

# HP Business Process Monitor

For the Windows operating system

Software Version: 9.22

## Business Process Monitor Deployment Guide

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# Chapter 1: Business Process Monitor System Requirements

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

This section includes the following topics:

- ["Windows Hardware and Operating System" below](#)
- ["Other System Requirements" on the next page](#)
- ["Business Process Monitor on Virtual Platforms" on the next page](#)

## 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
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 SP1 (64 bit) Standard and Enterprise Editions</li> <li>• Microsoft Windows 7 SP1 (32/64 bit)</li> <li>• Microsoft Windows Server 2003 R2 SP2 (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 BPM on specific Windows platforms, see the following topics in the Business Process Monitor Administration Guide:</p> <ul style="list-style-type: none"> <li>• Notes and Limitations for Business Process Monitor on Windows 7</li> <li>• Notes and Limitations for Business Process Monitor on Windows Server 2008</li> </ul>		

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

## 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.  <b>Note:</b> To run the Ajax TruClient for Internet Explorer protocol, you must use Internet Explorer (IE) 9.x.
Support for WebTrace over Modem	All supported platforms
Java JDK (including the Java Plug-in)	Version 6u20 and later

**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): <http://java.com/en/index.jsp>.

## Business Process Monitor on Virtual Platforms

BPM is supported on ESX 5.0 hypervisor, with the following restrictions:

- HP cannot guarantee accurate transaction response times for BPM measurements on VMWare. Therefore, HP will not address or solve any support issues regarding transaction response times, except if the same behavior can be reproduced on a physical system.
- Dedicated (not shared) resources for the BPM VMWare instance (CPU cycles, memory, and so forth) is mandatory.
- A Gigabit network 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.
- There is no hardware capacity calculator for determining the number of BPM scripts on a single BPM instance.

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, response time metrics are not supported on VMware environments.

If you are deploying BPM on a virtual platform, the sizing guidelines for a regular installation are not applicable.

# Chapter 2: 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" below](#)
- ["Business Process Monitor/QuickTest Professional \(QTP\) Compatibility Matrix" on the next page](#)
- ["Business Process Monitor Protocol Support Matrix" on page 10](#)
- ["Supported protocols via QTP Add-ins" on page 12](#)

## 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 9.22 (LR Replay 11.50 SP 1)	✓ (Recommended)	✓	✓	✓
BPM 9.13 (LR Replay 11 SP 3)	✓ (Recommended)	✓	✓	✓
BPM 9.03 (LR Replay 11 SP 3)	✓ (Recommended)	✓	✓	✓
BPM 9.02 (LR Replay 11 SP 1)	✓ (Recommended)	✓	✓	✓

<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 9.01 (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**

<b>Compatibility Matrix</b>	<b>Business Process Monitor 9.22</b>	<b>Business Process Monitor 9.0x, 9.1x</b>	<b>Business Process Monitor 8.03, 8.04, 8.05</b>	<b>Business Process Monitor 8.02</b>	<b>Business Process Monitor 7.5x</b>	<b>Business Process Monitor 7.0</b>
QTP 11.0 with QTP_00944 and QTP_00994 patches	✓	X	X	X	X	X
QTP 11.0	X	✓	✓	✓	X	X
QTP 10.0	X	✓	✓	✓	X	X

Compatibility Matrix	Business Process Monitor 9.22	Business Process Monitor 9.0x, 9.1x	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 9.5	X	X	X	✓	✓	X
QTP 9.1/2	X	X	X	X	✓	✓
QTP 9.0	X	X	X	X	✓	✓
QTP SAP R/3 7.31	X	X	X	X	✓	✓

### Business Process Monitor Protocol Support Matrix

Protocol	Windows
.NET	✓
Ajax	✓
Ajax TruClient	✓
Ajax TruClient for Internet Explorer	✓
C VUser	✓
Citrix 1.8	✓
COM/DCOM	✓
CORBA-java	✓
DB2 CLI	✓
DNS	✓
EJB	✓
Flex	✓
FTP	✓
IMAP	✓
I-mode	✓
Informix	✓
acJada	✓

Protocol	Windows
JAVA over HTTP	✓
JAVA Record\Replay	✓
Java VUser	✓
JavaScript VUser	✓
JMS	✓
LDAP	✓
Mobile APP (HTML/HTTP)	✓
Mobile TruClient	✓
MSSQL Server	✓
Multi protocol Web	✓
ODBC	✓
Oracle (2-tier)	✓
Oracle NCA	✓
PeopleSoft - 8	✓
POP 3	✓
RDP	✓
Real	✓
RMI-java	✓
SAP Click and Script	✓
SAP GUI	✓
SAP Web	✓
Siebel – Web	✓
Siebel DB2 CLI	✓
Siebel MSSQL	✓
Siebel Oracle	✓
Silverlight	✓
SMTP	✓

Protocol	Windows
SOAP	✓
Sybase CtLib	✓
Sybase DBLib	✓
Terminal Emulation [RTE]	✓
Tuxedo 6	✓
Tuxedo 7	✓
VB User	✓
Voice XML	✓
WAP	✓
Web [HTTP/HTML]	✓
Web Click and Script	✓
Windows sockets	✓

### Supported protocols via QTP Add-ins

Web
<a href="#">PerfectoMobile MobileCloud for QTP Add-in</a> (For details, go to <a href="http://www.perfectomobile.com/portal/cms/resources/install_mobilecloud_for_qtp.html">http://www.perfectomobile.com/portal/cms/resources/install_mobilecloud_for_qtp.html</a> .)
QuickTest Professional Oracle Add-in (web-based & Java-based Oracle lications)app
QuickTest Professional Add-in for SAP Solutions (Windows-based & web-based SAP solutions)
QuickTest Professional Siebel Add-in
QuickTest Professional Web Services Add-in
QuickTest Professional PeopleSoft Add-in
QuickTest Professional Java Add-in
QuickTest Professional .NET Add-in
QuickTest Professional Terminal Emulator Add-in
QuickTest Professional Stingray Add-in
QuickTest Professional VisualAge Smalltalk Add-in

**Note:** Starting from BPM 7.50, QTP 9.5 is supported with the following new protocol: Power Builder Add-in

# Chapter 3: Deploying Business Process Monitor

**Caution:** 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.

You install BPM 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 (BSM) Gateway Server. BPM includes BPM Admin, which is the BPM 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 BPM on additional host machines at a later time.

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

**Note:** For details on the compatible versions of BPM and BSM, see "[Business Process Monitor Compatibility Matrixes](#)" on page 8.

## Requirements for Installation

The following topics discuss the requirements and limitations for installation:

- "[System Requirements](#)" below
- "[General Installation Information](#)" below
- "[Details Required During Installation](#)" on the next page
- "[Notes and Limitations](#)" on page 16

### System Requirements

For details of system requirements, see "[Business Process Monitor System Requirements](#)" on page 5.

### General Installation Information

- The BPM Setup file can be accessed from one of the following locations:

- The BPM installation package.
- The [HP Software Support Online web site](http://www.hp.com/go/hpsupport) (<http://www.hp.com/go/hpsupport>). 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 BSM Platform Administration. For details, see the BSM Platform Administration Guide.

**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/hpsupport) (<http://www.hp.com/go/hpsupport>).

- You can upgrade to BPM 9.22 from BPM 6.5 or later. To upgrade to BPM 9.22 from a version of BPM earlier than 6.5, first upgrade to BPM 6.5 or later, and then to BPM 9.22.
- Upgrading to BPM 9.22 requires you to uninstall the previous version of BPM, but provides the option of retaining the existing configuration settings.
- If you change the BSM machine to which a BPM connects (for example, if you use staging during a BSM upgrade) you must redirect the BPM to the new machine. For details, see "Redirecting Business Process Monitor Instances" in the the BSM Upgrade Guide.
- During a new installation (with no saved configuration settings), you specify if you want the data collection mechanism used by BPM 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 BPM Admin. For details, see "Set User Credentials" in the the Business Process Monitor Administration Guide.
- Users with advanced knowledge of BSM can install BPM using a silent installation procedure. For details, see "[Running a Silent Installation](#)" on page 37.
- For last-minute technical and troubleshooting information for BPM, 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 BSM DVD, for versions delivered on DVD.

## Details Required During Installation

You should have the following information ready when installing BPM:

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

- If you want to run BPM 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 BPM instance (defined as part of the installation process) to register with BSM. 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.)

**Note:** You can choose to skip the default instance configuration during installation and can configure an instance in BPM Admin at a later stage.

- The protocol to be used to access BSM (http or https).
- The name or IP address of the machine on which you installed the BSM Gateway Server, and the port number to be used by BPM to access BSM.

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

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

- When installing BPM from a network drive at a remote location, if the BPM 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 BPM is down during installation).
- BPM does not support installation via terminal service. Installation must be performed at the destination machine.
- BPM supports basic (http) and NTLM authentication, as well as SSL with client side certification and/or server side certification.

When connecting via proxy, BPM 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 Guide.

## Installing Business Process Monitor on a Windows Platform

This procedure describes how to install/upgrade directly on the BPM machine.

You must have administrative privileges on the machine on which you are installing BPM.

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

**Note:** Setup gives you the option of selecting the locations of the installation folder for BPM 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.

For notes and limitations on running BPM 9.22 on specific Windows platforms, see the following sections in the Business Process Monitor Administration Guide.

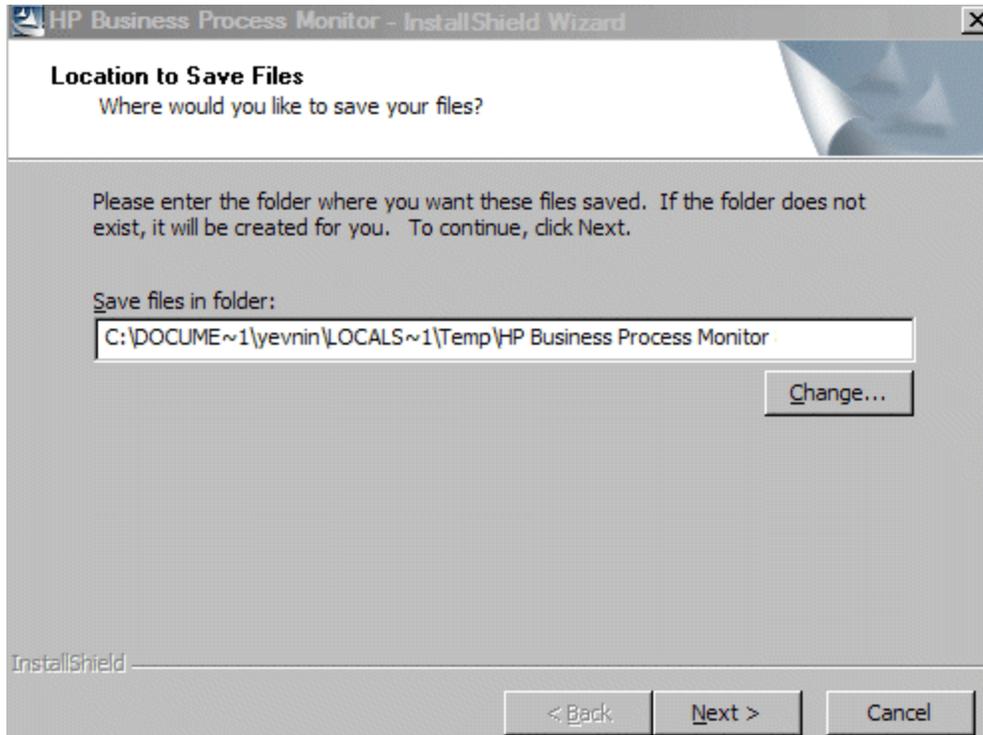
- Notes and Limitations for Business Process Monitor on Windows 7
- Notes and Limitations for Business Process Monitor on Windows Server 2008

## To Install Business Process Monitor on a Windows Platform

1. Save the BPM Setup file for Windows on the machine on which you are installing BPM. For more details on the location of the BPM Setup file, see "[General Installation Information](#)" on

page 14.

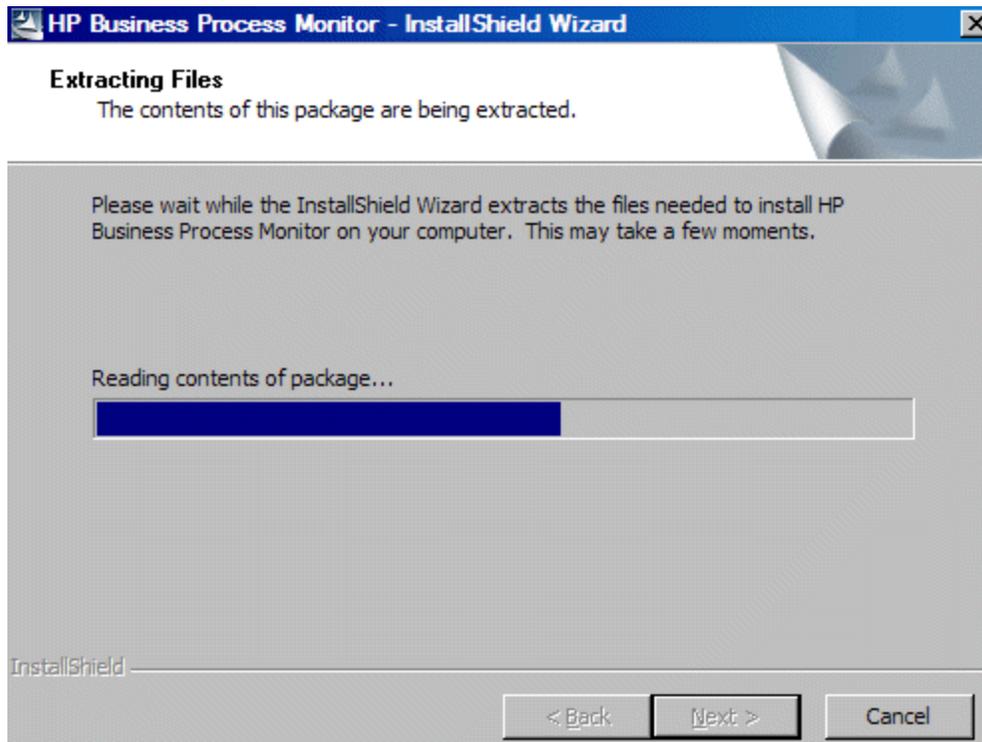
2. Run the BPM setup program. A screen opens requesting a location to which to extract and temporarily store the installation files.



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

Click **Next** to continue.

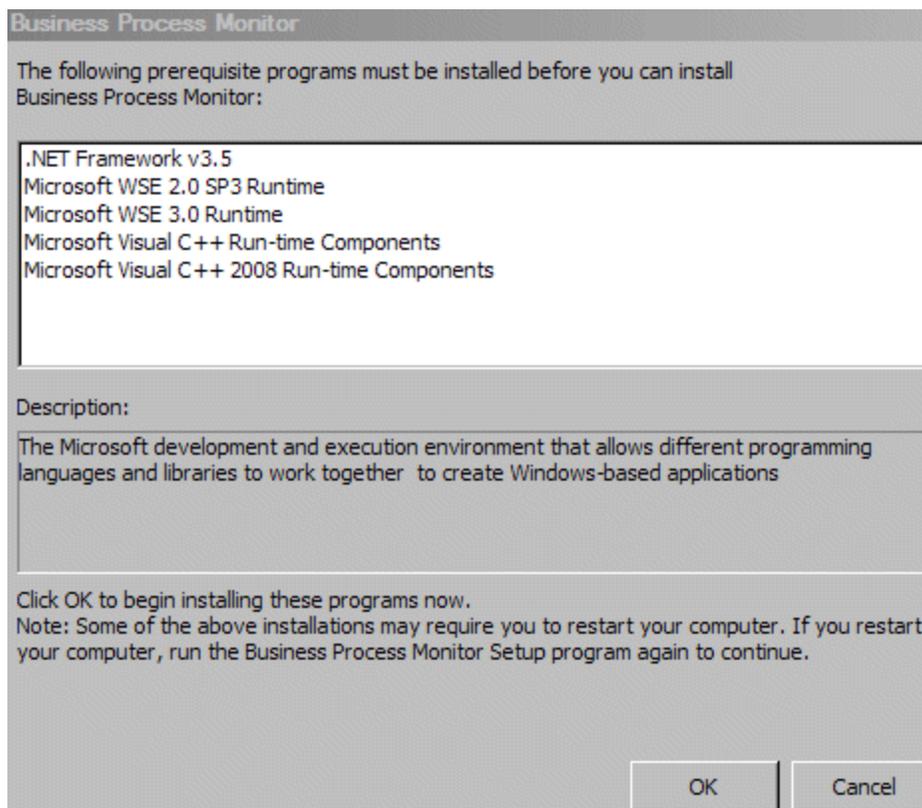
3. The file extraction process starts and an extraction progress screen opens.



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
  - .NET Framework 4.0
  - Microsoft Data Access Components (MDAC) 2.8 SP1 (or later)
  - Microsoft Windows Installer 3.1 or later
  - Microsoft Visual Studio 2005 Service Pack 1 MFC Security Update (x64)
  - Microsoft Visual Studio 2005 Service Pack 1 MFC Security Update (x86)
  - Microsoft Visual Studio 2008 Service Pack 1 MFC Security Update (x64)
  - Microsoft Visual Studio 2008 Service Pack 1 MFC Security Update (x86)
  - Microsoft Visual Studio 2010 Service Pack 1 MFC Security Update (x86)

- Microsoft Core XML Services (MSXML) 6.0
- 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



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 BPM setup program again until all the prerequisite programs are installed and the setup program continues with the next step.

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

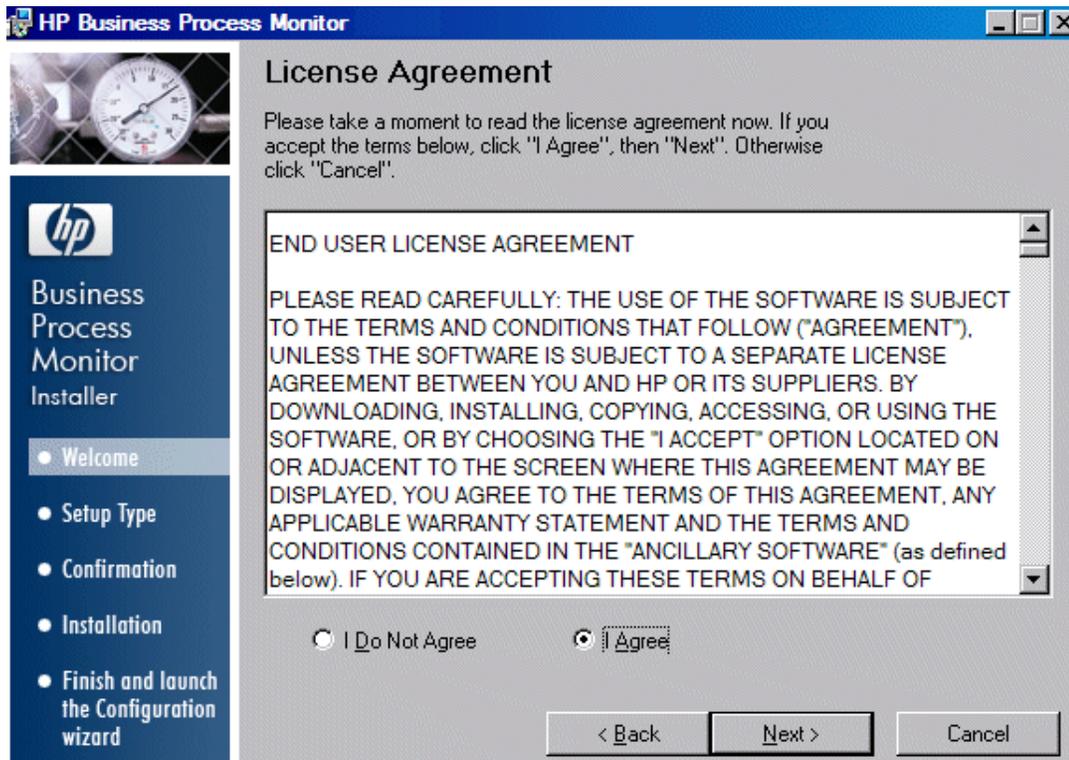
5. If the setup program detects a previous version of BPM on the machine, you are prompted to uninstall the previous version and the setup program ends. Uninstall the previous version and then restart the new installation. For details on uninstalling BPM, refer to the Business Process Monitor Deployment Guide relevant for the version of BPM you are uninstalling. (For BPM versions earlier than 9.13, refer to the Business Process Monitor Administration Guide relevant for the version of BPM you are uninstalling.)

6. The BPM Setup Wizard opens.



Click **Next** to begin the installation.

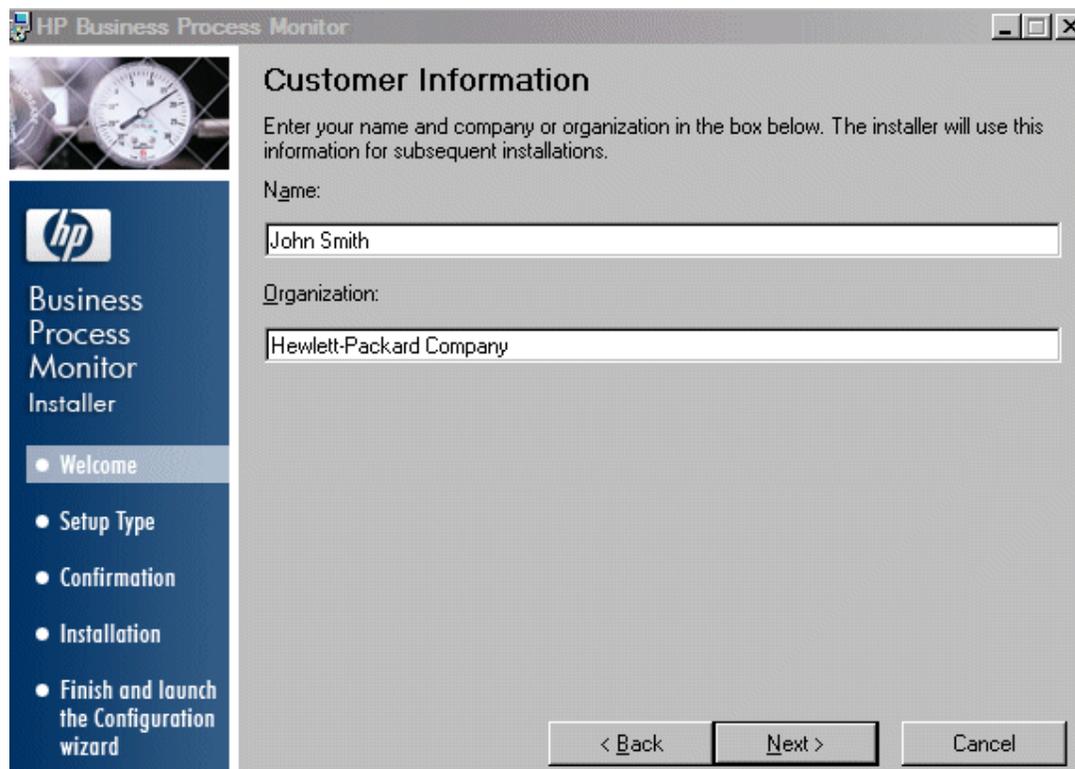
7. The license agreement screen opens.



Read the BPM License Agreement.

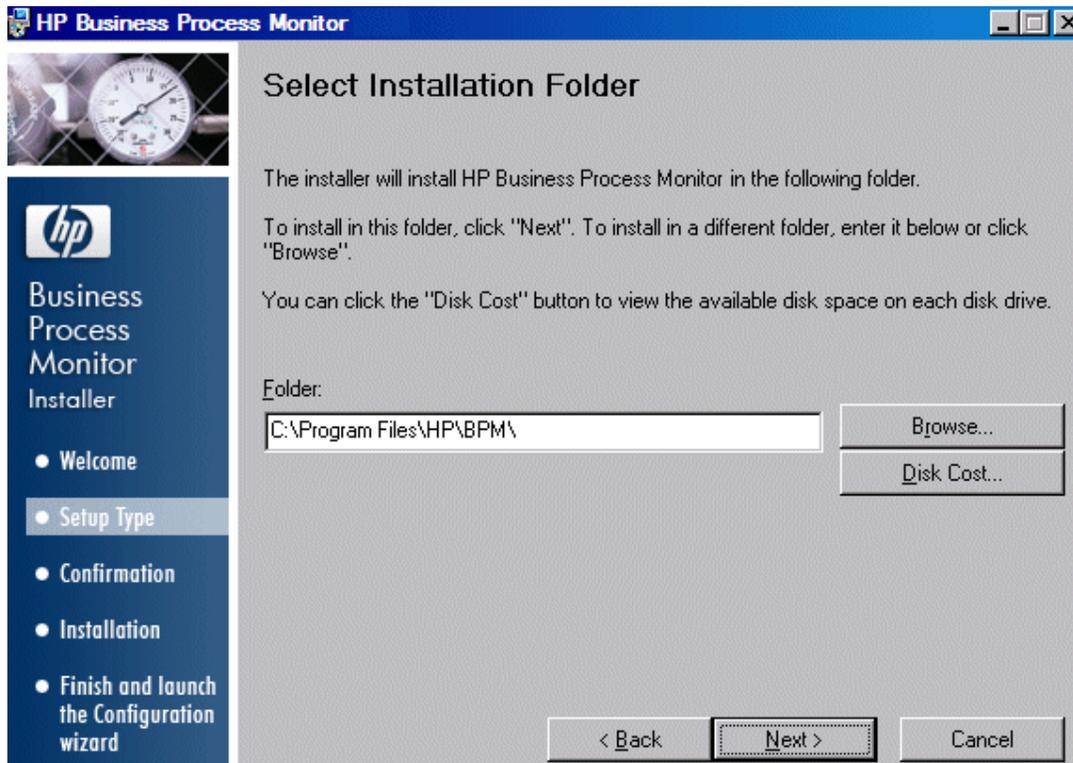
To install BPM, you must accept the terms of the license agreement by clicking **I agree** and then click **Next** to continue.

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.



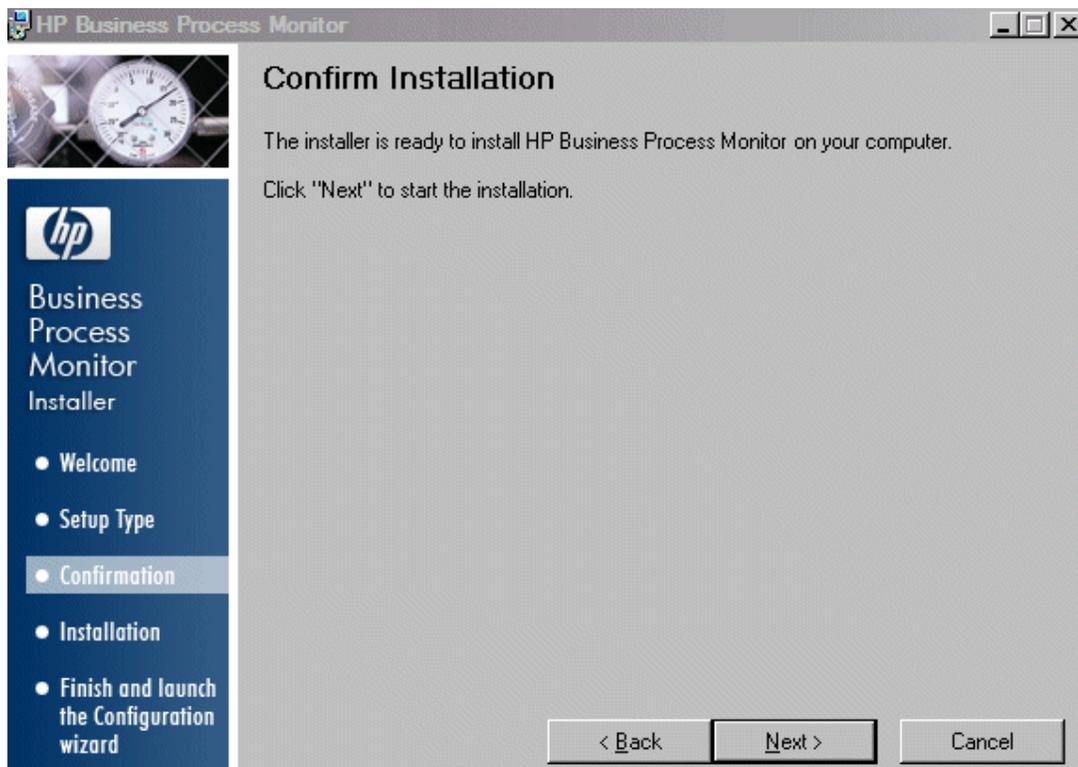
Accept the default directory location for the installation, or click **Browse** to select another directory.

Click **Next** to continue.

**Note:**

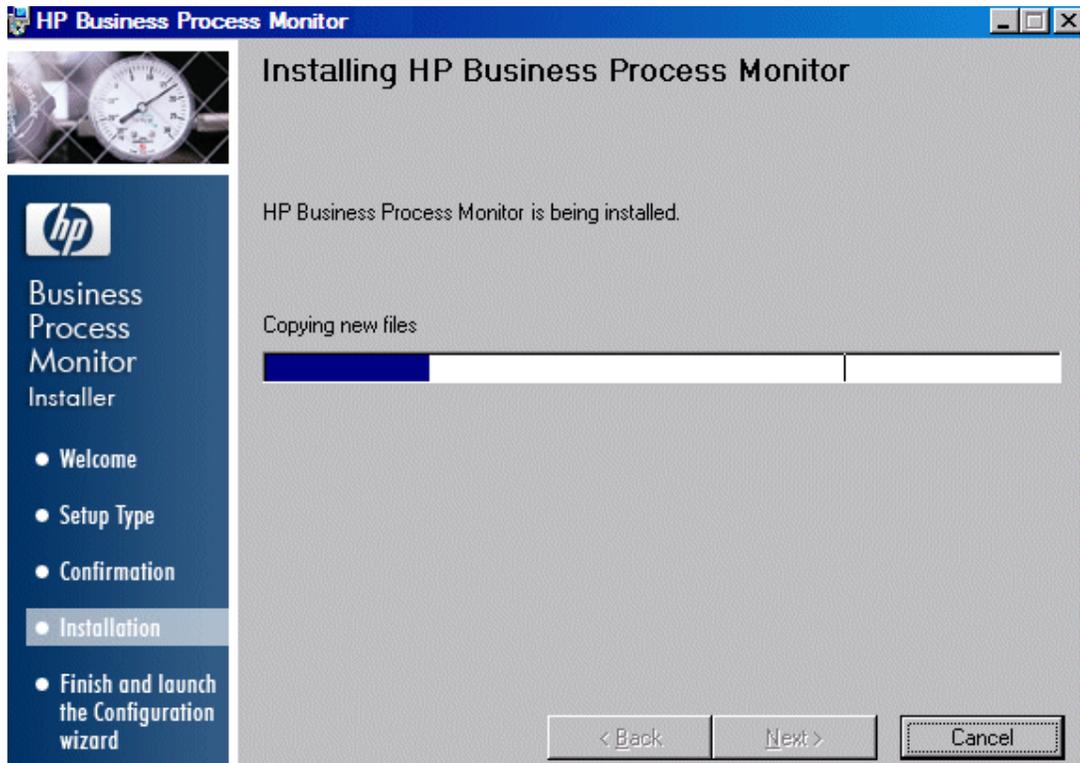
- If you select a directory other than the default directory, you must have administrator privileges for the selected directory.
- Click **Disk Cost** to display the required and available space on the machine's disk drives in a popup window.

10. The Confirm Installation screen opens.

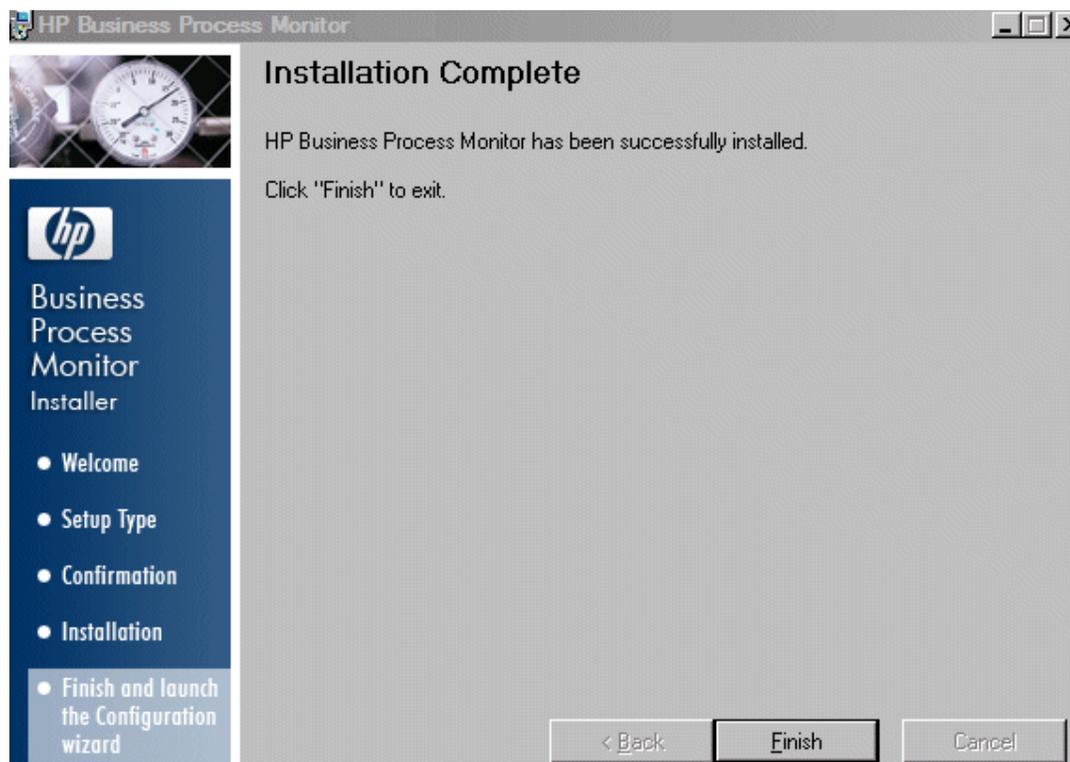


Click **Next** to continue.

11. The BPM 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 BPM Configuration wizard. For details on the user interface, see ["Business Process Monitor Configuration Wizard"](#) below.

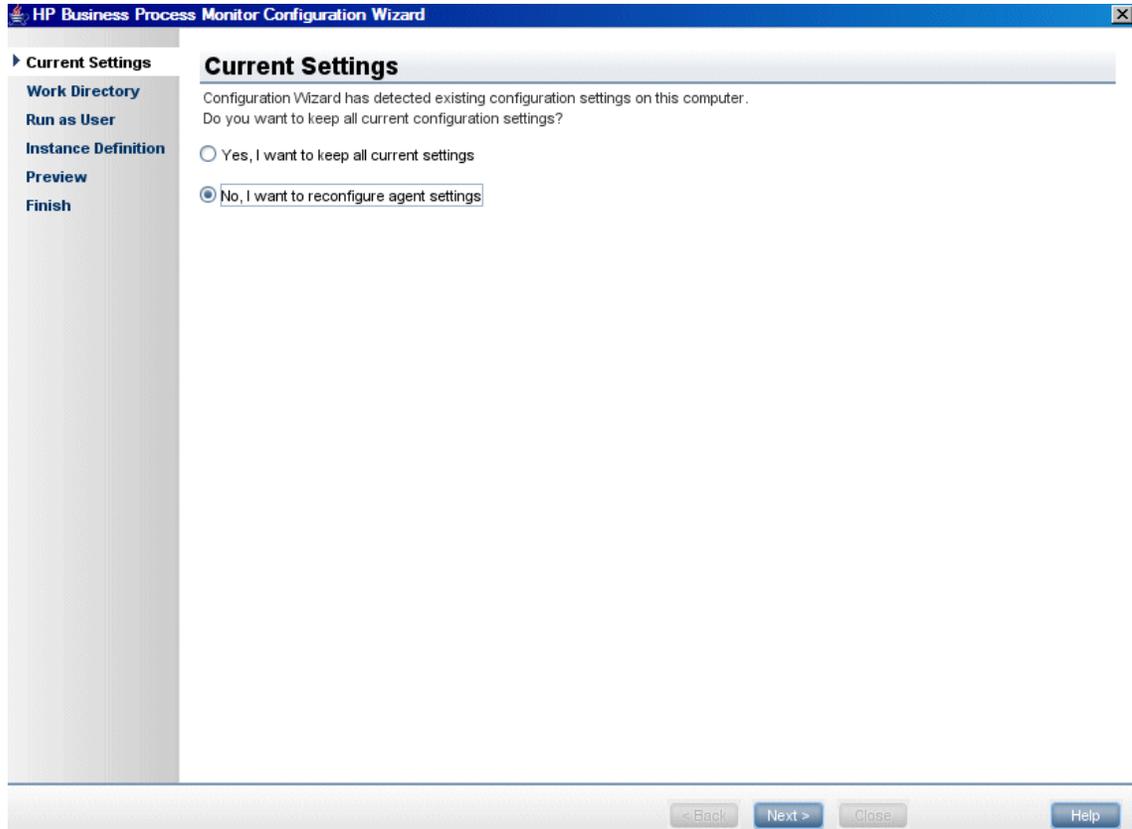
## Business Process Monitor Configuration Wizard

The BPM Configuration wizard enables you to configure the settings for a BPM, including the work directory, user mode, and default instance settings.

<b>To access</b>	The BPM Configuration wizard is automatically launched during a BPM installation, after the setup program has installed the BPM application.
<b>Wizard Map</b>	The BPM Configuration wizard contains: <a href="#">"Current Settings Page"</a> on the next page > <a href="#">"Work Directory Page"</a> on page 29 > <a href="#">"Run as User Page"</a> on page 30 > <a href="#">"Instance Definition Page"</a> on page 32 > <a href="#">"Preview Page"</a> on page 36 > <a href="#">"Finish Page"</a> on page 37
<b>Useful Links</b>	<a href="#">"Installing Business Process Monitor on a Windows Platform"</a> on page 17

## Current Settings Page

The following is an example of the Current Settings page.



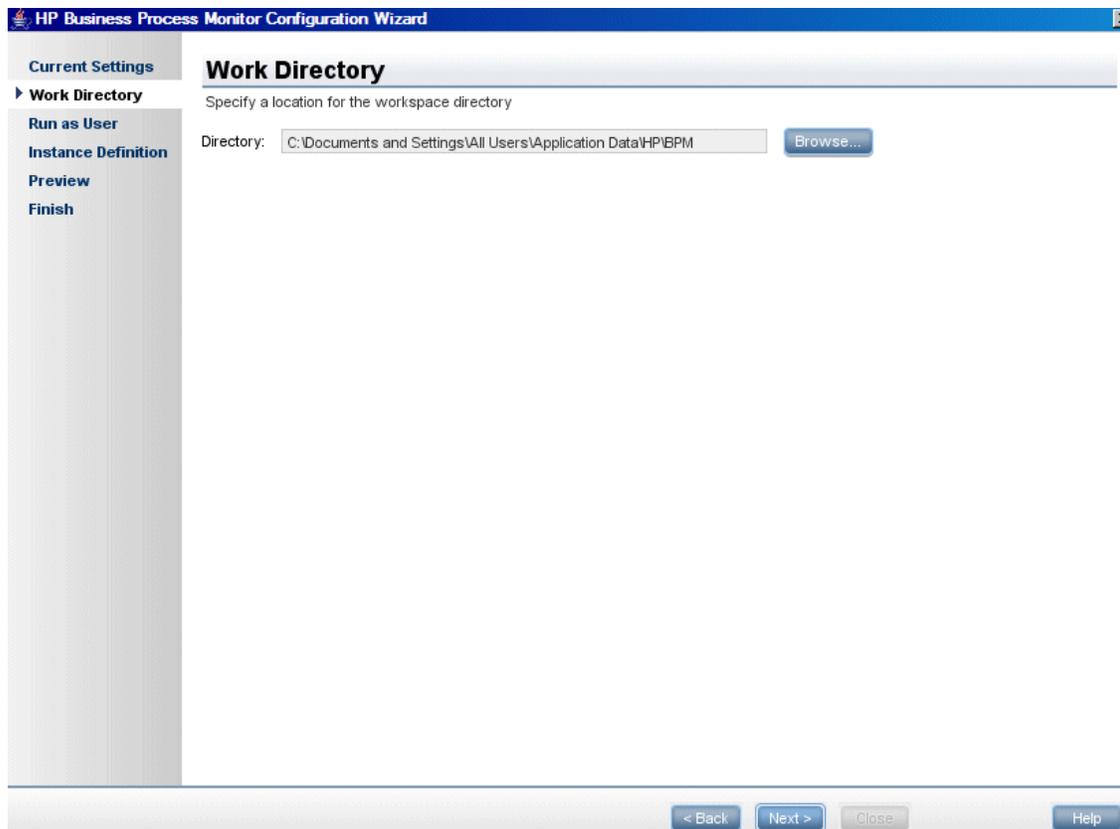
<b>Description</b>	Enables you to select whether you want to apply existing configuration settings from a previous BPM installation, or configure new settings.
<b>Important Information</b>	<ul style="list-style-type: none"> <li>• General information about the wizard is available in <a href="#">"Business Process Monitor Configuration Wizard" on the previous page</a>.</li> <li>• If no existing configuration settings are detected on the machine on which you are installing BPM, this page is not displayed and the wizard continues with the <a href="#">"Work Directory Page" on the next page</a>.</li> </ul>
<b>Wizard Map</b>	<p>The BPM Configuration Wizard contains:</p> <p><b>Current Settings Page</b> &gt; <a href="#">"Work Directory Page" on the next page</a> &gt; <a href="#">"Run as User Page" on page 30</a> &gt; <a href="#">"Instance Definition Page" on page 32</a> &gt; <a href="#">"Preview Page" on page 36</a> &gt; <a href="#">"Finish Page" on page 37</a></p>

The following elements are included:

UI Element	Description
<b>Yes, I want to keep all current settings</b>	Select this option to apply existing settings to the current installation. <b>Note:</b> <ul style="list-style-type: none"><li>If you select this option, the wizard continues with the <a href="#">"Preview Page" on page 36</a>.</li><li>If you choose to use configuration settings from a previous installation of BPM, the configured instances are registered to the same BSM 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>	Select this option to configure new settings.

## Work Directory Page

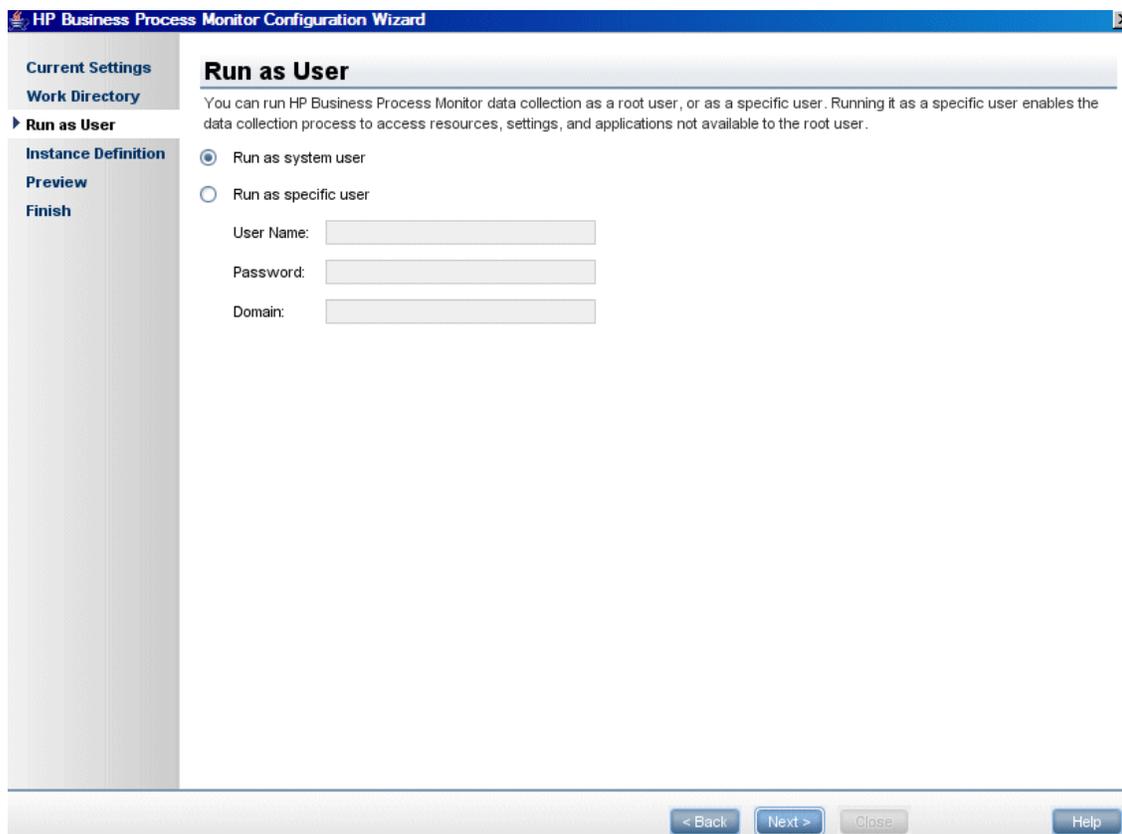
The following is an example of the Work Directory page in a Windows installation.



<b>Description</b>	Enables you to select the location of the BPM work directory. Accept the default location, or click <b>Browse</b> to select a different location.
<b>Important Information</b>	<ul style="list-style-type: none"> <li>• General information about the wizard is available in <a href="#">"Business Process Monitor Configuration Wizard" on page 27</a>.</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>
<b>Wizard Map</b>	The BPM Configuration Wizard contains:  <a href="#">"Current Settings Page" on page 28</a> > <b>Work Directory Page</b> > <a href="#">"Run as User Page" below</a> > <a href="#">"Instance Definition Page" on page 32</a> > <a href="#">"Preview Page" on page 36</a> > <a href="#">"Finish Page" on page 37</a>

## Run as User Page

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



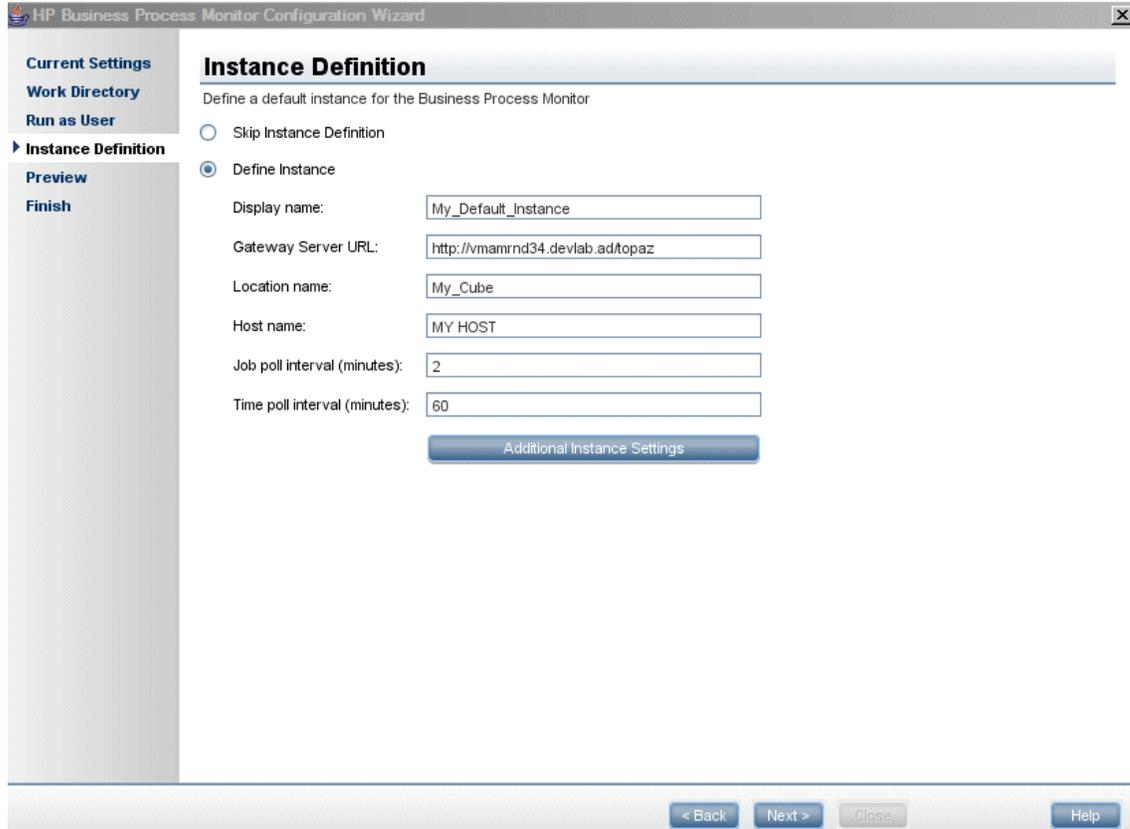
Description	Enables you to configure BPM data collection to run as a system user, or as a specific user. Running it as a specific user limits access to resources, settings, and applications located on the local machine. (This may not be true for resources located on remote machines, where a specific user may have different privileges than the local system user.)
Important Information	<ul style="list-style-type: none"> <li>• General information about the wizard is available in <a href="#">"Business Process Monitor Configuration Wizard" on page 27</a>.</li> <li>• You can also set BPM to run as a specific user after installation, from BPM Admin. For details, see "Set User Credentials" in the Business Process Monitor Administration Guide.</li> </ul>
Wizard Map	The BPM Configuration Wizard contains: <a href="#">"Current Settings Page" on page 28</a> > <a href="#">"Work Directory Page" on page 29</a> > <b>Run as User Page</b> > <a href="#">"Instance Definition Page" on the next page</a> > <a href="#">"Preview Page" on page 36</a> > <a href="#">"Finish Page" on page 37</a>

The following elements are included:

UI Element	Description
<b>Run as system user</b>	Select this option to set BPM data collection to run as a system user.
<b>Run as specific user</b>	Select this option to set BPM data collection to run as a specific user and configure the following parameters: <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> The user's password.</li> <li>• <b>Domain.</b> 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.



<b>Description</b>	Enables you to define a default instance for the BPM.
<b>Important Information</b>	<ul style="list-style-type: none"> <li>• General information about the wizard is available in <a href="#">"Business Process Monitor Configuration Wizard" on page 27</a>.</li> <li>• You can also define an instance after installation, from BPM Admin. For details, see "Create New Instance" in the Business Process Monitor Administration Guide.</li> </ul>
<b>Wizard Map</b>	The BPM Configuration Wizard contains: <a href="#">"Current Settings Page" on page 28</a> > <a href="#">"Work Directory Page" on page 29</a> > <a href="#">"Run as User Page" on page 30</a> > <b>Instance Definition Page</b> > <a href="#">"Preview Page" on page 36</a> > <a href="#">"Finish Page" on page 37</a>

The following elements are included:

UI Element	Description
<b>Skip Instance Definition</b>	Select this option to skip the instance definition.
<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 BPM 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 BSM Gateway Server to which this instance sends collected data. The URL must be in the following format: http (or https)://&lt;Gateway Server name or IP address&gt;:&lt;port number&gt;/topaz. 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 BPM 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 BPM polls BSM for time synchronization. This is an integer positive number of up to 4 digits.</li> </ul>
<b>Additional Instance Settings</b>	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 " <a href="#">Additional Instance Settings Dialog Box</a> " on the next page.

## Additional Instance Settings Dialog Box

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

The screenshot shows a dialog box titled "Additional Instance Settings" with a close button (X) in the top right corner. The dialog is organized into four distinct sections, each with a blue header bar:

- Run Instance As User:** Contains three input fields labeled "User name:", "Password:", and "Domain:".
- Authentication:** Contains three input fields labeled "User name:", "Password:", and "Domain:".
- Proxy Settings:** Contains four input fields labeled "Proxy user name:", "Proxy password:", "Proxy domain:", and "Proxy URL:".
- SSL Settings:** Contains four rows of settings. Each row has a text label, a light gray input field, and a "Browse..." button:
  - SSL client certificate file: [input field] [Browse...]
  - SSL private key file: [input field] [Browse...]
  - SSL private key password: [input field]
  - SSL authority certificate file: [input field] [Browse...]

At the bottom right of the dialog, there are two buttons: "Save" and "Cancel".

Enables you to define additional settings for a default instance, such as user, authentication, proxy, and SSL settings.

<b>To access</b>	Click <b>Additional Instance Settings</b> on the Instance Definition page.
------------------	--

<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 Business Process Monitor Administration Guide.</li> </ul>
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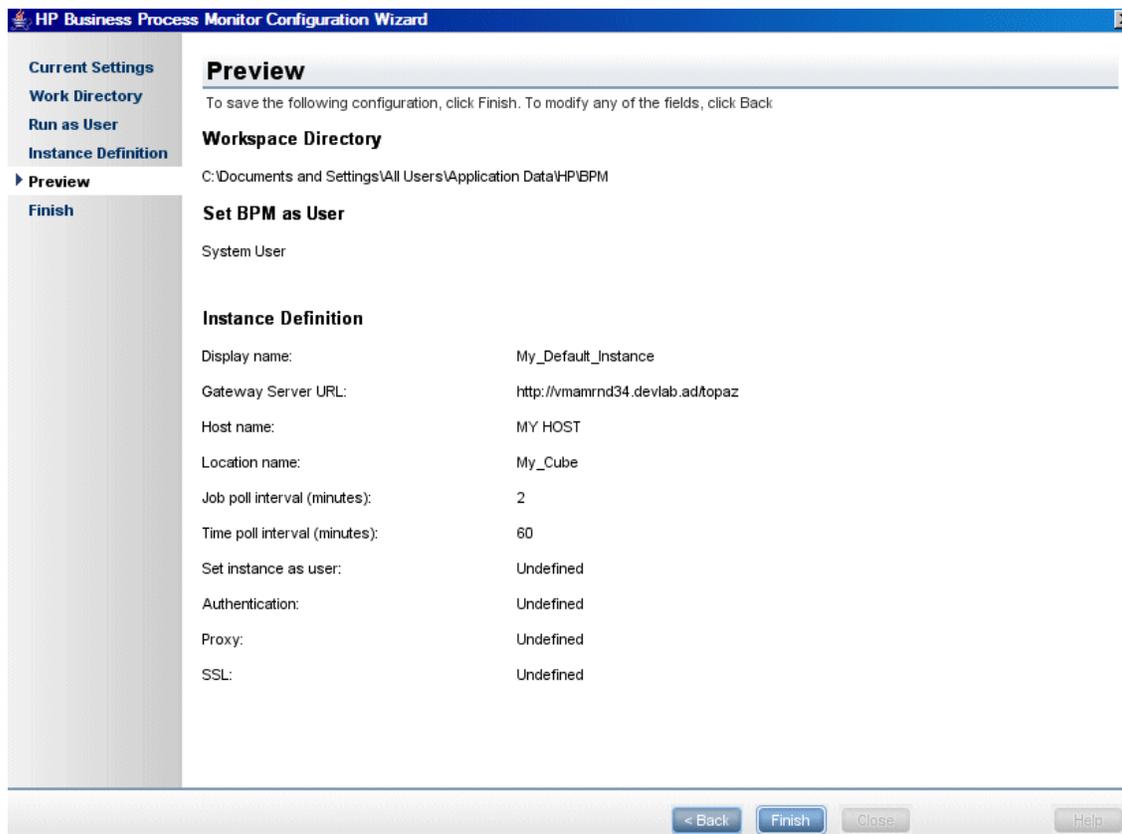
The following elements are included:

UI Element	Description
<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 BPM 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 BSM Gateway Server.
<b>Proxy Settings</b>	<p>If the BPM instance is accessing the BSM 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 <a href="#">"Instance Definition Page" on page 32</a>.</li> <li>• You cannot connect a forward proxy configured for NTLM authentication to a BSM server configured for SSL.</li> </ul>

UI Element	Description
<b>SSL Settings</b>	<p>If the BPM instance is communicating with the BSM Gateway Server using SSL, type the required information in the relevant boxes. For details on SSL settings, see "Security Settings Area" in the Business Process Monitor Administration Guide.</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

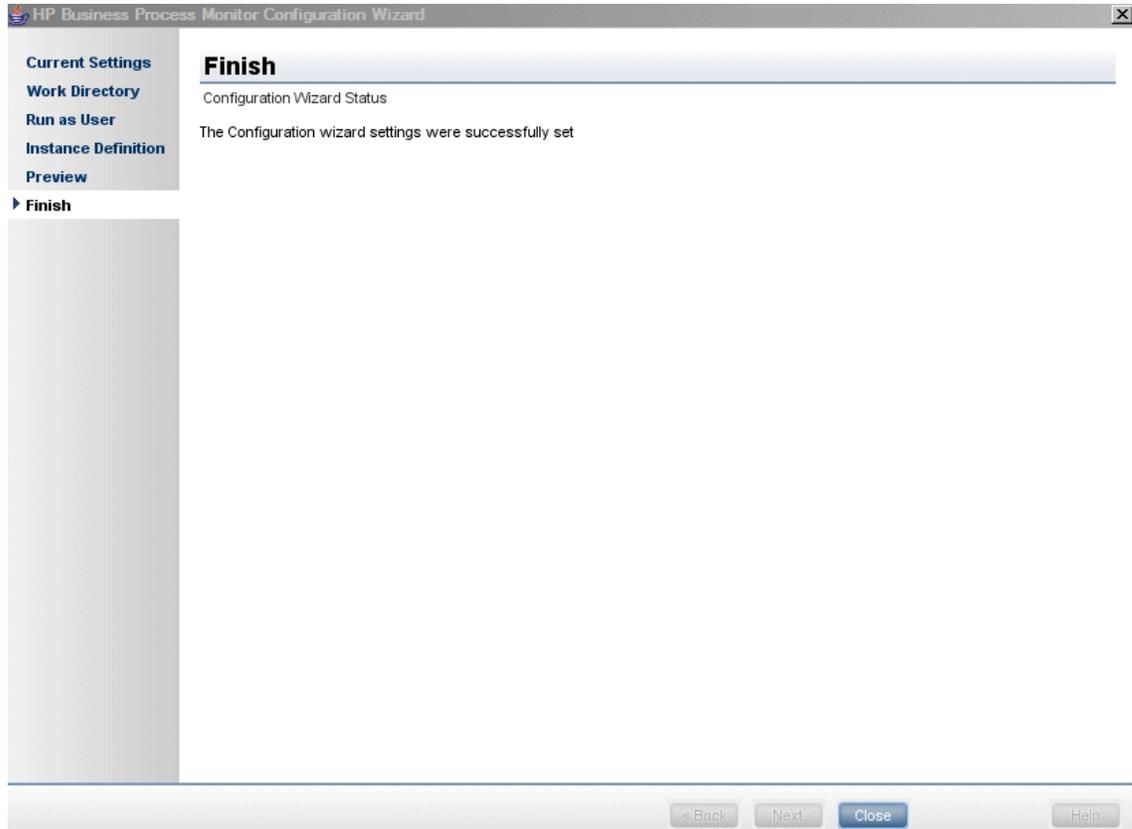
The following is an example of the Preview page in a Windows installation.



<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>	<p>The BPM Configuration Wizard contains:</p> <p><a href="#">"Current Settings Page" on page 28</a> &gt; <a href="#">"Work Directory Page" on page 29</a> &gt; <a href="#">"Run as User Page" on page 30</a> &gt; <a href="#">"Instance Definition Page" on page 32</a> &gt; <b>Preview Page</b> &gt; <a href="#">"Finish Page" on the next page</a></p>

## 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 BPM Configuration Wizard contains: <a href="#">"Current Settings Page" on page 28</a> > <a href="#">"Work Directory Page" on page 29</a> > <a href="#">"Run as User Page" on page 30</a> > <a href="#">"Instance Definition Page" on page 32</a> > <a href="#">"Preview Page" on the previous page</a> > <b>Finish Page</b>
<b>Important Information</b>	After Setup successfully completes the installation process, BPM is added as a service and launched on the machine. For details on stopping and starting BPM manually, see "Running Business Process Monitor" in the Business Process Monitor Administration Guide.

## Running a Silent Installation

You can use a silent installation procedure to run the BPM 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" below](#)
- ["How a Silent Installation Assigns Values" below](#)
- ["Silent Installation Prerequisites" on the next page](#)
- ["Silent Installation for Windows" on page 40](#)
- ["Configuring the bpm\\_install\\_config.xml File" on page 41](#)
- ["Notes and Limitations" on page 46](#)

## 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 of 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 BPM 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 BPM 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 BPM application directory is:

- **Windows Server 2003 and Windows XP**—C:\Documents and Settings\All Users\Application Data\HP\BPM
- **Windows Server 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 BPM. 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 BPM on the machine, it uses default settings. The default settings configure BPM to run as a system user and locate the workspace directory in the default BPM 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 Guide.

For details on configuring the bpm\_install\_config.xml file, see "[Configuring the bpm\\_install\\_config.xml File](#)" on page 41.

## Silent Installation Prerequisites

Before you begin a silent installation of BPM, make sure of the following:

### Prerequisite Programs

If not already installed on the machine on which you are installing BPM, the following prerequisite programs will be installed as part of the silent installation:

- .NET Framework 3.5 SP1
- .NET Framework 4.0
- Microsoft Data Access Components (MDAC) 2.8 SP1 (or later)
- Microsoft Windows Installer 3.1 or later
- Microsoft Visual Studio 2005 Service Pack 1 MFC Security Update (x64)
- Microsoft Visual Studio 2005 Service Pack 1 MFC Security Update (x86)
- Microsoft Visual Studio 2008 Service Pack 1 MFC Security Update (x64)
- Microsoft Visual Studio 2008 Service Pack 1 MFC Security Update (x86)
- Microsoft Visual Studio 2010 Service Pack 1 MFC Security Update (x86)

- Microsoft Core XML Services (MSXML) 6.0
- 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

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

1. Save the BPM Setup file for Windows on the machine on which you are installing BPM. For more details on the location of the BPM Setup file, see "[General Installation Information](#)" on [page 14](#).
2. Extract the files from the downloaded file to a location of your choice on the machine on which you are installing BPM. To extract the installation files, run the BPM 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 and in the common directory. For example:
  - Windows\BPM\En\prerequisites
  - Windows\BPM\Common

You can also obtain the prerequisite programs from the Internet.

## Uninstall Previous Versions of Business Process Monitor

You must uninstall any previous versions of BPM from each machine on which you are installing BPM. For details on uninstalling Business Process Monitor, see "[Uninstalling Business Process Monitor](#)" on [page 46](#).

## Assign Administration Privileges

You must have administration privileges for each machine on which you are installing BPM.

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

If you want to use a silent installation to install BPM 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 [the next page](#).

## Silent Installation for Windows

You run a silent installation on Windows using the regular setup program.

**To run a silent installation:**

1. Save the BPM Setup file for Windows on the machine on which you are installing BPM. For more details on the location of the BPM Setup file, see ["General Installation Information" on page 14](#).
2. Extract the files from the downloaded file to a location of your choice on the machine on which you are installing BPM. To extract the installation files, run the BPM setup program and once the files are extracted, terminate the installation process.
3. 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:

```
<extracted files path>\en\setup.exe /s /! *v C:\BPM_Install_log.txt
```

where:

- **/s**—silent mode
- **!/ \*v**—log with verbose

4. Monitor the log file until you see the following message:

"Product: HP Business Process Monitor -- Installation completed successfully."

## 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 BPM machine. For details on how the silent installation assigns values, see ["How a Silent Installation Assigns Values" on page 38](#).

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 the next page](#)
- ["Description of the xml Schema File \(.xsd\) Structure" on page 43](#)
- ["Sample Files" on page 45](#)

## 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 HP 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:sequence>
          </xsd:complexType>
        </xsd:element>
      </xsd:sequence>
    </xsd:complexType>
  </xsd:element>
  <xsd:attribute name="hostName" type="xsd:string" use="required"/>
</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 BPM installation.	
<b>runBpmAsUser.</b> For running the BPM 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.	
<b>instance.</b> Default instance settings. For details on BPM instances, see "Business Process Monitor Instance Page" in the Business Process Monitor Administration Guide.	<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 (_).	
	<b>serverUrl.</b> The URL of the BSM Gateway Server to which this instance sends collected data. The URL must be in the following format: http (or https)://<Gateway Server name or IP address>:<port number>/topaz. If you do not specify a port number, the default port is used (80 for http and 443 for https).	
	<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> .	
	<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> .	
	<b>timeInterval.</b> The defined frequency (in minutes) with which BPM polls BSM for time synchronization. This is an integer positive number.	
	<b>jobInterval.</b> The defined frequency (in minutes) with which BPM polls the database for assigned task, application, and business transaction flow changes. This is an integer positive number of up to 4 digits.	

Parent Element	Element	Sub Element
<p><b>instance</b></p>	<p><b>authentication.</b> Set to <b>yes</b> if authentication is required for the instance and configure the authentication parameters for the BPM instance to support the authentication scheme in use by the server (basic or NTLM authentication)</p>	<p><b>username.</b> The name of the user (recognized by the BSM Gateway Server) for authentication.</p>
		<p><b>password.</b> The password for the user.</p>
		<p><b>domain.</b> The domain of the user.</p>
<p><b>instance</b></p>	<p><b>ssl.</b> Set to <b>yes</b> if the BPM instance is communicating with the BSM Gateway Server using SSL.</p> <p>For more information on supporting SSL communication, see "Communication Using SSL" in the Business Process Monitor Administration Guide.</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>	<p><b>proxy.</b> Set to <b>yes</b> if the BPM instance is accessing the BSM Gateway Server through a proxy server.</p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <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 <b>serverUrl</b> element of the instance.</li> <li>You cannot connect a forward proxy configured for NTLM authentication to a BSM server configured for SSL.</li> </ul>	<p><b>username.</b> The user name for the proxy server.</p> <p><b>Note:</b> To configure a user name, you must also configure the proxy server URL.</p>
		<p><b>password.</b> The password for the user.</p>
		<p><b>domain.</b> The domain of the user.</p>
		<p><b>url.</b> The URL for the proxy server.</p> <p><b>Note:</b> 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.</p>
<b>instance</b>	<p><b>runAsUser.</b> Set to <b>yes</b> to run the instance as a specific user.</p>	<p><b>username.</b> The specific user name.</p>
		<p><b>password.</b> The password for the specific user (for Windows).</p>
		<p><b>domain.</b> The domain of the specific user (for Windows).</p>

**Note:** To configure parameter values for multiple BPM 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\TARGETDIR\ServletContainer\webapps\ROOT\help\BPMWeb\Content\sample_files` directory when you download and extract the BPM 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 BPM setup file, see "[Silent Installation for Windows](#)" on page 40.

## Notes and Limitations

Note the following when using a silent installation method for BPM:

- 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 49.
- 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 BSM Gateway Server in the bpm\_install\_config.xml file, it must end with **/topaz**.
- Do not install BPM 9.22 on the same machine as HP Virtual User Generator (VuGen), as it can cause instability issues.

## Uninstalling Business Process Monitor

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

The following procedures relate to uninstalling BPM version 9.22 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 BPM on a Windows platform

1. On the host machine, shut down BPM Admin and BPMs (select: **Start > Programs > HP Business Process Monitor > Stop HP Business Process Monitor Service**).
2. Wait two minutes.

3. Run the BPM 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 BPM installation.)

Delete the BPM **config** folder from the machine.

6. Delete the BPM 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 BPM on a Windows platform using MSI

1. Locate the **HP\_BPM.msi** file, which is included in the BPM setup files for Windows. For details on downloading and extracting files from the BPM setup file for Windows, see "[Silent Installation for Windows](#)" on page 40.
2. Open the command prompt window (**Start > Run > cmd**) and enter the following command:

```
msiexec /x <path to where the HP_BPM.msi file is located>\HP_BPM.msi /quiet /! *v C:\silent_uninstallation_log.txt /! *v
```

where:

- **quiet**—quiet mode (there is no user interaction).
  - **! \*v**—log with verbose
3. (**Important:** This step should only be performed if you do **not** want to save the configuration settings for use by a future BPM installation.)

After the silent uninstall has finished, delete the BPM **config** folder from the machine.

4. Delete the BPM 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" below](#)
- ["Log Files" on the next page](#)

## Windows Platforms

This section describes troubleshooting problems when installing BPM on a Windows platform.

### Cannot Set BPM to Run as a Different User

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

1. Stop BPM.
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 Server 2003 and Windows XP

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

- Windows Server 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 BPM. BPM now runs as a system user.
5. From BPM Admin, set BPM to run as a new specific user (with Administrator permissions).

### Error Message when Installing Prerequisites on Windows 7

When installing BPM 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 BPM 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
<b>ihp_custom_batches.log</b>	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.
<b>bpm_setup.log</b>	The main log file for the MSI installation.
<b>bpm_inst_bat.log</b>	The log file that reflects the command line that launched MSI.
<b>Prereq_Mgr.Business_Process_Monitor.log</b>	The log file that contains the output from <b>setup.exe</b> .
<b>BpmInstall.log</b>	The log file that contains all log messages from the configuration tool.
<b>BpmInstallStdOut.log</b>	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
<b>BpmInstall.log</b>	The log file that contains all log messages from the Configuration wizard.
<b>BpmInstallStdOut.log</b>	The log file that contains the standard output from the Configuration wizard.