HP Network Node Manager i Software

For the Windows®, HP-UX, Linux, and Solaris operating systems

Software Version: NNMi 9.20

HP Network Node Manager i Software—Cisco Systems CiscoWorks LAN Management Solution Integration Guide

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Acknowledgements

This product includes software developed by the Apache Software Foundation. (http://www.apache.org)

This product includes software developed by the Indiana University Extreme! Lab. (http://www.extreme.indiana.edu)

Available Product Documentation

In addition to this guide, the following documentation is available for NNMi:

- *HP Network Node Manager i Software Documentation List*—Available on the HP manuals web site. Use this file to track additions to and revisions within the NNMi documentation set for this version of NNMi. Click a link to access a document on the HP manuals web site.

- *NNMi Installation Guide*—This is an interactive document, and is available on the NNMI 9.20 product media.
See the nnmi_interactive_installation_en_README.txt file, located on the product media, for more information.

- *HP Network Node Manager i Software Upgrade Reference*—Available on the HP manuals web site.

- *HP Network Node Manager i Software Release Notes*—Available on the product media and the NNMi management server.

- *HP Network Node Manager i Software System and Device Support Matrix*—Available on the product media and the NNMi management server.

- *HP Network Node Manager iSPI Network Engineering Toolset Planning and Installation Guide*— Available on the NNM iSPI NET diagnostics server product media.

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Contents

Cisco Systems CiscoWorks LAN Management Solution

Cisco Systems CiscoWorks LAN Management Solution (Cisco Systems CiscoWorks LMS) is an integrated suite of management tools for configuring, administering, monitoring, and troubleshooting Cisco networks.

This chapter contains the following topics:

- HP NNMi–Cisco Systems CiscoWorks LMS Integration
- Enabling the HP NNMi–Cisco Systems CiscoWorks LMS Integration
- Using the HP NNMi–Cisco Systems CiscoWorks LMS Integration
- Changing the HP NNMi–Cisco Systems CiscoWorks LMS Integration Configuration
- Disabling the HP NNMi–Cisco Systems CiscoWorks LMS Integration
- Troubleshooting the HP NNMi–Cisco Systems CiscoWorks LMS Integration
- HP NNMi–Cisco Systems CiscoWorks LMS Integration Configuration Form Reference

HP NNMi–Cisco Systems CiscoWorks LMS Integration

The HP NNMi–Cisco Systems CiscoWorks LMS integration provides actions for accessing Cisco Systems CiscoWorks LMS tools from the NNMi console.

Value

The HP NNMi–Cisco Systems CiscoWorks LMS integration adds Cisco Systems CiscoWorks LMS information to HP NNMi, so that HP NNMi users can detect and investigate potential network problems for Cisco devices.

Integrated Products

The information in this chapter applies to the following products:

- Cisco Systems CiscoWorks LMS

☛ For the list of supported versions, see the *NNMi System and Device Support Matrix*.

- HP NNMi 9.20

HP NNMi and Cisco Systems CiscoWorks LMS must be installed on separate computers. The NNMi management server and the Cisco Systems CiscoWorks LMS server computer can be of the same or different operating systems.

For the most recent information about supported hardware platforms and operating systems for HP NNMi, see the *NNMi System and Device Support Matrix*.

For the most recent information about supported hardware platforms and operating systems for Cisco Systems CiscoWorks LMS, see the documentation for your version. For example:

- Cisco Systems CiscoWorks LMS:

  **http://www.cisco.com/en/US/docs/net_mgmt/
  ciscoworks_lan_management_solution/4.0/install/guide/prereq.html**

Documentation

This chapter describes how to configure HP NNMi to communicate with Cisco Systems CiscoWorks LMS and how to use the integration from the NNMi console.

Enabling the HP NNMi–Cisco Systems CiscoWorks LMS Integration

On the NNMi management server, configure the connection between HP NNMi and Cisco Systems CiscoWorks LMS by following these steps:

1 In the NNMi console, open the **HP NNMi–CiscoWorks LMS Integration Configuration** form (**Integration Module Configuration > CiscoWorks LMS**).

2 Select the **Enable Integration** check box to make the remaining fields on the form available.

3 Enter the information for connecting to the NNMi management server For information about these fields, see NNMi Management Server Connection on page 11.

4 Enter the information for connecting to the Cisco Systems CiscoWorks LMS server. For information about these fields, see Cisco Systems CiscoWorks LMS Server Connection on page 12.

5 Click **Submit** at the bottom of the form.

A new window opens, showing a status message. If the message indicates a problem with connecting to the NNMi management server, click **Return**, then adjust the values as suggested by the text of the error message.

6 Load the incident definitions for Cisco Systems CiscoWorks LMS-managed devices:

a Change to the following directory:

— *Windows*: `%NnmInstallDir%\newconfig\HPOvNmsEvent`

— *UNIX*: `$NnmInstallDir/newconfig/HPOvNmsEvent`

b Import the Cisco Systems CiscoWorks LMS incident definitions by entering the following command:

`nnmconfigimport.ovpl -f nnm-cisco-incidentConfig.xml \`
`-u <username> -p <password>`

7 Optional and recommended. Load the MIB definition files for the traps that Cisco Systems CiscoWorks LMS-managed devices generate:

a Obtain the appropriate MIB files from the device media or the Cisco Systems web site:

tools.cisco.com/Support/SNMP/do/SearchOID.do?local=en&step=1

b Change to the directory where the MIB files are stored.

c Use the nnmloadmib.ovpl command to load the appropriate MIB files for the managed environment. For example:

`nnmloadmib.ovpl -load cpqhost.mib -u <username> -p <password>`

d Verify that the MIBs loaded correctly, by entering the following command:

`nnmloadmib.ovpl -list -u <username> -p <password>`

Using the HP NNMi–Cisco Systems CiscoWorks LMS Integration

The HP NNMi–Cisco Systems CiscoWorks LMS integration provides links from the NNMi console to Cisco Systems CiscoWorks LMS. The integration does not provide single sign-on between the products. You must enter your Cisco Systems CiscoWorks LMS user credentials to view the Cisco Systems CiscoWorks LMS pages.

Enabling the HP NNMi–Cisco Systems CiscoWorks LMS integration adds the following actions to the NNMi console:

• **CiscoWorks LMS Device Center**—Opens the Cisco Systems CiscoWorks LMS Device Center in the context of the selected node.

• **CIscoWorks LMS CiscoView**—Opens Cisco Systems CiscoWorks LMS CiscoView in the context of the selected node.

Changing the HP NNMi–Cisco Systems CiscoWorks LMS Integration Configuration

1   In the NNMi console, open the **HP NNMi–CiscoWorks LMS Integration Configuration** form (**Integration Module Configuration > CiscoWorks LMS**).

2   Modify the values as appropriate. For information about the fields on this form, see HP NNMi–Cisco Systems CiscoWorks LMS Integration Configuration Form Reference on page 11.

3   Verify that the **Enable Integration** check box at the top of the form is selected, and then click **Submit** at the bottom of the form.

➤   The changes take effect immediately. You do not need to restart `ovjboss`.

Disabling the HP NNMi–Cisco Systems CiscoWorks LMS Integration

1   In the NNMi console, open the **HP NNMi–CiscoWorks LMS Integration Configuration** form (**Integration Module Configuration > CiscoWorks LMS**).

2   Clear the **Enable Integration** check box at the top of the form, and then click **Submit** at the bottom of the form. The integration actions are no longer available.

➤   The changes take effect immediately. You do not need to restart `ovjboss`.

Troubleshooting the HP NNMi–Cisco Systems CiscoWorks LMS Integration

Cisco Systems CiscoWorks LMS Actions Do Not Work

If you have verified the values in the **HP NNMi–CiscoWorks LMS Integration Configuration** form and you are still not able to open a Cisco Systems CiscoWorks LMS page from the NNMi console, do the following:

1   Clear the web browser cache.

2   Clear all saved form or password data from the web browser.

3   Close the web browser window completely, and then re-open it.

4   Re-enter the values in the **HP NNMi–CiscoWorks LMS Integration Configuration** form.

5   Verify that Cisco Systems CiscoWorks LMS is running.

OID Not Found in the MIB Cache Message in Traps

If the MIB definition files for the traps that Cisco Systems CiscoWorks LMS-managed devices generate are not loaded in NNMi, you might see an error similar to the following text:

<Cia .1.3.6.1.4.1.11.5.7.5.2.1.1.1.7.0 with value 1 was not found within the mib cache>

To resolve these errors, load the MIBs as described in

HP NNMi–Cisco Systems CiscoWorks LMS Integration Configuration Form Reference

The **HP NNMi–CiscoWorks LMS Integration Configuration** form contains the parameters for configuring communications between HP NNMi and Cisco Systems CiscoWorks LMS. This form is available from the **Integration Module Configuration** workspace.

▶ Only NNMi users with the Administrator role can access the **HP NNMi–CiscoWorks LMS Integration Configuration** form.

The **HP NNMi–CiscoWorks LMS Integration Configuration** form collects information for the following general areas:

- NNMi Management Server Connection
- Cisco Systems CiscoWorks LMS Server Connection

To apply changes to the integration configuration, update the values on the **HP NNMi–CiscoWorks LMS Integration Configuration** form, then click **Submit**.

NNMi Management Server Connection

Table 1 lists the parameters for connecting to the NNMi management server. This is the same information that you use to open the NNMi console. You can determine many of these values by examining the URL that invokes an NNMi console session. Coordinate with the HP NNMi administrator to determine the appropriate values for this section of the configuration form.

Table 1   NNMi Management Server Information

Field	Description
NNMi SSL Enabled	The connection protocol specification. • If the NNMi console is configured to use HTTPS, select the **NNMi SSL Enabled** check box. This is the default configuration. • If the NNMi console is configured to use HTTP, clear the **NNMi SSL Enabled** check box.
NNMi Host	The fully-qualified domain name of the NNMi management server. This field is pre-filled with the hostname that was used to access the NNMi console. Verify that this value is the name returned by the `nnmofficialfqdn.ovpl -t` command run on the NNMi management server.

Table 1   NNMi Management Server Information (cont'd)

Field	Description
NNMi Port	The port for connecting to the NNMi console. This field is pre-filled with the port that the jboss application server uses for communicating with the NNMi console, as specified in the following file: • *Windows*: `%NnmDataDir%\conf\nnm\props\nms-local.properties` • *UNIX*: `$NnmDataDir/conf/nnm/props/nms-local.properties` For non-SSL connections, use the value of `nmsas.server.port.web.http`, which is `80` or `8004` by default (depending on the presence of another web server when HP NNMi was installed). For SSL connections, use the value of `nmsas.server.port.web.https`, which is `443` by default.
NNMi User	The user name for connecting to the NNMi console. This user must have the HP NNMi Administrator or Web Service Client role.
NNMi Password	The password for the specified HP NNMi user.

Cisco Systems CiscoWorks LMS Server Connection

Table 2 lists the parameters for connecting to the Cisco Systems CiscoWorks LMS server to open Cisco Systems CiscoWorks LMS pages. Coordinate with the Cisco Systems CiscoWorks LMS administrator to determine the appropriate values for this section of the configuration.

Table 2   Cisco Systems CiscoWorks LMS Management Server Information

Cisco Systems CiscoWorks LMS Server Parameter	Description
Cisco Systems CiscoWorks LMS SSL Enabled	The connection protocol specification for connecting to Cisco Systems CiscoWorks LMS • If Cisco Systems CiscoWorks LMS is configured to use HTTPS, select the **CiscoWorks LMS SSL Enabled** check box. This is the default configuration. • If Cisco Systems CiscoWorks LMS is configured to use HTTP, clear the **CiscoWorks LMS SSL Enabled** check box.
Cisco Systems CiscoWorks LMS Host	The fully-qualified domain name of the Cisco Systems CiscoWorks LMS server.
Cisco Systems CiscoWorks LMS Port	The port for connecting to the Cisco Systems CiscoWorks LMS web services. If you are using the default Cisco Systems CiscoWorks LMS configuration, use port `1741` (for non-SSL connections to Cisco Systems CiscoWorks LMS) or port `443` (for SSL connections to Cisco Systems CiscoWorks LMS).

We appreciate your feedback!

If an email client is configured on this system, by default an email window opens when you click *here*.

If no email client is available, copy the information below to a new message in a web mail client, and then send this message to **ovdoc-nsm@hp.com**.

Product name and version: NNMi 9.20

Document title: *HP Network Node Manager i Software - Cisco Systems CiscoWorks LMS Integration Guide*

Feedback: