HP Operations Agent

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

Software Version: 11.01

Installation Guide

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Acknowledgements

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This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/).

This product includes software written by Tim Hudson (tjh@cryptsoft.com).

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

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Documentation Updates

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

- Software Version number, which indicates the software version.

- Document Release Date, which changes each time the document is updated.

- Software Release Date, which indicates the release date of this version of the software.

To check for recent updates or to verify that you are using the most recent edition of a document, go to:

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Or click the **New users - please register** link on the HP Passport log on page.

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Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract. To register for an HP Passport ID, go to:

http://h20229.www2.hp.com/passport-registration.html

To find more information about access levels, go to:

http://h20230.www2.hp.com/new_access_levels.jsp

Contents

Overview

You can obtain the HP Operations agent11.01 from the Software Support Online web site. The HP Operations agent 11.01 media is available in the ISO format—five different ISO files for five operating systems supported by the HP Operations agent.

The HP Operations agent 11.01 ISO file provides you with utilities to apply the update on the agent running on the managed node. These utilities also enable you to update the HP Operations agent 11.00 deployment packages available on the management server. Updating the deployment packages helps you deploy the agent 11.01 centrally from the management server to all managed nodes.

Downloading the HP Operations Agent 11.01

To download HP Operations agent 11.01 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 11.01. The search result includes links to download the ISO files for the HP Operations agent 11.01.

4. Click one of the links and download the ISO file on your system.

The ISO files for the HP Operations agent 11.01 not only include updates for the agent 11.00 running on managed nodes, but they also include updates for deployment packages for the HP Operations agent 11.00. 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 11.01 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.

Applying Hotfixes

You must contact HP Support to obtain hotfixes. Hotfixes for the HP Operations agent 11.01 are available in the form of `.tar` files. After obtaining the hotfix `.tar` file from HP Support, you can use the installer programs to apply the hotfix. You can manually install the hotfix on nodes—separately or together with the Operations Agent 11.01. You can even install multiple hotfixes on the agent node at the same time.

Tip: To extract the contents of the hotfix `.tar` files, you can use the 7-Zip tool on Windows.

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.

Prerequisite: Install the Agent on the Management Server

1. Make sure that HP Operations agent 11.00 is running on the management server.

2. Download the patch ISO file for the management server's operating system.

3. Transfer the downloaded ISO file onto the management server.

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

5. Extract the contents of the ISO file into a local directory on the management server, or mount the ISO file.

6. 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

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. 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 5 for each operating system that is in use in your environment.

You can now apply the updates for 11.01 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 11.00 and 11.01 together on nodes where the agent 11.00 is not already installed. When you install the deployment package updates for the agent 11.01, the configuration variable INCLUDEUPDATES is introduced on the management server and automatically set to true by the installer, which ensures agent 11.00 and 11.01 are installed together on nodes where the agent 11.00 is not already installed. For more information about installing the agent from the HPOM console, see "Install From the HPOM Console" (on page 25). To modify the default value of the INCLUDEUPDATES variable, see "Modify the Default Deployment Behavior" (on page 27).

Verify the installation

To verify that the version 11.01 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 11.01 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_00002    :HP-UX  :IPF32        :11.01.002

OAHPUX_00002    :HP-UX  :PA-RISC      :11.01.002

OAWIN_00002     :WIN    :IPF64        :11.01.002

OAWIN_00002     :WIN    :x64          :11.01.002

OAWIN_00002     :WIN    :x86          :11.01.002
```

Updating Deployment Packages with Hotfixes

The HP Operations agent 11.01 enables you to apply hotfixes on nodes centrally from the HPOM management server while installing the agent remotely. However, you can only take advantage of installing hotfixes from the HPOM console when you want to deploy hotfixes together with the agent 11.00 and 11.01. If you do not have any hotfixes to deploy at the time of installing the agent, this procedure will not give any additional benefits and you can skip to the next section.

To update the deployment packages with hotfixes, follow these steps:

1. *Only on HPOM for UNIX/Linux.* Apply the hotfix `QCCR1A126841` on the management server. This is a hotfix for HPOM. Contact HP Support to obtain this hotfix.

2. Obtain the hotfix `.tar` file from HP Support, and then extract the contents of the file into a local directory.

   On Windows, you can use the 7-Zip tool to extract the contents of the hotfix `.tar`file.

   On UNIX/Linux, run the following command to extract the contents of the hotfix `.tar` file:

   tar -xvf *<hotfix_file_name>*

   Tip: You can extract multiple hotfix `.tar` files into a single local directory. Extracting multiple hotfix files into a single directory helps you prepare HPOM to install multiple hotfixes on nodes.

3. Make sure that you are logged on as root or administrator.

4. Go to the directory where you extracted the contents of hotfix `.tar` file.

5. Install the hotfix on the agent running on the management server:

   On Windows

   cscript oainstall -i -a

   On UNIX/Linux

   ./oainstall.sh -i -a

   HPOM is now ready to install hotfixes along with the agent 11.01 on managed nodes.

Remove Agent Hotfixes from Deployment Packages

Every time you install the HP Operations agent 11.01 remotely from the management server, hotfixes for the agent 11.01 are also installed on nodes if you updated deployment packages with hotfixes (). If you want to stop installing hotfixes along with the agent 11.01, you must remove the hotfixes from deployment packages.

To remove hotfixes from deployment packages, follow these steps:

1. Make sure that you are logged on as root or administrator.

2. Go to the following directory:

   Windows 64-bit

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

Windows 32-bit

%ovinstalldir%`bin\OpC\agtinstall`

UNIX/Linux

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

3. Run the following command to check the hotfixes available with the deployment package:

    On Windows

    cscript oainstall.vbs -inv

    On UNIX/Linux

    ./oainstall.sh -inv

    The command lists the available patches and hotfixes with the deployment package. Note down the hotfix ID.

    Tip: Hotfix IDs appear with the prefix **HF.**

4. Run the following command to remove the hotfix:

    On Windows

    cscript oainstall.vbs -r -m -pn *<hotfix_ID>*

    On UNIX/Linux

    ./oainstall.sh -r -m -pn *<hotfix_ID>*

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 11.01only on the active nodes. However, the HP Operations agent 11.01 must be running on the each node in the cluster. After installing the deployment packages on the active HPOM server, install the agent 11.00 and 11.01 on all passive nodes in the cluster.

You must perform Task 1: Before Failover to make sure that deployment packages for the HP Operations agent 11.01can fail over to a passive node. After failover, perform Task 2: After Failover 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).

Task 1: Before Failover

Before failover, follow these steps on the active node in the cluster:

1. Install the HP Operations agent 11.01. See Prerequisite: Install the Agent on the Management Server.

2. Install the deployment package. See Install the Deployment Package.

3. Install the HP Operations agent 11.00 and 11.01 on all nodes in the HA cluster. You can follow the instructions in "Install the HP Operations Agent 11.00 and 11.01 Together" (on page 23)

Task 2: After Failover

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 11.01 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 11.01 deployment packages that are installed on the system under the `Active Agent Patches Installed` section.

Remove the Deployment Package Updates

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/install`

3. Run the following command:
   On Windows
   cscript oainstall.vbs -r -m -pn *<ISO_name>*
   On UNIX/Linux
   ./oainstall.sh -r -m-pn *<ISO_name>*

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

ISO File Names

Platform	File Name
Windows	OAWIN_00002
Linux	OALIN_00002
HP-UX	OAHPUX_00002
Solaris	OASOL_00002
AIX	OAAIX_00002

This procedure reinstates the version of the HP Operations agent 11.00 deployment package that was in effect prior to applying this patch.

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`

Installing the HP Operations Agent 11.01

You can install the HP Operations agent 11.01 manually on an HPOM-managed or standalone node, or you can use the HPOM management server to deploy the HP Operations agent 11.01 centrally on all managed nodes.

The installer program, which is available with the HP Operations agent 11.01 media, enables you to install the HP Operations agent 11.00 and 11.01 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 11.00.

To install only the HP Operations agent 11.01, do one of the following:

- Install from the management server

-

To install the HP Operations agent 11.01 with the HP Operations agent 11.00, do one of the following:

- Install from the management server

-

Prerequisites

Hardware Requirements

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

http://h20230.www2.hp.com/sc/support_matrices.jsp

The following table describes the disk space requirements for the HP Operations agent 11.01:

Disk Space Requirements

OS	Free Disk Space
Windows	150 MB
Linux	50 MB on `/opt` 100 MB on `/var`
HP-UX	50 MB on `/opt` 100 MB on `/var`
Solaris	50 MB on `/opt` 100 MB on `/var`
AIX	50 MB on `/usr` 100 MB on `/var`

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

- HP Operations agent 11.00 must be installed and configured on the node.

- Windows Installer 4.5 or higher must be installed on Windows nodes.

Install the HP Operations Agent 11.01 on a Node Manually

The HP Operations agent 11.01 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.

On Windows Nodes

1. Log on to the node with the administrator privileges.

2. Make sure the HP Operations agent 11.00 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 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.

If you install the HP Operations agent on the HPOM for Windows 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 command on the management server:

vpstat -3 -r

On UNIX/Linux Nodes

1. Log on to the node with the root privileges.

2. Make sure the HP Operations agent 11.00 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 command on the management server:

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 11.00 on the node from the HPOM console, you must perform the following steps after manually installing the agent 11.01 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 11.01 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.

Installing the HP Operations Agent 11.01 Remotely

From the management server, you can install the HP Operations agent 11.01 remotely on managed nodes.

Before You Begin

1. Make sure that the HP Operations agent 11.00 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 11.01.

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

Node Platform	Location of the OVO-Agent.xml File

Windows (Itanium)	*%ovdatadir%*`shared\Packages\HTTPS\windows\`
	`ms\5.2 6.0 6.1\ipf64\Operations-`
	`agent\11.00.044\64\https\oawin_00002`

Windows (x64)	*%ovdatadir%*`shared\Packages\HTTPS\windows\`
	`ms\5.1 5.2 6.0 6.1\x64\Operations-`
	`agent\11.00.044\64\https\oawin_00002`

Windows (x86)	*%ovdatadir%*`shared\Packages\HTTPS\windows\`
	`ms\5.0 5.1 5.2 6.0 6.1\x86\Operations-`
	`agent\11.00.044\32 64\https\oawin_00002`

HP-UX (Itanium)	*%ovdatadir%*`shared\Packages\HTTPS\hp-ux\`
	`hp\11.23 11.31\ipf32\Operations-`
	`agent\11.00.044\64\https\oahpux_00002`

HP-UX (PA-RISC)	*%ovdatadir%*`shared\Packages\HTTPS\hp-ux\`
	`hp\11.11 11.23 11.31\pa-risc\Operations-`
	`agent\11.00.044\32 64\https\oahpux_00002`

Linux (Itanium)	*%ovdatadir%*`shared\Packages\HTTPS\linux\`
	`linux\2.6\ipf64\Operations-agent`
	`\11.00.044\64\https\oalin_00002`

Linux (POWER)	*%ovdatadir%*`shared\Packages\HTTPS\linux\`
	`linux\2.6\powerpc\Operations-agent`
	`\11.00.044\64\https\oalin_00002`

Linux (x86)	*%ovdatadir%*
	`shared\Packages\HTTPS\linux\linux\2.6\x86\Operations-`
	`agent \11.00.044\32 64\https\oalin_00002`

Linux (x64)	*%ovdatadir%*`shared\Packages\HTTPS\linux\`
	`linux\2.6\x64\Operations-agent`
	`\11.00.044\64\https\oalin_00002`

Solaris (SPARC)	*%ovdatadir%*`shared\Packages\HTTPS\solaris\`
	`sun\5.9 5.10\sparc\Operations- agent\11.00.044\32`
	`64\https\oasol_00002`

Solaris (x86)	*%ovdatadir%*`shared\Packages\HTTPS\solaris\`
	`sun\5.10\x86\Operations-agent \11.00.044\32`
	`64\https\oasol_00002`

AIX (5.3)	*%ovdatadir%*`shared\Packages\HTTPS\aix\`
	`ibm\5.3\powerpc\Operations-agent \11.00.044\32`
	`64\https\oaaix_00002`

Node Platform	Location of the OVO-Agent.xml File

AIX (6.1)	*%ovdatadir%*`shared\Packages\HTTPS\aix\`
	`ibm\6.1\powerpc\Operations-agent`
	`\11.00.044\64\https\oaaix_00002`

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 (Itanium)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/ms/` `ipf64/win2k3/A.11.00.000/RPC_BBC/OAWIN_00002`
Windows (x64)	`/var/opt/OV/share/databases/OpC//mgd_node/vendor/ms/` `x64/win2k3/A.11.00.000/RPC_BBC/OAWIN_00002`
Windows (x86)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/ms/` `x86/winnt/A.11.00.000/RPC_BBC/OAWIN_00002`
HP-UX (Itanium)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/hp/` `ipf32/hpux1122/A.11.00.000/RPC_BBC/OAHPUX_00002`
HP-UX (PA-RISC)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/hp/` `pa-risc/hpux1100/A.11.00.000/RPC_BBC/OAHPUX_00002`
Linux (Itanium)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/linux/` `ipf64/linux26/A.11.00.000/RPC_BBC/OALIN_00002`
Linux (POWER)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/linux/` `powerpc/linux26/A.11.00.000/RPC_BBC/OALIN_00002`
Linux (x86)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/linux/` `x86/linux26/A.11.00.000/RPC_BBC/OALIN_00002`

Linux (x64)	`/var/opt/OV/share/databases/OpC/mgd_`
	`node/vendor/linux/x64/linux26/A.11.00.000/RPC_BBC/OALIN_`
	`00002`

Solaris (SPARC)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/sun/` `sparc/solaris7/A.11.00.000/RPC_BBC/OASOL_00002`
Solaris (x86)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/sun/` `x86/solaris10/A.11.00.000/RPC_BBC/OASOL_00002`
AIX (5.3)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/ibm/` `rs6000/aix5/A.11.00.000/RPC_BBC/OAAIX_00002`
AIX (6.1)	`/var/opt/OV/share/databases/OpC/mgd_node/vendor/ibm/` `rs6k64/aix5/A.11.00.000/RPC_BBC/OAAIX_00002`

Install the Agent

To install the agent remotely from the management server, run the `ovdeploy` command from the command line on the management server with appropriate options.

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>* **-ostype** *<os type>* **-host** *<node name>*

   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).

   <OS Type> is the operating system type for the node; use one of the following values with this parameter:

   WINDOWS

   LINUX

   HPUX

   SOLARIS

   AIX

   <node name> is the FQDN of the node

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

   For Windows nodes:

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

   For HP-UX, Linux, or Solaris nodes:

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

   For AIX nodes:

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

   The command output shows 11.01 if the installation is successful.

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 11.00 and 11.01 Together

The HP Operations agent 11.01 media enables you to install the agent 11.01 along with the base agent version 11.00. The installer program first installs the agent 11.00 on the system, and then installs the updates available with the agent 11.01.

Note: To install the agent 11.00 and 11.01 together, you must make sure that the node meets all the requirements for installing the agent 11.00. See the *Prerequisites* section in the *HP Operations Agent 11.00 Installation Guide*.

Before You Begin

Before you attempt to install the HP Operations agent 11.00 and HP Operations agent 11.01 together, make sure that the node meets all the prerequisites.

- See the *Prerequisites* section in the *HP Operations Agent (11.00) Installation Guide* and make sure all the prerequisites are met.

- See the "Prerequisites" (on page 17) section and make sure all the prerequisites are met.

Tip: To install the agent 11.00 and 11.01 together on nodes from the HPOM console, see "Install From the HPOM Console" (on page 25)

On Windows Nodes

To install the agent 11.00 and 11.01 together, follow these steps:

1. Log on to the system with the administrator privileges.

2. Mount the DVD for the agent 11.00 on the DVD-ROM, or extract the contents of the media ISO file for the agent 11.00 into a local directory.

3. Extract the contents of the media ISO file for the agent 11.01 into a local directory.

4. Copy the `oainstall.vbs` file from the directory where you extracted the agent 11.01 media ISO file.

5. Paste the `oainstall.vbs` file into the directory where the original installers for the agent 11.00 are present. This step overwrites the installer programs shipped with the agent 11.00 media with the installers shipped with the agent 11.01 media.

6. *Optional.* If you want to install hotfixes for the agent 11.01, follow these steps:
   a. Obtain the hotfix `.tar` file from HP Support.

   b. Extract the contents of the `.tar` file into a local directory.

   You can use the 7-Zip tool to extract the contents of the hotfix `.tar` file.

7. To install the agent (on an HPOM-managed or standalone node), run the following command:

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

   To include the hotfixes as well, run the following command:

   cscript oainstall.vbs -i -a -includeupdates -patch_dir *<patch_directory>* **-hotfix_dir** *<hotfix_directory>*

   In this instance, *<patch_directory>* is the directory where the agent 11.01 media is located and <hotfix_directory> is the directory where the hotfix `.tar` file is located.

   Tip: You can install multiple hotfixes by extracting multiple hotfix `.tar` files into the same directory.

Tip: You can extract the agent 11.01 media into the same directory where you extracted the media for the agent 11.00. In that case, do not use the **-patch_dir** option. Specifying the **-includeupdates** option ensures that the installer looks for the 11.01 updates in the current directory. Similarly, you can extract the contents of the hotfix `.tar` files into the directory where you extracted the media for the agent 11.00 to install hotfixes without specifying the **-hotfix_dir** option.

In this instance, *<directory>* is the directory where you extracted the HP Operations agent 11.01 media.

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.

If you install the HP Operations agent on the HPOM for Windows 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 command on the management server:

vpstat -3 -r

On UNIX/Linux Nodes

To install the agent 11.01 and 11.00 together, follow these steps:

1. Log on to the system with the root privileges.

2. Mount the DVD for the agent 11.00 on the DVD-ROM, or extract the contents of the media ISO file for the agent 11.00 into a local directory.

3. Extract the contents of the media ISO file for the agent 11.01 into a local directory.

4. Copy the `oainstall.sh` file from the directory where you extracted the agent 11.01 media ISO file.

5. Place the `oainstall.sh` file into the directory where the original installers for the agent 11.00 are present. This step overwrites the installer programs shipped with the agent 11.00 media with the installers shipped with the agent 11.01 media.

6. *Optional.* If you want to install hotfixes for the agent 11.01, follow these steps:
   a. Obtain the hotfix `.tar` file from HP Support.

   b. Extract the contents of the `.tar` file into a local directory.

      Run the following command to extract the contents of the hotfix `.tar` file:

      tar -xvf *<hotfix_file_name>*

7. To install the agent (on an HPOM-managed or standalone node), run the following command:

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

   To include the hotfixes as well, run the following command:

   ./oainstall.sh -i -a -includeupdates -patch_dir *<patch_directory>* **-hotfix_dir** *<hotfix_directory>*

   In this instance, *<patch_directory>* is the directory where the agent 11.01 media is located and <hotfix_directory> is the directory where the hotfix `.tar` file is located.

   Tip: You can install multiple hotfixes by extracting multiple hotfix `.tar` files into the same directory.

Tip: You can extract the agent 11.01 media into the same directory where you extracted the media for the agent 11.00. In that case, do not use the **-patch_dir** option. Specifying the **-includeupdates** option ensures that the installer looks for the 11.01 updates in the current directory. Similarly, you can extract the contents of the hotfix `.tar` files into the directory where you extracted the media for the agent 11.00 to install hotfixes without specifying the **-hotfix_dir** option.

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.

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 command on the management server:

opcsv start

Install From the HPOM Console

Installation of the deployment packages for the HP Operations agent 11.01 on the management server makes necessary changes in the configuration to enable you to install the agent 11.01

remotely on nodes from the HPOM console. If older agent software (which can be upgraded to the version 11.00) is installed on the node, the remote installation procedure from the HPOM console upgrades the agent version on the node to 11.01.

From the HPOM for Windows Console

To install the agent 11.01 and 11.00 together from the HPOM for Windows console:

1. Check that the INCLUDEUPDATES variable is set to true on the management server. Installing the agent deployment package on the management server ensures that this variable is set to true ("Update Deployment Packages on the Management Server" (on page 11)).

   On the management server, run the following command:

   ovconfget -ovrg server depl INCLUDEUPDATES

   If the command returns true, you can go ahead with installation. Otherwise, you must change the setting to true ("Modify the Default Deployment Behavior" (on page 27)).

2. 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** option 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. For Windows 7 x64 nodes, do not select this option.

   - If the node does not have any agent software installed, the agent 11.00 and 11.01 are installed.

   - If the node has older agent software that *can* be upgraded to the version 11.00, the existing agent is upgraded to the version 11.00 first, and then the updates for the agent 11.01 are installed.

   - If the node has older agent software that *cannot* be upgraded to the version 11.00, the installation fails.

Note: Installation from the HPOM console might take longer than usual as HPOM first installs the HP Operations agent 11.00 on the node, and then installs the HP Operations agent 11.01. If you updated the deployment packages with hotfixes ("Updating Deployment Packages with Hotfixes" (on page 13)), HPOM installs hotfixes as well after installing the agent on the node.

If the HP Operations agent 11.00 is already installed on the node, follow these steps to install the agent 11.01 from the HPOM for Windows console:

1. In the console tree, right-click the node, and then click **All Tasks > Reinstall/Update**. The Reinstall/Update Node dialog box opens.

2. Follow these steps in the Reinstall/Update Node dialog box:
   a. Select **Update**.

   b. Select **Packages** in the Scope section.

   c. Clear the Deploy Only if Version is Lower option.

   d. Click **OK**.

3. 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**.

From the HPOM for UNIX Console

To install the agent 11.01 and 11.00 together from the HPOM for UNIX console:

1. Check that the INCLUDEUPDATES variable is set to true on the management server. Installing the agent deployment package on the management server ensures that this variable is set to true ("Update Deployment Packages on the Management Server" (on page 11)).

   On the management server, run the following command:

   ovconfget -ovrg server depl INCLUDEUPDATES

   If the command returns true, you can go ahead with installation.Otherwise, you must change the setting to true ("Modify the Default Deployment Behavior" (on page 27)).

2. 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.

   - If the HP Operations agent 8.53 or 8.60 is installed on the node, the existing agent is upgraded to the version 11.00 first, and then updates for the agent 11.01 are installed.

   - If the agent 11.00 is already installed on the node, you must select the **Force** option in the Install Agent window.

   - If the node does not have an older version of the agent installed, HPOM installs only the agent 11.00 first.

     After the agent 11.00 is successfully installed on the node, complete the procedure to install an agent from the HPOM console once again to install the updates for the agent 11.01 (this time, you must select the **Force** option in the Install Agent window).

   - If the node has older agent software that *cannot* be upgraded to the version 11.00, installation fails.

   Note: Installation from the HPOM console might take longer than usual as HPOM first installs the HP Operations agent 11.00 on the node, and then installs the HP Operations agent 11.01. If you updated the deployment packages with hotfixes ("Updating Deployment Packages with Hotfixes" (on page 13)), HPOM installs hotfixes as well after installing the agent on the node.

Modify the Default Deployment Behavior

If you do not want to install the 11.01 patch and HP Operations agent 11.00 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

Applying Hotfixes on Nodes Manually

If you want to apply hotfixes on a node with the agent 11.01, follow these steps:

1. Obtain the hotfix from HP Support.

2. Extract the hotfix `.tar` file into a local directory. For multiple hotfixes, extract multiple `.tar` files into a single local directory.

   On Windows, you can use the 7-Zip tool to extract the contents of the hotfix `.tar` file.

   On UNIX/Linux, run the following command to extract the contents of the hotfix `.tar` file:

   tar -xvf *<hotfix_file_name>*

3. Make sure that you are logged on as root or administrator.

4. Go to the directory where you extracted the `.tar` file.

5. Run the following command to install the hotfix:

   On Windows

   cscript oainstall.vbs -i -a

   On UNIX/Linux

   ./oainstall.sh -i -a

   The command installs the hotfix.

6. Run the following command to check that the hotfix is installed on the node:

   On Windows 64-bit

   %ovinstalldir%bin/win64/ovdeploy -inv -includeupdates

   On Windows

   %ovinstalldir%bin/ovdeploy -inv -includeupdates

   On HP-UX, Solaris, and Linux

   /opt/OV/bin/ovdeploy -inv -includeupdates

   On AIX

   /usr/lpp/OV/bin/ovdeploy -inv -includeupdates

   The command lists the details of the hotfix under the `HOTFIX:` *<hotfix_name>* section.

To verify the status of the installation, you can see the `oapatch.log` file. The `oapatch.log` file is available in the following directory on the node:

On Windows

%ovdatadir%`log`

On UNIX/Linux

`/var/opt/OV/log`

Remove the Hotfix

To remove the hotfix, follow these steps:

1. Make sure that you are logged on as root or administrator.

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 to check the hotfixes available with the deployment package:

   On Windows

   ovdeploy -inv -includeupdates

   On UNIX/Linux

   ./ovdeploy -inv -includeupdates

   The command lists the available patches and hotfixes installed on the node. Note down the hotfix ID.

   Tip: Hotfix IDs appear with the prefix HF.

4. Run the following command to remove the hotfix:

   On Windows

   cscript oainstall.vbs -r -a -pn *<hotfix_ID>*

   On UNIX/Linux

   ./oainstall.sh -r -a -pn *<hotfix_ID>*

Removing the HP Operations Agent 11.01

To remove the HP Operations agent 11.01, follow these steps after you log on to the node as root or administrator:

Note: You cannot remove the agent 11.01 alone from Linux nodes; you can only remove the complete product (versions 11.00 and 11.01 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 32).

1. 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 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 11.01:
    On Windows
    cscript oainstall.vbs -r -a -pn OAWIN_00002

    On HP-UX

    ./oainstall.sh -r -a -pn OAHPUX_00002

    On Solaris

    ./oainstall.sh -r -a -pn OASOL_00002

    On AIX

    ./oainstall.sh -r -a -pn OAAIX_00002

On all platforms other than Linux, agent 11.00 comes in effect after removing the patch 11.01.

Remove the HPOperations Agent 11.01 Remotely

To remove the agent 11.01 from a managed node remotely by using the `ovdeploy` command from the management server, follow these steps:

Note: You cannot remove the agent 11.01 alone from Linux nodes; you can only remove the complete product (versions 11.00 and 11.01 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 32).

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>***-sp -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 11.01 from a Linux node.

On all platforms other than Linux, agent 11.00 comes in effect after removing the patch 11.01.

Remove Hotfixes for the Agent 11.01 Remotely

To delete only hotfixes from the nodes remotely from the management server, 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 HP-UX, Solaris, or Linux:

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

3. Run the following command to determine the hotfix ID:

   ovdeploy -inv -includeupdates -sp -host *<node_name>*

   In this instance, *<node name>* is the FQDN of the node.

4. Note down the hotfix ID.

   Tip: Hotfix IDs appear with the prefix HF.

5. Run the following command to remove the hotfix:

   ovdeploy -remove -patch *<hotfix_ID>* **-sp -host** *<node_name>*

   In this instance, *<hotfix_ID>* is the ID that you noted down in step 5.

Note: Although you cannot remove the agent 11.01 from Linux nodes without removing the agent 11.00, you can remove hotfixes for the agent 11.01 from all platforms including Linux without removing or modifying the agent 11.01.

Remove the HP Operations Agent from Linux Nodes

You cannot remove the agent 11.01 alone from Linux nodes. However, you can remove both the versions of the agent (11.00 and 11.01) together with a single command.

To remove the agent 11.00 and 11.01 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:

   ./oainstall -r -a

   The command removes both the versions of the agent (11.00 and 11.01).

Reinstall the HP Operations Agent 11.01 on Linux

On Linux systems, you cannot remove just the agent 11.01 with the agent 11.00 still in effect. Uninstallation procedure removes both the versions of the agent (11.00 and 11.01) completely from the Linux system. If you want to install the agent 11.01 again on the same system, do one of the following:

- Install the agent 11.00 and 11.01 together ("Install the HP Operations Agent 11.00 and 11.01 Together" (on page 23)).

- Install the agent 11.00 first (follow the instructions in the *HP Operations Agent 11.00 Installation Guide*), and then install the agent 11.01 (see "Install the HP Operations Agent 11.01 on a Node Manually" (on page 18)).

Troubleshooting

While installing the HP Operations agent 11.01, 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 11.01 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_00002` directory on the HP Operations agent 11.01 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-ia64.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.

Disk Space Check Fails on HP-UX

On HP-UX nodes, prerequisite check fails although adequate disk space is available for the installation and data directories.

One of the following error messages appears in the command-line console:

- `Not enough disk space on /opt`

- `Not enough disk space on /var`

If the name of the file system for the `/opt` or `/var` directory is too long, the installer cannot perform the disk space check correctly.

Solution:

Apply the hotfix `QCCR1A126636`. Contact HP Support to obtain this hotfix.

Note: A similar problem exists with the installer for the HP Operations agent 11.00. If you are installing the agent 11.00 and 11.01 together, obtain the hotfix `QCCR1A123980` as well from HP Support.

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

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.