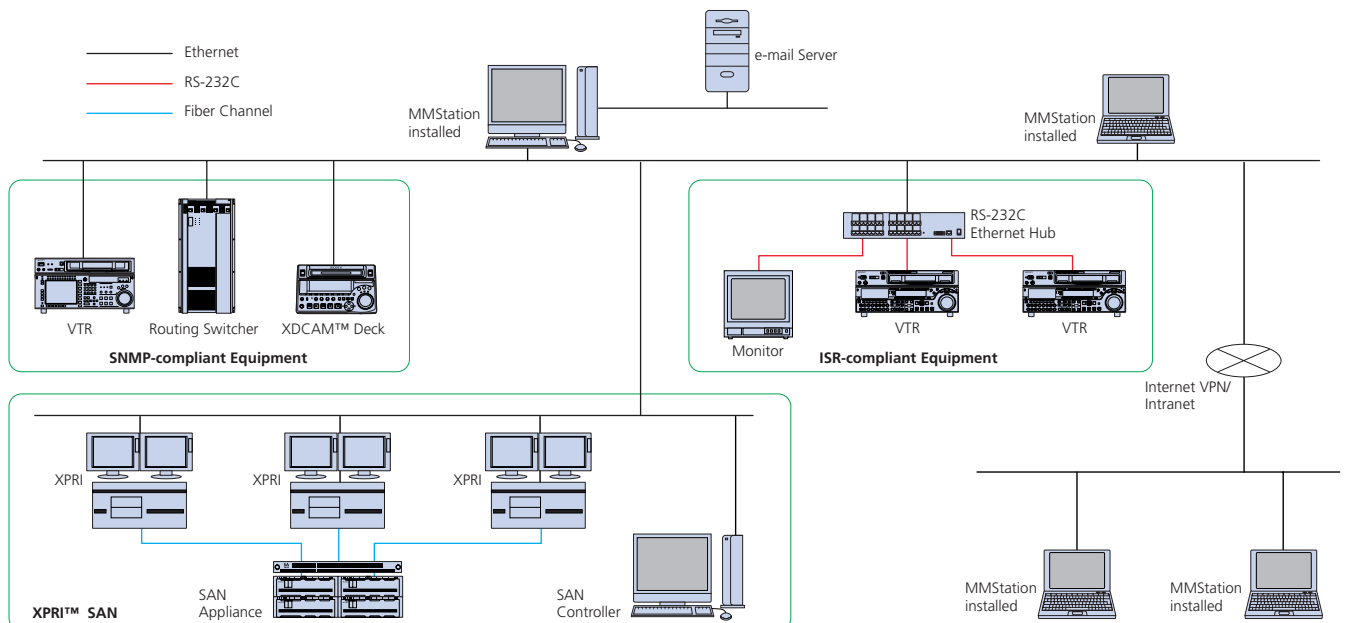
By monitoring device-status information, you can take the optimum maintenance management actions. For example, by monitoring operation hours, you can estimate the most appropriate maintenance schedule for consumable parts such as head drums and fans.



The MMStation can automatically discover devices connected to a network, and can display the devices on this window in a logical view.



The MMStation can display monitored devices installed in a rack with easy-to-view illustrations (XDCAM decks installed in racks, in this case).



### Preventive Action Management

When monitoring PCs, resource management such as CPU load and memory usage for application software currently running on the PC can be performed on a process-by-process basis. The MMStation also allows you to set thresholds for these and to be notified when the thresholds have been exceeded, making it possible to take preventive actions such as scheduled reboots in order to avoid system halts.

In case a critical process fails, the MMStation can display on-screen messages on its terminal and run your own maintenance programs (such as a program that automatically lights a caution lamp installed in a facility).

### Convenient Automatic Notification Function

When a malfunction occurs, a series of specified alarms can be automatically generated to contact your technicians for immediate maintenance service:

- An error/warning e-mail message is sent to designated addresses
- A pager is called
- An alert message is displayed on a client PC screen

### Easy Device Setup

MMStation facilitates centralized device setup operations. Settings can be retrieved and/or restored from most Sony digital VTR and XDCAM products. You can also compare the current setup versus your house reference settings in order to prevent wrong settings from being selected.

Furthermore, you can set up multiple devices with the same settings simultaneously, which is extremely convenient for the following situations:

- When you have to replace faulty devices with new units and want to use the same settings
- When you want to reset devices with their default settings, or configure devices for optimum performance by changing appropriate settings
- When you want to implement the same settings to multiple devices at the same time

### Scalable Maintenance Management System

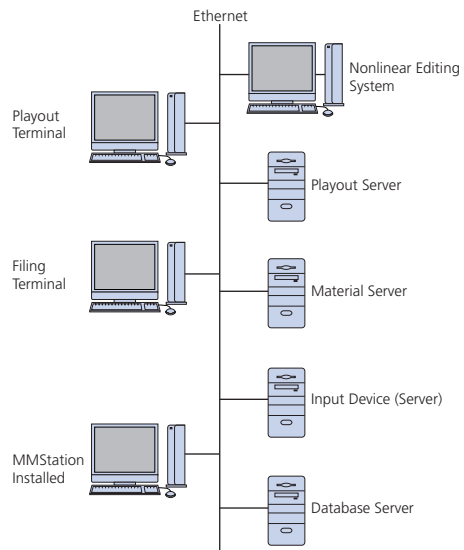
Since the MMStation can refer to device information databases of other MMStations transparently, you can build a scalable maintenance management system comprising multiple databases. Furthermore, if a terminal PC cannot be connected to a network in full time, you can send the device information database to another terminal PC by the export function.

### Software Distribution Management

The MMStation allows users to install application software to a device or upgrade pre-installed application software in a device from a central or remote location. You can also install or upgrade software for multiple devices at the same time.

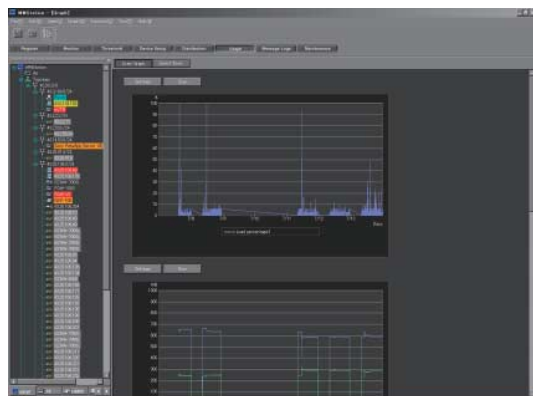
This function is extremely convenient when you want to efficiently maintain server systems such as the Sony Sonaps™ network production system that includes multiple AV servers and control PCs connected online.

### Example of the Sonaps Network Production System



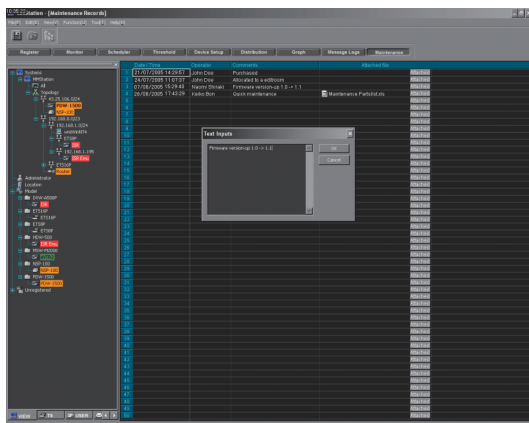
### Trend-graph Creation

The MMStation can display trend graphs that show the transition of data such as CPU load and memory usage of each device monitored by the MMStation.



## Maintenance History Management

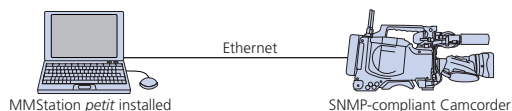
The MMStation provides a Management Histories window that allows you to keep track of maintenance activities. Here you can input comments on maintenance service, such as the technician's name and repairing reports, and save them with the relevant date/time and device information such as model name and serial number. Material such as repairing data can also be attached to this maintenance history information. This function is very useful when you are inspecting equipment and want to know its past repairing record.



## MMStation *petit* (BZBW-700)

By installing the MMStation *petit* (BZBW-700) application software in a laptop PC and connecting the PC to professional A/V and IT equipment that is compliant with SNMP or ISR, standalone monitoring and maintenance can be achieved. Microsoft Windows-based PCs\* can also be monitored. A single device can be monitored at a time and up to 10 devices can be managed in the device information database of the MMStation *petit* application.

\*Windows 2000/2000 Pro/Server 2003 /XP must be installed on the PC.



## Easy Maintenance in Local Offices or on Location

You can easily pre-check device settings of portable A/V devices such as camcorders and mobile decks in the local office or on location, preventing potential problems that may happen during shooting.

## Easy Inspection of the Device

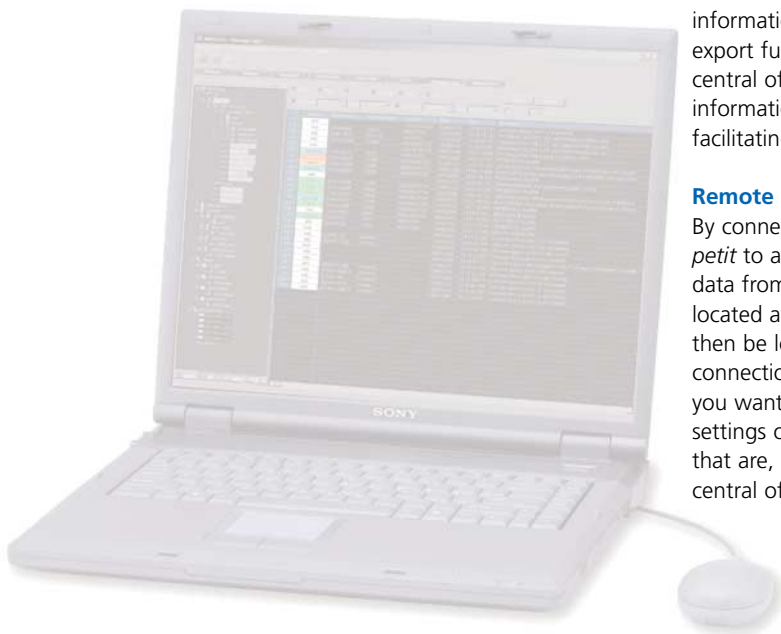
The MMStation *petit* is also extremely useful when you want to inspect equipment that is not connected to a LAN or WAN. You can easily obtain the necessary maintenance information by connecting each device directly to the laptop PC, one at a time.

## Remote Monitoring by the MMStation

By connecting a laptop PC to a network, the device information database managed by the MMStation *petit* can be transparently referred to by the MMStation. If a laptop PC cannot be connected to the network in full time, you can send the device information database to the MMStation using the export function. This allows facility engineers in the central office to remotely collect device setting information of A/V equipment in the local office, facilitating centralized device setup management.

## Remote Device Setup by the MMStation

By connecting a laptop PC running the MMStation *petit* to a network, you can download device setup data from a PC running the MMStation application located at a remote location. This setting data can then be loaded to desired compatible devices via connection to the laptop PC. This is very useful when you want to reset devices with house-reference settings or configure devices with desired settings that are, for example, given by video engineers in the central office.



## SYSTEM REQUIREMENTS

MMStation	
<b>Data Manager (Server)</b>	
Machine	IBM® PC/AT compatible
OS	Windows 2000 Pro SP4, Windows 2003 Server, Windows XP Pro SP2
OS language	English or Japanese
CPU	Pentium® IV 2.0 GHz or higher recommended
Memory	512 MB or more (1 GB or more recommended)
HDD	500 MB for program, 30 MB per month for monitoring devices
Network (Ethernet)	10BASE-T/100BASE-TX/1000BASE-T, IEEE802.11b
Monitor	1024 x 768 resolution, 16-bit color or higher (1280 x 1024 resolution, 32-bit color recommended)
Anti Virus Software	Trend Micro® Virus Buster Corporate Edition (recommended) or Virus Buster 2005 (install an antivirus function only)
Environment	Java™ 2 Standard Edition (J2SDK) 1.4.2_05 (all languages) Tomcat: V5.0.28 Axis: V1.10, Xalan: V2.5.2, Xerces: V2.6.0 MSXML: 4.0 SP2
<b>Main Console (Client PC)</b>	
CPU	Pentium III 500 MHz or higher recommended
Memory	512 MB or more (1 GB or more recommended)
HDD	100 MB or more of free disk space
Network (Ethernet)	10BASE-T/100BASE-TX/1000BASE-T, IEEE802.11b
Monitor	1024 x 768 resolution, 16-bit color or higher (1280 x 1024 resolution, 32-bit color recommended)
Browser	Microsoft Internet Explorer 6.0 SP1, Flash® Player 7
Anti Virus Software	Trend Micro Virus Buster Corporate Edition (recommended) or Virus Buster 2005 (install an antivirus function only)
<b>MMStation petit</b>	
OS	Windows 2000 Pro SP4, Windows XP Pro SP2
OS language	English or Japanese
CPU	Pentium M 1.6 GHz or higher
Memory	512 MB or more
HDD	500 MB or more of free disk space
Monitor	1024 x 768 resolution, 16-bit color or higher
Environment	Java 2 Standard Edition (J2SDK) 1.4.2_05 (all languages) Tomcat: V5.0.28 Axis: V1.10, Xalan: V2.5.2, Xerces: V2.6.0 MSXML: 4.0 SP2
Browser	Microsoft Internet Explorer 6.0 SP1, Flash Player 7
Anti Virus Software	Trend Micro Virus Buster Corporate Edition (recommended) or Virus Buster 2005 (install an antivirus function only)

## SPECIFICATIONS

MMStation	
Protocol	ISR Protocol, SNMPv1, SNMPv2 HTTP, FTP, WMI, ICMP
Number of nodes	Up to 20 (BZMW-7000S/7000SS), up to 80 (BZMW-7000M/7000MS) Up to 320 (BZMW-7000L/7000LS)
Number of group views	Up to 15 (Default setup:3, User setup:12)
Polling interval	10 seconds at rated polling (Best efforts)
Discovery interval	10 seconds at rated polling (Best efforts)
Disconnection check interval	10 seconds at rated polling (Best efforts)
Number of nodes at rated polling	Up to 80
Number of nodes for simultaneous setup	Up to 80
Number of nodes for simultaneous software distribution	Same as the number of monitoring nodes
Number of simultaneous access	Up to 5 client PCs
Number of distributed installations (BZMW-7000L/7000LS only)	Up to 4 PCs
<b>MMStation petit</b>	
Protocol	ISR Protocol, SNMPv1, SNMPv2 HTTP, FTP, WMI, ICMP
Number of nodes	1
Number of nodes for registration	Up to 10 units
Polling interval	10 seconds at rated polling (Best efforts)
Disconnection check interval	10 seconds at rated polling (Best efforts)
Number of nodes for simultaneous setup	1

### Distributed by

©2005 Sony Corporation. All rights reserved.  
 Reproduction in whole or in part without written permission is prohibited.  
 Features and specifications are subject to change without notice.  
 All non-metric weights and measurements are approximate.  
 Sony, MMStation, ISR, XDCAM, XPRI and Sonaps are trademarks of Sony Corporation.  
 All other trademarks are the property of respective owners.