IBM Corporation

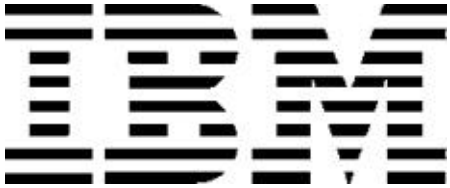
IBM Nways RouteSwitch Network Manager Release Notes

Form Number GC30-3875-02

Version 3.0

Rev. B

June 20, 1997



Nways RouteSwitch Network Manager for Windows 95 and Window NT 4.0 and for Sun Solaris, HPUX, and AIX Version 3.0 Release Notes

TABLE OF CONTENTS

REFERENCES TO WINDOWS AND UNIX SECTIONS 5

TECHNICAL SUPPORT AND SERVICE CONTACTS 5

Electronic Support 5

Voice Support 5

IBM NWASY ROUTESWITCH NETWORK RELEASE NOTES FOR WINDOW 6

1. INTRODUCTION FOR WINDOWS 6

2. FEATURE SET SUPPORTED 6

2.1 Unsupported IBM Nways RouteSwitch Features 6

3. GENERAL INSTRUCTIONS AND NOTES 6

3.1 System Requirements for Microsoft Windows 6

3.2 Installation 7

3.3 Third-Party NMS Compatibility 7

3.4 General Notes 8

3.5 Community Names 8

4. IBM NWAYS ROUTESWITCH NETWORK MANAGER VERSION 2.1 PROBLEM RESOLUTION. 8

5. IBM NWAYS ROUTESWITCH NETWORK MANAGER 3.0 FOR MS WINDOWS KNOWN PROBLEMS 9

5.1 General 9

5.2 Routing 11

5.3 Switch Translations 11

5.4 CSM 11

5.5 ATM 11

5.6 LAN Emulation Client 12

5.7 FSM 12

5.8 Traps 13

5.9 Known SNMP Problems 13

6. IBM NWAYS ROUTESWITCH NETWORK MANAGER MANAGEMENT/IBM NWAYS ROUTESWITCH COMPATIBILITY MATRIX 14

7. APPENDIX A - 8273 SERIES UPLINK RULES 14

IBM NWAYS ROUTESWITCH NETWORK RELEASE NOTES FOR SUN SOLARIS, HP-UX AND AIX 15

1. INTRODUCTION 15

2. TECHNICAL SUPPORT CONTACTS 15

3. FEATURE SET SUPPORTED 15

3.1 Unsupported IBM Nways RouteSwitch Features 15

4. GENERAL INSTRUCTIONS AND NOTES 16

4.1 General Notes 16

4.2 Community Names 16

5. IBM NWAYS ROUTESWITCH NETWORK MANAGER VERSION 2.1 PROBLEM RESOLUTION. 17

6. IBM NWAYS ROUTESWITCH NETWORK MANAGER 3.0 FOR UNIX KNOWN PROBLEMS 17

6.1 General 17

6.2 Routing 20

6.3 Switch Translations **20**

6.4 CSM **20**

6.5 ATM **21**

6.6 LAN Emulation Client **21**

6.7 FSM **21**

6.8 Traps **22**

6.9 Known SNMP Problems **22**

7. SOLARIS INSTRUCTIONS 22

7.1 Solaris System Requirements: **22**

7.2 Solaris Installation **23**

8. HP-UX INSTRUCTIONS 25

8.1 HP-UX System Requirements: **25**

8.2 HP-UX Installation **25**

9. AIX INSTRUCTIONS 27

9.1 AIX System Requirements*: **27**

9.2 AIX Installation Instructions **27**

10. IBM NWAYS ROUTESWITCH NETWORK MANAGER/IBM NWAYS ROUTESWITCH COMPATIBILITY MATRIX 29

11. APPENDIX A - 8273 SERIES UPLINK RULES 30

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 IBM Nwasy RouteSwitch Network Release Notes for Window on *page 6*.
- See IBM Nways RouteSwitch Network *Release* Notes for Sun Solaris, HP-UX and AIX on *page 15* for UNIX operating system information..

Technical Support and Service Contacts

This section provides contacts for help if you have questions about the IBM RouteSwitch products or if a RouteSwitch product is not working correctly. It also explains how to access the IBM electronic sites to obtain the latest versions of microcode and release notes.

Electronic Support

This section explains how to access the IBM electronic site to obtain the latest version of microcode, drivers, and software by using the Internet World Wide Web, FTP, or the IBM BBS.

- **http://www.networking.ibm.com/** - This is the IBM Networking home page. From here, you can access product announcements, publications, and other information regarding hardware and software updates, and a technical support information database. The direct path to the support area is: **http://networking.ibm.com/nes/neshome.html/.**
- FTP: lansupport.raleigh.ibm.com\
- IBM Bulletin Board System: Using a modem you can access the IBM BBS to obtain the latest versions of software. Set your modem and communications software to 8 data bits, no parity, and 1 stop bit. Dial one of the following numbers:
    - United States: (919) 517-0001
    - Toronto: (905) 316-4255
    - Toronto: (416) 956-7877
    - Vancouver: (604) 664-6464
    - Montreal: (514) 938-3022

Voice Support

IBM Network Hardware support: **1-800-772-2227**. Follow the menu prompts for Network Hardware.

IBM Nwasy RouteSwitch Network Release Notes for Window

Revision History

Release	Revision	Date	Description of Changes
3.0	A	3/24/97	Initial Release for Windows only.
3.0	B	5/7/97	GA

1. Introduction for Windows

These Release Notes cover the basic feature set supported for IBM Nways RouteSwitch Network Manager Version 3.0 for Windows running with IBM Nways RouteSwitch Version 3.0.2. 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.

References to the User's Guide refer to the IBM Nways RouteSwitch Network Manager Switch Management Software User Manual. Additional information regarding the IBM Nways RouteSwitch can be found in the IBM Nways RouteSwitch User's Guide.

IBM Nways RouteSwitch Network Manager 3.0 for Windows runs on the following platforms:

- Microsoft Windows (Windows 95 and NT) standalone mode
- Microsoft Windows (Windows 95 and NT) with HP OpenView Version 7.2, C.02.14 and D.00.01.

2. Feature Set Supported

IBM Nways RouteSwitch Network Manager for Windows Version 3.0 supports the features of IBM Nways RouteSwitch Version 3.0 as listed in the User's Guide.

2.1 Unsupported IBM Nways RouteSwitch Features

IBM Nways RouteSwitch Network Manager 3.0 for Windows does not support the following features of IBM Nways RouteSwitch 3.0:

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

3. General Instructions and Notes

3.1 System Requirements for Microsoft Windows

The minimum system requirements to operate this product are:

- Pentium 100 MHz or faster
- 32MB of RAM (64MB is recommended)
- VGA color monitor (SVGA recommended) at 800 X resolution (or higher)
- At least 100MB of free disk space
- Network Interface Card (NIC)
- 1.44 MB diskette drive

- Microsoft+ Windows-compatible mouse
- Windows 95 or NT 4.0

3.2 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 IBM Nways RouteSwitch 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.

3.3 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
"8273 Port"	1.3.6.1.4.1.800.3.1.1.7	0x6330	Router	0
"MSS Server"	1.3.6.1.4.1.2.6.118.2	0x45da	Router	0

   Note that in order for the OmniMSS (MSS Server) to be recognized, HP OpenView for Windows Version D.00.01 or later must be installed.
2. To make HP OpenView for Windows Version 7.2, C.02.17 or D.00.01 compatible with IBM Nways RouteSwitch 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. This may negate the simultaneous running of HP OpenView's NetMetrix product with IBM Nways RouteSwitch Network Manager (PR 4208).
3. To load MIB files for Browsing, it is necessary to observe certain dependencies: Load RFC1213 first, then IBM.mib and the other IBM MIBs.
4. The only IBM Trap MIB that can be browsed is IBM-trapc.mib. There are several other IBM 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 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 IBM Nways RouteSwitch 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 IBM Nways RouteSwitch Network Manager (360 seconds), IBM Nways RouteSwitch 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)

3.4 General Notes

1. These Release Notes cover IBM Nways RouteSwitch Network Manager (NRSM) Version 3.0 for Windows managing IBM Nways RouteSwitch Version 3.0 and IBM 8276 Series Version 1.0.2.
2. IBM Nways RouteSwitch Network Manager for Windows Version 3.0 must be used with IBM Nways RouteSwitch Version 3.0 for full compatibility.
3. The terms IBM Nways RouteSwitch 1.2 (or earlier) and IBM Nways RouteSwitch Network Manager all refer to this product. (PR 2372)
4. The term VLAN, as used in IBM Nways RouteSwitch Network Manager, actually refers to IBM Nways RouteSwitch Groups. IBM Nways RouteTracker Manager VLAN access is accomplished through the IBM Nways RouteSwitch IBM Nways RouteTracker Manager GUI or the UI (PR 4446).
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. It is possible to add a Group with the same number as an existing Group. The existing one is overwritten.(PR 525)
10. Device names are not saved across installations. If you have an FCS release of IBM Nways RouteSwitch Network Manager V3.0 and wish to save your device names, backup the switch.ini file and restore it after installation.
11. The on-line Help file is not implemented. (PRs 558, 6880).
12. SVCs are not supported in V3.0 IBM Nways RouteSwitch Network Manager – use the UI.

3.5 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)

4. IBM Nways RouteSwitch Network Manager Version 2.1 Problem Resolution.

The IBM Nways RouteSwitch Versions 2.1 known problems have been fixed in this release.

- Static IP Routes are not supported for SNMP. (PR 436, 684)
- 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.) (PR 1195)
- Port Administration Admin State = Delete is ignored. (PR 1334)
- Occasionally, the ATM Service Table will get corrupted and will display an infinite number of table entries. (PR 1633)
- ATM SVC Port Address requires a 40-character address for an ILMI 12-character address. (PR 1729)
- Add VLAN Disable State is ignored. (PR 1734)
- The Port Administration Switch Timer value will only be set to the value range accepted by the Switch - 1-60,000, even though IBM Nways RouteSwitch Network Manager will allow values up to 65,535. (PR 1939, 2034, 2112)
- It is possible to create a duplicate LANE Service from IBM Nways RouteSwitch Network Manager by modifying a LEC record to have a duplicate LAN name with one already in use. (PR 2361)
- 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. (PR 2619)
- 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. (PR 2771)
- The LANE ARP-Cache table shows false for the ARP Remote column, when UI *vlat* shows true. (PR 2673)
    - MIB object testInsertFunc returns no value on snmp query. (PR 3123)
    - MIB Object dot5ChipSets returns no value to snmp query. (PR 3124)
    - Snmp query on dot1dSr returns no value. (PR 3128)
    - dot1dTpAgingTime has error response. (PR 3130)
    - Series traps not supported in OpenView integration. (PR 4569)
    - ATM PTOP PVC Bridging Service Encaps type displayed incorrectly in Modify Service. (PR 4835)
    - LED's on FESM-II on second 8273 daughter card display incorrectly. (PR 4844)
    - ASM-E3 LED displays do not match production board. (PR 4848)
    - ASM-E3 on 9-slot displays green active LED incorrectly. (PR 4849)
    - When an FDDI single card and a multi card are in the same 8273 chassis, they do not function correctly in IBM Nways RouteSwitch Network Manager. (PR 4918, 4916, 4917)
    - combination ATM-0C3 and ATM-DS3 do not function properly. (PR 5058)

5. IBM Nways RouteSwitch Network Manager 3.0 for MS Windows Known Problems

The problems listed here and in Appendix A cover all problems known at the time of the release of this document that apply specifically to IBM Nways RouteSwitch Network Manager Version 3.0 for Microsoft Windows running with IBM Nways RouteSwitch Version 3.0.2.

5.1 General

Problem Report 374
Static Bridge Addresses are not supported in the IBM Nways RouteSwitch SNMP (will not function in IBM Nways RouteSwitch Network Manager).

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

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: 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 IBM Nways RouteSwitch 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.

Problem Report 1871

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

Work-around: Close the Device window and reopen the device.

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 4313

Because Start/stop times for Ethernet Port Mirroring are not supported in firmware, they have been removed from IBM Nways RouteSwitch Network Manager functionality.

Work-around: None.

Problem Report 4669

The MPM configuration file (mpm.cfg) in flash sometimes shows up in the Flash File System Table as “No Data”.

Work-around: None.

Problem Report 6481

If an ESM100 Full Duplex cable is disconnected, the FD LED displayed will become blank and the HD LED will become green. The HD LED should be displayed as blank as well (indicating no connection).

Work-around: None.

Problem Report 6667, 6880

X-LANE Services (VLAN Clusters) are not supported in 3.0 of IBM Nways RouteSwitch Network Manager.

Work-around: Use the UI.

Problem Report 6811

When entering the device name in the Device Open dialog, use of spaces causes the function to fail.

Work-around: Do not use spaces in the device name.

Problem Report 7011

Wide chassis for 5 and 9-slot IBM Nways RouteSwitches appear as original, narrow chassis for this version of IBM Nways RouteSwitch Network Manager.

Work-around: None - Informational.

Problem Report 7150

The virtual port properties dialog will allow the user to select any encapsulation type for any port type. The switch will not set invalid encapsulation type, but IBM Nways RouteTracker Manager will display that type until the next update.

Work-around: Do not select an illegal encapsulation type for that port type.

5.2 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 512
The IP Route Hop Count is not displayed in IBM Nways RouteSwitch Network Manager.

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

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

Work-around: This is noted for SNMP access other than IBM Nways RouteSwitch Network Manager - IBM Nways RouteSwitch 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 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.

5.3 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.

5.4 CSM

Problem Report 6550
The VC tables do not show multicast children configured on a connection.

Work-around: None - Informational

Problem Report 6795
CSM ports are not displayed in the Port Browser.

Work-around: None – Informational (cell ports are not supported by Port Browser).

5.5 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 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 6836
Manual override for spanning tree configuration (IEEE 802.1 vs. IBM) has not been provided for individual ATM or WSm ports on the Port Configuration dialogs; however manual override for bridging services can be changed using the modify button on the Spanning Tree Port Table.

Work-around: None – use UI.

Problem Report 6894
When DS3/E3 ASM ports are active, no green LEDs appear; amber LEDs indicate a non-operational state.

Work-around: None – Informational (works as designed).

5.6 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 IBM Nways RouteSwitch 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 IBM Nways RouteSwitch 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.

5.7 FSM

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

Work-around: Must check UI.

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.

Problem Report 745

The following FDDI MIB objects cannot be set:

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

Work-around: None.

5.8 Traps

Problem Report 1149

Port Link Up/Down Traps may not always appear.

Work-around: None

5.9 Known SNMP Problems

Problem Report 4068

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

Work-around: None

6. IBM Nways RouteSwitch Network Manager Management/IBM Nways RouteSwitch Compatibility Matrix

The following matrices shows the compatibility between the revision releases of the IBM Nways RouteSwitch Network Manager and the Software Releases of the IBM Nways 8274 LAN RouteSwtich and the IBM Nways 8273 Ethernet RouteSwitch compatibility.

	Software Release						
Product	2.0.3	2.0.4	2.0.5	2.1.1	2.1.2	2.1.3	3.0
IBM Nways RouteSwitch 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	x
Rev. 3.0						*Yes	x

*Yes. Using Revision 3.0 of IBM Nways RouteSwitch Network Manager with IBM Nways RouteSwitch software release 2.1 will function, however, it is preferable to use revision 3.0 of IBM Nways RouteSwitch Network Manager with IBM Nways RouteSwitch software 3.0.2.

7. APPENDIX A - 8273 Series Uplink Rules

8273 Series Uplink Installation Rules

Most of the 8273 Series Uplink Installation Rules that were required with previous versions of IBM Nways RouteSwitch Network Manager are no longer required. With the release of V3.0 IBM Nways RouteSwitch Network Manager running in tandem with V3.0.1 (or later) IBM Nways RouteSwitch software, all combinations of ASM, ESM100, FSM and WSM daughter cards should be recognized. However, if one of the uplink slots is empty, it must be the one on the right as you are facing the back of the 8273 Series (PR 7019).

IBM Nways RouteSwitch Network Release Notes for Sun Solaris, HP-UX and AIX

Revision History

Release	Revision	Date	Description of Changes
3.0	A	5/6/97	Initial Release for Solaris, HP-UX and AIX platforms only.

1. Introduction

These Release Notes cover the basic feature set supported for IBM Nways RouteSwitch Network Manager Version 3.0 for Unix running with IBM Nways RouteSwitch Version 3.0.2. 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.

References to the User's Guide refer to the IBM Nways RouteSwitch Network Manager Switch Management Software User Manual. Additional information regarding the IBM Nways RouteSwitch can be found in the IBM Nways RouteSwitch User's Guide.

IBM Nways RouteSwitch Network Manager 3.0 for Unix has been tested on the following platforms; it should also run correctly on later versions for which backward compatibility has been claimed:

- Solaris 2.5 workstation
- HP-UX 9.05 or 10.01 workstation
- RS6000 running workstation AIX 3.2.5 or 4.1

See also: Section 7.

2. Technical Support Contacts

IBM Technical Support can be reached at **1-800-772-2227.** See Technical Support and Service Contacts on page 5 for more information.

3. Feature Set Supported

IBM Nways RouteSwitch Network Manager for Unix Version 3.0 supports the features of IBM Nways RouteSwitch Version 3.0.2 as listed in the User's Guide.

3.1 Unsupported IBM Nways RouteSwitch Features

IBM Nways RouteSwitch Network Manager 3.0 for Unix does not support the following features of IBM Nways RouteSwitch 3.0.2:

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

4. General Instructions and Notes

4.1 General Notes

1. These Release Notes cover IBM Nways RouteSwitch Network Manager (NRS) Version 3.0 for Unix managing IBM IBM Nways RouteSwitch Version 3.0.2 and IBM 8276 Series Version 1.0.2.
2. IBM Nways RouteSwitch Network Manager for Unix Version 3.0 must be used with IBM Nways RouteSwitch Version 3.0.2 for full compatibility.
3. The term IBM Nways RouteSwitch Network Manager 1.2 (or earlier) refers to this product. (PR 2372)
4. The term VLAN, as used in IBM Nways RouteSwitch Network Manager, actually refers to IBM Nways RouteSwitch Groups. IBM Nways RouteTracker Manager VLAN access is accomplished through the IBM Nways RouteTracker Manager GUI or the UI (PR 4446).
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. 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)
7. 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)
8. 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)
9. It is possible to add a Group with the same number as an existing Group. The existing one is overwritten.(PR 525)
10. 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)
11. Device names are not saved across installations. If you have an FCS release of IBM Nways RouteSwitch Network Manager V3.0 and wish to save your device names, backup the switch.ini file and restore it after installation.
12. Earlier versions of IBM Nways RouteSwitch Network Manager for UNIX platforms should be removed before installation of V3.0. If they are not, core dumps may occur (PR 7020).
13. The on-line Help file is not implemented. (PRs 558, 6880).
14. SVCs are not supported in V3.0 IBM Nways RouteSwitch Network Manager– use the UI (PR 6551)

4.2 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 IBM Nways RouteSwitch, no error message will appear on a Get or Set attempt. It will time-out. (PR 724)

5. IBM Nways RouteSwitch Network Manager Version 2.1 Problem Resolution.

The IBM Nways RouteSwitch Network Manager Versions 2.1 known problems have been fixed in this release.

- Static IP Routes are not supported for SNMP. (PR 436, 684)
- 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.) (PR 1195)
- Port Administration Admin State = Delete is ignored. (PR 1334)
- Occasionally, the ATM Service Table will get corrupted and will display an infinite number of table entries. (PR 1633)
- ATM SVC Port Address requires a 40-character address for an ILMI 12-character address. (PR 1729)
- Add VLAN Disable State is ignored. (PR 1734)
- The Port Administration Switch Timer value will only be set to the value range accepted by the Switch - 1-60,000, even though IBM Nways RouteSwitch Network Manager will allow values up to 65,535. (PR 1939, 2034, 2112)
- It is possible to create a duplicate LANE Service from IBM Nways RouteSwitch Network Manager by modifying a LEC record to have a duplicate LAN name with one already in use. (PR 2361)
- 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. (PR 2619)
- 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. (PR 2771)
- The LANE ARP-Cache table shows false for the ARP Remote column, when UI *vlat* shows true. (PR 2673)
- MIB object testInsertFunc returns no value on snmp query. (PR 3123)
- MIB Object dot5ChipSets returns no value to snmp query. (PR 3124)
- Snmp query on dot1dSr returns no value. (PR 3128)
- dot1dTpAgingTime has error response. (PR 3130)
- 8276 Series traps not supported in OpenView integration. (PR 4569)
- ATM PTOP PVC Bridging Service Encaps type displayed incorrectly in Modify Service. (PR 4835)
- ASM-E3 LED displays do not match production board. (PR 4848)
- ASM-E3 on 9-slot displays green active LED incorrectly. (PR 4849)
- When an FDDI single card and a multi card are in the same 8273 Series chassis, they do not function correctly in IBM Nways RouteSwitch Network Manager. (PR 4918, 4916, 4917)
- 8273 Series combination ATM-0C3 and ATM-DS3 do not function properly. (PR 5058)

6. IBM Nways RouteSwitch Network Manager 3.0 for Unix Known Problems

The problems listed here and in Appendix A cover all problems known at the time of the release of this document that apply specifically to IBM Nways RouteSwitch Network Manager Version 3.0 for Microsoft Windows running with IBM Nways RouteSwitch Version 3.0.2.

6.1 General

Problem Report 374
Static Bridge Addresses are not supported in the IBM Nways RouteSwitch SNMP (will not function in IBM Nways

RouteSwitch Network Manager).

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

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 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 IBM Nways RouteSwitch 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 1871
If a different module type is inserted into an IBM Nways RouteSwitch, or a module is removed, IBM Nways RouteSwitch 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 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 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 4313
Start/stop times are not functional in the port mirroring dialog.

Work-around: Mirroring is either enabled or disabled.

Problem Report 4669
The MPM configuration file (mpm.cfg) in flash sometimes shows up in the Flash File System Table as “No Data”.

Work-around: None.

Problem Report 4317
Trap Control via NRS is dysfunctional on the 8276 Series.

Work-around: None required.

Problem Report 6481

If an ESM100 Full Duplex cable is disconnected, the FD LED displayed will become blank and the HD LED will become green. The HD LED should be displayed as blank as well (indicating no connection).

Work-around: None.

Problem Report 6667, 6880

X-LANE Services (VLAN Clusters) are not supported in 3.0 of IBM Nways RouteSwitch Network Manager.

Work-around: Use the UI.

Problem Report 6811

When entering the device name in the Device Open dialog, use of spaces causes the function to fail.

Work-around: Do not use spaces in the device name.

Problem Report 7011

Wide chassis for 5 and 9-slot IBM Nways RouteSwitch appear as original, narrow chassis for this version of IBM Nways RouteSwitch Network Manager.

Work-around: None - Informational.

6.2 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 512

The IP Route Hop Count is not displayed in IBM Nways RouteSwitch Network Manager.

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

Problem Report 2765

Sending ATM1483 as vIPRouterFramingType disables the IP Route.

Work-around: This is noted for SNMP access other than IBM Nways RouteSwitch Network Manager- IBM Nways RouteSwitch 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 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.

6.3 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.

6.4 CSM

Problem Report 6550

The VC tables do not show multicast children configured on a connection.

Work-around: None - Informational

Problem Report 6795
CSM ports are not displayed in the Port Browser.

Work-around: None – Informational (cell ports are not supported by Port Browser).

6.5 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 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 6836
Manual override for spanning tree configuration (IEEE 802.1 vs. IBM) has not been provided for individual ATM or WSm ports on the Port Configuration dialogs; however manual override for bridging services can be changed using the modify button on the Spanning Tree Port Table.

Work-around: None – use UI.

Problem Report 6894
When DS3/E3 ASM ports are active, no green LEDs appear; amber LEDs indicate a non-operational state.

Work-around: None – Informational (works as designed).

6.6 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 IBM Nways RouteSwitch Network Manager. When they are in use in a LANE Service, they may also be edited via "*mas*" in the UI.

6.7 FSM

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

Work-around: Must check UI.

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.

6.8 Traps

Problem Report 1149
Port Link Up/Down Traps may not always appear.
Work-around: None

6.9 Known SNMP Problems

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

7. Solaris Instructions

The IBM Nways 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 2.5 workstation (64MB minimum)
- X11R5/Motif 1.2
- HP OpenView Network Node Manager 4.1(optional)
- SunNet Manager 2.2.3 (optional)

- Cabletron Spectrum Version 3.0 rel 1 (optional)

7.2 Solaris Installation

Note: If you move or upgrade the IBM Nways RouteSwitch 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 Nways 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/dt/lib: /usr/openwin/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 want to install the IBM Nways RouteSwitch 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 IBM Nways RouteSwitch 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.

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

10. 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 Nways RouteSwitch Network Manager from local workstation:
    switchmg

2. Standalone Nways 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 IBM Nways RouteSwitch 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 Nways 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 10.01 workstation, 700 or 9000 series
- HP-UX 9.x or 10.01 workstation, 700 or 9000 series (64MB minimum)
- X11R5/Motif 1.2
- HP OpenView Network Node Manager 4.1 (optional)

8.2 HP-UX Installation

1. Create a directory to hold Nways 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

4. In your .cshrc file, add $SWITCHMG_HOME to your library path,
SHLIB_PATH, e.g., setenv SHLIB_PATH $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 IBM Nways RouteSwitch 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
```

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

Execute instructions:

1. Standalone Nways RouteSwitch Network Manager from local workstation:

```
switchmg
```

2. Standalone Nways 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 Nways 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 Power PC running AIX 3.2.5 or 4.1 (64MB minimum)
- X11R5/Motif 1.2
- NetView for AIX Version 4.x (optional)

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

9.2 AIX Installation Instructions

1. Create a directory to hold Nways 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_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

4. In your .cshrc file, add $SWITCHMG_HOME to your library path, LIBPATH, e.g.,
   setenv LIBPATH /lib:$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 IBM Nways RouteSwitch 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

8. Before using IBM Nways RouteSwitch Network Manager with NetView or Cabletron Spectrum, you must run

IBM Nways RouteSwitch Network Manager in a standalone mode to verify system operation.

Execute instructions:

1. Standalone Nways RouteSwitch Network Manager from local workstation:
    switchmg

2. Standalone Nways 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. IBM Nways RouteSwitch Network Manager/IBM Nways RouteSwitch Compatibility Matrix

The following matrices shows the compatibility between the Revision Releases of the IBM Nways RouteSwitch Network Manager and the Software Releases of the IBM Nways 8274 LAN RouteSwitch and the IBM Nways 8273 Ethernet series compatibility.

	Software Release						
Product	2.0.3	2.0.4	2.0.5	2.1.1	2.1.2	2.1.3	3.0
IBM Nways RouteSwitch 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	x
Rev. 3.0						*Yes	x

*Yes. Using Revision 3.0 of IBM Nways RouteSwitch Network Manager with IBM Nways RouteSwitch software release 2.1 will function, however, it is preferable to use revision 3.0 of IBM Nways RouteSwitch Network Manager with IBM Nways RouteSwitch software 3.0.2.

11. APPENDIX A - 8273 Series Uplink Rules

8273 Series Uplink Installation Rules

Most of the 8273 Series Uplink Installation Rules that were required with previous versions of IBM Nways RouteSwitch Network Manager are no longer required. With the release of V3.0 IBM Nways RouteSwitch Network Manager running in tandem with V3.0.1 (or later) IBM Nways RouteSwitch software, all combinations of ASM, ESM100, FSM and WSM daughter cards should be recognized. However, if one or the uplink slots is empty, it must be the one on the right as you are facing the back of the 8273 Series (PR 7019).