

Using Templates

9

This chapter discusses using templates to configure managed objects. You can use templates supplied with the NMC-RX application, or create your own templates.

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Overview

The NMC-RX application enables you to set preconfigured values for the non-unique parameters of a particular object type and store these values under a template name.

The application allows you to apply either templates supplied with the application or those you have created for the following objects:

- ATM interfaces
- ATM circuits
- BGP neighbors
- Bulk services
- DS0 bundles

- Frame Relay interfaces
- Frame Relay circuits
- PPP interfaces

If the NMC-RX application provides a template for the object you are creating, that template is applied to the object by default. You can apply a different template during the creation or configuration of the object, which results in the template's settings being applied to the object's non-unique parameters. For existing objects, the template updates the object's current configuration.

The NMC-RX application also allows you to group a suite of object configurations together under the same name, thus creating a *Template Pak*.

Configuration Tasks

You can perform the following tasks when using templates:

- Apply an existing template to an object.
- Preview a template before applying it.
- Create a template.
- Associate a template with a Template Pak.

Applying Templates

When you create an object, if the NMC-RX application has a default template available, that template sets the object's non-unique parameters. You can, of course, replace the application's default template settings with another template.

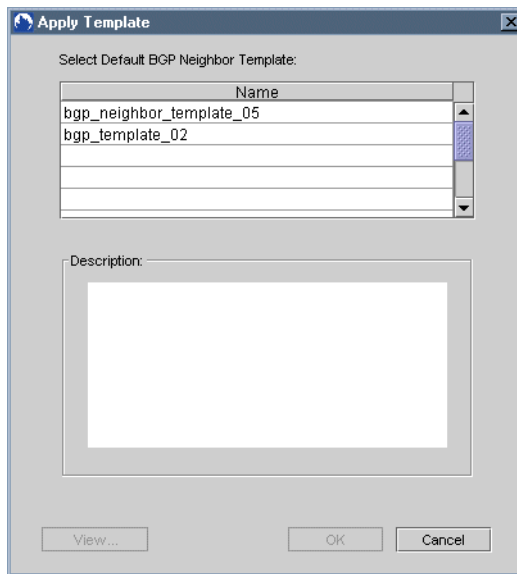
To apply a template:

- 1 In the Instance Explorer, select the object you want to configure.
- 2 Right-click, and click Configure.

If there is a template that is applicable to the type of object that you have selected, the Apply Template and Save As Template buttons become available in the Create dialog box or in the Configuration menu.

- 3 Click Apply Template.

The Apply Template dialog box appears with a list of available templates.



- 4 Select the template that you wish to apply to your object.
 You can view this template before applying it by clicking View. See the next section, *Previewing Templates*.
- 5 Click OK to apply the template.
 The settings from the template appear in your object's configuration. You can customize these settings if you wish.
- 6 To save the settings, you must select Save in the work area.

Previewing Templates

Before saving a new template or applying an existing template to an object, you can preview the template.



Note: When you preview a template, the parameters belonging to the template appear in blue. All other parameters are not part of the template and are not affected when the template is applied.

To preview a template:

- 1 On the Configuration menu, click either Apply Template or Save As Template.
 - The Apply Template dialog box has a View button.
 - The Save As Template dialog box has a Preview button.
- 2 Choose the appropriate action:
 - In the Apply Template dialog box, click the template you want to use from the list, and click View.
 - In the Save As Template dialog box, click Preview.

In either case, the Template Pre-View dialog box displays the template's settings. The template part of this screen contains the settings displayed in blue. In this instance, the settings are for HDLC.

Template ———

The screenshot shows a window titled "Template Pre-View: [Default]". It contains several sections for configuration:

- Location:** Fields for "Physical" and "Logical" locations.
- DSO Bundle Name:** and **DSO Bundle ID:** text input fields.
- HDLC Settings:** A section containing:
 - CRC Checking Enabled
 - Data Inversion
 - CRC Algorithm:** Radio buttons for "16 Bit" (selected) and "32 Bit".
 - MTU:** and **MRU:**
- DSO Bundle Time Slots:** A row of 20 checkboxes labeled 1 through 20.
- DSO Bundle Speed:** Radio buttons for "56 kbps" and "64 kbps" (selected).
- Allocated Bandwidth (kbps):** A text input field.

Creating Templates

This section presents a DS0 bundle example to illustrate how to create a template. Other objects may differ slightly, but the main concepts and procedures are the same.

After you have configured an object, you can save the configuration as a new template for future use. The settings that are saved to the template are for those parameters that are not unique for objects of the same type. For example, the name of a DS0 bundle is a unique parameter, but the bundle's High-Level Data Link Control (HDLC) parameters are not.

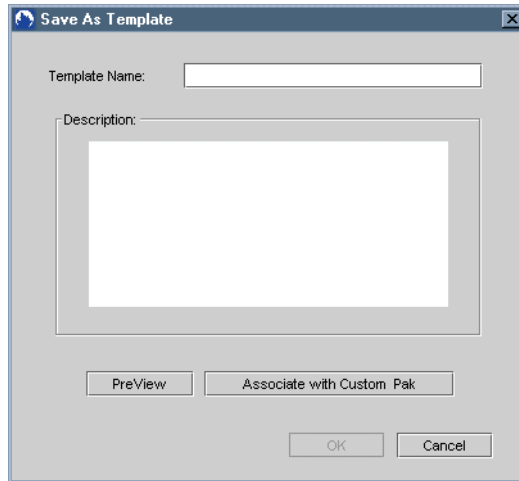
To save an object's configuration as a template:

- 1 Open an object's configuration view (for example, a DS0 Bundle view).

The screenshot shows the 'DS0 Bundle Config' window with the following details:

- Location:** Physical: Module: CT3-3 port, Slot: 5, Port: 0, DSI Channel: 1; Logical: (empty)
- Name:** SERIAL5/0:1/1
- Status:** Operational: Lower Layer Down; Administrative: Up
- Alias:** (empty)
- Ifindex:** 201326657
- HDLC Settings:**
 - CRC Checking Enabled
 - Data Inversion
 - CRC Algorithm:** 16 Bit, 32 Bit
 - MTU:** 1024, **MRU:** 500
- DS0 Bundle Time Slots:** A row of 24 slots. Slots 1 and 2 are green with checkmarks. Slots 22, 23, and 24 are grey with 'X' marks. Slots 3-21 are empty.
- DS0 Bundle Speed:** 56 kbps, 64 kbps
- Allocated Bandwidth (kbps):** 128

- 2 On the Configuration menu, click Save As Template.
The Save As Template dialog box appears.



- 3 Type a name for your new template in Template Name.
- 4 (Optional) Type a description of the template.

A brief description helps to identify the new template's objective and settings.

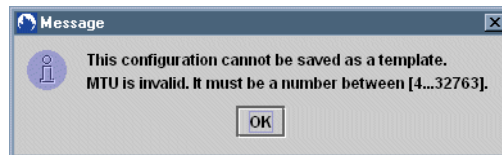
- 5 Click OK.

Your configuration is now saved as a template and can be applied later when you configure objects of the same type. See *Applying Templates* earlier in this chapter.

If you want to associate your new template with a Template Pak, see the next section.



Note: If the object's configuration is invalid, you are not allowed to save it as a template. A message, such as the following, appears.



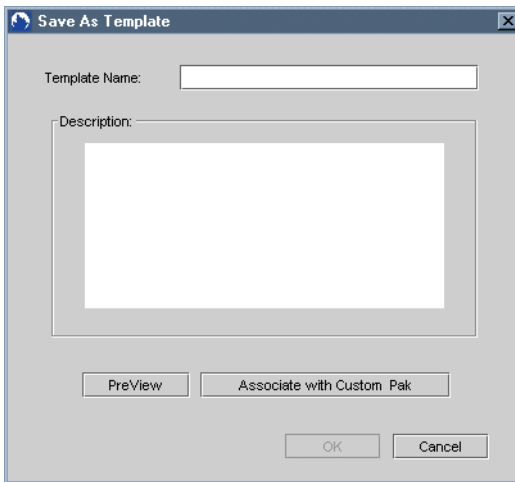
Associating an Object's Configuration with a Template Pak

When you save an object's configuration, you can associate the configuration with a Template Pak. Doing this allows you to group a suite of configurations together under the same template name.

To associate an object with a Template Pak:

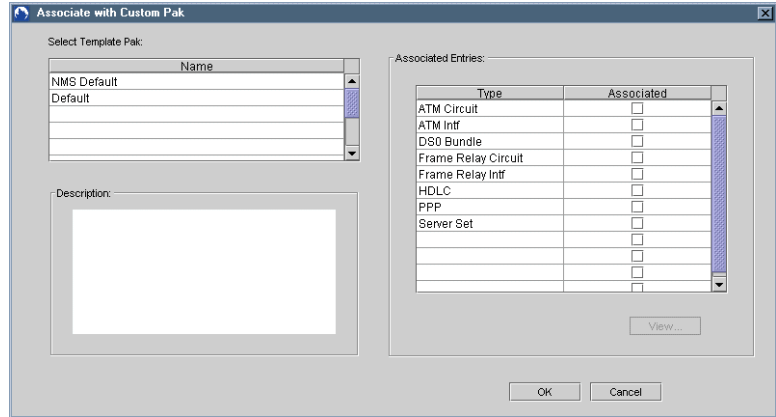
- 1 Open an object's configuration view (for example, a DS0 Bundle configuration view).
- 2 On the Configuration menu, click Save As Template.

The Save As Template dialog box appears.

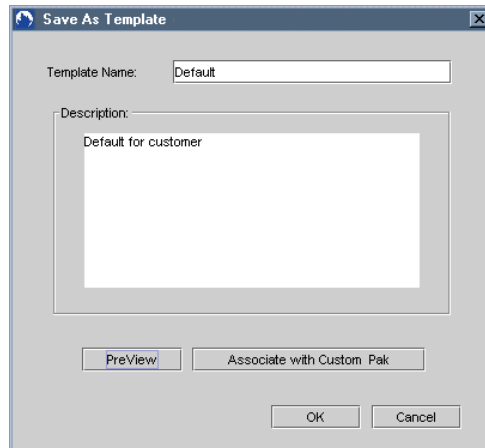


- 3 Click Associate with Custom Pak.

The Associate with Custom Pak dialog box appears with the names of existing Template Paks in the Name list.



- 4 From the Name list, click the Template Pak with which you want to associate the current work area setting. The Associated Entries list displays a list of the objects that you can associate with a Template Pak. The object(s) checked in this list are currently associated with the selected Template Pak.
- 5 Click OK. The work area object settings will be associated with the selected Template Pak. The Save As Template dialog box now has the name of the Template Pak you selected displayed in the Template Name text box.



- 6 Click OK. You can now apply the new Template Pak to future configurations of the objects associated with it.