

# HP Business Service Management

for the Windows and Linux operating systems

Software Version: 9.12

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## Business Process Monitor 9.13 Deployment

Document Release Date: May 2012

Software Release Date: May 2012



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

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# Welcome to This Guide

This guide provides detailed instructions on how to deploy the HP Business Process Monitor data collector.

For details on administering and working with Business Process Monitor, see the *Business Process Monitor Administration* PDF.

## **This chapter includes:**

- How This Guide Is Organized on page 9
- Who Should Read This Guide on page 11
- How Do I Find the Information That I Need? on page 11
- Additional Online Resources on page 12
- Documentation Updates on page 13

## **How This Guide Is Organized**

The guide contains the following chapters:

### **Chapter 1 System Requirements**

Describes the system requirements necessary for installing Business Process Monitor.

### **Chapter 2 HP Business Process Monitor Compatibility Matrixes**

Describes the compatibility of different Business Process Monitor versions with Business Service Management and also with QuickTest Professional.

## **Chapter 3    Deploying Business Process Monitor**

Describes how to install Business Process Monitor on a Windows platform.

## Who Should Read This Guide

This guide is intended for the following users of HP Business Service Management:

- HP Business Service Management administrators
- HP Business Service Management data collector administrators

Readers of this guide should be knowledgeable about enterprise system administration, scripting, and HP Business Service Management data collectors.

## How Do I Find the Information That I Need?

This guide is part of the HP Business Service Management Documentation Library. This Documentation Library provides a single-point of access for all Business Service Management documentation.

You can access the Documentation Library by doing the following:

- In Business Service Management, select **Help > Documentation Library**.
- From a Business Service Management Gateway Server machine, select **Start > Programs > HP Business Service Management > Documentation**.

## Additional Online Resources

**Troubleshooting & Knowledge Base** accesses the Troubleshooting page on the HP Software Support Web site where you can search the Self-solve knowledge base. Choose **Help > Troubleshooting & Knowledge Base**. The URL for this Web site is <http://h20230.www2.hp.com/troubleshooting.jsp>.

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To find more information about access levels, go to:

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To register for an HP Passport user ID, go to:

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Welcome to This Guide

# 1

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## System Requirements

This section describes the hardware and system requirements for running Business Process Monitor.

This section includes the following topics:

- "Windows Hardware and Operating System" on page 15
- "Other System Requirements" on page 17
- "Business Process Monitor on Virtual Platforms" on page 17

### Windows Hardware and Operating System

Component	Minimum	Recommended	High Volume Loaded Systems
Processor	3.00 GHz	3.00 GHz or higher	At least Intel(R) Core(TM)2 DUO CPU 2.40 GHz
Memory	1 GB	2 GB	4 GB
Cache Size	N/A	N/A	At least 4 MB L2 cache

Component	Minimum	Recommended	High Volume Loaded Systems
Operating System	<ul style="list-style-type: none"> <li>▶ Microsoft Windows Server 2008 SP2 (32/64 bit) Standard and Enterprise Editions</li> <li>▶ Microsoft Windows Server 2008 R2 (64 bit) Standard and Enterprise Editions</li> <li>▶ Microsoft Windows 7</li> <li>▶ Microsoft Windows Vista SP2 (32 bit)</li> <li>▶ Microsoft Windows Server 2003 SP2 (32bit) Standard and Enterprise Editions</li> <li>▶ Microsoft Windows Server 2003 SP2–Release 2 (32bit) Standard and Enterprise Editions</li> <li>▶ Microsoft Windows XP Professional SP3 (32bit)</li> </ul> <p><b>Note:</b> For notes and limitations on installing and running Business Process Monitor on specific Windows platforms, see:</p> <ul style="list-style-type: none"> <li>▶ "Notes and Limitations for Business Process Monitor on Windows Vista" on page 39.</li> <li>▶ "Notes and Limitations for Business Process Monitor on Windows 7" on page 40.</li> <li>▶ "Notes and Limitations for Business Process Monitor on Windows 2008" on page 40</li> </ul>		

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**Note:** For additional details on sizing for high volume loaded systems, see "Planning Business Process Monitor Capacity" in the *Business Process Monitor Administration* PDF.

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## Other System Requirements

Component	Minimum
Free Hard Disk Space	Minimum 2.0 GB (If the application files and workspace directory are stored on different drives, the application files require a minimum of 500 MB and the workspace directory requires a minimum of 1 GB. The required amount of free disk space for the workspace directory varies according to the scale of the implementation. In addition, an extra 500 MB in the temp folder is required for the extraction of the installation files.)
Web Browser	Internet Explorer (IE) 7.0 and later
Support for WebTrace over Modem	All supported platforms
Java JDK (including the Java Plug-in)	Version 6u20 and later

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**Note:** The online documentation is best viewed from a browser with Java support. If you do not have Java support on your browser, then you should download the Sun Java plug-in from the Sun Java Web site: <http://java.com/en/index.jsp>.

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## Business Process Monitor on Virtual Platforms

The key to effective performance benchmarking and service level management is having a consistent and reliable monitoring foundation. Consistency provides a basis for long term trending of metrics, comparison of metrics from one period to another, and the eventual support of contractual obligations associated with Service Level Management. It is acceptable to have the metrics vary from the actual performance as long as they are consistent. If the metrics are not consistent in their variation or

relation to the actual business service, then they cannot be used for production monitoring or performance analysis because no appropriate baseline will compensate for the variations. For this reason support response time metrics are not supported on VMware environments and it is recommend against using shared dynamic environments where resource contention issues can occur.

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**Note:** HP will not address or resolve any support issues arising from Business Process Monitors running in a VMware environment.

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If you are deploying HP Business Process Monitor on a virtual platform, the sizing guidelines for a regular installation are not applicable. The following general limitations and recommendations are applicable to an installation on a virtual machine:

- ▶ BPM has been tested only with ESX 5.
- ▶ A Gigabit network card should be used.
- ▶ VMotion and DRS are not supported.
- ▶ The total amount of configured resources for all the virtualized environments within the same ESX server (for example, memory or CPU) must not exceed the ESX server's physical resources.

# 2

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## HP Business Process Monitor Compatibility Matrixes

This section describes matrixes for various environments and components supported by BPM versions.

In each Table, ✓=supported, X=not supported.

This section includes the following matrixes:

- "Business Process Monitor Compatibility Matrix" on page 19
- "Business Process Monitor/QuickTest Professional (QTP) Compatibility Matrix" on page 21

### Business Process Monitor Compatibility Matrix

For each BPM version, the latest supported HP Virtual User Generator (VuGen) version is mentioned. All previous versions of VuGen are supported as well.

Compatibility Matrix	HP Business Service Management 9.x	HP Business Availability Center 8.x	HP Business Availability Center 7.5x	HP Business Availability Center 7.0
BPM 9.13 (LR Replay 11 SP 3)	✓ (Recommended)	✓	✓	✓
BPM 9.03 (LR Replay 11 SP 3)	✓ (Recommended)	✓	✓	✓

**Chapter 2 • HP Business Process Monitor Compatibility Matrixes**

<b>Compatibility Matrix</b>	<b>HP Business Service Management 9.x</b>	<b>HP Business Availability Center 8.x</b>	<b>HP Business Availability Center 7.5x</b>	<b>HP Business Availability Center 7.0</b>
BPM 9.02 (LR Replay 11 SP 1)	✓ (Recommended)	✓	✓	✓
BPM 9.01 (LR Replay 9.5 SP 2)	✓ (Recommended)	✓	✓	✓
BPM 9.00 (LR Replay 9.5 SP 2)	✓ (Recommended)	✓	✓	✓
BPM 8.03 and later (LR Replay 9.5 SP2)	✓	✓ (Recommended)	✓	✓
BPM 8.02 (LR Replay 9.5)	✓	✓ (Recommended)	✓	✓
BPM 7.5x (LR Replay 9.1)	✓	✓	✓ (Recommended)	✓
BPM 7.0 (LR Replay 9.0)	✓	✓	✓	✓ (Recommended)

## Business Process Monitor/QuickTest Professional (QTP) Compatibility Matrix

Compatibility Matrix	Business Process Monitor 9.x	Business Process Monitor 8.03, 8.04, 8.05	Business Process Monitor 8.02	Business Process Monitor 7.5x	Business Process Monitor 7.0
QTP 11.0	✓	✓	✓	X	X
QTP 10.0	✓	✓	✓	X	X
QTP 9.5	X	X	✓	✓	X
QTP 9.1/2	X	X	X	✓	✓
QTP 9.0	X	X	X	✓	✓
QTP SAP R/3 7.31	X	X	X	✓	✓



# 3

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## Deploying Business Process Monitor

**This chapter includes:**

- ▶ About Business Process Monitor Deployment on page 24
- ▶ Requirements for Installation on page 24
- ▶ Installing Business Process Monitor on a Windows Platform on page 29
- ▶ Business Process Monitor Configuration Wizard on page 41
- ▶ Running a Silent Installation on page 57
- ▶ Uninstalling Business Process Monitor on page 72
- ▶ Deployment Troubleshooting on page 74

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**Note:** If you are installing a service pack, before beginning the installation, review the information in the HP Business Service Management Readme file for any last minute notes and limitations for the service pack. Failure to follow procedures listed in the Readme could result in unexpected data loss or failure of the installation process.

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## About Business Process Monitor Deployment

You install Business Process Monitor on designated host machines running on Windows platforms. The machines can be located on your local network or on the Internet, and must have http or https access to the HP Business Service Management Gateway Server. Business Process Monitor includes Business Process Monitor Admin, which is the Business Process Monitor management component.

The number and locations of host machines you use should reflect factors such as the number of transactions you plan to run, the geographic dispersion of typical end-users who access your application, the location of remote servers, the locations of ISPs that provide connectivity to your Web site, and so forth. You can always install Business Process Monitor on additional host machines at a later time.

If you are using secure communication (over SSL) between Business Process Monitor and the Gateway Server, you must configure Business Process Monitor to support https communication. For details, see "Communication Using SSL" in the *Business Process Monitor Administration* PDF.

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**Note:** For details on the compatible versions of Business Process Monitor and Business Service Management, see "HP Business Process Monitor Compatibility Matrixes" on page 19.

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## Requirements for Installation

The following topics discuss the requirements and limitations for installation:

- ▶ "System Requirements" on page 25
- ▶ "General Installation Information" on page 25
- ▶ "Details Required During Installation" on page 26
- ▶ "Notes and Limitations" on page 28



## System Requirements

For details of system requirements, see "System Requirements" on page 15.

## General Installation Information

- ▶ The Business Process Monitor Setup file can be accessed from one of the following locations:
  - ▶ The Business Process Monitor installation package.
  - ▶ The HP Software Support Online web site (<http://www.hp.com/go/hpssoftwaresupport>). Go to **Software Support Online > Downloads > Software Patches** and select Application Performance Management as the product. For each version, check for Business Process Monitor as a sub-product.
  - ▶ The Downloads page in HP Business Service Management Platform Administration. For details, see the *HP Business Service Management Deployment Guide* PDF.

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**Note:** There may be more recent versions of BPM than the version included in the BSM Downloads page. For details, check the HP Software Support Online web site (<http://www.hp.com/go/hpssoftwaresupport>).

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- ▶ You can upgrade to Business Process Monitor 9.13 from Business Process Monitor 6.5 or later. To upgrade to Business Process Monitor 9.13 from a version of Business Process Monitor earlier than 6.5, first upgrade to Business Process Monitor 6.5 or later, and then to Business Process Monitor 9.13.
- ▶ Upgrading to Business Process Monitor 9.13 requires you to uninstall the previous version of Business Process Monitor, but provides the option of retaining the existing configuration settings.

- ▶ If you change the HP Business Service Management machine to which a Business Process Monitor connects (for example, if you use staging during a Business Service Management upgrade) you must redirect the Business Process Monitor to the new machine. For details, see "Redirecting Business Process Monitor Instances" in the *HP Business Service Management Upgrade Guide* PDF.
- ▶ During a new installation (with no saved configuration settings), you specify if you want the data collection mechanism used by Business Process Monitor to run as the system (root) user or as a specific user. Running it as a specific user limits access to resources, settings, and applications located on the local machine. (This may not be true for resources located on remote machines, where a specific user may have different privileges than the local system user.) Note that after installation, you can configure this setting from within Business Process Monitor Admin. For details, see "Set User Credentials" in the *Business Process Monitor Administration* PDF.
- ▶ Users with advanced knowledge of HP Business Service Management can install Business Process Monitor using a silent installation procedure. For details, see "Running a Silent Installation" on page 57.
- ▶ For last-minute technical and troubleshooting information for Business Process Monitor, refer to the Release Notes file available in:
  - ▶ the release download area, for Web delivery versions.
  - ▶ the HP Software Product Manuals site on the HP Software Support Web site ([h20230.www2.hp.com/selfsolve/manuals](http://h20230.www2.hp.com/selfsolve/manuals)). To enter the site, you must log on with your HP Passport ID.
  - ▶ the root directory on the HP Business Service Management DVD, for versions delivered on DVD.

### **Details Required During Installation**

You should have the following information ready when installing Business Process Monitor:

**Note:** If during installation you select to use configuration settings from an earlier Business Process Monitor version, then you are generally not required to supply the following information.

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- ▶ If you want to run Business Process Monitor data collection as a specific user, you need the login parameters (user name, password, domain) for the user.
  - ▶ Logical names to use for the host name and location (for example, Atlanta). These logical names are used by the first Business Process Monitor instance (defined as part of the installation process) to register with HP Business Service Management. They do not have to match the actual machine's host name and location. (Note that Setup provides the actual machine host name as the default value for the **Host name** parameter.)
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**Note:** You can choose to skip the default instance configuration during installation and can configure an instance in Business Process Monitor Admin at a later stage.

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- ▶ The protocol to be used to access HP Business Service Management (http or https).
- ▶ The name or IP address of the machine on which you installed the HP Business Service Management Gateway server, and the port number to be used by Business Process Monitor to access HP Business Service Management.

For a distributed deployment, you need the name of the Gateway Server machine, or the load balancer machine behind which servers are installed.

## Notes and Limitations

- ▶ Business Process Monitor cannot run on the same machine as HP Business Service Management due to a port conflict.
- ▶ If Business Process Monitor *is* installed on the same machine as any other HP Business Service Management component, it is highly recommended that you define a host name for Business Process Monitor that is not the actual name of the machine.
- ▶ The logical host name for each Business Process Monitor instance must be unique within an HP Business Service Management platform. When two Business Process Monitor instances are each connected to a different HP Business Service Management platform, they can use the same logical host name.
- ▶ Business Process Monitor should not be installed on a network drive.
- ▶ It is recommended that you run Business Process Monitor on Windows platforms as a specific user. You select this option during setup. Note that if you set Business Process Monitor to run as a specific user on Windows platforms, the user must have Administrator privileges on the local machine. (You can also set Business Process Monitor to run as a specific user after installation, from Business Process Monitor Admin. For details, see "Set User Credentials" in the *Business Process Monitor Administration* PDF.)
- ▶ Business Process Monitor can be run on a machine with a different language locale to the HP Business Service Management system, but all relevant entity names (applications, business transaction flows, transactions, and scripts) in Business Service Management must be entered in the same language as the Business Process Monitor operating system.
- ▶ You cannot install Business Process Monitor to an installation path that contains special characters (for example, # () %).

- ▶ When installing Business Process Monitor from a network drive at a remote location, if the Business Process Monitor user does not have network permissions to all the network, you may not be able to run the installation remotely. To install, copy the installation file to the local machine and install from there (this greatly reduces the download time and enables you to control when Business Process Monitor is down during installation).
- ▶ Business Process Monitor does not support installation via terminal service. Installation must be performed at the destination machine.
- ▶ Business Process Monitor supports basic (http) and NTLM authentication, as well as SSL with client side certification and/or server side certification. When connecting via proxy, Business Process Monitor supports basic and NTLM proxy authentication.

For required parameter settings when configuring NTLM authentication, see "Parameters in sconn.cfg" in the *Business Process Monitor Administration* PDF.

## **Installing Business Process Monitor on a Windows Platform**

This procedure describes how to install/upgrade directly on the Business Process Monitor machine.

You must have administrative privileges on the machine on which you are installing Business Process Monitor.

The installation process consists of two main parts—the MSI installation of the application and the Business Process Monitor configuration wizard.

**Note:** Setup gives you the option of selecting the locations of the installation folder for Business Process Monitor and the workspace directory, although it is recommended that you accept the default options. You require a minimum of 500 MB free disk space for the application files and 1 GB of free disk space for the workspace directory. (The required amount of free disk space for the workspace directory varies according to the scale of the implementation.) In addition, you need an additional 500 MB free disk space in a temporary folder for extracting and temporarily storing the installation files.

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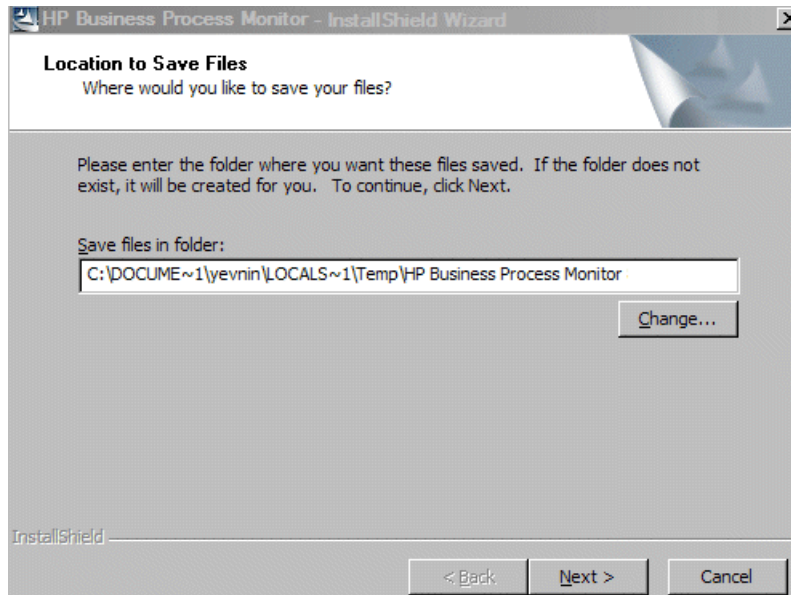
For notes and limitations on running Business Process Monitor 9.13 on specific Windows platforms, see

- ▶ "Notes and Limitations for Business Process Monitor on Windows Vista" on page 39
- ▶ "Notes and Limitations for Business Process Monitor on Windows 7" on page 40
- ▶ "Notes and Limitations for Business Process Monitor on Windows 2008" on page 40

**To install Business Process Monitor on a Windows platform:**

- 1** Save the Business Process Monitor Setup file for Windows on the machine on which you are installing Business Process Monitor. For more details on the location of the Business Process Monitor Setup file, see "General Installation Information" on page 25.

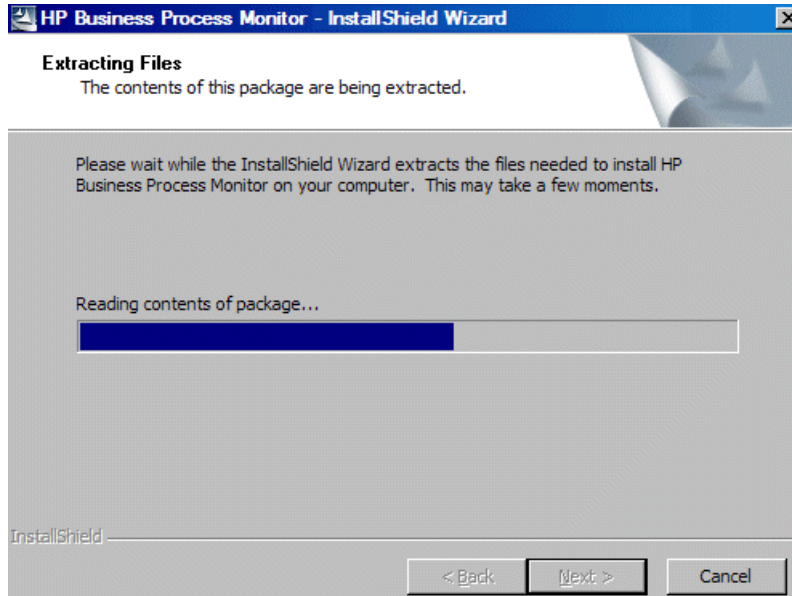
- 2 Run the Business Process Monitor setup program. A screen opens requesting a location to which to extract and temporarily store the installation files.



Accept the default, temporary directory to which to extract the required installation files, or click **Change** to select another directory.

Click **Next** to continue.

- 3 The file extraction process starts and an extraction progress screen opens.

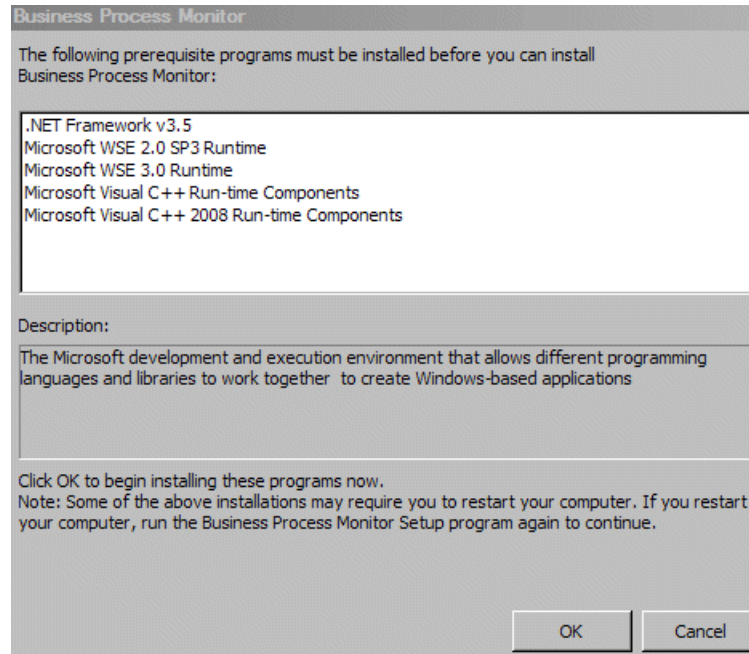


When all the files have been extracted, click **Next** to continue.

- 4 The setup program checks if the following prerequisite programs for running scripts correctly are installed on the machine and if not, prompts you to install them. (If all the prerequisite programs are installed, setup continues with the next step.)
  - ▶ .NET Framework 3.5 SP1
  - ▶ Microsoft Data Access Components (MDAC) 2.8 SP1 (or later)
  - ▶ Microsoft Windows Installer 3.1
  - ▶ Microsoft Core XML Services (MSXML) 6.0
  - ▶ Microsoft Visual C++ 2005 SP1 Redistributable Package (x86)
  - ▶ Microsoft Visual C++ 2008 Redistributable Package (x86)
  - ▶ Web Services Enhancements (WSE) 2.0 SP3 for Microsoft .NET Redistributable Runtime MSI
  - ▶ Web Services Enhancements (WSE) 3.0 for Microsoft .NET Redistributable Runtime MSI



## ► Strawberry Perl 5.10.1



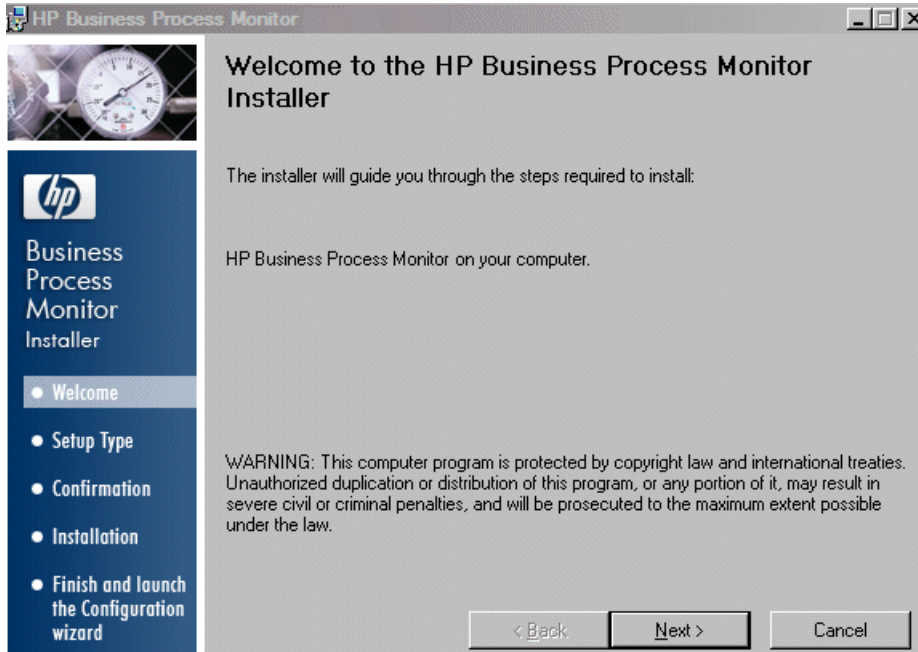
Click **OK** to install the missing programs listed. During the installation, you may be required to restart the computer. In such cases, after restarting the computer, run the Business Process Monitor setup program again until all the prerequisite programs are installed and the setup program continues with the next step.

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**Note:** The installations of the prerequisite programs are self-contained and are embedded in the Business Process Monitor installation.

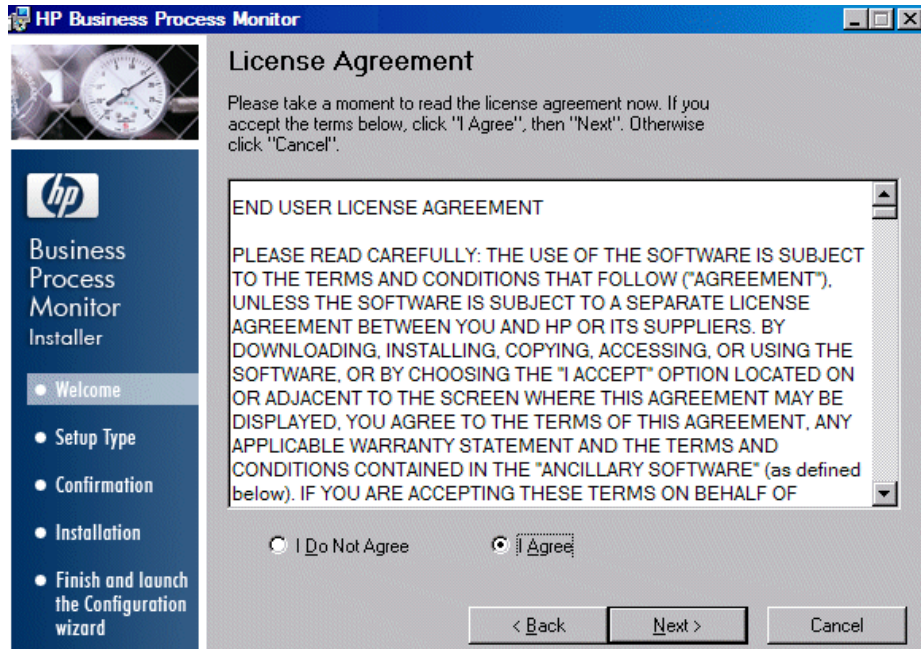
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- 5 If the setup program detects a previous version of Business Process Monitor on the machine, you are prompted to uninstall the previous version and the setup program ends. Uninstall the previous version and then restart the new installation. For details on uninstalling Business Process Monitor, refer to the *Business Process Monitor Administration* PDF relevant for the version of Business Process Monitor you are uninstalling.
- 6 The HP Business Process Monitor Setup Wizard opens.



Click **Next** to begin the installation.

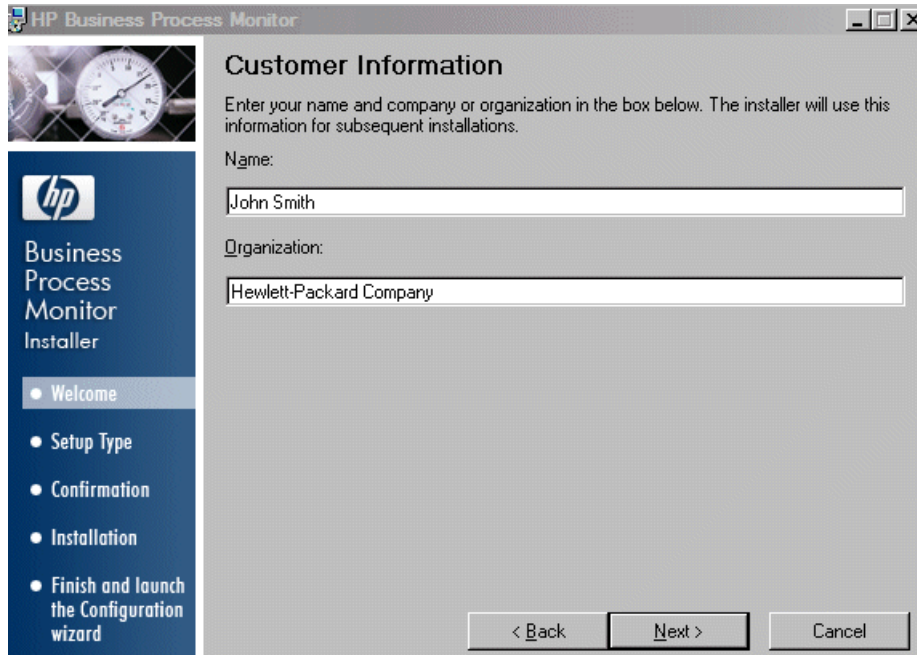
## 7 The license agreement screen opens.



Read the Business Process Monitor License Agreement.

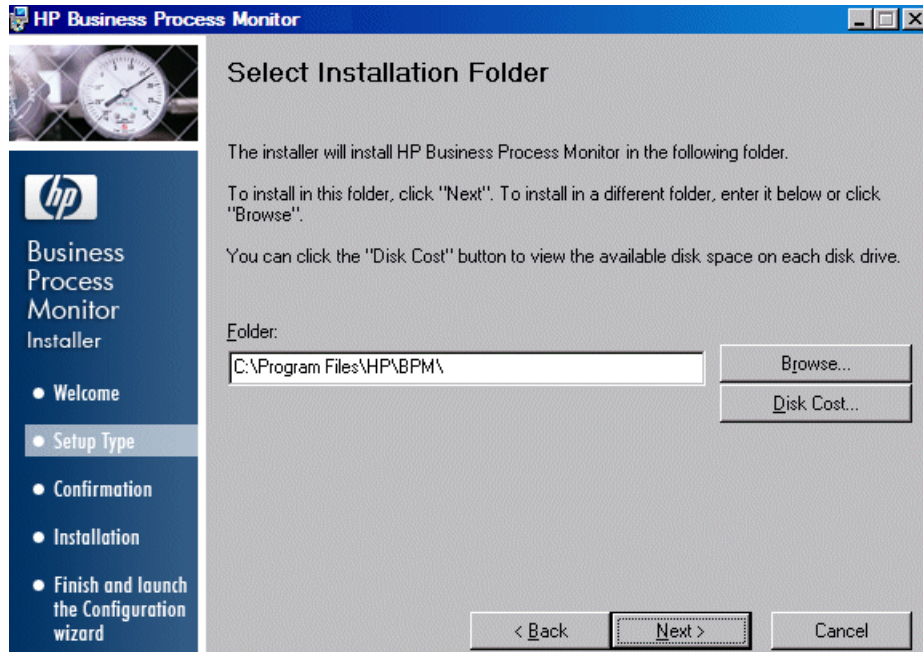
To install Business Process Monitor, you must accept the terms of the license agreement by clicking **I agree** and then click **Next** to continue.

8 The Customer Information screen opens.



Enter your name and organization (or accept the defaults) and click **Next** to continue.

## 9 The Select Installation Folder screen opens.



Accept the default directory location for the installation, or click **Browse** to select another directory.

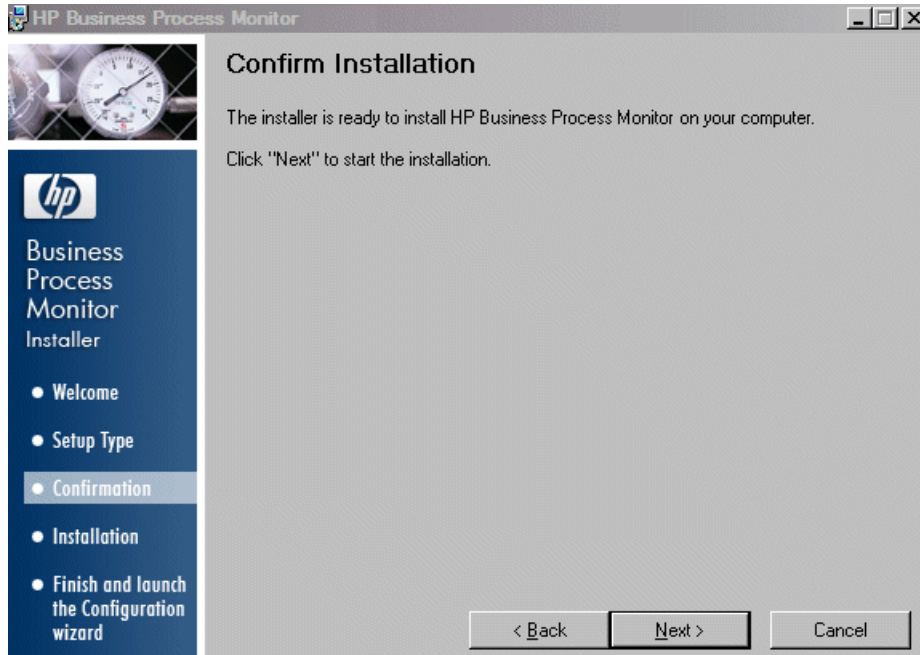
Click **Next** to continue.

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**Note:**

- If you select a directory other than the default directory, you must have administrator privileges for the selected directory.
  - Click **Disk Cost** to display the required and available space on the machine's disk drives in a popup window.
-

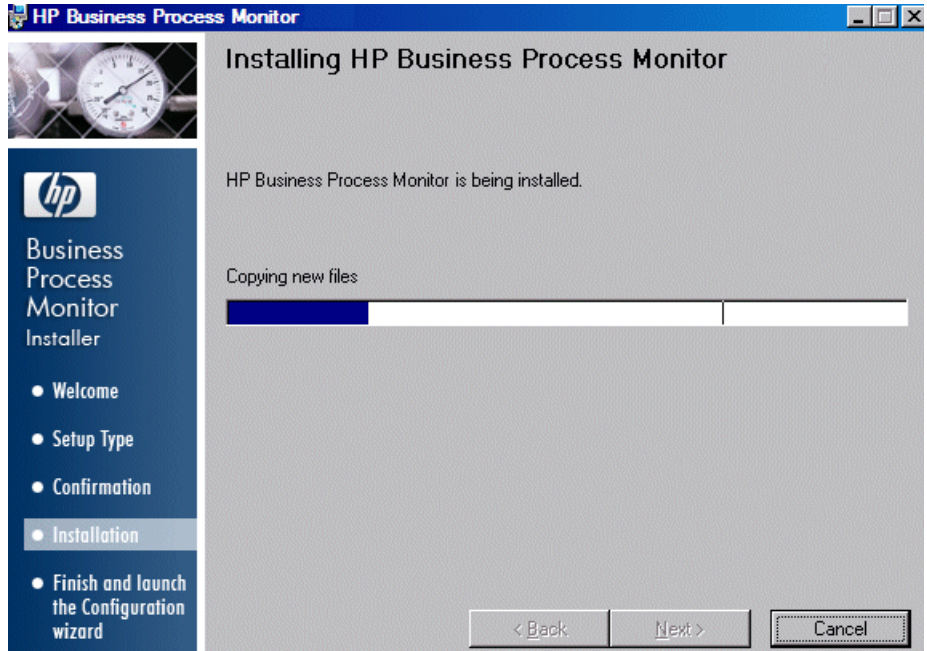
**10** The Confirm Installation screen opens.



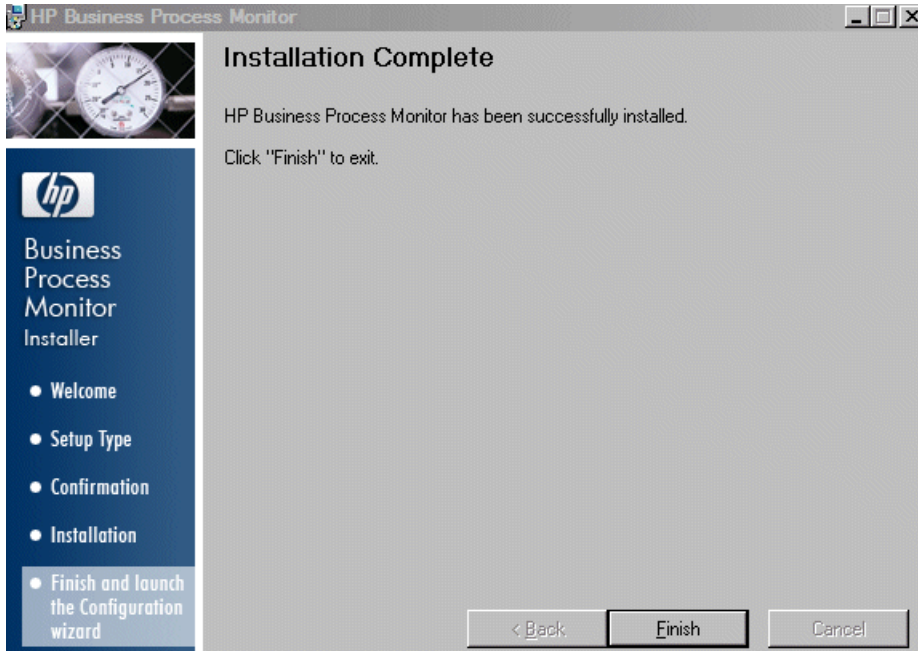
Click **Next** to continue.



- 11 The Business Process Monitor installation process starts and an installation progress screen opens.



- 12 When the installation process is complete, a message about the successful installation opens.



Click **Finish** to end the installation and continue with the HP Business Process Monitor Configuration wizard. For details on the user interface, see "Business Process Monitor Configuration Wizard" on page 41.



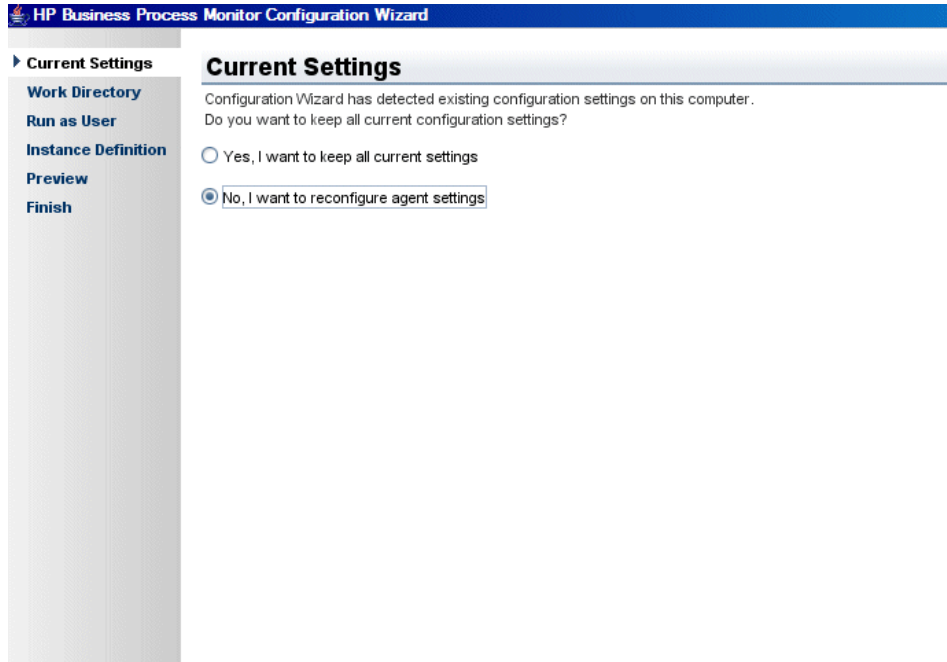


## Business Process Monitor Configuration Wizard

<b>Description</b>	<p>Enables you to configure the settings for a Business Process Monitor, including the work directory, user mode, and default instance settings.</p> <p><b>To access:</b> The Business Process Monitor Configuration wizard is automatically launched during a Business Process Monitor installation, after the setup program has installed the Business Process Monitor application.</p>
<b>Wizard Map</b>	<p>The Business Process Monitor Configuration wizard contains:</p> <p>Current Settings Page &gt; Work Directory Page &gt; Run as User Page &gt; Instance Definition Page &gt; Preview Page &gt; Finish Page</p>
<b>Useful Links</b>	<p>"Installing Business Process Monitor on a Windows Platform" on page 29</p>

## **Current Settings Page**

The following is an example of the Current Settings page.



<b>Description</b>	Enables you to select whether you want to apply existing configuration settings from a previous Business Process Monitor installation, or configure new settings.
--------------------	---

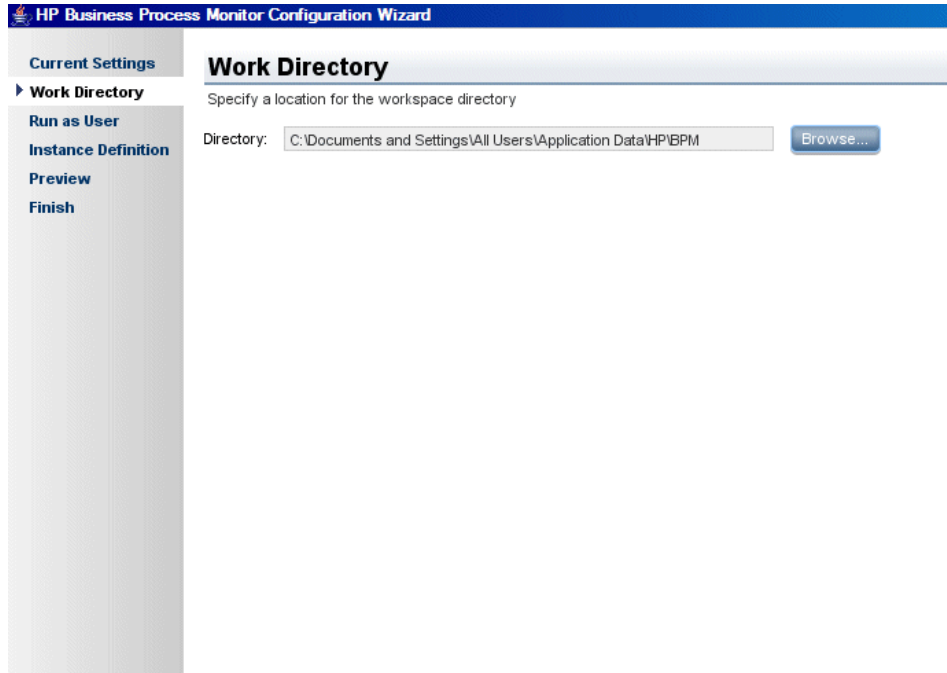
<b>Important Information</b>	<ul style="list-style-type: none"> <li>➤ General information about the wizard is available in "Business Process Monitor Configuration Wizard" on page 41.</li> <li>➤ If no existing configuration settings are detected on the machine on which you are installing Business Process Monitor, this page is not displayed and the wizard continues with the "Work Directory Page" on page 44.</li> </ul>
<b>Wizard Map</b>	<p>The Business Process Monitor Configuration Wizard contains:</p> <p><b>Current Settings Page</b> &gt; Work Directory Page &gt; Run as User Page &gt; Instance Definition Page &gt; Preview Page &gt; Finish Page</p>

The following elements are included:

<b>UI Element</b>	<b>Description</b>
<b>Yes, I want to keep all current settings</b>	<p>Select this option to apply existing settings to the current installation.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>➤ If you select this option, the wizard continues with the "Preview Page" on page 55.</li> <li>➤ If you choose to use configuration settings from a previous installation of Business Process Monitor, the configured instances are registered to the same Business Service Management Gateway Servers as the previous installation. This means that the same jobs are retrieved, although previous persistency queues are not saved.</li> </ul>
<b>No, I want to reconfigure agent settings</b>	<p>Select this option to configure new settings.</p>

## Work Directory Page

The following is an example of the Work Directory page in a Windows installation.

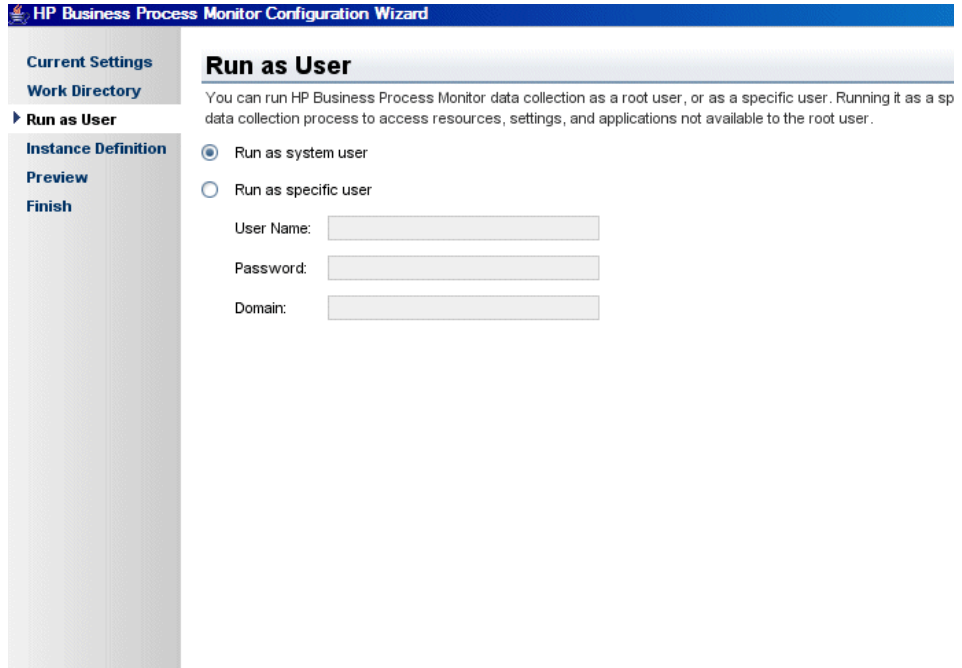


<b>Description</b>	Enables you to select the location of the Business Process Monitor work directory. Accept the default location, or click <b>Browse</b> to select a different location.
--------------------	--

<p><b>Important Information</b></p>	<ul style="list-style-type: none"> <li>➤ General information about the wizard is available in "Business Process Monitor Configuration Wizard" on page 41.</li> <li>➤ If you select a different directory, make sure that:             <ul style="list-style-type: none"> <li>➤ You have administrative privileges for the folder in Windows.</li> <li>➤ You have at least 1 GB of free disk space for the folder. (The required amount of free disk space varies according to the scale of the implementation.)</li> </ul> </li> </ul>
<p><b>Wizard Map</b></p>	<p>The Business Process Monitor Configuration Wizard contains:</p> <p>Current Settings Page &gt; <b>Work Directory Page</b> &gt; Run as User Page &gt; Instance Definition Page &gt; Preview Page &gt; Finish Page</p>

## Run as User Page

The following is an example of the Run as User page for a Windows installation.



The screenshot shows the 'Run as User' page of the HP Business Process Monitor Configuration Wizard. The title bar reads 'HP Business Process Monitor Configuration Wizard'. On the left, a navigation pane contains the following items: 'Current Settings', 'Work Directory', 'Run as User' (which is expanded), 'Instance Definition', 'Preview', and 'Finish'. The main content area is titled 'Run as User' and contains the following text: 'You can run HP Business Process Monitor data collection as a root user, or as a specific user. Running it as a sp data collection process to access resources, settings, and applications not available to the root user.' Below this text are two radio button options: 'Run as system user' (which is selected) and 'Run as specific user'. Under the 'Run as specific user' option, there are three text input fields labeled 'User Name:', 'Password:', and 'Domain:'.

<b>Description</b>	Enables you to configure Business Process Monitor data collection to run as a system user, or as a specific user. Running it as a specific user limits access to resources, settings, and applications located on the local machine. (This may not be true for resources located on remote machines, where a specific user may have different privileges than the local system user.)
<b>Important Information</b>	<ul style="list-style-type: none"> <li>▶ General information about the wizard is available in "Business Process Monitor Configuration Wizard" on page 41.</li> <li>▶ You can also set Business Process Monitor to run as a specific user after installation, from Business Process Monitor Admin. For details, see "Set User Credentials" in the <i>Business Process Monitor Administration</i> PDF.</li> </ul>
<b>Wizard Map</b>	<p>The Business Process Monitor Configuration Wizard contains:</p> <p>Current Settings Page &gt; Work Directory Page &gt; <b>Run as User Page</b> &gt; Instance Definition Page &gt; Preview Page &gt; Finish Page</p>

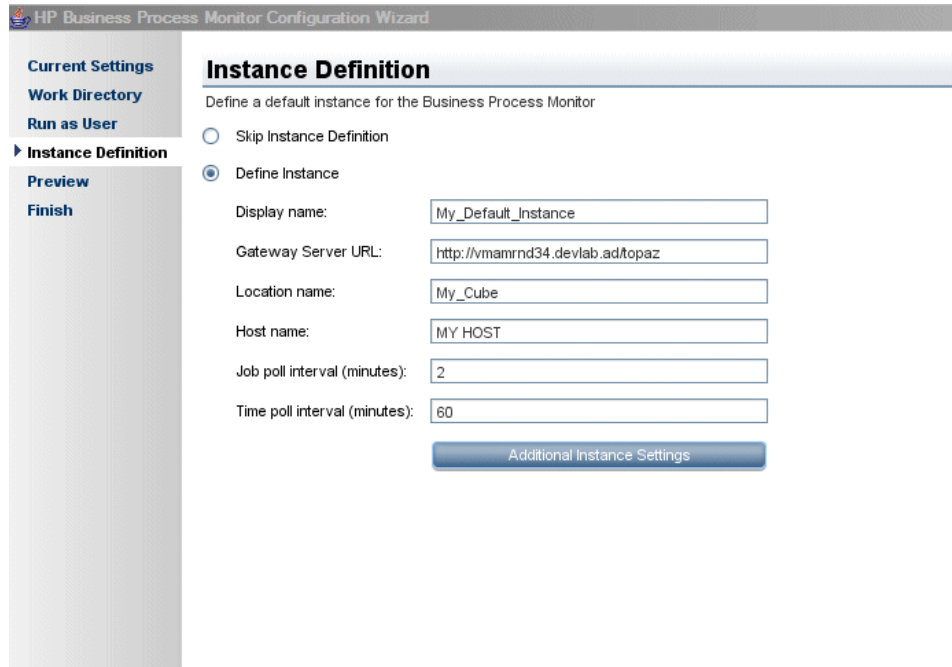
The following elements are included:

UI Element	Description
<b>Run as system user</b>	Select this option to set Business Process Monitor data collection to run as a system user.
<b>Run as specific user</b>	<p>Select this option to set Business Process Monitor data collection to run as a specific user and configure the following parameters:</p> <ul style="list-style-type: none"> <li>▶ <b>User name.</b> The specific user name. This is a mandatory field of up to 24 characters. The name cannot include spaces, nor any of the following characters: ( ; : " &lt; &gt; * + = \   ? , ).</li> <li>▶ <b>Password.</b> (For Windows only.) The user's password.</li> <li>▶ <b>Domain.</b> (For Windows only.) The domain for the user. The domain name can be up to 67 characters long and can include the following characters: <b>0-9, a-z, A-Z,</b> hyphen (-). The domain name cannot start or end with a hyphen (-), nor can it include spaces.</li> </ul>



## Instance Definition Page

The following is an example of the Instance Definition page.



The screenshot shows the 'HP Business Process Monitor Configuration Wizard' interface. On the left is a navigation pane with the following items: 'Current Settings', 'Work Directory', 'Run as User', 'Instance Definition' (selected), 'Preview', and 'Finish'. The main content area is titled 'Instance Definition' and contains the following elements:

- A sub-header: 'Instance Definition' with a blue underline.
- A description: 'Define a default instance for the Business Process Monitor'.
- Two radio buttons:
  - Skip Instance Definition
  - Define Instance
- Form fields:
  - Display name:
  - Gateway Server URL:
  - Location name:
  - Host name:
  - Job poll interval (minutes):
  - Time poll interval (minutes):
- A button: 'Additional Instance Settings' (blue button with white text).

<b>Description</b>	Enables you to define a default instance for the Business Process Monitor.
--------------------	--

<p><b>Important Information</b></p>	<ul style="list-style-type: none"> <li>▶ General information about the wizard is available in "Business Process Monitor Configuration Wizard" on page 41.</li> <li>▶ You can also define an instance after installation, from Business Process Monitor Admin. For details, see "Create New Instance" in the <i>Business Process Monitor Administration</i> PDF.</li> </ul>
<p><b>Wizard Map</b></p>	<p>The Business Process Monitor Configuration Wizard contains:</p> <p>Current Settings Page &gt; Work Directory Page &gt; Run as User Page &gt; <b>Instance Definition Page</b> &gt; Preview Page &gt; Finish Page</p>

The following elements are included:

UI Element	Description
<p><b>Skip Instance Definition</b></p>	<p>Select this option to skip the instance definition.</p>

UI Element	Description
<b>Define Instance</b>	<p>Select this option to define an instance and configure the following, mandatory parameters:</p> <ul style="list-style-type: none"> <li>▶ <b>Display name.</b> The display name for the instance in Business Process Monitor Admin. The display name can be up to 50 characters and can include the following characters: <b>0-9, a-z, A-Z</b>, hyphen (-), underscore (_). The display name cannot start or end with a hyphen (-) or an underscore (_).</li> <li>▶ <b>Gateway Server URL.</b> The URL of the HP Business Service Management Gateway Server to which this instance sends collected data. The URL must be in the following format: <code>http (or https)://&lt;Gateway Server name or IP address&gt;:&lt;port number&gt;/topaz</code>. If you do not specify a port number, the default port is used (80 for http and 443 for https).</li> <li>▶ <b>Location name.</b> The location defined for the instance. The location name can be up to 50 characters and can include the following characters: <b>0-9, a-z, A-Z, ` ~ ! @ # \$ % ^ &amp; * ( ) _ - + = [ ] { }   / ? . , ; (space)</b>.</li> <li>▶ <b>Host name.</b> The host name defined for the instance. The host name can be up to 50 characters and can include the following characters: <b>0-9, a-z, A-Z, ` ~ ! @ # \$ % ^ &amp; * ( ) _ - + = [ ] { }   / ? . , " ' ; &lt; &gt; (space)</b>.</li> <li>▶ <b>Job poll interval.</b> The defined frequency (in minutes) with which Business Process Monitor polls the database for assigned task, application, and business transaction flow changes. This is an integer positive number of up to 4 digits.</li> <li>▶ <b>Time poll interval.</b> The defined frequency (in minutes) with which Business Process Monitor polls HP Business Service Management for time synchronization. This is an integer positive number of up to 4 digits.</li> </ul>
<b>Additional Instance Settings</b>	<p>Click <b>Additional Instance Settings</b> to open the Additional Instance Settings dialog box, where you configure user, authentication, proxy, and SSL settings for the instance. For detail on the user interface, see "Additional Instance Settings Dialog Box" on page 52.</p>

## Additional Instance Settings Dialog Box

The following is an example of the Additional Instance Settings dialog box for a Windows installation.

**Additional Instance Settings** [X]

**Run Instance As User**

User name:

Password:

Domain:

**Authentication**

User name:

Password:

Domain:

**Proxy Settings**

Proxy user name:

Proxy password:

Proxy domain:

Proxy URL:

**SSL Settings**

SSL client certificate file:

SSL private key file:

SSL private key password:

SSL authority certificate file:

<b>Description</b>	<p>Enables you to define additional settings for a default instance, such as user, authentication, proxy, and SSL settings.</p> <p><b>To access:</b> Click <b>Additional Instance Settings</b> on the Instance Definition page.</p>
<b>Important Information</b>	<p>The following rules apply when you configure additional instance settings:</p> <ul style="list-style-type: none"> <li>▶ User names can be up to 24 characters long. Names cannot include spaces, nor any of the following characters: ( ; : " &lt; &gt; * + =   \ ? , ).</li> <li>▶ All domain names can be up to 67 characters long and can include the following characters: <b>0-9</b>, <b>a-z</b>, <b>A-Z</b>, hyphen (-). Domain names cannot start or end with a hyphen (-), nor can they contain spaces.</li> <li>▶ For more information on supporting SSL communication, see "Communication Using SSL" in the <i>Business Process Monitor Administration</i> PDF.</li> </ul>

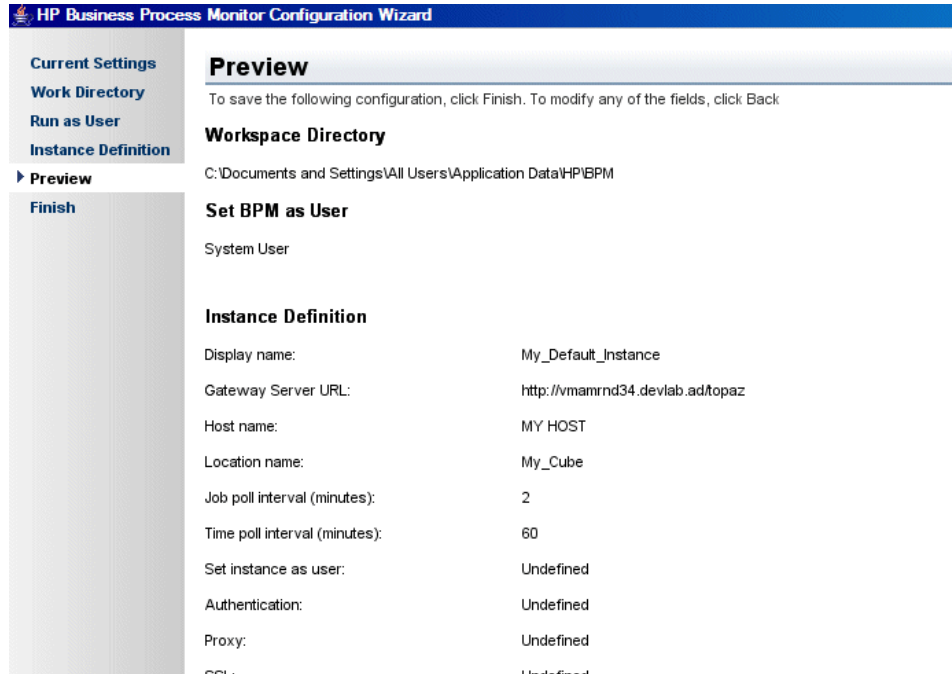
The following elements are included:

<b>UI Element</b>	<b>Description</b>
<b>Run Instance as User</b>	If you want to configure the instance to run as a specific user, type the user name, password, and domain.
<b>Authentication</b>	The authentication parameters for the Business Process Monitor instance to support the authentication scheme in use by the server (basic or NTLM authentication). Type the user name, password, and domain name of a user recognized by the HP Business Service Management Gateway Server.

UI Element	Description
<p><b>Proxy Settings</b></p>	<p>If the Business Process Monitor instance is accessing the HP Business Service Management Gateway Server through a proxy server, define authentication parameters for proxy requests (basic or NTLM proxy authentication). Type the user name, password, domain name, and URL for the proxy server.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>▶ To configure a user name, you must also configure the proxy server URL.</li> <li>▶ The proxy URL must be in the following format: http (or https)://&lt;host name or IP address&gt;:&lt;port number&gt;/URI path.</li> <li>▶ To configure reverse proxy, do not use these proxy settings, but configure the reverse proxy server URL instead of the Gateway Server URL in the "Instance Definition Page" on page 49.</li> </ul>
<p><b>SSL Settings</b></p>	<p>If the Business Process Monitor instance is communicating with the HP Business Service Management Gateway Server using SSL, type the required information in the relevant boxes. For details on SSL settings, see "Security Settings Area" on page 80.</p> <p><b>Note:</b> Click <b>Browse</b> to search for required locations.</p> <p><b>Syntax exceptions:</b> You cannot use a UNC (Uniform Naming Convention) path when configuring the path for SSL files.</p>

## Preview Page

The following is an example of the Preview page in a Windows installation.



**HP Business Process Monitor Configuration Wizard**

**Current Settings**  
**Work Directory**  
**Run as User**  
**Instance Definition**  
**Preview**  
**Finish**

**Preview**

To save the following configuration, click Finish. To modify any of the fields, click Back

**Workspace Directory**  
C:\Documents and Settings\All Users\Application Data\HP\BPM

**Set BPM as User**  
System User

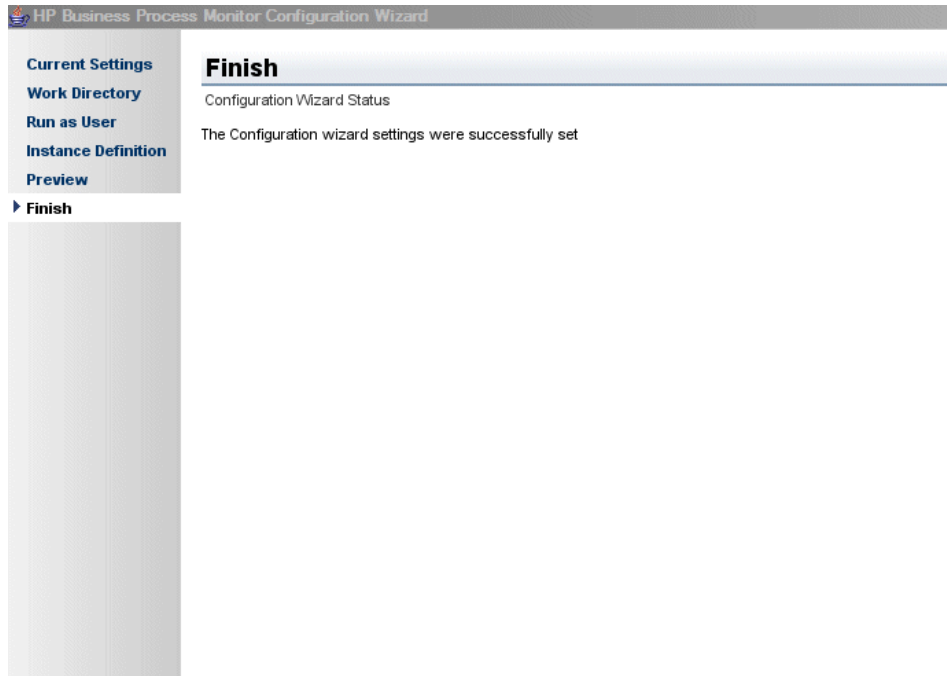
**Instance Definition**

Display name: My\_Default\_Instance  
Gateway Server URL: http://vmamrnd34.devlab.ad/topaz  
Host name: MY HOST  
Location name: My\_Cube  
Job poll interval (minutes): 2  
Time poll interval (minutes): 60  
Set instance as user: Undefined  
Authentication: Undefined  
Proxy: Undefined

<b>Description</b>	Enables you to view a summary of the configured settings before they are saved. Click <b>Finish</b> to save the configuration and continue, or click <b>Back</b> to modify any of the settings.
<b>Wizard Map</b>	The Business Process Monitor Configuration Wizard contains:  Current Settings Page > Work Directory Page > Run as User Page > Instance Definition Page > <b>Preview Page</b> > Finish Page

## **Finish Page**

The following is an example of the Finish page.



<b>Description</b>	Displays a message about the success of the installation. Click <b>Close</b> to exit from the configuration wizard.
<b>Wizard Map</b>	The Business Process Monitor Configuration Wizard contains:  Current Settings Page > Work Directory Page > Run as User Page > Instance Definition Page > Preview Page > <b>Finish Page</b>
<b>Important Information</b>	After Setup successfully completes the installation process, HP Business Process Monitor is added as a service and launched on the machine. For details on stopping and starting Business Process Monitor manually, see "Running Business Process Monitor" in the <i>Business Process Monitor Administration</i> PDF.



## Running a Silent Installation

You can use a silent installation procedure to run the Business Process Monitor Setup. A silent installation is an installation that is performed automatically, without the need for user interaction. Instead, all configuration parameters are allocated predetermined values that are stored in a configuration xml file.

---

**Note:** Read "Notes and Limitations" on page 71 before using any of the silent installation methods.

---

This section includes:

- "Silent Installation Overview" on page 57
- "How a Silent Installation Assigns Values" on page 58
- "Prerequisites" on page 59
- "Silent Installation for Windows" on page 61
- "Configuring the bpm\_install\_config.xml File" on page 63
- "Notes and Limitations" on page 71

### Silent Installation Overview

There are three different types of silent installation:

- Using the silent installation default settings (when there is no configuration file or previous settings).
- Using previous settings.

- ▶ Using an xml configuration file. For this type on silent installation, do the following:
  - ▶ Create a silent installation configuration file with predefined settings for all the hosts you are installing.
  - ▶ Copy the Business Process Monitor setup program and the silent installation xml configuration file to each of the target host machines.
  - ▶ Run the silent installation on each of the target host machines.

---

**Note:** From Business Process Monitor version 8.02, the silent installation xml configuration file is different from previous versions.

---

## How a Silent Installation Assigns Values

You can configure predetermined values to be used by a silent installation for a specific Business Process Monitor machine in the **<Business Process Monitor application directory>\bpm\_install\_config.xml** file located on the machine on which you run the silent installation. The default Business Process Monitor application directory is:

- ▶ **Windows 2003 and Windows XP**—C:\Documents and Settings\All Users\Application Data\HP\BPM
- ▶ **Windows Vista, Windows 2008, and Windows 7**—C:\ProgramData\HP\BPM

If the silent installation locates the bpm\_install\_config.xml file and the file contains values to be used for the specific machine, the silent installation uses these values.

If the silent installation cannot locate the bpm\_install\_config.xml file, or the file does not contain values to be used for the specific machine, the silent installation looks for configuration settings from a previous installation of Business Process Monitor. If such settings are detected, the silent installation uses these settings.

If a silent installation cannot locate the `bpm_install_config.xml` file, or the file does not contain values to be used for the specific machine, and does not detect configuration settings from the previous installation of Business Process Monitor on the machine, it uses default settings. The default settings configure Business Process Monitor to run as a system user and locate the workspace directory in the default Business Process Monitor application directory. When default settings are used, a default instance is not defined during the installation and you must define the instance manually later. For details on defining an instance, see "Create New Instance" in the *Business Process Monitor Administration* PDF.

For details on configuring the `bpm_install_config.xml` file, see "Configuring the `bpm_install_config.xml` File" on page 63.

## Prerequisites

Before you begin a silent installation of Business Process Monitor, make sure of the following:

### Install Prerequisite Programs

Each machine on which you want to install Business Process Monitor must have the following programs, which are required for running scripts correctly, installed:

- .NET Framework 3.5 SP1
- Microsoft Data Access Components (MDAC) 2.8 SP1 (or later)
- Microsoft Windows Installer 3.1 or later
- Microsoft Core XML Services (MSXML) 6.0
- Microsoft Visual C++ 2005 SP1 Redistributable Package (x86)
- Microsoft Visual C++ 2008 Redistributable Package (x86)
- Web Services Enhancements (WSE) 2.0 SP3 for Microsoft .NET Redistributable Runtime MSI
- Web Services Enhancements (WSE) 3.0 for Microsoft .NET Redistributable Runtime MSI
- Strawberry Perl 5.10.1

**To download and install the prerequisite programs:**

- 1** Save the Business Process Monitor Setup file for Windows on the machine on which you are installing Business Process Monitor. For more details on the location of the Business Process Monitor Setup file, see "General Installation Information" on page 25.
- 2** Extract the files from the downloaded file to a location of your choice on the machine on which you are installing Business Process Monitor. To extract the installation files, run the Business Process Monitor setup program and once the files are extracted, terminate the installation process.
- 3** From the extracted files (or from the files copied from the DVD), run the prerequisite installation programs located in the language directory relevant for your system, or in the common directory. For example:
  - ▶ Windows\BPM\En\prerequisites or
  - ▶ Windows\BPM\Common

---

**Note:** You can also obtain the prerequisite programs from the Internet.

---

## Uninstall Previous Versions of Business Process Monitor

You must uninstall any previous versions of Business Process Monitor from each machine on which you are installing Business Process Monitor. For details on uninstalling Business Process Monitor, see "Uninstalling Business Process Monitor" on page 72.

## Assign Administration Privileges

You must have administration privileges for each machine on which you are installing Business Process Monitor.

## Configure the bpm\_install\_config.xml File

If you want to use a silent installation to install Business Process Monitor on multiple machines, or if you want to configure specific settings to be used by a silent installation, edit the `bpm_install_config.xml` file accordingly. Make sure that the file is located in the `<Business Process Monitor application directory>` directory on each machine on which you run the silent installation. For details on configuring the `bpm_install_config.xml` file, see "Configuring the bpm\_install\_config.xml File" on page 63.

## Silent Installation for Windows

You can run a silent installation on Windows using either the regular setup program, or using MSI.

---

**Note:** If you run a silent installation using MSI, the installation will not use configuration settings from a previous installation of Business Process Monitor on the machine, even if they are valid according to the order in which a silent installation assigns values. For details, see "How a Silent Installation Assigns Values" on page 58.

---

### To run a silent installation:

- 1 Save the Business Process Monitor Setup file for Windows on the machine on which you are installing Business Process Monitor. For more details on the location of the Business Process Monitor Setup file, see "General Installation Information" on page 25.

**2** Extract the files from the downloaded file to a location of your choice on the machine on which you are installing Business Process Monitor. To extract the installation files, run the Business Process Monitor setup program and once the files are extracted, terminate the installation process.

**3** Run the program as follows:

- ▶ **Using the regular setup program:** From the extracted files, run the setup program located in the language directory relevant for your system. For example, to run the setup.exe program from the English language directory, use:

```
en\setup.exe "\"TARGETDIR=c:\Temp\a\" /quiet /norestart
```

- ▶ **Using MSI:** From the extracted files, run the **HP\_BPM.msi** program located in the **MSI** directory using the following command:

```
\MSI\HP_BPM.msi /quiet /norestart
```

where:

- ▶ "\"TARGETDIR=<installation folder name>\""—enables you to specify an installation folder instead of the default folder. For example, "\"TARGETDIR=c:\Temp\a\".

---

**Note:** This option must be the first option used in the command line.

---

- ▶ **/quiet**—quiet mode (there is no user interaction).

---

**Note:** This option is mandatory for silent installations.

---

- ▶ **/norestart**—the machine will not be restarted after the installation is complete.

- 4 Ensure that the silent installation has finished successfully by looking for the following processes in the Windows Task Manager:
- tp\_bpm\_data\_server.exe\*32
  - tp\_bpm\_ctrl.exe\*32
  - tp\_bpm\_agent.exe\*32
  - tp\_bpm\_admin.exe\*32

### **Configuring the bpm\_install\_config.xml File**

The **bpm\_install\_config.xml** file is used by a silent installation to obtain the parameter values required during the installation of a specific Business Process Monitor machine. For details on how the silent installation assigns values, see "How a Silent Installation Assigns Values" on page 58.

The **bpm\_install\_config.xml** file can contain parameter values for multiple machines, enabling you to create one file which you can copy to all the machines on which you want to run a silent installation. Only the values for the specific machine on which the installation runs are used.

This section includes the following topics:

- "Example of the xml Schema File (.xsd) Structure" on page 64
- "Description of the xml Schema File (.xsd) Structure" on page 65
- "Sample Files" on page 70

## Example of the xml Schema File (.xsd) Structure

```

<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSPY v5 rel. 3 U (http://www.xmlspy.com) by HF user -->
<!-- W3C Schema generated by XMLSPY v5 rel. 3 U (http://www.xmlspy.com)-->
<xsd:schema xmlns:xsd="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified"
  attributeFormDefault="unqualified">
  <xsd:element name="hosts">
    <xsd:complexType>
      <xsd:sequence>
        <xsd:element name="host" minOccurs="1" maxOccurs="unbounded">
          <xsd:complexType>
            <xsd:sequence>
              <xsd:element name="workspacePath" type="xsd:string" minOccurs="1" maxOccurs="1"/>
              <xsd:element name="runBpmAsUser" minOccurs="0" maxOccurs="1">
                <xsd:complexType>
                  <xsd:sequence>
                    <xsd:element name="username" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                    <xsd:element name="password" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                    <xsd:element name="domain" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                    <xsd:element name="group" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                  </xsd:sequence>
                </xsd:complexType>
              </xsd:element>
              <xsd:element name="instance" minOccurs="1" maxOccurs="1">
                <xsd:complexType>
                  <xsd:sequence>
                    <xsd:element name="displayName" type="xsd:string"/>
                    <xsd:element name="serverUrl" type="xsd:string"/>
                    <xsd:element name="locationName" type="xsd:string"/>
                    <xsd:element name="hostName" type="xsd:string"/>
                    <xsd:element name="timeInterval" type="xsd:integer"/>
                    <xsd:element name="jobInterval" type="xsd:integer"/>
                    <xsd:element name="authentication" minOccurs="0" maxOccurs="1">
                      <xsd:complexType>
                        <xsd:sequence>
                          <xsd:element name="username" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                          <xsd:element name="password" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                          <xsd:element name="domain" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                        </xsd:sequence>
                      </xsd:complexType>
                    </xsd:element>
                    <xsd:element name="ssl" minOccurs="0" maxOccurs="1">
                      <xsd:complexType>
                        <xsd:sequence>
                          <xsd:element name="clientCert" type="xsd:string"/>
                          <xsd:element name="privateKey" type="xsd:string"/>
                          <xsd:element name="authorityCert" type="xsd:string"/>
                          <xsd:element name="privatekeyPassword" type="xsd:string"/>
                        </xsd:sequence>
                      </xsd:complexType>
                    </xsd:element>
                    <xsd:element name="proxy" minOccurs="0" maxOccurs="1">
                      <xsd:complexType>
                        <xsd:sequence>
                          <xsd:element name="username" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                          <xsd:element name="password" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                          <xsd:element name="domain" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                          <xsd:element name="url" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                        </xsd:sequence>
                      </xsd:complexType>
                    </xsd:element>
                    <xsd:element name="runAsUser" minOccurs="0" maxOccurs="1">
                      <xsd:complexType>
                        <xsd:sequence>
                          <xsd:element name="username" type="xsd:string" minOccurs="1" maxOccurs="1"/>
                          <xsd:element name="password" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                          <xsd:element name="domain" type="xsd:string" minOccurs="0" maxOccurs="1"/>
                        </xsd:sequence>
                      </xsd:complexType>
                    </xsd:element>
                  </xsd:sequence>
                </xsd:complexType>
              </xsd:element>
              <xsd:attribute name="hostName" type="xsd:string" use="required"/>
            </xsd:sequence>
          </xsd:complexType>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
  </xsd:element>
</xsd:schema>

```



## Description of the xml Schema File (.xsd) Structure

Parent Element	Element	Sub Element
	<b>host.</b>	The name or IP address of the machine for which the parameter values are valid. <b>Note:</b> The host name cannot be in Fully Qualified Domain (FQDN) format.
	<b>workspacePath.</b>	The path of the workspace directory of the Business Process Monitor installation.
<b>runBpmAsUser.</b> For running the Business Process Monitor as a specific user instead of as a system user:	<b>username.</b>	The specific user name. The name can contain up to 24 characters and cannot include spaces, nor any of the following characters: ( ; : " < > * + = \   ? , ).
	<b>password.</b>	The specific user's password (for Windows).
	<b>domain.</b>	The domain for the user (for Windows). The domain name can be up to 67 characters long and can include the following characters: <b>0-9, a-z, A-Z</b> , hyphen (-). The domain name cannot start or end with a hyphen (-), nor can it include spaces.

Parent Element	Element	Sub Element
<p><b>instance.</b> Default instance settings. For details on Business Process Monitor instances, see "Instance Page" in the <i>Business Process Monitor Administration</i> PDF.</p>	<p><b>displayName.</b> The display name for the instance in Business Process Monitor Admin. The display name can be up to 50 characters and can include the following characters: <b>0-9, a-z, A-Z</b>, hyphen (-), underscore (_). The display name cannot start or end with a hyphen (-) or an underscore (_).</p>	
	<p><b>serverUrl.</b> The URL of the HP Business Service Management Gateway Server to which this instance sends collected data. The URL must be in the following format: <code>http (or https)://&lt;Gateway Server name or IP address&gt;:&lt;port number&gt;/topaz</code>. If you do not specify a port number, the default port is used (80 for http and 443 for https).</p>	
	<p><b>locationName.</b> The location defined for the instance. The location name can be up to 50 characters and can include the following characters: <b>0-9, a-z, A-Z, ` ~ ! @ # \$ % ^ &amp; * ( ) _ - + = [ ] { }   / ? . , ; ; (space)</b>.</p>	
	<p><b>hostName.</b> The host name defined for the instance. The host name can be up to 50 characters and can include the following characters: <b>0-9, a-z, A-Z, ` ~ ! @ # \$ % ^ &amp; * ( ) _ - + = [ ] { }   / ? . , " ' : ; &lt; &gt; (space)</b>.</p>	
	<p><b>timeInterval.</b> The defined frequency (in minutes) with which Business Process Monitor polls HP Business Service Management for time synchronization. This is an integer positive number.</p>	
	<p><b>jobInterval.</b> The defined frequency (in minutes) with which Business Process Monitor polls the database for assigned task, application, and business transaction flow changes. This is an integer positive number of up to 4 digits.</p>	

Parent Element	Element	Sub Element
<b>instance</b>	<b>authentication.</b> Set to <b>yes</b> if authentication is required for the instance and configure the authentication parameters for the Business Process Monitor instance to support the authentication scheme in use by the server (basic or NTLM authentication)	<b>username.</b> The name of the user (recognized by the HP Business Service Management Gateway Server) for authentication.
		<b>password.</b> The password for the user.
		<b>domain.</b> The domain of the user.

Parent Element	Element	Sub Element
<p><b>instance</b></p>	<p><b>ssl.</b> Set to <b>yes</b> if the Business Process Monitor instance is communicating with the HP Business Service Management Gateway Server using SSL.</p> <p>For more information on supporting SSL communication, see "Communication Using SSL" in the <i>Business Process Monitor Administration</i> PDF.</p>	<p><b>ClientCert.</b> The path and name of the client certificate file.</p>
		<p><b>privateKey.</b> The path and name of the private key file.</p>
		<p><b>authorityCert.</b> The path and name of the authority certificate file.</p>
		<p><b>privatekeyPassword.</b> The password for the private key file.</p>

Parent Element	Element	Sub Element
<b>instance</b>	<b>proxy.</b> Set to <b>yes</b> if the Business Process Monitor instance is accessing the HP Business Service Management Gateway Server through a proxy server.  <b>Note:</b> To configure reverse proxy, do not use these proxy settings, but configure the reverse proxy server URL instead of the Gateway Server URL in the <b>serverUrl</b> element of the instance.	<b>username.</b> The user name for the proxy server.  <b>Note:</b> To configure a user name, you must also configure the proxy server URL.
		<b>password.</b> The password for the user.
		<b>domain.</b> The domain of the user.
		<b>url.</b> The URL for the proxy server.  <b>Note:</b> The proxy URL must be in the following format: http (or https)://<host name or IP address>:<port number>/URI path.
<b>instance</b>	<b>runAsUser.</b> Set to <b>yes</b> to run the instance as a specific user.	<b>username.</b> The specific user name.
		<b>password.</b> The password for the specific user (for Windows).
		<b>domain.</b> The domain of the specific user (for Windows).

**Note:** To configure parameter values for multiple Business Process Monitor machines, create a new `<host></host>` section for each machine.

---

### Sample Files

The following files are located in the `\\<%TEMP%>\HP Business Process Monitor <BPM VERSION>\MSI\ServletContainer\webapps\ROOT\help\BPMWeb` directory when you download and extract the Business Process Monitor setup file:

- **silent\_installation.xsd.** A sample .xsd file.
- **Example\_1.xml.** A sample .xml file that contains a simple configuration for two hosts.
- **Example\_2.xml.** A sample .xml file that contains a more complicated configuration for one host.
- **Example\_3.xml.** A sample .xml file that contains all parameters (remove unwanted sections).

For details on downloading and extracting the Business Process Monitor setup file, see "Silent Installation for Windows" on page 61.

## Notes and Limitations

Note the following when using a silent installation method for Business Process Monitor:

- ▶ When running an installation in silent mode, no messages are displayed. Instead, you can view installation information in the log files, including information on whether the installation was successful. For details on the log files, see "Log Files" on page 75.
- ▶ To troubleshoot installation issues on Windows platforms, you can add logging options at the end of the command. For example, to run an MSI silent installation with full logging:

```
HP_BPM.msi /quiet /norestart /qn /log <LogFile>
```

Note that this is the only way to view certain errors.

Use Standard MSI command line options to define logging options.

- ▶ When you specify the URL to the HP Business Service Management Gateway Server in the bpm\_install\_config.xml file, it must end with **/topaz**.

## Uninstalling Business Process Monitor

The uninstall process saves configuration settings on the machine for future installation.

The following procedures relate to uninstalling Business Process Monitor version 9.13 on a Windows platform. For details on uninstalling earlier versions on Windows platforms, refer to the relevant version documentation.

**To run a regular uninstall for Business Process Monitor on a Windows platform:**

- 1** On the host machine, shut down Business Process Monitor Admin and Business Process Monitors (select: **Start > Programs > HP Business Process Monitor > Stop HP Business Process Monitor Service.**)
- 2** Wait two minutes.
- 3** Run the Business Process Monitor uninstall program from the **Add/Remove Programs** option in the **Control Panel** (select **Start > Settings > Control Panel > Add/Remove Programs > HP Business Process Monitor**, and click **Change/Remove**).
- 4** Restart the machine if prompted to do so.
- 5** (**Important:** This step should only be performed if you do **not** want to save the configuration settings for use by a future Business Process Monitor installation.)

Delete the Business Process Monitor **config** folder from the machine.

- 6** Delete the Business Process Monitor root installation folder from the machine and also, if it was not deleted automatically by the uninstall procedure, the **workspace** directory.



### To run a silent uninstall for Business Process Monitor on a Windows platform using MSI:

- 1 Locate the **HP\_BPM.msi** file, which is included in the Business Process Monitor setup files for Windows. For details on downloading and extracting files from the Business Process Monitor setup file for Windows, see "Silent Installation for Windows" on page 61.
- 2 Open the command prompt window (**Start > Run > cmd**) and enter one of the following commands:

- From the directory in which the **HP\_BPM.msi** file is located:

```
msiexec.exe /uninstall HP_BPM.msi /quiet /norestart
```

- From any directory:

```
msiexec.exe /uninstall [path to HP_BPM.msi]\HP_BPM.msi /quiet /norestart
```

For example:

```
msiexec.exe /uninstall C:\Backup\DVD\Windows\BPM\MSI\Win32\HP_BPM.msi /quiet /norestart
```

All standard MSI command line options are supported. For example:

- **quiet**—quiet mode (there is no user interaction).
  - **norestart**—the machine will not be restarted after the installation is complete.
- 3 (**Important:** This step should only be performed if you do **not** want to save the configuration settings for use by a future Business Process Monitor installation.)

After the silent uninstall has finished, delete the Business Process Monitor **config** folder from the machine.

- 4 Delete the Business Process Monitor root installation folder from the machine and also, if it was not deleted automatically by the uninstall procedure, the **workspace** directory.
- 5 Ensure that the uninstall has finished successfully by checking that HP Business Process Monitor is not included in the list of installed programs in the Windows Control Panel.

## Deployment Troubleshooting

This section describes common problems that you may encounter when deploying Business Process Monitor, and their solutions, as well as the log files created during the deployment.

This section includes the following topics:

- "Windows Platforms" on page 74
- "Log Files" on page 75

### Windows Platforms

This section describes troubleshooting problems when installing Business Process Monitor on a Windows platform.

#### Cannot Set Business Process Monitor to Run as a Different User

If you (mistakenly) set the whole Business Process Monitor to run as a specific user for a user that does not have write permissions to the **<Business Process Monitor root directory>\config** directory, Business Process Monitor fails to run, and you are unable to switch to a different user using the **Set BPM as User** option in Business Process Monitor Admin. To set a different user, use the following procedure:

**To set a different user:**

- 1** Stop Business Process Monitor.
- 2** Open the **<Business Process Monitor application directory>\config\topaz\_agent\_ctrl.cfg** file in a text editor.

The default Business Process Monitor application directory is:

- Windows 2003 and Windows XP  
C:\Documents and Settings\All Users\Application Data\HP\BPM
- Windows Vista, Windows 2008, and Windows 7  
C:\ProgramData\HP\BPM

- 3** Under the **[general]** section, remove any existing values for the following parameters:
  - UserDomain=""
  - UserPasswd=""
  - UserName=""
- 4** Save the file and restart Business Process Monitor. Business Process Monitor now runs as a system user.
- 5** From Business Process Monitor Admin, set Business Process Monitor to run as a new specific user (with Administrator permissions).

### **Error Message when Installing Prerequisites on Windows 7**

When installing Business Process Monitor on Windows 7, you may receive an error message during the installation of the prerequisites. In such cases, carry out the following procedure and then restart the installation:

- 1** Select **Start > Control Panel > Administrative Tools > Local Security Policy > Software Restriction Policies**.
- 2** If no software restriction policies are defined, right-click the Software Restriction Policies node and select **New Software Restriction Policy**.
- 3** Double-click **Enforcement**.
- 4** Select **All users except local administrators**.
- 5** Click **OK**.
- 6** Reboot the machine.

### **Log Files**

The log files that are created when you deploy Business Process Monitor can help you troubleshoot installation related problems. Log files are created for both the installation and configuration parts of the deployment.

## Windows Installation Log Files

The following Windows installation log files are located in the `%temp%` directory:

File Name	Description
ihp_custom_batches.log	The log file for custom batch files, invoked by MSI install/uninstall.  This is a common log for all HP based MSI installations, such as HP Virtual User Generator (VuGen) and QuickTest Professional.  This log is useful for ensuring that the custom batches were running and it can provide information to help track errors in the execution of these batches.
bpm_setup.log	The main log file for the MSI installation.
bpm_inst_bat.log	The log file that reflects the command line that launched MSI.
Prereq_Mgr.Business_Process_Monitor.log	The log file that contains the output from <b>setup.exe</b> .
BpmInstall.log	The log file that contains all log messages from the configuration tool.
BpmInstallStdOut.log	The log file that contains the standard output for the configuration tool.

## Configuration Wizard Log Files

The following log files are created by the Configuration wizard and are located in the `%temp%` directory:

File Name	Description
BpmInstall.log	The log file that contains all log messages from the Configuration wizard.
BpmInstallStdOut.log	The log file that contains the standard output from the Configuration wizard.

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