# HP ComputeSensor

For the Windows® and Linux operating systems

Software Version: 1.00

# User Guide

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# Contents

# Chapter 1: Introduction

HP ComputeSensor is a light-weight performance and health collection tool that provides a quick overview of the workloads and applications that are available and running on a Virtual Machine (VM). The tool helps you monitor the system where it is installed and troubleshoot the resource bottlenecks by collecting metrics that indicate the health and performance of the system. The tool is deployed on the VMs to gather the vital information to provide the quick overview about the utilization.

The tool provides you the following:

- Overview about the system resource utilization such as CPU, file systems, disks, and network utilization

- Overview about the general health of the system and reasons for any available bottlenecks

- List of the processes and resources that are being used

- List of the System Events

You can determine if the system utilization is optimal or health of the system by checking the graphs available. You can further drill down to detect the processes where the memory or CPU utilization is exceeding the limit by checking the processes that are consuming more CPU or memory.

To install ComputeSensor on Windows node, see  Install HP ComputeSensor on Windows Nodes

To install ComputeSensor on Unix nodes, see Install HP ComputeSensor on Linux or Linux-Debian Nodes

# Chapter 2: Installing the HP ComputeSensor

The installer program available with the ComputeSensor media enables you to install the product on a node.

You can install HP ComputeSensor on the following operating systems:

- Microsoft Windows 7 SP1, 64-bit

- Microsoft Windows Server 2008 R2, 64-bit

- Linux (RHEL, SuSE, Ubuntu), 64-bit

## Install HP ComputeSensor on Windows Nodes

You can perform any one of the following tasks:

- Using Graphical User Interface

- Using Silent Installation

- Using .Zip

**Using Graphical User Interface**

Follow these steps:

1. Log on to the node with administrator privileges.

2. Go to the location where the downloaded ComputeSensor packages are available.

3. Double-click **HPComputeSensor-01.00.001-Win5.2_64-release** to start the installer.

   The Installer for HP ComputeSensor appears.

4. On the Installer for HP ComputeSensor of the installation program, click **Next**

   The License Agreement page appears.

5. Read the terms of the license agreement, select the `I accept the terms in the License Agreement` option and click **Next**.

   The Destination Folder page displays the options of the installation directory.

6. You can choose the default location for installing the product or change the location as per your requirement and click **Next**.

   The Ready to Install the Program page appears.

7. Click **Install** to start the HP ComputeSensor install program.

   The installer program starts by performing installation checks.

8. The installation wizard displays the Installer Completed dialog box after the installation is completed. Click **Finish** to complete the installation.

After the installation is completed, **HP ComputeSensor Service** starts automatically.

> **Note:** After the system reboots, **HP ComputeSensor Service** starts automatically.

**Using Silent Installation**

Follow these steps:

1. Log on to the node with administrator privileges.

2. Download the ComputeSensor packages from the media.

3. Open the Windows command prompt and type the name of the drive where
   HP ComputeSensor **HPComputeSensor-01.00.001-Win5.2_64-release** file is located.

4. Type the following command to start the installer.

   ```
   msiexec /i HPComputeSensor-01.00.001-Win5.2_64-release.msi /qn
   ```

   After you run the command, the installation procedure begins. You will not receive any message stating the installation is successful.

After the installation is completed, **HP ComputeSensor Service** starts automatically.

> **Note:** After the system reboots, **HP ComputeSensor Service** starts automatically.

**Using .Zip**

Follow these steps:

1. Log on to the node with administrator privileges.

2. Extract the contents of .Zip file to a local directory.

3. Double-click **hpcomputesensor.exe**. The message appears as:

   ```
   Started successfully. Type the URI to connect --> http://localhost:381
   ```

4. To start the HP ComputeSensor, follow these steps:

a. Open the Windows command prompt and go to the installation directory.

b. Run the following commands:

To register as HP ComputeSensor Service:

`hpcomputesensor.exe -rs`

To start the service:

`hpcomputesensor.exe -srs`

To run as a process in foreground:

`hpcomputesensor.exe`

> **Note:** You need to start the HP ComputeSensor only for the .Zip Installation.

5. To stop the HP ComputeSensor Service, follow these steps:

a. Open the Windows command prompt and go to the installation directory.

b. Run the following commands:

To stop the service:

`net stop HP Compute Sensor Service`

To un-register:

`hpcomputesensor.exe -drs`

If you have started as a process:

Type `Ctrl + c` in the command prompt or Close the command window which is running `hpcomputesensor.exe`

# Install HP ComputeSensor on Linux or Linux-Debian Nodes

You can perform any one of the following tasks:

- Using Command Line

- Using .tar or .gz

**Using Command Line**

Follow these steps:

1. Log on as `root` user.

2. Go to the location where the downloaded HP ComputeSensor packages are available.

3. To start the installation, type the following command according to the node:

   **For Linux nodes:**

   ```
   rpm -ivh HPComputeSensor-01.00.001-Linux2.6_64-release.rpm
   ```

   > **Note:** During the installation of rpm, a warning message appears. You can ignore the following message.
   >
   > ```
   > warning: HPComputeSensor-01.00.001-Linux2.6_64-release.rpm: Header V3
   > DSA/SHA1 Signature, key ID 2689b887: NOKEY
   > ```

   **For Linux-Debian nodes:**

   ```
   dpkg -i HPComputeSensor-01.00.001-Linux_Debian5-release.deb
   ```

   After you run the command the installer starts performing the installation checks and installs the HP ComputeSensor.

   > **Note:** After the system reboots, **HP ComputeSensor Service** starts automatically.

**Using .tar or .gz**

Follow these steps:

1. Log on as `root` user.

2. Extract the contents of .tar or .gz file to a local directory.

3. To start the HP ComputeSensor explicitly, follow these steps:

   a. Log on to the node and go to the installation directory.

   b. Run the following commands:

   To run as a daemon:

   ```
   ./hpcomputesensor -srs
   ```

   To run as a process:

   ```
   ./hpcomputesensor
   ```

4. To stop HP ComputeSensor Service, follow these steps:

   a. Go to the installation directory.

   b. Run the following command:

   To find pid of the running process:

   ```
   ps -ef | grep hpcomputesensor
   ```

   Input the value of pid in the below command:

   ```
   kill -15 <hpcomputesensor-pid>
   ```

# Verifying the Installation

To verify if the installation of HP ComputeSensor is successful, check for the following:

1. Go to the following directory:

   **On Windows Nodes**: `%HPCSInstallDir%`

   **On Linux or Linux-Debian Nodes:** `/opt/OV/hpcs`

2. Check the **hpcstrace.log** file. The message appears as

   ```
   Started successfully. Type the URI to connect --> http://localhost:381
   ```

> **Note: On Windows Nodes**: A new entry named `HP Compute Sensor` Service will be listed under **Services.msc**.

# Chapter 3: Configuring the HP ComputeSensor

After you install the HP ComputeSensor, you can complete the following additional configuration tasks on the node:

- Configure the port number

- Configure the collection level

- Configure the debug level

Follow the steps to configure the port number, collection level and debug level:

1. Log on to the node with administrator privileges.

2. Go to the directory:

   - On Windows node - `%HPCSInstallDir%`

   - On Linux or Linux Debian node - `/opt/ OV/ hpcs`

3. Open the **hpcs.conf** file and edit the default port number and collection interval in the `hpcs.runtime` namespace.

   **Configure the Port Number**

   Modify the default port number as **port=**`<Value>`. By default, the HP ComputeSensor nodes use the port 381 for communication.

   In this instance, `<Value>` is the port number that is used by HP ComputeSensor.

   > **Note:** If you have used `HPComputeSensor-01.00.001-Win5.2_64-release.msi` and changed the port number, you must restart **hpcomputesensor**.

   **Configure the collection level**

   Modify the default collection interval as **collection_Interval=** `<Value>`. By default, the collection interval is set to 2 seconds.

   In this instance, `<Value>` is the collection interval.

4. Open the **hpcs.conf** file and edit the default debug level in the `hpcs.trace` namespace.

   **Configure the debug level**

Modify the default debug level as **Debug_Level=**`<Value>`. By default, the debug level is set to INFO.

In this instance `<Value>` is the debug level used to get debug and error information. You can also use `INFO, WARN, ERROR, DEBUG, ALL` as value for Debug Level.

5. Restart HP ComputeSensor.

# Chapter 4: Removing the HP ComputeSensor

You can remove HP ComputeSensor from the Windows and Linux or Linux-Debian nodes.

## Remove the HP ComputeSensor from Windows node

You can perform any one of the following tasks:

- Interactive Uninstallation

- Silent Uninstallation

**Interactive Uninstallation**

Follow these steps:

1. To start the HP ComputeSensor uninstallation go to the control panel.

2. Click **Programs and Features**.

3. Select HP ComputeSensor and click **Uninstall**.

   The Programs and Features dialog box appears.

4. Click **Yes** to confirm the removal of HP ComputeSensor.

   HP ComputeSensor is removed from the node.

**Silent Uninstallation**

Follow these steps:

1. Log on to the node with administrator privileges.

2. Open the Windows command prompt.

3. Run the following command:

   `msiexec /x hpcomputesensor /qn`

   The command removes HP ComputeSensor from the node.

## Remove the HP ComputeSensor from Linux or Linux-Debian nodes

To remove HP ComputeSensor from Linux or Linux-Debian node(s), follow these steps:

1. Log on as `root` user.

2. Run the following command:

   **For Linux nodes:**

   ```
   rpm -e hpcomputesensor
   ```

   **For Linux-Debian nodes:**

   ```
   dpkg -P hpcomputesensor
   ```

   The command removes HP ComputeSensor from the node.

# Chapter 5: Troubleshooting HP ComputeSensor

The following section details how to troubleshoot:

**HP ComputeSensor does not run after installation is completed.**

| Symptom | After you complete installation, HP ComputeSensor does not run. |
|---|---|
| Resolution | Check for the following error message:<br>`cannot bind to 381`<br><br>If this error message is present in **hpcs.conf** file, configure an alternate port. To configure the port number see, Configure the Port Number. |

**HP ComputeSensor fails to start**

| Symptom | After you complete the installation, HP ComputeSensor fails to start. |
|---|---|
| Resolution | Follow these steps:<br><br>Set the following variable in the `[hpcs.trace]` section of the **hpcs.conf** file `Debug_Level=DEBUG`<br><br>Restart HP ComputeSensor and check the messages in the **hpcstrace.log**. |

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