

Chapter 14

Configuring NMC-RX Services Using the Resource Configurator

This chapter describes how to use the NMC-RX Resource Configurator to configure NMC-RX services.

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Overview

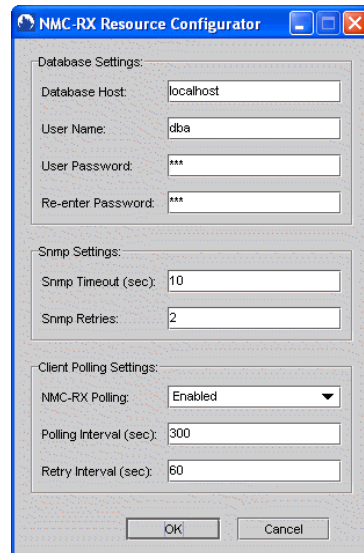
The Resource Configurator is a standalone application that allows configuration of the following resources:

- NMC-RX database—Provides a main storage area for management of both group and device configurations.
- SNMP—Enables you to configure basic Simple Network Management Protocol (SNMP) parameters.
- Polling Service—Collects status information about managed devices through SNMP and redistributes that information to network management clients.

Running the Resource Configurator

1. Double-click the NMC-RX Resources desktop icon, or from the NMC-RX Tools menu, click NMC-RX Settings.

The NMC-RX Resource Configurator dialog box opens.



2. Set the parameters (see the following sections for details).
3. Click OK when you are done.

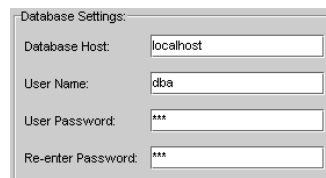
The settings are saved, and the Resource Configurator dialog box closes.

Configuring the NMC-RX Database

The NMC-RX application provides two databases: the Demo database, which includes some configurations of groups and devices that you may use to get started, and a second database with no groups or devices configured.

To change the location of the NMC-RX database:

1. In the NMC-RX Resource Configurator dialog box, set the database parameters (Table 73).



Database Settings:

Database Host: localhost

User Name: dba

User Password: ***

Re-enter Password: ***

Table 73: Database Parameters

| Parameter | Default | Range/Options | Description |
|-------------------|-----------|--|---|
| Database Host | localhost | Name or IP address of the system on which the database resides | System on which the database resides. NOTE: If you use a name for the database host, a naming service must be running on the network. We recommend using an IP address. |
| User Name | dba | 32-character alphanumeric string | Username to access the database. |
| User Password | sql | 32-character alphanumeric string | Password to access the database. |
| Re-enter Password | sql | 32-character alphanumeric string | Validation of User Password. |

2. When you are done, click OK. Otherwise, go to *Configuring SNMP* on page 230 to set the SNMP parameters.

Running the Database

Before running the NMC-RX application or the Polling or Config Sync Services, you must run the NMC-RX database either locally or on another system.

To run the NMC-RX database, double-click the database icon. (You can choose either NMC-RX Database or NMC-RX DemoDB.)

If you are running the database locally, the Database icon appears in the desktop tray. This is the graphical indication that the database is available to the NMC-RX application. The Polling and ConfigSync Services and the NMC-RX application can now connect with the database.

If you are running the database on another machine, you do not receive any indication that it is running.



NOTE: Be sure to wait until the database is initialized before starting other NMC-RX components. If an error occurs, close all NMC-RX components (including the database) and start over.

The database does not start automatically when you restart your system. Also, when you exit the Polling Service, the Config Sync Services, or the NMC-RX application itself, you do not need to stop the database from running.

Configuring SNMP

The Resource Configurator lets you configure basic SNMP parameters.

To configure SNMP:

1. In the NMC-RX Resource Configurator dialog box, set the SNMP parameters (Table 74).



NOTE: If you are a Config Sync Services user or a Polling Service user, the SNMP settings are updated for all services.

Table 74: SNMP Parameters

| Parameter | Default | Range/Options | Description |
|--------------|---------|---------------|--|
| SNMP Timeout | 10 | 1–2147483647 | Amount of time, in seconds, that an SNMP request is made and that the request is considered unresponsive |
| SNMP Retries | 2 | 0–2147483647 | Number of times that an SNMP request is sent and timed out before the request is considered failed |

- When you are done, click OK. Otherwise, see the next section to set the Polling Service parameters.

Configuring the Polling Service

The Polling Service is an application that collects status information about managed devices by means of SNMP and redistributes that information to network management clients. This service eliminates the need for every client to poll devices individually for status and reduces the SNMP load placed on managed devices. The status must be updated frequently to maintain an accurate view of the device. The Polling Service also maintains a log detailing client connections and polling problems that arise.

You can access the Polling Service parameters from the NMC-RX Resource Configurator dialog box. For more information, see *Configuring the Settings in the NMC-RX Resource Configurator Dialog Box* on page 231.

You can access additional parameters from the Polling Service tab. The Polling Service tab appears when you choose NMC-RX Application Settings from the Configuration menu in either the Network Workshop or the Device Workshop. For more information, see *Configuring the Settings in the Polling Service Tab* on page 232.

Configuring the Settings in the NMC-RX Resource Configurator Dialog Box

To configure the Polling Service:

- In the NMC-RX Resource Configurator dialog box, set the Client Polling parameters (Table 75).

Client Polling Settings:

NMC-RX Polling: Enabled

Polling Interval (sec): 300

Retry Interval (sec): 60

Table 75: Client Polling Parameters

| Parameter | Default | Range/Options | Description |
|------------------------|--------------------|-------------------|---|
| NMC-RX Polling | Enabled | Enabled, Disabled | Enable or disable the Polling Service |
| Polling Interval (sec) | 300 (5 minutes) | 60–2147483 | Amount of time, in seconds, between polls |
| Retry Interval (sec) | 60 (1 minute) | 1–2147483 | Frequency with which the client attempts to contact the Polling Service to get the latest status or to reconnect when the connection is lost. |

- When you are done, click OK.

Configuring the Settings in the Polling Service Tab



NOTE: The Security privilege is required to access the Polling Service tab. For more information, see *NMC-RX User Guide, Vol. 1, Chapter 8, Configuring Security Settings*.

To configure the settings in the Polling Service tab:

1. From either the Network Workshop or the Device Workshop, choose Configuration > NMC-RX Application Settings, and then click the Polling Service tab.

2. Set the parameters (Table 76).

Table 76: Polling Service Parameters

| Parameter | Default | Description |
|----------------------------|---------|--|
| SNMP Settings User Profile | admin | Specifies which user profile to use for SNMP settings. |
| RMI Registry Port | 1099 | Port with which the Polling Service registers. This port is set during installation. |



NOTE: If you change the RMI Registry Port value, a warning dialog box appears prompting you to shut down and restart the Polling Service for the change to take effect.

If you set SNMP settings as a Polling Service user, the settings are used by the Polling Service when communicating by means of SNMP.

3. When you are done, click Save.

Viewing a User Profile

To view a user profile:

1. In the Polling Service tab, select a user profile from the SNMP Settings User Profile field.
2. Click View.

The View User Profile dialog box opens.

For information about configuring a user profile, see *NMC-RX User Guide, Vol. 1, Chapter 8, Configuring Security Settings*.

Getting Status Information

When the Polling Service is running, the system folders and the device and module icons change color to indicate the status of each device. Text labels to the right of the module type denote the status for a slot. See Table 77 and Table 78 for color and text status explanations.

Table 77: Color Status Indicators

| Color | Meaning |
|--------|---|
| Blue | No connection is made between the Polling Service and the device. NOTE: This color is not used for modules. |
| Gray | The Polling Service has not reported any status for the device or module. Also, when polling is not enabled in the NMC-RX application, all device or module icons are gray. NOTE: This color should persist only when an unreachable device is being polled for the first time, in which case it will turn blue after approximately 75 seconds. |
| Green | Device, module, or port is OK. |
| Red | Device, module, or port has failed. |
| Yellow | A warning that something is not right with the device or module. For example, the device has a problem with one or more, but not all, modules, or the modules have not finished booting and initializing. |
| Cyan | A failure that does not affect service; for example, a port in the administrative down state. |

Table 78: Text Status Labels

| Label | Meaning |
|---------|--|
| EMPTY | Slot does not contain a module. |
| Standby | Module is the spare for its redundancy group. |
| Offline | Module is present but currently offline. |
| Update | Module has an operational status of online but was not discovered by the Config Sync Services during the last discovery. Perform an update on this module. |

Table 78: Text Status Labels (continued)

| Label | Meaning |
|------------------------|--|
| Mismatch | Current module is different from the one discovered earlier. Perform an update on this module. |
| Missing | Module that was discovered earlier has been removed. |
| Spared for by <i>N</i> | Module has failed, and module <i>N</i> has taken over. |

Locating the Polling Service Log

When the Polling Service is running, it creates a log file (*pollingServer.log*). This log file is located in the *log* directory of the NMC-RX home directory of the system on which the Polling Service is running.