HP Business Service Management

For the Windows and Linux operating systems

Software Version: 9.20

BSM System Requirements and Support Matrixes

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Documentation Updates

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

- Software Version number, which indicates the software version.

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Support

Visit the HP Software Support Online web site at:

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This web site provides contact information and details about the products, services, and support that HP Software offers.

HP Software online support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the support web site to:

- Search for knowledge documents of interest
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BSM System Requirements

This section contains:

HP BSM Servers

Computer/ Processor	**Windows:**
	The following CPU types are supported (further CPU requirements also appear below, see Memory and CPU Requirements):
	• Intel Dual Core Xeon Processor 2.4 GHz or higher
	• AMD Opteron Dual Core Processor 2.4 GHz or higher
	Tip: As BSM performance is dependent upon processor speed, it is recommended to get the fastest possible processor speed to ensure proper performance.

Operating System	**Windows:**
	• Windows Server 2008 Enterprise Edition SP2 or later (64 bit) *****
	• Windows Server 2008 Standard Edition SP2 or later (64 bit) *****
	• Windows Server 2008 R2 Enterprise Edition, including all service packs (64 bit) *****
	• Windows Server 2008 R2 Standard Edition, including all service packs (64 bit) *****
	* Note: User Access Control (UAC) must be disabled during the installation process.
	Linux:
	• RedHat Enterprise Linux 5.3 (Intel x64 64 bit)
	• RedHat Enterprise Linux 5.4 (Intel x64 64 bit)
	• RedHat Enterprise Linux 5.5 (Intel x64 64 bit)
	• RedHat Enterprise Linux 5.6 (Intel x64 64 bit)
	• RedHat Enterprise Linux 5.7 (Intel x64 64 bit)
	Note: Regardless of the operating system version, the entire Distribution (with OEM support) and the latest recommended Patch Cluster are required.
Domain Name	Each BSM server must have a resolvable Fully Qualified Domain Name.
Web Server	**Windows:**
	• Microsoft Internet Information Server (IIS) 6.0
	• Microsoft Internet Information Server (IIS) 7.0, 7.5
	• Apache HTTP Server - requires use of Apache HTTP Server version adapted by HP for BSM and installed during the BSM server installation
	Linux:
	Apache HTTP Server (adapted by HP for BSM and installed during the BSM server installation)

Memory and CPU Requirements

The following table lists the memory and CPU requirements according to some of the deployment scenarios available for BSM. To get the most accurate requirement information for your deployment, use the capacity calculator. You can access the capacity calculator on the SSO site: http://support.openview.hp.com/selfsolve/document/KM1430983/binary/BSM_920_BSM_9_ Deployment_and_Capacities.xls

Certified Deployment	Server Type	Memory	CPU	Minimum Virtual Memory/ Swap Space
APM Basic	One machine	8 GB	4 CPU	8 GB
APM Advanced	Gateway	8 GB	8 CPU	8 GB
APM Advanced	DPS	19 GB	8 CPU	8 GB
OPS Basic	One machine	8 GB	4 CPU	8 GB
OPS Advanced	Gateway	9 GB	8 CPU	8 GB
OPS Advanced	DPS	20 GB	8 CPU	8 GB
BSM Full	Gateway	10 GB	8 CPU	8 GB
BSM Full	DPS	24 GB	8 CPU	8 GB

HP BSM Databases

Hardware Requirements

The following table describes the hardware (CPU and memory) requirements recommended for the HP BSM Oracle or Microsoft SQL database server:

Deployment	Number of Processors	Physical Memory
Standard	1 dual core	Minimum: 2G RAM Recommended: 4G RAM
Large	Minimum 2 dual core or 1 quad core	Minimum: 4G RAM Recommended: 8G RAM and up

For larger deployments, a separate database server is required for Business Process Insight and for TransactionVision. In smaller deployments, they can share the database server.

For details on the criteria for standard and large deployments of HP BSM, see the *HP Business Service Management Database Guide PDF*.

Software Requirements - Oracle Server

The following table lists the Oracle servers supported for working with HP BSM.

Database Release - Version	System Type
Oracle 10.2 (10.2.0.5 or later component specific release number 10.2.0.X) Enterprise Edition	64 bit
Oracle 10.2 (10.2.0.5 or later component specific release number 10.2.0.X) RAC Enterprise Edition	64 bit
Oracle 11.2 (11g R2) Enterprise Edition	64 bit
Oracle 11.2 (11g R2) RAC Enterprise Edition	64 bit

Note:

- It is strongly recommended to apply the latest critical Oracle patches per your operating system. For details, consult the Oracle documentation.

- Consult the Oracle documentation for supported platforms.

- The Oracle Partitioning option must be enabled.

Examples of Tested Deployments - Oracle Server

The following table details the deployment environments that were tested by HP.

Database Release		
Version	**System Type**	**Operating System**
Oracle 11.2 (11g R2) Enterprise Edition	64 bit	Linux Enterprise Edition RHEL 5
Oracle 11.2 (11g R2) RAC Enterprise Edition	64 bit	Linux Enterprise Edition RHEL 5
Oracle 10.2.0.5 Enterprise Edition	64 bit	Linux Enterprise Edition RHEL 5
Oracle 11.2 (11g R2) Enterprise Edition	64 bit	Solaris 10

Software Requirements - Microsoft SQL Server

The following table describes the Microsoft SQL servers supported for working with BSM:

Database Release		
Version	**System Type**	**Service Pack**
Microsoft SQL Server 2008 R2 Enterprise Edition	64 bit	Service Pack 1
Microsoft SQL Server 2008 Enterprise Edition	32 bit	Service Pack 2, 3
Microsoft SQL Server 2008 Enterprise Edition	64 bit	Service Pack 2, 3

Note:

- Only supported service packs should be installed.
- Consult the Microsoft SQL Server documentation for supported platforms.

Examples of Tested Deployments - Microsoft SQL Server

The following table details the deployment environments that were tested by HP.

Database Release			
Version	System Type	Service Pack	Operating System
Microsoft SQL Server 2008 R2 Enterprise Edition	64 bit	Service Pack 1	Windows 2008 R2 Enterprise Edition Service Pack 1 (64-bit)
Microsoft SQL Server 2008 Enterprise Edition	32 bit	Service Pack 3	Windows 2008 Enterprise Edition Service Pack 2

Client Requirements for Viewing BSM

Display	**Minimum:** color palette setting of at least 256 colors
	Recommended: color palette setting of 32,000 colors
Resolution	1400x1200 or higher (recommended)
	1280x1024 (supported)
Supported Browsers	- Microsoft Internet Explorer (IE) 9.0 - Microsoft Internet Explorer (IE) 8.0 - Microsoft Internet Explorer (IE) 7.0 - Mozilla Firefox ESR 10.0 **Note:** - The browser must be set to accept third-party cookies and allow session cookies. - The browser must be set to enable JavaScript execution. - The browser must allow pop-ups from the BSM application. - Internet Explorer users must set browser caching to automatically check for newer versions of stored pages.

Flash Player	Adobe Flash 10.1 or later
Fonts	The following fonts must be installed on client systems: • MS Gothic for Japanese locales • Gulim for Korean locales • SimSun for simplified Chinese locales • Arial for all other locales
Java Plug-in (to view applets)	**Recommended:** Version 6 update 31 **Supported:** Version 6 update 26 and higher, or version 7 **Note:** You may not be able to view all BSM applets with an earlier version of Java and you will need to download the latest version from the Java download site (http://www.java.com/en/download/manual.jsp) and install it. You may also have to disable earlier versions after download. To do this in Internet Explorer: Select **Tools > Internet Options > Advanced** tab, locate the **Java (Sun)** item and select the check box for the correct Java version, click **OK**, close the browser, and reopen it. For details about how to verify the Java version in Mozilla Firefox, see the Mozilla Firefox documentation.

Server Environment Settings

Time settings	All BSM servers and database servers must have the same settings for the following: • Time zone • Daylight Saving Time configuration • Time
Name resolution	The BSM servers must be able to resolve the names of the machines with which they must communicate. These include all the BSM servers, database servers, and data collectors.

TCP	**Windows:**
	It is highly recommended that you make the following change in your registry:
	For registry key MACHINE\SYSTEM\CurrentControlSet\Services\ Tcpip\Parameters, create a new key TcpTimedWaitDelay (DWORD) and set the (Decimal) value to 60.
	If this is not done, there may be a problem with exhausting the available TCP resources because the time delay default value may be too long.
	Tip: When working with the registry, it is recommended that you back it up before making any changes.

HP BSM on Virtual Platforms

The following general limitations and recommendations are applicable to an installation on a virtual machine:

- The following virtualization platforms are supported:

  - VMware ESX 3.x, 4.x, ESXi 5.x

  - Microsoft Hyper-V

- Performance of BSM on a virtual machine can be expected to be slower than in a regular installation.

- Business Process Monitors can be run in a VMware environment, but HP will not address or resolve any support issues arising from Business Process Monitors running in a VMware environment.

- BSM capacities and performance will vary according to the various server resources, such as CPU, memory, and network bandwidth, allocated to BSM components.

- A Gigabit network card should be used.

- If you plan to run a database server containing HP BSM databases on a virtual machine, check with your database vendor for their support policies and performance implications.

- Refer to the SiteScope documentation for details on SiteScope requirements for installing on a virtual machine.

IPV6 Support

All management information in BSM that represents an IP address can be either an IPv4 or IPv6 address, and the data is processed, stored, and displayed correctly in the product. BSM can be installed on dual-stack servers, but the network transport between many BSM components is limited to IPv4 routing and does not yet support IPv6 addresses. RUM, SiteScope, and the Operations Agent can manage the IT infrastructure over IPv6 routing. RUM can monitor real-user network traffic in IPv6 networks, various SiteScope monitors can connect to managed servers over IPv6, and the agent handles SNMP and WMI monitoring over IPv6.

Component Support and Compatibility

This section contains:

Business Process Monitor 9.13 System Support Matrix

For complete BPM support information, see the BPM Administration Guide and readme.

Business Process Monitor – Operating Systems	Microsoft Windows Server 2008 SP2 (32/64 bit) Standard and Enterprise Editions
	Microsoft Windows Server 2008 R2 (64 bit) Standard and Enterprise Editions
	Microsoft Windows 7
	Microsoft Windows Vista SP2 (32 bit)
	Microsoft Windows Server 2003 SP2 (32bit) Standard and Enterprise Editions
	Microsoft Windows Server 2003 SP2–Release 2 (32bit) Standard and Enterprise Editions
	Microsoft Windows XP Professional SP3 (32bit)

Business Process Monitor Compatibility Matrix

For each BPM version, the latest supported 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)	√	√	√
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 9.0x	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	√	√

Note: HP Quick Test Professional 10.0 can be obtained from HP BTO Software Web site. The link is accessible from HP QuickTest Professional software page (look for HP QuickTest Professional 10.0 Evaluation). You can also use the following link: http://www8.hp.com/us/en/software-solutions/software.html?compURI=1172122

Business Process Monitor Protocol Support Matrix

The following table describes the BPM 9.13 supported protocols.

Protocol	Windows
.NET	√
AJAX	√
AJAX TruClient	√
C VUser	√
Citrix 1.8	√
COM/DCOM	√
CORBA-java	√
DB2 CLI	√
DNS	√
EJB	√
Flex	√

Protocol	Windows
FTP	√
IMAP	√
I-mode	√
Informix	√
acJada	√
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	√

Protocol	Windows
Siebel MSSQL	√
Siebel Oracle	√
Silverlight	√
SMTP	√
SOAP	√
Sybase CtLib	√
Sybase DBlib	√
Terminal Emulation [RTE]	√
Tuxedo 6	√
Tuxedo 7	√
VB VUser	√
Voice XML	√
WAP	√
Web [HTTP/HTML]	√
Web Click and Script	√
Windows sockets	√

Note: Some of the protocols require the installation of additional software components and therefore are platform dependent.

Supported protocols via QTP add-ins:

Web
Perfecto Mobile MobileCloud for QTP Add-in
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

SiteScope 11.2x System Support Matrix

SiteScope – Operating Systems	Windows	**32-bit Support:** ● Microsoft Windows 2003 SP2 Standard/Enterprise Edition ● Microsoft Windows Server 2003 R2 SP2 Enterprise Edition ● Microsoft Windows Server 2008 SP2 Standard/Enterprise Edition ● Microsoft Windows Server 2008 SP2 Standard/Enterprise Edition Hyper-V guest (32 or 64-bit) hosted on Windows Server 2008 R2 **64-bit Support:** ● Microsoft Windows Server 2003 SP2 Standard/Enterprise Edition ● Microsoft Windows Server 2003 R2 SP2 Enterprise Edition ● Microsoft Windows Server 2008 SP2 Standard/Enterprise Edition ● Microsoft Windows Server 2008 R2 Standard/Enterprise Edition without Hyper-V ● Microsoft Windows Server 2008 R2 Standard/Enterprise Edition with Hyper-V enabled ● Microsoft Windows Server 2008 R2 Hyper-V guests (64-bit) hosted on Windows Server 2008 R2 Standard/Enterprise Edition ● Microsoft Windows Server 2008 SP2 Standard/Enterprise Edition Hyper-V guests (64-bit) hosted on Windows Server 2008 R2 Standard/Enterprise Edition

	Solaris	• Solaris 9 (32-bit) with latest recommended patch cluster
		• Solaris 10 (32 or 64-bit) with latest recommended patch cluster
	Linux	• Oracle Enterprise Linux 6.0, 6.1 (64-bit) *****
		• Red Hat ES/AS Linux 5.2, 5.4 (32-bit)
		• Red Hat ES/AS Linux 5.5, 5.6 (32 or 64-bit)
		• Red Hat ES Linux 6.0, 6.2 (64-bit)
		• CentOS 6.2 (64-bit) *****
		Note:
		• *****This environment must be manually configured before installing SiteScope. For details, see the SiteScope Deployment Guide.
		• The Red Hat Linux 6.0 server must be manually configured before installing the HP Operations agent. For details, see the SiteScope Deployment Guide.
		• Red Hat Linux 9 with Native POSIX Threading Library (NPTL) is not supported.
		• To be able to monitor CPU and memory usage on SiteScope or a remote server running on a Red Hat Linux environment, the **sysstat** package must be installed on the SiteScope server and on all remote servers being monitored (it is not included out-of-the-box).
		• When SiteScope is installed on Red Hat Linux, the SiteScope Server Health monitor requires valid output of sar -W and sar -B commands for the SwapIns/sec, SwapOuts/sec, PageIns/sec, and PageOuts/sec counters. If these commands do not work, no errors are thrown and these counters are shown as **n/a**. To enable them to run, edit the crontab by adding the command "/usr/local/lib/sa/sadc -" to run once a day.

SiteScope Compatibility Matrix

Compatibility Matrix	HP BSM 9.20	HP BSM 9.1x	HP BSM 9.0x	HP BAC 8.0x	HP BAC 7.50	HP BAC 7.0
SiteScope 11.2x	√[1]	√	√	√	X	X
SiteScope 11.1x	√	√[1]	√	√	√	X
SiteScope 11.0x	√	√	√[1]	√	√	X
SiteScope 10.1x	X	√	√	√[1]	√	√
SiteScope 10.00	X	X	X	√	√	√
SiteScope 9.5x	X	X	X	√	√[1]	√
SiteScope 9.0x	X	X	X	√	√	√

[1]Recommended

System Health Support

BSM 9.20 uses System Health for BSM 9.20. The System Health for BSM 9.20 support matrix is identical to that of SiteScope 11.20 (see "SiteScope 11.2x System Support Matrix" on page 19).

Real User Monitor 9.20 System Support Matrix

Real User Monitor Probe – Operating Systems	Windows	Microsoft Windows Server 2008 SP2 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2008 R2 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2008 R2 SP1 (32/64 bit) Standard and Enterprise editions
	Solaris	Not supported
	Linux	Red Hat Enterprise Linux Version 5.0 (RHEL5) 64-bit and 32-bit versions
Real User Monitor Engine – Operating Systems	Windows	Microsoft Windows Server 2008 SP2 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2008 R2 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2008 R2 SP1 (32/64 bit) Standard and Enterprise editions

Real User Monitor Supported Virtualized Environments

	Brand	Version
Real User Monitor 9.20 Probe	VMware ESX	3.x
		4.x
		5.x
Real User Monitor 9.20 Engine	VMware ESX	3.x
		4.x
		5.x

Real User Monitor Compatibility Matrix

Compatibility Matrix	HP BSM 9.20	HP BSM 9.13	HP BSM 9.12	HP BSM 9.10	HP BSM 9.0x	HP BAC 8.0x	HP BAC 7.5x	HP BAC 7.0x
Real User Monitor 9.20	√	√	√	√	X	X	X	X
Real User Monitor 9.13	X	√	√	√	X	X	X	X
Real User Monitor 9.12	X	X	√	√	X	X	X	X
Real User Monitor 9.10	X	X	X	√	X	X	X	X
Real User Monitor 9.02	X	X	X	X	√	X	X	X
Real User Monitor 9.01	X	X	X	X	√	X	X	X
Real User Monitor 9.00	X	X	X	X	√	X	X	X
Real User Monitor 8.0x	X	X	X	X	X	√	X	X
Real User Monitor 7.5x	X	X	X	X	X	X	√	X
Real User Monitor 7.0	X	X	X	X	X	X	X	√

Note: Real User Monitor 7.01 works only with Business Availability Center 7.01.

HP Operations Manager (HPOM) and Agent Support

BSM 9.2x/HPOM Support Matrix

HPOM Type	Version	Required Patches
HP Operations Manager for Windows	8.16	Server Patch OMW_00090 or higher Accessories Patch OMW_00092 or higher HPOM Server Node: One of the following HP Operations Agent versions: ● HP Operations Agent 8.60.501 ● HP Operations Agent 11.02.011 or higher
	9.00	HPOM Server Node: One of the following HP Operations Agent versions: ● HP Operations Agent 8.60.501 ● HP Operations Agent 11.02.011 or higher
HP Operations Manager for UNIX or Linux	9.10	PHSS_41692 or higher for HPOM 9.10 for HP-UX OML_00034 or higher for HPOM 9.10 for Linux ITOSOL_00748 or higher for HPOM 9.10 for Solaris HPOM Server Node: One of the following HP Operations Agent versions: ● HP Operations Agent 8.60.501 ● HP Operations Agent 11.02.011 or higher

If you are currently using HPOM for UNIX or HPOM for Windows in an HPOM manager of managers scenario you can use the following strategies to integrate information from these installations to BSM:

● Topology Synchronization

  ■ With an OMi-ready SPI on HPOM, use Configuration Upload to move topology information to a supported version of HPOM. Then use Basic or Dynamic Topology Synchronization to synchronize with BSM.

  ■ Use other discovery technologies such as HP Data Flow Management (formerly known as the HP Discovery and Dependency Mapping) using the Data Flow Probe.

● Event Forwarding

  ■ Events may be sent from an HPOM system to a supported version of HPOM, and from there

to BSM. Note that events can only be related to CIs and set ETIs if they contain corresponding information, and if the CIs exist in the RTSM.

BSM 9.2x/HP Operations Agent Support

The following versions of the OM agent can co-exist with BSM on the BSM server:

- 8.60.501

- 11.02.011 or higher

SiteScope 11.2x/HPOM Integration Matrix

	SiteScope 11.2x Integration		
HP Operations Manager Version	**Events integration**	**Node discovery Integration**	**Monitor Discovery Integration**
HP Operations Manager for Windows 8.1x (with patch OMW_00149)	√	√	√
HP Operations Manager for Windows 9.0	√	√	√
HP Operations Manager for Linux/UNIX/Solaris 9.10	√	X	√

HP Operations Smart Plug-in Support Matrix

To use Content Packs with HP Operations Smart Plug-ins (SPIs), you must install the corresponding SPI patches on the HP Operations Manager (HPOM) management server that is connected to BSM. The patch numbers are listed in the following table. Periodically check the HP Software Support website for new patches.

Download the patch files from: http://www.hp.com/go/hpsoftwaresupport

Smart Plug-in	Patch Version	Windows Patch Number	UNIX/Linux Patch Number
Microsoft Active Directory, version 06.10	6.11	OMW_00045	N/A
Microsoft Active Directory, version 7.00	7.06	OMW_00079	PHSS_41318 OML_00017 ITOSOL_00734
		Hotfix for QCCR1A144907	

Smart Plug-in	Patch Version	Windows Patch Number	UNIX/Linux Patch Number
Microsoft Exchange Server, version 12.10	12.11	OMW_00046	N/A
Microsoft Exchange Server, version 13.00	13.08	OMW_00078 and OMW_00106 OMW_00107 (for HPOM for Windows 9.00 Hotfix for QCCR1A130090 Hotfix for QCCR1A145521	PHSS_41317 OML_00016 ITOSOL_00733 For Exchange 2010 support: OMU: PHSS_41939; OMS: ITOSOL_00755; OML: OML_00041
Microsoft Enterprise Servers, version 08.02	08.03	OMW_00094 (for HPOM for Windows 8.16) OMW_00105 (for HPOM for Windows 9.00)	N/A
Microsoft SQL Server, version 11.50	11.53	OMW_00113	N/A
Microsoft SQL Server, version 12.00	12.04	OMW_00085 (For OMW 8.16)	PHSS_41328 OML_00022 ITOSOL_00739
Oracle Database, version 11.50	11.53	OMW_00112	N/A
Oracle Database, version 12.00	12.04	OMW_00084 (For OMW 8.16)	PHSS_41327 OML_00021 ITOSOL_00738
WebLogic, version 06.10	6.12	OMW_00038	N/A

Smart Plug-in	Patch Version	Windows Patch Number	UNIX/Linux Patch Number
WebLogic, version 07.00	7.04	OMW_00081 [Prerequisite Patch - JMX SPICOMPJMXWIN_00004]	PHSS_41320 [Prerequisite Patch - JMX SPICOMPJMXHPUX_00004] OML_00018 [Prerequisite Patch - JMX SPICOMPJMXLIN_00004] ITOSOL_00735 [Prerequisite Patch - JMX SPICOMPJMXSOL_00004]
WebSphere, version 7.00	7.04	OMW_00082 [Prerequisite Patch - JMX SPICOMPJMXWIN_00004]	PHSS_41324 [Prerequisite Patch - JMX SPICOMPJMXHPUX_00004] OML_00019 [Prerequisite Patch - JMX SPICOMPJMXLIN_00004] ITOSOL_00736 [Prerequisite Patch - JMX SPICOMPJMXSOL_00004]

Smart Plug-in	Patch Version	Windows Patch Number	UNIX/Linux Patch Number
Infrastructure, version 01.60		**SI SPI**	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2011-09-19_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2011-06-27_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2011-05-24_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2011-05-13_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2011-03-08_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2011-02-21_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2010-12-16_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2010-11-04_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2010-10-08_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2010-09-24_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2010-08-26_3	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2010-07-22_2	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2010-07-06_1	
		• HOTFIX_SPI_FOR_SYSTEMS_INFRASTRUCTURE_2010-04-30_1	
		VI SPI	
		• HOTFIX_SPI_VI_2011-03-08_1	
		• HOTFIX_SPI_VI_2010-08-19_1	
		• HOTFIX_SPI_VI_2010-11-09_1	
		CI SPI	
		• HOTFIX_SPI_FOR_CLUSTER_INFRASTRUCTURE_2011-02-15_1	
		• HOTFIX_SPI_FOR_CLUSTER_INFRASTRUCTURE_2010-09-24_2	
		• HOTFIX_SPI_FOR_CLUSTER_INFRASTRUCTURE_2010-06-07_1	
		Contact HP Support for the following hot fixes:	
		• QCCR1A121296 (For Systems Infrastructure Smart Plug-in)	
		• QCCR1A120317 (For Cluster Infrastructure Smart Plug-in)	
		• QCCR1A122013 (For Virtual Infrastructure Smart Plug-in)	
		• QCCR1A117084	

Smart Plug-in	Patch Version	Windows Patch Number	UNIX/Linux Patch Number
Infrastructure, version 02.00	2.01	OMW 9.x - INFSPIWIN_00002 OMW 8.16 - INFSPIWIN_00001	OMU 9.x - PHSS_42529 OML 9.x - INFSPILIN_00001 OMS 9.x- INFSPISOL_00001
IIS SPI	6.05	OMW 9.x - OMW_00128 OMW 8.16 - OMW_00127	OML 9.x - OML_00047 OMU 9.x - PHSS_42550 OMS 9.x - ITOSOL_00768
SAP SPI	12.04	OMW 8.16 - OMW_00146 OMW 9.x - OMW_00147	OML 9.x - OML_00054 OMU 9.x - PHSS_42872 OMS 9.x - ITOSOL_00776

BSM 9.20 Performance Grapher Compatibility Matrix

Component	Supported Versions
HP Operations Agent	8.6, 11, 11.01, 11.02, 11.03
HP Performance Agent	5
SiteScope	All versions supported by BSM 9.20
Business Process Monitor	All versions supported by BSM 9.20
Real User Monitor	All versions supported by BSM 9.20
HP Diagnostics	9.20

BSM Connector Compatibility Matrix

	BSM Connector 9.20	BSM Integration Adapter 9.1x	BSM Integration Adapter 9.0x
BSM 9.20	√[1]	√	√
BSM 9.1x	X	√[1]	√
BSM 9.0x	X	√[1]	√

[1] Recommended

Data Flow Probe Requirements

Data Flow Probe Compatibility

Data Flow Probe support for any given BSM release is limited to use of the version of the Probe that is provided on the installation media for that specific BSM release.

Data Flow Probe 9.05 System Support Matrixes

Hardware Requirements

Computer/processor	**Windows/Linux** Pentium IV 2.4 GHz or later processor **Recommended:** Dual Core
Memory	**Windows/Linux:** Minimum 1 GB RAM (Recommended: 2 GB RAM)
Memory swap file	**Windows:** Minimum: 2 GB RAM **Linux:** Minimum: 1 GB RAM **Note:** • The virtual memory for Windows should be at least double the size of the physical memory. • The Linux swap file size should be equal in size to the physical memory.
Free hard disk space	**Windows/Linux:** Minimum 4 GB (at least 4 GB for database software and data files) (Recommended: 20 GB hard disk)
Display	**Windows/Linux:** Color palette setting of at least 256 colors (32,000 colors recommended)

Software Requirements

Hardware Platform	OS Type	OS Version and Edition	Supported	Recommended
x86	Windows 2008	SP2, Standard/Enterprise editions, 32-bit	Yes	
x86-64	Windows 2008	SP2, Standard/Enterprise editions, 64-bit	Yes	Yes
x86-64	Windows 2008	R2 and R2 SP1, Standard/Enterprise editions, 64-bit	Yes	

HP Business Service Management (9.20)

Hardware Platform	OS Type	OS Version and Edition	Supported	Recommended
x86	Windows 2003	SP2 and R2 SP2, Standard/Enterprise editions, 32-bit	Yes	
x86-64	Windows 2003	SP2 and R2 SP2, Standard/Enterprise editions, 64-bit	Yes	
x86-64	Red Hat Linux 5 [1]	Enterprise/Advanced, 64 bit	Yes	
	Windows 7	Professional/Enterprise	No	
	Windows 2000		No	

Note: [1] The Data Flow Probe is supported on Linux for integration use only (for example, topology synchronization) and cannot be used for discovery. If the BSM server (One-machine or Gateway) is installed on a Linux machine and meets the Data Flow Probe's capacity requirements, the Data Flow Probe can also be installed on the BSM server if the Probe will only be used for topology synchronization.

Supported Databases

Database	Version and Edition	Recommended	Comments
MySQL	5.1.46	Yes	This database comes bundled with the Probe installation.

Virtual Environment Requirements

Platform	OS Version and Edition	Supported	Recommended
VMware ESXi 5.0	• Windows 2003 Standard/Enterprise editions SP2 and R2 SP2, 32/64-bit • Windows 2008 Standard/Enterprise SP2, 32/64-bit and R2, 64-bit • Red Hat Linux 5 Enterprise/Advanced, 64-bit	Yes	

Platform	OS Version and Edition	Supported	Recommended
VMware ESX 4.0, 4.1	• Windows 2003 Standard/Enterprise editions SP2 and R2 SP2, 32/64-bit • Windows 2008 Standard/Enterprise SP2, 32/64-bit and R2, 64-bit • Red Hat Linux 5 Enterprise/Advanced, 64-bit	Yes	Yes
VMware ESX 3.x	• Windows 2003 Standard/Enterprise editions SP2 and R2 SP2, 32/64-bit • Windows 2008 Standard/Enterprise SP2, 32/64-bit and R2, 64-bit • Red Hat Linux 5 Enterprise/Advanced, 64-bit	Yes	
Microsoft Hyper-V Server 2008 R2 SP1	• Windows 2003 Standard/Enterprise editions SP2 and R2 SP2, 32/64-bit • Windows 2008 Standard/Enterprise SP2, 32/64-bit and R2, 64-bit	Yes	
Pre ESX 3.5 (like 3.0.x versions)	• May not provide adequate performance • Does not support Windows 2008 or Windows 7	No	
VMware ESXi 4.1 and earlier	All platforms	No	
Xen Hypervisor 3.x	All platforms	No	

UCMDB Support Matrixes

BSM-CMS Synchronization Integration Matrix

BSM version	Integration Type	HP UCMDB (CMS) version
BSM 9.00, 9.01, 9.1x	Population synchronization from HP UCMDB (CMS) to BSM	9.01 or later
BSM 9.2x	Population synchronization from HP UCMDB (CMS) to BSM	later than 9.01
BSM 9.00, 9.01, 9.1x	Population synchronization from BSM to HP UCMDB (CMS)	9.01 or later
BSM 9.2x	Population synchronization from BSM to HP UCMDB (CMS)	later than 9.01

BSM-BSM Synchronization Matrix

Target BSM version	Synchronization Type	Source BSM Version
BSM 9.0x, 9.1x	Population from source to target	BSM 9.01 and later
BSM 9.2x	Population from source to target	Later than BSM 9.01

UCMDB Content Pack Support in BSM 9.20

In the table, √=supported, X=not supported.

	CP 11	CP 10.01	CP 10	CP 9.01	CP 9	CP 8
BSM 9.20	√	√ (default CP)	X	X	X	X

Note: Future Content Pack versions may also be supported. See the relevant Content Pack documentation for details, or check the SSO site for updated support matrix information.

SHA Data Collector System Requirements

System requirements for machines on which the SHA Data Collector for Performance Agent is installed are identical to the BSM system requirements, with the following exceptions:

- **CPU:** 2 CPUs

  The following CPU types are supported:

  - Intel Dual Core Xeon Processor 2.4 GHz or higher

  - AMD Operation Dual Core Processor 2.4 GHz or higher

- **Memory:** 2 GB
- **Virtual Memory/Swap Space:** 2 GB

Diagnostics Compatibility Matrix

	BSM 9.2x	BSM 9.1x	BSM 9.0x	BAC 8.0x	BAC 7.50
HP Diagnostics 9.2x	√	√	√	√	X
HP Diagnostics 9.1x	√	√	√	√	X
HP Diagnostics 9.02	√	√	√	√	X
HP Diagnostics 9.00, 9.01	X	X	√	√	X
HP Diagnostics 8.0x	X	X	X	√	√

TransactionVision Processing Server Compatibility Matrix

BSM Version	TransactionVision Processing Server Version
BSM 9.20	TV 9.20

TransactionVision Processing Server and Agent Compatibility Matrix

TransactionVision Agent	Versions of Agent Compatible with 9.20 Processing Server	Versions of Processing Server Compatible with 9.20 Agent
HP Diagnostics/TransactionVision Java Agent	8.0x, 9.0x, 9.10, 9.12, 9.20	9.20
HP Diagnostics/TransactionVision .NET Agent	8.0x, 9.0x, 9.10, 9.12, 9.20	9.20
WebSphere MQ Agent	8.0x, 9.0x, 9.10, 9.20	9.20
DataPower Agent	9.02, 9.10, 9.20	9.20
CICS, WMQ Batch, WMQ CICS, WMQ IMS, and IMS Bridge Agents on z/OS	8.0x, 9.0x, 9.10, 9.20	8.0x, 9.0x, 9.10, 9.20
Tuxedo Agent	8.0x, 9.00, 9.10, 9.20	9.20
NonStop TMF Agent	8.00, 9.10, 9.20	9.20

Note: If you require use of the 9.20 agent with an older Processing Server/Analyzer, contact HP TransactionVision Support for potential product compatibility/incompatibility details.

Business Process Insight Compatibility Matrix

	HP BSM 9.2x	HP BSM 9.1x	HP BSM 9.0x	HP BAC 8.0x	HP BAC 7.5 x
Business Process Insight 9.2x	√	X	X	X	X
Business Process Insight 9.1x	X	√	X	X	X
Business Process Insight 9.0x (9.00, 9.01)	X	X	√	X	X

	HP BSM 9.2x	HP BSM 9.1x	HP BSM 9.0x	HP BAC 8.0x	HP BAC 7.5 x
Business Process Insight 8.0x (8.00, 8.01, 8.02, 8.04)	X	X	X	√	X
Business Process Insight 7.5x	X	X	X	X	√

Verticals Support Matrixes

Application Management for SAP Component Support Matrix

Application Management for SAP works with SiteScope 10.x and SiteScope 11.x.

SAP Version	Limitations
SAP R/3 4.6 SAP R/3 4.7	• Service Health SAP reports do not have unified UI (QCCR1I47923) • Configuration file page is not displayed through Service Health context menu (QCCR1I47837)
ERP 2004 (ECC 5.0) ERP 2005 (ECC 6.0)	The following reports are not supported: • Show Impacting SAP Transports • Show SAP Transport Impact • SAP Transaction Changes • SAP Transport Changes

Application Management for Siebel Component Support Matrix

Application Management for Siebel works with SiteScope10.x and SiteScope 11.x.

Siebel Version	Solaris Operating System Version for Siebel Servers	Windows Operating System Version for Siebel Servers	Other Operating System Version (on the Siebel Servers)
Siebel 7.5.3	Solaris 5.9 SARM on mixed environment not supported	Windows 2000	
Siebel 7.7	Solaris 9	Windows 2000	
Siebel 7.8 (to work with SARM you must use SARMAnalyzer version 7.7)	Solaris 9	Windows 2000	

Siebel Version	Solaris Operating System Version for Siebel Servers	Windows Operating System Version for Siebel Servers	Other Operating System Version (on the Siebel Servers)
Siebel 8.0	Solaris 10	Windows 2003 Enterprise Edition Windows 2003 Datacenter edition	IBM AIX 5L version 5.3 HP-UX 11i V2 Red Hat Enterprise Linux 4 Oracle Enterprise Linux 4 Novell SUSE Linux Enterprise Server 9