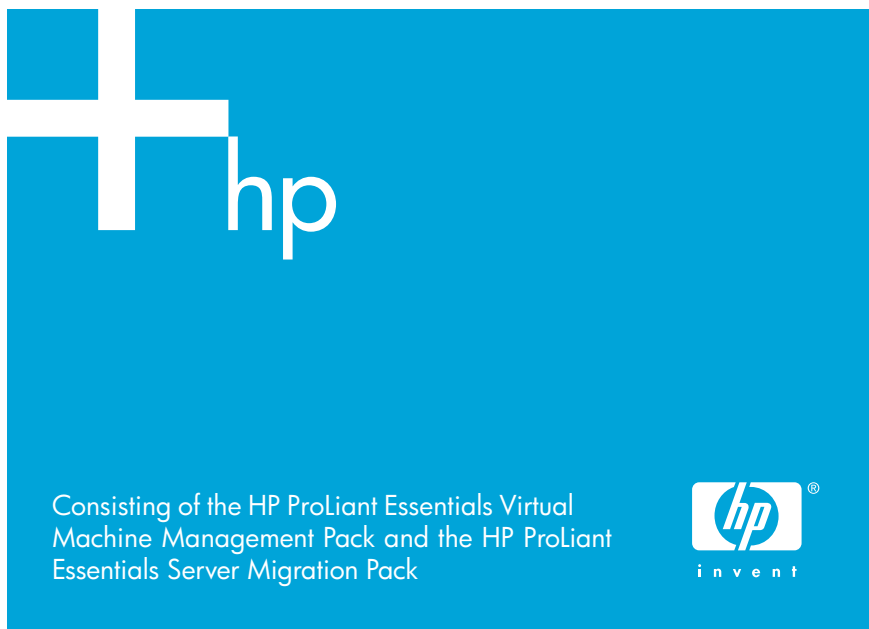


HP ProLiant Essentials Virtualization Management Software Quick Setup Poster



Consisting of the HP ProLiant Essentials Virtual Machine Management Pack and the HP ProLiant Essentials Server Migration Pack



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Overview

This document provides basic information about installing the HP ProLiant Essentials Virtualization Management Software. This software consists of the HP ProLiant Essentials Virtual Machine Management Pack and the HP ProLiant Essentials Server Migration Pack.

1 Prerequisites

Table 1-1 lists the prerequisites for the Virtual Machine Management Pack and Server Migration Pack to function properly on the HP Systems Insight Manager (HP SIM) Central Management Server (CMS).

Table 1-1 HP SIM CMS prerequisites

Component	Requirement
Software	<ul style="list-style-type: none">• HP SIM 5.0 or later• OpenSSH installed and configured• Windows Management Instrumentation (WMI) installed and configured
Hardware	250 MB of available disk space to install the Virtual Machine Management Pack and Server Migration Pack

For specific hardware and software requirements for HP SIM, refer to the *HP Systems Insight Manager Installation and User Guide*.

Be sure to have the following items available before beginning the Virtual Machine Management Pack installation:

- HP SIM credentials with administrative rights
- If SQL is used as the primary HP SIM database, SQL database credentials
- If Oracle® is used as the primary HP SIM database, an Oracle database created manually with a customized database name and the same user account as HP SIM

2 Installing the software



IMPORTANT: HP SIM must be stopped and restarted to perform the Virtual Machine Management Pack and Server Migration Pack installation.



NOTE: Installation of the Virtual Machine Management Pack and Server Migration Pack requires HP SIM administrative rights.

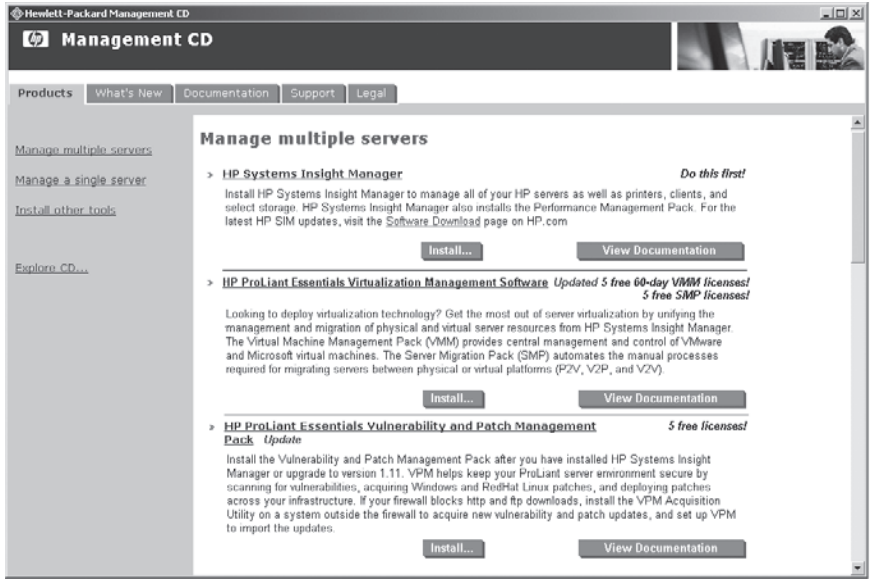
Both the Virtual Machine Management Pack and Server Migration Pack can be acquired either from the HP Management CD or the HP website. The Virtual Machine Management Pack and Server Migration Pack can be installed at the same time as HP SIM 5.0 or installed separately as stand-alone products.

Installing from the Management CD

1. Insert the Management CD into the CD-ROM drive of the HP SIM CMS.
2. Read the license agreement. If you agree to the terms of the license agreement, click **Agree** to continue.

- If HP SIM 5.0 has not already been installed, click **Install** located under HP Systems Insight Manager. Select **Typical** or **Custom**.
 - If **Typical** is selected, the Virtualization Management Software is automatically installed.
 - If **Custom** is selected, be sure that the Virtualization Management Software checkbox is selected.

If HP SIM 5.0 is already installed, click **Install** located under HP ProLiant Essentials Virtualization Management Software.



- Follow the on-screen instructions to complete installation.

Installing from the Web

- Download the Virtualization Management Software from <http://www.hp.com/go/vmmanage>.
- Double-click the downloaded executable file to start the installation.
- Follow the on-screen instructions, entering your user-specific information when prompted.

3 Post-installation configuration tasks

Perform the following steps if:

- You performed a typical installation
- You selected to perform these tasks later while performing a custom installation

Upgrading the VMM agent

The menu item to upgrade the VMM agent is available only after a Virtual Machine Management Pack upgrade.

- Select **Options>Virtualization Management>Post VMM Upgrade**.
- Click **Run Now** to deploy the agent immediately, or click **Schedule** to deploy the agent at a designated time.

Configuring VMware™ VirtualCenter

To configure the VMware VirtualCenter, select **Options>Virtualization Management>Security>VMware VirtualCenter Settings**.

4 Setting up virtual machine hosts

Table 4-1 lists the virtual machine host requirements.

Table 4-1 Virtual machine host requirements

Component	Requirement
Software	HP Server Management Agents from the latest HP ProLiant Support Pack available at http://www.hp.com/support/files (recommended for ProLiant servers)
Hardware	65 MB of available disk space for the VMM agent (100 MB during installation)

For supported versions of virtualization technology required on the virtual machine hosts, refer to the *HP ProLiant Essentials Virtualization Management Software Support Matrix* at <http://www.hp.com/go/vmmanage>.

Perform the procedures in the following sections before attempting to use the Virtual Machine Management Pack and the Server Migration Pack.



IMPORTANT: These configuration steps **must** be performed before attempting to use the Virtual Machine Management Pack and Server Migration Pack.

Performing an HP SIM discovery

1. Log in to HP SIM from an account with administrator privileges.
2. Select **Options>Protocol Settings>Global Protocol Settings**, and configure the default Web Based Enterprise Management (WBEM) settings with appropriate credentials to enable access to target systems. If some target systems use individual protocol settings, select **Options>Protocol Settings>System Protocol Settings** to configure settings for individual systems.
3. Perform a discovery of virtual machine hosts and guests to allow the Virtual Machine Management Pack to access target systems in the network.



NOTE: For information about performing basic HP SIM tasks, refer to the *HP Systems Insight Manager Installation and User Guide*.

Installing and configuring OpenSSH

OpenSSH provides secure communications between the virtual machine host and the CMS by encrypting online traffic to eliminate network-level attacks. Install OpenSSH on Windows hosts before deploying the VMM agent from the CMS.

To install OpenSSH on Windows hosts, select **Deploy>Deploy Drivers, Firmware, and Agents>Install OpenSSH**. Click the HP SIM help icon (?) and follow the on-screen instructions to complete the installation.

If OpenSSH is already installed, it must be configured on both Windows and Linux virtual machine hosts using the `MxAgentConfig` command.

From the command prompt, enter:

```
mxagentconfig -a -n <hostname> -u <username>
-p <password>
```

For more information about the `MxAgentConfig` command, go to the HP SIM online help and search for keywords "Getting started using the command line interface commands."

Deploying the VMM agent



IMPORTANT: OpenSSH must be configured properly and running on both the HP SIM CMS and the selected target virtual machine hosts to deploy the VMM agent.

1. Log in to HP SIM from an account with administrator privileges.
2. Select **Deploy>Deploy Drivers, Firmware and Agents>Install VMM Agent**, and select either **Linux** or **Windows**.
3. Select the target virtual machine hosts by selecting the checkbox next to the appropriate systems.
4. Click **Apply**.
5. Verify that the correct target hosts appear in the list. If necessary, click **Add Targets** to add targets, or click **Remove Targets** to remove targets, and then click **Next**.
6. Click **Run Now** to deploy the VMM agent to selected virtual machine hosts immediately.

Deploying the SMP agent



IMPORTANT: Physical-to-virtual (P2V) migrations can be performed only on Microsoft Windows physical machines. Virtual machine hosts cannot be migrated into a virtual machine.

1. Log in to HP SIM from an account with administrator privileges.
2. Select **Deploy>Deploy Drivers, Firmware and Agents>Install SMP Agent**.
3. Select the physical machine by selecting the checkbox next to the appropriate systems.
4. Click **Apply**.
5. Verify that the correct target hosts appear in the list. If necessary, click **Add Targets** to add targets, or click **Remove Targets** to remove targets, and then click **Next**.
6. Select to install the SMP agent using either **SMP deploy** (recommended) or **OpenSSH**. Click **Run Now** to deploy the SMP agent immediately.

5 Setting up virtual machine guests

HP recommends that you install Microsoft Virtual Server Additions or VMware Tools on virtual machine guests. For more information about configuring virtual machine guests, refer to the *HP ProLiant Essentials Virtualization Management Software User Guide*.

6 Licensing the software

To locate the license key, look on the back of the package in which the software was delivered. The license key will be in the lower left corner.

Adding licenses

1. From the console toolbar, select **Deploy>License Manager>Manage Keys**.
2. Click **Add Key** to enter one or more new key strings, which can be cut and pasted as one string into any of the subfields, and click **OK**.

Virtual Machine Management Pack licensing

This section provides information about licensing servers for use with the Virtual Machine Management Pack. One license is required for each system managed by the Virtual Machine Management Pack.

Free licenses

Five fully functional, 60-day trial licenses are provided with the Virtual Machine Management Pack for evaluation purposes. These licenses are available after the Virtual Machine Management Pack is installed and can be applied to systems from the HP SIM License Manager. For more information or to purchase more licenses, refer to

<http://www.hp.com/go/vmmanage>.

Licensing preparation

Before licensing servers for the Virtual Machine Management Pack, verify that the servers have a supported virtualization product and the VMM agent installed.

For more information about discovering and updating the server list in HP SIM, refer to the *HP Systems Insight Manager Installation and User Guide*. For information about supported operating systems, refer to the *HP ProLiant Essentials Virtualization Management Software Support Matrix*.

Applying licenses to virtual machine hosts



IMPORTANT: After a license is applied to a specific server, the license cannot be removed or transferred to another server.

1. From the console toolbar, select **Deploy>License Manager>Deploy Keys**.
2. Select the target virtual machine hosts to license by selecting the checkbox next to the systems.
3. Click **Apply**.
4. Verify that the correct target hosts appear in the list. If necessary, click **Add Targets** to add targets, or click **Remove Targets** to remove targets, and then click **Next**.
5. Select the appropriate Virtual Machine Management Pack license to apply to the selected target host by selecting the checkbox next to the license.
6. Click **Run Now** to deploy the license.

Server Migration Pack licensing

This section provides information about Server Migration Pack licensing. One license is required for each successful P2V, virtual-to-virtual (V2V), or virtual-to-physical (V2P) migration. Server Migration Pack licenses do not have to be deployed.

Free licenses

Five fully functional licenses are provided with the Server Migration Pack for evaluation purposes. These licenses are available after the Server Migration Pack is installed.

Licensing requirements

- A P2V, V2V, or V2P migration can only be performed if at least one Server Migration Pack license is available.
- In a P2V migration, the target virtual machine host involved must be licensed and managed by the Virtual Machine Management Pack.
- In a V2V migration, both the source and target virtual machine hosts must be licensed and managed by the Virtual Machine Management Pack.
- In a V2P migration, the source virtual machine host must be licensed and managed by the Virtual Machine Management Pack.

7 Navigating the software

The HP SIM toolbar is expanded with the Virtual Machine Management Pack installation, as shown in the following figure.

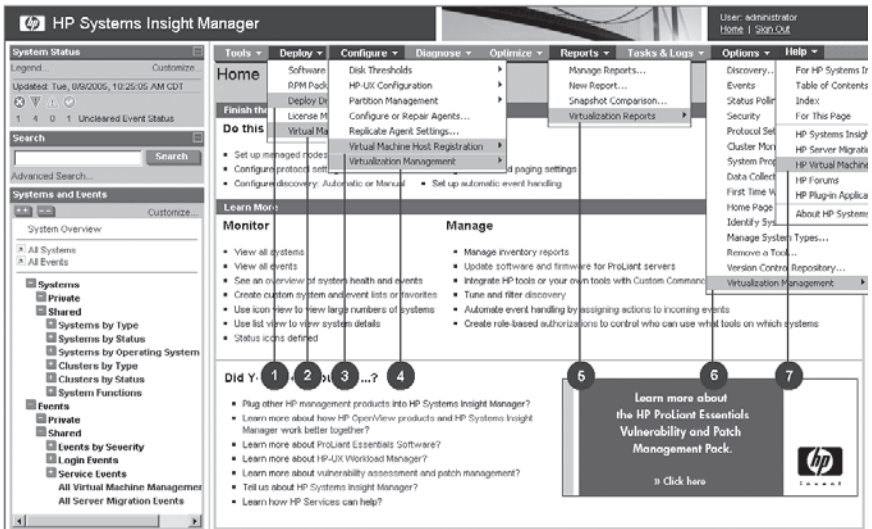


Table 7-1 lists the appropriate menu to select from the HP SIM toolbar, as shown in the preceding figure, to initiate a Virtual Machine Management Pack action.

Table 7-1 Virtual Machine Management Pack interface

Menu	Action
1	Install VMM for Windows and Linux.
2	Copy and move virtual machines, recover virtual machines of a failed host, create and deploy virtual machine templates, create virtual machine backups, and restore virtual machines from backups.
3	Register and unregister virtual machine hosts.
4	Restart VMM agent, set alternate virtual machine hosts, and set performance thresholds.
5	Generate performance reports for virtual machines or virtual machine hosts.
6	Manage recorded data, set data recording rate, upload drivers, perform VMM agent upgrade, and configure VMware VirtualCenter settings.
7	Access the Virtual Machine Management Pack page on the HP website.

The HP SIM toolbar is expanded with the Server Migration Pack installation, as shown in the following figure.

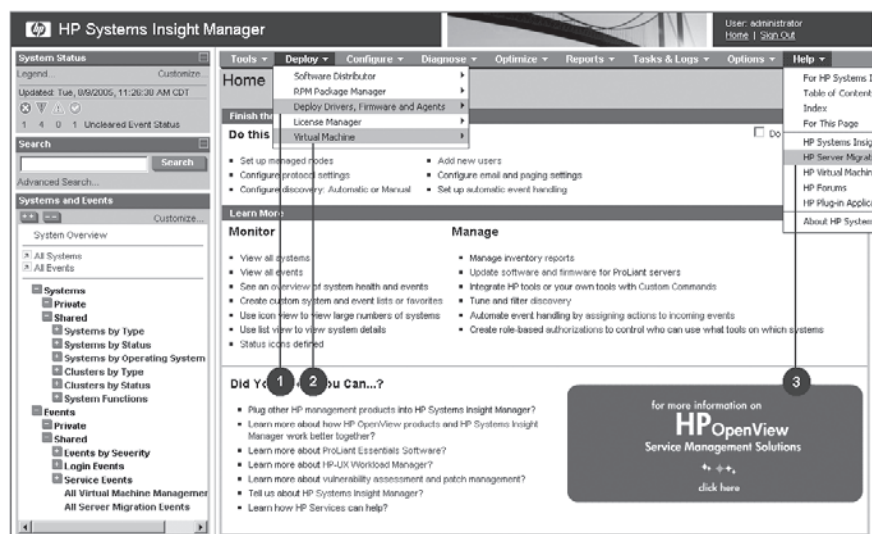


Table 7-2 lists the appropriate menu to select from the HP SIM toolbar, as shown in the preceding figure, to initiate a Server Migration Pack action.

Table 7-2 Server Migration Pack interface

Menu	Action
1	Install SMP agent for Windows.
2	Access the Server Migration Pack V2P, P2V, and V2V wizards.
3	Access the Server Migration Pack page on the HP website.

Support and information

For HP support, software updates, and additional information, refer to:

- <http://www.hp.com/go/vmmanage>
- *HP ProLiant Essentials Virtualization Management Software Support Matrix*
- *HP ProLiant Essentials Virtualization Management Software User Guide*

HP Customer Support provides 90 days of phone-based support with Monday through Friday, 9-to-5 service coverage hours in your local time zone. For information:

- In the United States and Canada, call 1-800-HP-INVENT (1-800-474-6836). For continuous quality improvement, calls may be recorded or monitored.
- Outside the United States and Canada, go to the HP website for additional support information at <http://www.hp.com/support>.