IBM Corporation

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Nways RouteSwitch Network Manager Software Release Notes Version 2.1 for Windows and for SunOS, Solaris, HPUX, and AIX

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Revision History

Release	Revision	Date	Description of Changes
2.1	A	12/12/96	Initial Release for Microsoft Windows and Unix operating system.

1. Introduction

These Release Notes cover the basic feature set supported for IBM Nways RouteSwitch Network Manager Version 2.1 for Windows and UNIX running with IBM Nways RouteSwitch Version 2.1.3. They include known limitations, bugs and known work-arounds. Please read the applicable sections in their entirety as they contain important operational aspects that may impact your network.
See *IBM Nways RouteSwitch Network Manager Software User's Guide*, GC30-3871 and *IBM Nways RouteSwitch User's Guide*, GA27-4166 for further references to User's Guides..

1.1 Windows Platform

IBM Nways RouteSwitch Network Manager 2.1 for **Windows** runs on the following platforms:

- Microsoft Windows (V3.1 and later, Windows 95, and NT) standalone mode
- Microsoft Windows (V3.1 and later, Windows 95, and NT) with HP OpenView Version 7.2, C.02.14

1.2 UNIX Platforms

IBM Nways RouteSwitch Network Manager 2.1 for **UNIX** runs on the following platforms:

- SunOS 4.1 workstation
- Solaris 2.4 or later workstation
- HP-UX 9.x or greater workstation
- RS6000 running workstation AIX 3.2.5 or later

1.3 References to Windows and UNIX Sections

To easily distinguish what is supported for the Windows and UNIX operating systems, references to each operating system have been separated in the remainder of this document..

- See *Windows Platform for IBM Nway RouteSwitch Network Manager on page 5* for Windows operating system information..
- See *UNIX Platform for IBM Nway RouteSwitch Network Manager on* page 15 for UNIX operating system information..

2. Technical Support Contacts

IBM Nways RouteSwitch Technical Support can be reached at **1-800-IBM-SERVE (426-7378).**

3. Feature Set Supported

IBM Nways RouteSwitch Network Manager for Windows Version 2.1 supports the features of IBM Nways RouteSwitch Version 2.1.3 as listed in the User's Guide.

3.1 Unsupported IBM Nways RouteSwitch Features

IBM Nways RouteSwitch Network Manager Version 2.1 for Windows and UNIX do not support the following features of IBM Nways RouteSwitch 2.1.3:

- RouteTracker Virtual LANs. Use the IBM Nways RouteSwitch RouteTracker GUI for this function.
- Token Ring Fiber modes (PR 1436)

4. Windows Platform for IBM Nway RouteSwitch Network Manager

4.1 General Instructions and Notes

4.1.1 System Requirements for Microsoft Windows

The minimum system requirements to operate this product are listed in the User's Guide.

4.1.2 Installation

1. The basic instructions to install this product are listed in the User's Guide.
2. The installation instructions in the Setup program indicate that Network Manager may be installed either for HP OpenView or standalone. It is only necessary to install once, either HP OpenView OR standalone. If the HP OpenView version is used, IBM Nways RouteSwitch Network Manager may be launched from Program Manager as a standalone but the Alarm and Graph icons are not functional in this case. The Setup program allows an HP OpenView installation without HP OpenView installed. This creates a stand-alone version. HP OpenView must be installed first, if used. (PR 346)
3. The Setup program for the HP OpenView installation requests the operator to enter path names for the third-party ping and telnet programs. These path names are not checked for validity during the installation. If the ping or telnet icons do not function properly from IBM Nways RouteSwitch Network Manager , it is possible to edit the executable path names in the *nmsconf.ini* file contained in the run directory.

4.1.3 Third-Party NMS Compatibility

1. When installing under HP OpenView the ...*ovfiles**devices* file (generally under the *c:**ov* HP OpenView directory) must have the following lines added (anywhere in the file) in order for HP OpenView to recognize IBM Nways RouteSwitch Network Manager and allow traps for those enterprise devices:

   “1 Slot Switch “ 1.3.6.1.4.1.800.3.1.1.3 0x6327 Router 0
   “5 Slot Switch “ 1.3.6.1.4.1.800.3.1.1.1 0x6328 Router 0
   “9 Slot Switch “ 1.3.6.1.4.1.800.3.1.1.2 0x6329 Router 0
2. To make HP OpenView for Windows Version 7.2, C.02.14 compatible with Network Manager , it is necessary to copy c:\ov*ovsnmp.hp* to c:\ov*ovsnmp.dll* before launching HPOV. You may wish to make a back-up copy of *ovsnmp.dll* before deleting it.
3. To load MIB files for Browsing, it is necessary to observe certain dependencies: Load RFC1213 first, then IBM Nways RouteSwitch .mib and the other IBM Nways RouteSwitch MIBs.
4. The only IBM Nways RouteSwitch Trap MIB that can be browsed is IBM Nways RouteSwitch - trapc.mib. There are several other IBM Nways RouteSwitch Trap MIBs that are for internal use only. They describe the individual traps applicable to each chassis type. To configure an NMS application to accept IBM Nways RouteSwitch Traps, follow the instructions in the User's Guide and in the NMS documentation.
5. If the operator assigns an inaccurate chassis type from HP OpenView on a manual device add, IBM Nways RouteSwitch Network Manager will display the chassis type defined by the operator instead of the correct type.
6. If Network Manager has been launched from another Network Management application, it uses the Polling Rate passed from the other application. If that Polling Rate is set higher than the maximum allowed by Network Manager (360 seconds), Network Manager uses 360 seconds. (PR 1673)
7. There will occasionally be a General Protection Fault when exiting from HP OpenView or Program Manager with IBM Nways RouteSwitch Network Manager open. It is best to close each application manually in reverse order. This is also true for closing dialog boxes within IBM Nways RouteSwitch Network Manager . (PR 372, 663)

4.1.4 General Notes

1. These Release Notes cover IBM Nways RouteSwitch Network Manager (OVSM) Version 2.1 FCS for Windows managing IBM Nways RouteSwitch Version 2.1.3 and IBM Nways RouteSwitch 8273 Port Version 1.0.2.
2. IBM Nways RouteSwitch Network Manager for Windows Version 2.1 must be used with IBM Nways RouteSwitch Version 2.1.3 for full compatibility.
3. The term IBM Nways RouteSwitch 1.2 (or earlier), RouteSwitch Network Manager , and Network Manager all refer to this product. (PR 2372)
4. The term VLAN, as used in Network Manager , actually refers to IBM Nways RouteSwitch Groups. RouteTracker VLAN access is accomplished through the IBM Nways RouteSwitch RouteTracker GUI or the UI.
5. The Microsoft Windows conventions for default button focus is not always used, i.e., focus on Close until data field edits when it should then change to Apply. Always verify the button focus before pressing the Enter key. Use the mouse click to ensure the desired action. (PR 579)
6. Update buttons do not appear in all dialogs and do not always perform consistently throughout the application. Data field Updates do not always behave consistently throughout the application after an Apply. (PR 640, 779)
7. In general, when a data dialog box is in the process of receiving data back from the IBM Nways RouteSwitch , it is possible in some cases to proceed with dialog activity such as entering data in an edit field or selecting a Modify button. However, the edit fields are cleared after the completion of the Gets, and any resulting Modify dialog boxes may be invalid. It is best to let all the data Gets complete before accessing any subsequent dialog functions. Also, the status messages do not always accurately reflect the status of the Gets. (PR 161, 327, 334, 368, 369, 376, 500)
8. Messages are sometimes returned from the SNMP agent, such as “Reply Error: No Such Name”, which will appear on the status message line. This can mean that there was a problem with the Get or Set, or it could simply mean that it has finished processing the data or that there was no data. (PR 2195 - F) Alternatively, there are occasions when a Get or Set is not successful and no “Reply Error” is returned to indicate an unsuccessful attempt. (PR 2446)
9. Set Poll Rate appears to allow a character field edit of the poll rate, but it must be performed using the slide bar. (PR 728)
10. It is possible to add a Group with the same number as an existing Group. The existing one is overwritten.(PR 525)

4.1.5 Community Names

1. The Community names in the Set Device Parameters dialog are not saved if changed because these are used as a password security device. Changes must be re-entered upon each launch of the application. (PR 557)
2. If the Get or Set Community names do not match the settings on the IBM Nways RouteSwitch , no error message will appear on a Get or Set attempt. It will time-out. (PR 724)
3. If the Get and Set Community Names are different in the IBM Nways RouteSwitch , the Set Name overrides the Get Name for Get access. I.E., a Get can be performed even if the Get Community Name does not match, if the Set Community Names match. (PR 2397)

4.2 IBM Nways RouteSwitch Network Manager Version 2.0 Problem Resolution for Windows

- When the Device Name is changed from Control - Set Device Parameters, this change does not appear in the title bars of currently open windows. (PR 332)
- All LED displays may not be implemented, or may not be correct. An effort has been made in this release to show at least one LED for each active port, however this is not yet the case with some

newer hardware modules. (NOTE: LED displays are representative of activity at the Polling cycle and do not necessarily represent complete actual activity.) (PR 588, 1541, 1769, 2281, 2375)

- Token Ring Administration New Description entries are removed if a VLAN is subsequently selected. (PR 738)
- There are some existing compatibility problems running HP OpenView with Network Manager : (a) The Network Manager application may not appear on the first Launch attempt from HPOV, it is necessary to retry. (b) The HPOV Alarm Log may not function when Network Manager has been launched. (c) Module displays may not appear on a Network Manager Device Open. (PR 1150, 1151, 1564, 2624)
- The HP OpenView Graph icon in the toolbar brings up a statistics-selection dialog. This dialog is not currently integrated with HP OpenView Graphing, but will bring up the HP OpenView MIB Browser for manual selection of statistics graphing. (PR 1369)
- Validity checking has not been fully implemented on all data entry fields. (PR 2105, 2106)
- Source Routing Type is not shown on the Source Routing Administration Table. (PR 1878)
- The currently selected Group does not always appear in the VLAN Toolbar in some instances (i.e., after a Delete VLAN or Select VLAN from the VLAN Admin Table). (PR 2355)
- If a New Description is entered in the Modify VLAN dialog, and then the IP/IPX Router child dialog is opened, the New Description disappears from the Modify VLAN dialog after the IP/IPX child dialog is closed. (PR 2401)
- Switch Translations terminology “Prop” corresponds to UI usage “802.3”; “LLC” corresponds to “802.2”. (PR 2741)
- Switch Translations Modify dialog field selections may display types that are not valid for certain port types. If applied, they will be ignored by the Switch. For example, LLC 802.2 and Prop 802.3 are shown as available for IP translation types, but they will not be applied. (PR 2743)
- It is not possible to edit an ATM Address from Modify ATM Address. The other data fields in the record may be changed in this dialog. Any change to the Address itself must be accomplished by Creating a new Address. (PR 754)
- The Modify ATM PTOP Service dialog doesn’t Update the Admin State when it has been changed from somewhere else. It also doesn’t recognize if the Service has been deleted from somewhere else. (PR 527)
- Modify LEC Configuration does not necessarily show the appropriate Server Address. (PR 2803)

4.3 IBM Nways RouteSwitch Network Manager 2.1 for MS Windows Known Problems

The problems listed here and in Appendices A and B cover all problems known at the time of the release of this document that apply specifically to IBM Nways RouteSwitch Network Manager Version 2.1 for Microsoft Windows running with IBM Nways RouteSwitch Version 2.1.3. ("F" means that a fix for this problem has been incorporated into this release but has not yet been verified.)

4.3.1 General

Problem Report 1871
If a different module type is inserted into an IBM Nways RouteSwitch , or a module is removed, Network Manager will not necessarily update the display to the new configuration.

Work-around: Close the Device window and reopen as a New Device.

Problem Report 558
The on-line Help file is not implemented.

Work-around: See the User's Guide for reference.

Problem Report 748
Some dialogs including Port Administration, VLAN Table, Delete VLAN and Chassis Module Table may time-out before Getting all the data. Possible reasons for this may be: this may happen more often on a 9-slot; if the configuration file has expanded in size; if the Switch is in File Compaction mode; if there is heavy traffic on the network; if the Polling Rate is set low on any Network Manager or SNMP application; if the hardware is marginally functional. In these instances, it is necessary to retry, Update, or exit the dialog and re-enter.

Work-around: Retry the operation. Decrease polling rate from any SNMP applications. Replace hardware if the problem continues.

Problem Report 1327
Port Administration doesn't allow setting Pass-through.

Work-around: Use the UI *modvp*.

Problem Report 1334
Port Administration Admin State = Delete is ignored.

Work-around: None.

Problem Report 1939, 2034, 2112
The Port Administration Switch Timer value will only be set to the value range accepted by the Switch - 1-60,000, even though Network Manager will allow values up to 65,535.

Work-around: Set the Switch Timer value between 1 and 60,000.

Problem Report 2650
Certain configurable data fields such as chasControlDCEStopBits in the IBM Nways RouteSwitch - chassis.mib chasControl Table (MPM Redundancy) are only settable on the Primary MPM (Master), but the value is applied to both MPMs.

Work-around: Set the value on the Master MPM.

Problem Report 2671
When editing the values in the Transparent Bridging and Spanning Tree menus, if the Selected Group has changed from the one displayed in the dialog title bar, the value gets assigned to the currently Selected Group, instead of the one displayed.

Work-around: Make sure to select the desired Group, open the dialog, change the value, and close the dialog. Verify the value by repeating the process.

Problem Report 2678
If a Group number larger than 32767 is modified in Modify IP Router, it will reappear as a negative number.

Work-around: None.

Problem Report 2790
In the Virtual LANs / Switching / Spanning Tree / Port Table, ATM LANE and Trunk Services are shown as Unknown Service types.

Work-around: Check the ATM Services Tables.

Problem Report 4313
Start/stop times are not functional.

Work-around: None.

Problem Report 4844
LED's on FESM-II on second 8273 daughter card display incorrectly.

Work-around: None.

Problem Report 4848
ASM-E3 LED displays do not match production board.

Work-around: None.

Problem Report 4849
ASM-E3 on 9-slot displays green active LED incorrectly.

Work-around: None.

Problem Report 4918, 4916, 4917
When an FDDI single card and a multi card are in the same 8273, they do not function correctly in Network Manager .

Work-around: None.

Problem Report 5058
8273 combination ATM-0C3 and ATM-DS3 do not function properly.

Work-around: None.

4.3.2 Routing

Problem Report 432
No Bridge Address is displayed for a CIP Group in the VLAN table.

Work-around: Check the Port Services table.

Problem Report 436, 684
Static IP Routes are not supported for SNMP.

Work-around: Must use UI to create and access Static IP Routes.

Problem Report 512
The IP Route Hop Count is not displayed in Network Manager .

Work-around: Must check the UI *ipr* command to see the IP Route Hop Count.

Problem Report 613
When setting Source Routing parameters from the Administration Modify dialog, sometimes the values won't set.

Work-around: Try again. Verify that the Switch configuration allows the desired settings. Set from UI.

Problem Report 2765
Sending ATM1483 as vIPRouterFramingType disables the IP Route.

Work-around: This is noted for SNMP access other than Network Manager - Network Manager does not send this type to the IBM Nways RouteSwitch . The IBM Nways RouteSwitch will always use ATM-1483 for CIP Groups, so it is not necessary to send it.

Problem Report 2771 (F)
When the IP Address and/or the SubNet Mask is changed from Modify VLANs or Modify IP Route, the Broadcast Address does not automatically get set to the new default value.

Work-around: Modify the IP Address, SubNet Mask, and Broadcast Address from Virtual LANs / IP Router Table / Modify. Enter each value and Apply.

Problem Report 3885
If NMS enters a new Group that duplicates an existing router address on the switch, the group is created with no router. This causes problems for Frame Relay and CIP Groups that require routers.

Work-around: Check for an existing network address on the switch vlan IP Route table before allowing to send a duplicate on a create or modify group or IP Route.

4.3.3 VLANs (Groups)

Problem Report 1734
Add VLAN Disable State is ignored.

Work-around: None - all VLANs are added as Enabled.

4.3.4 Switch Translations

Problem Report 2745
When port encapsulation is set to SWCH from Port Administration, the translation settings are reset to: Ethernet, Snap, Ethernet, Prop, LLC, Snap, instead of the default or current port type settings.

Work-around: Use the Switch Translation tables to set customized settings.

Problem Report 2773
When setting the Port Encapsulation type from the Port Administration dialog, the UI *modvp* command may not reflect the slight variations in the actual Switch Translations that are used. For example, both EthII-LLC and EthII on an Ethernet port will appear as "e" in *modvp* but will have slightly different settings when viewed through the *swch* command. Similarly, both SNAP and SNAP-LLC will appear as "s" in *modvp* but will show different settings in *swch*.

Work-around: Check the Switch Translations table to see the actual values being used.

4.3.5 ATM

Problem Report 160
It is possible to create an ATM Connection using an existing Connection number. The existing one is overwritten.

Work-around: None - Informational

Problem Report 2010
It is not possible to Apply a different Address index on an ATM CIP Service Modify. A new Service must be Created in order to use a different Address.

Work-around: None - Informational

Problem Report 1633
Occasionally, the ATM Service Table will get corrupted and will display an infinite number of table entries.

Work-around: Close the Table dialog to end the infinite display. Delete the services from the UI. May need to remove the configuration file.

Problem Report 1729
ATM SVC Port Address requires a 40-character address for an ILMI 12-character address.

Work-around: Pad the address with 28 leading zeroes.

Problem Report 2805
Create and Modify ATM CIP Group Framing Type shows Ethernet II when it should be ATM 1483.

Work-around: Ignore this field for CIP Groups. The Switch is actually using ATM 1483.

Problem Report 2619
When applying a Module Description from the Slot Configuration dialog on an ATM-UTP module, the message "set_chasModuleAdminStatus bad status value =2" appears on the console.

Work-around: Don't change the Module Description from Network Manager on an ATM-UTP Module.

Problem Report 2673
The LANE ARP-Cache table shows false for the ARP Remote column, when UI *vlat* shows true.

Work-around: Check the UI.

Problem Report 4835
ATM PTOP PVC Bridging Service Encaps type displayed incorrectly in Modify Service.

Work-around: None.

4.3.6 LAN Emulation Client

Problem Report 2048
Unused LEC instances are not saved across reboots.

Work-around: A LEC instance will be saved if it is being used in a LANE Service.

Problem Report 2050
There is no way to edit or access unused LEC instances from the UI.

Work-around: Individual LEC instances are only accessible from Network Manager . When they are in use in a LANE Service, they may also be edited via "*mas*" in the UI.

Problem Report 2361
It is possible to create a duplicate LANE Service from Network Manager by modifying a LEC record to have a duplicate LAN name with one already in use.

Work-around: Avoid creating a LANE Service that has the same LAN Name as an existing Service on that physical port.

4.3.7 FSM

Problem Report 746
The FDDI MIB values that are not settable are ignored on a Set attempt.

The following can be set from the UI:

- fddimibSMTTraceMaxExpiration
- fddimibPATHMaxLowerBound
- fddimibPATHMaxTReq

Work-around: Set them from the UI.

The following FDDI MIB objects cannot be set:

- fddimibSMTStationAction
- fddimibFrameErrorThreshold
- fddimibNotCopiedThreshold
- fddimibSMTTraceMaxExpiration
- fddimibPATHMaxLowerBound
- fddimibPATHMaxTReq
- fddimibPORTRequestedPaths
- fddimibPORTAction

Work-around: None.

Problem Report 692
FDDI MAC Timers don't match UI fmac values for Tmax, TVX Max.

Work-around: Must check UI.

4.3.8 Traps

Problem Report 1149
Port Link Up/Down Traps may not always appear.

Work-around: None

Problem Report 1195
ModuleResetReload and systemEvent Traps are not supported at this time. (Note: MIB-II traps implemented for this version: A warmStart will be sent when the Switch is issued a reboot command. A coldStart will be sent after the Switch is rebooted, but this trap may not be seen due to the lack of IP communication at the time of start-up.)

Work-around: None.

Problem Report 4569
8273 Port traps not supported in OpenView integration.

Work-around: None.

4.3.9 Known SNMP Problems

Problem Report 3123
MIB object testInsertFunc returns no value on snmp query.

Work-around: None

Problem Report 3124
MIB Object dot5ChipSets returns no value to snmp query.

Work-around: None

Problem Report 3128
SNMP query on dot1dSr returns no value.
Work-around: None

Problem Report 3130
dot1dTpAgingTime has error response.
Work-around: None

Problem Report 4068
Setting FR Phys Ports Adm Status = Disabled has no effect on VPs.
Work-around: None

Problem Report 374
Static Bridge Addresses are not supported in the IBM Nways RouteSwitch SNMP (will not function in Network Manager).
Work-around: Must use the UI to create and access Static Bridge Addresses.

5. UNIX Platform for IBM Nway RouteSwitch Network Manager

IBM Nways RouteSwitch Network Manager 2.1 for UNIX runs on the following platforms:

- SunOS 4.1 workstation
- Solaris 2.4 or later workstation
- HP-UX 9.x or greater workstation
- RS6000 running workstation AIX 3.2.5 or later

5.1 Unsupported RouteSwitch Features for UNIX

IBM Nways RouteSwitch Network Manager 2.1 for UNIX does not support the following features of RouteSwitch 2.1.3:

- RouteTracker Virtual LANs. Use the IBM Nways RouteSwitch, IBM Nways RouteTracker GUI for this function.
- Token Ring Fiber modes (PR 1436)

5.2 General Instructions and Notes for UNIX

5.2.1 General Notes for UNIX

1. These Release Notes cover IBM Nways RouteSwitch Network Manager (OVSM) Version 2.1 for UNIX managing IBM RouteSwitch Version 2.1.3 and IBM 8276-360.
2. IBM Nways RouteSwitch Network Manager for UNIX Version 2.1 must be used with RouteSwitch Version 2.1.3 for full compatibility.
3. The terms IBM Nways RouteSwitch 1.2 (or earlier), RouteSwitch Network Manager and Network Manager all refer to this product. (PR 2372)
4. The term VLAN, as used in Network Manager, actually refers to RouteSwitch Groups. RouteTracker VLAN access is accomplished through the IBM Nways RouteTracker GUI or the UI.
5. The UNIX conventions for default button focus is not always used, i.e., focus on Close until data field edits when it should then change to Apply. Always verify the button focus before pressing the Enter key. Use the mouse click to ensure the desired action. (PR 579)
6. Update buttons do not appear in all dialogs and do not always perform consistently throughout the application. Data field Updates do not always behave consistently throughout the application after an Apply. (PR 640, 779)
7. In general, when a data dialog box is in the process of receiving data back from the RouteSwitch, it is possible in some cases to proceed with dialog activity such as entering data in an edit field or selecting a Modify button. However, the edit fields are cleared after the completion of the Gets, and any resulting Modify dialog boxes may be invalid. It is best to let all the data Gets complete before accessing any subsequent dialog functions. Also, the status messages do not always accurately reflect the status of the Gets. (PR 161, 327, 334, 368, 369, 376, 500)
8. Messages are sometimes returned from the SNMP agent, such as “Reply Error: No Such Name”, which will appear on the status message line. This can mean that there was a problem with the Get or Set, or it could simply mean that it has finished processing the data or that there was no data. (PR 2195 - F) Alternatively, there are occasions when a Get or Set is not successful and no “Reply Error” is returned to indicate an unsuccessful attempt. (PR 2446)
9. Set Poll Rate appears to allow a character field edit of the poll rate, but it must be performed using the slide bar. (PR 728)
10. It is possible to add a Group with the same number as an existing Group. The existing one is overwritten.(PR 525)

11. When the Device Name is changed from Control - Set Device Parameters, this change does not appear in the title bars of currently open windows. (PR 332)

5.2.2 Community Names

1. The Community names in the Set Device Parameters dialog are not saved if changed because these are used as a password security device. Changes must be re-entered upon each launch of the application. (PR 557)
2. If the Get or Set Community names do not match the settings on the RouteSwitch, no error message will appear on a Get or Set attempt. It will time-out. (PR 724)
3. If the Get and Set Community Names are different in the RouteSwitch, the Set Name overrides the Get Name for Get access. I.E., a Get can be performed even if the Get Community Name does not match, if the Set Community Names match. (PR 2397)

5.3 IBM Nways RouteSwitch Network Manager Version 2.0 Problem Resolution for UNIX.

- LED displays may not be implemented, or may not be correct. An effort has been made in this release to show at least one LED for each active port, however this is not yet the case with some newer hardware modules. (NOTE: LED displays are representative of activity at the Polling cycle and do not necessarily represent complete actual activity.) (PR 588, 1541, 1769, 2281, 2375)
- Token Ring Administration New Description entries are removed if a VLAN is subsequently selected. (PR 738)
- Validity checking has not been fully implemented on all data entry fields. (PR 2105, 2106)
- Source Routing Type is not shown on the Source Routing Administration Table. (PR 1878)
- The currently selected Group does not always appear in the VLAN Toolbar in some instances (i.e., after a Delete VLAN or Select VLAN from the VLAN Admin Table). (PR 2355)
- If a New Description is entered in the Modify VLAN dialog, and then the IP/IPX Router child dialog is opened, the New Description disappears from the Modify VLAN dialog after the IP/IPX child dialog is closed. (PR 2401)
- Switch Translations terminology “Prop” corresponds to UI usage “802.3”; “LLC” corresponds to “802.2”. (PR 2741)
- Switch Translations Modify dialog field selections may display types that are not valid for certain port types. If applied, they will be ignored by the Switch. For example, LLC 802.2 and Prop 802.3 are shown as available for IP translation types, but they will not be applied. (PR 2743)
- It is not possible to edit an ATM Address from Modify ATM Address. The other data fields in the record may be changed in this dialog. Any change to the Address itself must be accomplished by Creating a new Address. (PR 754)
- The Modify ATM PTOP Service dialog doesn’t Update the Admin State when it has been changed from somewhere else. It also doesn’t recognize if the Service has been deleted from somewhere else. (PR 527)
- Modify LEC Configuration does not necessarily show the appropriate Server Address. (PR 2803)

5.4 IBM Nways RouteSwitch Network Manager 2.1 for UNIX Known Problems

The problems listed here and in Appendices A and B cover all problems known at the time of the release of this document that apply specifically to IBM Nways RouteSwitch Network Manager Version 2.1 for UNIX running with RouteSwitch Version 2.1.3. ("F" means that a fix for this problem has been incorporated into this release but has not yet been verified.)

5.4.1 General for UNIX

Problem Report 1871
If a different module type is inserted into an RouteSwitch, or a module is removed, Network Manager will not necessarily update the display to the new configuration.

Work-around: Close the Device window and reopen as a New Device.

Problem Report 558
The on-line Help file is not implemented.

Work-around: See the User's Guide for reference.

Problem Report 748
Some dialogs including Port Administration, VLAN Table, Delete VLAN and Chassis Module Table may time-out before Getting all the data. Possible reasons for this may be: this may happen more often on a 9-slot; if the configuration file has expanded in size; if the Switch is in File Compaction mode; if there is heavy traffic on the network; if the Polling Rate is set low on any Network Manager or SNMP application; if the hardware is marginally functional. In these instances, it is necessary to retry, Update, or exit the dialog and re-enter.

Work-around: Retry the operation. Decrease polling rate from any SNMP applications. Replace hardware if the problem continues.

Problem Report 1327
Port Administration doesn't allow setting Pass-through.

Work-around: Use the translations table in IBM Nways RouteSwitch Network Manager.

Problem Report 1334
Port Administration Admin State = Delete is ignored (Ethernet only).

Work-around: None required. This option will be removed from their dialog in future releases.

Problem Report 1939, 2034, 2112
The Port Administration Switch Timer value will only be set to the value range accepted by the Switch - 1-60,000, even though Network Manager will allow values up to 65,535.

Work-around: Set the Switch Timer value between 1 and 60,000.

Problem Report 2650
Certain configurable data fields such as chasControlDCEStopBits in the IBM-chassis.mib chasControl Table (MPM Redundancy) are only settable on the Primary MPM (Master), but the value is applied to both MPMs.

Work-around: Set the value on the Master MPM.

Problem Report 2671
When editing the values in the Transparent Bridging and Spanning Tree menus, if the Selected Group has changed from the one displayed in the dialog title bar, the value gets assigned to the currently Selected Group, instead of the one displayed.

Work-around: Make sure to select the desired Group, open the dialog, change the value, and close the dialog. Verify the value by repeating the process.

Problem Report 2678
If a Group number larger than 32767 is modified in Modify IP Router, it will reappear as a negative number.

Work-around: None.

Problem Report 2790
In the Virtual LANs / Switching / Spanning Tree / Port Table, ATM LANE and Trunk Services are shown as Unknown Service types.

Work-around: Check the ATM Services Tables.

Problem Report 4313
Start/stop times are not functional in the port mirroring dialog.

Work-around: Mirroring is either enabled or disabled.

Problem Report 4844
LED's on FESM-II on second 8273 daughter card display incorrectly.

Work-around: None.

Problem Report 4848
ASM-E3 LED displays do not match production board.

Work-around: None.

Problem Report 4849
ASM-E3 on 9-slot displays green active LED incorrectly.

Work-around: None.

Problem Report 4918, 4916, 4917
When an FDDI single card and a multi card are in the same 8273 chassis, they do not function correctly in Network Manager.

Work-around: None.

Problem Report 5058
8273 chassis combination with ATM-0C3 and ATM-DS3 do not function properly.

Work-around: None.

Problem Report 5156
The eighth port on Ethernet fiber does not allow admin access.

Work-around: None.

Problem Report 5193
There is no console menu on the 8276-360 chassis.

Work-around: None.

Problem Report 5282
The ability to remove trunk groups off frame relay is not always available.

Work-around: None.

Problem Report 5292
Duplicate MAC traps are sent to NMS until time-out period to flush the forwarding database is complete.

Work-around: None.

Problem Report 4852
The RouteSwitch-8274-9 slot, RouteSwitch-8274-5 port FESM LED's do not show port LINK.

Work-around: None.

Problem Report 4866
Using command *switchmg&* does not display an active screen.

Work-around: Run "*switchmg*" in foreground.

Problem Report 5170
LED configuration bitmap for ATM-E3 is incorrect.
Work-around: None.

Problem Report 5174
ATM2M not shown and ATMDS3 out of place on 8273 chassis.
Work-around: None.

Problem Report 5175
ATMDS3 bitmap LED configuration is incorrect.
Work-around: None.

Problem Report 5242
There are unreadable characters for Frame Relay Services Group descriptions in the create and modify dialogs.
Work-around: See the Frame Relay Services Table.

Problem Report 5244
User is unable to use scroll bars for Frame Relay Create Services. Only partial list is displayed.
Work-around: User must click mouse on entry and then use arrow keys.

Problem Report 1978
This product will use the default font and character size of its X-windows environment, which may or may not be optimal.
Work-around: It is highly recommended that the user select an appropriate font and character size for this application, which can be done with standard X-windows configuration tools.

Problem Report 667, 5040
SNMP access is lost after leaving application to run overnight. Symptom: No data is returned from the switch.
Work-around: Exit application and relaunch.

Problem Report 4317
Trap Control via OVSM is dysfunctional on the 8276-360 product.
Work-around: None required.

Problem Report 4839
ATM LANE VCC Timeout is dysfunctional via SNMP.
Work-around: Must use UI, telnet to the switch.

Problem Report 5237
The static-link versions are not supported. The README files mention this option, but it is not available.
Work-around: Dynamic versions that are supplied depend upon Motif being already installed.

5.4.2 Routing

Problem Report 432
No Bridge Address is displayed for a CIP Group in the VLAN table.
Work-around: Check the Port Services table.

Problem Report 436, 684
Static IP Routes are not supported for SNMP.
Work-around: Must use UI to create and access Static IP Routes.

Problem Report 512
The IP Route Hop Count is not displayed in Network Manager.

Work-around: Must check the UI *ipr* command to see the IP Route Hop Count.

Problem Report 613
When setting Source Routing parameters from the Administration Modify dialog, sometimes the values won't set.

Work-around: Try again. Verify that the Switch configuration allows the desired settings. Set from UI.

Problem Report 2765
Sending ATM1483 as vIPRouterFramingType disables the IP Route.

Work-around: This is noted for SNMP access other than Network Manager - Network Manager does not send this type to the RouteSwitch. The RouteSwitch will always use ATM-1483 for CIP Groups, so it is not necessary to send it.

Problem Report 2771
When the IP Address and/or the SubNet Mask is changed from Modify VLANs or Modify IP Route, the Broadcast Address does not automatically get set to the new default value.

Work-around: Modify the IP Address, SubNet Mask, and Broadcast Address from Virtual LANs / IP Router Table / Modify. Enter each value and Apply.

Problem Report 3885
If NMS enters a new Group that duplicates an existing router address on the switch, the group is created with no router. This causes problems for Frame Relay and CIP Groups that require routers.

Work-around: Check for an existing network address on the switch VLAN IP Route table before allowing to send a duplicate on a create or modify group or IP Route.

5.4.3 VLANs (Groups)

Problem Report 1734
Add VLAN Disable State is ignored.

Work-around: None - all VLANs are added as Enabled.

5.4.4 Switch Translations

Problem Report 2745
When port encapsulation is set to SWCH from Port Administration, the translation settings are reset to: Ethernet, Snap, Ethernet, Prop, LLC, Snap, instead of the default or current port type settings.

Work-around: Use the Switch Translation tables to set customized settings.

Problem Report 2773
When setting the Port Encapsulation type from the Port Administration dialog, the UI *modvp* command may not reflect the slight variations in the actual Switch Translations that are used. For example, both EthII-LLC and EthII on an Ethernet port will appear as "e" in *modvp* but will have slightly different settings when viewed through the *swch* command. Similarly, both SNAP and SNAP-LLC will appear as "s" in *modvp* but will show different settings in *swch*.

Work-around: Check the Switch Translations table to see the actual values being used.

5.4.5 ATM

Problem Report 160
It is possible to create an ATM Connection using an existing Connection number. The existing one is overwritten.

Work-around: None - Informational

Problem Report 2010
It is not possible to Apply a different Address index on an ATM CIP Service Modify. A new Service must be Created in order to use a different Address.

Work-around: None - Informational

Problem Report 1633
Occasionally, the ATM Service Table will get corrupted and will display an infinite number of table entries.

Work-around: Close the Table dialog to end the infinite display. Delete the services from the UI. May need to remove the configuration file.

Problem Report 1729
ATM SVC Port Address requires a 40-character address for an ILMI 12-character address.

Work-around: Pad the address with 28 leading zeroes.

Problem Report 2805
Create and Modify ATM CIP Group Framing Type shows Ethernet II when it should be ATM 1483.

Work-around: Ignore this field for CIP Groups. The Switch is actually using ATM 1483.

Problem Report 2619
When applying a Module Description from the Slot Configuration dialog on an ATM-UTP (7078,6886,7076,6888) module, the message "set_chasModuleAdminStatus bad status value =2" appears on the console.

Work-around: Don't change the Module Description from Network Manager on an ATM-UTP (7078,6886,7076,6888) Module.

Problem Report 2673
The LANE ARP-Cache table shows false for the ARP Remote column, when UI *vlat* shows true.

Work-around: Check the UI.

Problem Report 4835
ATM PTOP PVC Bridging Service Encaps type displayed incorrectly in Modify Service.

Work-around: None.

5.4.6 LAN Emulation Client

Problem Report 2048
Unused LEC instances are not saved across reboots.

Work-around: A LEC instance will be saved if it is being used in a LANE Service.

Problem Report 2050
There is no way to edit or access unused LEC instances from the UI.

Work-around: Individual LEC instances are only accessible from Network Manager. When they are in use in a LANE Service, they may also be edited via "*mas*" in the UI.

Problem Report 2361
It is possible to create a duplicate LANE Service from Network Manager by modifying a LEC record to have a duplicate LAN name with one already in use.

Work-around: Avoid creating a LANE Service that has the same LAN Name as an existing Service on that physical port.

5.4.7 FSM

Problem Report 746
The FDDI MIB values that are not settable are ignored on a Set attempt.

The following can be set from the UI:

- fddimibSMTTraceMaxExpiration
- fddimibPATHMaxLowerBound
- fddimibPATHMaxTReq

Work-around: Set them from the UI.

The following FDDI MIB objects cannot be set:

- fddimibSMTStationAction
- fddimibFrameErrorThreshold
- fddimibNotCopiedThreshold
- fddimibSMTTraceMaxExpiration
- fddimibPATHMaxLowerBound
- fddimibPATHMaxTReq
- fddimibPORTRequestedPaths
- fddimibPORTAction

Work-around: None.

Problem Report 692
FDDI MAC Timers don't match UI fmac values for Tmax, TVX Max.

Work-around: Must check UI.

5.4.8 Traps

Problem Report 1149
Port Link Up/Down Traps may not always appear.

Work-around: None

Problem Report 1195
ModuleResetReload and systemEvent Traps are not supported at this time. (Note: MIB-II traps implemented for this version: A warmStart will be sent when the Switch is issued a reboot command. A coldStart will be sent after the Switch is rebooted, but this trap may not be seen due to the lack of IP communication at the time of start-up.)

Work-around: None.

Problem Report 4569
8276-360 product traps not supported in OpenView integration.

Work-around: None.

Problem Report 4408

Traps do not always appeared immediately after being configured from OVSM.

Work-around: None required.

Problem Report 5161

Trap Control - SA Privilege is not accessible via OVSM.

Work-around: Must use UI.

5.4.9 Known SNMP Problems

Problem Report 3123

MIB object testInsertFunc returns no value on SNMP query.

Work-around: None

Problem Report 3124

MIB Object dot5ChipSets returns no value to SNMP query.

Work-around: None

Problem Report 3128

SNMP query on dot1dSr returns no value.

Work-around: None

Problem Report 3130

dot1dTpAgingTime has error response.

Work-around: None

Problem Report 4068

Setting FR Phys Ports Adm Status = Disabled has no effect on VPs.

Work-around: None

Problem Report 374

Static Bridge Addresses are not supported in the RouteSwitch SNMP (will not function in Network Manager).

Work-around: Must use the UI to create and access Static Bridge Addresses.

6. SunOS Instructions

The IBM RouteSwitch Network Manager is a SunOS/Motif based graphical user interface program that provides access to IBM network switch devices. Features include:

- SNMP communication between SunOS and the IBM chassis
- Bitmap displays of module cards
- Dialog screens for data entry and browsing.

HP OpenView, SunNet Manager, and Cabletron Spectrum are optionally supported.

6.1 SunOS System Requirements:

- SunOS 4.1 workstation (64MB minimum)
- X11R5/Motif 1.2
- HP OpenView Network Node Manager 3.x or later (optional)
- SunNet Manager 2.2.2 (optional)

6.2 SunOS Installation

Note: If you move or upgrade the Network Manager program to a different directory, it is necessary to delete the related links in the home directory: .WindU, .nmsconfg.ini, .snmpsrvr.ini, and .pmconfig.ini.

1. Create a directory to hold RouteSwitch Network Manager files, e.g.,

```
% mkdir /usr/home
```

2. Extract the binaries from the distribution tar file, e.g.:

```
% cd /usr/home
% tar xvf /dev/rst0
```

Note: A directory "switchmg_xyl" is created containing all necessary files.

3. In your .cshrc file, create an environment variable called SWITCHMG_HOME, e.g.,

```
setenv SWITCHMG_HOME /usr/home/switchmg_xyl
```

4. In your .cshrc file, add $SWITCHMG_HOME to your library path, LD_LIBRARY_PATH, e.g.,

```
setenv LD_LIBRARY_PATH /usr/lib/X11:$MOTIFHOME/lib:/usr/lib:$SWITCHMG_HOME
```

5. In your .cshrc file, Add $SWITCHMG_HOME to your file search path, e.g.,

```
set path=( /bin \
        /usr/ucb \
        /usr/bin \
        /usr/etc \
        $SWITCHMG_HOME \
                .)
```

6. Source your .cshrc file, e.g.,

```
% source .cshrc
```

7. Inform the shell of new binary locations:

```
% rehash
```

8. If you do not have access to Motif 1.2 libraries, use a Network Manager option that has self-contained libraries. To activate this option, cd to $SWITCHMG_HOME and enter the following:

% switchmg_setup <variable> where variable = static or dynamic

For example:
% switchmg_setup static

To deactivate this option at any time, enter the following:

% switchmg_setup dynamic

9. If you want to install the Network Manager files for integration with network management platforms, first su to root and then enter the following:

% ./switchmg_nms_setup

switchmg_nms_setup will detect which network management platform (HP OpenView, SunNet Manager, or Cabletron Spectrum) is currently installed on the local system and automatically run the appropriate setup script.
NOTE: NMS platforms will usually need to be told to re-build their databases after installing new device management software, like Network Manager, along with all its configuration information. With SunNetManager, for example, this is "snm -i" instead of just "snm" to start it up. The Basic Start option may need to be run instead of the Head Start option of snm.

10. Before using Network Manager with HP Openview or Sun Net Manager, you must run Network Manager in a standalone mode to verify system operation.

Execute instructions:

11. To integrate IBM traps into SunNet Manager, go to the SunNet Manager directory that contains its traps file. For example:

```
% cd /var/adm/snm
% cp $SWITCHMG_HOME/snm/switchmg.trap .
% cat snmp.traps switchmg.trap > temp
% cp temp snmp.traps
% rm temp
```

Execute instructions:

1. Standalone RouteSwitch Network Manager from local workstation:

switchmg

2. Standalone RouteSwitch Network Manager from remote workstation, (e.g., "jupiter" is the host name of the remote workstation and "mars" is the host name of the local workstation):

a. At the local workstation, allow the remote workstation to send an X-Window display:
xhost +jupiter

b. At the remote workstation:
switchmg mars

3. If Network Manager fails to start up correctly, and complains of a missing library "libXm.so.2", you may have newer motif Motif libraries than were used to link this product - this can be easily resolved by creating a symbolic link in your Motif library directory as follows:

cd /usr/dt/lib# cd to where you Motif libraries reside (could be some other path)
ln -s libXm.so.3 libXm.so.2# make the symbolic link.

7. Solaris Instructions

The IBM RouteSwitch Network Manager is a Solaris/Motif based graphical user interface program that provides access to IBM network switch devices. Features include:

- SNMP communication between Solaris and the IBM chassis
- Bitmap displays of module cards
- Dialog screens for data entry and browsing.

HP OpenView, SunNet Manager, and Cabletron Spectrum are optionally supported.

7.1 Solaris System Requirements:

- Solaris 2.4 or later workstation (64MB minimum)
- X11R5/Motif 1.2
- HP OpenView Network Node Manager 3.x or later (optional)
- SunNet Manager 2.2.2 (optional)
- Cabletron Spectrum Version 3.0 rel 1 or later (optional)

7.2 Solaris Installation

Note: If you move or upgrade the Network Manager program to a different directory, it is necessary to delete the related links in the home directory: .WindU, .nmsconfg.ini, .snmpsrvr.ini, and .pmconfig.ini.

1. Create a directory to hold RouteSwitch Network Manager files, e.g.,
   % mkdir /usr/home

2. Extract the binaries from the distribution tar file, e.g.:
   % cd /usr/home
   % tar xvf /dev/rmt/c201d4t0

Note: A directory "switchmg_xyl" is created containing all necessary files.

3. In your .cshrc file, create an environment variable called SWITCHMG_HOME, e.g.,
   setenv SWITCHMG_HOME /usr/home/switchmg_xyl

4. In your .cshrc file, add $SWITCHMG_HOME to your library path, LD_LIBRARY_PATH, e.g.,

```
setenv LD_LIBRARY_PATH /usr/lib/X11:$MOTIFHOME/lib:/usr/lib:$SWITCHMG_HOME
```

5. In your .cshrc file, Add $SWITCHMG_HOME to your file search path, e.g.,

```
set path=( /bin \
        /usr/ucb \
        /usr/bin \
        /usr/etc \
        $SWITCHMG_HOME \
                .)
```

6. Source your .cshrc file, e.g.,
   % source .cshrc

7. Inform the shell of new binary locations:
   % rehash

8. If you do not have access to Motif 1.2 libraries, use a Network Manager option that has self-contained libraries. To activate this option, cd to $SWITCHMG_HOME and enter the following:

% switchmg_setup <variable> where variable = static or dynamic

For example:
% switchmg_setup static

To deactivate this option at any time, enter the following:
% switchmg_setup dynamic

9. If you want to install the Network Manager files for integration with network management platforms, first su to root and then enter the following:

% cd $SWITCHMG_HOME
% ./switchmg_nms_setup

switchmg_nms_setup will detect which network management platform (HP OpenView, SunNet Manager, or Cabletron Spectrum) is currently installed on the local system and automatically run the appropriate setup script.

NOTE: NMS platforms will usually need to be told to re-build their databases after installing new device management software, like Network Manager, along with all its configuration information. With SunNetManager, for example, this is "snm -i" instead of just "snm" to start it up. The Basic Start option may need to be run instead of the Head Start option of snm.

10. Before using Network Manager with HP Openview or Sun Net Manager, you must run Network Manager in a standalone mode to verify system operation.

11. To integrate IBM traps into SunNet Manager, go to the SunNet Manager directory that contains its traps file. For example:

```
% cd /var/opt/SUNWconn/snm
% cp $SWITCHMG_HOME/snm/switchmg.trap .
% cat snmp.traps switchmg.trap > temp
% cp temp snmp.traps
% rm temp
```

Execute instructions:

1. Standalone RouteSwitch Network Manager from local workstation:

switchmg

2. Standalone RouteSwitch Network Manager from remote workstation, (e.g., "jupiter" is the host name of the remote workstation and "mars" is the host name of the local workstation):

a. At the local workstation, allow the remote workstation to send an X-Window display:

xhost +jupiter

b. At the remote workstation:

switchmg mars

3. If Network Manager fails to start up correctly, and complains of a missing library "libXm.so.2", you may have newer motif Motif libraries than were used to link this product - this can be easily resolved by creating a symbolic link in your Motif library directory as follows:

```
cd /usr/dt/lib# cd to where you Motif libraries reside (could be some other path)
ln -s libXm.so.3 libXm.so.2#  make the symbolic link.
```

8. HP-UX Instructions

The IBM RouteSwitch Network Manager is a HP-UX/Motif based graphical user interface program that provides access to IBM network switch devices. Features include:

- SNMP communication between HP-UX and the IBM chassis
- Bitmap displays of module cards
- Dialog screens for data entry and browsing.

HP OpenView and Cabletron Spectrum are optionally supported.

8.1 HP-UX System Requirements:

- HP-UX 9.x or greater workstation, 700 or 800 series (64MB minimum)
- X11R5/Motif 1.2
- HP OpenView Network Node Manager 3.x or later (optional)
- Cabletron Spectrum Version 3.0 rel 1 or later (optional)

8.2 HP-UX Installation

1. Create a directory to hold RouteSwitch Network Manager files, e.g.,

```
% mkdir /usr/home
```

2. Extract the binaries from the distribution tar file, e.g.:

```
% cd /usr/home
% tar xvf /dev/rmt/c201d4t0
```

Note: A directory "switchmg" is created containing all necessary files.

3. In your .cshrc file, create an environment variable called SWITCHMG_HOME, e.g., setenv SWITCHMG_HOME /usr/home/switchmg

4. In your .cshrc file, add $SWITCHMG_HOME to your library path, SHLIB_PATH, e.g., setenv SHLIB_PATH /usr/lib/X11:$MOTIFHOME/lib:/usr/lib:$SWITCHMG_HOME

5. In your .cshrc file, Add $SWITCHMG_HOME to your file search path, e.g.,

```
set path=( /bin \
        /usr/ucb \
        /usr/bin \
        /usr/etc \
        $SWITCHMG_HOME \
        .)
```

6. Source your .cshrc file, e.g.,

```
% source .cshrc
```

7. If you want to install the Network Manager files for integration with network management platforms, first cd to $SWITCHMG_HOME, su to root, and then enter the following:

```
% ./switchmg_nms_setup
```

switchmg_nms_setup will detect which network management platform (HP OpenView or Cabletron Spectrum) is currently installed on the local system and automatically run the appropriate setup script.

8. Before using Network Manager with HP Openview, you must run Network Manager in a standalone mode to verify system operation.

Execute instructions:

1. Standalone RouteSwitch Network Manager from local workstation:

```
switchmg
```

2. Standalone RouteSwitch Network Manager from remote workstation, (e.g., "jupiter" is the host name of the remote workstation and "mars" is the host name of the local workstation):

a. At the local workstation, allow the remote workstation to send an X-Window display:

```
xhost +jupiter
```

b. At the remote workstation:

```
switchmg mars
```

9. AIX Instructions

The IBM RouteSwitch Network Manager is an AIX/Motif based graphical user interface program that provides access to IBM network switch devices. Features include:

- SNMP communication between HP-UX and the IBM chassis
- Bitmap displays of module cards
- Dialog screens for data entry and browsing.

NetView for AIX and Cabletron Spectrum are optionally supported.

9.1 AIX System Requirements*:

- RS6000 workstation running AIX 3.2.5 or later (64MB minimum)
- X11R5/Motif 1.2
- NetView for AIX Version 4.x (optional)
- Cabletron Spectrum Version 3.0 rel 1 or later (optional)

*Note: The X libraries must be installed for Network Manager to operate on the RS6000 with AIX.

9.2 AIX Installation Instructions

1. Create a directory to hold RouteSwitch Network Manager files, e.g.,

```
% mkdir /usr/home
```

2. Extract the binaries from the distribution tar file, e.g.:

```
% cd /usr/home
% tar xvf /dev/rmt/0
```

Note: A directory "switchmg" is created containing all necessary files.

3. In your .cshrc file, create an environment variable called SWITCHMG_HOME, e.g.,

```
setenv SWITCHMG_HOME /usr/home/switchmg
```

4. In your .cshrc file, add $SWITCHMG_HOME to your library path, LIBPATH, e.g.,

```
setenv LIBPATH /usr/lib/X11:$MOTIFHOME/lib:/usr/lib:$SWITCHMG_HOME
```

5. In your .cshrc file, Add $SWITCHMG_HOME to your file search path, e.g.,

```
set path=( /bin \
        /usr/ucb \
        /usr/bin \
        /usr/etc \
        $SWITCHMG_HOME \
        .)
```

6. Source your .cshrc file, e.g.,

```
% source .cshrc
```

7. If you want to install the Network Manager files for integration with network management platforms, first cd to $SWITCHMG_HOME (assuming you are running in C shell and the .cshrc has been appropriately modified, su to root, and then enter the following:

```
% ./switchmg_nms_setup
```

switchmg_nms_setup will detect which network management platform (NetView for AIX or Cabletron Spectrum) is currently installed on the local system and automatically run the appropriate setup script.

8. Before using Network Manager with NetView or Cabletron Spectrum, you must run Network Manager in a standalone mode to verify system operation.

Execute instructions:

1. Standalone RouteSwitch Network Manager from local workstation:

    switchmg

2. Standalone RouteSwitch Network Manager from remote workstation, (e.g., "jupiter" is the host name of the remote workstation and "mars" is the host name of the local workstation):

    a. At the local workstation, allow the remote workstation to send an X-Window display:

        xhost +jupiter

    b. At the remote workstation:

        switchmg mars

10. Network Management/IBM Nways RouteSwitch Compatibility Matrix

Below are matrices containing 1) IBM Nways RouteSwitch Network Manager , IBM Nways RouteSwitch , and 8273 Compatibility.

Network Management

	Software Release					
Product	2.0.3	2.0.4	2.0.5	2.1.1	2.1.2	2.1.3
Network Manager						
Rev. 2.0	x	x	x	No	No	
Rev. 2.0.3	x	x	x	No	No	
Rev. 2.1	*Yes	*Yes	*Yes	No	No	x
RouteTracker						
Rev. 2.0	No	No	No	No	No	No
Rev. 2.0.6		x	x	No	No	No
Rev. 2.1	No	No	No	No	No	x
RouteMonitor						
Rev. 2.1	No	No	No	No	No	x

*Yes. Using Revision 2.1 of Network Manager with IBM Nways RouteSwitch software release 2.0.3, 2.0.4, and 2.0.5 will function, however, it is preferable to use revision 2.0 or 2.0.3 of Network Manager with IBM Nways RouteSwitch software 2.0.3, 2.0.4 and 2.0.5.

11. 8273 Uplink Rules

8273 Uplink Installation Rules

The 8273 unit is equipped with two uplink slots that can be installed with a large mix of sub-modules types to fit almost any high-speed server and backbone requirement. However, there are certain rules and restrictions that must be adhered to when installing sub-modules in the 8273 Network Management software will not recognize the configuration.

Available Uplinks Sub-Modules

- Fast Ethernet
- ATM
- FDDI and CDDI
- Frame Relay (Q1/97)
- Sub-Module Rule Matrix – Appendix A

11.1 Fast Ethernet Sub-Module Rules

- RESM-100C-4 - *7123*
- RESM-100C-FD-1 - *7120*
- RESM-100FM-FD-1 - *7121*
- RESM-100FS-FD-1 - *7122*

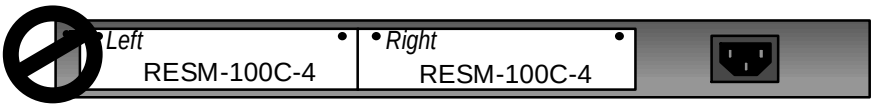
Single Fast Ethernet sub-module

When installing only one Fast Ethernet sub-module it **MUST** be installed in the left slot of the 8273.

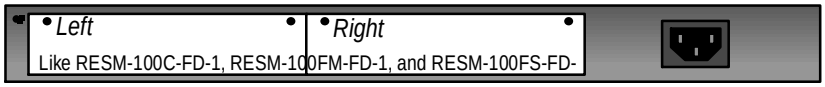


Dual Like Fast Ethernet sub-modules

Warning! The RESM-100C-4 (*7123)* Fast Ethernet sub-module **CANNOT** be mixed with a second RESM-100C-4 *(7123)* sub-module within the same 8273.

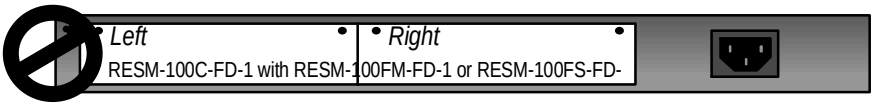


All other Fast Ethernet sub-modules can be mixed with second sub-module of the exact same model number.

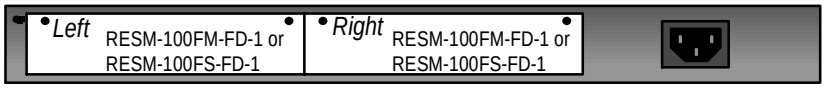


Mixing different 1-Port Fast Ethernet sub-modules

Warning! Mixing copper (RESM-100C-FD-1) *7120* and fiber (RESM-100FM-FD-1, RESM-100FS-FD-1) *7121, 7122* 1-port modules within the same 8273 is **NOT** currently supported. This support will be added in release 3.0 (Q1/97).



1-port single-mode (RESM-100FS-FD-1) *7122* and multimode (RESM-100FM-FD-1) *7121* fiber sub-modules may be mixed within the same 8273 in any slot



Mixing Single Port Fast Ethernet sub-modules with four port Sub-module

Any 1-port copper (RESM-100C-FD-1) *7120* or fiber (RESM-100FM-FD-1, RESM-100FS-FD-1) *7121, 7122* sub-module can be mixed with a 4-port copper (RESM-100C-4) *7123* sub-module in the same 8273. The RESM-100C-4 (*7123)* **MUST** be placed in the right uplink slot and the other Fast Ethernet sub-module **MUST** be placed in the left uplink slot.



Mixing of any Fast Ethernet with FDDI, CDDI, ATM or future Frame Relay (Q1/97)

Any fast Ethernet sub-module can be mixed in the same 8273 with an FDDI, CDDI, ATM, or Frame Relay sub-module. The Fast Ethernet sub-module **MUST** be placed in the right uplink slot and the FDDI, CDDI , ATM, or Frame Relay sub-module **MUST** be placed in the left uplink slot.

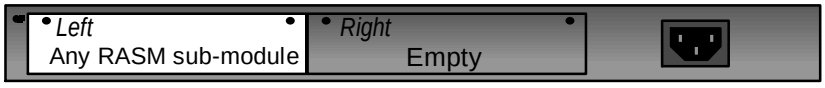


11.2 ATM Sub-Module Rules

- RASM-155FM-1/1E - *7128, 7127*
- RASM-155FS-1/1E - *7126, 7125*
- RASM-DS3-1 - *7124*
- RASM-E3-1 - *8721*

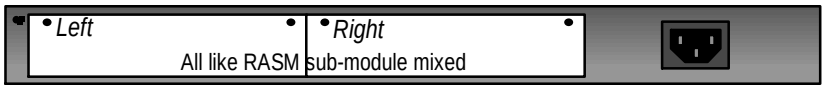
Single ATM sub-module

When installing only one ATM sub-module it **MUST** be installed in the left slot of the 8273.



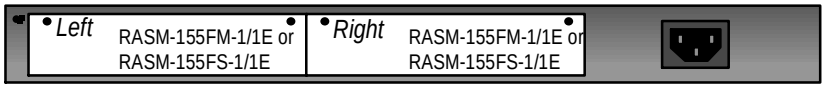
Dual Like ATM sub-modules types

All ATM sub-modules can be mixed with second sub-module of the exact same model number.

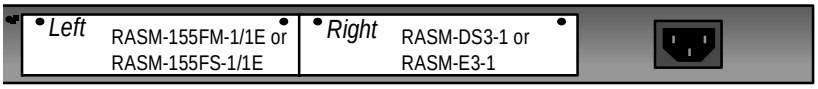


Mixing different ATM sub-modules types

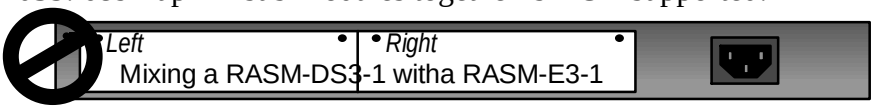
The ATM 155 multimode (ASM-155FM-1/1E) *7087, 7086, 6877, 6878* and single mode (ASM-155FS-1/1E) *7083, 6881, 7082, 6882* fiber sub-modules can be mixed in the same chassis in any slot combination.



The ATM DS3 (ASM-DS3-1) *7051, 6889* or E3 (ASM-E3-1) *7053. 6891* uplink sub-modules can be mixed with either of the ATM-155 multimode (ASM-155FM-1/1E) *7087, 7086, 6877, 6878* and single mode (ASM-155FS-1/1E) *7083, 6881, 7082, 6882* fiber sub-modules. The ASM-DS3-1 *(7051, 6889)* or ASM-E3-1 *(7053, 6891)* must be placed in the right slot and the ATM-155 sub-module should be placed in the left slot.



Warning! Mixing the ATM DS3 (ASM-DS3-1) *7051, 6889* and the E3 (ASM-E3-1) *7053. 6891* uplink sub-modules together is **NOT** supported.



Mixing any ATM with Fast Ethernet, FDDI, CDDI, or future Frame Relay (Q1/97)

Warning! Mixing any ATM sub-module with either FDDI, CDDI, or the future Frame Relay sub-module is **NOT** supported.



Any ATM sub-module can be mixed with any of the Fast Ethernet sub-modules. The ATM sub-module **MUST** be placed in the left slot and the Fast Ethernet sub-module **MUST** be placed in the right slot.



11.3 FDDI/CDDI Sub-Module Rules

- RFSM-M-1 - *7131*
- RFSM-S-1 - *7130*
- RFSM-C-4 - *7129*

Single FDDI or CDDI sub-module

When installing only one FDDI or CDDI sub-module it **MUST** be installed in the left slot of the 8273.



Dual Like FDDI or CDDI sub-modules types

All FDDI or CDDI sub-modules can be mixed with second sub-module of the exact same model number.

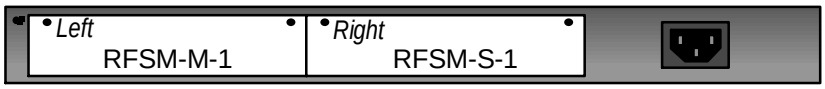


Mixing different FDDI or CDDI sub-modules types

Any FDDI sub-module can be mixed with a CDDI sub-module (RFSM-C-4) *7129.* The FDDI sub-module **MUST** be placed in the left slot and the RFSM-C-4 *(7129)* **MUST** be placed in the right slot.

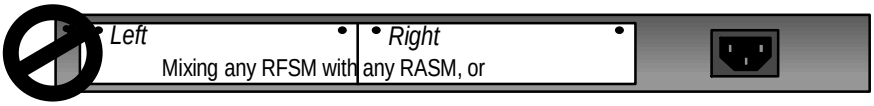


The FDDI single-mode sub-module (RFSM-S-1) *7130* can be mixed with the FDDI multimode sub-module (RFSM-M-1) *7131*. The RFSM-M-1 (*7131)* **MUST** be placed in the left slot and the RFSM-S-1 *(7130)* **MUST** be placed in the right slot.



Mixing any FDDI or CDDI with Fast Ethernet, ATM, or future Frame Relay (Q1/97)

Warning! Mixing any FDDI or CDDI sub-module with either ATM, or the future Frame Relay sub-module is **NOT** supported.



Any FDDI or CDDI sub-module can be mixed with any of the Fast Ethernet sub-modules. The FDDI or CDDI sub-module **MUST** be placed in the left slot and the Fast Ethernet sub-module **MUST** be placed in the right slot.



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12. Sub-Module Rule Matrix

	Right Side uplink Slot (closest to the power connector)										
Left Side Uplink Slot	Empty slot	RFSM-M-1	RFSM-S-1	RFSM-C-4	RASM-155FM-1/1E	RASM-155FS-1/1E	RESM-100C-FD-1	RESM-100FM-FD-1	RESM-100FS-FD-1	RESM-100C-4	RASM-DS3-1
RFSM-M-1 *7131*	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
RFSM-S-1 *7130*	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No
RFSM-C-4 *7129*	Yes	No	No	Yes	No	No	Yes	Yes	Yes	Yes	No
RASM-155FM-1/1E *7128, 7127*	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RASM-155FS-1/1E *7126, 7215*	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
RESM-100C-FD-1 *7120*	Yes	No	No	No	No	No	Yes	Rel 3.0	Rel 3.0	Yes	No
RESM-100FM-FD-1 *7121*	Yes	No	No	No	No	No	Rel 3.0	Yes	Yes	Yes	No
RESM-100FS-FD-1 *7122*	Yes	No	No	No	No	No	Rel 3.0	Yes	Yes	Yes	No
RESM-100C-4 *7123*	Yes	No	No	No	No	No	No	No	No	No	No
RASM-DS3-1 *7124*	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	Yes
RASM-E3-1 *8721*	Yes	No	No	No	No	No	Yes	Yes	Yes	Yes	No
RWSM-S-2 *tbd*	Rel 3.0	No	No	No	No	No	Rel 3.0	Rel 3.0	Rel 3.0	Rel 3.0	No
RWSM-SC-4 *tbd*	Rel 3.0	No	No	No	No	No	Rel 3.0	Rel 3.0	Rel 3.0	Rel 3.0	No
Empty slot	Yes	No	No	No	No	No	No	No	No	No	No