HP Network Node Manager / Route Analytics Management System Integration Module

Software Version: 5.50

Installation Guide

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Prepare to Install

Before installing the Network Node Manager (NNM) / Route Analytics Management System (RAMS) Integration Module, verify that your system meets the hardware and software requirements and that the prerequisite hardware and software has been set up properly.

The NNM/RAMS Integration Module replaces the OSPF view that is created by the Advanced Routing SPI for NNM Advanced Edition. In its place, you get the RAMS IGP view. This view is similar to the OSPF view, but it offers more information and features.

NNM Advanced Edition Requirements

If you have not already installed Network Node Manager (NNM) Advanced Edition, refer to the *Network Node Manager Quick Start Installation Guide* and *Managing Your Network with NNM* for instructions on how to install and deploy NNM Advanced Edition.

Version

The NNM/RAMS Integration Module requires a compatible version of NNM AE - version 7.5 or greater. To find out which version is installed, run the following command at a command prompt:

UNIX

/opt/OV/bin/ovnnmversion

Windows

<*install_dir*>\bin\ovnnmversion

Configuration

The NNM/RAMS Integration Module requires that NNM's Extended Topology features are enabled and that the Advanced Problem Analyzer (APA) is enabled for your IP environment.

For information on enabling Extended Topology, refer to the *Using Extended Topology* manual. If APA is not already enabled, it will be enabled when you install the NNM/RAMS Integration Module.

Environment Variables

The NNM/RAMS Integration Module requires that NNM environment variables be set. To set these variables, run the following command at a command prompt:

UNIX (`sh` or `ksh`)

. /opt/OV/bin/ov.envvars.sh

UNIX (`csh`)

source /opt/OV/bin/ov.envvars.csh

Windows

<*install_dir*>\bin\ov.envvars.bat

RAMS Appliance Requirements

Before you can install the NNM/RAMS Integration Module, your RAMS appliance must be installed and configured. This includes the following:

- You have purchased (at a minimum) the OSPF Smart Plug-in for Route Analytics Management System (RAMS) product.
- You have installed the associated license on the RAMS appliance.
- You have configured the RAMS appliance to work with the NNM/RAMS Integration Module.

For information on setting up the RAMS appliance, see the *Route Analytics Management System / Traffic Analysis Appliance Setup Guide*.

Supported Operating Systems

The following operating systems are supported:

HP-UX

11.0, 11.11, 11iv2 on PA-RISC, and 11.23 on Itanium

Solaris

8, 9, and 10

Windows

2000, 2003, and XP

Install the NNM/RAMS Integration Module

Installation steps for the UNIX and Windows operating systems are different. This section contains steps for both platforms.

Install on a UNIX Operating System

To install the NNM/RAMS Integration Module on a UNIX operating system, follow these steps:

1. Log on to the NNM management station as root.
2. Verify that the NNM environment variables are sourced. See Environment Variables on page 8 for more information.
3. Stop all NNM processes by running the following command at a command prompt:

   $OV_BIN/ovstop -c
4. The NNM/RAMS Integration Module can be downloaded from the web at the following location:

   http://managementsoftware.hp.com/downloads/other.html#integration

   If you are installing from a CD, mount the CD.
5. Run the `setup` program.

   The installation script verifies that the target system has the correct version of NNM installed. If the correct version is not present, the installation script exits with an error. See Prepare to Install on page 7.
6. When an install screen appears, follow the instructions to install the NNM/RAMS Integration Module.
7. On the Installation Complete screen, you can access the release notes and the installation log file.

   Click `Done` to close the Installation Complete screen.
8. To complete the install, run the following command at a command prompt:

   /opt/OV/bin/setupRAMS.ovpl

If the NNM ovdbcheck process is not running, you will be asked if the script can start the process. This process is required to complete the install.

If an NNM discovery is in progress, the script will not continue. In this case, wait until NNM's discovery is complete, and run the script again.

Install on a Windows Operating System

To install the NNM/RAMS Integration Module on a Windows operating system, follow these steps:

1. Log on to the NNM management station as administrator.
2. Disable any anti-virus software running on the system.
3. Verify that the NNM environment variables are set. See Environment Variables on page 8 for more information.
4. Stop all NNM processes by running the following command at a command prompt:

   %OV_BIN%\ovstop -c
5. The NNM/RAMS Integration Module can be downloaded from the web at the following location:

   http://managementsoftware.hp.com/downloads/other.html#integration

   If you are installing from a CD, insert the CD.
6. The installation process should start automatically and display the first install screen.

   If you do not see the Introduction screen, use Windows Explorer to navigate to the `setup.bat` file. Double-click the file to start the install.

   The installation script verifies that the target system has the correct version of NNM installed. If the correct version is not present, the installation script exits with an error. See Prepare to Install on page 7.
7. When an install screen appears, follow the instructions to install the NNM/RAMS Integration Module.
8. On the Installation Complete screen, you can access the release notes and the installation log file.

   Click `Done` to close the Installation Complete screen.

9 To complete the install, run the following command at a command prompt:

<*install_dir*>\bin\setupRAMS.ovpl

If NNM's ovdbcheck process is not running, you will be asked if the script can start the process. This process is required to complete the install.

If an NNM discovery is in progress, the script will not continue. In this case, wait until NNM's discovery is complete, and run the script again.

Disable the NNM/RAMS Integration Module

HP has provided a way for you to disable the NNM/RAMS Integration Module if necessary. When you disable the module, the following changes occur in NNM Advanced Edition:

- The RAMS Path History view is removed.
- The RAMS IGP view is removed, and the standard OSPF view is restored.
- The RAMS tab is removed from the NNM AE Extended Topology configuration utility.
- Event reduction on arriving RAMS events is stopped. RAMS events that come to NNM are delivered to the Status alarms category, and no root cause analysis is performed.

Disabling the NNM/RAMS Integration Module does not remove the Route Analytics event category.

To disable the NNM/RAMS Integration Module, complete the following steps:

1. Log in to the installed system as administrator or root.
2. At a command prompt, run the following command:

   UNIX

   /opt/OV/support/NM/setupRAMS.ovpl -disable

   Windows

   install_dir\support\NM\setupRAMS.ovpl -disable

   If NNM's ovdbcheck process is not running, you will be asked if the script can start the process. This process is required to disable/enable the NNM/RAMS Integration Module.

To re-enable the NNM/RAMS Integration Module, complete the steps for disabling it, but replace the `-disable` parameter with `-enable`.

Remove the NNM/RAMS Integration Module

To remove the NNM/RAMS Integration Module, complete the following steps:

1. Log in to the installed system as administrator or root.
2. If you are removing the module from an 11.23 on Itanium system, you must export the following environment variables before running the script to remove the module. If you are removing the module from another system type, skip this step.

   export SHLIB_PATH=$SHLIB_PATH:/opt/OV/jre/jre1.4/lib/ IA64N/server

   export PATH=/opt/OV/jre/jre1.4/bin/IA64N\:$PATH
3. At a command prompt, run the following command:

   UNIX

   /opt/OV/Uninstall/HPOvRAMS/setup.bin

   Windows

   \Program Files\HP OpenView\uninstall\HPOvRAMS\setup.bat
4. On the screen that appears, select the uninstall option, and follow the instructions to complete the uninstall.

2 Configuration

After you have installed the NNM/RAMS Integration Module, there are two configuration activities you need to complete:

- Configure the RAMS appliance to use the NNM/RAMS Integration Module.
- Configure communication between NNM and RAMS.

Information about these activities is contained in the following two sections.

Configure the RAMS Appliance for the NNM/RAMS Integration Module

After you have installed the NNM/RAMS Integration Module, you need to complete a few configuration steps on the RAMS appliance to permit full use of the NNM/RAMS Integration Module.

To configure your RAMS appliance to work with the NNM/RAMS Integration Module, complete the following steps:

1. Launch your web browser, and load the RAMS Administration web-based interface with one of the following URLs:
   - http://<*appliance_name*>/
   - http://<*appliance_IP_address*>/
2. Click the Administration tab, and enter the administrator's name and password when prompted.

   The default password is "admin", but this should be changed to protect the security of your system. After you log on the first time, use the `Change Password` tab to set a new administrator's password.
3. Click the `Queries` tab, and set the Queries password. You will need this password when you configure the Integration Module.
4. Click the `System` tab, and within that tab, click the `Time and Date` tab. If the time is not set correctly, do so now. Be sure to set the time zone, using Standard (not Daylight) time.
5. Click the `Route Recorder Configuration` tab, and within that tab, click the `Networks` icon at the left. From the pop-up menu, select `Add->Administrative Domain`.

   An Administrative Domain is a collection of routers under common management. For best results, HP recommends that you create a single Administrative Domain for all protocol instances.

   Type a descriptive name for your Administrative Domain in the space provided, for example, CorporateNet. You will need to know this name during the configuration of the NNM/RAMS Configuration Module.
6. Configure the protocols you choose to use. For specific configuration information for each supported protocol, see the *RAMS User's Guide*.

7 After you have configured your protocols, click the `Start Recording` button.

At this point, the RAMS appliance can participate in the routing protocols. Over time, it discovers your routing topology and logs historical data for analysis when troubleshooting.

Configure the NNM/RAMS Integration Module

Configuring communication between NNM and RAMS is done with the Extended Topology web-based configuration utility of NNM Advanced Edition.

To configure communication between NNM and RAMS, complete the following steps:

1. Launch your web browser, and load the Extended Topology web-based configuration utility with the following URL:

   http://<*nnm_mgmt_station*>:7510/topology/etconfig

2. Click the `RAMS` tab, and enter the following:
   - In the `RAMS IP/DNS Address` field, enter the hostname or IP address of your RAMS appliance.
   - In the `RAMS Query Password` field, enter the password you set when you configured the RAMS appliance.
   - In the `RAMS Database Name` field, enter the name of the Administrative Domain you set when you configured the RAMS appliance.
   - Select the `Preferred Protocol` to be used.
   - Click the `Apply` button to set the new configuration values.

Configure Alarms and Watch Lists

It is a good idea to configure RAMS events and watch lists soon after installing the NNM/RAMS Integration Module. These actions help you troubleshoot your environment more efficiently and improve performance.

See the *NNM/RAMS Integration Module User's Guide* for more information.

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