

# HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure

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

Software Version: 11.12

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## Installation Guide

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### Acknowledgements

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# Chapter 1

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## Introduction

The HP Operations agent helps you monitor a system by collecting metrics that indicate the health, performance, and availability of essential elements of the system. While HP Operations Manager (HPOM) presents you with the framework to monitor and manage multiple systems through a single, interactive console, the HP Operations agent deployed on individual nodes helps you gather vital information to facilitate the monitoring process.

You can obtain the HP Operations Agent 11.12 from the Software Support Online web site. The HP Operations Agent 11.12 is available in the ISO format—five different ISO files for five operating systems supported by the HP Operations agent, one ISO file for Infrastructure SPI, and one ISO file for Virtual Appliance (VA).

The HP Operations agent contains the **consolidated media- HP Operations Agent and Infrastructure SPIs 11.12 DVD** which includes the HP Operations agent and Infrastructure packages for version 11.11 and patch ISO for 11.12 version.

## Consolidated Media

The consolidated media provides both the HP Operations Agent and Infrastructure SPIs packages for the base media (version 11.11 and patch (version 11.12) together.

The base media is the DVD containing the HP Operations agent and Infrastructure SPIs packages for all the platforms. The patch releases contain enhancements and defect fixes of the product. You can download the platform-specific ISO's from the <http://h20230.www2.hp.com/selfsolve/patches>

The HP Operations agent releases are categorized as:

Release Version	Media	Patch
11.10	Yes	-
11.11	Yes	-
11.12	Yes (Consolidated media containing the packages of the product for the version 11.11 and platform specific ISO's for the version 11.12)	Yes

By using the consolidated media version 11.12, you have an option to upgrade from Operations agent 8.53, 8.60, 11.0x, or 11.10 to the following version in a **single** step:

- Base media version (11.11 )

**or**

- Base media version (11.11) and then the patch version (11.12 ) together

You can do the following by using this media:

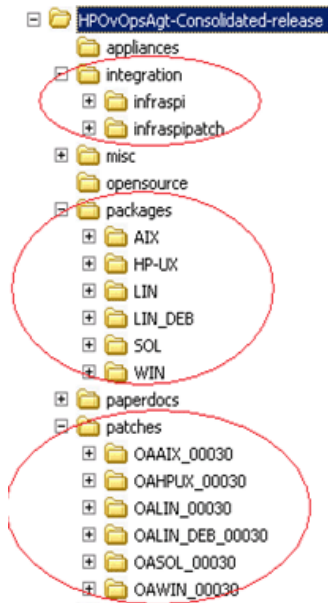
## Installation Guide

### Chapter 1:

- Register HP Operations agent 11.11 and 11.12 together on the management server.
- Register HP Operations agent 11.11 on the management server.
- Install Infrastructure SPIs 11.11 and 11.12 together on the management server.
- Install HP Operations agent (version 11.11 and 11.12) on the managed node.

The consolidated media contains the following folders:

- Packages - This folder contains the HP Operations agent install packages for different operating systems.
- Patches - This folder contains version 11.12 patches for all the operating systems.
- Integration - This folder contains Infrastructure SPIs package and patch.



The following table lists the patch names for all five platforms of HP Operations agent, one patch of Virtual Appliance, and one patch of Infrastructure SPI:

#### Operations agent and Infrastructure SPI Patch Names

Platform	File Name
Windows	OAWIN_00030
Linux	OALIN_00030
HP-UX	OAHPUX_00030
Solaris	OASOL_00030
AIX	OAAIX_00030
VA	OAVA_00001
Infra SPI	INFSPI_00001

## Downloading the HP Operations Agent and HP Operations Smart Plug-ins for Infrastructure 11.12

To download HP Operations Agent 11.12 ISO files, follow these steps:

1. Go to the following web site:  
<http://h20230.www2.hp.com/selfsolve/patches>
2. Log on to the web site with your HP Passport credentials.
3. Search with the keyword HP Operations Agent 11.12. The search result includes links to download the ISO files for the HP Operations Agent 11.12.
4. Click one of the links and download the ISO file on your system.

The ISO files for the HP Operations Agent 11.12 not only include updates for the agent 11.11 running on managed nodes, but they also include updates for deployment packages for the HP Operations agent 11.11. Although you can just install the updates on the agent locally on managed nodes, updating the deployment packages on the management server provides you with an additional patch deployment feature that simplifies the process of deploying the patch centrally and remotely from the management server to multiple nodes.

**Tip:** You are required to install the HP Operations Agent 11.02 or higher on the management server before installing the deployment packages. Therefore, if the managed nodes and the management server are running on different operating systems, you must download the ISO file for the management server's operating system too.

### Planning for the Installation of HP Operations agent 11.12

#### Installing the Operations Agent on the HPOM Management Server

The process is as follows:

1. Make sure that HP Operations Agent 11.11 deployment packages are installed on the management server.
2. Download the platform specific patch ISO file for the management server's operating system.

#### Installing the HP Operations Agent Manually on the Node

You can install the HP Operations agent 11.12 manually on an HPOM-managed or standalone node, or you can use the HPOM management server to deploy the HP Operations agent 11.12 centrally on all managed nodes.

The installer program, which is available with the HP Operations agent 11.12, enables you to install the HP Operations agent 11.11 and 11.12 together on a node with a single command. To use this capability, you must ensure the node meets all the requirements for the HP Operations agent 11.11.

To install the HP Operations agent 11.12 with the HP Operations agent 11.11, do *one* of the following:

- Install from the HPOM console
- Install the HP Operations Agent 11.11 and 11.12 Together

#### Installing only Infrastructure SPIs

The process is as follows:

## Installation Guide

### Chapter 1:

---

1. Make sure that HP Operations Agent 11.11 deployment packages are installed on the management server.
2. Download the Infrastructure SPIs patch ISO file.

## Chapter 2

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### Registering the Operations Agent on the HPOM Management Server (and Installing the Infrastructure SPIs)

#### Registering on the HPOM for Windows Management Server

##### *Prerequisites*

No deployment jobs must run at the time of registering the deployment package.

To view the active deployment jobs:

1. In the console tree, expand Policy Management.
2. Click **Deployment Jobs**. The details pane shows the list of active deployment jobs. You must make sure that none of the deployment jobs are active at the time of installing the agent deployment packages. You must not start any deployment jobs until the agent deployment package registration is complete.

##### **Upgrade Requirements**

You can directly upgrade the Infrastructure SPIs 1.60 or above to the version 11.11 and then install 11.12.

##### *Register the Deployment Package*

In addition to registering the deployment package for the HP Operations Agent, the `oainstall` script can install the Infrastructure SPIs on the management server.

You can install Operations agent 11.11 and 11.12 together by using the consolidated media. You can also install only Operations agent 11.11.

Choose one of the following tasks based on your requirement:

- ["Register the Operations agent Deployment Packages \(version 11.11\) and install Infrastructure SPIs 11.11" \(on page 13\)](#)
- ["Register the Operations agent Deployment Packages \(version 11.12\) " \(on page 14\)](#)
- ["Register the Operations agent Deployment Packages \(Version 11.11 and 11.12 Together\) " \(on page 14\)](#)
- ["Install Only Infrastructure SPIs on the Management Server" \(on page 15\)](#)

#### **Register the Operations agent Deployment Packages (version 11.11) and install Infrastructure SPIs 11.11**

Follow the steps:

1. Make sure that you download the consolidated media for the version 11.11 and 11.12.
2. Log on to the management server as administrator.
3. Go to the media root.

4. Run the following command:

```
cscript oainstall.vbs -i -m -baseonly
```

The command registers the agent (version 11.11) deployment packages for all platforms on the management server and installs the Infrastructure SPIs (version 11.11)

or

```
cscript oainstall.vbs -i -m -p <platform> -baseonly
```

This command registers the platform specific ISO for version 11.11.

Use the following values for <platform>

For Windows: WIN

For Linux: LIN

For HP-UX: HP-UX

For Solaris: SOL

For AIX: AIX

5. Verify the registration process.

### Register the Operations agent Deployment Packages (version 11.12)

Follow the steps:

1. Make sure that you downloaded the patch .ISO file for the respective platforms.
2. Log on to the management server as administrator.
3. Go to the media root.
4. Run the following command:

```
cscript oainstall.vbs -i -m
```

5. Verify the registration process.

For more information about installation procedures, see *HP Operations Agent and Infrastructure SPIs Installation guide 11.11*.

### Register the Operations agent Deployment Packages (Version 11.11 and 11.12 Together)

Follow the steps:

1. Make sure that you download *one* of the following:
  - Consolidated media for the version 11.11 and 11.12.
  - Platform specific ISO for 11.12 patch. Download Operations agent version 11.11 (all platforms or single platform ISO) and OA 11.12 platform ISO in the same location. You must extract the version 11.11 and then 11.12 version.
2. Log on to the management server as administrator.
3. Go to the media root.

4. Run the following command:

**cscript oainstall.vbs -i -m**

The command registers the agent (version 11.11 and 11.12) deployment packages for all platforms on the management server and install the Infrastructure SPIs (version 11.11 and 11.12).

or

**cscript oainstall.vbs -i -m -p <platform>**

This command registers the platform specific ISO for 11.11 and 11.12 .

Use the following values for <platform>

For Windows: WIN

For Linux: LIN

For HP-UX: HP-UX

For Solaris: SOL

For AIX: AIX

The command registers the agent (version 11.11 and 11.12) deployment packages for the mentioned platforms on the management server. The infrastructure SPI packages will not be installed by this command.

5. Verify the registration process.

## Install Only Infrastructure SPIs on the Management Server

You can install only Infrastructure SPIs by using the consolidated media.

Follow the steps:

1. Log on to the management server.
2. Download the consolidated media containing version 11.11 and 11.12.
3. Create a new file with a text editor.
4. Add the following content:

```
[agent.parameter]
REGISTER_AGENT=NO

[hpinfraspi.parameter]
InfraSPI=YES
InfraSPI_With_Graphs=YES
InfraSPI_With_Reports=YES
```

5. Save the file (<config\_file>).
6. Run the following command:

*On Windows*

```
cscript oainstall.vbs -i -m -spiconfig <config_file>
```

In this instance, *<config\_file>* is the name of the configuration file (with the complete path to the file). For more information about config file, see HP Operations agent and Infrastructure SPI Installation guide, version 11.11.

If HPOM is in an HA cluster, follow the above steps on the active node in the cluster, and then perform step 1 to step 3 on all nodes in the HA cluster.

#### **Example**

i. Create a configuration file with the following content:

```
[agent.parameter]
REGISTER AGENT=NO

[hpinfraspi.parameter]
InfraSPI=YES
InfraSPI_With_Graphs=YES
InfraSPI_With_Reports=YES
```

ii. Save the file as *config\_file* in the following directory:

```
C:\temp
```

iii. Run the following command to install the Infrastructure SPIs.

```
cscript oainstall.vbs -i -m -spiconfig C:\temp\config_file
```

The command uses the config file to install the Infrastructure SPIs report package, and graph package and without installing the agent.

#### **Verification**

1. On the management server, go to the following location:

```
%ovinstalldir%bin\OpC\agtinstall
```

2. Run the following command:

```
cscript oainstall.vbs -inv -listall
```

The command shows the list of available (active) deployment packages and patches on the management server.

To check that the Infrastructure SPIs are installed, run the command with the *-includespi* option.

```
cscript oainstall.vbs -inv -includespi -listall
```

3. Locate the platform for which you installed the deployment package. If the active version is displayed as 11.12, the registration is successful.

#### **Log File**

The registration log file (*oainstall1.log*) for 11.11 and 11.12 is available in the following directory:

```
%OvDataDir%shared\server\log
```



You can now apply the patches for 11.12 on managed nodes remotely and centrally from the management server.

You can view the patch log file (`oapatch.log`) for version 11.12 in the following location:

```
%OvDataDir%shared\server\log
```

### Placement of Packages

When you register the HP Operations Agent packages on the management server, the `oainstall` program places all necessary deployment packages into the following directory:

```
%OvDataDir%shared\Packages\HTTPS
```

### Backup of Deployment Packages

When you register the deployment packages on the management server, the `oainstall` script saves a copy of the older deployment packages into the following local directory:

```
%OvShareDir%server\installation\backup\HPOpsAgt\<<OS>\<OA_
Version>\<ARCH>
```

To view the active deployment packages, run the following command:

```
cscript oainstall.vbs -inv
```

To view all deployment packages (active and backed-up) on the system, run the following command:

```
cscript oainstall.vbs -inv -listall
```

To check that the Infrastructure SPIs are installed, run the command with the `includespi` option.:

```
cscript oainstall.vbs -inv -includespi -listall
```

## Registering on the HPOM for UNIX Management Server

### Prerequisites

No deployment jobs must run at the time of registering the deployment package.

To view the active deployment jobs:

1. In the console tree, expand Policy Management.
2. Click **Deployment Jobs**. The details pane shows the list of active deployment jobs. You must make sure that none of the deployment jobs are active at the time of installing the agent deployment packages. You must not start any deployment jobs until the agent deployment package registration is complete.

### Upgrade Requirements

You can directly upgrade the Infrastructure SPIs 1.60 or above to the version 11.11 and then install 11.12.

### Register the Deployment

In addition to registering the deployment package for the HP Operations Agent, the `oainstall` script can install the Infrastructure SPIs on the management server.

You can install HP Operations agent 11.11 and 11.12 together by using the consolidated media. Also, you can **only** install HP Operations agent 11.11.

Choose one of the following tasks based on your requirement:

- ["Register the Operations agent Deployment Packages \(version 11.12\)" \(on page 14\)](#)
- ["Register the Operations agent Deployment Packages \(version 11.12\)" \(on page 14\)](#)
- ["Register the Operations agent Deployment Packages \(Version 11.11 and 11.12 Together\)" \(on page 14\)](#)
- ["Install Only Infrastructure SPIs on the Management Server" \(on page 15\)](#)

### Register the Operations agent Deployment Packages (version 11.11) and Install Infrastructure SPIs 11.11

Follow the steps:

1. Make sure that you download the consolidated media for the version 11.11.
2. Log on to the management server as administrator.
3. Go to the media root.
4. Run the following command:

```
./oainstall.sh -i -m -baseonly
```

The command registers the agent (version 11.11) deployment packages for all platforms on the management server and installs the Infrastructure SPIs (version 11.11)

or

```
./oainstall.sh -i -m -p <platform>-baseonly
```

This command registers the platform specific ISO for 11.11 patch.

Use the following values for <platform>

For Windows: WIN

For Linux: LIN

For HP-UX: HP-UX

For Solaris: SOL

For AIX: AIX

5. Verify the registration process.

### Register the Operations agent Deployment Packages (version 11.12)

Follow the steps:

1. Make sure that you downloaded the patch .ISO file for the respective platforms.
2. Log on to the management server as administrator.
3. Go to the media root.

4. Run the following command:

```
./oainstall.sh -i -m
```

5. Verify the registration process.

## Register the Operations agent Deployment Packages (Version 11.11 and 11.12 Together)

Follow the steps:

1. Make sure that you download *one* of the the following:
  - Consolidated media for the version 11.11 and 11.12.
  - Platform specific ISO for 11.12 patch. Extract Operations agent version 11.11 (all platforms or single platform ISO) and OA 11.12 platform ISO in the same location. You must extract the version 11.11 and then 11.12 version.

2. Log on to the management server as administrator.

3. Go to the media root.

4. Run the following command:

```
./oainstall.sh -i -m
```

The command registers the agent (version 11.11 and 11.12) deployment packages for all platforms on the management server and installs the Infrastructure SPIs (version 11.11 and 11.12).

or

```
./oainstall.sh -i -m -p <platform>
```

This command registers the platform specific ISO for version 11.11 and 11.12 .

Use the following values for <platform>

For Windows: `WIN`

For Linux: `LIN`

For HP-UX: `HP-UX`

For Solaris: `SOL`

For AIX: `AIX`

The command registers the agent (version 11.11 and 11.12) deployment packages for the mentioned platforms on the management server. The infrastructure SPI packages will not be installed by this command.

5. Verify the registration process.

## Install Only Infrastructure SPIs on the Management Server

You can install only Infrastructure SPIs by using the consolidated media.

Follow the steps:

1. Log on to the management server.
2. Mount the consolidated media containing version 11.11 and 11.12.
3. Create a new file with a text editor.
4. Add the following content:

```
[agent.parameter]
REGISTER_ AGENT=NO

[hpinfraspi.parameter]
InfraSPI=YES
InfraSPI_With_Graphs=YES
InfraSPI_With_Reports=YES
```

5. Save the file (*<config\_file>*). .
6. Run the following command:

*On UNIX/Linux*

```
./oainstall.sh -i -m -spiconfig <config_file>
```

In this instance, *<config\_file>* is the name of the configuration file (with the complete path to the file). For more information about config file, see HP Operations agent and Infrastructure SPI Installation guide, version 11.11.

If HPOM is in an HA cluster, follow the above steps on the active node in the cluster, and then perform step 1 to step 3 on all nodes in the HA cluster.

#### **Example**

- i. Create a configuration file with the following content:

```
[agent.parameter]
REGISTER AGENT=NO

[hpinfraspi.parameter]
InfraSPI=YES
InfraSPI_With_Graphs=YES
InfraSPI_With_Reports=YES
```

- ii. Save the file as *config\_file* in the following directory:

C:\temp

- iii. Run the following command to install the Infrastructure SPIs.

```
./oainstall.sh -i -m -spiconfig <config_file>
```

The command uses the config file to install the Infrastructure SPIs report package, and graph package without installing the agent.

#### **Verification**

1. On the management server, go to the following location:

```
/opt/OV/bin/OpC/agtinstall
```

2. Run the following command:

```
./oainstall.sh -inv -listall
```

The command shows the list of available (active) deployment packages and patches on the management server.

To check that the Infrastructure SPIs are installed, run the command with the `-includespi` option.

```
./oainstall.sh -inv -includespi -listall
```

3. Locate the platform for which you installed the deployment package. If the active version is displayed as 11.12, the registration is successful.

### Log File

The log file (`oainstall.log`) is available in the following directory:

```
/var/opt/OV/shared/server/log
```

You can now apply 11.12 patch on managed nodes remotely and centrally from the management server. You can view the installation log file (`oapatch.log`) for version 11.12 in the following location:

```
/var/opt/OV/shared/server/log
```

### Placement of Packages

When you register the HP Operations Agent packages on the management server, the `oainstall` program places all necessary deployment packages into the following directory:

```
/var/opt/OV/share/databases/OpC/mgd_node/vendor
```

### Backup of Deployment Packages

When you register the deployment packages on the management server, the `oainstall` script saves a copy of the older deployment packages into the following local directory:

```
/var/opt/OV/shared/server/installation/backup/HPOpsAgt/<OS>/<OA_  
Version>/<ARCH>
```

To view the active deployment packages, run the following command:

```
./oainstall.sh -inv
```

To view all deployment packages (active and backed-up) on the system, run the following command:

```
./oainstall.sh -inv -listall
```

To check that the Infrastructure SPIs are installed, run the command with the `includespi` option.:

```
./oainstall.sh -inv -includespi -listall
```

# Chapter 3

---

## Removing the Deployment Package

To remove the updates applied on the deployment packages, follow these steps:

1. Log on to the management server with the root or administrator privileges.

2. Go to the following directory:

*On Windows (32-bit systems)*

`%ovinstalldir%bin\OpC\agtinstall`

*On Windows (64-bit systems)*

`%ovinstalldir%bin\win64\OpC\agtinstall`

*On UNIX/Linux*

`/opt/OV/bin/OpC/agtinstall`

3. Run the following command:

*On Windows*

`cscript oainstall.vbs -r -m -pn <Patch_name>`

*On UNIX/Linux*

`./oainstall.sh -r -m -pn <Patch_name>`

In this instance, `<Patch_name>` is the file name of the patch file that you downloaded (without the extension .ISO). The following table lists the patch names for all five node platforms:

### Patch Names

Platform	File Name
Windows	OAWIN_00030
Linux	OALIN_00030
HP-UX	OAHPUX_00030
Solaris	OASOL_00030
AIX	OAAIX_00030

## Chapter 4

---

### Upgrading to the HP Operations Agent 11.12 from the Previous Versions

You can upgrade an older version of the HP Operations agent, HP Performance Agent, or HP GlancePlus to the HP Operations agent 11.12. The upgrade procedure upgrades the agent first to the version 11.11 and then to the version 11.12.

Upgrade Scenario	Procedure
From version 11.11 to version 11.12	You can use the patch download procedure or media to upgrade from version 11.11.
From version Operations Agent 8.53, 8.60, 11.00, 11.0x, or 11.10 to version 11.11.	You can upgrade to version 11.11. See the steps documented for registration in the <a href="#">Registering the HP Operations agent on the HPOM Management Server</a> . For information about the steps to install Operations agent version 11.11, see the Installation Guide, version 11.11.
The following versions can be upgraded directly to version 11.12: <ul style="list-style-type: none"><li>• HP Operations agent: 8.53, 8.60</li><li>• HP Performance Agent: 4.70, 5.00</li><li>• HP GlancePlus: 4.70, 5.00</li></ul>	You can upgrade to the version 11.12 by using the consolidated media.





# Chapter 5

---

## Update Deployment Packages on the Management Server

Skip this section if you do not use HPOM and installed the agent only on standalone nodes for system performance monitoring.

### Prerequisites

#### Install the Agent on the Management Server

**Note:** Skip step 3 to step 8 if HP Operations agent 11.02 or higher is running on the management server.

1. Make sure that HP Operations agent 11.11 deployment packages are installed on the management server.
2. Make sure that the HP Operations agent 11.1x or HP Operations agent 11.0x (patch) is running on the management server.
3. Download the platform specific patch ISO file for the management server's operating system.
4. Transfer the downloaded ISO file onto the management server.
5. Log on to the management server with the root or administrator privileges.
6. Extract the contents of the ISO file into a local directory on the management server, or mount the ISO file.
7. Go to the directory where you extracted or mounted the ISO file, and then install the agent by running the following command:

*On Windows*

```
cscript oainstall.vbs -i -a
```

*On UNIX/Linux*

```
./oainstall.sh -i -a
```

8. Restart HPOM processes:

*On HPOM for Windows*

```
vpstat -3 -r stop
```

```
vpstat -3 -r start
```

*On HPOM on UNIX/Linux*

```
/opt/OV/bin/OpC/opcsv -stop
```

```
/opt/OV/bin/OpC/opcsv -start
```

## Back Up the OpenVMS Deployment Package (Only on HPOM for UNIX)

If you are installing the HP Operations agent 11.12 deployment packages on the HPOM for UNIX management server, and if the HP Operations agent deployment package for the OpenVMS platform is already available on the server, you must take a backup of the deployment package for OpenVMS before the installation procedure starts.

1. Log on to the management server as root.
2. Transfer the contents of the directory `/var/opt/OV/share/databases/OpC/mgd_node/vendor/hp/alpha/ovms` into the `/tmp/alpha` directory (or any directory of your choice).
3. Transfer the contents of the directory `/var/opt/OV/share/databases/OpC/mgd_node/vendor/hp/ipf64/ovms` into the `/tmp/ipf64` directory (or any directory of your choice)

After installation, you must copy the backed-up contents of the `alpha` and `ipf64` directory into the original location (`/var/opt/OV/share/databases/OpC/mgd_node/vendor/hp/alpha/ovms`) and (`/var/opt/OV/share/databases/OpC/mgd_node/vendor/hp/ipf64/ovms`)

## Install the Deployment Package

To update the deployment packages on the management server, follow these steps:

1. Download the ISO file for the managed node platform.
2. Transfer the downloaded ISO file onto the management server.
3. Log on to the management server with the root or administrator privileges.
4. Extract the contents of the ISO file into a local directory on the management server, or mount the ISO file.
5. Go to the directory where you extracted or mounted the ISO file, run the following command from the command prompt:

*On Windows*

```
cscript oainstall.vbs -i -m
```

*On UNIX/Linux*

```
./oainstall.sh -i -m
```

**Tip:** If you use different operating systems for different node groups in your environment, you must perform [step 1](#) through [step 5](#) for each operating system that is in use in your environment. In addition, you must perform the steps to deploy HP Operations agent 11.11 and 11.1x (patches).

You can now apply the updates for 11.12 on managed nodes remotely and centrally from the management server. You can view the installation log file (`oapatch.log`) in the following location:

*On Windows*

```
%ovdatadir%\shared\server\log
```

*On UNIX/Linux*

```
/var/opt/OV/shared/server/log
```

You can use the HPOM console to install agent 11.11 and 11.12 together on a node where the agent 11.11 is not already installed. When you install the deployment package updates for the agent 11.12, the configuration variable `INCLUDEUPDATES` is introduced on the management server and automatically set to `true` by the installer, which ensures agent 11.11 and 11.12 are installed together on nodes where the agent 11.11 is not already installed. For more information about installing the agent from the HPOM console, see ["Install from the HPOM Console" \(on page 56\)](#). To modify the default value of the `INCLUDEUPDATES` variable, see ["Modify the Default Deployment Behavior" \(on page 58\)](#).

## Verify the installation

To verify that the version 11.12 of the agent deployment package is installed on the management server, follow these steps:

1. Log on to the management server with the root or administrator privileges.
2. Go to the following directory:

*On HPOM for Windows (32-bit systems)*

```
%ovinstalldir%bin\OpC\agtinstall
```

*On HPOM for Windows (64-bit systems)*

```
%ovinstalldir%bin\win64\OpC\agtinstall
```

*On HPOM on UNIX/Linux*

```
/opt/OV/bin/OpC/agtinstall
```

3. View the package inventory.

To view the package inventory, run the following command:

*On Windows*

```
cscript oainstall.vbs -inv
```

*On UNIX/Linux*

```
./oainstall.sh -inv
```

The command displays the list of HP Operations Agent 11.12 deployment packages that are installed on the system under the `Active Agent Patches Installed` section.

For example, if you install the deployment package for HP-UX and Windows, the command shows:

```
Active Agent Patches Installed
=====
OAHPUX_00030      :HP-UX   :IPF32           :11.12.009
OAHPUX_00030      :HP-UX   :PA-RISC         :11.12.009
OAWIN_00030       :WIN     :IPF64           :11.12.009
OAWIN_00030       :WIN     :x64             :11.12.009
OAWIN_00030       :WIN     :x86             :11.12.009
```

## Log Files

The installation log file (`oapatch.log`) is located in the following directory on the management server:

*On Windows*

`%ovdatadir%shared\server\log`

*On UNIX/Linux*

`/var/opt/OV/shared/server/log`

# Chapter 6

---

## Update Deployment Packages on Management Servers in Clusters

For HPOM management servers that exist in high-availability (HA) clusters, you must install the deployment packages for the HP Operations agent 11.12 only on active nodes. However, the HP Operations agent 11.12 must be running on each node in the cluster.

To install HP Operations agent 11.12 deployment packages, follow these steps:

1. ["Install the HP Operations Agent 11.12 on the Active Management Server" \(on page 29\).](#)
2. ["Install HP Operations Agent 11.12 Deployment Packages on the Active Management Server" \(on page 31\).](#)
3. ["Install the HP Operations agent on Other Management Servers in the Cluster" \(on page 31\)](#)
4. ["Synchronize Installer Scripts After Failover" \(on page 31\).](#) Perform this step only after HPOM fails over to another node in the HA cluster.

## Install the HP Operations Agent 11.12 on the Active Management Server

To install the agent in an HA cluster on the active management server, follow these steps:

1. Make sure that the management server meets the disk space requirement:

### Disk Space Requirements

OS	Free Disk Space
Windows	150 MB
Linux	<ul style="list-style-type: none"><li>■ 50 MB on <code>/opt</code></li><li>■ 100 MB on <code>/var</code></li></ul>
HP-UX	<ul style="list-style-type: none"><li>■ 50 MB on <code>/opt</code></li><li>■ 100 MB on <code>/var</code></li></ul>
Solaris	<ul style="list-style-type: none"><li>■ 50 MB on <code>/opt</code></li><li>■ 100 MB on <code>/var</code></li></ul>

**Note:** *On UNIX/Linux.* At least 20% of the original volume of the `/tmp` directory must be free while you install the agent.

2. Make sure that the HP Operations agent 11.11 is installed and configured on the management servers.
3. Disable the mechanism to monitor HPOM's resource group.

If you use HPOM for Windows, follow these steps on *all* nodes in the HA cluster:

- a. Log on to the management server as an administrator.
- b. Set the management server to the unplanned outage mode by running the following command:

```
ovownodeutil -outage_node -unplanned -node_name <FQDN_of_node>-on
```

In this instance, <FQDN\_of\_node> is the fully qualified domain name of the management server.

If you use HPOM on UNIX/Linux, follow these steps *only* on active nodes in the HA cluster:

- a. Log on to the management server as root.
- b. Disable monitoring of the resource group:

```
/opt/OV/sbin/ovharg -monitor <HA_resource_group_name> disable
```

In this instance, <HA\_resource\_group\_name> is the HA resource group for HPOM on the management server.

#### 4. Install the HP Operations agent 11.12 on the management server.

- a. Log on to the management server as root or administrator.
- b. Stop all agent and HPOM processes:

*On Windows*

```
vpstat -3 -r stop
```

```
%ovinstalldir%bin\opcagt -stop
```

*On UNIX/Linux*

```
/opt/OV/bin/OpC/opcsv -stop
```

```
/opt/OV/bin/opcagt -stop
```

- c. Extract the contents of the HP Operations agent 11.12ISO file into a local directory. Alternatively, you can mount the ISO file.
- d. Go to the directory where you extracted (or mounted) the ISO file, and then run the following command:

*On Windows*

```
cscript oainstall.vbs -i -a
```

*On UNIX/Linux*

```
./oainstall.sh -i -a
```

- e. Restart all HPOM processes:

*On Windows*

```
vpstat -3 -r stop
```

```
vpstat -3 -r start
```

*On UNIX/Linux*

```
/opt/OV/bin/OpC/opcsv -stop
```

```
/opt/OV/bin/OpC/opcsv -start
```

## Install HP Operations Agent 11.12 Deployment Packages on the Active Management Server

Install the deployment packages for the HP Operations agent 11.12 on the active management server:

1. Log on to the management server as root or administrator.
2. Go to the directory where you extracted (or mounted) the HP Operations agent 11.12 ISO file.
3. From the command prompt, run the following command:

*On Windows*

```
cscript oainstall.vbs -i -m
```

*On UNIX/Linux*

```
./oainstall.sh -i -m
```

**Tip:** If you use different operating systems for different node groups in your environment, you must perform [step 1](#) through [step 3](#) for each operating system that is in use in your environment.

## Install the HP Operations agent on Other Management Servers in the Cluster

Verify that the HP Operations agent 11.12 works correctly on the active node, and then install the HP Operations agent 11.12 on other management servers in the cluster that are not active.

Follow the instructions in "[Installing the HP Operations agent 11.12](#)" (on page 34).

## Synchronize Installer Scripts After Failover

After failover, perform this task to make sure that the correct version of the installer program for the HP Operations agent is transferred to the currently active node in the cluster (you need the installer program to remove the agent deployment packages or to view the package inventory). To copy the scripts to the other management servers in cluster, you must switch (failover) the HPOM server to the next cluster node.

After HPOM fails over to a node in the HA cluster, follow these steps:

1. Log on as root or administrator to the node where HPOM is currently active.
2. Run the following command:

*On Windows*

```
cscript %OvShareDir%server\installation\oainstall_sync.vbs
```

*On UNIX/Linux*

```
/var/opt/OV/shared/server/installation/oainstall_sync.sh
```

The command transfers the latest version of the `oainstall.vbs` or `oainstall.sh` script to the currently active node from the failed node.

3. View the package inventory for the agent on the currently active node to make sure that

deployment packages for the HP Operations agent are available.

To view the package inventory, run the following command:

*On Windows*

**cscript oainstall.vbs -inv**

*On UNIX/Linux*

**./oainstall.sh -inv**

The command displays the list of HP Operations agent 11.12 deployment packages that are installed on the system under the `Active Agent Patches Installed` section.



# Chapter 7

## Different Modes of the Agent Installation

The HP Operations agent installer enables you to install the agent either on an HPOM-managed node or on a standalone server. If you install the agent on an **HPOM-managed** node, you must provide the details of the management server at the time of installation and make sure that the node belongs to the list of managed nodes in the HPOM console. This mode of the installation enables you to use the operations monitoring component of the agent to monitor the system and send alerts to the HPOM console.

If you want to use the HP Operations agent only to monitor system performance metrics locally, you can perform the installation without providing any details of the HPOM management server. This **standalone** mode of the installation enables you to use the performance collection component (and HP GlancePlus, if installed on UNIX/Linux) to monitor system performance metrics that indicate the health and performance of the system.

With the **-defer\_configure** option, you can install the agent in the **inactive** mode—a mode where all the processes of the agent remain inactive after installation and the agent does not perform any tasks. At a later time, you can use the **-configure** option of the agent installer to set the agent running. The **-configure** option helps you set the operation of the agent in the HPOM-managed or standalone mode.

### Different Modes of the HP Operations Agent Installation

Agent Installation Mode	Description
HPOM-managed/active	The agent is installed on a managed node and details of the management server (and the certificate server) are specified at the time of installation; the installation started all necessary agent processes. Remote installation from a management server always ensures this mode of the agent is set.
Standalone/active	The agent is installed on a standalone system. Management server details are not provided at the time of installation. However, the installation started all necessary agent processes.
Inactive	The agent is installed with the <b>-defer_configure</b> option. The installation procedure places all the necessary files on the system, but the agent remains inactive after installation. You cannot use this mode of installation if you want to install the agent remotely from the management server. For information about installing the agent in the inactive mode, see " <a href="#">Installing the HP Operations agent in the Inactive Mode</a> " (on page 53).

# Chapter 8

---

## Installing the HP Operations agent 11.12

You can install the HP Operations agent 11.12 manually on an HPOM-managed or standalone node, or you can use the HPOM management server to deploy the 11.12 centrally on all managed nodes.

The installer program, which is available with the 11.12 media, enables you to install the HP Operations agent 11.11 and 11.12 together on a node with a single command. To use this capability, you must ensure the node meets all the requirements for the HP Operations agent 11.11.

**Note:** No additional steps are required for installing the HP Operations agent on nodes in a high-availability cluster. The agent installation process does not stop cluster services or daemons running on the node. Installing the agent deployment packages, however, requires additional steps ("[Update Deployment Packages on Management Servers in Clusters](#)" (on page 29)).

To install only the HP Operations agent 11.12, do one of the following:

- Install from the management server:
  - To install from the HPOM console, see "[Install from the HPOM Console](#)" (on page 56).
  - To install with the command line, see "[Installing Operations Agent Remotely](#)" (on page 45)
- "[Install the HP Operations Agent 11.12 on a Node Manually](#)" (on page 43)

To install the HP Operations agent 11.12 with the HP Operations Agent 11.11, do one of the following:

- To install from the HPOM console, see "[Install from the HPOM Console](#)" (on page 56).
- "[Install the HP Operations Agent 11.11 and 11.12 Together](#)" (on page 49)

## Prerequisites for Installing the HP Operations Agent 11.11

Before you begin the installation, make sure that all the prerequisites are met. After evaluating your requirements, identify the most suitable option to install the product in your environment.

### General Considerations

- If you want to deploy the agent remotely from the HPOM console, make sure firewall settings are disabled between the management server and nodes.
- If you want to install the agent manually on the node in a firewall-controlled environment, make sure that the firewall setting allows the agent to contact the management server through the port 383 on the management server.
- Before installing the product in an HPOM-managed environment, always make sure the node is added as a managed node before you begin the installation process.
- If you want to work with the agent immediately after installation, make sure the automatic certificate requests are enabled on the management server.

- In a highly-secure environment, if you disable the automatic certificate request property on HPOM, you must exchange certificate manually with the management server after the agent installation completes.
- The HP Operations agent is a cluster-aware application. However, the HP Operations agent software cannot fail over automatically to the standby node in the event of failover.

## Prerequisites for Windows

### User

To install the HP Operations agent on a Windows node, you must use a user with the administrative privileges; the user must have access to the default system share (the disk on which the **Programs Files** folder is configured) with the following additional privileges:

- Membership of the Local Administrators group
- Write access to the admin\$ share
- Read access to the registry
- Permission to log on as a service
- Permission to start and stop services

### Necessary Software

- **Windows Installer 4.5 or higher:** The Windows Installer software is packaged with the Microsoft Windows operating system. The installer program of the HP Operations agent requires the version 4.5 of this software component to be present on the system. To check if the Windows Installer 4.5 or higher is present, follow these steps:
  - a. Log on to the Windows system.
  - b. From the Start menu, open the Run prompt.
  - c. At the Run prompt, type **regedit**, end then press **Enter**. The Registry Editor window opens.
  - d. In the Registry Editor window, expand **HKEY\_LOCAL\_MACHINE > SOFTWARE > Microsoft**, and then click **DataAccess**.
  - e. In the right pane, double-click **FullInstallVer**. The Edit String dialog box opens.
  - f. In the Edit String dialog box, check if the version string is set to 2.00 or higher.
- **Windows Script Host:** The Windows Script Host must be enabled on the system. The installer program of the HP Operations agent requires the Windows Script Host to be enabled. To check if the Windows Script Host is enabled, follow these steps:
  - a. Log on to the Windows system.
  - b. From the Start menu, open the Run prompt.
  - c. At the Run prompt, type **regedit**, end then press **Enter**. The Registry Editor window opens.
  - d. In the Registry Editor window, expand **HKEY\_LOCAL\_MACHINE > SOFTWARE > Microsoft**, and then click **Windows Script Host**.
  - e. In the right pane, look for the key Enabled:

- f. If the key Enabled is present, double-click the key and make sure the Value Data is set to 1. The Windows Script Host is disabled is the Value Data for the Enabled key is set to 0.
- g. If the key Enabled is not present, you can safely assume that the Windows Script Host is enabled.

### Necessary Services

Before installing the agent, make sure the following services are running:

- Event Log
- Remote Procedure Call
- Plug and Play
- Security Accounts Manager
- Net Logon
- Remote Registry
- Server
- Workstation

To verify that the above services are running, follow these steps:

1. Log on to the system with the administrative privileges.
2. From the Start menu, open the Run prompt.
3. At the Run prompt, type **services.msc**, and then press **Enter**. The Services window opens.
4. In the Services window, check if the status of each of the above services is Started. If the status of one of the services is found to be anything other than Started, right-click the service, and then click **Start**.

### Disk Space

This is the disk space requirement for HP Operations agent 11.11 and 11.12.

#### For new installation

For the installation directory:

350 MB

For the data directory:

50 MB

#### For upgrade from old agent software

For the installation directory:

100 MB

For the data directory:

50 MB

### Recommended Software and Services

**For WMI Interceptor policies:** The Windows Management Instrumentation (WMI) Service is required if you want to deploy the WMI Interceptor policies or Measurement Threshold policies. WMI is also used to monitor the WMI events and classes or to perform automatic service discovery on the node.

**For SNMP MIB monitoring:** If you want to monitor objects in an SNMP Management Information Base (MIB) on the agent system, make sure the SNMP agent (compliant with MIB-I and MIB-II) is installed on the system.

**For HPOM actions and tools:** For launching HPOM actions and tools on the node, the NT LM Security Support Provider service must be running.

#### **Additional Requirements for Hyper-V on Windows Server 2008**

To be able to monitor virtual systems, apply the following hotfix:

<http://support.microsoft.com/kb/950050>

To be able to log the BYLS class of metrics, apply the following hotfix:

<http://support.microsoft.com/KB/960751>

## **Prerequisites for Linux**

### **User**

To install the HP Operations agent on a Linux node, you must use a user with the root privileges.

**Note:** Because the HP Operations agent cannot be installed without the root user on a Linux node, you cannot install the agent on a vSphere Management Assistant (vMA) node (where the root user is disabled by default) remotely from the HPOM console.

### **Necessary Software**

To install the HP Operations agent, the following runtime libraries and packages are required:

- C++ runtime:
  - For systems with kernel version 2.6:  
**`/usr/lib/libstdc++.so.5`**
  - For systems with kernel version 2.6 on Itanium :  
**`/usr/lib/libstdc++.so.6`**
- **Only required for Glance-** Curses runtime library:  
**`/usr/lib/libncurses.so.5`**
- On x64 systems:
  - `libgcc-3.4.6-8.i386.rpm`
  - `glibc-2.3.4-2.36.i686.rpm`
  - `libstdc++-3.4.6-8.i386.rpm`
  - `compat-libstdc++-33.i386.rpm`
  - `libstdc++33-32bit-3.3.3-7.8.1.x86_64.rpm`

**Note:** Make sure that `libstdc++33-32bit-3.3.3-7.8.1.x86_64.rpm` is installed before you install HP Operations agent 11.11 on SLES10 SP4 x64 system.

If you want to remotely install the agent from the HPOM for Windows console, make sure OpenSSH 5.2 or higher is installed on the system.

## Disk Space

### For new installation for HP Operations agent 11.11 and 11.12

For the installation directories (`/opt/OV` and `/opt/perf`):

350 MB

For the data directories (`/var/opt/OV` and `/var/opt/perf`):

350 MB

### For upgrade

For the installation directories (`/opt/OV` and `/opt/perf`):

100 MB

For the data directories (`/var/opt/OV` and `/var/opt/perf`):

350 MB

**Note:** If you do not have sufficient space in the installation or data directory, you can symbolically link the install or data directory to another location on the same system by using the `ln -s` command.

For example, to symbolically link the `/opt/OV` directory to the `/new` directory, run the following command:

```
ln -s /new /opt/OV
```

## Recommended Software and Services

- **For SNMP MIB monitoring:** If you want to monitor objects in an SNMP Management Information Base (MIB) on the agent system, make sure the SNMP agent (compliant with MIB-I and MIB-II) is installed on the system.
- **For xglance:** To use the xglance utility, make sure the following components are available on the system:
- Open motif toolkit 2.2.3 (On Linux platforms other than Red Hat Enterprise Linux 5.x and SUSE Linux Enterprise Server 10.x on x86\_64 and Itanium, the 32-bit version of the Open motif toolkit and associated libraries must be present.)

## Prerequisites for HP-UX

### User

To install the HP Operations agent on an HP-UX node, you must use a user with the root privileges.

### Necessary Software

On HP-UX, make sure that the following patches are installed:

- For HP-UX 11.23. PHKL\_36853, PHCO\_38149 (or superseding patches)
- For HP-UX 11i v1. PHNE\_27063 (or superseding patch)
- For HP-UX 11i v1. PHCO\_24400 s700\_800 11.11 libc cumulative patch (or superseding patch)
- For HP-UX 11.11 PA-RISC. PHCO\_38226 (or superseding patch)
- For HP-UX 11.31. PHCO\_36530 (or superseding patch)
- For HP-UX 11i v1. The following patches are required for the performance tools to function with VERITAS Volume Manager 3.2:
  - PHKL\_26419 for HP-UX B.11.11 (11.11) (or superseding patch)
  - PHCO\_26420 for HP-UX B.11.11 (11.11) (or superseding patch)

On HP-UX systems running on Itanium, the libunwind library must be available.

If multiple processor sets are configured on an HP-UX 11i v1 system and you are using the log application=prm switch in the parm file to log APP\_metrics by the PRM Group, you must install the following patch:

PHKL\_28052 (or superseding patch)

On HP-UX 11i v1 and higher, the performance tools work with Instant Capacity on Demand (iCOD). The following kernel pstat patch should be installed to correctly report iCOD data (If iCOD is not installed on your system, do not install the kernel patch.):

PHKL\_22987 for HP-UX B.11.11 (11.11) (or superseding patch)

HP GlancePlus, included in this version of the HP Operations agent, works with Process Resource Manager (PRM) version C.03.02.

HP-UX 11.11 and higher running EMC PowerPath v2.1.2 or v3.0.0 must have the latest EMC patches installed.

- For the EMC PowerPath v2.1.2 release, use the following patch:  
EMCpower\_patch213 HP.2.1.3\_b002 (or superseding patch)
- For the EMC PowerPath v3.0.0 release, use the following patch:  
EMCpower\_patch301 HP.3.0.1\_b002 (or superseding patch)

## Disk Space

This is the disk space requirement for HP Operations agent 11.11 and 11.12.

### For new installation

For the installation directories (**/opt/OV** and **/opt/perf**):

400 MB

For the data directories (**/var/opt/OV** and **/var/opt/perf**):

550 MB

### For upgrade

For the installation directories (**/opt/OV** and **/opt/perf**):

400 MB

For the data directories (*/var/opt/OV* and */var/opt/perf*):

550 MB

**Note:** If you do not have sufficient space in the installation or data directory, you can symbolically link the install or data directory to another location on the same system by using the `ln -s` command.

For example, to symbolically link the */opt/OV* directory to the */new* directory, run the following command:

```
ln -s /new /opt/OV
```

### Recommended Software and Services

**For SNMP MIB monitoring:** If you want to monitor objects in an SNMP Management Information Base (MIB) on the agent system, make sure the SNMP agent (compliant with MIB-I and MIB-II) is installed on the system.

## Prerequisites for Solaris

### User

To install the HP Operations agent on a Solaris node, you must use a user with the root privileges.

### Necessary Software

Before you install the HP Operations agent on a Solaris node, make sure to install the following or superseding patches:

Operating System Version	Platform	Required Patches
10	32-bit (x86)	<ul style="list-style-type: none"><li>• 118345-03 SunOS 5.10_x86: ld &amp; libc.so.</li><li>• 119964-03 SunOS 5.10_x86 Shared library patch for C++_x86</li><li>• 120754-01 SunOS 5.10_x86 libmtnsk</li></ul>
	64-bit (SPARC/x64)	<ul style="list-style-type: none"><li>• 117461-04 Linker</li><li>• 120753-01 libmtnsk</li><li>• 119963-19 SunOS 5.10: Shared library patch for C++</li></ul>

In addition, make sure the following packages are available:

SUNWlibC

SUNWlibms

SUNWmfrun

SUNWxwplt

### Kernel Settings

Set the following minimum kernel parameter values for Solaris 9:

```
semsys:seminfo_semmni=30
```



semsys:seminfo\_semms=200

semsys:seminfo\_semmsl=100

For Solaris 10, no specific kernel settings are required.

## Disk Space

This is the disk space requirement for HP Operations agent 11.11 and 11.12

### For new installation of HP Operations agent 11.11 and 11.12

For the installation directories (**/opt/OV** and **/opt/perf**):

350 MB

For the data directories (**/var/opt/OV** and **/var/opt/perf**):

350 MB

### For upgrade

For the installation directories (**/opt/OV** and **/opt/perf**):

100 MB

For the data directories (**/var/opt/OV** and **/var/opt/perf**):

350 MB

**Note:** If you do not have sufficient space in the installation or data directory, you can symbolically link the install or data directory to another location on the same system by using the `ln -s` command.

For example, to symbolically link the **/opt/OV** directory to the **/new** directory, run the following command:

**ln -s /new /opt/OV**

However, before using symbolic links on Solaris nodes for the agent installation, you must apply the hotfix QCCR1A120832. Contact HP Support to obtain this hotfix.

## Recommended Software and Services

*For SNMP MIB monitoring:* If you want to monitor objects in an SNMP Management Information Base (MIB) on the agent system, make sure the SNMP agent (compliant with MIB-I and MIB-II) is installed on the system.

## Prerequisites for AIX

### User

To install the HP Operations agent on an AIX node, you must use a user with the root privileges.

### Necessary Software

- The **libC.a** library is required for the HP GlancePlus to function correctly. The library is bundled within the **xlC.rte** package, which is available from your AIX Operating System optical media.
- The **bos.perf.libperfstat** package is required for the communication daemon.

- If you want to remotely install the agent from the HPOM for Windows console, make sure OpenSSH 5.2 or higher is installed on the system.

## Disk Space

This is the disk space requirement for HP Operations agent 11.11 and 11.12.

### For new installation

For the installation directory (**/usr/lpp/OV** and **/usr/lpp/perf**):

350 MB

For the data directory (**/var/opt/OV** and **/var/opt/perf**):

350 MB

### For upgrade

For the installation directory (**/usr/lpp/OV** and **/usr/lpp/perf**):

350 MB

For the data directory (**/var/opt/OV** and **/var/opt/perf**):

350 MB

**Note:** If you do not have sufficient space in the installation or data directory, you can symbolically link the install or data directory to another location on the same system by using the `ln -s` command.

For example, to symbolically link the **/usr/lpp/OV** directory to the **/new** directory, run the following command:

```
ln -s /new /usr/lpp/OV
```

### Recommended Software and Services

**For SNMP MIB monitoring:** If you want to monitor objects in an SNMP Management Information Base (MIB) on the agent system, make sure the SNMP agent (compliant with MIB-I and MIB-II) is installed on the system.

**For xglance:** To use the xglance utility, make sure the following components are available on the system:

- Open Motif 2.1 or higher
- X11 Revision 6 (X11R6)

To collect and log cross-partition metrics, the `xmservd` or `xmtopas` daemon must be available. `xmtopas` is a part of `perfagent.tools` file set and `xmservd` is bundled with the Performance Toolbox for AIX component (a licensed software program).

## Prerequisites for Installing the HP Operations agent 11.12

### Hardware Requirements

For information about supported architecture types, see the Support Matrix at:

[http://h20230.www2.hp.com/sc/support\\_matrices.jsp](http://h20230.www2.hp.com/sc/support_matrices.jsp)

The following table describes the disk space requirements for the HP Operations Agent 11.12:

## Disk Space Requirements

OS	Free Disk Space
Windows	150 MB
Linux	<ul style="list-style-type: none"> <li>• 50 MB on <code>/opt</code></li> <li>• 100 MB on <code>/var</code></li> </ul>
HP-UX	<ul style="list-style-type: none"> <li>• 50 MB on <code>/opt</code></li> <li>• 100 MB on <code>/var</code></li> </ul>
Solaris	<ul style="list-style-type: none"> <li>• 50 MB on <code>/opt</code></li> <li>• 100 MB on <code>/var</code></li> </ul>
AIX	<ul style="list-style-type: none"> <li>• 50 MB on <code>/usr</code></li> <li>• 100 MB on <code>/var</code></li> </ul>

**Note:** On *UNIX/Linux*. At least 20% of the original volume of the `/tmp` directory must be free while you install the agent.

## Software Requirements

- **Operating system:** For a list of supported operating systems, see the Support Matrix at: [http://h20230.www2.hp.com/sc/support\\_matrices.jsp](http://h20230.www2.hp.com/sc/support_matrices.jsp)
- HP Operations agent 11.11 must be installed and configured on the node.
- Windows Installer 4.5 or higher must be installed on Windows nodes.
- Remove all test binaries for the HP Operations agent from all Windows nodes (test binaries are hotfixes that are distributed by HP Support for testing purposes only).

## Additional Requirements for vSphere Management Assistant Nodes

- **Login requirement**

By default, the root login is disabled on vSphere Management Assistant (vMA). As a result, you cannot deploy the agent remotely from the HPOM console to a vMA node. The `oainstall` script also requires the root privileges. Therefore, you must use the `sudo` command to switch to the root user before installing the agent manually on the vMA node.

- **viserver.properties**

**Note:** If you want to roll back to previous version of HP Operations agent, you must always back up the existing `viserver.properties` file (which is available in the `/var/opt/perf` directory) before installing the HP Operations Agent 11.12

After installing HP Operations Agent 11.12, the new `viserver.properties` file will replace the existing file. The recommended values are set in the properties file.

## Install the HP Operations Agent 11.12 on a Node Manually

The HP Operations Agent 11.12 media enables you to install the agent manually using command-line utilities. The installer programs, available with the media, enable you to install the product on a

node in the HPOM-managed environment or on a standalone system.

**Note:** The HP Operations Agent 11.11 media provided you with the `oasetup` program, which could be used in installing the agent (instead of the `oainstall` scripts). Although the agent 11.12 ISO file includes the `oasetup` program (within the `patches` directory), use only the `oainstall` script for installing the HP Operations Agent 11.12.

### On Windows Nodes

1. Log on to the node with the administrator privileges.
2. Make sure the HP Operations Agent 11.11 is already installed and running on the system.
3. Extract the contents of the ISO file into a local directory.
4. Go to the directory where you extracted the contents of the ISO file.

**Note:** Before installing the HP Operations Agent 11.12 patch, if you have already installed the Performance Manager 9.0 (component patch HPPM8X9XCPW\_00002) and LCore hotfixes in your system, remove the hotfix inventory *xml* files, example *HPOvXpl-HFWIN\_00045.xml* from the location `%OvDataDir%\installation\inventory`.

5. Run the following command to install the agent (on an HPOM-managed node or on a standalone system):  
**cscript oainstall.vbs -i -a**

After you run the command, the installation procedure begins. At the end of the installation, the agent starts its operation on the node and all the necessary components start running.

### On UNIX/Linux Nodes

1. Log on to the node with the root privileges.
2. Make sure the HP Operations Agent 11.11 is already installed and running on the system.
3. Extract the contents of the ISO file into a local directory.
4. Go to the directory where you extracted the contents of the ISO file.
5. Run the following command to install the agent (on an HPOM-managed node or a standalone system):  
**./oainstall.sh -i -a**

After you run the command, the installation procedure begins. At the end of the installation, the agent starts its operation on the node and all the necessary components start running.

If you install the HP Operations agent on the HPOM on UNIX/Linux management server (that is, if you select the management server as a managed node), you must manually restart all HPOM processes by running the following commands on the management server:

- **/opt/OV/bin/OpC/opcsv -stop**
- **/opt/OV/bin/OpC/opcsv -start**

### Post-Installation Task for Nodes Under HPOM for Windows

If the agent node is managed by HPOM for Windows and if you remotely installed the HP Operations Agent 11.11 on the node from the HPOM console, you must perform the following steps after manually installing the agent 11.12 on the node:

1. Go to the console tree of the HPOM console.
2. Right-click the node, and then click **All Tasks > Synchronize > Packages**.

### Verify the installation

To verify that the HP Operations Agent 11.12 is installed on the system successfully, follow these steps:

1. Go to the following directory on the node:

*On Windows*

`%ovinstalldir%bin`

*On HP-UX, Linux, or Solaris*

`/opt/OV/bin`

*On AIX*

`/usr/lpp/OV/bin`

2. Run the following command:

*On Windows*

**ovdeploy -inv -includeupdates**

*On UNIX/Linux:*

**./ovdeploy -inv -includeupdates**

The command lists the version of the agent installed on the system.

**Note:** On AIX nodes, preinstallation details appear twice in the log file.

### Installing Operations Agent Remotely

From the management server, you can install the HP Operations Agent 11.12 remotely on managed nodes.

### Before You Begin

1. Make sure that the Operations Agent 11.11 is installed and configured on the node (the agent must be running on the node).
2. Determine the location of the `OVO-Agent.xml` file on the management server for the node where you want to install the HP Operations agent 11.12.

### Location of the OVO-Agent.xml File on the HPOM for Windows Management Server

Node Platform	Location of the OVO-Agent.xml File
Windows (x64)	%ovdatadir%shared\Packages\HTTPS\windows\ms\5.1 5.2 6.0 6.1\x64\Operations-agent\11.11\64\https\oawin_00030
Windows (x86)	%ovdatadir%shared\Packages\HTTPS\windows\ms\5.0 5.1 5.2 6.0 6.1\x86\Operations-agent\11.11\32 64\https\oawin_00030
HP-UX (Itanium)	%ovdatadir%shared\Packages\HTTPS\hp-ux\hp\11.23 11.31\ipf32\Operations-agent\11.11\64\https\oahpux_00030
HP-UX (PA-RISC)	%ovdatadir%shared\Packages\HTTPS\hp-ux\hp\11.11 11.23 11.31\pa-risc\Operations-agent\11.11\32 64\https\oahpux_00030
Linux (Itanium)	%ovdatadir%shared\Packages\HTTPS\linux\linux\2.6\ipf64\Operations-agent\11.11\64\https\oalin_00013
Linux (POWER)	%ovdatadir%shared\Packages\HTTPS\linux\linux\2.6\powerpc\Operations-agent\11.11\64\https\oalin_00030
Linux (x86)	%ovdatadir%shared\Packages\HTTPS\linux\linux\2.6\x86\Operations-agent\11.11\32 64\https\oalin_00030
Linux (x64)	%ovdatadir%shared\Packages\HTTPS\linux\linux\2.6\x64\Operations-agent\11.11\64\https\oalin_00030
Solaris (SPARC)	%ovdatadir%shared\Packages\HTTPS\solaris\sun\5.9 5.10\sparc\Operations-agent\11.11\32 64\https\oasol_00030
Solaris (x86)	%ovdatadir%shared\Packages\HTTPS\solaris\sun\5.10\x86\Operations-agent\11.11\32 64\https\oasol_00030
AIX (6.1)	%ovdatadir%shared\Packages\HTTPS\aix\ibm\6.1\powerpc\Operations-agent\11.11\64\https\oaaix_00030

### Location of the OVO-Agent.xml file on the HPOM on UNIX/Linux Management Server

Node Platform	Location of the OVO-Agent.xml File
Windows (x64)	/var/opt/OV/share/databases/OpC//mgd_node/vendor/ms/x64/win2k3/A.11.11.000/RPC_BBC/OAWIN_00030
Windows (x86)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/ms/x86/winnt/A.11.11.000/RPC_BBC/OAWIN_00030
HP-UX (Itanium)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/hp/ipf32/hpux1122/A.11.11.000/RPC_BBC/OAHPUX_00030
HP-UX (PA-RISC)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/hp/pa-risc/hpux1100/A.11.11.000/RPC_BBC/OAHPUX_00030
Linux (Itanium)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/linux/ipf64/linux26/A.11.11.000/RPC_BBC/OALIN_00030
Linux (POWER)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/linux/powerpc/linux26/A.11.11.000/RPC_BBC/OALIN_00030
Linux (x86)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/linux/x86/linux26/A.11.11.000/RPC_BBC/OALIN_00030
Linux (x64)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/linux/x64/linux26/A.11.11.000/RPC_BBC/OALIN_00030
Solaris (SPARC)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/sun/sparc/solaris7/A.11.11.000/RPC_BBC/OASOL_00030
Solaris (x86)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/sun/x86/solaris10/A.11.11.000/RPC_BBC/OASOL_00030
AIX (5.3)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/ibm/rs6000/aix5/A.11.11.000/RPC_BBC/OAAIX_00030
AIX (6.1)	/var/opt/OV/share/databases/OpC/mgd_node/vendor/ibm/rs6k64/aix5/A.11.11.000/RPC_BBC/OAAIX_00030

### Install the Agent

To install the agent remotely from the command line, follow these steps:

1. Log on to the management server as root or administrator.
2. Go to the following directory on the management server:

On Windows:

```
%ovinstalldir%bin
```

On UNIX/Linux:

```
/opt/OV/bin
```

3. Run the following command:

```
ovdeploy -install -bundle <path-to-OVO-Agent.xml>-host <node name> -ovrg server
```

In this instance:

*<path-to-OVO-Agent.xml>* is the path to the `OVO-Agent.xml` file for the node type (see [Table: Location of the OVO-Agent.XML File](#)).

*<node name>* is the FQDN of the node

The command installs the Operations Agent on the node.

4. Run the following command on the management server to check that the installation is successful:

For Windows nodes:

```
ovdeploy -cmd "%ovinstalldir%bin\opcagt -version" -host <node_name>
```

For HP-UX, Linux, or Solaris nodes:

```
ovdeploy -cmd "/opt/OV/bin/opcagt -version" -host <node_name>
```

For AIX nodes:

```
ovdeploy -cmd "/usr/lpp/OV/bin/opcagt -version" -host <node_name>
```

The command output shows 11.12 if the installation is successful.

**Note:** On AIX nodes, the preinstall log messages will appear twice on a successful installation of the Operations Agent 11.12.

### Verify Installation on the Node

To verify that the installation is successful, follow these steps on the node:

1. Log on to the node as administrator or root.
2. Go to the following directory:

*Windows:*

```
%ovinstalldir%bin
```

*HP-UX, Linux, or Solaris:*

```
/opt/OV/bin
```

*AIX:*

```
/usr/lpp/OV/bin
```

3. Run the following command:

*Windows:*

```
ovdeploy -inv -includeupdates
```



*UNIX/Linux:*

```
./ovdeploy -inv -includeupdates
```

The command output shows the list of components upgraded by the installer in the `PATCH` section.

## Install the HP Operations Agent 11.11 and 11.12 Together

The HP Operations agent 11.12 installer enables you to install the agent 11.12 along with the base agent version 11.11. The installer first installs the agent 11.11 on the system, and then installs the updates available with the agent 11.12.

You can use the `oainstall` script to install both versions of the HP Operations agent locally on a managed node, or you can use the `ovdeploy` command to remotely install these versions of the HP Operations agent on a managed node from the management server.

**Note:** The HP Operations Agent 11.11 media provided you with the `oasetup` program, which could be used in installing the agent (instead of the `oainstall` scripts). Although the agent 11.12 ISO file includes the `oasetup` program (within the `patches` directory), use only the `oainstall` script for installing the HP Operations Agent 11.12.

## Preparing to Install the Agent 11.11 and 11.12 Together

Before you attempt to install the HP Operations Agent 11.11 and HP Operations Agent 11.12 together, make sure that the node meets all the prerequisites.

1. See the *Prerequisites* section in the *HP Operations Agent (11.11) Installation Guide* and make sure all the prerequisites are met.
2. See the ["Prerequisites for Installing the HP Operations agent 11.12" \(on page 42\)](#) section and make sure all the prerequisites are met.
3. Extract the contents of the media ISO file for the agent 11.11 into a local directory.

**Note:** Since this procedure involves overwriting certain files in the agent 11.11 media, do not mount the 11.11 media. If the media is mounted on the system, you will not be able to overwrite any files.

4. Extract the contents of the ISO file for the agent 11.12 into a local directory, or mount the ISO file on the system.
5. From the directory where you extracted (or mounted) the contents of the HP Operations Agent 11.12 ISO file, copy the `oainstall` script (`oainstall.vbs` for Windows; `oainstall.sh` for UNIX/Linux) into the directory where you extracted the contents of the HP Operations Agent 11.11 media.
6. From the directory where you extracted (or mounted) the contents of the HP Operations Agent 11.12 ISO file, copy the `scripts` directory to the directory where you extracted the contents of the HP Operations Agent 11.11 media.

Because the HP Operations Agent 11.12 ISO file also includes a `scripts` directory, you must overwrite the contents of the existing `scripts` directory while copying.

**Tip:** You can transfer the `patch` directory as well from the directory where you extracted (or mounted) the HP Operations Agent 11.12 ISO file into the directory where you extracted the

contents of the HP Operations Agent 11.11 if you like to create a package that can be reused for installing the HP Operations Agent 11.11 and 11.12 together on different nodes.

## Install on Windows Nodes

There are options available to install Operations agent 11.11 only or upgrade to version 11.11 and 11.12 together.

### Installing Operations agent 11.11

You can install Operations agent 11.11 by using the consolidated media:

Follow the steps:

1. Log on to the node with the administrator privileges.
2. Go to the media root.
3. Run the following command:

```
cscript oainstall.vbs -i -a -baseonly
```

4. Verify the installation process.

For more information about installation procedures, see *HP Operations Agent and Infrastructure SPIs Installation guide 11.11*.

### Installing Operations agent 11.11 and 11.12 Together

You can install Operations agent 11.12 by any one of the following:

- Consolidated media
- Using the includeupdates option

### Using the Consolidated Media

Install the agent 11.11 and 11.12 together by using the **consolidated media**, follow these steps:

1. Log on to the node with the administrator privileges.
2. Go to the media root.
3. Run the following command:

```
cscript oainstall.vbs -i -a
```

4. Verify the installation process.

### Using the Includeupdates Option

To install the agent 11.11 and 11.12 together, follow these steps:

1. Log on to the system with the administrator privileges.
2. Go to the directory where you extracted or mounted HP Operations Agent 11.11. Run the following command to install on a standalone node (the standalone mode of installation):

```
cscript oainstall.vbs -i -a -includeupdates -patch_dir <patch_directory>
```

3. To install on an HPOM-managed node (the HPOM-managed mode of installation)

```
cscript oainstall.vbs -i -a -includeupdates -patch_dir <patch_directory> -s <management_server>[-cs<certificate_server>-install_dir <install_directory> -data_dir <data_directory>]
```

In this instance, *<patch\_directory>* is the directory where the agent 11.12 ISO file is extracted (or mounted). *<management\_server>* is the FQDN of the management server; *<certificate\_server>* is the FQDN of the certificate server; *<install\_directory>* is the location where all packages and binary files are placed on the node; *<data\_directory>* is the location where all data and configuration files are placed on the node.

The command may fail if you are installing the agent on a platform that is certified as a *supported platform* for the agent 11.0x only with this release. In that case, run the following command instead:

```
cscript oainstall.vbs -i -a -minprecheck -includeupdates -patch_dir <patch_directory>
```

**Tip:** You can extract the contents of the HP Operations Agent 11.12 ISO file into the same directory where you extracted the contents of the HP Operations Agent 11.11 media. In that case, do not use the **-patch\_dir** option. Specifying the **-includeupdates** option ensures that the installer looks for the 11.12 updates in the current directory.

After you run the command with necessary options and arguments, the installation procedure begins. At the end of the installation, the agent starts its operation on the node and all the necessary components start running.

## Install on UNIX/Linux Nodes

There are options available to install Operations agent 11.11 only or upgrade to version 11.11 and 11.12 together.

### Installing Operations agent 11.11

You can install Operations agent 11.11 by using the media:

Follow the steps:

1. Log on to the node with the administrator privileges.
2. Go to the media root.
3. Run the following command:

```
./oainstall.sh -i -a -baseonly
```

4. Verify the installation process.

### Installing Operations agent 11.11 and 11.12 Together

You can install Operations agent by any *one* of the following:

- Consolidated media
- Using the includeupdates option

### Using the Consolidated Media

Install the agent 11.11 and 11.12 together by using the **consolidated media**, follow these steps:

1. Log on to the node with the administrator privileges.
2. Go to the media root.
3. Run the following command:  

```
./oainstall.sh -i -a
```
4. Verify the installation process.

### Using the Includeupdates Option

To install the agent 11.12 and 11.11 together, follow these steps:

1. Log on to the system with the root privileges.
2. Go to the directory where you extracted or mounted HP Operations Agent 11.11. Run the command to install on a standalone node (the standalone mode of installation):

```
./oainstall.sh -i -a -includeupdates -patch_dir <patch_directory>
```

3. To install on an HPOM-managed node (the HPOM-managed mode of installation)

```
./oainstall.sh -i -a -includeupdates -patch_dir <patch_directory> -s <management_server>[-cs <certificate_server>]
```

In this instance, *<patch\_directory>* is the directory where the agent 11.12 ISO file is extracted (or mounted). *<management\_server>* is the FQDN of the management server; *<certificate\_server>* is the FQDN of the certificate server

**Note:** When you install HP Operations Agent 11.11 and 11.12 together on a node, follow these steps:

1. Copy the **oareqcheck.awk** file from the location - patches/<patch number>/<architecture>/<file>. For example, patches/OAAIX\_00030/AIX\_powerpc32/oareqcheck.awk
2. Save the **oareqcheck.awk** file in the directory where you have extracted the HP Operations agent 11.11 ISO file. The directory location is /<platform>/<architecture>.

**Example –** For AIX, copy the oareqcheck.awk file from patches/OAAIX\_00030/AIX\_powerpc32/oareqcheck.awk to packages/AIX/AIX\_powerpc32

**Tip:** With 11.12, the file oareqcheck.awk is identical for all UNIX platforms.

The command may fail if you are installing the agent on a platform that is certified as a *supported platform* for the agent 11.0x only with this release. In that case, run the following command instead:

```
./oainstall.sh -i -a -minprecheck -includeupdates -patch_dir <patch_directory>
```

**Tip:** You can extract the agent 11.12 media into the same directory where you extracted the media for the agent 11.11. In that case, do not use the **-patch\_dir** option. Specifying the **-includeupdates** option ensures that the installer looks for the 11.12 updates in the current directory.

After you run the command with necessary options and arguments, the installation procedure begins. At the end of the installation, the agent starts its operation on the node and all the necessary components start running.

**Note:** The `rc.shutdown` file/`etc/rc.shutdown` gets updated or created after you install Operations agent on AIX node. This file is updated to ensure seamless shutdown process of the Operations agent.

If you install the HP Operations agent on the HPOM on UNIX/Linux management server (that is, if you select the management server as a managed node), you must manually restart all HPOM processes by running the following commands on the management server:

1. `/opt/OV/bin/OpC/opcsv -stop`
2. `/opt/OV/bin/OpC/opcsv -start`

## Installing the HP Operations agent in the Inactive Mode

You can install the HP Operations agent 11.11 and 11.12 in the inactive mode without specifying any configuration details. This mode of installation does not perform necessary configuration tasks to enable the agent to run on the system, but only creates the necessary directory structure and places necessary files on the system.

The advantage of using this mechanism is the ability to clone the image of a system where the HP Operations agent is installed in the inactive mode. Cloning a system with preinstalled HP Operations agent eliminates the requirement to install the agent on the system after adding the system to the list of managed nodes.

**Note:** If Operations agent 11.11 is already installed, the `defer configure` option will be ignored.

## Install the HP Operations agent 11.11 and 11.12 Together

Although you can install the HP Operations agent 11.12 alone in the inactive mode, a requirement for this installation is the HP Operations agent 11.11 also must be available on the system in the inactive state. Installing the HP Operations agent 11.11 and 11.12 together simplifies the installation procedure.

### Install on Windows Nodes

To install the agent 11.11 and 11.12 together, follow these steps:

1. Log on to the system with the administrator privileges.
2. To install the agent (on an HPOM-managed or standalone node), go to the directory where you extracted the contents of the HP Operations agent 11.11 media, and then run the following command:

```
cscrip oainstall.vbs -i -a -includeupdates -defer_configure -patch_dir <patch_directory>
```

The command may fail if you are installing the agent on a platform that is certified as a *supported platform* for the agent 11.0x only with this release. In that case, run the following command instead:

```
cscrip oainstall.vbs -i -a -minprecheck -includeupdates -defer_configure -patch_dir <patch_directory>
```

In this instance, `<patch_directory>` is the directory where the contents of the agent 11.12 ISO file are extracted.

**Tip:** You can extract the contents of the HP Operations agent 11.12 ISO file into the same directory where you extracted the contents of the HP Operations Agent 11.11 media. In that

case, do not use the **-patch\_dir** option. Specifying the **-includeupdates** option ensures that the installer looks for the 11.12 updates in the current directory.

In this instance, *<directory>* is the directory where you extracted (or mounted) the contents of the HP Operations agent 11.12 ISO file.

After you run the command with necessary options and arguments, the installation procedure begins. At the end of the installation, all agent files are placed on the system, but the agent remains inactive.

To check the status of the agent installed, follow these steps:

1. Go to `%ovinstalldir%bin`.
2. Run the following command:

#### **opcagt**

The following message appears:

```
Agent is in the inactive state.
```

### Install on UNIX/Linux Nodes

To install the agent 11.12 and 11.11 together, follow these steps:

1. Log on to the system with the root privileges.
2. To install the agent (on an HPOM-managed or standalone node), go to the directory where you extracted the contents of the agent 11.11 media, and then run one of the following commands:

```
./oainstall.sh -i -a -includeupdates -defer_configure -patch_dir <patch_directory>
```

The command may fail if you are installing the agent on a platform that is certified as a *supported platform* for the agent 11.0x only with this release. In that case, run the following command instead:

```
./oainstall.sh -i -a -minprecheck -includeupdates -defer_configure -patch_dir <patch_directory>
```

In this instance, *<patch\_directory>* is the directory where the agent 11.12 ISO file is extracted (or mounted).

**Tip:** You can extract the agent 11.12 media into the same directory where you extracted the media for the agent 11.11. In that case, do not use the **-patch\_dir** option. Specifying the **-includeupdates** option ensures that the installer looks for the 11.12 updates in the current directory.

After you run the command with necessary options and arguments, the installation procedure begins. At the end of the installation, all agent files are placed on the system, but the agent remains inactive.

To check the status of the agent installed, follow these steps:

1. On HP-UX, Linux, or Solaris, go to `/opt/OV/bin`.  
On AIX, go to `/usr/lpp/OV/bin`.
2. Run the following command:

#### **./opcagt**

The following message appears:

```
Agent is in the inactive state.
```

#### **Configure an Inactive Agent to Switch to the Active Mode**

After installing the HP Operations agent in the inactive mode, you can perform the following configuration tasks to switch the agent to the active mode:

1. Log on to the node as root or administrator.
2. Go to the following location:

*On Windows 64-bit nodes:*

```
%ovinstalldir%bin\win64\OpC\install
```

*On other Windows nodes:*

```
%ovinstalldir%bin\OpC\install
```

*On HP-UX, Linux, and Solaris:*

```
/opt/OV/bin/OpC/install
```

*On AIX:*

```
/usr/lpp/OV/bin/OpC/install
```

3. For an installation in an HPOM-managed environment, run the following command:

*On Windows:*

```
cscript oainstall.vbs -a -configure -srv <management_server> [-cert_srv <certificate_server>]
```

or

```
cscript oainstall.vbs -a -c-srv <management_server> [-cert_srv <certificate_server>]
```

*On UNIX/Linux:*

```
./oainstall.sh -a -configure -srv <management_server> -cert_srv <certificate_server>
```

or

```
./oainstall.sh -a -c -srv <management_server> -cert_srv <certificate_server>
```

4. For a standalone installation, run the following command:

*On Windows:*

```
cscript oainstall.vbs -a -configure
```

*On UNIX/Linux:*

```
./oainstall.sh -a -configure
```

At the end of the procedure, the agent starts its operation on the node and all the necessary components start running.

If you installed the HP Operations agent on the HPOM on UNIX/Linux management server (that is, if you select the management server as a managed node), you must manually restart all HPOM processes by running the following commands on the management server:

1. `/opt/OV/bin/OpC/opcsv -stop`
2. `/opt/OV/bin/OpC/opcsv -start`
3. Run the following commands if you are running the agent on an HPOM for UNIX 8.3x server:
  - a. `/opt/OV/bin/ovstop -c`
  - b. `/opt/OV/bin/ovstart -c`

## Install from the HPOM Console

Installation of the deployment packages for the HP Operations Agent 11.12 on the management server makes necessary changes in the configuration to enable you to install the agent 11.12 and 11.11 (together) remotely on nodes from the HPOM console. You cannot install the agent 11.12 alone on the node from the HPOM console. In addition, if HP Operations agent 11.11 is already present on the node, then only 11.12 is installed.

## Prerequisites for Installing the HP Operations agent from the HPOM Console

- Auto granting of the certificates must be enabled on the management server.
- the `INCLUDEUPDATES` variable must be set to `true` on the management server. Installing deployment packages for the HP Operations Agent 11.12 ensures that this variable is set to `true` (["Update Deployment Packages on the Management Server" \(on page 25\)](#)).

For verification, run the following command on the management server:

```
ovconfget -ovrg server depl INCLUDEUPDATES
```

If the command returns `true`, you can go ahead with installation. Otherwise, you must change the setting to `true`.

- If you want to install the agent on one of the newly supported platforms, you must do *one* of the following:
  - Install the hotfix `QCCR1A128349` for HPOM on UNIX/Linux. Contact HP Support to obtain this hotfix. You do not need any additional hotfixes if you are using HPOM for Windows.

or

- Install HPOM for Windows patch (OM 9.10.220).
- The HP Operations Agent 11.11 must be installed and running on the node
- The node must also meet the requirements listed in ["Prerequisites for Installing the HP Operations agent 11.12" \(on page 42\)](#)

## From the HPOM for Windows Console

To install the agent 11.12 and 11.11 together from the HPOM for Windows console:

Follow the instructions in the *Remote Agent Installation* section in *HPOM for Windows Online Help*.

**Note:** You *need not* select the **Run prerequisites check automatically before deployment** check box while installing the agent. The installation process on the node always performs



prerequisite checks and the error or failure messages are annotated with the deployment job in the HPOM console. You can reduce the installation time by clearing this check box.

Depending on the original state of the node, you will see one of the following results:

- If the node did not have any agent software installed, the agent 11.11 and 11.12 are installed.
- If the node had old agent software that *can* be upgraded to the version 11.11, the existing agent is upgraded to the version 11.11 first, and then the agent 11.12 is installed.

**Note:** In the above two scenarios, the remote installation mechanism first installs the HP Operations agent 11.11 on the node, and then installs the HP Operations agent 11.12. Therefore, the installation process might take longer than usual.

- If the node has old agent software that *cannot* be upgraded to the version 11.11, the installation fails.
- If the agent 11.11 was already installed on the node, follow these additional steps after the remote installation is complete:
  - a. In the console tree, right-click the node, and then click **All Tasks > Reinstall/Update**. The Reinstall/Update Node dialog box opens.
  - b. Select **Update**, select **Packages** in the Scope section, clear the Deploy Only if Version is Lower check box, and then click **OK**.
  - c. After the installation is complete, go to the console tree of the HPOM console, right-click the node, and then click **All Tasks > Synchronize > Packages**.

The agent 11.12 is now installed on the node.

**Note:** Installation from the HPOM console might take longer than usual as HPOM first installs the HP Operations agent 11.11 on the node, and then installs the HP Operations agent 11.12.

## From the HPOM for UNIX Console

To install the agent 11.12 and 11.11 together from the HPOM for UNIX console:

Follow the instructions in the *HPOM for UNIX: New Agent Installation* section in *HPOM for UNIX Online Help* to install the agent remotely from the HPOM console.

Depending on the original state of the node, you will see one of the following results:

- If the node did not have any agent software installed, HPOM installs both the agent versions 11.11 and 11.12. Make sure to select the **Force** check box in the Install Agent window.
- If the agent 11.11 was already installed on the node, you must select the **Force** check box in the Install Agent window while installing the agent. At the end of the installation, the agent 11.12 is installed.
- If the node has older agent software that *cannot* be upgraded to the version 11.11, installation fails.
- If the node had old agent software that *can* be upgraded to the version 11.11, the existing agent is upgraded to the version 11.11 first, and then the agent 11.12 is installed (this two-step upgrade takes place automatically; no additional steps are involved).

**Note:** Installation from the HPOM console might take longer than usual as HPOM first installs the HP Operations agent 11.11 on the node, and then installs the HP Operations agent 11.12.

## Modify the Default Deployment Behavior

If you do not want to install the 11.12 patch and HP Operations agent 11.11 together anymore, follow these steps:

1. Log on to the management server with the administrator or root privileges.
2. Go to the directory `%ovinstalldir%bin` or `/opt/OV/bin`.
3. Run the following command:

```
ovconfchg -ovrg server -ns depl -set INCLUDEUPDATES false
```

## Reverting to the HP Operations agent 11.11

After installing the agent 11.12, if you want to revert to the agent 11.11, you can do so by removing the agent from the node. See ["Removing the HP Operations Agent 11.12" \(on page 67\)](#) for more details.

## Stopping Unnecessary Processes

If you do not want to use all the components of the HP Operations agent, you can run specific commands to stop unnecessary processes. Stopping unnecessary processes is useful when you are upgrading only from the HP Operations agent, HP Performance Agent, or HP GlancePlus and you do not want to use the other components of the HP Operations agent.

### When you are upgrading from the HP Operations agent only

In this scenario, you can stop the `rtmd` process if you do not want to use the Performance Collection Component and RTM.

The simplest way to stop the `rtmd` process is running the `ovc -stop rtmd` command. However, the `rtmd` process starts running again when you restart the system. Therefore, it is important to unregister the process from the `control` component instead of just stopping its operation.

Perform the following steps to unregister the `rtmd` process:

1. Log on to the node as root or administrator.
2. Go to the following directory:

*On Windows*

```
%ovinstalldir%bin
```

*On HP-UX, Linux, or Solaris*

```
/opt/OV/bin
```

*On AIX*

```
/usr/lpp/OV/bin
```

3. Run the following command:

```
ovcreg -del rtmd
```

The command stops the `rtmd` process and unregisters the `rtmd` process from the `control` component.

#### **When you are upgrading from the HP Performance Agent only**

In this scenario, you can stop the `rtmd` process if you do not want to use RTM.

The simplest way to stop the `rtmd` process is running the **`ovc -stop rtmd`** command. However, the `rtmd` process starts running again when you restart the system. Therefore, it is important to unregister the process from the `control` component instead of just stopping its operation.

Perform the following steps to unregister the `rtmd` process:

Log on to the node as root or administrator.

1. Go to the following directory:

*On Windows*

**`%ovinstalldir%bin`**

*On HP-UX, Linux, or Solaris*

**`/opt/OV/bin`**

*On AIX*

**`/usr/lpp/OV/bin`**

2. Run the following command:

**`ovcreg -del rtmd`**

The command stops the `rtmd` process and unregisters the `rtmd` process from the `control` component.

#### **When you are upgrading from HP GlancePlus only**

HP GlancePlus does not require the `ovc` process. When you want to run only HP GlancePlus (and no other components of the HP Operations agent 11.00), follow these steps:

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

*On HP-UX, Linux, or Solaris*

**`/opt/OV/bin`**

*On AIX*

**`/usr/lpp/OV/bin`**

3. Run the following command to stop all agent processes (including processes for the Performance Collection Component):

**`opcagt -kill`**

This command stops all HP Operations agent processes.

4. Run the following command to restart the `midaemon` process:

*On HP-UX, Linux, or Solaris*

```
/opt/perf/bin/midaemon
```

*On AIX*

```
/usr/lpp/perf/bin/midaemon
```

5. Run the following command to restart the `perfd` process:

*On HP-UX, Linux, or Solaris*

```
/opt/perf/bin/perfd
```

*On AIX*

```
/usr/lpp/perf/bin/perfd
```

The `ovc` process is already stopped by the command that was run in [step 3](#). However, the `ovc` process will start running again when you restart the system.

Run the following command to prevent the `ovc` process from starting its operation when the system is restarted:

*On HP-UX, Linux, or Solaris*

```
/opt/OV/bin/ovconfchg -ns ctrl -set START_ON_BOOT false
```

*On AIX*

```
/usr/lpp/OV/bin/ovconfchg -ns ctrl -set START_ON_BOOT false
```

The `ovc` process does not start anymore after you restart the system.

Perform [step 6](#) through [step 8](#) to prevent the Performance Collection Component from starting its operation when the system is restarted

6. Go to the following location:

*On Linux*

```
/etc/sysconfig
```

*On HP-UX*

```
/etc/rc.config.d
```

*On Solaris and AIX*

```
/etc/default
```

7. Open the `ovpa` file with a text editor.
8. Set the variable `OVPA_START` to 0, and then save the `ovpa` file

If the `ttd` process does not start after you restart the system, run the following command:

*On HP-UX, Linux, or Solaris*

```
/opt/perf/bin/ttd
```

*On AIX*

```
/usr/lpp/perf/bin/ttd
```

## Stopping Operations agent Processes

With the previous versions of HP Operations agent (version 11.0x, 11.10 or 11.11), when you run the (**opcagt -kill**) command to stop all the HP Operations agent and HP Performance Agent processes, two processes (`midaemon` and `ttd`) do not stop or still continue to run on the node. To stop these processes, you would need other extra steps.

Example, after you run the (**opcagt -kill**) command on the Windows or UNIX node, Performance Collection Component processes (such as `midaemon` and `ttd`) still continue to run on the node.

With version 11.12, if you want to stop all the processes of the HP Operations agent and HP Performance Agent, you can run a **single** command (**opcagt -kill**) to stop all the processes.

**Note:** The DSI and ARM applications may have dependency on `midaemon` or `ttd` processes. There might be an impact on these applications if you use (**opcagt -kill**) command.

Follow the steps to stop all the processes:

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

*On Windows*

**%ovinstalldir%bin**

*On HP-UX, Linux, or Solaris*

**/opt/OV/bin**

*On AIX*

**/usr/lpp/OV/bin**

3. Run the following command to stop all agent processes (including processes for the HP Performance Agent):

*On Windows:*

**opcagt -kill**

*On UNIX:*

**./opcagt -kill**

This command stops all HP Operations agent processes including `midaemon` and `ttd` processes.

**Note:** As `ttd` process is stopped, any ARM-instrumented applications that are running must also be stopped before you restart `ttd` process.

# Chapter 9

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## Installing Infrastructure SPIs

### Prerequisites for Installing the Infrastructure SPIs

#### Hardware and Software Requirements

For a list of supported hardware, operating systems, HPOM version, and agent version, see the *Support Matrix*.

<sup>a</sup>The disk space for the temporary directory/drive is required only during installation. These are approximate values.

#### Upgrade Requirements

You can directly upgrade the Infrastructure SPIs 1.60 or above to the version 11.11 and then to 11.12.

## Install Infrastructure SPIs by Using Infrastructure SPIs Media

Follow the steps:

1. Download Infrastructure SPIs ISO version 11.11 (all platforms) and Infrastructure SPIs 11.12 platform ISO in the same location. You must extract the version 11.11 and then 11.12 version in the same location.
2. Log on to the management server as administrator.
3. From the media root, run the following command:

```
cscript oainstall.vbs -i -m
```

The command installs the Infrastructure SPIs version 11.11 and 11.12.

### Log File

The common log file (`oainstall.log`) for installing Infrastructure SPIs (11.11) and patch 11.12 is in the following directory:

#### On Windows

```
%OvDataDir%shared\server\log\oainstall.log
```

#### On UNIX/Linux

```
/var/opt/OV/shared/server/log/oainstall.log
```

You can view the patch log file (`oapatch.log`) for version 11.12 in the following location:

#### On Windows

```
%OvDataDir%shared\server\log\oapatch.log
```

#### On UNIX/Linux

```
/var/opt/OV/shared/server/log/oapatch.log
```

### Verifying the Installation

After installing the Infrastructure SPIs version 11.11 and 11.12, review the contents of the installation log file (`oainstall.log`) or `oapatch.log`. If the installation is successful, the file must be error-free and must display the messages near the end of the file.

## Install Infrastructure SPIs 11.12 Patch Only

Follow the steps:

1. Make sure that you downloaded the HPInfraSPI 11.12 patch .ISO file.
2. Log on to the management server as administrator.
3. Go to the media root.
4. Run the following command:

```
cscript oainstall.vbs -i -m
```

5. Verify the registration process.

**Note:** HPInfraSPI patch media does not support installation of only Infrastructure SPI or Infrastructure SPI with graphs or reports.

# Chapter 10

---

## Installing HP Operations Agent Using Red Hat Network Satellite Server

You can use Red Hat Network Satellite server to deploy HP Operations agent on all the Linux nodes. For more information on the prerequisites for installing HP Operations agent, see ["Prerequisites for Installing the HP Operations Agent"](#). The target node where you are installing HP Operations agent must always be added to communicate with Red Hat Network (RHN) Satellite server.

To obtain platform specific packages from the HP Operations agent media, browse the media to the specific package location. For all platforms, you must obtain the `oainstall.vbs` or `oainstall.sh` package and the contents of the **scripts** folder. The following table lists the platform-specific packages to be obtained from the media.

Operating System	Architecture	Packages
Linux	Linux2.6 x64	packages/LIN/Linux2.6_X64
	Linux2.6 x86	packages/LIN/Linux2.6_X86
	Linux2.6 PPC64	packages/LIN/Linux2.6_PPC64

To install HP Operations agent using RHN Satellite server, perform the following tasks:

1. ["Collect and Store the Operations agent depot files \(RPMs\) in Software Delivery Repository " \(on page 64\)](#)
2. ["Create the Setup on the Target Node " \(on page 65\)](#)
3. ["Deploy the Packages on the Target Node" \(on page 65\)](#)

### Collect and Store the Operations agent depot files (RPMs) in Software Delivery Repository

To download the HP Operations agent software, follow these steps:

1. Obtain the HP Operations agent media.  
To extract the contents of the `.tar` file containing the HP Operations agent media, you can use the command `tar -xvf <filename>.tar` on the Linux systems.
2. Browse to the **packages** folder and select the required Operating System.  
For example, to obtain the Linux packages, browse to **packages > Lin**.
3. Extract the contents of the media.
4. Collect and unzip all the depot files from media.
5. Upload the Operations agent RPMs to Software Delivery Repository location of the RHN Satellite server.



## Create the Setup on the Target Node

To create the setup on the target node, follow these steps:

1. Add the node to RHN Satellite server. The node is known as target node.
2. On the target node, create a file and provide the location on the system where HP Operations agent package must create the **Default Agent File**.

For example, create a file `/etc/yum.repos.d/<Default Agent File>`.

The agent depot files must be available in the **repos.d** location.

3. Update the contents of the file and specify the location where Operations agent depot files are available.

The content of the file:

```
oa
```

```
Name=Operations Agent
```

```
baseurl=System_name/SDR/downloads/Extras/RedHat/6Server/x86_64/current/operation-agent/<Agent RPMs location>
```

```
gpgcheck=0
```

In this instance:

`<Name>` is the product name.

`<baseurl>` is the location where agent package is available.

## Deploy the Packages on the Target Node

1. Run the command to install the required RPMs: `# yum install <agent RPMs>`

For example, `# yum install HPOvOpsAgt`

All the dependent agent RPMs will be installed.

After you complete installation, you can run the command to update the agent depot files (RPMs) from RHN Satellite server: `# yum update <agent RPMs>` The

For example, `# yum update HPOVOpsAgt`

2. Run the command to verify that Operations agent packages are installed:

```
rpm -qa | grep <packagename>
```

In this instance, `<packagename>` is name of the agent package.

For example, `rpm -qa | grep <HPOvBbc>`

After performing all the steps, the Operations agent RPMs are available on the node. Configure the management server by the following :

1. Go to the following directory on the linux node:  
`/opt/OV/bin/OpC/install`

2. Run the command: `opcactivate -srv <management_server> -cert_srv <management_server> -f`

In this instance:

<management\_server> is the FQDN of the HPOM management server.

# Chapter 11

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## Removing the HP Operations agent

To remove the complete product from Windows®, HP-UX, Solaris, Linux, and AIX operating systems see [Removing the HP Operations Agent 11.11 and 11.12 Together](#).

To remove HP Operations agent and Infrastructure SPIs 11.12 see [Removing the HP Operations Agent 11.12](#).

To remove HP Operations agent from Linux, see [Remove the HP Operations Agent from Linux Nodes](#).

## Removing the HP Operations Agent 11.12

To remove the HP Operations agent 11.12, follow these steps after you log on to the node as root or administrator:

**Note:** You cannot remove HP Operations agent 11.12 alone from Linux nodes; you can only remove the complete product (versions 11.11 and 11.12 together) from Linux nodes. Do not follow these steps on Linux nodes. To remove the complete product from Linux nodes, see ["Remove the HP Operations Agent from Linux Nodes" \(on page 68\)](#).

1. Go to the following directory:  
*On Windows (32-bit systems)*  
`%ovinstalldir%bin\OpC\install`  
*On Windows (64-bit systems)*  
`%ovinstalldir%bin\win64\OpC\install`  
*On HP-UX or Solaris*  
`/opt/OV/bin/OpC/install`  
*On AIX*  
`/usr/lpp/OV/bin/OpC/install`
2. Run the following command to remove the agent 11.12:  
*On Windows*  
**`cscript oainstall.vbs -r -a -pn OAWIN_00030`**

*On HP-UX*

**`./oainstall.sh -r -a -pn OAHPUX_00030`**

*On Solaris*

**`./oainstall.sh -r -a -pn OASOL_00030`**

*On AIX*

**`./oainstall.sh -r -a -pn OAAIX_00030`**

On all platforms other than Linux, uninstallation of the HP Operations agent 11.12 reinstates the version of the HP Operations agent 11.11.

For information on removing the agent on Linux, see ["Remove the HP Operations Agent from Linux Nodes" \(on page 68\)](#).

## Remove the HP Operations agent Remotely

To remove the agent 11.12 from a managed node remotely by using the `ovdeploy` command from the management server, follow these steps:

**Note:** You cannot remove the agent 11.12 alone from Linux nodes; you can only remove the complete product (versions 11.11 and 11.12 together) from Linux nodes. Do not follow these steps on Linux nodes. To remove the complete product from Linux nodes, see ["Remove the HP Operations Agent from Linux Nodes" \(on page 68\)](#).

1. Log on to the management server as root or administrator.
2. Go to the following directory on the management server:

*On Windows:*

```
%ovinstalldir%bin
```

*On HP-UX, Solaris, or Linux:*

```
/opt/OV/bin
```

3. Run the following command:

```
ovdeploy -remove -patch <patch-ID>-host <node name>
```

In this instance:

*<patch-ID>* is the name of the patch ISO file that was downloaded while installing the patch (see [ISO file names](#)).

*<node name>* is the FQDN of the node.

**Note:** Do not specify the FQDN of a Linux node. You cannot remove just the agent 11.12 from a Linux node.

On all platforms other than Linux:

For information on removing the agent on Linux, see ["Remove the HP Operations Agent from Linux Nodes" \(on page 68\)](#).

## Remove the HP Operations Agent from Linux Nodes

You cannot remove the agent 11.12 alone from Linux nodes. However, you can remove both the versions of the agent (11.11 and 11.12) together with a single command.

To remove the agent 11.11 and 11.12 from Linux nodes, follow these steps:

1. Log on to the node as root.
2. Go to `/opt/OV/bin/OpC/install`.
3. Run the following command:

```
./oainstallsh -r -a
```

The command removes both the versions of the agent (11.11 and 11.12).

## Reinstall the HP Operations Agent 11.12 on Linux

On Linux systems, you cannot remove just the agent 11.12 with the agent 11.11 still in effect. Uninstallation procedure removes both the versions of the agent (11.11 and 11.12) completely from the Linux system. If you want to install the agent 11.12 again on the same system, do one of the following:

- Install the agent 11.11 and 11.12 together ("[Install the HP Operations Agent 11.11 and 11.12 Together](#)" (on page 49)).
- Install the agent 11.11 first (follow the instructions in the *HP Operations Agent 11.11 Installation Guide*), and then install the agent 11.12 (see "[Install the HP Operations Agent 11.12 on a Node Manually](#)" (on page 43)).

## Removing the Agent with the oacleanall Script

If the installation of the agent is incomplete or unsuccessful, you must always try reinstallation only after uninstalling the agent. If the uninstallation command (`oainstall.sh -r -a` or `cscript oainstall.vbs -r -a`) fails to remove the agent, use the `oacleanall` script.

The `scripts` directory (directory where ISO is extracted or mounted) includes a set of `oacleanall` scripts—one script for each platform. You must choose the appropriate script to bring the system back to its original state. The `oacleanall` script **removes** the agent (11.12 and 11.11) from the system completely and irrecoverably. Use this script only to reverse the effect of an incomplete, unsuccessful, or incorrect installation of the agent.

**Note:** The `oacleanall` script is *NOT* recommended to remove the Operations agent on a system running other HP Software products.

The following table lists the commands for all supported platforms.

Operating System	Architecture	Command
Windows	x86	cscript oacleanall_Windows_X86.vbs
	x64	cscript oacleanall_Windows_X64.vbs
Linux	x86	./oacleanall_Linux2.6_X86.sh
	x64	./oacleanall_Linux2.6_X64.sh
	power (64-bit)	./oacleanall_Linux2.6_PPC64.sh
HP-UX	PA-RISC	./oacleanall_HP-UX_PA32.sh
	Itanium	./oacleanall_HP-UX_IA32.sh
Solaris	SPARC	./oacleanall_Solaris_SPARC32.sh
	x86	./oacleanall_Solaris_X86.sh

Operating System	Architecture	Command
AIX	power (64-bit)	<code>./oacleanall_AIX_powerpc64.sh</code>

## Removing the HP Operations agent 11.11 and 11.12 Together

To remove the HP Operations agent complete product (versions 11.11 and 11.12) using a single command, follow these steps after you log on to the node as root or administrator:

- Go to the following directory:  
*On Windows (32-bit systems)*  
`%ovinstalldir%\bin\OpC\install`  
*On Windows (64-bit systems)*  
`%ovinstalldir%\bin\win64\OpC\install`  
*On HP-UX or Solaris*  
`/opt/OV/bin/OpC/install`  
*On AIX*  
`/usr/lpp/OV/bin/OpC/install`
- Run the following command to remove the agent:

*On Windows*

**`cscript oainstall.vbs -r -a`**

*On UNIX/Linux*

**`./oainstall.sh -r -a`**

The command removes the agent (11.11 and 11.12 together) from the node. After uninstallation, the complete data directory remains on the system (on Windows: `%ovdatadir%`; on UNIX/Linux: `/var/opt/OV`).

Alternatively, if you do not want to retain the data files on the system, run the following command:

*On Windows*

**`cscript oainstall.vbs -r -a -clean`**

*On UNIX/Linux*

**`./oainstall.sh -r -a -clean`**

The command removes the agent (11.11 and 11.12 together) from the node. After uninstallation, only the following files remain on the system:

*On Windows*

`%ovinstalldir%\inventory\Operations-Agent.xml`

`%ovdatadir%\log\oainstall.log`

`%ovdatadir%\log\oainstall.bin`

*On HP-UX, Linux, or Solaris*

`/opt/OV/inventory/Operations-Agent.xml`

`/var/opt/OV/log/oainstall.log`

`/var/opt/OV/log/oainstall.bin`

#### *On AIX*

`/usr/lpp/OV/inventory/Operations-Agent.xml`

`/var/opt/OV/log/oainstall.log`

`/var/opt/OV/log/oainstall.bin`

# Chapter 12

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## Removing Infrastructure SPIs

To remove the Infrastructure SPIs, make sure you have approximately 240 MB of total disk space and 35 MB of space in the temporary folders available on the management server.

1. Log on to the management server.
2. Go to the following directory:

*On Windows*

```
%ovinstalldir%bin\OpC\agtinstall
```

*On UNIX/Linux*

```
/opt/OV/bin/OpC/agtinstall
```

3. Run the following command:

*On Windows*

**cscript oainstall.vbs -r -m -spiconfig**

The command removes Infrastructure SPIs version 11.11 and 11.12 patch installed on the management server.

**cscript oainstall.vbs -r -m -spiconfig - removepatch**

The command removes the highest Infrastructure SPIs patch version installed on the management server.

**cscript oainstall.vbs -r -m -spiconfig - removeallpatch**

The command removes all Infrastructure SPIs patches installed on the management server.

*On UNIX/Linux*

**./oainstall.sh -r -m -spiconfig**

The command removes Infrastructure SPIs version 11.11 and 11.12 patch installed on the management server.

**./oainstall.sh -r -m -spiconfig -removepatch**

The command removes the highest Infrastructure SPIs patch version installed on the management server.

**./oainstall.sh -r -m -spiconfig - removeallpatch**

The command removes all Infrastructure SPIs patches installed on the management server.

In an HA cluster, perform the above steps on the active node first, and then on all nodes in the cluster.





## Chapter 13

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### Installing the HP Operations agent on Platforms Supported with Limitation

See the HP Operations agent *Support Matrix* document for more details on platforms supported with limitation.

The installer may fail to install the HP Operations agent on platforms supported with limitation. You may see the following error when you try to install the agent on such platforms:

```
The product bundle selected may not yet be supported on this node
```

To install the HP Operations agent on such nodes, you must run the installer with the -**minprecheck** option along with the -**i** and -**a** options.

#### Examples

To install the HP Operations agent 11.12 on a Windows system, run the following command:

```
cscript oainstall.vbs -i -a -minprecheck
```

To install the HP Operations agent 11.12 on a UNIX/Linux system, run the following command:

```
./oainstall.sh -i -a -minprecheck
```

### Install the HP Operations agent on Platforms Supported with Limitation Remotely from the HPOM for Windows Console

To install the HP Operations agent 11.12 remotely from the HPOM for Windows console on platforms supported with limitation, you must perform the following preinstallation tasks on the management server:

1. Log on to the management server as administrator.
2. Go to the directory %ovdatadir%share\conf\PMAD.
3. Rename the `agent_install_defaults.cfg.sample` file to `agent_install_defaults.cfg`.  
**Tip:** Take a backup of the `agent_install_defaults.cfg.sample` file.
4. Open the `agent_install_defaults.cfg` file with a text editor and add the following line:  

```
[eaagt]  
  
MINPRECHECK=TRUE
```
5. Save the file.

You can now follow the steps in "[From the HPOM for Windows Console](#)" (on page 56) to install the HP Operations agent 11.12 remotely from the HPOM console.

## Install the HP Operations Agent on Platforms Supported with Limitation Remotely from the HPOM for UNIX Console

To install the HP Operations agent 11.12 remotely from the HPOM for UNIX console on platforms supported with limitation, you must perform the following preinstallation tasks on the management server:

1. Log on to the management server with the root privileges.
2. Go to the directory `/etc/opt/OV/share/conf/OpC/mgmt_sv`.
3. Rename the file `bbc_inst_defaults.sample` to `bbc_inst_defaults`.
4. Open the file `bbc_inst_defaults` with a text editor and add the following line:

```
[eaagt]
```

```
MINPRECHECK=TRUE
```

5. Save the file.

Follow the steps in ["From the HPOM for UNIX Console" \(on page 43\)](#) to install the HP Operations agent 11.12 remotely from the HPOM console.

**Note:** After installing the HP Operations Agent 11.12 using MINPRECHECK, the changes done in the profile file must be reverted. When you install using MINPRECHECK, the version check for the Operating System and Architecture will be skipped.

## Install the HP Operations Agent on Platforms Supported with Limitation Remotely

To install the HP Operations agent 11.12 remotely on platforms supported with limitation:

1. Log on to the management server with root or administrator privileges.
2. Go to the following directory on the management server:

On Windows:

```
%ovinstalldir%bin
```

On UNIX/Linux:

```
/opt/OV/bin
```

3. Add the following line in a text file:

```
[eaagt]
```

```
MINPRECHECK=TRUE
```

4. Run the following command:

```
ovdeploy -install -bundle <path_to_OVO-Agent.xml> -node <node name> -af <path_of_profile_file>\<profile_file_name> -1 -configure <profile_file_name>
```

The command installs the HP Operations Agent 11.12 on the node.

# Chapter 14

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## Troubleshooting

While installing the HP Operations agent 11.12, you may experience certain problems. This section helps you troubleshoot such problems and provides you with information to help you avoid problems from occurring.

### Installation Fails on a Windows Node with the Error "MSI version is less than 4.5"

Installation of the HP Operations agent 11.12 on a Windows node fails with the following message in the command line console (as well as in the `oapatch.log` file):

```
[ FAIL ] Check if MSI engine version is 4.5 or higher. MSI version is less than 4.5, installation not supported, update to Service Pack 2
```

#### Solution:

1. Go to the `patches\OAWIN_00030` directory on the HP Operations agent 11.12 media.
2. Go to one of the following directories depending on the architecture of the Windows node:
  - For Itanium nodes: `Windows_IA64`
  - For x64 nodes: `Windows_X64`
  - For x86 nodes: `Windows_X86`
3. Run one of the following commands depending on the architecture of the Windows node:
  - For Itanium nodes: **`wusa Windows6.0-ia64.msu /quiet /norestart`**
  - For x64 nodes: **`wusa Windows6.0-x64.msu /quiet /norestart`**
  - For x86 nodes: **`wusa Windows6.0-x86.msu /quiet /norestart`**

**Tip:** Alternatively, you can double-click the `*.msu` file.
4. Restart the system.
5. Try to install the HP Operations agent again.

### Remote Installation of the Agent from the HPOM for Windows Console Fails

Installation of the agent (11.11 and 11.12 together) from the HPOM for Windows console fails; the `oapatch.log` file is not created. The following error message appears in the HPOM console:

```
(PMD1240) Cannot deploy package 'Operations-agent' to node <node_name>. The agent API returned the following errors:  
(depl81) Unable to deploy OVO-Agent.xml to node <node_name>  
(depl81) Unable to deploy oasetup to node <node_name>
```

The installation mechanism first transfers and installs the packages for the agent 11.11 on the node, and then triggers the installation of the agent 11.12 packages. This failure occurs if the agent tries to start its processes on the node even before the installation of the agent 11.12 is complete.

#### **Solution:**

1. On the HPOM management server, set the `SELFPATCHUPLOADRETRYLIMIT` variable to a higher value (such as, 90). Run the following command on the management server to set this variable to a value of your choice:

```
ovcongchg ovrg -server -ns depl -set SELFPATCHUPLOADRETRYLIMIT <value>
```

2. Try to install the agent 11.11 and 11.12 together again from the HPOM console.

## **Error Messages Appear in the "status.perfalarm" File After Installing the Agent with the "syncwpar" Command**

On AIX systems, after you install the HP Operations agent by using the `syncwpar` command, the following error messages appear in the `status.perfalarm` file (in the `/var/opt/perf/log` directory):

```
ERROR: Connection to localhost failed ((bbc-42) Unable to connect to the OV Communication Broker.Update to Service Pack
```

#### **Solution:**

Start the `ovc` process by running the following command:

```
/usr/lpp/OV/bin/ovc -start
```

## **Reinstallation of the Agent Fails on Windows**

Reinstallation of the agent (11.11 or 11.12) on Windows fails with the following error:

```
The service 'lanmanserver' is not running on the system. This service is required to run this tool.
```

#### **Solution:**

Restart the `Server` service (service name: `lanmanserver`) from the Services window:

1. At the Run prompt, type **services.msc**, and then press **Enter**.
2. In the Services window, right-click **Server**, and then click **Restart**.

## **Remote Installation from the HPOM Console Fails on Windows 7 x64 Nodes**

Remote installation of the HP Operations agent from the HPOM console fails on Windows 7 x64 nodes with the following error:

```
REQCHK8016 The platform/OS version on node <node_name> is not yet supported - please consult the latest support matrix; if platform is supported ignore prerequisite check and check prerequisites manually
```

#### **Solution:**

Clear the **Run prerequisites check automatically before deployment** option while installing the agent from the HPOM console.

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