Software Version: 9.00 / March 2010

The HP NNM iSPI Network Engineering Toolset diagnostic server extends the powerful network management capabilities of NNMi by providing additional troubleshooting and diagnostic tools for network engineers.

For the latest updates to these Release Notes, see <u>sg-pro-ovweb.austin.hp.com/nnm/ISPI-NET9.00/releasenotesupdate.htm</u>.

For a list of supported hardware platforms, operating systems, and databases, see the Support Matrix.

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Overview of this Version

Overview of the NNM iSPI NET diagnostics server 9.00 Release

Diagnostic flows are run by NNM iSPI NET during the lifecycle of management incidents. These diagnostic flows automate the gathering and analysis of information from network devices. Diagnostic flows log into network devices using SSH or Telnet and run a series of commands defined in the flow. These commands extract troubleshooting information from specified network devices. Diagnostic flows can be run automatically when incidents are registered or manually by the operator against a node or incident.

The NNM iSPI NET diagnostics server consists of an embedded version (7.20) of HP Operations Orchestration (HP OO) and the MySQL relational database.

For a detailed overview of NNM iSPI NET diagnostics server 9.00, see *Introducing HP NNM iSPI Network Engineering Toolset Software* in the Planning and Installation Guide (see <u>Installation Guide and Support Matrix</u>).

Documentation Updates

The complete documentation set is available on the HP Product Manuals web site at <u>h20230.www2.hp.com/selfsolve/manuals</u>. Choose the "network node manager SPI for NET" product, "9.00" product version, and the Windows operating system.

NOTE: To view files in PDF format (*.pdf), Adobe Acrobat Reader must be installed on your system. To download Adobe Acrobat Reader, visit the Adobe web site at <u>www.adobe.com</u>.

Installation Guide and Support Matrix

Installation requirements, as well as instructions for installing NNM iSPI NET diagnostics server, are documented in the installation guide provided in Adobe Acrobat (.pdf) format. The document file is included on the product's installation media as install-guide_en.pdf.

For a list of supported hardware platforms, operating systems, and databases, see the Support Matrix.

Licensing

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NNMi installs with an instant-on license for NNM iSPI NET that is valid for 60 days. After 60 days, the NNM iSPI NET diagnostic flows are no longer run if you do not obtain a permanent license. To view information about your NNM iSPI NET license, open the NNMi console and select **Help** \rightarrow **System Information**. From the NNMi informational window, select **View Licensing Information**.

For information about installing and managing licenses, see the Installation Guide.

Known Problems, Limitations, and Workarounds

- The NNM iSPI NET diagnostics server is initially configured using self-signed certificates. When browsers first connect to the server after installation, an invalid certificate message is displayed due to this configuration. You can continue to the HP OO web site by selecting the appropriate link, depending on your browser type. To alleviate this condition, the HP OO PAS certificate needs to be signed by a valid Certificate Authority. After NNM iSPI NET diagnostics server installation is complete, generate a Certificate Signing Request for the HP OO PAS certificate, and submit the request to your preferred Certificate Authority. After a new certificate is returned by the Certificate Authority, this certificate can be imported back to the PAS keystore (rc_keystore). If the Certificate Authority you utilize is already trusted by Java by default, no further action is needed. If the Certificate Authority you utilize is not trusted by Java by default, import the signed certificate to the NNMi truststore again. Consult the Installation Guide for details on this process.
- The NNM iSPI NET diagnostics server is not supported for use in High Availability (HA) or NNMi application failover implementations. The NNM iSPI NET diagnostics server must be installed on a system separate from the multiple nodes participating in an HA model. Each node in an HA implementation can be bound to the single separate NNM iSPI NET diagnostics server and can dispatch requests to this node.
- The NNM iSPI NET diagnostics server is not supported for use in cluster configurations as provided in the standard HP Operations Orchestration product. The full HP Operations Orchestration product must be purchased and used if you want to facilitate clustering as supported in this implementation.
- When you click on the results link in the Diagnostics tab of a node or incident and the diagnostics flow result is no longer available in the NNM iSPI NET diagnostics server (or HP OO), the following message is displayed in the browser: "Dhamra.dhamra.reports.individual.cannot_find_repair_history[1]". This message indicates that the records in the HP OO database have been removed. This situation can occur if the NNM iSPI NET diagnostics server is reinstalled, if the supporting MySQL database is reinitialized, or if the supporting MySQL database records have been removed.
- On the Configuration Workspace > Communication Configuration form > Default Device Credentials tab, only one entry is allowed in the Default Device Credentials table at this time. If you populate more than one row in this table, the following error message displays when you attempt to save the Communication Configuration form: "Save failed: An attribute value for this item is not valid, e.g. a duplicate key value."

Potential Installation Issues

- The NNM iSPI NET Server uses the following ports for its processes by default:
 - HP OO Central: 8080 and 8443
 - HP OO RAS: 9004
 - MySQL: 3306

Ensure that these ports are not in use prior to NNM iSPI NET diagnostics server installation. The installer verifies that ports 8080 and 8443 are available for HP OO Central. If these ports are not available, the installer requires that you change the port numbers before proceeding with the installation.

- The NNM iSPI NET diagnostics server installer requires an HTTP connection to the NNMi management server. If you have disabled HTTP on the NNMi management server, you will need to re-enable HTTP before running the NNM iSPI NET diagnostics server installer.
- The NNM iSPI NET diagnostics server installer cannot run from a UNC based path. The installer must run from the local file system.
- Certificates are exchanged to the NNMi management server from the HP OO server, which permit the NNMi
 management server to communicate with HP OO. The default self-signed certificates, installed by HP OO, do not
 provide adequate security for transfer of device usernames and passwords. Consequently, the original certificates

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are replaced with self-signed certificates by the NNM iSPI NET diagnostics server installer. By default, these new certificates use the hostname identified by the Java virtual machine. It is important that the hostname stamped in these certificates, which identifies the HP OO system, matches the hostname known by NNMi for the HP OO system. If both systems use the same DNS server, this should be the case. You can confirm the hostname by logging into the NNMi management server and pinging the hostname identified in the NNM iSPI NET diagnostics server installer. Make sure to use the hostname by which the NNMi management server identifies that target HP OO system in the certificate. More information is available in the Installation Guide.

- The NNM iSPI NET diagnostics server installer adds several components to the system: .NET if not installed, MySQL (version 5.0.51b), and HP OO. The installer makes decisions based on what it finds on the system.
 - If HP OO already exists on the system, HP OO, MySQL, and .NET are not installed. In this case, only the NNM iSPI NET diagnostic flows are loaded in the existing HP OO, and the installer binds this system to the specified NNMi management server. In order to accomplish binding to the NNMi management server, the HP OO system's certificates must be inspected and possibly changed to provide a proper hostname within the certificate. See the Installation Guide for details on setting up proper certificates. If these manual steps are not followed, the installer reports an error when binding to the NNMi management server.
 - If HP OO does not exist on the system and MySQL does exist on the system, only the embedded version of HP OO is installed. The installer requires the input of the appropriate root level username and password for MySQL. The existing copy of MySQL is used by HP OO after installation. The version of MySQL must be 5.0.51b or later.
 - If HP OO and MySQL do not exist on the system, MySQL version 5.0.51b is installed first. HP OO is installed next, and it uses the new installation of MySQL. An existing remote installation of MySQL can also be configured with the installer. Remote MySQL instances must allow root access from remote nodes.
- If MySQL was previously installed on your system, remove all MySQL folders and databases left on the system after MySQL was uninstalled. Preexisting MySQL databases and configuration files negatively impact the installation of a new instance of MySQL.
- If a problem occurs during the HP OO installation step but after the database and user have been created, you can restart the installation using the **Start Again** button. Before you start the install again, you must change the selected MySQL database name. If you do not change the database name, the installation will fail again when it attempts to create the same database a second time.

English Locale Only

 Note that HP NNM iSPI NET diagnostics server is not internationalized. All content is displayed using the English locale.

Domain Name System (DNS) Configuration Known Problems

Security as implemented using a certificate-based infrastructure relies heavily on a well-configured Domain Name System (DNS) to convert discovered IP addresses to hostnames. An improper configuration can result in NNMi being unable to dispatch requests to the HP OO system. See the <u>Installation Guide</u> for more details on proper hostname resolution of the HP NNM iSPI NET diagnostics server system by NNMi.

HP Software Support

Go to the HP Support web site: www.hp.com/go/hpsoftwaresupport

HP Software online support provides an efficient way to access interactive technical support tools. As a valued customer, you benefit by being able to do the following:

- · Search for knowledge documents of interest
- · Submit and track progress on support cases
- Submit enhancement requests online
- Download software patches
- Manage a support contract

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- Look up HP support contacts
- Review information about available services
- · Enter discussions with other software customers
- · Research and register for software training

NOTE: Most of the support areas require that you register as an HP Passport user and sign in. Many also require an active support contract. To find more information about support access levels and HP Passport, go to the following URL: <u>support.openview.hp.com/new_access_levels.jsp</u>

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