HP Network Node Manager iSPI Performance for Quality Assurance Software

Intelligent Response Agent

for the Windows $\ensuremath{\mathbb{R}}$ and Linux operating systems

Software Version: 9.20

Installation Guide

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The title page of this document contains the following identifying information:

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1 Introduction

The Intelligent Response Agent (iRA) is an agent that helps you configure Quality of Service (QoS) monitoring probes on NNMi-managed servers. These probes can generate different types of synthetic traffic to measure the performance of the network between the source and destination nodes.

The iRA runs as an AgentX subagent of Net-SNMP.

The iRA enables you to configure the following service types of probes:

- ICMP
- UDP Echo
- TCP Connect
- UDP Jitter
- DNS
- HTTP
- HTTPS
- Oracle Connect

The iRA adds the QA-PROBE-MIB to the NNMi MIB browser. The NNM iSPI Performance for QA interacts with the QA-PROBE-MIB that is present with the iRA to discover probes on the iRA and shows the discovered probes and their status in the NNM iSPI Performance for QA inventory views and reports.

The iRA provides you with a set of command line tools that help you configure probes and view the status of the probes. For more information about command line tools, see the *Intelligent Response Agent Command Reference*.

2 Installing the iRA on a Windows System

Installation Prerequisites

• Operating system:

- Windows Server 2008 x64 Datacenter Edition with Service Pack 2
- Windows Server 2008 R2 x64 Datacenter Edition with Service Pack 1
- Windows Server 2008 x64 Enterprise Edition with Service Pack 2
- Windows Server 2008 R2 x64 Enterprise Edition with Service Pack 1
- Windows Server 2008 x64 Standard Edition with Service Pack 2
- Windows Server 2008 R2 x64 Standard Edition with Service Pack 1
- **Disk space:** Make sure that at least 250 MB space is available on the system.
- **Net-SNMP:** Net-SNMP 5.7.1 (or higher) must be installed on the system and you must enable the AgentX protocol on the system.

Net-SNMP 5.7.1 is packaged with the NNM iSPI Performance for QA media, which you can install on the system where you plan to install the iRA.

It is not mandatory to install Net-SNMP only from the NNM iSPI Performance for QA media. Net-SNMP installed from other sources also work with the iRA provided the AgentX protocol is enabled on the system.

You can install Net-SNMP even after installing the iRA.

- Ports:
 - The 10101 port must be available on the system.
 - If you want to install Net-SNMP from the NNM iSPI Performance for QA media, the 705 port must be available on the system.

To install Net-SNMP 5.7.1 from the NNM iSPI Performance for QA media, follow these steps:

- a Log on to the system as administrator.
- b Make sure that at least 50 MB space is available on the system for the Net-SNMP installation.
- c Go to the following location on the NNM iSPI Performance for QA installation media: Net-SNMP\Windows
- d Double-click the setup.exe file. The installation wizard opens.
- e Select the language of your preference and click **OK**. The Introduction (Install) screen appears.
- f Click Next. The License Agreement screen appears.

- g Select I Accept..., and then click Next. The Setup Type screen appears.
- h Select Typical, and then click Next. The Choose the Folders screen appears.

If any other HP Software products are installed on the system, the Choose the Folders screen may not appear. In that case, the Pre-Install Summary screen appears at this stage and you can skip to step k.

i You can specify non-default values for the installation and data directories for Net-SNMP. Click **Next**. The Install Checks screen appears and the installer starts checking the availability of disk space for installation. If sufficient disk space exists, the screen shows the following message:

Disk space checks successfully completed

- i Click Next. The Pre-Install Summary screen appears.
- k Click Install. The installation process begins.
- After the installation is complete, click **Done**.

The installer installs Net-SNMP in the <Install_Dir>\nonOV\NMCNetSNMP directory.

In this instance, *<Install_Dir>* is the directory where you chose to install Net-SNMP.

m Start the HP OV NMC Net-SNMP Agent service from the Services window (at the Run prompt, type services.msc) after installation.

Installing the iRA

To install the iRA, follow these steps:

- 1 Log on to the system as administrator.
- 2 Go to the following location on the NNM iSPI Performance for QA installation media: iRA\Windows
- 3 Double-click the setup.exe file. The installation wizard opens.
- 4 Select the language of your preference and click **OK**. The Introduction (Install) screen appears.
- 5 Click Next. The License Agreement screen appears.
- 6 Select I Accept..., and then click Next. The Setup Features screen appears.
- 7 Click Next. The Choose the Folders screen appears.

If any other HP Software products are installed on the system, the Choose the Folders screen *may* not appear. In that case, the Pre-Install Summary screen appears at this stage and you can skip to step 10.

8 You can specify non-default values for the installation and data directories for the iRA. Click **Next**. The Install Checks screen appears and the installer starts checking the availability of disk space for installation. If sufficient disk space exists, the screen shows the following message:

Disk space checks successfully completed

- 9 Click Next. The Pre-Install Summary screen appears.
- 10 Click Install. The installation process begins.

11 After the installation is complete, the following message appears:

Please start iRA (Intelligent Response Agent) services manually

- 12 Click OK.
- 13 Click Done.
- 14 If Net-SNMP was installed on the system from a source other than the NNM iSPI Performance for QA media, make sure that Net-SNMP runs as an AgentX master agent on port 705. If Net-SNMP is configured to run on a port other than 705, you must configure the iRA to communicate with Net-SNMP using the non-standard port.
 - a Go to the %IRA HOME%\ira\conf directory.
 - **b** Open the .ira.conf file with a text editor.
 - c Modify the value of the masteragentport property to the port on which Net-SNMP runs as the master agent.
 - d Save the file.
- 15 Manually start the HP Intelligent Response Agent service from the Services window (at the Run prompt, type services.msc).

To stop the iRA, right-click the HP Intelligent Response Agent service in the Services window, and then click Stop.

The installation log file (HPOVIRA_9.20.000_<date>_<time>_HPOVInstallerLog.txt) is available in the %TEMP% directory.

3 Installing the iRA on a Linux System

Installation Prerequisites

• Operating system:

- Red Hat Enterprise Linux Server 6.0 (or later minor version through 6.x)
- Red Hat Enterprise Linux Server 5.4 (or later minor version through 5.x)
- Disk space: Make sure that at least 250 MB space is available on the system.
- **Net-SNMP:** Net-SNMP 5.7.1 (or higher) must be installed on the system and you must enable the AgentX protocol on the system.

Net-SNMP 5.7.1 is packaged with the NNM iSPI Performance for QA media, which you can install on the system where you plan to install the iRA.

It is not mandatory to install Net-SNMP only from the NNM iSPI Performance for QA media. Net-SNMP installed from other sources also work with the iRA provided the AgentX protocol is enabled on the system.

You can install Net-SNMP even after installing the iRA.

• Ports:

- The 10101 port must be available on the system.
- If you want to install Net-SNMP from the NNM iSPI Performance for QA media, the 705 port must be available on the system.

To install Net-SNMP 5.7.1 from the NNM iSPI Performance for QA media, follow these steps:

- a Log on to the system as root.
- b Make sure that at least 50 MB space is available on the system for the Net-SNMP installation.
- c Go to the following location on the NNM iSPI Performance for QA installation media:

Net-SNMP/Linux

d Run the following command:

./setup.bin

The installation wizard opens.

- e Select the language of your preference and click **OK**. The Introduction (Install) screen appears.
- f Click Next. The License Agreement screen appears.
- g Select I Accept..., and then click Next. The Setup Type screen appears.

h Select **Typical**, and then click **Next**. The Install Checks screen appears and the installer starts checking the availability of disk space for installation. If sufficient disk space exists, the screen shows the following message:

```
Disk space checks successfully completed
```

- i Click Next. The Pre-Install Summary screen appears.
- i Click Install. The installation process begins.
- k After the installation is complete, click **Done**.

The installer installs Net-SNMP in the /opt/OV/nonOV/NMCNetSNMP directory.

Start the nmpd daemon as a master agent after installation:

/opt/OV/nonOV/NMCNetSNMP/sbin/snmpd -x TCP:<PORT>

In this instance, *PORT*> is the port on which you want to start Net-SNMP as a master agent.

If you install Net-SNMP from the NNM iSPI Performance for QA media, you must manually start the snmpd daemon after system reboot. To start the snmpd daemon, run the following command:

/opt/OV/nonOV/NMCNetSNMP/sbin/snmpd -x TCP:<PORT>

In this instance, *PORT*> is the port on which you want to start Net-SNMP as a master agent.

To avoid this, configure the nmcnetsnmpd daemon as a run-level service by running the following command:

/opt/OV/nonOV/NMCNetSNMP/bin/nmcnetsnmpd register

If you do not want to run the nmcnetsnmpd daemon as a run-level service, run the following command:

/opt/OV/nonOV/NMCNetSNMP/bin/nmcnetsnmpd unregister

Installing the iRA

To install the iRA, follow these steps:

- 1 Log on to the system as root.
- 2 Go to the following location on the NNM iSPI Performance for QA installation media: iRA/Linux
- 3 Run the following command:

./setup.bin

The installation wizard opens.

- 4 Select the language of your preference and click **OK**. The Introduction (Install) screen appears.
- 5 Click Next. The License Agreement screen appears.
- 6 Select I Accept..., and then click Next. The Setup Features screen appears.

7 Click **Next**. The Install Checks screen appears and the installer starts checking the availability of disk space for installation. If sufficient disk space exists, the screen shows the following message:

```
Disk space checks successfully completed
```

- 8 Click Next. The Pre-Install Summary screen appears.
- 9 Click Install. The installation process begins.
- 10 After the installation is complete, the following message appears:

Please start iRA (Intelligent Response Agent) services manually

- 11 Click OK.
- 12 Click Done.
- 13 If Net-SNMP was installed on the system from a source other than the NNM iSPI Performance for QA media, make sure that Net-SNMP runs as an AgentX master agent on port 705. If Net-SNMP is configured to run on a port other than 705, you must configure the iRA to communicate with Net-SNMP using the non-standard port.
 - a Open a new command prompt.
 - **b** Go to the \$IRA HOME/ira/conf directory.
 - c Open the .ira.conf file with a text editor.
 - d Modify the value of the masteragentport property to the port on which Net-SNMP runs as the master agent.
 - e Save the file.
- 14 Manually start the irad daemon:
 - a Go to the /etc/init.d directory.
 - **b** Run the following command:
 - ./irad start

To stop the irad daemon, run the following command as root:

/etc/init.d/irad stop

To view the status of the irad daemon, run the following command as root:

/etc/init.d/irad status

The installation log file (HPOvIRA_9.20.000_<date>_<time>_HPOvInstallerLog.txt) is available in the /tmp directory.

4 Uninstalling the iRA

To uninstall the iRA, follow these steps:

On Windows

- 1 Log on as administrator.
- 2 Go to the following directory:
 - <iRA_Install_Dir>\Uninstall\HPOvIRA

In this instance, <*IRA_Install_Dir*> is the directory where you installed the iRA.

- 3 Double-click the setup.exe file. The installation wizard opens.
- 4 Select the language of your preference and click **OK**. The Application Maintenance screen appears.
- 5 Select Uninstall and click Next. The Pre-Uninstall Summary screen appears.
- 6 Click Uninstall.
- 7 After the iRA is uninstalled, click **Done**.

On Linux

- 1 Log on as root.
- 2 Go to the following directory:

/opt/OV/Uninstall/HPOvIRA

- 3 Run the following command:
 - ./setup.bin

The installation wizard opens.

- 4 Select the language of your preference and click **OK**. The Application Maintenance screen appears.
- 5 Select Uninstall and click Next. The Pre-Uninstall Summary screen appears.
- 6 Click Uninstall.
- 7 After the iRA is uninstalled, click **Done**.

To uninstall Net-SNMP (which was installed from the NNM iSPI Performance for QA media), follow these steps:

$On \ Windows$

- 1 Log on as administrator.
- 2 Go to the following directory:

 $< iRA_Install_Dir> \$ Uninstall \HPOvNMCNetSNMP

In this instance, *<IRA_Install_Dir>* is the directory where you installed the iRA.

3 Double-click the setup.exe file. The installation wizard opens.

- 4 Select the language of your preference and click **OK**. The Application Maintenance screen appears.
- 5 Select Uninstall and click Next. The Pre-Uninstall Summary screen appears.
- 6 Click Uninstall.
- 7 After Net-SNMP is uninstalled, click **Done**.

On Linux

- 1 Log on as root.
- 2 Go to the following directory:

/opt/OV/Uninstall/HPOvNMCNetSNMP

3 Run the following command:

./setup.bin

The installation wizard opens.

- 4 Select the language of your preference and click **OK**. The Application Maintenance screen appears.
- 5 Select Uninstall and click Next. The Pre-Uninstall Summary screen appears.
- 6 Click Uninstall.
- 7 After the Net-SNMP is uninstalled, click **Done**.

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Product name and version: NNM iSPI Performance for QA - iRA, 9.20

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