



NMC-RX Element Management System Release Notes

Release 5.1.0

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NMC-RX Release Notes

These *Release Notes* are for NMC-RX Element Management System Release 5.1.0. Unless specified otherwise, information in these *Release Notes* pertains to both the Windows and Sun Solaris versions of the release 5.1.0 software.



Note: *If the information in these Release Notes differs from the information found in the product documentation, follow these Release Notes.*

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Overview

The NMC-RX application allows you to manage, configure, and monitor the E-series routers in your network and to communicate with them to obtain a complete and accurate picture of the network services you provide to your customers.

Before You Start

Before you use the NMC-RX application, Juniper Networks suggests that you read these *Release Notes* in their entirety, especially the sections *Known Problems*, *Known Limitations*, and *Fixed Problems*.

About Release 5.1.0 Documentation

With the NMC-RX application, you receive the following documentation:

- Online Help (integral to the NMC-RX application)
- A PDF version of the *NMC-RX User Guide* (Vol. 1 and Vol. 2)
- A PDF version of the *NMC-RX Release Notes* (*this document*)

Contacting Customer Service

For technical support, contact Juniper Networks at support@juniper.net, or at 1-888-314-JTAC (within the United States) or 408-745-9500 (from outside the United States).

Updating the NMC-RX License Key

If you need to update your license key after you install the NMC-RX application, choose NMC-RX Licensing from the Help menu. In the NMC-RX Licensing Information dialog box, you can change your license.

New Features and Enhancements

NMC-RX Release 5.1.0 includes new features and enhancements (defined in the following sections). These features have been added to the NMC-RX application since Release 5.0.1.

This release is compatible with ERX Releases 4.0.x, 4.1.x, 5.0.x, and 5.1.x.

ATM OAM F4 Circuits

ATM interfaces support OAM standards (operations, administration, and management). Using the NMC-RX application, you can create two types of OAM F4 circuits:

- Segment—the end of a connection segment
- End-to-end—the end of a VC/VP connection where the ATM cells are terminated

You can ping from an ATM circuit or OAM F4 circuit by using the ATM Ping command.

Local IP Address Pools

You can configure the E-series router to provide an IP address during the authentication process. These IP addresses must be configured in a local IP address pool. Each address pool must be associated with a virtual router before it can be used.

Each local address pool is named and may contain multiple ranges of sequentially ordered IP addresses. Event notification for local IP address pools is configurable and information about address pool utilization can be viewed.

Installation Upgrade

Depending on the version of software currently installed, you can perform an installation upgrade rather than installing the complete NMC-RX application. If you have a version of the software installed that is listed below, you may upgrade. Releases before 4.1.x are not upgradeable using this feature.

If You Have This Version Installed	You May Upgrade To This Version
4.1.x	5.0.0
4.1.x, 5.0.x	5.1.0

After upgrading, you can revert to a previously installed version of the software, if necessary.

RADIUS User Authentication

RADIUS authentication or local database authentication can be set as the default mode of user login authentication. A list of RADIUS servers can be specified to authenticate user logins; the order in which they are queried can also be set.

User Security

There are now three NMC-RX user privilege categories:

- Security – Allows access to administer application-specific settings, such as inserting/removing members of groups, creating groups and new users, and setting user authentication settings.
- Backup – Allows the ability to save and restore running configurations on managed E-series routers.
- Device Administration – Allows access to device-specific settings and features. You can specify five areas for the device administration category, which are: view, create, configure, delete, and execute.

Installation Information

See *Chapter 2, Installing and Running the NMC-RX Application*, in the *NMC-RX Element Management System User Guide*.

Solaris software patches 108940-50 and 108652-66 are required to install the NMC-RX application on Solaris 2.8. To find the required patches for your system, visit:

- <http://sunsolve.sun.com/pub-cgi/show.pl?target=patches/patch-access>

Known Problems

This section lists the known problems in Release 5.1.0:

- The uninstall program does not remove all registry key items, such as the NMCRX_HOME environment variable. This does not create a problem when you either upgrade or re-install a different version or point release.
- When discovering a large system, the ConfigSync Service consumes a large amount of system memory. Once this memory is used, it is not returned to the system. This memory can only be released by shutting down the ConfigSync Service.
- When statistics are running, if an SNMP error is received on another operation (create for instance), and you do not click the OK button on the error message dialog box within a certain number of seconds, a SNMP timeout error is returned for the SNMP statistics get request. The same result occurs if the SNMP error is on one device, and the statistics polling is occurring on another.

Once you click OK on the error dialog box, everything returns to normal with the next poll.

- When configuring an interface, if you display the Module Config tab (by clicking the Lower Layer button) and then close it (by clicking the X button), all other tabs are closed and the original interface remains locked.

Workaround – Users with Security privileges enabled can right-click the System folder and choose Unlock Device.

- An SNMP error occurs when you try to configure an IP static route and select an NBMA or broadcast IP interface as the next hop. Only IP interfaces with a category of point-to-point can be used as the next hop for an IP static route.

Known Limitations

This section lists the known limitations in Release 5.1.0:

- When you use Bulk Services to create a large number of objects, you should limit the number of objects to a maximum of 9000. Otherwise, you run the risk of running out of memory. To create additional objects, you can exit the NMC-RX application and then restart.
- The NMC-RX application does not currently support Cisco HDLC and Frame Relay interfaces on POS interfaces, but discovery does not display a warning message regarding this limitation.
- Currently, the NMC-RX application allows you to start multiple Polling and ConfigSync Services at the same time. Only the last service started is actually utilized by the application. There will be no disruption of service by starting these additional services; however, it is a waste of resources to do so, and currently no error message is displayed to indicate the displacement of the existing service. You should close all instances and restart.
- When creating a BGP Neighbor, default values for many attributes are explicitly set in SNMP even if the user did not explicitly set these values. This results in unwanted configuration parameters being added to the configuration.

Recommendation: Remove these unwanted parameters using the CLI.

- When the Config Sync service and the Polling service are started before the database has completely initialized, an error occurs.

Recommendation: Wait until the database is initialized before launching other NMC-RX components. If an error has occurred, close all NMC-RX components (including the database) and start over.

- If you edit the ILMI settings (VPI and VCI) of an ATM interface while the ILMI Settings Admin Status is set to “Up”, an SNMP error occurs.

Workaround – Before changing VPI and VCI settings, change the ILMI Settings Admin Status to “Down” and click Save. Next, update the VPI and VCI settings and click Save. Then, change the ILMI Settings Admin Status back to “Up” and click Save.

- If a value outside the range of 0-65535 is set for the poll frequency on an ATM interface, an SNMP error may occur.

Troubleshooting

If any of the following conditions appear, try the suggested workaround(s).

- The default port for Java RMI (Remote Method Invocation) is 1099. If this port is in use, Polling Service and ConfigSync Service do not run correctly and an error message appears.

Workaround – Go to the NMC-RX Resource Configurator and click the Polling Service tab. Change the RMI Registry Port from 1099 to another number (for example, try 1300). Now, click the ConfigSync Service tab and change the RMI Registry Port from 1099.

- There are two causes that prevent WebHelp from starting on Solaris:
 - > You have not defined the Netscape path in the PATH variable. This results in an error message being displayed in the NMC-RX window.

Workaround – Define the Netscape path.

- > You may not have permission to connect to the X server. This prevents Netscape from being started. When this happens, no error message is generated and you may think that the online help does not work properly.

Workaround – Enter the command **xhost < hostname >** in a term window. Doing this disables the X server security and allows the Netscape browser to be displayed.

- If your desktop shortcuts do not display the correct icon, use the following workaround.

Workaround

- a** Right click your desktop, and choose Properties.
- b** In the Display Properties control panel, select the Appearance tab.
- c** Under the Item option, select Icon and change the icon's size from 32 to 31.
- d** Click Apply, and click OK.
- e** Repeat steps a–d, and return the icon's size to 32 (step c).

Fixed Problems

The following problems reported in Releases 5.0.x, have been fixed:

- The Uni version value in the NMC-RX application may not be in sync with the value displayed in the CLI.
- An invalid error message is displayed when communication with the ERX router is down and a View or Config command is performed on an FE-8 port.
- IP local address pools cannot be created on the ERX router.
- Device update or discovery does not complete properly if the user clicks in the Device Workshop instance explorer.

