

# HP Network Management Software

For the Windows® and Linux operating systems

Software Version: 10.00

## Ports Reference

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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>)

## Documentation Updates

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

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# Introduction

This document shows ports that HP Network Management Software products use in network communications.

The ports listed in ["HP Network Management Software Well-Known Ports" on the next page](#) are those used by all HP Network Management Software products, sorted by port number to help you identify any possible port conflicts.

In addition, subsequent topics document the ports used by the individual HP Network Management Software products.

- ["HP Network Node Manager i Software Ports" on page 37](#)
- ["NNM iSPI for MPLS Ports" on page 47](#)
- ["NNM iSPI for IP Telephony Ports" on page 50](#)
- ["NNM iSPI for IP Multicast Ports" on page 53](#)
- ["NNM iSPI for Performance for Traffic Ports" on page 56](#)
- ["NNM iSPI Performance for QA Ports" on page 63](#)
- ["NNM iSPI Performance for Metrics and NPS Ports" on page 67](#)
- ["NNM iSPI NET Ports" on page 68](#)
- ["HP Network Automation Software Ports" on page 69](#)

## HP Network Management Software Well-Known Ports

The following table shows the ports that the HP Network Management Software products use in network communications. The ports listed in this table are those used by all HP Network Management Software products, sorted by port number to help you identify any possible port conflicts. If port conflicts occur between products, you can change most of these port numbers as shown in the *Change Configuration* column.

### Ports Used by HP Network Management Software Products

| Port | Product | Type | Name               | Purpose   | Change Configuration                                |
|------|---------|------|--------------------|---|---|
| 22   | NA Core | TCP  | SSH Server Port    | SSH port from the NA client to the NA server on the Windows operating system    | See "Telnet/SSH Page Fields" in the NA help.        |
| 23   | NA Core | TCP  | Telnet Server Port | Telnet port from the NA client to the NA server on the Windows operating system | See "Telnet/SSH Page Fields" in the NA help.        |
| 69   | NA Core | UDP  | TFTP Port          | Network devices to the NA server  | Change not supported                                |
| 80   | NA Core | TCP  | HTTP Port          | HTTP port from the NA client to the NA server                                   | Contact your Support representative for assistance. |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product | Type | Name                        | Purpose  | Change Configuration   |
|------|---------|------|-----------------------------|--|--|
| 80   | NNMi    | TCP  | nmsas.server.port.web.http  | <p>Default HTTP port - used for Web UI &amp; Web Services</p> <p>- In GNM configurations NNMi uses this port to establish communication from the global manager to the regional manager</p> <p>- Once this port is open, it becomes bi-directional</p> | <p>Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux).</p> <p>You can also change this during installation.</p> |
| 162  | NNMi    | UDP  | trapPort                    | SNMP trap port   | <p>Modify using the <i>nmmtrapconfig.ovpl</i> Perl script. See the <i>nmmtrapconfig.ovpl</i> reference page, or the Linux manpage, for more information.</p>                               |
| 443  | NA Core | TCP  | HTTPS Port                  | HTTPS port from the NA client to the NA server   | Contact your Support representative for assistance.  |
| 443  | NNMi    | TCP  | nmsas.server.port.web.https | Default secure HTTPS port (SSL) - used for Web UI & Web Services   | <p>Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux).</p>  |
| 514  | NA Core | UDP  | Syslog Port                 | Receive syslog messages from network devices on the NA server  | See “Configuring the NA Syslog Server” in the NA Installation and Upgrade Guide.   |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product | Type | Name                         | Purpose  | Change Configuration   |
|------|---------|------|------------------------------|--|--|
| 1098 | NA Core | TCP  | RMI Activation Port          | Port between NA clients and the NA Management Engine and between the NA Management Engines in separate NA Cores. NA clients can include:<br>-NA Syslog Server<br>-NA Connectors<br>-AAA Log Reader<br>-Syslog Reader<br>-Customer-written API scripts (For information, see the NA API User Guide and the NA CLI/API Command Reference.) | Contact your Support representative for assistance.  |
| 1098 | NNMi    | TCP  | nmsas.server.port.naming.rmi | - Used by NNMi command line tools to communicate with a variety of services used by NNMi<br><br>- HP recommends configuring the system firewall to restrict access to these ports to localhost only  | Modify the %NNM_CONF%\nnm\props\nms-local.properties file (Windows) or \$NNM_CONF/nnm/props/nms-local.properties file (Linux). |



**Ports Used by HP Network Management Software Products, continued**

| Port | Product | Type | Name                          | Purpose  | Change Configuration   |
|------|---------|------|-------------------------------|--|--|
| 1099 | NA Core | TCP  | RMI Registration Port         | Port between NA clients and the NA Management Engine and between the NA Management Engines in separate NA Cores. NA clients can include:<br>-NA Syslog Server<br>-NA Connectors<br>-AAA Log Reader<br>-Syslog Reader<br>-Customer-written API scripts (For information, see the NA API User Guide and the NA CLI/API Command Reference.) | Contact your Support representative for assistance.  |
| 1099 | NNMi    | TCP  | nmsas.server.port.naming.port | - Used by NNMi command line tools to communicate with a variety of services used by NNMi<br><br>- HP recommends configuring the system firewall to restrict access to these ports to localhost only  | Modify the %NNM_CONF%\nnm\props\nms-local.properties file (Windows) or \$NNM_CONF/nnm/props/nms-local.properties file (Linux). |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product      | Type | Name                      | Purpose  | Change Configuration                                |
|------|--------------|------|---------------------------|--|---|
| 1433 | NA Core      | TCP  | Microsoft SQL Server Port | Port on the Microsoft SQL Server that communicates with the NA Core. In a Distributed System configuration, the SQL Server databases communicate with each other on port 1433. | Contact your Support representative for assistance. |
| 1521 | NA Core      | TCP  | Oracle SQL*Net Port       | Port on the Oracle database server that communicates with the NA Core. In a Distributed System configuration, the Oracle processes connect to each other on port 1521.         | Contact your Support representative for assistance. |
| 2001 | NA Satellite | TCP  | Gateway Tunnel Port       | TunnelPort from the Satellite to the Core Gateway. The Core Gateway listens for tunnel connections.  | Contact your Support representative for assistance. |
| 3002 | NA Satellite | TCP  | Gateway Proxy Port        | ProxyPort from the NA Core to the Core Gateway and from the Satellite agent to the Satellite   | See "Device Access Page Fields" in the NA help.     |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product      | Type | Name                            | Purpose  | Change Configuration   |
|------|--------------|------|---------------------------------|--|--|
| 3306 | NA Core      | TCP  | MySQL Port                      | Port on the MySQL database server that communicates with the NA Core   | Contact your Support representative for assistance.  |
| 3306 | NNM iSPI NET | TCP  | MySQL database port             | Provides access to MySQL database.   | Change not supported.  |
| 3873 | NNMi         | TCP  | nmsas.server.port.remoting.ejb3 | <p>- Used by NNMi command line tools to communicate with a variety of services used by NNMi</p> <p>- HP recommends configuring the system firewall to restrict access to these ports to localhost only</p> | Modify the %NNM_CONF%\nrm\props\nms-local.properties file (Windows) or \$NNM_CONF/nrm/props/nms-local.properties file (Linux). |
| 4040 | NA Satellite | TCP  | Gateway Ident Port              | IdentPort from the NA Core to the Core Gateway   | Contact your Support representative for assistance.  |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product | Type | Name                       | Purpose  | Change Configuration  |
|------|---------|------|----------------------------|--|---|
| 4444 | NNMi    | TCP  | nmsas.server.port.jmx.jrmp | <p>- Used by NNMi command line tools to communicate with a variety of services used by NNMi</p> <p>- HP recommends configuring the system firewall to restrict access to these ports to localhost only</p> | <p>Modify the %NNM_CONF%\nrm\props\nms-local.properties file (Windows) or \$NNM_CONF/nrm/props/nms-local.properties file (Linux).</p> |
| 4445 | NNMi    | TCP  | nmsas.server.port.jmx.rmi  | <p>- Used by NNMi command line tools to communicate with a variety of services used by NNMi</p> <p>- HP recommends configuring the system firewall to restrict access to these ports to localhost only</p> | <p>Modify the %NNM_CONF%\nrm\props\nms-local.properties file (Windows) or \$NNM_CONF/nrm/props/nms-local.properties file (Linux).</p> |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product | Type | Name                              | Purpose  | Change Configuration   |
|------|---------|------|-----------------------------------|--|--|
| 4446 | NA Core | TCP  | jboss Remoting Port               | Port between NA clients and the NA Management Engine and between the NA Management Engines in separate NA Cores. NA clients can include:<br>-NA Syslog Server<br>-NA Connectors<br>-AAA Log Reader<br>-Syslog Reader<br>-Customer-written API scripts (For information, see the NA API User Guide and the NA CLI/API Command Reference.) | Contact your Support representative for assistance.  |
| 4446 | NNMi    | TCP  | nmsas.server.port.invoker.unified | - Used by NNMi command line tools to communicate with a variety of services used by NNMi<br><br>- HP recommends configuring the system firewall to restrict access to these ports to localhost only  | Modify the %NNM_CONF%\nnm\props\nms-local.properties file (Windows) or \$NNM_CONF/nnm/props/nms-local.properties file (Linux). |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product | Type | Name                                    | Purpose  | Change Configuration   |
|------|---------|------|---|--|--|
| 4457 | NNMi    | TCP  | nmsas.server.port.hq                    | <ul style="list-style-type: none"> <li>- Used for un-encrypted Global Network Management traffic.</li> <li>- Messaging travels from the global manager to the regional manager</li> <li>- Once this port is open, it becomes bi-directional</li> </ul> | Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux). |
| 4459 | NNMi    | TCP  | nmsas.server.port.hq.ssl                | <ul style="list-style-type: none"> <li>- Used for encrypted Global Network Management traffic.</li> <li>- Messaging travels from the global manager to the regional manager</li> <li>- Once this port is open, it becomes bi-directional</li> </ul>    | Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux). |
| 4712 | NA Core | TCP  | jbossTS Recovery Manager Port           | jboss transaction management   | Contact your Support representative for assistance.  |
| 4712 | NNMi    | TCP  | nmsas.server.port.ts.recovery           | Internal transaction service port  | Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux). |
| 4713 | NA Core | TCP  | jbossTS Transaction Status Manager Port | jboss transaction management   | Contact your Support representative for assistance.  |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product                   | Type | Name                           | Purpose  | Change Configuration   |
|------|---------------------------|------|--------------------------------|--|--|
| 4713 | NNMi                      | TCP  | nmsas.server.port.ts.status    | Internal transaction service port  | Modify the %NNM_CONF%\nsm\props\nms-local.properties file (Windows) or \$NNM_CONF/nsm/props/nms-local.properties file (Linux). |
| 4714 | NA Core                   | TCP  | jbossTS Socket Process ID Port | jboss transaction management   | Contact your Support representative for assistance.  |
| 4714 | NNMi                      | TCP  | nmsas.server.port.ts.id        | Internal transaction service port  | Modify the %NNM_CONF%\nsm\props\nms-local.properties file (Windows) or \$NNM_CONF/nsm/props/nms-local.properties file (Linux). |
| 5432 | NNM iSPI for IP Multicast | TCP  | com.hp.ov.nms.postgres.port    | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file. | N/A  |
| 5432 | NNM iSPI for IP Telephony | TCP  | com.hp.ov.nms.postgres.port    | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file. | N/A  |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product                     | Type | Name                        | Purpose  | Change Configuration   |
|------|-----------------------------|------|-----------------------------|--|--|
| 5432 | NNM iSPI for MPLS           | TCP  | com.hp.ov.nms.postgres.port | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file. | N/A  |
| 5432 | NNMi                        | TCP  | com.hp.ov.nms.postgres.port | This PostgreSQL port is the port the embedded database listens on for this NNMi management server.   | Modify the %NNM_CONF%\nsm\props\nms-local.properties file (Windows) or \$NNM_CONF/nsm/props/nms-local.properties file (Linux). |
| 5432 | NNM iSPI Performance for QA | TCP  | com.hp.ov.nms.postgres.port | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file. | N/A  |



**Ports Used by HP Network Management Software Products, continued**

| Port | Product   | Type | Name                                  | Purpose  | Change Configuration                                |
|------|---|------|---------------------------------------|--|---|
| 5432 | NNM iSPI Performance for Traffic (Traffic Leaf)   | TCP  | com.hp.ov.nms.postgres.port           | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file. | N/A   |
| 5432 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | com.hp.ov.nms.postgres.port           | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file  | N/A   |
| 5445 | NA Core   | TCP  | jboss HornetQ netty port              | jboss Messaging service  | Contact your Support representative for assistance. |
| 5455 | NA Core   | TCP  | jboss HornetQ netty-batch port        | jboss Messaging service  | Contact your Support representative for assistance. |
| 6099 | NA Core   | TCP  | Software Image Management Server Port | HTTPS port from the NA server to the Software Image Management server  | See "Server Page Fields" in the NA help.            |

**Ports Used by HP Network Management Software Products, continued**

| Port      | Product      | Type | Name               | Purpose  | Change Configuration   |
|-----------|--------------|------|--------------------|--|--|
| 7800-7810 | NNMi         | TCP  |                    | <ul style="list-style-type: none"> <li>- JGroups ports for application failover</li> <li>- If application failover is not used, HP recommends configuring the system firewall to restrict access to these ports</li> </ul> | Modify the %NNM_CONF%\nsm\props\nms-cluster.properties file (Windows) or \$NNM_CONF/nsm/props/nms-cluster.properties file (Linux). |
| 8005      | NA Satellite | TCP  | Tomcat Server Port | Port for Tomcat to listen for commands like SHUTDOWN   | Contact your Support representative for assistance.  |
| 8009      | NA Satellite | TCP  | Tomcat AJP Port    | Port for Tomcat to listen for AJP messages   | Contact your Support representative for assistance.  |
| 8022      | NA Core      | TCP  | SSH Server Port    | SSH port from the NA client to the NA server on the Linux operating system   | See "Telnet/SSH Page Fields" in the NA help.   |
| 8023      | NA Core      | TCP  | Telnet Server Port | Telnet port from the NA client to the NA server on the Linux operating system  | See "Telnet/SSH Page Fields" in the NA help.   |
| 8080      | NA Core      | TCP  | HTTP Port          | HTTP port from the NA client to the NA server. Use instead of 80 when NA coexists with NNMi.   | Contact your Support representative for assistance.  |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product                   | Type | Name                       | Purpose  | Change Configuration   |
|------|---------------------------|------|----------------------------|--|--|
| 8080 | NNM iSPI NET              | TCP  | jetty http port            | Default HTTP port - used for Web UI & Web Services.  | Post-install modifications not supported.  |
| 8084 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.web.http | Default HTTP port - used for Web UI.   | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). You can also change this during installation. |
| 8443 | NA Core                   | TCP  | HTTPS Port                 | HTTPS port from the NA client to the NA server. Use instead of 443 when NA coexists with NNMi. | Contact your Support representative for assistance.  |
| 8443 | NA Satellite              | TCP  | Tomcat HTTPS Port          | RpcPort from the Satellite to the management agent (Tomcat), Syslog, TFTP                      | Contact your Support representative for assistance.  |
| 8443 | NNM iSPI NET              | TCP  | jetty SSL/https port       | Default HTTPS port - used for Web UI & Web Services.   | Post-install modifications not supported.  |
| 8886 | NNMi                      | TCP  | OVsPMD_MGMT                | NNMi ovspmd (process manager) management port  | Modify the /etc/services file  |
| 8887 | NNMi                      | TCP  | OVsPMD_REQ                 | NNMi ovspmd (process manager) request port   | Modify the /etc/services file  |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product                                  | Type | Name                                    | Purpose  | Change Configuration   |
|------|--|------|---|--|--|
| 8989 | NNMi                                     | TCP  | com.hp.ov.nms.events.action.server.port | Action server port   | Modify the %NmInstallDir%\misc\nnm\props\shared\nmaction.properties file (Windows) or \$NmInstallDir/misc/nnm/props/shared/nmaction.properties file (Linux). |
| 9004 | NNM iSPI NET                             | TCP  | HP OO RAS port                          | Provides access to HP OO Remote Action Service.  | Change not supported.  |
| 9090 | NA Satellite                             | TCP  | Gateway Admin Port                      | AdminPort from the Satellite to the Core Gateway. Note that the Satellite uses all of the ports that the NA Core uses for managing devices (from the Satellite to the device: 22, 23, 514, 80, and 443). | See "Device Access Page Fields" in the NA help.  |
| 9300 | NNM iSPI Performance for Metrics and NPS | TCP  | NPS UI                                  | Default HTTP port - used for Web UI & BI Web Services.   | Change using configureWebAccess.ovpl.  |
| 9301 | NNM iSPI Performance for Metrics and NPS | TCP  | Sybase ASE                              | Sybase ASE (BI Content Manager Database). Used by processes running on the same server.  | Change not supported.  |

**Ports Used by HP Network Management Software Products, continued**

| Port | Product                                  | Type | Name                                    | Purpose   | Change Configuration                  |
|------|--|------|---|---|---------------------------------------|
| 9302 | NNM iSPI Performance for Metrics and NPS | TCP  | Sybase IQ Agent                         | Sybase IQ Agent service. Used by processes running on the same server.  | Change not supported.                 |
| 9303 | NNM iSPI Performance for Metrics and NPS | TCP  | Sybase IQ - PerfSPI DB                  | Sybase IQ database used to store all NPS extensionPack data. Used by processes running on the same server.    | Change not supported.                 |
| 9305 | NNM iSPI Performance for Metrics and NPS | TCP  | NPS UI - SSL                            | Default Secure HTTPS port (SSL) - used for Web UI & BI Web Services.  | Change using configureWebAccess.ovpl. |
| 9306 | NNM iSPI Performance for Metrics and NPS | TCP  | Database SQL Rewrite Proxy - PerfSPI DB | SQL Rewrite proxy for the Perfspi database - used by BI Server. Used by processes running on the same server. | Change not supported.                 |
| 9308 | NNM iSPI Performance for Metrics and NPS | TCP  | Sybase ASE Backup Server                | Sybase ASE backup server for the BI content manager database. Used by processes running on the same server.   | Change not supported.                 |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product                   | Type | Name                              | Purpose                                    | Change Configuration   |
|-------|---------------------------|------|-----------------------------------|--|--|
| 10080 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.web.http        | Default HTTP port - used for Web UI.       | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). You can also change this during installation. |
| 10083 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.naming.rmi      | Default port for RMI naming service        | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 10084 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.jmx.jrmp        | Default RMI object port (JRMP invoker)     | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 10085 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port            | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 10086 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product                   | Type | Name                            | Purpose  | Change Configuration   |
|-------|---------------------------|------|---------------------------------|--|--|
| 10087 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.hq            | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 10089 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.remoting.ejb3 | Default EJB3 remoting connector port                     | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 10092 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.hq.ssl        | Used for encrypted Global Network Management traffic.    | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 10099 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.naming.port   | Default bootstrap JNP service port (JNDI provider)       | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). You can also change this during installation. |
| 10443 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.web.https     | Default secure HTTPS port (SSL) - used for Web UI.       | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). You can also change this during installation. |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product   | Type | Name                              | Purpose  | Change Configuration   |
|-------|---|------|-----------------------------------|--|--|
| 11080 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.web.http        | Default HTTP port - used for Web UI.               | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux). You can also change this during installation. |
| 11081 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.web.https       | Default secure HTTPS port (SSL) - used for Web UI. | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux). You can also change this during installation. |
| 11083 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.naming.rmi      | Default port for RMI naming service                | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11084 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.jmx.jrmp        | Default RMI object port (JRMP invoker)             | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11085 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port                    | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11086 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port         | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |



**Ports Used by HP Network Management Software Products, continued**

| Port  | Product   | Type | Name                            | Purpose  | Change Configuration   |
|-------|---|------|---------------------------------|--|--|
| 11087 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.hq            | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11089 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.remoting.ejb3 | Default EJB3 remoting connector port                     | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11092 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.hq.ssl        | Used for encrypted Global Network Management traffic.    | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11099 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.naming.port   | Default bootstrap JNP service port (JNDI provider)       | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux). You can also change this during installation. |
| 11712 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.ts.recovery   | Default recovery port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11713 | NNM iSPI Performance for Traffic (Traffic Leaf) | TCP  | nmsas.server.port.ts.status     | Default status port used by the Transaction service.     | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product   | Type | Name                         | Purpose  | Change Configuration   |
|-------|---|------|------------------------------|--|--|
| 11714 | NNM iSPI Performance for Traffic (Traffic Leaf)   | TCP  | nmsas.server.port.ts.id      | Default port used by the Transaction service.      | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 12080 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.web.http   | Default HTTP port - used for Web UI.               | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). You can also change this during installation. |
| 12081 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.web.https  | Default secure HTTPS port (SSL) - used for Web UI. | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). You can also change this during installation. |
| 12083 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.naming.rmi | Default port for RMI naming service                | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12084 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.jmx.jmp    | Default RMI object port (JRMP invoker)             | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product   | Type | Name                              | Purpose  | Change Configuration   |
|-------|---|------|-----------------------------------|--|--|
| 12085 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port                          | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). |
| 12086 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port               | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). |
| 12087 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.hq              | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). |
| 12089 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.remoting.ejb3   | Default EJB3   | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). |
| 12092 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.hq.ssl          | Used for encrypted Global Network Management traffic.    | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product   | Type | Name                          | Purpose  | Change Configuration   |
|-------|---|------|-------------------------------|--|--|
| 12099 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.naming.port | Default bootstrap JNP service port (JNDI provider)     | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). You can also change this during installation. |
| 12712 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.ts.recovery | Default recovery port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12713 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.ts.status   | Default status port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12714 | NNM iSPI Performance for Traffic (Traffic Master) | TCP  | nmsas.server.port.ts.id       | Default port used by the Transaction service.          | Modify the %NnmDataDir%\nmsas\traffic-master\server.properties file (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 14083 | NNM iSPI for IP Multicast                         | TCP  | nmsas.server.port.naming.rmi  | Default port for RMI naming service                    | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).   |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product                   | Type | Name                              | Purpose  | Change Configuration   |
|-------|---------------------------|------|-----------------------------------|--|--|
| 14084 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.jmx.jrmp        | Default RMI object port (JRMP invoker)                   | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). |
| 14085 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port                          | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). |
| 14086 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port               | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). |
| 14087 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.hq              | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). |
| 14089 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.remoting.ejb3   | Default EJB3 remoting connector port                     | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product                   | Type | Name                          | Purpose  | Change Configuration   |
|-------|---------------------------|------|-------------------------------|--|--|
| 14092 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.hq.ssl      | Used for encrypted Global Network Management traffic.  | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).   |
| 14099 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.naming.port | Default bootstrap JNP service port (JNDI provider)     | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). You can also change this during installation. |
| 14102 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.ts.id       | Default port used by the Transaction service.          | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).   |
| 14103 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.ts.recovery | Default recovery port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).   |
| 14104 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.ts.status   | Default status port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).   |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product                   | Type | Name                          | Purpose  | Change Configuration   |
|-------|---------------------------|------|-------------------------------|--|--|
| 14443 | NNM iSPI for IP Multicast | TCP  | nmsas.server.port.web.https   | Default secure HTTPS port (SSL) - used for Web UI.     | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). You can also change this during installation. |
| 14712 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.ts.recovery | Default recovery port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 14713 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.ts.status   | Default status port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 14714 | NNM iSPI for IP Telephony | TCP  | nmsas.server.port.ts.id       | Default port used by the Transaction service.          | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 24040 | NNM iSPI for MPLS         | TCP  | nmsas.server.port.web.http    | Default HTTP port - used for Web UI.                   | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpIs/server.properties file (Linux). You can also change this during installation.           |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product           | Type | Name                              | Purpose  | Change Configuration   |
|-------|-------------------|------|-----------------------------------|--|--|
| 24041 | NNM iSPI for MPLS | TCP  | nmsas.server.port.remoting.ejb3   | Default EJB3 remoting connector port               | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |
| 24043 | NNM iSPI for MPLS | TCP  | nmsas.server.port.web.https       | Default secure HTTPS port (SSL) - used for Web UI. | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). You can also change this during installation. |
| 24044 | NNM iSPI for MPLS | TCP  | nmsas.server.port.jmx.jrmp        | Default RMI object port (JRMP invoker)             | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |
| 24045 | NNM iSPI for MPLS | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port         | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |
| 24046 | NNM iSPI for MPLS | TCP  | nmsas.server.port.naming.port     | Default bootstrap JNP service port (JNDI provider) | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). You can also change this during installation. |



**Ports Used by HP Network Management Software Products, continued**

| Port  | Product           | Type | Name                          | Purpose  | Change Configuration   |
|-------|-------------------|------|-------------------------------|--|--|
| 24047 | NNM iSPI for MPLS | TCP  | nmsas.server.port.hq          | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |
| 24048 | NNM iSPI for MPLS | TCP  | nmsas.server.port.jmx.rmi     | Default RMI pooled invoker port                          | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |
| 24049 | NNM iSPI for MPLS | TCP  | nmsas.server.port.naming.rmi  | Default port for RMI naming service                      | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |
| 24092 | NNM iSPI for MPLS | TCP  | nmsas.server.port.hq.ssl      | Used for encrypted Global Network Management traffic.    | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |
| 24712 | NNM iSPI for MPLS | TCP  | nmsas.server.port.ts.recovery | Default recovery port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product                     | Type | Name                          | Purpose  | Change Configuration   |
|-------|-----------------------------|------|-------------------------------|--|--|
| 24713 | NNM iSPI for MPLS           | TCP  | nmsas.server.port.ts.status   | Default status port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |
| 24714 | NNM iSPI for MPLS           | TCP  | nmsas.server.port.ts.id       | Default port used by the Transaction service.        | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |
| 54040 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.web.http    | Default HTTP port - used for Web UI.                 | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). You can also change this during installation. |
| 54043 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.web.https   | Default secure HTTPS port (SSL) - used for Web UI.   | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). You can also change this during installation. |
| 54046 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.naming.port | Default bootstrap JNP service port (JNDI provider)   | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). You can also change this during installation. |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product                     | Type | Name                              | Purpose  | Change Configuration   |
|-------|-----------------------------|------|-----------------------------------|--|--|
| 54047 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.naming.rmi      | Default port for RMI naming service                      | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54084 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.jmx.jmp         | Default RMI object port (JRMP invoker)                   | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54085 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port                          | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54086 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port               | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54087 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.hq              | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |

**Ports Used by HP Network Management Software Products, continued**

| Port  | Product                     | Type | Name                            | Purpose  | Change Configuration   |
|-------|-----------------------------|------|---------------------------------|--|--|
| 54088 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.hq.ssl        | Used for encrypted Global Network Management traffic.  | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54089 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.remoting.ejb3 | Default EJB3 remoting connector port                   | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54712 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.ts.recovery   | Default recovery port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54713 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.ts.status     | Default status port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54714 | NNM iSPI Performance for QA | TCP  | nmsas.server.port.ts.id         | Default port used by the Transaction service.          | Modify the %NnmDataDir%\nmsas\qa\server.properties file (Windows) or \$NnmDataDir/nmsas/qa/server.properties file (Linux). |

# HP Network Node Manager i Software Ports

The NNMi ports fit into the following categories:

- [Ports Used on the NNMi Management Server](#)
- [Ports Used for Communication Between the NNMi Management Server and Other Systems](#)
- [Required Accessible Sockets for Global Network Management](#)

## Ports Used on the NNMi Management Server

The following table shows the ports NNMi uses on the management server. NNMi listens on these ports. If port conflicts occur, you can change most of these port numbers as shown in the *Change Configuration* column. See the *nmm.ports* reference page, or the Linux manpage, for more information.

**Note:** For application failover to work successfully, open TCP ports 7800-7810. For the application failover feature to function correctly, the active and standby NNMi management servers must have unrestricted network access to each other.

### Ports Used on the NNMi Management Server

| Port | Type | Name                        | Purpose  | Change Configuration   |
|------|------|-----------------------------|--|--|
| 80   | TCP  | nmsas.server.port.web.http  | <p>Default HTTP port - used for Web UI &amp; Web Services</p> <p>- In GNM configurations NNMi uses this port to establish communication from the global manager to the regional manager</p> <p>- Once this port is open, it becomes bi-directional</p> | <p>Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux).</p> <p>You can also change this during installation.</p> |
| 162  | UDP  | trapPort                    | SNMP trap port   | Modify using the <i>nmtrapconfig.ovpl</i> Perl script. See the <i>nmtrapconfig.ovpl</i> reference page, or the Linux manpage, for more information.  |
| 443  | TCP  | nmsas.server.port.web.https | Default secure HTTPS port (SSL) - used for Web UI & Web Services   | Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux).   |

**Ports Used on the NNMi Management Server, continued**

| Port | Type | Name                          | Purpose  | Change Configuration  |
|------|------|-------------------------------|--|---|
| 1098 | TCP  | nmsas.server.port.naming.rmi  | <p>- Used by NNMi command line tools to communicate with a variety of services used by NNMi</p> <p>- HP recommends configuring the system firewall to restrict access to these ports to localhost only</p> | <p>Modify the %NNM_CONF%\nrm\props\nms-local.properties file (Windows) or \$NNM_CONF/nrm/props/nms-local.properties file (Linux).</p> |
| 1099 | TCP  | nmsas.server.port.naming.port | <p>- Used by NNMi command line tools to communicate with a variety of services used by NNMi</p> <p>- HP recommends configuring the system firewall to restrict access to these ports to localhost only</p> | <p>Modify the %NNM_CONF%\nrm\props\nms-local.properties file (Windows) or \$NNM_CONF/nrm/props/nms-local.properties file (Linux).</p> |

**Ports Used on the NNMi Management Server, continued**

| Port | Type | Name                            | Purpose  | Change Configuration   |
|------|------|---------------------------------|--|--|
| 3873 | TCP  | nmsas.server.port.remoting.ejb3 | <p>- Used by NNMi command line tools to communicate with a variety of services used by NNMi</p> <p>- HP recommends configuring the system firewall to restrict access to these ports to localhost only</p> | <p>Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux).</p>            |
| 4444 | TCP  | nmsas.server.port.jmx.jmp       | <p>- Used by NNMi command line tools to communicate with a variety of services used by NNMi</p> <p>- HP recommends configuring the system firewall to restrict access to these ports to localhost only</p> | <p>Modify the Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux).</p> |



**Ports Used on the NNMi Management Server, continued**

| Port | Type | Name                              | Purpose  | Change Configuration  |
|------|------|-----------------------------------|--|---|
| 4445 | TCP  | nmsas.server.port.jmx.rmi         | <p>- Used by NNMi command line tools to communicate with a variety of services used by NNMi</p> <p>- HP recommends configuring the system firewall to restrict access to these ports to localhost only</p> | <p>Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux).</p> |
| 4446 | TCP  | nmsas.server.port.invoker.unified | <p>- Used by NNMi command line tools to communicate with a variety of services used by NNMi</p> <p>- HP recommends configuring the system firewall to restrict access to these ports to localhost only</p> | <p>Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux).</p> |

**Ports Used on the NNMi Management Server, continued**

| Port | Type | Name                          | Purpose  | Change Configuration   |
|------|------|-------------------------------|--|--|
| 4457 | TCP  | nmsas.server.port.hq          | <ul style="list-style-type: none"> <li>- Used for un-encrypted Global Network Management traffic.</li> <li>- Messaging travels from the global manager to the regional manager</li> <li>- Once this port is open, it becomes bi-directional</li> </ul> | Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux). |
| 4459 | TCP  | nmsas.server.port.hq.ssl      | <ul style="list-style-type: none"> <li>- Used for encrypted Global Network Management traffic.</li> <li>- Messaging travels from the global manager to the regional manager</li> <li>- Once this port is open, it becomes bi-directional</li> </ul>    | Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux). |
| 4712 | TCP  | nmsas.server.port.ts.recovery | Internal transaction service port  | Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux). |
| 4713 | TCP  | nmsas.server.port.ts.status   | Internal transaction service port  | Modify the %NNM_CONF%\nmm\props\nms-local.properties file (Windows) or \$NNM_CONF/nmm/props/nms-local.properties file (Linux). |

**Ports Used on the NNMi Management Server, continued**

| Port      | Type | Name                                    | Purpose  | Change Configuration   |
|-----------|------|---|--|--|
| 4714      | TCP  | nmsas.server.port.ts.id                 | Internal transaction service port  | Modify the %NNM_CONF%\nnm\props\nms-local.properties file (Windows) or \$NNM_CONF/nnm/props/nms-local.properties file (Linux).                                   |
| 5432      | TCP  | com.hp.ov.nms.postgres.port             | This PostgreSQL port is the port the embedded database listens on for this NNMi management server.   | Modify the %NNM_CONF%\nnm\props\nms-local.properties file (Windows) or \$NNM_CONF/nnm/props/nms-local.properties file (Linux).                                   |
| 7800-7810 | TCP  |   | - JGroups ports for application failover<br><br>- If application failover is not used, HP recommends configuring the system firewall to restrict access to these ports | Modify the %NNM_CONF%\nnm\props\nms-cluster.properties file (Windows) or \$NNM_CONF/nnm/props/nms-cluster.properties file (Linux).                               |
| 8886      | TCP  | OVsPMD_MGMT                             | NNMi ovspmd (process manager) management port  | Modify the /etc/services file.   |
| 8887      | TCP  | OVsPMD_REQ                              | NNMi ovsmppd (process manager) request port  | Modify the /etc/services file.   |
| 8989      | TCP  | com.hp.ov.nms.events.action.server.port | Action server port   | Modify the %NnmInstallDir%\misc\nnm\props\shared\nnmaction.properties file (Windows) or \$NnmInstallDir/misc/nnm/props/shared/nnmaction.properties file (Linux). |

### Ports Used for Communication Between the NNMi Management Server and Other Systems

The following table shows some of the ports NNMi uses to communicate with other systems. If a firewall separates NNMi from these systems, you must open many of these ports in the firewall. The actual set of ports depends on the set of integrations you configured to use with NNMi and how you configured those integrations. If column 4 indicates *Client*, NNMi connects or sends to this port; if column 4 indicates *Server*, NNMi listens on this port.

### Ports Used for Communication Between the NNMi Management Server and Other Systems

| Port | Type | Purpose  | Client, Server |
|------|------|--|----------------|
| 80   | TCP  | Default HTTP port for NNMi; used for Web UI and Web Services   | Server         |
| 80   | TCP  | Default HTTP port for NNMi connecting to other applications. The actual port depends on NNMi configuration.  | Client         |
| 161  | UDP  | SNMP request port  | Client         |
| 162  | UDP  | SNMP trap port - traps received by NNMi  | Server         |
| 162  | UDP  | SNMP trap port; Trap Forwarding, Northbound Interface, or NetCool integrations   | Client         |
| 389  | TCP  | Default LDAP port  | Client         |
| 395  | UDP  | nGenius Probe SNMP trap port   | Client         |
| 443  | TCP  | Default secure HTTPS port for NNMi connecting to other applications; the actual port depends on NNMi configuration.<br>Default HTTPS port for HP OM on Windows | Client         |
| 443  | TCP  | Default secure HTTPS port; used for Web UI and Web Services  | Server         |
| 636  | TCP  | Default secure LDAP port (SSL)   | Client         |
| 1741 | TCP  | Default CiscoWorks LMS web services port   | Client         |
| 4457 | TCP  | Used for un-encrypted Global Network Management traffic. The connection is from the global manager to the regional manager.                                    | Client, Server |

**Ports Used for Communication Between the NNMi Management Server and Other Systems, continued**

| Port         | Type | Purpose  | Client, Server    |
|--------------|------|--|-------------------|
| 4459         | TCP  | Used for encrypted Global Network Management traffic. The connection is from the global manager to the regional manager.   | Client, Server    |
| 7800-7810    | TCP  | JGroups ports for application failover   | Client and Server |
| 8004         | TCP  | Default HTTP port for NNMi if another web server already has port 80. Used for Web UI and Web Services. Verify the actual HTTP port for your NNMi management server. | Server            |
| 8080         | TCP  | Default HTTP port for connecting to NA if installed on the same system as NNMi.<br>Default HTTPS port for HP UCMDB web services                                      | Client            |
| 8443 or 8444 | TCP  | Default HTTP port for connecting to HP OM for UNIX   | Client            |
| 9300         | TCP  | Default HTTP port for connecting to NNM iSPI Performance for Metrics   | Client            |
| 50000        | TCP  | Default HTTPS port for connecting to SIM   | Client            |

**Note:** If you configure NNMi to use ICMP fault polling or ping sweep for discovery, configure the firewall to pass ICMP packets through the firewall.

**Note:** The Web Services approach for the NNMi-HP OM integration does not work through a firewall, however the NNMi-HP OM integration using the Northbound Interface does work through a firewall.

### Required Accessible Sockets for Global Network Management

The following table shows the well-known ports that need to be accessible from a global NNMi management server to a regional NNMi management server. The global network management feature requires these ports to be open for TCP access from the global NNMi management server to the regional NNMi management server. The regional NNMi management server will not open sockets back to the global NNMi management server.

### Required Accessible Sockets for Global Network Management

| Security | Parameter              | TCP Port |
|----------|------------------------|----------|
| non-SSL  | jboss.http.port        | 80       |
|          | jboss.bisocket.port    | 4457     |
| SSL      | jboss.https.port       | 443      |
|          | jboss.sslbisocket.port | 4459     |

## NNM iSPI for MPLS Ports

The following table shows the ports the HP Network Node Manager iSPI for MPLS Software uses on the management server. In case of port conflicts, almost all of these port numbers can be changed using the server.properties file located at: %NnmDataDir%/nmsas/mpls/server.properties.

### Ports Used on the HP Network Node Manager iSPI for MPLS Software Management Server

| Port  | Type | Name                            | Purpose  | Change Configuration   |
|-------|------|---------------------------------|--|--|
| 5432  | TCP  | com.hp.ov.nms.postgres.port     | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file. | N/A  |
| 24040 | TCP  | nmsas.server.port.web.http      | Default HTTP port - used for Web UI.   | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). You can also change this during installation. |
| 24041 | TCP  | nmsas.server.port.remoting.ejb3 | Default EJB3 remoting connector port   | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |
| 24043 | TCP  | nmsas.server.port.web.https     | Default secure HTTPS port (SSL) - used for Web UI.   | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). You can also change this during installation. |

**Ports Used on the HP Network Node Manager iSPI for MPLS Software Management Server, continued**

| Port  | Type | Name                              | Purpose  | Change Configuration   |
|-------|------|-----------------------------------|--|--|
| 24044 | TCP  | nmsas.server.port.jmx.jmp         | Default RMI object port (JRMP invoker)                   | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |
| 24045 | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port               | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |
| 24046 | TCP  | nmsas.server.port.naming.port     | Default bootstrap JNP service port (JNDI provider)       | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). You can also change this during installation. |
| 24047 | TCP  | nmsas.server.port.hq              | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |
| 24048 | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port                          | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux).   |



**Ports Used on the HP Network Node Manager iSPI for MPLS Software Management Server, continued**

| Port  | Type | Name                          | Purpose  | Change Configuration   |
|-------|------|-------------------------------|--|--|
| 24049 | TCP  | nmsas.server.port.naming.rmi  | Default port for RMI naming service                    | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |
| 24092 | TCP  | nmsas.server.port.hq.ssl      | Used for encrypted Global Network Management traffic.  | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |
| 24712 | TCP  | nmsas.server.port.ts.recovery | Default recovery port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |
| 24713 | TCP  | nmsas.server.port.ts.status   | Default status port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |
| 24714 | TCP  | nmsas.server.port.ts.id       | Default port used by the Transaction service.          | Modify the %NnmDataDir%\nmsas\mpls\server.properties file (Windows) or \$NnmDataDir/nmsas/mpls/server.properties file (Linux). |

## NNM iSPI for IP Telephony Ports

The following table shows the ports the NNM iSPI for IP Telephony uses on the management server. In case of port conflicts, almost all of these port numbers can be changed using the `server.properties` file located at: `%NnmDataDir%/nmsas/ipt/server.properties`.

### Ports Used on the NNM iSPI for IP Telephony Management Server

| Port  | Type | Name                                      | Purpose   | Change Configuration   |
|-------|------|---|---|--|
| 5432  | TCP  | <code>com.hp.ov.nms.postgres.port</code>  | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the <code>nms-local.properties</code> file. | N/A  |
| 10080 | TCP  | <code>nmsas.server.port.web.http</code>   | Default HTTP port - used for Web UI.  | Modify the <code>%NnmDataDir%\nmsas\ipt\server.properties</code> file (Windows) or <code>\$NnmDataDir/nmsas/ipt/server.properties</code> file (Linux). You can also change this during installation. |
| 10083 | TCP  | <code>nmsas.server.port.naming.rmi</code> | Default port for RMI naming service   | Modify the <code>%NnmDataDir%\nmsas\ipt\server.properties</code> file (Windows) or <code>\$NnmDataDir/nmsas/ipt/server.properties</code> file (Linux).   |
| 10084 | TCP  | <code>nmsas.server.port.jmx.jrmp</code>   | Default RMI object port (JRMP invoker)  | Modify the <code>%NnmDataDir%\nmsas\ipt\server.properties</code> file (Windows) or <code>\$NnmDataDir/nmsas/ipt/server.properties</code> file (Linux).   |

**Ports Used on the NNM iSPI for IP Telephony Management Server, continued**

| Port  | Type | Name                              | Purpose  | Change Configuration   |
|-------|------|-----------------------------------|--|--|
| 10085 | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port                          | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). |
| 10086 | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port               | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). |
| 10087 | TCP  | nmsas.server.port.hq              | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). |
| 10089 | TCP  | nmsas.server.port.remoting.ejb3   | Default EJB3 remoting connector port                     | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). |
| 10092 | TCP  | nmsas.server.port.hq.ssl          | Used for encrypted Global Network Management traffic.    | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). |

**Ports Used on the NNM iSPI for IP Telephony Management Server, continued**

| Port  | Type | Name                          | Purpose  | Change Configuration   |
|-------|------|-------------------------------|--|--|
| 10099 | TCP  | nmsas.server.port.naming.port | Default bootstrap JNP service port (JNDI provider)     | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). You can also change this during installation. |
| 10443 | TCP  | nmsas.server.port.web.https   | Default secure HTTPS port (SSL) - used for Web UI.     | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux). You can also change this during installation. |
| 14712 | TCP  | nmsas.server.port.ts.recovery | Default recovery port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 14713 | TCP  | nmsas.server.port.ts.status   | Default status port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |
| 14714 | TCP  | nmsas.server.port.ts.id       | Default port used by the Transaction service.          | Modify the %NnmDataDir%\nmsas\ipt\server.properties file (Windows) or \$NnmDataDir/nmsas/ipt/server.properties file (Linux).   |

## NNM iSPI for IP Multicast Ports

The following table shows the ports the NNM iSPI for IP Multicast uses on the management server. In case of port conflicts, almost all of these port numbers can be changed using the server.properties file located at: %NnmDataDir%/nmsas/multicast/server.properties.

### Ports Used on the NNM iSPI for IP Multicast Management Server

| Port  | Type | Name                         | Purpose  | Change Configuration   |
|-------|------|------------------------------|--|--|
| 5432  | TCP  | com.hp.ov.nms.postgres.port  | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file. | N/A  |
| 8084  | TCP  | nmsas.server.port.web.http   | Default HTTP port - used for Web UI.   | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). You can also change this during installation. |
| 14083 | TCP  | nmsas.server.port.naming.rmi | Default port for RMI naming service  | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).   |
| 14084 | TCP  | nmsas.server.port.jmx.jrmp   | Default RMI object port (JRMP invoker)   | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).   |

**Ports Used on the NNM iSPI for IP Multicast Management Server, continued**

| Port  | Type | Name                              | Purpose  | Change Configuration   |
|-------|------|-----------------------------------|--|--|
| 14085 | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port                          | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). |
| 14086 | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port               | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). |
| 14087 | TCP  | nmsas.server.port.hq              | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\multicast\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).  |
| 14089 | TCP  | nmsas.server.port.remoting.ejb3   | Default EJB3 remoting connector port                     | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). |
| 14092 | TCP  | nmsas.server.port.hq.ssl          | Used for encrypted Global Network Management traffic.    | Modify the %NnmDataDir%\nmsas\multicast\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).  |

**Ports Used on the NNM iSPI for IP Multicast Management Server, continued**

| Port  | Type | Name                          | Purpose  | Change Configuration   |
|-------|------|-------------------------------|--|--|
| 14099 | TCP  | nmsas.server.port.naming.port | Default bootstrap JNP service port (JNDI provider)     | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). You can also change this during installation. |
| 14102 | TCP  | nmsas.server.port.ts.id       | Default port used by the Transaction service.          | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).   |
| 14103 | TCP  | nmsas.server.port.ts.recovery | Default recovery port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\multicast\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).  |
| 14104 | TCP  | nmsas.server.port.ts.status   | Default status port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux).   |
| 14443 | TCP  | nmsas.server.port.web.https   | Default secure HTTPS port (SSL) - used for Web UI.     | Modify the %NnmDataDir%\nmsas\multicast\server.properties file (Windows) or \$NnmDataDir/nmsas/multicast/server.properties file (Linux). You can also change this during installation. |

# NNM iSPI for Performance for Traffic Ports

The NNM iSPI Performance for Traffic ports fit into the following categories:

- [Ports Used on the NNM iSPI Performance for Traffic Management Server \(Traffic Master\)](#)
- [Ports Used on the NNM iSPI Performance for Traffic Management Server \(Traffic Leaf\)](#)
- [Ports Used for Communication Between the NNM iSPI Performance for Traffic Management Server and Other Systems](#)

## Ports Used on the NNM iSPI Performance for Traffic Management Server (Traffic Master)

The following table shows the ports the NNM iSPI Performance for Traffic (Traffic Master component) uses on the management server. In case of port conflicts, almost all of these port numbers can be changed using the server.properties file located at: %NnmDataDir%\nmsas/traffic-master/server.properties.

## Ports Used on the NNM iSPI Performance for Traffic Management Server (Traffic Master)

| Port  | Type | Name                        | Purpose   | Change Configuration  |
|-------|------|-----------------------------|---|---|
| 5432  | TCP  | com.hp.ov.nms.postgres.port | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file | N/A   |
| 12080 | TCP  | nmsas.server.port.web.http  | Default HTTP port - used for Web UI.  | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). You can also change this during installation. |



**Ports Used on the NNM iSPI Performance for Traffic Management Server (Traffic Master), continued**

| Port  | Type | Name                              | Purpose  | Change Configuration  |
|-------|------|-----------------------------------|--|---|
| 12081 | TCP  | nmsas.server.port.web.https       | Default secure HTTPS port (SSL) - used for Web UI.       | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). You can also change this during installation. |
| 12083 | TCP  | nmsas.server.port.naming.rmi      | Default port for RMI naming service                      | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12084 | TCP  | nmsas.server.port.jmx.jrmp        | Default RMI object port (JRMP invoker)                   | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12085 | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port                          | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12086 | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port               | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12087 | TCP  | nmsas.server.port.hq              | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |

**Ports Used on the NNM iSPI Performance for Traffic Management Server (Traffic Master), continued**

| Port  | Type | Name                            | Purpose  | Change Configuration  |
|-------|------|---------------------------------|--|---|
| 12089 | TCP  | nmsas.server.port.remoting.ejb3 | Default EJB3   | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12092 | TCP  | nmsas.server.port.hq.ssl        | Used for encrypted Global Network Management traffic.  | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12099 | TCP  | nmsas.server.port.naming.port   | Default bootstrap JNP service port (JNDI provider)     | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux). You can also change this during installation. |
| 12712 | TCP  | nmsas.server.port.ts.recovery   | Default recovery port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12713 | TCP  | nmsas.server.port.ts.status     | Default status port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |
| 12714 | TCP  | nmsas.server.port.ts.id         | Default port used by the Transaction service.          | Modify the %NnmDataDir%\nmsas\traffic-master\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-master/server.properties file (Linux).   |

### Ports Used on the NNM iSPI Performance for Traffic Management Server (Traffic Leaf)

The following table shows the ports the NNM iSPI Performance for Traffic (Traffic Leaf component) uses on the management server. In case of port conflicts, almost all of these port numbers can be changed using the server .properties file located at: %NnmDataDir%/nmsas/traffic-leaf/server.properties.

### Ports Used on the NNM iSPI Performance for Traffic Management Server (Traffic Leaf)

| Port  | Type | Name                         | Purpose  | Change Configuration  |
|-------|------|------------------------------|--|---|
| 5432  | TCP  | com.hp.ov.nms.postgres.port  | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the nms-local.properties file. | N/A   |
| 11080 | TCP  | nmsas.server.port.web.http   | Default HTTP port - used for Web UI.   | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux). You can also change this during installation. |
| 11081 | TCP  | nmsas.server.port.web.https  | Default secure HTTPS port (SSL) - used for Web UI.   | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux). You can also change this during installation. |
| 11083 | TCP  | nmsas.server.port.naming.rmi | Default port for RMI naming service  | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11084 | TCP  | nmsas.server.port.jmx.jrmp   | Default RMI object port (JRMP invoker)   | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |

**Ports Used on the NNM iSPI Performance for Traffic Management Server (Traffic Leaf), continued**

| Port  | Type | Name                              | Purpose  | Change Configuration  |
|-------|------|-----------------------------------|--|---|
| 11085 | TCP  | nmsas.server.port.jmx.rmi         | Default RMI pooled invoker port                          | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11086 | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port               | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11087 | TCP  | nmsas.server.port.hq              | Used for un-encrypted Global Network Management traffic. | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11089 | TCP  | nmsas.server.port.remoting.ejb3   | Default EJB3 remoting connector port                     | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11092 | TCP  | nmsas.server.port.hq.ssl          | Used for encrypted Global Network Management traffic.    | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux).   |
| 11099 | TCP  | nmsas.server.port.naming.port     | Default bootstrap JNP service port (JNDI provider)       | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux). You can also change this during installation. |

### Ports Used on the NNM iSPI Performance for Traffic Management Server (Traffic Leaf), continued

| Port  | Type | Name                          | Purpose  | Change Configuration  |
|-------|------|-------------------------------|--|---|
| 11712 | TCP  | nmsas.server.port.ts.recovery | Default recovery port used by the Transaction service. | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux). |
| 11713 | TCP  | nmsas.server.port.ts.status   | Default status port used by the Transaction service.   | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux). |
| 11714 | TCP  | nmsas.server.port.ts.id       | Default port used by the Transaction service.          | Modify the %NnmDataDir%\nmsas\traffic-leaf\server.propertiesfile (Windows) or \$NnmDataDir/nmsas/traffic-leaf/server.properties file (Linux). |

### Ports Used for Communication Between the NNM iSPI Performance for Traffic Management Server and Other Systems

The following table shows some of the ports NNM iSPI Performance for Traffic uses to communicate with other systems. If a firewall separates the NNM iSPI Performance for Traffic from these systems, you must open many of these ports in the firewall. The actual set of ports depends on the set of integrations you configured to use with the NNM iSPI Performance for Traffic and how you configured those integrations. If column 4 indicates *Client*, the NNM iSPI Performance for Traffic connects or sends to this port; if column 4 indicates *Server*, the NNM iSPI Performance for Traffic listens on this port.

### Ports Used for Communication Between the Management Server and Other Systems

| Port          | Type | Purpose                       | Client or Server |
|---------------|------|-------------------------------|------------------|
| Any Free Port | TCP  | Avaya Streaming               | Server           |
| Any Free Port | TCP  | RTCP Server                   | Server           |
| 22            | TCP  | Cisco/Avaya SSH Communication | Client           |
| 22/23         | TCP  | Cisco FTP/SFTP Communication  | Server           |

**Ports Used for Communication Between the Management Server and Other Systems, continued**

| Port                | Type | Purpose                        | Client or Server |
|---------------------|------|--------------------------------|------------------|
| 23                  | TCP  | Avaya Survivable Communication | Client           |
| 8000 (Configurable) | TCP  | .NET Proxy(IPT shipped)        | Client           |
| 8443                | TCP  | Cisco AXL Communication        | Client           |

## NNM iSPI Performance for QA Ports

The following table shows the ports the NNM iSPI Performance for QA uses on the management server. In case of port conflicts, almost all of these port numbers can be changed using the `server.properties` file located at: `%NmDataDir%/nmsas/qa/server.properties`.

### Ports Used on the NNM iSPI Performance for QA Management Server

| Port  | Type | Name                                     | Purpose   | Change Configuration   |
|-------|------|--|---|--|
| 5432  | TCP  | <code>com.hp.ov.nms.postgres.port</code> | This PostgreSQL port is the port the embedded database listens on for this NNMi management server. The port is expected to be the same as that configured for NNMi in the <code>nms-local.properties</code> file. | N/A  |
| 54040 | TCP  | <code>nmsas.server.port.web.http</code>  | Default HTTP port - used for Web UI.  | Modify the <code>%NmDataDir%\nmsas\qa\server.properties</code> file (Windows) or <code>\$NmDataDir/nmsas/qa/server.properties</code> file (Linux). You can also change this during installation. |
| 54043 | TCP  | <code>nmsas.server.port.web.https</code> | Default secure HTTPS port (SSL) - used for Web UI.  | Modify the <code>%NmDataDir%\nmsas\qa\server.properties</code> file (Windows) or <code>\$NmDataDir/nmsas/qa/server.properties</code> file (Linux). You can also change this during installation. |

**Ports Used on the NNM iSPI Performance for QA Management Server, continued**

| Port  | Type | Name                          | Purpose  | Change Configuration  |
|-------|------|-------------------------------|--|---|
| 54046 | TCP  | nmsas.server.port.naming.port | Default bootstrap JNP service port (JNDI provider) | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties<br>file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties<br>file (Linux). You can also change this during<br>installation. |
| 54047 | TCP  | nmsas.server.port.naming.rmi  | Default port for RMI naming service                | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties<br>file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties<br>file (Linux).  |
| 54084 | TCP  | nmsas.server.port.jmx.jrmp    | Default RMI object port (JRMP invoker)             | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties<br>file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties<br>file (Linux).  |
| 54085 | TCP  | nmsas.server.port.jmx.rmi     | Default RMI pooled invoker port                    | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties<br>file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties<br>file (Linux).  |



**Ports Used on the NNM iSPI Performance for QA Management Server, continued**

| Port  | Type | Name                              | Purpose  | Change Configuration   |
|-------|------|-----------------------------------|--|--|
| 54086 | TCP  | nmsas.server.port.invoker.unified | Default RMI remoting server connector port               | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties<br>file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties<br>file (Linux). |
| 54087 | TCP  | nmsas.server.port.hq              | Used for un-encrypted Global Network Management traffic. | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties<br>file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties<br>file (Linux). |
| 54088 | TCP  | nmsas.server.port.hq.ssl          | Used for encrypted Global Network Management traffic.    | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties<br>file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties<br>file (Linux). |
| 54089 | TCP  | nmsas.server.port.remoting.ejb3   | Default EJB3 remoting connector port                     | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties<br>file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties<br>file (Linux). |

**Ports Used on the NNM iSPI Performance for QA Management Server, continued**

| Port  | Type | Name                          | Purpose  | Change Configuration   |
|-------|------|-------------------------------|--|--|
| 54712 | TCP  | nmsas.server.port.ts.recovery | Default recovery port used by the Transaction service. | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54713 | TCP  | nmsas.server.port.ts.status   | Default status port used by the Transaction service.   | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties file (Linux). |
| 54714 | TCP  | nmsas.server.port.ts.id       | Default port used by the Transaction service.          | Modify the<br><br>%NnmDataDir%\nmsas\qa\server.properties file (Windows) or<br>\$NnmDataDir/nmsas/qa/server.properties file (Linux). |

## NNM iSPI Performance for Metrics and NPS Ports

The following table shows the ports required for NNM iSPI Performance for Metrics and Network Performance Server (NPS). In case of port conflicts, almost all of these port numbers can be changed.

**Note:** If NNMi and NPS are not coexisting, then the network ports used for the OS network file sharing are also required (NFS services on Linux, Windows File Sharing on Windows).

### Required Ports for NNM iSPI Performance for Metrics and NPS

| Port | Type | Name                                    | Purpose   | Change Configuration                                |
|------|------|---|---|---|
| 9300 | TCP  | NPS UI                                  | Default HTTP port - used for Web UI & BI Web Services.  | Change using <code>configureWebAccess.ovpl</code> . |
| 9301 | TCP  | Sybase ASE                              | Sybase ASE (BI Content Manager Database). Used by processes running on the same server.                       | Change not supported.                               |
| 9302 | TCP  | Sybase IQ Agent                         | Sybase IQ Agent service. Used by processes running on the same server.  | Change not supported.                               |
| 9303 | TCP  | Sybase IQ - PerfSPI DB                  | Sybase IQ database used to store all NPS extensionPack data. Used by processes running on the same server.    | Change not supported.                               |
| 9305 | TCP  | NPS UI - SSL                            | Default Secure HTTPS port (SSL) - used for Web UI & BI Web Services.  | Change using <code>configureWebAccess.ovpl</code> . |
| 9306 | TCP  | Database SQL Rewrite Proxy - PerfSPI DB | SQL Rewrite proxy for the Perfspi database - used by BI Server. Used by processes running on the same server. | Change not supported.                               |
| 9308 | TCP  | Sybase ASE Backup Server                | Sybase ASE backup server for the BI content manager database. Used by processes running on the same server.   | Change not supported.                               |

## NNM iSPI NET Ports

The following table shows the ports used by the NNM iSPI NET diagnostics server. The NNM iSPI NET diagnostic server installs HP Operations Orchestration (HP OO). For more information, see the *HP Operations Orchestration Administrator's Guide*.

### Ports Used by the NNM iSPI NET Diagnostics Server

| Port | Type | Name                 | Purpose  | Change Configuration                      |
|------|------|----------------------|--|---|
| 3306 | TCP  | MySQL database port  | Provides access to MySQL database.                   | Change not supported.                     |
| 8080 | TCP  | jetty http port      | Default HTTP port - used for Web UI & Web Services.  | Post-install modifications not supported. |
| 8443 | TCP  | jetty SSL/https port | Default HTTPS port - used for Web UI & Web Services. | Post-install modifications not supported. |
| 9004 | TCP  | HP OO RAS port       | Provides access to HP OO Remote Action Service.      | Change not supported.                     |

# HP Network Automation Software Ports

The NA ports fit into the following categories:

- [Ports Used by the NA Core](#)
- [Ports Used by the NA Satellite](#)

## Ports Used by the NA Core

The following table shows the ports used by the NA core.

### Ports Used by the NA Core

| Port | Type | Name               | Purpose   | Change Configuration   |
|------|------|--------------------|---|--|
| 22   | TCP  | SSH Server Port    | SSH port from the NA client to the NA server on the Windows operating system    | See "Telnet/SSH Page Fields" in the NA help.                                     |
| 23   | TCP  | Telnet Server Port | Telnet port from the NA client to the NA server on the Windows operating system | See "Telnet/SSH Page Fields" in the NA help.                                     |
| 69   | UDP  | TFTP Port          | Network devices to the NA server  | Change not supported   |
| 80   | TCP  | HTTP Port          | HTTP port from the NA client to the NA server                                   | Contact your Support representative for assistance.                              |
| 443  | TCP  | HTTPS Port         | HTTPS port from the NA client to the NA server                                  | Contact your Support representative for assistance.                              |
| 514  | UDP  | Syslog Port        | Receive syslog messages from network devices on the NA server                   | See "Configuring the NA Syslog Server" in the NA Installation and Upgrade Guide. |

**Ports Used by the NA Core, continued**

| Port | Type | Name                      | Purpose  | Change Configuration                                |
|------|------|---------------------------|--|---|
| 1098 | TCP  | RMI Activation Port       | Port between NA clients and the NA Management Engine and between the NA Management Engines in separate NA Cores. NA clients can include:<br>-NA Syslog Server<br>-NA Connectors<br>-AAA Log Reader<br>-Syslog Reader<br>-Customer-written API scripts (For information, see the NA API User Guide and the NA CLI/API Command Reference.) | Contact your Support representative for assistance. |
| 1099 | TCP  | RMI Registration Port     | Port between NA clients and the NA Management Engine and between the NA Management Engines in separate NA Cores. NA clients can include:<br>-NA Syslog Server<br>-NA Connectors<br>-AAA Log Reader<br>-Syslog Reader<br>-Customer-written API scripts (For information, see the NA API User Guide and the NA CLI/API Command Reference.) | Contact your Support representative for assistance. |
| 1433 | TCP  | Microsoft SQL Server Port | Port on the Microsoft SQL Server that communicates with the NA Core. In a Distributed System configuration, the SQL Server databases communicate with each other on port 1433.   | Contact your Support representative for assistance. |
| 1521 | TCP  | Oracle SQL*Net Port       | Port on the Oracle database server that communicates with the NA Core. In a Distributed System configuration, the Oracle processes connect to each other on port 1521.   | Contact your Support representative for assistance. |
| 3306 | TCP  | MySQL Port                | Port on the MySQL database server that communicates with the NA Core   | Contact your Support representative for assistance. |

**Ports Used by the NA Core, continued**

| Port | Type | Name                                    | Purpose  | Change Configuration                                |
|------|------|---|--|---|
| 4446 | TCP  | jboss Remoting Port                     | Port between NA clients and the NA Management Engine and between the NA Management Engines in separate NA Cores. NA clients can include:<br>-NA Syslog Server<br>-NA Connectors<br>-AAA Log Reader<br>-Syslog Reader<br>-Customer-written API scripts (For information, see the NA API User Guide and the NA CLI/API Command Reference.) | Contact your Support representative for assistance. |
| 4712 | TCP  | jbossTS Recovery Manager Port           | jboss transaction management   | Contact your Support representative for assistance. |
| 4713 | TCP  | jbossTS Transaction Status Manager Port | jboss transaction management   | Contact your Support representative for assistance. |
| 4714 | TCP  | jbossTS Socket Process ID Port          | jboss transaction management   | Contact your Support representative for assistance. |
| 5445 | TCP  | jboss HometQ netty port                 | jboss Messaging service  | Contact your Support representative for assistance. |
| 5455 | TCP  | jboss HometQ netty-batch port           | jboss Messaging service  | Contact your Support representative for assistance. |
| 6099 | TCP  | Software Image Management Server Port   | HTTPS port from the NA server to the Software Image Management server  | See "Server Page Fields" in the NA help.            |
| 8022 | TCP  | SSH Server Port                         | SSH port from the NA client to the NA server on the Linux operating system   | See "Telnet/SSH Page Fields" in the NA help.        |

### Ports Used by the NA Core, continued

| Port | Type | Name               | Purpose  | Change Configuration                                |
|------|------|--------------------|--|---|
| 8023 | TCP  | Telnet Server Port | Telnet port from the NA client to the NA server on the Linux operating system                  | See "Telnet/SSH Page Fields" in the NA help.        |
| 8080 | TCP  | HTTP Port          | HTTP port from the NA client to the NA server. Use instead of 80 when NA coexists with NNMi.   | Contact your Support representative for assistance. |
| 8443 | TCP  | HTTPS Port         | HTTPS port from the NA client to the NA server. Use instead of 443 when NA coexists with NNMi. | Contact your Support representative for assistance. |

### Ports Used by the NA Satellite

The following table shows the ports used by the NA satellite.

#### Ports Used by the NA Satellite

| Port | Type | Name                | Purpose   | Change Configuration                                |
|------|------|---------------------|---|---|
| 2001 | TCP  | Gateway Tunnel Port | TunnelPort from the Satellite to the Core Gateway. The Core Gateway listens for tunnel connections. | Contact your Support representative for assistance. |
| 3002 | TCP  | Gateway Proxy Port  | ProxyPort from the NA Core to the Core Gateway and from the Satellite agent to the Satellite        | See "Device Access Page Fields" in the NA help.     |
| 4040 | TCP  | Gateway Ident Port  | IdentPort from the NA Core to the Core Gateway  | Contact your Support representative for assistance. |
| 8005 | TCP  | Tomcat Server Port  | Port for Tomcat to listen for commands like SHUTDOWN  | Contact your Support representative for assistance. |
| 8009 | TCP  | Tomcat AJP Port     | Port for Tomcat to listen for AJP messages  | Contact your Support representative for assistance. |



**Ports Used by the NA Satellite, continued**

| Port | Type | Name               | Purpose  | Change Configuration                                |
|------|------|--------------------|--|---|
| 8443 | TCP  | Tomcat HTTPS Port  | RpcPort from the Satellite to the management agent (Tomcat), Syslog, TFTP  | Contact your Support representative for assistance. |
| 9090 | TCP  | Gateway Admin Port | AdminPort from the Satellite to the Core Gateway. Note that the Satellite uses all of the ports that the NA Core uses for managing devices (from the Satellite to the device: 22, 23, 514, 80, and 443). | See "Device Access Page Fields" in the NA help.     |

## We appreciate your feedback!

If you have comments about this document, you can [contact the documentation team](#) by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

**Feedback on Ports Reference (Network Management Software 10.00)**

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to [ovdoc-nsm@hp.com](mailto:ovdoc-nsm@hp.com).