HP Business Service Management

For the Windows ® and Linux operating systems

Software Version: 9.12

Release Notes

Legal Notices

Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

Restricted Rights Legend

Copyright Notice

Trademark Notices

Adobe® and Acrobat® are trademarks of Adobe Systems Incorporated.

AMD and the AMD Arrow symbol are trademarks of Advanced Micro Devices, Inc.

Google™ and Google Maps™ are trademarks of Google Inc.

Intel®, Itanium®, Pentium®, and Intel® Xeon® are trademarks of Intel Corporation in the U.S. and other countries.

Java is a registered trademark of Oracle and/or its affiliates.

Microsoft®, Windows®, Windows NT®, Windows® XP, and Windows Vista® are U.S. registered trademarks of Microsoft Corporation.

Oracle is a registered trademark of Oracle Corporation and/or its affiliates.

UNIX® is a registered trademark of The Open Group.

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

This product includes software developed by the JDOM Project (http://www.jdom.org).

This product includes software developed by the MX4J project (http://mx4j.sourceforge.net).

For information about third-party or open source license agreements, see the Open_Source_and_ Third_Party_Agreements directory on the product installation media.

Documentation Updates

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

- Software Version number, which indicates the software version.

- Document Release Date, which changes each time the document is updated.

- Software Release Date, which indicates the release date of this version of the software.

To check for recent updates or to verify that you are using the most recent edition of a document, go to:

    http://h20230.www2.hp.com/selfsolve/manuals

This site requires that you register for an HP Passport and log on. To register for an HP Passport ID, go to:

    http://h20229.www2.hp.com/passport-registration.html

Or click the **New users - please register** link on the HP Passport log on page.

You will also receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

Support

Visit the HP Software Support Online web site at:

http://www.hp.com/go/hpsoftwaresupport

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
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- Enter into discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract. To register for an HP Passport ID, go to:

http://h20229.www2.hp.com/passport-registration.html

To find more information about access levels, go to:

http://h20230.www2.hp.com/new_access_levels.jsp

Contents

About This Service Pack

This service pack includes the following updates:

- New functionality (for details see "What's New in This Release" (on page 11)

- Customer escalation fixes (for details, see "Fixed Issues" (on page 99))

- Internal bug fixes

Installation Instructions

For complete instructions on installing this Service Pack, see the relevant deployment or upgrade documentation:

- New customers should follow the instructions in the BSM 9.12 Deployment Guide.

- Existing customers upgrading from 7.x, 8.x, or 9.x should follow the instructions in the BSM 9.12 Upgrade Guide.

Service Pack Documentation

This service pack contains the following documentation and updates:

- BSM_912_Release_Notes.pdf (this file)

- whatsnew.pdf

- Reissue of the BSM documentation set

Updated Components Associated with this Service Pack

The following updated components have been released in parallel to BSM 9.12. They must be downloaded separately from the software patches download site.

- **Real User Monitor Probe 9.12**

  For instructions on installing the Real User Monitor probe, see the Real User Monitor Administration Guide.

  - Bug fixes

- **Real User Monitor Engine 9.12**

  For instructions on installing the Real User Monitor engine, see the Real User Monitor Administration Guide.

  - Support for extracting user names from SiteMinder

  - Support Flex AMF (over HTTP) protocol

  - Support IBM WebSphere MQ protocol

  - Bug fixes

- **Data Flow Probe 9.04**

  To install the Data Flow Probe, first stop any existing Data Flow Probe instances (if you have a previous version running), then uninstall the existing Data Flow Probe via **Start > Programs > UCMDB** or **HP DFM > Uninstall UCMDB Data Flow Probe** or **Uninstall HP DDM Probe**. Then, run **HPUCMDB_DataFlowProbe_904.exe**. Finally, start the 9.04 Data Flow Probe.

  - Bug fixes

- **SiteScope 11.12**

  For instructions on installing SiteScope, see the SiteScope Deployment Guide.

  - Content updates and bug fixes (for details, see the SiteScope readme file, ReleaseNotes.htm, available in the SiteScope installation directory)

- **System Health for BSM 9.12 (based on SiteScope 11.10 + System Health for BSM 9.12 patch)**

  For general instructions on installing System Health, see the BSM Platform Administration Guide. To install System Health for BSM 9.12, install System Health using SiteScope 11.10, then install the System Health for BSM 9.12 patch on top.

  - Add Linux installation to System Health (SiteScope) installer

  - Support for running on secure BSM environment

  - Support for monitoring BSM on Linux

  - Add monitor troubleshooting information

  - Support installation via SLICK

  - Bug fixes

- **TransactionVision 9.10**

  For installation instructions, see the TransactionVision Deployment Guide.

  - The following TransactionVision components have been updated with bug fixes: TransactionVision Processing Server, TransactionVision WMQ Agent, TransactionVision z/OS Agents, TransactionVision Tuxedo Agent, TransactionVision Nonstop TMF Agent, Diagnostics/TransactionVision Java Agent, Diagnostics/TransactionVision .NET Agent

- **Diagnostics 9.12**

  For installation instructions, see the Diagnostics Installation and Configuration Guide.

  - Content updates and bug fixes (for details, see the Diagnostics readme file, Readme.html, available in the Diagnostics installation directory).

What's New in This Release

This section lists new features and enhancements in BSM 9.12 as well as highlights of the BSM 9.10 release. To view a full list of new features in BSM 9.1x, select **Help > What's New** in BSM, or double-click whatsnew.pdf from the root directory of the BSM DVD or setup directory. Alternatively, you can download the document from the HP Software Product Manuals web site.

BSM 9.12 New Features and Capabilities

BSM General, Platform, and Shared Services

- Added support for using HP Service Health Analyzer, a new performance analytics application
- Support for Firefox 5 and 6 and IE 9
- Support for HP UCMDB 9.04 and Content Packs 8 and 9.01
- Support for System Health on Linux

Application Performance Management

HP Business Process Monitor

- Enhanced reports for synthetic monitoring of mobile applications
  - Overview application mobile device users experience in comparison to non mobile device using Application Summary report
  - Overview application performance and availability distribution by device in Application Health report
  - View application performance and availability over time for different devices in BPM Performance Over Time report
  - Analyze transaction behavior according to the end-user device in Performance Analysis reports
  - View distribution of errors reported by BPM according to emulated device in BPM Error Summary
  - Filter all BPM reports according to mobile device
  - Graph different synthetic monitoring metrics per device
- Alerts by mobile device type - alerts can now be generated based on performance and availability problems by device using the existing, advanced BSM alerting mechanism
- Service Health by mobile device type - view real time synthetic performance and availability of application and its transactions for each of the different devices in BSM Service Health

HP Real User Monitor

- MQ protocol support that enables monitoring this common protocol used in IBM Websphere MQ product suite
- AMF (Flex) protocol support that enables monitoring this common protocol for Flex based

applications

- Integration with SiteMinder single sign-on that enables original username extraction from users authenticating through SiteMinder

HP Diagnostics

- Upgraded SaaS offering including new capabilities

- Install and Monitor and Azure application using the Diagnostics .NET instrumentation agent

- Improved LDAP support with search and redirect features

- Diagnostics data fed to Service Health Analyzer (SHA)

- Extract and Display metrics from TIBCO Enterprise Message Service (EMS)

- Improved display of TIBCO ActiveMatrix Service Bus 3.1.2 thread-switching server requests

- New notifications for several conditions (availability thresholds, excessive server requests, etc.)

- Enhanced CPU metrics for Solaris Zones

- Support for Composite Type mbeans

- Probe efficiency improvements (reduction in overhead)

- New Diagnostics Data Model API document

HP TransactionVision (9.10)

- Upgrade support for 8.0x and 9.0x to 9.10

- Alerting on incomplete and late transactions (including visibility in BSM/Service Health)

- Better extensibility to support custom event sources

- New Correlation user interface:

  - Server correlation and topology features

  - Generic event format and API

  - Event collection from any .NET application using event generation definitions in a points file

- Report usability improvements in the Transaction Topology, Summary, Tracking and Over Time reports

  - Provides quick visualization of metrics, response time thresholds, flow problems and paths in reports and topologies

  - Provides enhanced tooltip information for nodes in transaction topologies such as node type, host, application server, and so on

- Platform support

  - Official WebSphere MQ Agent and Java Agent support for SUSE z/Linux

  - Official Java Agent support for TIBCO BusinessWorks and Jetty

  - Java Agent support for new versions of JBoss and Tomcat

- Improved z/OS Agent performance for CICS and WMQ-CICS

- z/OS Agent support for new versions of z/OS

- WebSphere MQ and Tuxedo Agent support for VMware ESX Server 4

- Support for Two-way SSL

- Enhanced tooling support for field engineers

  - TransactionVision Java Agent POC/Supportability "Toolkit" and Improved POC supportability features

  - New Processing Server utility to aid in investigation of correlation issues

Consolidated Event and Performance Management – OMi

- New administration tool to synchronize existing topology from OM systems

- New tool to simplify the process of exchanging CA Certificates with other OM systems

- Support for OMi event generation to notify users whenever a target connected server becomes unavailable for event forwarding operations

- Enhanced Event WS query language to support additional relational expressions and additional event properties on query

BSM 9.10 Release Highlights

BSM Platform and Shared Services

- Direct and staged upgrade capabilities from 8.x version of HP Business Availability Center and OMi (see documentation for specific versions and upgrade paths)

- New support for Red Hat Linux as a platform

- Support for Firefox Browser

- UI localization added for Japanese, Simplified Chinese, Korean, and French

MyBSM and Service Health Dashboards

- The Service Health dashboard provides simpler views, improving both customer experience and UI performance.

- MyBSM can now incorporate HP Diagnostics UIs

- Additional configuration options for adding external URLs/content into MyBSM and easier consumption of MyBSM components in external portals.

Application Performance Management

- Expanded Virtualization monitoring

- New Cloud-ready APIs for End User Monitoring

- New Synthetic Monitoring of Web 2.0 applications

- New Real User Monitor protocol support

- Enhanced Diagnostics with configurable full-instance call profile capture

Consolidated Event and Performance Management – OMi

- Powerful new dynamic performance graphing user interface

- Extended cross-domain graphing with performance data from HP Operations Manager Performance Agents, SPIs, HP SiteScope, HP Business Process Monitor, and HP Real User Monitor

- Improved event handling with time-based event automation

- Improved automation with ability to trigger run-books on event arrival

- Improved integration framework

- Richer Event Browser user experience

- Localization support: French, Japanese, Korean, Chinese

- Upgrade from OMi 8.1x/OMi 9.0 to 9.10 support

BSM Content Packages for OMi

- New content pack for Microsoft Lync Server 2010

- Updated MS Exchange 2010 content pack

- Enhanced Network content including improved cross-domain correlation rules

- Solaris Zones support by Infrastructure Content Pack

- New tools added in all content packs

- Support for SPI DVD 2008/2009 and Operations Orchestration version 9.0

BSM Support Matrixes

This section describes matrixes for various environments and components supported by BSM versions. For complete system requirement information, see the *HP Business Service Management Deployment Guide*.

BSM 9.1x System Support Matrix

Component	Brand	Version	Comments
BSM Servers – Operating Systems	Windows	*Windows Server 2008 Enterprise Edition SP2 or later (64 bit)	*If you are running Windows Server 2008 R2 or Windows Server 2008 SP2, User Access Control (UAC) must be disabled.
		*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)	
		Windows Server 2003 Enterprise Edition SP2 or later (64 bit)	
		Windows Server 2003 Standard Edition SP2 or later (64 bit)	
		Windows Server 2003 R2 Enterprise Edition, including all service packs (64 bit)	
		Windows Server 2003 R2 Standard Edition, including all service packs (64 bit)	
	Linux	Redhat Enterprise Linux 5.3 (Intel x64 64bit)	Regardless of the operating system version, the entire Distribution (with OEM support) and the latest recommended Patch Cluster are required.
		Redhat Enterprise Linux 5.4 (Intel x64 64bit)	
		Redhat Enterprise Linux 5.5 (Intel x64 64bit)	
BSM Servers – Web Servers	Microsoft IIS	6	IIS 7 and 7.5 on Windows Server 2008 only
		7	
		7.5	
	Apache	2.2.17	Adapted by HP for HP BSM and installed during HP BSM server installation.

Component	Brand	Version	Comments
BSM Client – Web Browsers	IE	Microsoft Internet Explorer 7, 8, and 9.0	
	Firefox	Mozilla Firefox 3.6, 5.0, 6.0	Windows or Linux
	Java	**Recommended**: 6 update 20 **Supported**: 6 update 18 and higher	Check the HP Business Service Management Deployment Guide and these release notes for troubleshooting information.
	Adobe	Flash Player 10.1 and higher	

Virtualized Environments

Platform	Brand	Version
BSM 9.1x servers	VMware ESX	3.x 4.x
	Microsoft Hyper-V	Hyper-V Server 2008 R2

Database Support Matrixes

For complete details on database support, see the *HP Business Service Management Database Guide*.

Software Requirements — Oracle Server

The following table lists the Oracle servers supported for working with Business Service Management. A supported option means that HP quality assurance personnel have successfully performed basic tests on that option.

Database Release - Version	System Type
Oracle 10.2 (10.2.0.4 or higher component specific release number 10.2.0.X) Enterprise Edition	64 BIT
Oracle 10.2 (10.2.0.4 or higher component specific release number 10.2.0.X) RAC Enterprise Edition	64 BIT
Oracle 11.1.0.7 Enterprise Edition	64 BIT
Oracle 11.2 (11g R2) Enterprise Edition	64 BIT
Oracle 11.2 (11g R2) RAC Enterprise Edition	64 BIT

- 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 have been rigorously tested by HP quality assurance personnel.

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 lists the Microsoft SQL Servers supported for for working with Business Service Management. A supported option means that HP quality assurance personnel have successfully performed basic tests on that option.

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 1
Microsoft SQL Server 2008 Enterprise Edition	64 BIT	Service Pack 1
Microsoft SQL Server 2008 Enterprise Edition	32 BIT	Service Pack 2
Microsoft SQL Server 2008 Enterprise Edition	64 BIT	Service Pack 2
Microsoft SQL Server 2005 Enterprise Edition	32 BIT	Service Pack 3
Microsoft SQL Server 2005 Enterprise Edition	64 BIT	Service Pack 3
Microsoft SQL Server 2005 Enterprise Edition	32 BIT	Service Pack 4
Microsoft SQL Server 2005 Enterprise Edition	64 BIT	Service Pack 4

- Only supported service packs should be installed. Patches newer than the installed service pack are also supported.

- Consult the Microsoft documentation for supported platforms.

Examples of Tested Deployments — Microsoft SQL Server

The following table details the deployment environments that have been rigorously tested by HP quality assurance personnel.

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 1	Windows 2008 Enterprise Edition Service Pack 1
Microsoft SQL Server 2008 Enterprise Edition	64 BIT	Service Pack 1	Windows 2008 Enterprise Edition Service Pack 1 (64-bit)

BSM Component Support Matrixes

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

Business Process Monitor 9.03 System Support Matrix

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

Business Process Monitor – Operating Systems	Windows Server 2008 Enterprise Edition SP2 (64bit)
	Windows Server 2008 Standard Edition SP2 (64bit)
	Windows Server 2008 R2 Enterprise Edition (64bit)
	Windows Server 2008 R2 Standard Edition (64bit)
	Windows 7 SP1 (32/64bit)
	Windows Vista SP2 (32/64bit)
	Windows Server 2003 Enterprise Edition SP2 (32bit)
	Windows Server 2003 Standard Edition SP2 (32bit)
	Windows Server 2003 R2 Enterprise Edition (32bit)
	Windows Server 2003 R2 Standard Edition (32bit)
	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 9.03 (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	√	√	√	√

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
(LR Replay 9.5 SP 2)				
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 direct link.

Business Process Monitor Protocol Support Matrix

The following table describes the BPM 9.03 supported protocols.

Protocol	Windows
.NET	√
AJAX	√
AJAX TruClient	√
C VUser	√
Citrix 1.8	√
COM/DCOM	√
CORBA-java	√
DB2 CLI	√
DNS	√
EJB	√
Flex	√
FTP	√
IMAP	√
I-mode	√
Informix	√
Jacada	√
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)	√

Protocol	Windows
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	√
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 installing of additional software components and therefore are platform dependent.

Supported protocols via QTP add-ins:

Web
QuickTest Professional Oracle Add-in (Web-based & Java-based Oracle applications)
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 11.1x System Support Matrix

SiteScope – Operating Systems	Windows	32-bit Support: • Microsoft Windows 2003 SP1, SP2 Standard/Enterprise Edition • Microsoft Windows Server 2003 R2 SP1, SP2 Enterprise Edition • Microsoft Windows Server 2008 SP2 Standard/Enterprise Edition (supported on Windows Server 2008 SP2 Standard/Enterprise Edition host and 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 2008 SP2 Enterprise Edition • Microsoft Windows Server 2008 R2 Enterprise Edition (supported on Windows Server 2008 R2 host with Hyper-V enabled, and on Windows Server 2008 SP2 (32 or 64-bit) guests on this host and on host without Hyper-V; also supported on Windows 2008 R2 Hyper-V guests) • Microsoft Cluster (for SiteScope Failover installation only)
	Solaris	• Solaris 9 (32-bit) with latest recommended patch cluster • Solaris 10 (32 or 64-bit) with latest recommended patch cluster
	Linux	• RedHat ES/AS Linux 4, 4.3, 5.2, 5.4 (32-bit) • RedHat ES/AS Linux 5.5 (32 or 64-bit) **Note:** RedHat Linux 9 with Native POSIX Threading Library (NPTL) is not supported.

SiteScope Compatibility Matrix

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

[1]Recommended

Real User Monitor 9.12 System Support Matrix

Real User Monitor Probe – Operating Systems	Windows	Microsoft Windows Server 2003 SP1 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2003 SP2 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2008 SP2 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2008 R2 (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; Version 4.0 (RHEL4) 32-bit versions
Real User Monitor Engine – Operating Systems	Windows	Microsoft Windows Server 2003 SP1 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2003 SP2 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2008 SP2 (32/64 bit) Standard and Enterprise editions
		Microsoft Windows Server 2008 R2 (32/64 bit) Standard and Enterprise editions

Real User Monitor Virtualized Environments

Platform	Brand	Version
Real User Monitor 9.12 Probe	VMware ESX	3.x 4.x
Real User Monitor 9.12 Engine	VMware ESX	3.x 4.x

Real User Monitor Compatibility Matrix

Compatibility Matrix	HP Business Service Management 9.12	HP Business Service Management 9.10	HP Business Service Management 9.0x	HP Business Availability Center 8.0x	HP Business Availability Center 7.5x	HP Business Availability Center 7.0x
Real User Monitor Engine 9.12	√	√	X	X	X	X
Real User Monitor Probe 9.12	√	√	X	X	X	X
Real User Monitor Engine 9.10	X	√	X	X	X	X
Real User Monitor Probe 9.10	X	√	X	X	X	X
Real User Monitor Engine 9.01	X	X	√	X	X	X
Real User Monitor Probe 9.01	X	X	√	X	X	X
Real User Monitor Engine 9.00	X	X	√	X	X	X
Real User Monitor Probe 9.00	X	X	√	X	X	X
Real User Monitor Engine 8.0x	X	X	X	√	X	X
Real User Monitor Probe 8.0x	X	X	X	√	X	X
Real User Monitor Engine 7.5x	X	X	X	X	√	X

Compatibility Matrix	HP Business Service Management 9.12	HP Business Service Management 9.10	HP Business Service Management 9.0x	HP Business Availability Center 8.0x	HP Business Availability Center 7.5x	HP Business Availability Center 7.0x
Real User Monitor Probe 7.5x	X	X	X	X	√	X
Real User Monitor Engine 7.0	X	X	X	X	X	√
Real User Monitor Probe 7.0	X	X	X	X	X	√

Note: Real User Monitor 7.01 (probe and engine) works only with Business Availability Center 7.01.

Data Flow Probe 9.04 System Support Matrix

Data Flow Probe – Operating Systems	Windows	Windows 2008 Standard/Enterprise editions SP2, 32-bit or 64-bit
		Windows 2008 Standard/Enterprise editions R2, 64-bit
		Windows 2003 Standard/Enterprise editions, SP2 and R2

Data Flow Probe Compatibility Matrix

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.

Service Health Analyzer (SHA) 9.10 System Support Matrix

Component	Brand	Version	Comments
SHA Analytics Server – Operating Systems	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) Windows Server 2003 Enterprise Edition SP2 or later (64 bit) Windows Server 2003 Standard Edition SP2 or later (64 bit) Windows Server 2003 R2 Enterprise Edition, including all service packs (64 bit) Windows Server 2003 R2 Standard Edition, including all service packs (64 bit)	*If you are running Windows Server 2008 R2 or Windows Server 2008 SP2, User Access Control (UAC) must be disabled.
	Linux	Redhat Enterprise Linux 5.3 (Intel x64 64bit) Redhat Enterprise Linux 5.4 (Intel x64 64bit) Redhat Enterprise Linux 5.5 (Intel x64 64bit)	Regardless of the operating system version, the entire Distribution (with OEM support) and the latest recommended Patch Cluster are required.

SHA Virtualized Environments

Platform	Brand	Version
SHA Analytics Server	VMware ESX	3.x 4.x
	Microsoft Hyper-V	Hyper-V Server 2008 R2

TransactionVision Processing Server Compatibility Matrix

BSM Version	TransactionVision Processing Server Version
BSM 9.12	TV 9.10

Note: TransactionVision 9.10 Processing Server requires BSM 9.12 as a prerequisite and will not run with BSM 9.10 alone.

TransactionVision Processing Server and Agent Compatibility Matrix

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

Note: If you require use of the 9.10 agent with an older Processing Server/Analyzer, contact HP TransactionVision Support for potential product compatibility/incompatibility details.

Business Process Insight Compatibility Matrix

	HP Business Service Management 9.1x	HP Business Service Management 9.0x	HP Business Availability Center 8.0x	HP Business Availability Center 7.5 x
Business Process Insight 9.10	√	X	X	X
Business Process Insight 9.0x (9.00, 9.01)	X	√	X	X
Business Process Insight 8.0x (8.00, 8.01, 8.02, 8.04)	X	X	√	X
Business Process Insight 7.5x	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 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

Integration Matrixes

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

"BSM 9.1x/HP Operations Manager (HPOM) Support Matrix" (on page 35)

"BSM 9.1x/HP Operations Agent Support" (on page 36)

"SiteScope 11.1x/HPOM Integration Matrix" (on page 36)

"BSM/BSM Integration Adapter Integration Matrix" (on page 36)

"HP Operations Smart Plug-in Support Matrix" (on page 36)

"BSM/HP Diagnostics Integration Matrix" (on page 39)

"Service Health Analyzer (SHA) Integration Matrix" (on page 39)

"BSM/HP Network Node Manager (NNMi) Integration Matrix" (on page 40)

"BSM/HP Service Manager Integration Matrix" (on page 41)

"BSM-CMS Synchronization Integration Matrix" (on page 43)

"UCMDB Content Pack Support" (on page 44)

"BSM/HP Operations Orchestration (OO) Integration Matrix" (on page 44)

BSM 9.1x/HP Operations Manager (HPOM) Support Matrix

HPOM Version			Required Patches
HP Operations Manager for Windows	8.16		Server Patch OMW_00090 or higher Accessories Patch OMW_00092 HPOM Server Node: One of the following HP Operations Agent versions: • HP Operations Agent 8.60 + Hotfix QCCR1A100254 • HP Operations Agent 8.60.501 • HP Operations Agent 11.00
	9.00		HPOM Server Node: One of the following HP Operations Agent versions: • HP Operations Agent 8.60 + Hotfix QCCR1A100254 • HP Operations Agent 8.60.501 • HP Operations Agent 11.00
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 + Hotfix QCCR1A100254 • HP Operations Agent 8.60.501 • HP Operations Agent 11.00

If you are currently using HPOM for UNIX or HPOM for Windows in an HPOM manager of manager 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 9.1x/HP Operations Agent Support

HP supports monitoring of BSM servers with the following versions of HP Operations agents:

- 8.60.051 or higher

- 11.02.011 or higher

SiteScope 11.1x/HPOM Integration Matrix

HP Operations Manager Version	SiteScope 11.1x Integration		
	Events integration	Node discovery Integration	Monitor Discovery Integration
HP Operations Manager for Windows 8.1x (with patch OMW_00071)	√	√	√
HP Operations Manager for Windows 9.0	√	√	√
HP Operations Manager for Linux/UNIX/Solaris 9.00	√	X	√
HP Operations Manager for Linux/UNIX/Solaris 9.10	√	X	√

BSM/BSM Integration Adapter Integration Matrix

Integration Matrix	BSM Integration Adapter 9.1x	BSM Integration Adapter 9.0x
BSM 9.1x	√	X
BSM 9.0x	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 web site 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	NA
Microsoft Active directory, version 7.00	7.06	OMW_00079	PHSS_41318 OML_00017 ITOSOL_00734
		Hotfix for QCCR1A119833	
Microsoft Exchange Server, version 12.10	12.11	OMW_00046	NA
Microsoft Exchange Server, version 13.00	13.08	OMW_00078 and OMW_00106 Hotfix for QCCR1A130090	PHSS_41317 OML_00016 ITOSOL_00733
Microsoft Enterprise Servers, version 08.02	08.03	OMW_00094 (for HPOM for Windows 8.16) OMW_00105 (for HPOM for Windows 9.00)	NA
Microsoft SQL Server, version 11.50	11.53	OMW_00036	NA
Microsoft SQL Server, version 12.00	12.04	OMW_00085	PHSS_41328 OML_00022 ITOSOL_00739
Oracle Database, version 11.50	11.53	OMW_00035	NA
Oracle Database, version 12.00	12.04	OMW_00084	PHSS_41327 OML_00021 ITOSOL_00738
WebLogic, version 06.10	6.12	OMW_00038	NA
WebLogic, version 07.00	7.04	OMW_00081	PHSS_41320

Smart Plug-in	Patch Version	Windows Patch Number	UNIX/Linux Patch Number
		[Prerequisite Patch - JMX SPICOMPJMXWIN_ 00004]	[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]
Infrastructure, version 01.60	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		
Infrastructure, version 02.00	Currently no patches. The Infrastructure content pack supports VMware, Microsoft HyperV, and Oracle Solaris Zones virtualization platforms with Infrastructure SPIs 02.00.		

BSM/HP Diagnostics Integration Matrix

Integration Matrix	HP Diagnostics 9.1x	HP Diagnostics 9.02	HP Diagnostics 9.00, 9.01	HP Diagnostics 8.0x	HP Diagnostics 7.5x
BSM 9.1x	√	√	X	X	X
BSM 9.0x	√	√	√	X	X
BAC 8.0x	√	√	√	√	√
BAC 7.50	X	X	X	√	√

Service Health Analyzer (SHA) Integration Matrix

Id	Product Supported	Versions Supported
489	Operations Manager/Performance Agent	4.60, 4.70, 5.00, 8.60, 11.00,11.10
490	Network Node Manager i	9.10
491	Business Process Monitor	7.50, 8.00, 9.0x
527	Diagnostics	9.12
528	SiteScope	10.1x, 11.0x, 11.1x
529	Real User Monitor	9.10, 9.12

BSM/HP Network Node Manager (NNMi) Integration Matrix

Integration Matrix	Integration Type	Network Node Manager (NNMi)							
		9.10 Patch 1 or later when available	9.01 Patch 1 or later	9.00	8.13	8.12	8.11	8.10	8.01
BSM 9.01, BSM 9.1x	NNMi to BSM RUM Integration	√ [2]	√ [1]	√	√	√	√	X	X
	NNMi to RTSM topology synchronization	√ [2]	√ [1]	X	X	X	X	X	X
	NNMi to BSM event flow	√ [2]	√ [1]	X	X	X	X	X	X
	NNMi components in MyBSM	√ [2]	√ [1]	√	√	√	√	X	X

[1] Required Patches: HP-UX: PHSS_40612; Linux: NNM900L_00001; Solaris: NNM900S_00001; Windows: NNM900W_00001

[2] Required Patches: HP-UX: PHSS_<contact support for latest patch number>; Linux: NNM910L_00001; Solaris: NNM910S_00001; Windows: NNM910W_00001

BSM/HP Service Manager Integration Matrix

ID	Integration Type	BSM	HP Service Manager							
			9.30	9.21	9.20	7.11	7.10	7.03	7.02	7.01
337	Incident exchange between Service Manager and Operations Manager i	9.1x	√	√	√	X	X	X	X	X
		9.01	√	√	√	X	X	X	X	X
		9.00	X	√	√	X	X	X	X	X
337	Drill down from Operations Manager i event to SM incident	9.1x	√	√	√	X	X	X	X	X
		9.01	√	√	√	X	X	X	X	X
		9.00	X	√	√	X	X	X	X	X
381	From Service Manager drill down to BSM Business Impact report	9.1x	√	√	√	X	X	X	X	X
		9.01	√	X	√	X	X	X	X	X
		9.00	√	X	√	X	X	X	X	X
245	View Service Manager Number of Open Incidents in Service Health and create SLAs (EMS)	9.1x	√	√	√	√	√	√	√	X
		9.01	√	X	√	√	√	√	√	√
		9.00	√	X	√	√	√	√	√	√

ID	Integration Type	BSM	HP Service Manager							
			9.30	9.21	9.20	7.11	7.10	7.03	7.02	7.01
243, 245	View Service Manager planned changes and incident details in Service Health	9.1x	√	√ (with CMS or with RTSM)		√ (with CMS)	√	√	√	X
		9.01	√	X	√ (with CMS or with RTSM)	√ (with CMS)	√	√	√	X
		9.00	√	X	√ (with CMS or with RTSM)	√ (with CMS)	√	√	√	X
	Submit an incident to Service Manager through BSM Service Health, Service Level Management, or EUM alerts	9.1x	√ (via Event Channel, for CI Status alerts, SLM alerts, and EUM alerts) √ (via CI Alert Retrieval Service, for CI Status alerts only, with the HPSM_00037 patch)			√ (via CI Alert Retrieval Service, for CI Status alerts only, with the HPSM_00037 patch)	√ (via CI Alert Retrieval Service, for CI Status alerts only, with the HPSM_00037 patch)	√ (via CI Alert Retrieval Service, for CI Status alerts only, with the HPSM_00037 patch)	√ (via CI Alert Retrieval Service, for CI Status alerts only, with the HPSM_00037 patch)	X
		9.01	X	X	√	√ (via CI Alert Retrieval Service with the HPSM_00037 patch)	√ (via CI Alert Retrieval Service with the HPSM_00037 patch)	√ (via CI Alert Retrieval Service with the HPSM_00037 patch)	√ (via CI Alert Retrieval Service with the HPSM_00037 patch)	√ (with legacy URL)
		9.00	X	X	X	X	X	X	X	X

ID	Integration Type	BSM	HP Service Manager							
			9.30	**9.21**	**9.20**	**7.11**	**7.10**	**7.03**	**7.02**	**7.01**
58	Drill down from Service Health and Service Level Management to the relevant Service Manager ticket	9.1x	√	√	√	√	√	√	√	X
		9.01	√	X	√	√	√	√	√	√
		9.00	√	X	√	√	√	√	√	√

Note: For integration with Service Manager to function properly, additional setup is required in both Business Service Management and Service Manager. For an overview of the integration of BSM and Service Manager and pointers to the relevant documentation, see the HP Service Manager (SM) section in the Business Service Management Integration with Other Applications chapter in the *Solutions and Integrations* guide.

Note: For the support matrix of the integration of Business Availability Center 8.x with Service Manager and ServiceCenter, see the Business Availability Center 8.x readme.

BSM-CMS Synchronization Integration Matrix

Integration Matrix	Integration Type	HP UCMDB (CMS)
BSM 9.00, 9.01, 9.1x	Population, federation, and push synchronization from HP UCMDB (CMS) to BSM	9.01 or later
BSM 9.00, 9.01, 9.1x	Population, federation, and push synchronization from BSM to HP UCMDB (CMS)	9.01 or later

UCMDB Content Pack Support

	CP 9.01	CP 9	CP 8
BSM 9.12	√ **Limitation:** There are incompatibility issues between LyncServer model provided by OMi 9.12 and CP 9.01. The following errors can appear while deploying the CP on top of BSM: "Action is not allowed, cannot update anything in class created by user but updated by factory". If the errors are related to classes that are part of LyncServer package or Exchange package, they can be ignored and OMi content packs continue working correctly after CP deployment.	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.

BSM/HP Operations Orchestration (OO) Integration Matrix

Integration Matrix	OO 9.0	OO 7.6	OO 7.51
BSM 9.0x, 9.1x	√	√ (with hotfix hf07162010_7.60)	√ (with hotfix hf04222010_7.51)

BSM/Release Control (RC) Integration Matrix

BSM integration with Release Control requires HP Universal CMDB. For support details, see the Release Control documentation.

Notes and Limitations

Problems and limitations are identified with a Change Request number (QCCR*xxxxxxxx*). Use this number when looking for more information about the problem on the HP Software Support web site, or when communicating with your HP Support representative.

General and Deployment

Capacity Calculator: The capacity calculator Excel sheet, BSM_9_Deployment_and Capacities.xls, can be found in the Documentation folder in the main BSM installation DVD. The latest version can also be downloaded from the HP Software Product Manuals site.

You use this Excel sheet to input information regarding the scope of your deployment (applications, number of users, expected data) and the capacity calculator then calculates the required hardware and determines the size of your deployment. You then use this information to determine your hardware requirements and deployment configuration. You can upload the data from the capacity calculator Excel sheet while running the Setup and Database Configuration Utility in the Server Deployment page. For details, see "Using the Capacity Calculator" in the HP Business Service Management Deployment Guide.

Authentication: BSM's default authentication strategy is Lightweight Single Sign-On (LW-SSO). When LW-SSO is enabled, you must use a fully qualified domain name (FQDN) to access BSM. This will enable integration among supported HP applications with a Single Sign-On manager, as well as working with BSM RTSM. If you are not able to provide an FQDN, it is still possible to use IP addresses for LW-SSO-trusted hosts. For details on working with IP addresses, see "Authentication Strategies" in the Platform Administration guide.

Temporary Internet Files: When logging into BSM for the first time after upgrading, delete the browser's temporary Internet files. This should be done on each browser that accesses BSM.

Skype Add-ons: An Internet Explorer exception error message is thrown inside BSM pages (usually on login page or in MyBSM), indicating Operation aborted. To resolve this issue, remove the Skype add-ons from your client. For further details, see http://support.microsoft.com/default.aspx/kb/927917.

VMWare Syncronization Issue Resolved (QCCR1I57087): There is a known issue in VMWare in which the clock of the virtual machine can jump up to 60 seconds. This caused synchronization issues with BSM in the past, but has now been resolved. BSM now uses the clock of the physical machine when VMWare is being used.

Customized version of httpd-ssl.conf file might be overwritten. (QCCR1I41178)

Description: If BSM is configured for secure access (using Apache + SSL), BSM uses a customized version of the file `httpd-ssl.conf`. This file might be overwritten during the upgrade with a standard version of the file, breaking the configuration.

Workaround: Before upgrading, backup the customized file `<HP BSM root directory>\WebServer\conf\extra\httpd-ssl.conf`. Then copy it back to its original location after completing the installation.

Applets fail with an unexpected handshake message (QCCR1I44883)

Description: In environments in which the BSM server requires a client certificate, applets using Java 1.6.0_20 may fail with an unexpected handshake message. This is a known issue from Sun (Oracle).

Workaround: Add the parameter – `Dsun.security.ssl.allowUnsafeRenegotiation=true` to the Java client.

Multiple prompts to enter credentials (QCCR1I45194)

Description: When using Java version 1.6.19 and higher in a secure environment (SSL) using basic authentication, you are prompted to enter credentials for each applet every time the applet is loaded. This is a known issue by Sun (Oracle).

Workaround: As suggested by Sun (Oracle): When each applet loads the first time, select **Remember password**. There is no security concern with this workaround since the applets are also protected by the browser and you are prompted for your credentials once every time you log into BSM through the browser using basic authentication.

High Availability Controller cannot move services (QCCR1I46345)

Description: If there is a problem with one of the marble_* processes (for example, one of the processes cannot start), you must disable the marble_supervisor process. If this process is not disabled, the High Availability Controller (HAC) cannot move the process' services (such as the DASHBOARD service that controls Service Health) to another Data Processing Server if there is a problem with the primary server.

Workaround: Disable the marble_supervisor process. HAC will move DASHBOARD service to another DPS.

Restart of BSM may be required after database outage (QCCR1I46504)

Description: If the management database was down or unreachable and the connection has been restored, you may have to restart BSM.

Workaround: Restart BSM when the management database is available again.

Adding additional Gateway servers with differing paths causes login failures (QCCR1I47337)

Description: If two Gateway servers are installed onto different drive paths, for example, one was installed onto the C:\ drive and the other onto the E:\ drive, BSM may not be able to be accessed.

Workaround: Create a duplicate path on the `C:\` drive by copying `E:\<HP BSM root directory>\conf\settings` to `C:\<HP BSM root directory>\conf\settings`.

Upgrade will fail if IDM-SSO is enabled in the source environment. (QCCR1I58648)

Description: If you are using IDM-SSO, upgrade will fail if IDM-SSO is enabled in the source environment but not yet configured in the target environment.

Workaround: Disable IDM-SSO on the BSM Gateway Server before running the configuration upgrade in the target environment. To do so:

1. Log into the JMX console **(http://<Gateway Server name>:8080/jmx-console)** and search for the SSO service (**service=SSO**).

2. Locate the **setSingleSignOnMode** operation and in the ParamValue box, type **Lightweight**.

3. Click **Invoke**.

IDM-SSO can be re-enabled after BSM 9.10 is up and running from within BSM (**Admin > Users and Permissions > Authentication Management wizard**).

View Size (QCCR1I61961)

Description: To enhance performance, in BSM 9.10 there is a view-size limit. As a result, if you created an extremely large view in BAC 8.x, the view may not be supported by the ODB in 9.10.

Workaround: Contact HP Support for assistance in creating new views to suit your needs.

Staging Data Replicator (SDR) issues (QCCR1I63137)

- The procedure for unsubscribing the SDR should use the following scripts rather than the Nanny JMX console:

  /opt/HP/BsmSDR/scripts/run_hpbsmsdr.sh start/stop

- Nanny manager JMX console will not show the correct SDR process status.

BSM upgrade 8.07 - 9.12 - RUM upgrader failed due to issue with next ID generation (QCCR1I65329)

Description: In some instances, the RUM upgrader may fail.

Workaround:

1. Check the **HPBSM\log\upgrade\EUMA-UPG-S05-RUM.log** file and locate the following error:

    ERROR- {RumConfigUpgrader.java:184} - ## null

    com.mercury.am.eum.shared.management.exceptions.EumRuntimeException

    at
    com.mercury.am.eum.shared.model.EumaIDGenerator.setNextId(EumaIDGenerator.java:63)

2. If only this error exists in the file, rerun the RUM upgrader

Platform

Platform Administration (Windows Server 2008): On Windows Server 2008 R2, if the Business Service Management root directory is defined as a shared folder, when attempting to open Business Service Management in a browser to log in, an HTTP server error is displayed and it is not possible to log into the application.

To workaround this limitation, grant full control for IUSR account and IIS_IUSRS group on Business Service Management root directory (by default, called HPBSM). Then restart IIS using iisreset /RESTART.

Authentication: When HP Business Service Management is installed with an Oracle Database and User Synchronization enabled with an LDAP Active Directory server, ensure that you login to HP Business Service Management with the correct-case UID (uppercase or lowercase), as configured on the LDAP server. This is because while the Oracle Database is case-sensitive, the LDAP Active Directory is not case sensitive, and logging in with an incorrect case UID can create undesirable results.

For example, if a user called **testuser** exists on the LDAP Active Directory server and logs into HP Business Service Management, he is automatically created as HP Business Service Management user **testuser**, who can be assigned permissions in the HP Business Service Management User Management interface. If you then login to HP Business Service Management as **Testuser**, the LDAP Active Directory server sends an acknowledgement that the user exists (because Active Directory is not case sensitive) and he is allowed entry to HP Business Service Management. However, since the Oracle Database does not identify this user as **testuser** (because the Oracle Database is case sensitive), the user **Testuser** is treated as a new user, without the permissions that were assigned to **testuser**.

NLS_LENGTH_SEMANTICS: The recommended setting for Oracle parameter NLS_LENGTH_ SEMANTICS is the default setting of BYTE; setting this value to CHAR may affect database performance.

Infrastructure Settings: Changes to infrastructure settings are not included in the Audit Log.

Schema Creation: You cannot create a schema that starts with a digit.

Errors when loading pages with Adobe Flex components. (QCCR1I40830)

Description: If your environment contains an SSL Offloader such as reverse proxy or load balancer where SSL is terminated and traffic is forwarded to BSM web server unencrypted, you may see errors when loading pages with Adobe Flex components (for example, Application Status report in EUM, or 360 View page in MyBSM).

The error in the topaz_all.ejb.log would look like this:
```
flex.messaging.security.SecurityException: Secure endpoint
'/messagebroker/amfsecure' must be contacted via a secure protocol
```

Workaround:

1. Replace the file: **<HPBSM root directory>\AppServer\webapps\site.war\WEBINF\flex\services-config.xml** with the following file found in the same directory: **services-config_for_reverse_proxy_env.xml**

2. Use this new **services-config.xml** to replace the **services-config.xml** files found in each of the following directories on the BSM Gateway Server:
   <HPBSM root directory>\AppServer\webapps\tvb.war\WEB-INF\flex

   <HPBSM root directory>\AppServer\webapps\bpi.war\WEB-INF\flex

3. Replace the file: **<HPBSM root directory>\AppServer\webapps\opr-admin-server.war\WEBINF\flex\services-config.xml** with the following file found in the same directory: **services-config_for_reverse_proxy_env.xml**

4. Replace the file: **<HPBSM root directory>\AppServer\webapps\OVPM.war\WEBINF\flex\services-config.xml** with the following file found in the same directory: **services-config_for_reverse_proxy_env.xml**

5. Replace the file: **<HPBSM root directory>\AppServer\webapps\opr-console.war\WEBINF\flex\services-config.xml** with the following file found in the same directory: **services-config_for_reverse_proxy_env.xml**

6. After replacing services-config xml files in all locations, restart BSM.

Downtime notifications may not be sent if the Data Processing Server is down (QCCR1I44964)

Description: If the Data Processing Server is down for any reason, notifications of downtime starting and ending may not be sent. Notifications sent to recipients regarding downtimes are configured during downtime creation.

Workaround: None.

Adobe Flash plugin errors in Firefox 3.6.4 or above (QCCR1I55463)

Description: When working with BSM in Firefox 3.6.4 or above, Firefox may display one of the following error messages:

- The Adobe Flash plugin has crashed.

- Adobe Flash Player <version>. An ActionScript error has occurred. Error #1502: A script has executed for longer than the default timeout period of 15 seconds.

This is due to a known problem with the browser's "out-of-process plugins" (OOPP) crash protection feature (for details, see https://bugzilla.mozilla.org/show_bug.cgi?id=574905).

Workaround: To prevent this behavior, go to about:config and set all dom.ipc.plugins.enabled.* preferences to false. This prevents the "plugin-container" process from running, and all plugins will run within the Firefox browser process. For details, see http://kb.mozillazine.org/Plugin-container_and_out-of-process_plugins#Disabling_crash_protection.

Java applets may fail to load (QCCR1I57396)

Description: Java applets may fail to load intermittently.

Workaround: If a Java applet in BSM fails to load, clear your Java client cache:

1. In the Windows Control Panel, click **Java**.

2. On the General tab, select **Settings > Delete Files**.

Firefox 3.6.14 is not supported (QCCRI58176).

Description: Due to a problem with applets in Firefox 3.6.14, BSM 9.10 does not work properly in this environment.

Workaround: Do not use BSM with Firefox 3.6.14. This specific version of Firefox fails to load applets. The problem does not occur in other versions of Firefox (for example version 3.6.15).

Applets fail to load when "Internet Explorer Enhanced Security" is enabled (QCCR1I59140)

Description: In some environments, certain applets fail to load when **Internet Explorer Enhanced Security** is enabled on the client machine (for example, the **LDAP Group Mapping Wizard**).

Workaround: Disable Internet Explorer Enhanced Security on the client machine (for example, Control Panel > Add/Remove Programs > Add/Remove Windows Components > scroll down to **Internet Explorer Enhanced Security Configuration** and uncheck the box).

Login page does not load if accessing through LB in separate domain from BSM (QCCR1I60724)

Description: When connecting to BSM using an FQDN, you still see the following error in the login screen: The HP Business Service Management URL must include the Fully Qualified Domain Name (FQDN).

Workaround: Retype the HP Business Service Management URL in the address bar, and check if there is a DNS resolution for Load Balanced virtual IPs from the BSM gateways.

System Health

Connection Protocol: When connecting System Health to your BSM and database servers, SSH is the preferred protocol, and should be used whenever possible.

Log levels: Some log level monitors may appear as not working.

BLE Main Flow monitor is not yet functional (QCCR1I59479)

Description: When you try to check the monitor Application Engines→Dashboard Engine→"BLE Main Flow", it fails with the error "no internal monitor result found".

Workaround: None.

System Health for BSM 9.10 does not support WMI connections to the BSM and database servers (QCCR1I62533)

Description: System Health for BSM 9.10 does not support WMI connections to the BSM and database servers. Monitors fail due to connection problems.

Workaround: When setting up System Health, complete the steps without connecting to the servers. Then, from within System Health, access the SiteScope Dashboard, and configure your server connections from there.

Integrations

NNMi Integration: Configuring topology integration between NNMi and BSM requires the configuration of credentials to log into the RTSM. You define RTSM users in the UCMDB Admin application, not in BSM itself. To configure an NNMi integration user, go to `http://<BSM_server>:21212/ucmdb-ui/applet/applet.jsp`, and then select **Managers > Administration > Users and Roles**. Define the name and password of an integration user.

For NNMi, the user at minimum needs to have the following roles:

- CmdbOpenApiImpact
- CmdbOpenApiQuery
- CmdbOpenApiUpdate

The default credentials are `admin/admin`.

Note: For the above roles to function, a patch on top of BSM 9.12 is required. Until this patch is applied, the user at minimum needs to have the Admin role.

Release Control (RC) Integration: If you are integrating BSM with Release Control (RC) 9.11 or earlier, perform the following procedure to solve an issue that prevents correct integration of RC Change Requests into the Changes and Incidents tab in Service Health.

1. Navigate to the Adapter Management page and in the Resources pane select
   RcChangeAdapter > Configuration Files > convertFields.properties.

2. Append the following line to the end of the file: `urgency=urgency`

3. Create a new properties file called `RcChangeAdapter/urgency.properties` and add the following lines:

   - `# File format:`
   - `# RC urgency value=uCMDB urgency value`
   - `Critical=1_critical`
   - `High=2_high`
   - `Normal=3_average`
   - `Low=4_low`
   - `#UNKNOWN= there is no available value in uCMDB: 'it_process_ urgency_enum'`

4. Save the file.

If the integration does not work after following the above procedure, contact HP Customer Support.

HPOM Integration: More than one HPOM (formerly HP OVO) monitor can be created on the same port using the Copy function, resulting in duplicate HPOM events. In such cases, delete the copied monitor. Note that the HPOM Event monitor is not available when SiteScope 11.00 is connected to BSM 9.x, unless the monitor was created in an earlier version of SiteScope that was upgraded to SiteScope 11.00.

EMS Integration:

- The maximum size of an expression in the EMS Integration configuration file is 4000 characters.

- An EMS monitor may not find its configuration file when upgrading the SiteScope version. In such cases, manually copy the contents of the configuration file to the EMS monitor configuration in the user interface.

In the BSM-Diagnostics integration (Admin>Diagnostics) an error occurs on short-name and there is no way to re-enter the FQDN (QCCR1I62229)

Description: You should use the FQDN when registering the Diagnostics Server with BSM. However if you entered a non-FQDN for the Diagnostics Server you could get stuck in a registration problem loop.

Workaround: Use the URL below and substitute the "topazhost" name in the URL with the FQDN of the BSM 9.1x Gateway Server to clear the Diagnostics Configuration page in BSM:

```
http://topazhost/opal/uibridge/action/registration.do?action=set_
registration&customer_name=Default%20Client&opal_protocol=&opal_
port=&opal_full_host=
```

Reports and Reporting

PDF: It is not possible to search charts inside reports exported to PDF (since the charts are saved as images). It is possible to search inside tables.

Export: It is not possible to export chart reports to Excel and XML (CSV is supported).

TransactionVision is missing from the Service Report data sources (QCCR1I45415)

Description: The TransactionVision data is not supported as a data source in Service Reports in BSM.

Workaround: None.

Service Health

Administration

Rules API Examples: The Rules API that was introduced in Business Availability Center version 8.00 enables you to create new business rules for Service Health and Service Level Management, using the Groovy scripting language. The BSM documentation contains basic examples of API rules. Additional examples of rules based on customer requests can be found in the Self-Solve knowledge base, in document **KM778069**. This document is intended to be collaborative, and more API rules will be added to it based on customer input. If you have any comments on existing rules or suggestions for new rules, please provide feedback on the document within the knowledge base. Your feedback will then be included within the document.

Modifying an HI from being fed by metrics to being fed by events (QCCR1I42865)

Description: In general, when you manually edit an HI on a CI using the CI Indicators tab (for example to use a different calculation rule), the assignment mechanism does not override these changes. However, if you modify an HI from being fed by metrics to being fed by events, the assignment mechanism does not recognize this change, and the HI is restored to its original setting. This scenario is not likely in typical usage of BSM.

Workaround: None.

Changing the breakdown configuration does not refresh Service Health components (QCCR1I46143)

Description: In the Breakdown UI, changing the breakdown configuration does not refresh Service Health components.

Workaround: If you have configured a breakdown in a local impact view (for example, transaction by location), and you want to change the breakdown type (for example, to location by transaction), you must perform the below steps:

1. Edit the original breakdown configuration, and select the new breakdown type as None.

2. Save the change, and wait a few minutes for the change to take effect.

3. Select your view, and edit the breakdown type to the type you want defined.

Changes made to triplets not reflected in Service Health calculation (QCCR1I59377F)

Description: If you make changes to the triplets that define impact links within **RTSM CI Type Manager > Calculated Relationships > Triplets**, these changes are not reflected in Service Health calculation.

Workaround: After making these changes, access the JMX console (`http://<server name>:21212/jmx-console`). Within the **UCMDB** list of services, select **TQL Services**, and invoke **retrieveTqlNames** using your customer ID. Within the results, search for **marble_dashboard_tql**, and click **Deactivate**. When deactivation is done, click **Activate**. Service Health calculations will now implement your modified impact links.

Hidden rule parameters lose their default values (QCCR1I65242)

Description: If you create a KPI assignment that uses a rule with hidden rule parameters, and the assignment updates an existing KPI with a different rule, the hidden rule parameters lose their default values. This typically impacts rule calculations. (Note that this does not apply to new KPIs, but only to existing KPIs which had a different rule before they were updated by the assignment.)

Workaround: Before updating the assignment, edit the rule definition in the Rule Repository and make the hidden rule parameters configurable (not hidden). You can then update the rule in the KPI assignment, and synch existing CIs. After you save the assignment, you can return the rule parameters to be hidden. Alternatively, you can delete the existing KPIs before running the KPI assignment; this causes the assignment to create the KPIs rather than update them.

Cannot create local impact pattern view based on the BSMDowntime_impact query (QCCR1I65385)

Description: Within **Service Health Administration > View Builder**, you cannot create a local impact pattern view based on the **BSMDowntime_impact** query.

Workaround: You can create a pattern view based on the **BSMDowntime_impact** query within **RTSM Administration > Modeling Studio**.

Application

PNR KPI Persistency: The PNR KPI in Service Health does not have persistency in case of a Data Processing Server failure or a system restart. The PNR KPI shows an initialized status until

---

the SLA is recalculated, at which time the PNR value is updated.

Daylight Savings Time:

- Reports that include the time period during which a Daylight Savings Time (DST) change took place (change to or change from DST) will either be missing one hour (in cases where clocks are moved forward) or have two sets of data for the same hour (in cases where clocks are moved back).

- If a report's time range includes the time of a Daylight Savings Time (DST) change, the data for the period after the DST time change is incorrect. To obtain correct data for the entire time range, print two separate reports, one for the time range before the DST time change and one for the time range after the DST time change.

Moving the Configuration Items dialog box can freeze the UI (QCCR1I42825)

Description: Within the 360° View, if you select the Filter icon on the toolbar, and then click the Configuration Items link, the Configuration Items dialog box opens. If you move this dialog box within the screen, the UI can freeze.

Workaround: Reselect the component to enable it again.

If the management database goes down, the 360° View suffers a fatal error (QCCR1I46512)

Description: If you are working with High Availability and a load balancer, if the management database goes down, the 360° View suffers a fatal error.

Workaround: Log out of BSM and then log in again.

Top View does not show the expand button for a CI even though there are lower level CIs (QCCR1I46578)

Description: When a view contains CIs that are nested in many hierarchy levels, Top View sometimes does not show the expand button (+) next to a CI even though there are lower-level CIs that should be available for display. You can see if there are more levels under the selected CI by accessing the menu command **Show > Find Visible and Hidden Child CIs**.

Workaround: From the CI's menu commands, select **Show > Expand More Levels** (or, if the CI is a virtual CI, access the menu command on its parent CI).

Inconsistency displaying breakdown views (QCCR1I47502)

Description: If no new samples were received after a breakdown was defined in a view, and samples were received from only some of the locations, the view can show inconsistent worst statuses on the locations.

Workaround: None.

Inconsistency in breakdown view for KPIs that do not participate in the breakdown (QCCR1I47561)

Description: In a local impact view with breakdown defined, when a KPI is based on samples that do not contain the relevant breakdown information, the KPI may contain misleading data. For example, you may have a breakdown of location by application, and an application CI shows Worst Status of the System KPI from two business transactions. If these BTs are in two locations, and the KPI is Critical in one of the two, each location will show the application as Critical, even though the BT is Critical in only one of the locations.

Workaround: None.

Error when viewing federated incidents and actual changes (QCCR1I47931)

Description: Attempting to view federated incidents and actual changes in the Service Health application sometimes fails

Workaround:

1. Access the JMX console: `http://<server name>:21212/jmx-console/`

2. Go to the UCMDB:service=Settings Services section.

3. In the **setSettingValue** table, enter the following values:

   - Customer ID = 1

   - Name = cmdb.tql.should.use.old.federatedgrader

   - Value = true

4. Click **Invoke**.

Note: You may have to enter user credentials to access the JMX console; if you do not know them, ask your system administrator.

Not possibile to reset HI to default (QCCR1I48559)

Description: In the Health Indicators component, the menu command "Reset Health Indicator" to reset an HI to its default state does not work for metric-based indicators.

Workaround: None.

Filter change done during Web Server or Application Server restart is not saved (QCCR1I60096)

Description: In the *Using Service Health* 9.12 guide, documentation for the Legacy Mobile Console ("Service Health on a Mobile Device") states that secure communication is not supported on mobile devices. This statement is not correct, and should be replaced with the following:

"When using the Legacy Mobile Console to communicate with BSM, use secure communication (https). If you use unsecured communication (http), authentication credentials (user and password) are transmitted to BSM using clear text."

Note that this is only related to the Legacy Mobile Console, and is not relevant for the BSMobile iPhone application.

The Worst Status rule cannot be calculated when any of the KPIs or HIs have an invalid status, including PNR_CRITICAL status (QCCR1I65483)

Description: The Worst Status rule cannot be calculated when any of the KPIs or HIs have an invalid status, including PNR_CRITICAL status. The valid statuses are OK, MINOR, MAJOR, WARNING, CRITICAL, DOWNTIME, INFO, STOPPED, and NO_DATA. Invalid statuses are ignored in the calculation.

Workaround: None .

Hierarchy

Only one filter is saved in session per user and customer (QCCR1I52699)

Description: Within the Hierarchy component, only one filter can be used at a time, per user, per customer (regardless of quick filter or advanced). This means that if a user is using a filter in one Hierarchy component, and the user then activates a different filter in another Hierarchy component, the first filter is overridden.

Workaround: None.

Filter change done during Web Server or Application Server restart is not saved (QCCR1I62605)

Description: If you are working in a high availability environment with a load balancer, and are editing an existing filter in Service Health when the web server or application server restarts, changes to the filter are not saved.

Workaround: None.

MyBSM

JavaScript errors when navigating from MyBSM (QCCR1I47291)

Description: In some versions of Internet Explorer if the browser is configured to show JavaScript errors, when you navigate from MyBSM to a different application in BSM, a popup window appears. This window contains the following message: **Errors on this webpage might cause it to work incorrectly**.

This message is not indicative of a problem. Any changes you made in MyBSM are saved, and MyBSM continues to work correctly.

Workaround: To prevent this message from appearing, within Internet Explorer access the **Internet Options > Advanced** tab, and clear the **Display a notification about every script error** checkbox.

Wiring to the NNMi Path View component does not work (QCCR1I47619)

Description: Wiring to the NNMi Path View component does not work. For example, if Top View and Path View are on the same page, when you select a CI in Top View, the Path View component does not show the path for this CI in NNM topology.

Workaround: None.

Service Level Management

Rules API: The Rules API that was introduced in Business Availability Center version 8.00 enables you to create new business rules for Service health and Service Level Management, using the Groovy scripting language. The BSM documentation contains basic examples of API rules. Additional examples of rules based on customer requests can be found in the Self-Solve knowledge base, in document **KM778069**. This document is intended to be collaborative, and more API rules will be added to it based on customer input. If you have any comments on existing rules or suggestions for new rules, please provide feedback on the document within the knowledge base. Your feedback will then be included within the document.

PNR KPIs: In Service Level Management, you cannot attach more than one PNR KPI (defined in Service Health) to a CI.

CIs in SLAs: You cannot add a CI to an SLA when the CI includes a copy of itself in the original definition in the RTSM. This is because nesting is meaningless in the SLA calculation (Service Level Management cannot calculate a CI using the CI result as a value). If you do so, your operation will fail with a general error. However, you can add the same CI to an SLA more than once if the CI does not include a descendant of itself. In this case, Service Level Management calculates the CI only once, so the objectives are the same no matter where the CI appears in the SLA hierarchy.

If ETL tasks do not progress, neither do SLM calculation tasks (QCCR1I43943)

Description: If the ETL tasks on the TRANSACTIONS_DIM or LOCATIONS_DIM tables do not progress because of a failure, the offline engine will also not perform SLA calculation tasks, until the ETL tasks for the same time period have been executed.

Workaround: None.

Linkage between Business Transaction and SAP Transaction is disabled (QCCR1I47274)

Description: After BSM restart, the automatic linkage of Business Transactions to SAP Transactions is disabled.

Workaround: To enable the linkage mechanism, restart the VERTICALS service in the MercuryAS process.

KPI or HI rule causes an "out of memory" exception (QCCR1I51423)

Description: When you create a KPI or HI rule using the API Rule Definitions in the SLA Wizard > Configure SLA Wizard pane, the rule may cause an "out of memory" exception when you recalculate the SLA.

Workaround: Do not create rules using the API Rule Definitions in the SLA Wizard UI. Instead, write the rule script, and only use the UI to test the rule. To test a rule, create a "dummy" SLA using the rule in the UI, and re-calculate the SLA to verify calculation results. When the script works properly, copy it into a text file and apply it to a KPI or HI instance as described in the Rules API documentation. If an OutOfMemorryError occurs during the rule testing, restart the BLE (offline engine).

Operations Manager i

Authorization

Deleted users and groups remain visible in the Event Perspective (QCCR1A91299)

Description: When user groups are added or deleted, the change is not immediately visible in the User Assignment dialog of the Event Browser or Event Details.

Workaround: After the refresh interval of 10 minutes, log off and back on again. The deleted users and groups will not appear and any added users and groups should be available.

Certificates

After a reboot the certificate server (ovcs) is not started (QCCR1A123805)

Description: After a reboot, the certificate server is not automatically started. Requests for new certificates are ignored.

Workaround:

1. On the data processing server start the certificate server using the following command:

   - On Windows:

     ```
     ovc -start ovcs
     ```

   - On Linux:

     ```
     /opt/OV/bin/ovc -start ovcs
     ```

2. Edit the following configuration file to make sure that the certificate server restarts automatically in future:

   - On Windows:

     ```
     %OvDataDir%\Conf\ctrl\ovcs.xml
     ```

   - On Linux:

     ```
     /var/opt/OV/Conf/ctrl/ovcs.xml
     ```

Change the following line:

```
<ovc:StartAtBootTime>false</ovc:StartAtBootTime>
```

to:

```
<ovc:StartAtBootTime>true</ovc:StartAtBootTime>
```

3. On any computer that sent a certificate request when the certificate server was not running, send another certificate request using the following command:

- On Windows:

```
ovcert -certreq
```

- On Linux:

```
/opt/OV/bin/ovcert -certreq
```

Configuration

Setup and Database Configuration Utility outputs an ORA-02275 error (QCCR1I50318)

Description: If you use an Oracle database, the BSM Setup and Database Configuration Utility may output the following error message to the command or shell prompt:

```
ORA-02775: such a referential constraint already exists in the table
```

Workaround: You can ignore this error message.

Content Packs

Installing content packs in a distributed BSM environment: If you want to use Basic Topology Synchronization, additional steps are necessary after you install content packs in a distributed BSM installation (that is, with the Gateway Server and Data Processing Server installed on separate computers). You must copy the contents of the `<HP BSM root directory>\conf\opr\topology-sync\sync-packages` folder on the Gateway Server and paste them into the corresponding folder on the Data Processing Server. After the data is transferred, add and sync one content pack at a time, using the following procedure:

- Append one new content pack to the end of the **Packages for Topology Sync** list in the Infrastructure Management Manager.

- Run `<HP BSM root directory>\bin\opr-startTopologySync.bat` on the Data Processing Server.

- Repeat for each content pack.

Note: You do not need to complete these steps to use Dynamic Topology Synchronization.

Content Packs: Active Directory

If you use the Microsoft Active Directory Content Pack 9.10 with HP Operations Smart Plug-in for Microsoft Active Directory 6.10, few of the following artifacts do not work. This is because either the artifacts are newly added or modified in the Microsoft Active Directory Content Pack 9.10.

HIs/ETIs	Correlation Rules
SysvolDiskQueueLength LDAPConnectivity GCConnectivity OutboundReplicationObjectRate DirectorySearchRate DirectoryReadRate DirectoryWriteRate	AD::FileSystem:Disk Usage Level >> DomainController Performance AD::DomainController:Sysvol Disk Queue Length >> DC Replication Latency & Inbound Replication Object Rate

Content Packs: Exchange

If you use the Microsoft Exchange Server Content Pack 9.10 with HP Operations Smart Plug-in for Microsoft Exchange Server 12.10, few of the following artifacts do not work. This is because either the artifacts are newly added or modified in the Microsoft Exchange Server Content Pack 9.10.

CI Types	HIs/ETIs	Correlation Rules
Exchange Storage Group Exchange Mailbox Database	IMAP4Latency POP3Latency ActiveDirectoryAccess GCSearchTime GCBindTime AvailableTransactionLogDiskSpace AvailableDatabaseDiskSpace MailflowLatency MapiLatency MapiConnectivity MailFlowStatus AvailableTransactionLogDiskSpace ActiveDirectoryAccess EdgeSyncronizationStatus ExchangeServiceHostStatus ActiveSyncLatency IMAP4Connectivity	Exchange::Microsoft Exchange Server:GC Search Time >> Client Accessibility Exchange::Microsoft Exchange Server:GC Search Time >> Mail Flow Latency Exchange::Microsoft Exchange Server:GC Search Time >> Transport Queue Length Exchange::Exchange Mailbox Database:Available Database Disk Space >> Information Store Service Status Exchange::File System:Disk Usage Level >> Available Database Disk Space Exchange::Exchange Mailbox Database:Available Database Log Disk Space >> Information Store Service Status Exchange::Exchange Hub Server:Submission Queue Length >> Mail Flow Latency Exchange::Exchange Hub Server:Active Mailbox Delivery

CI Types	HIs/ETIs	Correlation Rules
	POP3Connectivity	Queue Length >> Mail Flow LatencyQueue Length >> Mail Flow LatencyQueue Length >> Mail Flow Latency
	OWAConnectivity	
	ActiveSyncConnectivity	Exchange::Network Interface:Network IO >> Mail Flow Latency
	OWALatency	
	FileDistributionServiceStatus	Exchange::DomainController:DC LDAP Query Response Time >> MailflowLatency
	UnifiedMessagingConnectivity	
		Exchange::DomainController:DC LDAP Bind Response Time >> MailflowLatency
		Exchange::Exchange Mail Server:Information Store Service Status >> Mail Flow Status & Mapi Connectivity
		Exchange::Exchange Mail Server:Mail Submission Service Status >> Mail Flow Status
		Exchange::Windows:CPU Load >> OWA Latency & Active Sync Latency
		Exchange::Network Interface:Network IO >> Client Accessibility
		Exchange::DomainController:DC LDAP Query Response Time >> Client Accessibility
		Exchange::DomainController:DC LDAP Bind Response Time >> Client Accessibility
		Exchange::Microsoft Exchange Server:GC Search Time >> Cleint Accessibility
		Exchange::Exchange Mail Server:Information Store Service Status >> Client Accessibility
		Exchange::Exchange Client Access Server:IMAP4 Service

CI Types	HIs/ETIs	Correlation Rules
		Status >> IMAP4 ConnectivityStatus >> IMAP4 ConnectivityStatus >> IMAP4 Connectivity
		Exchange::Exchange Client Access Server:POP3 Service Status >> POP3 Connectivity
		Exchange::Microsoft Exchange Server:AD Topology Service Status >> Unified Messaging Services
		Exchange::Exchange Unified Messaging Server:Speech Engine Status >> Unified Messaging Status

ETIs are not resolved for Exchange servers on clusters using HP Data Flow Management or Dynamic Topology Synchronization (QCCR1A108412)

Description: If Exchange Servers hosted on clusters are discovered with HP Data Flow Management or Dynamic Topology Synchronization, then the events from the Smart Plug-in for Exchange do not impact the Exchange Server CI type in the cluster.

Workaround: None.

Exchange SPI: CI Info incorrect for several policies leading to no resolution of ETI (QCCR1A130090)

Description: Events generated from the following Exchange 2007 Policies do not map to the correct CI.

- EXSPI-8X_Check_ADTopologyServiceStatus

- EXSPI-8X_Check_InformationStoreServiceStatus

- EXSPI-8X_Check_MailSubmissionServiceStatus

- EXSPI-8X_Check_MailboxAssistantServiceStatus

- EXSPI-8X_Check_ReplicationServiceStatus

- EXSPI-8X_Check_SystemAttendantStatus

- EXSPI-8X_Check_MBExchangeServiceHostStatus

This is because the CMA "ciinfo" in the events generated in above policies was incomplete.

Workaround: Contact your HP Software Support representative for a hotfix.

HP Business Service Management (9.12)

Content Packs: Infrastructure

Events from the policy "SI-NetworkUsageAndPerformance" may fail to map to the correct CI (QCCR1A130703)

Description: On a node that has multiple network interfaces, events from the policy "SI-NetworkUsageAndPerformance" fail to map to the correct CI.

Workaround: None.

Content Packs: Microsoft SQL Server

If you use the Microsoft SQL Server Content Pack 9.10 with HP Operations Smart Plug-in for Microsoft SQL Server 11.50, few of the following artifacts do not work. This is because either the artifacts are newly added or modified in the Microsoft SQL Server Content Pack 9.10.

HIs/ETIs	Correlation Rules
Disk Read-Write Rate	Database::FileSystem:SQLServer Transaction Log Usage Level HIs >> Disk Usage Level
Server Load	
SQL Server Disk Read-Write Errors	Database::FileSystem:SQLServer FileGroup Space Usage Level HIs >> Disk Usage Level
SQL Server Databases Status	
SQL Query Tuning	Database::Computer:SQLServer FileGroup Space Usage Level HIs >> Disk Usage Level
Lock Memory Used Pct	
SQL Server Database Space Usage Level	
Database Deadlock Rate	
Database FileGroup Space Usage Level	
Database Latch Wait Rate	
Database Lock Timeout Rate	
Database Mirroring Transaction Delay	
Database Reads Outstanding	
Database Status	
Database Writes Outstanding	
SQL Server Active Cursor	
SQL Server Cursor Memory Usage	
SQL Server Database Active Transactions	
SQL Server Databases Data File Size	

HIs/ETIs	Correlation Rules
SQLServer Databases Transaction Rate	
Server Transaction Rate	
Transaction Log Usage Level	
Inactive Database Connections	
Merge Conflicts	

Event Browser

Not all areas can be controlled using only the keyboard (QCCR1A4280)

Description: It is generally possible to control the Operations Management user interface using keyboard navigation. In some cases, however, a pointing device of some kind is required. For example, when an event is selected in the browser using the keyboard (arrow keys + space) the event details are updated, but the event is not delivered to other portions of the user interface. Other examples include switching between tabs and activating context menus.

Workaround: Use a pointing device when keyboard navigation is not possible or does not function correctly.

Event Browser search does not consider all fields (QCCR1A102810)

Description: The search function in the Event Browser does not search the contents of the CI Type column.

Workaround: None.

Annotations cannot be saved if they contain a specific Chinese character (QCCR1A120197)

Description: If you add a specific Chinese character (𪀛 CJK unified ideograph-2053B) to fields in the Event Details pane, Connected Servers manager, or Event Forwarding manager, it is not possible to save the changes.

Workaround: None.

Filter list is not updated automatically when switching between Event Perspective and Health Perspective (QCCR1A118936)

Description: Event filters created in the one perspective (for example, the Event Perspective) are not visible in other perspectives (for example, the Health Perspective).

Workaround: Open the Filter Manager and refresh the list.

Event Details

Not possible to enter special characters using the ALT GR key in the Event Details text fields with Firefox 3.6 (QCCR1A106086)

Description: In Firefox 3.6, if you view the Event Details pane within the Event Browser, you cannot use the ALT GR key to type special characters in the text boxes.

Workaround: Double-click the event in the Event Browser. The Event Details pane opens in a separate window. You can then type special characters using the ALT GR key.

Event Processing Pipeline

ConnectException in `opr-common.log` (QCCR1A118727)

Description: After you start up BSM, the `opr-common.log` file contains the following error message:

```
ERROR HibernateChangeListenerImpl.sendInsertEventsToListener(399) -
Exception occured while calling entitiesInserted() on listener
```

Workaround: You can ignore this error message if it occurs during the startup of BSM.

CI resolution does not work correctly after upgrade (QCCR1A131396)

Description: Some events do not have a properly resolved node and CI. This problem occurs when an event uses an IP address or a hostname that is not the primary host name of the related host.

Workaround:

1. Select **Admin > Platform > Setup and Maintenance > Infrastructure Settings**.

2. Select **Applications** and use the list to set the administration context to **Operations Management**.

3. Edit the **Cache Modification Configuration** setting in one of the following ways:

4. ■ Restore the default setting by clicking the **Restore Default** button.

   ■ Add the following fragment between the tags `<CiResolver>...</CiResolver>`:

   ```
   <WhiteListTypes>
           <WhiteListCiType>node</WhiteListCiType>
           <WhiteListCiType>ip_address</WhiteListCiType>
   </WhiteListTypes>
   ```

5. Click **Save**.

Graphing

Virtualization_Infrastructure view in Performance Perspective: Performance graph is not appearing for VM hosted on ESX machine (QCCR1A114189)

Description: For the Virtualization_Infrastructure view in the Performance Perspective, performance graphs are not drawn for virtual machines hosted on an ESX server.

Workaround: In the model explorer, select the vMA node first and then select the VM that you are interested in. The performance graphs are drawn as expected.

When launching performance graphs (CI) from a VMware event, the graphs show metrics for VMs with similar names (QCCR1A118759)

Description: When a user launches a graph for a Virtual Machine CI, graphs are drawn for all the virtual machine CIs that have similar names.

Workaround: Close the graphs for unwanted virtual machine CIs.

Unable to delete custom graphs through Admin > Operations Management in Internet Explorer 8 (QCCR1A119284)

Description: User is unable to delete custom graphs through Admin -> Operations management in Internet Explorer 8.

Workaround: Log out and then log in again to see the changes. The selected custom graphs are deleted.

Launching of Performance Graphs (neighborhood) option for virtualization configuration items (CIs) takes a long time to respond (QCCR1A123200)

Description: Launching of Performance Graphs (neighborhood) for virtualization configuration items (CI) takes longer if there are no agents running on the neighborhood nodes. This delay happens because the performance graphs try to connect to each of the nodes with a default time-out of 60 seconds per node.

Workaround: Use either of the following workarounds:

- Use the Launch Performance Graphs (CI) option from the Event Browser for viewing the virtualization related CIs

- You can also change the default time-out required by Graphing to connect to the nodes.

  To change the default time-out to connect to the nodes follow these steps:

  a. Launch a web browser and then enter the following URL:

     ```
     http://<Gateway or Data Processing server name>:8080/jmx-console/
     ```

     The Gateway or Data Processing server name is the name of the machine on which HP Business Service Management is running.

  b. To login into JMX Console, you are required to enter the authentication credentials configured when installing BSM and running the Setup and Database Configuration utility.

  c. Click **service=Infrastructure Settings Manager** under **Foundations** to open the JMX MBEAN View page. In the `void setGlobalSettingValue()`, enter the values **opr**, **opr.graphing.responsetimeouthttp** and **<*new timeout value*>** (in seconds) in the **ParamValue** field for the parameters listed.

EUM - event launch shows all instances with same name (QCCR1A120394)

Description: When a user launches graphs for an EUM CI in one Business Transaction Flow (BTF) from the Event Perspective, graphs are displayed for all the CIs having similar names in other BTFs as well.

Workaround: After the graphs are drawn, expand the left pane in the graph window and select only the CI for which you want to view the graphs. Graphs for selected CI are then drawn.

End User Management

Add a configuration for alerts that will allow setting minimum transaction before triggering alert (QCCR1I52998)

Description: When you first log in to a BSM 9.12 system that was upgraded from BSM 9.10, end-user management alerts are automatically upgraded. For those alerts that included multiple conditions with different values for the minimum number of transactions:

- If the conditions were conjoined by AND, the highest value is used for the upgraded alert.

- If the conditions were conjoined by OR, the lowest value is used for the upgraded alert.

BPM and RUM Advanced with SLM licenses are not valid (QCCR1I56279)

Description: BPM and RUM Advanced with SLM licenses are not valid in BSM 9.10 or 9.12. If you upgraded from a BSM 9.0x version in which you were using evaluation versions of such licenses, they will show as expired. RUM probes assigned an expired license will not monitor any application tiers. BPM applications assigned an expired license will still be monitored, but will have limited configuration options.

Workaround: Install and assign valid licenses.

Invalid combinations of metrics and active filters in Metrics Over Time report (QCCR1I56993)

Description: • In the Metrics Over Time report, certain combinations of selected metrics and active filters are invalid and result in data for the report not being retrieved. A warning message to this effect is displayed.

Workaround: Change the active filters or select different metrics.

Restart service, Restart server, and Restart IIS commands are no longer supported (QCCR1I61605)

Description: Restart service, Restart server, and Restart IIS commands are no longer supported for EUM alerts and should be removed from already configured alerts, if used.

Workaround: None.

Business Process Monitor

Visual C++ Redistributable: Before installing Business Process Monitor on a machine, install the [Microsoft Visual C++ 2005 Service Pack 1 Redistributable Package ATL Security Update](#).

VuGen Scripts: When you run a script written in VuGen that uses proxy settings from an automatic configuration script (.pac file) configured in the run-time settings of the script, if one of the proxies in the .pac file is unavailable, replaying the script in either VuGen or Business Process Monitor may result in a high response time and, in some instances, the script may fail due to a timeout. The script can be run in Internet Explorer without this problem, as it ignores the unavailable proxy.

BSM URL: Business Process Monitor registers with BSM using `http://<BSM Gateway Server name>/topaz`, and not with HPBAC or MercuryAM at the end of the URL. You must use this format when creating instances for Business Process Monitor.

Large Scripts: Large scripts (larger than 10 MB) cannot be uploaded to the database.

Page Component Breakdown URL: When running a page component breakdown (from End User Management or Business Process Monitor), the target URL is limited to 144 characters.

WebTraces over UDP protocols do not work (QCCR1I56114)

Description: WebTraces configured to work over UDP protocols do not work in Windows 7 and Windows 2008.

Workaround: None.

Default granularity of the BPM Custom Reports time filter is calculated differently (QCCR1I60312)

Description: The default granularity of the BPM Custom Reports time filter is calculated differently in BAC 8.x and BSM 9.x. Thus, BPM Custom Reports created in 8.x may appear differently after being upgraded to 9.x.

Workaround: Edit the filter in 9.0 and select any granularity that you want for each component.

BPM instances on Windows 7

Description: You must run BPM instances on Windows 7 as a system user (default) or as a user with administrator privileges.

Workaround: None.

Real User Monitor

License Key: The "RUM Advanced with SLM" license key cannot be generated and installed. To work around this problem, reconfigure the RUM probe license setting to use the "RUM Probe" and "RUM SPI for Applications" license after the RUM license is installed. To change RUM license setting navigate to **End User Management Administration > Settings Tab > Real User Monitor Settings Tab > RUM Licenses > RUM Probe Licensing table**.

SSL: When Business Service Management is working with SSL and requires client-side certificate, Real User Monitor session replay will not work

---

RUM Text Pattern events are not functional for Oracle NCA over TCP (QCCR1I54373)

Description: RUM Text Pattern events are not functional for Oracle NCA over TCP.

Workaround: None.

After upgrading to RUM 9.1x some locations are not supported (QCCR1I61975)

Description: The following locations are not supported by Real User Monitor, and traffic monitored from these locations is reported with an unknown location:

- Congo The Democratic Republic Of
- United States Minor Outlying Islands
- Macedonia The Former Yugoslav Republic Of
- South Georgia And The South Sandwich Islands
- Korea Democratic People's Republic Of

Workaround: None.

Some active filters do not work on upgraded RUM data (QCCR1I62276)

Description: When reports are generated for RUM data that has been upgraded to version 9.x, some of the active filters in the report do not work.

Workaround: None.

RUM reports not available (QCCR1I63076)

Description: RUM reports are not available in BSM.

Workaround: If you configure an application for RUM the first time you log in to a new BSM system, log out of BSM and log in again before accessing RUM reports.

RUM Probe - MQ protocol - Performance breakdown parameters do not exist for actions in MQ sessions (QCCR1I64597)

Description: Response time breakdown for actions in MQ protocol applications is not reported. For such actions, total response time is included in relevant EUM reports, but no breakdown is available.

RUM Probe - MQ Protocol - Text Pattern Events cannot be triggered (QCCR1I64927)

Description: Even though you are able to configure RUM text pattern events for MQ protocol applications in BSM, such events are not relevant for this protocol and are not triggered.

nCipher traffic is not supported by RUM (QCCR1I65063)

Description: Private keys stored on nCipher cards for SSL traffic decryption are not supported.

Workaround: None.

Probe Traffic discovery - search box disappears in the domain view (QCCR1I65332)

Description: In the Domain view of the Probe Traffic Discovery page (**Real User Monitor Web Console > Probe Management > Probe Traffic Discovery**), the Search box is not always displayed.

Workaround: None.

System Availability Management and SiteScope

Link Monitor to CI Settings: The Link Monitor to CI Settings pane is not supported in Business Service Management 9.00 or later and was removed from Business Service Management's System Availability Management Administration page. To use this functionality, upgrade to SiteScope 11.00 or later, and use the report custom topology feature in **HP Integration Settings > BSM Integration Data and Topology Settings** in the monitor properties.

SiteScope Restarts: If a SiteScope is restarted while being accessed in System Availability Management Administration, you may receive an error and have to navigate back to the SiteScope to properly access the SiteScope server.

SiteScope Copy and Paste: If you are copying from a SiteScope version 10.00 to another SiteScope version 10.00 using the copy/paste functionality in System Availability Management Administration, there may be a delay of up to a minute until the pasted object appears in the target SiteScope. This is because the monitor tree in the new SiteScope user interface refreshes by default five seconds after a paste operation completes. If the paste operation takes longer than 5

seconds, it will miss this automatic refresh and the pasted objects appear only after the regularly scheduled refresh (by default 60 seconds).

SAM Administration Copy and Paste: In System Availability Management Administration, when copying objects from one SiteScope to another, there is no dependency check. This means that you can copy an object that depends on another object to a different SiteScope, even though the object on which it depends does not exist on the target SiteScope.

SAM Administration Page cannot be displayed error: In System Availability Management Administration, when the SiteScope service is down, instead of receiving an error to this effect, you will see a **Page cannot be displayed error**.

SiteScope Reset: If a SiteScope is being reset when BSM is not running, the SiteScope will appear as registered with a configurable profile in System Availability Management Administration once BSM is running again. The SiteScope must be reset when BSM is running.

SAM Administration Recently Used Monitors: On the **New Monitor** page, the **Recently Used Monitors** list is not saved when you exit System Availability Management Administration.

SiteScope Profiles: When creating a SiteScope profile in System Availability Management Administration, if you change the profile display name after having received any error during the profile creation process, the default profile name is not changed accordingly. Ensure that the profile name and SiteScope agent machine location fields contain the desired values.

SAM Administration Actions: In System Availability Management Administration, there is no notification for successful actions in the user interface.

SiteScope Release Notes: Refer to the SiteScope release notes for all SiteScope limitations.

SiteScope Documentation: SiteScope documentation is available only as a standalone help system. It is no longer a part of the BSM Documentation Library.

Monitor Deployment Wizard only supports topology reporting for monitors that have a default topology defined (QCCR1I39697)

Description: The Monitor Deployment Wizard only supports topology reporting for monitors that have a default topology defined. This means you can select to add a template to a CI only if the CI type is the default CI type for all the monitors in the template.

Workaround: None.

After an upgrade to BSM 9.10, manually resynchronize SiteScope (QCCR1I39744)

Description: If you upgrade to BSM 9.10 while using SiteScope 11.00, you should manually resynchronize SiteScope instead of waiting for topology data to be sent to BSM based on the Topology resynchronization time interval.

Workaround: None.

After Jboss Application Server recovery, there is no data in SAM Administration "Summary" (QCCR1I44570)

Description: After JBoss Application Server recovers from a server crash, the information in the right pane of the Summary tab in SAM Administration does not show any data until BSM is restarted.

Workaround: Restart BSM.

SiteScope 10.00 topology data is not reported to BSM (QCCR1I47810)

Description: When SiteScope 10.00 is connected to BSM 9.00, topology data is not reported to BSM.

Workaround: Contact customer support for a workaround to be supplied on top of SiteScope 10.00, or upgrade your version of SiteScope to 10.10 or later.

408 Request Timeout error in Internet Explorer 7

Description: When accessing SiteScope from System Availability Management Administration using Internet Explorer 7, a 408 Request Timeout error is displayed.

Workaround: Configure the browser to accept cookies from the SiteScope server.

1. In Internet Explorer, select **Tools** > **Internet Options** > **Privacy** tab > **Advanced** button.

2. Select **Override automatic cookie handling**, make sure **First-party cookies** and **Third-party cookies** are set to **Accept**, and select **Always allow session cookies**.

Settings when registering SiteScope to a BSM server that uses a load balancer (QCCR1I56354)

Description: When registering SiteScope to a BSM server that uses a load balancer, make sure that the Gateway server name/IP address (in Admin > System Availability Management > Distributed Settings) is the Default Virtual Server for Application Users URL (and not the Default Virtual Server for Data Collectors URL). This URL can be found in Admin > Platform > Setup and Maintenance > Infrastructure Settings > Foundations > Platform Administration > Host Configuration table.

Workaround: None.

No reconciliation between SiteScope and Discovery and Dependency Mapping (QCCR1I56709)

Description: There is no reconciliation between SiteScope and Discovery and Dependency Mapping when there is only a default SQL server instance. SiteScope reports the default value "SQLServer" as the name of the CI, while DDM reports the name of the host.

Workaround: Install an SQL database with a named instance.

Unable to perform some actions in SAM Administration in a load balancing environment (QCCR1I58582)

Description: Unable to perform the following actions in SAM Administration in a load balancing environment when SiteScope 10.x or later is integrated with BAC/BSM:

- Copy/paste from one SiteScope to another.

- Perform a Global Search and Replace.

- Run the Monitor Deployment Wizard.

Workaround: Register (or remove and reregister) SiteScope to the BSM server using the Default Virtual Server for Application Users URL instead of the Default Virtual Server for Data Collectors URL (enter the URL in Admin > System Availability Management > Distributed Settings > Gateway server name/IP address). This URL can be found in Admin > Platform > Setup and Maintenance > Infrastructure Settings > Foundations > Platform Administration > Host Configuration table.

If you cannot remove SiteScope from BSM because you do not want to lose data, you can change the host name on SiteScope under BSM Integration Preferences (Preferences > Integration Preferences > Business Service Management machine name/IP address).

Issue with Operations Manager integration when BSM using an HTTPS reverse proxy or a load balancer (QCCR1I59226)

Description: If BSM is using an HTTPS reverse proxy or a load balancer, you need to provide the HP Operations Agent on the SiteScope server with a certificate so that it can communicate securely with BSM.

Workaround: Check for an updated version of these release notes on the HP Software Support Site for details on how to manually configure the agent.

Downtime functionality in SiteScope 10.x or earlier is not supported when connected to BSM 9.x (QCCR1I60368)

Description: Downtime functionality in SiteScope 10.x or earlier is not supported when connected to BSM 9.x, since a new downtime cannot be created on a SiteScope profile. Previously defined downtimes in BSM 8.x upgraded to BSM 9.x do not affect SiteScope.

Workaround: To enable SiteScope support for the new downtime functionality when using BSM 9.x, upgrade your version of SiteScope to 11.x.

Generating SAM Reports (QCCR1I62712)

Description: When generating SAM reports on a loaded system:

- It takes a couple of minutes for result data to be displayed in the Group Performance Report and Monitor Performance Report.

- The Cross-Performance Report may not respond when using the Select Measurements filter on an Internet Explorer browser.

Workaround: Wait until the servers list is loaded in the user interface before navigating to other profiles.

SISConfigurationEnrichmentUpgrader failure (QCCR1I65694)

Description: During BSM upgrade, SISConfigurationEnrichmentUpgrader may report FAILED, PARTIALLY FAILED, or NOT REQUIRED status, or the BSM content packs may not automatically upload.

Workaround: Delete the **blockAutoUpload** file located in the **<HPBSM root directory>\conf\opr\content** folder.

Transaction Management

The TransactionVision 9.10 Processing Server and agents can only be used with BSM 9.12.

Java Plug-in Version: Transaction Management Administration pages may fail to initialize.

In some cases, the Admin > Transaction Management pages may not initialize. Errors such as the following appear:

```
java.lang.RuntimeException:
java.lang.reflect.InvocationTargetException

  at sun.plugin2.applet.Plugin2ClassLoader.defineClassHelper(Unknown
Source)

  at sun.plugin2.applet.Plugin2ClassLoader.access$100(Unknown Source)

......

Caused by: java.lang.NullPointerException

  at com.sun.deploy.security.CPCallbackHandler.isAuthenticated(Unknown
Source)
```

These errors are related to the Java Plug-in that is being used to view applets. See http://bugs.sun.com/view_bug.do?bug_id=6967414.

To workaround this problem, use Version 6 Update 18 or greater of the Java Plug-in. See the BSM Deployment Guide for information about the supported versions of the Java Plug-in.

Transaction Management > Administration page does not refresh correctly (QCCR1I47950)

Description: In rare cases, the Transaction Management > Administration page does not refresh correctly after some action and the following error appears: com.hp.am.bac.tvb.admin.shared.TVAdminException: An internal error occurred.

Workaround: Navigate away from the Transaction Management Admin UI page (by going to the site map or some other page), then return to it. The page should be correctly populated.

Error appears when accessing the Administration page (QCCR1I50435)

Description: The following error sometimes appears when accessing the **Transaction Management > Administration** page: Unable to communicate with BSM.

Workaround: Log out of BSM and log back in, and then access the Transaction Management Administration page again.

Aggregated Topology has been removed from MyBSM (QCCR1I53667)

Description: The Aggregated Topology has been removed from MyBSM in 9.10.

Workaround: The Aggregated Topology is still available in the Transaction Management application.

The option to use the TransactionVision Time Server in WebSphere MQ Communication Links for VMware environments is currently only supported by WebSphere MQ Agents (QCCR1I59208)

Description: The **Is the queue manager in which the monitored WebSphere MQ applications are connecting to running in a VMware environment?** option to use the TransactionVision Time Server in WebSphere MQ Communication Links for VMware environments is currently only supported by WebSphere MQ Agents. Using this option with other Agents (Java or .NET) results in inaccurate event timestamps and the possibility of the agents not collecting any events.

Workaround: None.

Changes to the PresentationQuery.xml file are not reflected until reload (QCCR1I62483)

Description: Changes to the **PresentationQuery.xml** file in the Transaction Management Admin user interface (**Admin > Transaction Management > Configuration > TransactionVision** folder > **Configuration** tab > **General** tab) are not reflected until the Transaction Management Admin user interface has been reloaded.

Workaround: None.

Drilldown to Dynamic Component Topology may result in a blank graph (QCCR1I63956)

Description: Drilling down to the Dynamic Component Topology from the Event Analysis or Transaction Tracking report may result in a blank graph.

Workaround: Click the **Run** button to generate the Component Topology.

If the Analyzer logging configuration is set to allow very large log files, the log viewer in the Transaction Management Admin user interface may display incorrectly (QCCR1I64232)

Description: If the Analyzer logging configuration is set to allow very large log files (above the default values), the log viewer in the Transaction Management Admin user interface may display all but the last two lines of the log file.

Workaround: The files may be viewed in their entirety on the Analyzer system.

Selecting a SQL Statement causes a NullPointerException (QCCR1I64322)

Description: Selecting a **SQL Statement** in the **Admin > Transaction Management > Configuration > Queries > JDBC** criteria, causes a **NullPointerException** in the query engine .

Workaround: None.

In languages other than English, MQDISC exit event is incorrectly sent (QCCR1I64374)

Description: In languages other than English, in the **Admin > Transaction Management > Configuration > Data Collection Filters > WebSphere MQ API Name** setting, when the **Do not send MQDISC exit event** check box is checked, the MQDISC exit event is incorrectly sent, instead of being disabled. Note that sending the MQDISC exit event can be a high-impact operation, so disabling it improves performance of the WMQ agent.

Workaround: None.

When the client browser system runs Java 1.6.0_29, the Transaction Management administration applet fails to load and the Transaction Management Administration user interface in BSM does not work. (QCCR1I65531)

Description: The following error appears when using Java 1.6.0_29 with the Transaction Management Administration user interface in BSM:

java.lang.NoClassDefFoundError: com/bristol/tvision/shared/CallContext

Workaround: Revert to the previous version, java 1.6.0_27.

Business Process Insight

Events from TransactionVision: If you start Business Process Insight while TransactionVision's JMS Event Queue services for sending events to Business Process Insight are unavailable, or if the JMS Event Queue services become unavailable once Business Process Insight has started, the OVBPIJmsEventHandler Service stops. To solve this problem, you need to configure the Windows Service for the OVBPIJmsEventHandler Service under **Control Panel > Administrative Tools > Services**. You should configure the service in the same way as is described for adapter Windows Services in the *Integration Training Guide - Business Events*, by selecting the Recovery option and setting each of the First, Second and Subsequent Failures to the value of **Restart the Service**.

Modifying Servlet Engine Files: If you intend to modify the Servlet Engine (Tomcat) configuration files, you need to be aware that changes made directly to the Servlet Engine files are overwritten by Business Process Insight configuration files. Refer to the Business Process Insight Server Administration Guide for more details.

Missing Infrastructure Settings: If you see an error indicating that one or more Business Process Insight Infrastructure settings is missing, make sure that you have specified a value for the Microsoft SQL Server database name:

```
Instance Database Settings: Database Name
```

You need to provide a value for this setting even if you are configuring the settings for an Oracle database. It can be any string, but you cannot leave the field blank; if you do, you receive an error when accessing the Business Process Insight Application pages.

Servlet Engine Appears Not to Start: Very occasionally, following a system restart, the Servlet Engine appears not to have started, both within the Business Process Insight Administration Console and as a Windows Service. The Servlet Engine service is actually in the processes of starting, but is taking a long time, possibly due to other applications causing delay; for example, the database can take a long time to start when it is very full.

If you think that you are experiencing this problem:

1. Click the **Start** button for the Servlet Engine from the Status screen on the Administration Console.

2. Click the **Stop** button for the Servlet Engine as soon as it is enabled.

3. Your Servlet Engine services are now synchronized and the Servlet Engine is not started.

4. Restart the Servlet Engine as normal.

Unable to Contact RMI Registry During Component Startup: If you receive an error message indicating that the Business Process Insight Server is unable to contact the RMI Registry on port 44,000, this is likely to be due to a port number clash.

The Business Process Insight RMI Registry uses port 44,000, and if another application or service is temporarily using this port, then the RMI Registry cannot start. To resolve this problem, you can:

- wait and attempt to restart the Business Process Insight components again.

- use the Business Process Insight Administration Console to modify the port number for the RMI.

Select the Port Numbers tab from the Business Process Insight Server Administration Console to change the RMI Registry port number from 44,000. If you change the value for the port number, you need to make sure that any other configuration affected by this change is also modified, for example, the Business Process Insight Infrastructure settings.

Process Definition Cannot Be Progressed: Process fails to progress when common data and event definitions are derived from a single process.

The following scenario results in a Process definition that cannot be progressed:

- Create and deploy two Process definitions, each linked to the same Data definition.

- Separate the Processes completely by creating a new Data definition with identical properties to the first Data definition.

One of the Process definitions is now linked to the newly created Data definition and no changes are made to the progression rules. In this case, the Business Process Insight Modeler should detect that the progression rules are referencing a different Data definition, but it does not and as a result, no process instances are created.

To resolve this problem, use the Export and Import options within the Business Process Insight Modeler to make a copy of a Process definition. Use the option to rename the definitions (not overwrite them).

See "How to Manage the BPI Modeler" in the Using Business Process Insight guide for details of making copies of your Process definitions.

Empty String Values and Null String Value Evaluation in Oracle: When entering property values for subscriptions within the Business Process Insight Modeler, be aware that the Oracle Server does not distinguish between a zero-length string, and a string with a value that has not been assigned (null string). This means that if you want to test a zero length string within a subscription, you are advised to use a single blank space (" "), and not an empty string ("").

Error Importing a Process Definition: If you see an error message similar to the following when importing a Process definition into the Business Process Insight Modeler, it is possible that you are attempting to import a Process definition with a name that contains characters that are locale-specific:

The file proc-defn-name.zip is not a valid import file. Please see the log file for more information.

where **proc-defn**-name is the filename, based on the Process definition name.

There are restrictions in the use of locale-specific character sets, whereby a .zip file name can contain characters only from the character set of the system locale where the Business Process Insight Modeler is running. The content of the file can contain any characters, but the file name is limited by the character set of the Windows system that is reading or writing the file. In the case of the zip archive files for exporting and importing processes, the zip archive file name is based on the Process definition name. Therefore, if you want to export a Process definition, you have to consider where you will be importing the file. If you plan to move the file across locales, you are advised to use only ASCII characters for the Process definition name to ensure the file can be read on any configured locale.

This problem can also occur if you change the locale of the Windows system where you have created the Process definitions.

Changing the Locale: If you modify the locale for a system where the Business Process Insight Server is installed, you might find that you cannot start the Business Process Insight Administration Console when you reboot your system. The Administration Console also returns an error indicating that it cannot find the main class and that the program will exit.

This can happen in cases where Business Process Insight is installed into a directory, which is named using locale-specific characters. If the locale for the system is then changed, it is not always possible for the directory and file names to be readable using the character set of the new locale.

If you have changed the locale of the system where Business Process Insight is installed and you are experiencing this problem, you need to:

- revert to the original locale and continue to use Business Process Insight.

- revert to the original locale, uninstall Business Process Insight, configure the new locale, and then reinstall Business Process Insight into a new directory.

Installation on Turkish Locale Causes an Exception: If you attempt to run the Business Process Insight Installation procedure using a Turkish locale, the installer does not present the installation screens correctly and, as a result, you cannot answer the installation questions. This is a problem related to the installation software.

In order to complete the installation successfully, you need to temporarily set the locale to a United States locale. When you have completed the installation, you can reset the locale to Turkish.

Non-ASCII characters in the Oracle Database Data Directory: If you enter non-ASCII characters for the Oracle database data directory during the Business Process Insight installation, the installation fails with a Database Setup error. The error indicates that Oracle is unable to create the database instance or a database table.

If the Business Process Insight installer reports a Database Setup Error, and you have used non-ASCII characters for the name of the database data directory, you need to reinstall (overinstall) Business Process Insight into the same location, this time using a database data directory name that contains only ASCII characters.

Microsoft SQL Server 2005 Excessive Checkpoint Process I/O: If you are using Microsoft SQL Server 2005 and you are aware that you are having problems with database checkpoint I/O requests, you are experiencing a known problem with SQL Server 2005. The problem has been fixed by Microsoft and has the following Microsoft defect number: **50000708**.

Microsoft provided a solution for this problem in their Service Pack 2 for SQL Server 2005. You need to make sure that you have installed Service Pack 2. Microsoft also recommends that you use the -k3 startup parameter to limit the I/O requests generated by the checkpoint process. Refer the defect text provided by Microsoft, or the Microsoft documentation for details of using startup parameters.

InstallAnywhere Uninstaller Stops Responding: Many errors encountered when the InstallAnywhere uninstaller is running, for example, a missing JVM, causes the uninstaller to stop responding, or hang.

If you experience a problem where the Business Process Insight uninstaller stops responding, you need to complete the following tasks according to what you have installed:

1. Stop the uninstaller process, which is still running on your system. For example, on a Windows system use the Task Manager.

2. If you are removing a Business Process Insight Server, delete the Business Process Insight files under the Business Process Insight installation directory.

3. Modify the Zerog Global Registry (an InstallAnywhere file):

    -   Open the registry file, which is usually located in `c:\Program Files\Zero G Registry\.com.zerog.registry.xml`. Note that on Windows the registry file is located in a hidden directory, so you might have to configure your system to display hidden directories and files.

        If the registry file contains only entries for the product that you are attempting to uninstall, you can rename the file. However, if there are multiple product installations, or multiple instances of one product installation, you need to edit the file as described in the following step.

        If the registry file contains entries in addition to those for Business Process Insight, edit the file to remove the following entries:

    -   The product elements for Business Process Insight. Make sure the element references the directory where the files are located that you want to uninstall.

    -   The components elements for Business Process Insight. Make sure the component element references the directory where the files are located that you want to uninstall.

Precision of Monitor Instance Values (QCCR1I28156)

Description: The processing and display of Business Process Insight monitor instance values is only done to a precision of 6 or 7 digits, and not to the precision of 15 digits used for process values.

This can mean that large integer values may not show their exact value. For example, $123,000,000 could show as $123,000,064.

Workaround: None.

Landing pages not displaying monitor values and statistics to double precision (QCCR1I29319)

Description: Business Process Insight Landing pages are not displaying monitor values and statistics to double precision.

Workaround: None.

Instance pages fail (QCCR1I30664)

Description: Business Process Insight instance pages fail when first accessed in a multi-domain LWSSO configuration.

Workaround: Access the **Process Repository Explorer** under the Business Process Insight **Admin** area in Business Service Management (**Admin->Business Process Insight->Process Repository Explorer**). After doing this, the process instance pages can be accessed normally.

Monitors with a type of Absolute Duration raise violations before an instance has completed. (QCCR1I31705)

Description: Unlike other monitors, those with a type of Absolute Duration raise violations before an instance has completed. When there is a combination of a short absolute threshold duration and the event which completes the instance is constantly delayed, violations are incorrectly raised for every instance. For example, a combination of a critical threshold of 30 seconds and a latency of five minutes for the end events causes a violation.

Workaround: Disable the violation detection for instance duration monitors that have yet to complete. This is achieved by altering the relevant stored procedures (METRIC_THRESH_ ACTIV_INSTS_OVER and METRIC_THRESH_ACTIVE_OVERDUE) to not match on active instances:

- For MS SQL, this can be done by doing the following:

  a. Run Microsoft SQL Server Management Studio (or equivalent).

  b. Connect to the BPI Instance database (default is hpbpischema).

  c. Navigate to the Stored Procedures (for example, Programmability > Stored Procedures).

  d. Select the stored procedure called METRIC_THRESH_ACTIV_INSTS_OVER.

  e. Select Modify (or equivalent) to modify the stored procedure.

  f. Replace Active with Never in the stored procedure.

  g. Click Execute on the toolbar (or equivalent) to apply the change.

- For Oracle, this can be done by doing the following:

a. Run Oracle Enterprise Manager (or equivalent) and connect to the BPI Instance database.

b. Navigate to the Stored Procedures section (for example, Administration >Procedures) and display the list of stored procedures for the BPI schema.

c. Select the stored procedure called METRIC_THRESH_ACTIV_INSTS_OVER.

d. Select Edit (or equivalent) to modify the stored procedure.

e. Replace Active with Never in the stored procedure.

f. Click Apply (or equivalent) to apply the change.

Note: The caveat to the above workaround is that if there are process instances experiencing issues, the absolute duration violations will not be triggered until after the monitor scope for the process instances is complete. Therefore, the absolute duration violations may not be triggered if the active process instances are blocked on a particular Activity within the Business Monitor span and none complete the monitor scope. This workaround should only be used if the implications of this are acceptable.

BPI does not support Oracle 11g RAC (QCCR1I33021)

Description: BPI does not support Oracle 11g RAC.

Workaround: None.

Business Process Diagram context menus intermittently shows JavaScript errors (QCCR1I34412)

Description: Context menus within Business Process Diagram intermittently show JavaScript errors.

Workaround: Close all open browsers and reopen the BSM user interface.

Monitor Definer landing page does not show the data collected for the State group (QCCR1I35230)

Description: If a Business Process is deployed with a Group property (such as **Region**) and a Business Process Monitor is defined with a different Group property (such as **State**) then the Monitor Definer landing page will not show the data collected for the **State** group.

Workaround: Define the same Group property for both the Business Process and Business Process Monitor to see the group breakdown in the landing pages.

List of monitors in the Business Health tab on the BPI Health page includes default non-grouped monitors (QCCR1I35229)

Description: On the **BPI Health** page, when you specify a non-default process grouping (other than **All**), the list in the **Business Health** tab at the bottom of the **BPI Health** page includes both

---

the Business Process Monitors that match the grouping criteria and the Business Process Monitors that have no Process Definition Group Property specified.

Workaround: If you want to segregate all Business Process Monitors by groups, then designate a group value for each of the Business Process Monitors when you create or update the Business Process Monitors in the Monitor Definer.

Deadline thresholds for Business Process monitors cannot be calculated (QCCR1I38172/QCCR1I38173)

Description: Deadline thresholds for Business Process monitors cannot be calculated if the name of the deadline property has greater than ten characters and the BPI Instance Database is on an Oracle server.

An error can occur when calculating the deadline or status for deadline thresholds on Business Process monitors if the BPI Instance Database is on an Oracle server. This error appears in one of two ways:

- The value of the deadline is listed as **Deadline unavailable**, while the following warning message appears in the Monitor Engine log:

  WARNING: Monitor generation failed for… ORA-00972: identifier is too long: …

- The monitor status is listed as **No monitor information recorded for process instance**, while the following warning message appears in the Monitor Engine log:

  WARNING: Monitor generation failed for… ORA-00904: … invalid identifier…

Workaround: Change the name of the deadline property to 10 or fewer characters.

Security warnings when launching the BPI Modeler (QCCR1I38624)

Description: When launching the BPI Modeler, you may see any of the following security warning messages:

- The application's digital signature cannot be verified.

- Part of the application is missing a digital signature. Only run if you trust the origin of the application.

- And after clicking on **More Information**,
  Although the application has a digital signature, the application's associated file (JNLP) does not have one.

Workaround: The messages can safely be ignored.

KPIs that contain multiple related Health Indicators are not shown in the Business Health tab in the Health page (QCCR1I38672)

Description: The Business Health tab in the Health page displays a gauge for all KPIs that have configured objectives. Any KPIs that contain multiple related Health Indicators, however, will not be displayed.

Workaround: Create a unique KPI for each Health Indicator.

Instance violation counts are always zero on the Health page (QCCR1I39397)

Description: The Business Health tab in the lower-right pane of the BPI Health page shows how many BPI monitor threshold violations there have been within the most recent sample period. The sample period corresponds to the period at which data samples are sent to BSM. If the sample period is too short, or the clocks are not synchronized between the database and BPI Server hosts, the violation counts may always be zero.

Workaround: If the violation counts on the BPI Health page remain zero when you expect there to be violations, check the following:

- Ensure the clocks are synchronized on the host systems for the database server, BPI server, and BSM.

- Increase the Data samples send interval option on the HP Business Service Management settings page of the BPI Server Administration Console.

Errors with long names for the BPI Instance database and user name (QCCR1I41558)

Description: When installing the BPI server on MSSQL (2008), multiple errors will occur if you have a large BPI Instance database name and large user name.

Workaround: Use up to a maximum of 16 characters for the BPI Instance database name and the user name.

Errors may occur if a non-admin Oracle user attempts to install a BPI instance databasewith tablespace names that already exist in Oracle DB (QCCR1I42012)

Description: When installing the BPI instance database on an Oracle database where pre-existing BPI tables exist (from a previous BPI installation where the Keep BPI data option was selected during the previous version uninstall), errors may occur if the database setup is conducted by a non-admin Oracle database user.

Workaround: When installing BPI against an Oracle database where legacy BPI database data has been retained from a previous installation, perform the BPI Instance database setup on the Oracle database as the Admin Oracle database user.

When deleting a previously created Data definition in BPI Lite mode an error may occur (QCCR1I45844)

Description: When using the Modeler in BPI Lite mode (BPI is not licensed or the BPI Server is not running), and you delete an existing Data definition that was created for a Business Process in BPI Full mode, an error may occur.

Workaround: Re-create a Business Process model with no Data definitions.

Filter Validation Error in the Monitor Over Time report (QCCR1I47399)

Description: In the Monitor Over Time report, a Filter Validation Error occurs if you did the following: 1) opened the Monitor Over Time report immediately before you created a monitor, 2) navigated directly to **BPI > Admin > Monitor Definer** and added a monitor, and 3) navigated back to BPI Applications through the application menu **Application > Business Process Insight**, which reopens the Monitor Over Time report and the Filter Validation error.

Workaround: If you go out of the Monitor Over Time report by navigating to another report, or to the site map, and then reopen the Monitor Over Time report, the error is resolved.

Process Definition Name and the Data Definition Name cannot be identical (QCCR1I48053)

Description: When creating a Business Process Model in the Modeler, the Process Definition Name and the Data Definition Name cannot be identical. Be sure that the Data Definition Name string is different from the Process Definition Name for all Business Processes.

Workaround: Change the Data Definition Name using the Modeler if necessary.

BPI Value monitors show the completed process value instead of the value of the activities in the span (QCCR1I48691)

Description: If you create a BPI Value monitor that spans multiple activities, and the value does not change from one activity to another, the monitor reports the value for the last activity in the span. However, in such cases where the value changes across activities, the monitor reports the value of the completed process even if the last activity that completes the process is not in the defined span.

Workaround: None.

Error when using TV-BPI integration and the Decimal column type (QCCR1I50361)

Description: When opening an event definition exported from the TV txn that has a data field of decimal type, an error occurs.

Workaround: When using TV-BPI integration, do not use the Decimal column type either when creating a data column in the UI or when creating XDM definitions by hand through XML. Use Double instead of Decimal.

Selecting the PDF menu item in the Scorecard reports does not work for some Business Processes (QCCR1I56352)

Description: Selecting the PDF menu item in the Scorecard reports does not work for some Business Processes and may display the error message: HTTP 500 error.

Workaround: None.

Modeler occasionally fails to start with error "Unable to use remote proxied object" (QCCR1I60390)

Description: Occasionally, when the BPI Modeler is launched, an error repeatedly appears that the Modeler cannot access the process repository. (QCCR1I60390)

Workaround: Follow these steps to resolve this issue if it persists. You must have BSM Administrator permissions.

1. Ensure the process repository service is up and running.

   a. Launch the **HP Business Service Management Status** panel on the BSM host.

      ○ For Windows, access: **Start > All Programs > HP Business Service Management > Administration > HP Business Service Management Status**.

      ○ For Linux, access: `http://<BSM_FullyQualifiedHostName>:11021/ invoke?operation=showServiceInfoAsHTML&objectname= Foundations:type%3DNannyManager`

   b. After you launch the Status panel and log in, look for a **ServiceName** called **bpi_process_ repos**.

   c. Verify that the **bpi_process_repos** Status is STARTED. If not, you may need to restart BSM.

   d. If you have a full BPI installation with a licensed server, ensure that all the BPI components are running on the BPI Administration Console Status page.

2. Ensure your browser has the appropriate proxy configuration.

   Access the Proxy settings dialog to see if the BSM domain has a proxy exception in the proxy exceptions list. For example, if your BSM server is called **bsm.hp.com**, then the proxy exception would be ***.hp.com**. Internet Explorer calls these proxy **Exceptions**, and Firefox calls these **No Proxy for**. If there is no BSM domain proxy exception, and it is appropriate, add the BSM domain to the exceptions list.

   Accessing the Proxy Settings panel varies depending on the type of browser and browser version you use to access BSM. Usually, the proxy settings can be configured from the browser tools or options panels in the network configuration or LAN settings under proxy servers.

3. Clear **javaws** cache.

   Typically, the **bpimodeler.jnlp** file in **javaws** cache is updated when changes are detected, but by manually uninstalling the application from **javaws**, you ensure a fresh download of the **bpimodeler.jnlp** from the BSM server. On the system where you plan to launch the modeler, run **javaws –uninstall** in a command prompt.

4. Clear the browser cache of BSM cookies.

   Your browser cache may contain a stale BSM cookie, which does not have the correct session ID and/or proper credential information. This can occur during unusual BSM shutdown scenarios where the Modeler was running at the time of the BSM shutdown.

   Clearing the cache specifically for BSM is different depending on which browser you are using:

- Firefox Browser

  i. Select the **Tools > Options > Privacy** tab.

  ii. On the Privacy tab, click on the **remove individual cookies** link. A dialog opens with a list of cookie sites.

  iii. Search through the sites for the hostname of your BSM host and select it.

  iv. Click the **Remove Cookie** button at the bottom to remove the cookies associated with the BSM host site and close all Tools windows.

- Internet Explorer Browser

  The following procedure ensures proper deletion of the targeted cookies, rather than using the Internet Explorer cookie removal tool, which may not always permit file deletions.

  i. Select the **Tools > Internet Options > General** tab.

  ii. Click the **Settings** button for deleting temporary files, history, cookies, and so on. A Settings dialog opens.

  iii. Click the **view files** button to view the cookies, which are opened in a Windows Explorer window to your local Temporary Internet Files location.

  iv. Open a second Windows Explorer window.

  v. Copy and paste the Address line (for example, `C:\<Local Settings>\Temporary Internet Files`) from the original Windows Explorer window opened by the IE browser, to the second Windows Explorer window.

     All the cache files are visible from this second window.

     You can now delete any of the IE browser cache files from this second Windows Explorer window.

  vi. Search for and delete a pair of files called topaz/ (see the adjacent Internet Address column):

     ○ One file is associated with **Cookie:<user>@<bsmhost>/topaz/**.

     ○ One file is associated with **http://<bsmhost>/topaz**.

Application Management for SAP

SiteScope SAP CCMS Alert monitor is not displayed (QCCR1I46581)

Description: The data received from the SiteScope SAP CCMS Alert monitor is not displayed in Service Health and Service Level Management SAP Systems views when working with Application Management for SAP application.

Workaround: None.

Run-time Service Model (RTSM)

Application and Modeling

Modifying CIT definition via CI Type Manager may cause loss of the identification rules. As a result CIs of the modified type and its inherited types may not be reconciled properly. Please consult with HP Software Support before customizing the class model via CI Type Manager.

When creating a cron expression in the Job Definition Scheduler, the time and date must be in the future. If the current date or a past date is defined, it will cause an error.

When Delete permission is assigned for a CIT, all of its sub-classes can also be deleted.

When Create permission is assigned for a CIT, it can be updated and all of its sub-classes can also be created.

In Enrichment Manager, Impact Analysis Manager, and CIT Manager, when you select several CITs and their connecting relationships and select **Export Map to Image** with the **Selected Object Only** option, the resulting image does not display the relationship names.

It is possible to edit CITs even if they are assigned the READ_ONLY_CLASS qualifier.

The Screen Capture tool cannot capture a screen shot when the UCMDB/RTSM browser is running in a multi-display environment.

The **Clear Filter** button in the Job List dialog box (for scheduled reports and scheduled snapshots) does not work properly.

When creating a new Impact rule in the Impact Analysis Manager, the created Impact rule can be run within the IT Universe Manager even if the **UCMDB** check box on the Impact Rule Groups page of the wizard is not selected.

After restarting the server, it may not be possible to log in for several minutes even though the login page is available.

In IT Universe, if you right click a Virtual Compound Link from the Get Related pane, the Show Compound Path option is disabled.

The following API has been added to the CI Selector to get the selected CIs' display labels and class names using Javascript:

- String getSelectedCmdbObjectDisplayNames()
- String getSelectedCmdbObjectClassNames()

The new **retrieveAllActiveUsers()** method is now available in the **UCMDB-UI:name=UCMDB Integration** section of the JMX console. This is equivalent to the **getAllActiveUsers()** method that was available in UCMDB version 8.0x.

In the UCMDB_JavaAPI, in cases where an attribute type was of type **string** or **integer** list, the **Attribute#getDefaultValue()** method, which had returned strings in XML format, now returns a collection of string or integer objects.

There have been some performance improvements in the Generic Database Adapter.

In the **Views** tab in the Security Manager, when Delete permission is set and a view is deleted, the query on which the view depends is also deleted.

It is not possible to import calculated relationships to the CI Type Manager from an XML file.

In the Modeling Studio, it is not possible to create more than one pattern-based model of the same CI type, based on the same query. When you try to create a new one, it overwrites the existing one.

Deprecated CI types do not appear in strike through font if the font size is less than 14 points.

In the Routing tab in the Layout Properties dialog box, (accessed by selecting Layout > Layout Properties), all the options seem to be available, but only some of them are actually used in the layout of the map.

In the Impact Analysis Manager, if an XML file is imported with the same file name as an existing Impact Rule, a confirmation message saying that an Impact Rule of that name already exists is not displayed before replacing the existing Impact rule.

When exporting CI instances found for a selected TQL, you can now manually enter up to 150,000 CIs per page.

If you have **Delete** permissions for views and you delete a view, the TQL query on which the view depends is also deleted.

In the Modeling Studio, no informative error message is displayed when you import an invalid XML file for views or queries.

In Modeling Studio, you cannot change the query type of an Enrichment or Impact Analysis query in the Query Definition Properties dialog box if there are resources that are defined on top of this query.

In the Impact Analysis manager, when you try to save an Impact rule for which you defined a sub-graph, a generic error message appears without giving detailed information regarding the problem.

Printing semi-transparent graphics using the **Run Screen Capture Tool** produces poor quality results.

In the Hierarchical tab in the Layout Properties dialog box, (accessed by selecting **Layout > Layout Properties**), the **Minimum Backward Edges** and **Optimize For Feedback Flow** options do not work properly.

The new viewing system currently does not support displaying view results via the IT Universe Manager that were based on a rule-based template.

When displaying CIT instances with the network port number property, the network port number is displayed with a comma. This comma is irrelevant but is displayed because of the manner in which Java reads the value from the system.

When you search for a string in the Modeling Studio or the Reports module, the Highlight button highlights only the first occurrence of the string that is found.

Reports

To enable hyperlinks in reports, set the infrastructure setting **Enable links in exported reports** to **TRUE**. To display icons in exported reports, set the infrastructure setting **Display icons in exported reports** to **TRUE**.

Confidential Manager

If you change the default domain name on the UCMDB server, you must first verify that the Data Flow Probe is not running. After the default domain name is applied, you must execute the **DataFlowProbe\tools\clearProbeData.bat** script on the Data Flow Probe side, and then restart the Data Flow Probe.

Note: Execution of the **clearProbeData.bat** script will cause a discovery cycle on the Probe side once the Probe is up.

Discovery

SQL Protocol: The Encryption Method field enables you to choose SSL support for Oracle connections.

SNMP Protocol: The **Privacy Algorithm** now supports both DES and AES algorithms.

If you want to connect a new Data Flow Probe to UCMDB/RTSM with an identifier of a Data Flow Probe that is already defined on a different domain, you must remove the existing Probe from UCMDB/RTSM (from the Data Flow Probe Setup module), prior to installing the new Probe.

To prevent an overload on the Data Flow Probe machine, you can limit the number of remote processes that run simultaneously. Locate the **appilog.agent.local.services.maxRemoteProcesses** parameter in the **DiscoveryProbe.properties** file. The default value is unlimited (**-1**). Change the value to the maximum number of processes that can be run simultaneously. If you change this value, you must restart the Probe. (This overload can occur when activating certain out-of-the-box jobs that launch a Java process for each destination, for example, J2EE or SAP jobs.)

Downloaded **jar** file resources can cause the Probe to restart before all the other resources of an adapter package have downloaded. To prevent this occurring, the reset time is, by default, **40** minutes. You can change this time:

Access the **appilog.agent.probe.restartProbeAfterJarDownload.interval** parameter in the **DiscoveryProbe.properties** file. The delay until a restart on the first resource download (that is, for a first start or after clearing the Probe data) is 10 milliseconds.

In the Dependency Map, when selecting to show all instances of a selected CI, the instances are not displayed.

When you try to filter triggered CIs by probe in the Discovery Control Panel - Status pane, the triggered CIs are not filtered.

Discovery job error and warning messages are displayed in the language of your client's operating system, independent of browser language settings.

Integration

If you are using data synchronization between BSM and the central CMDB (or vice versa) with aging enabled in the adapter, if you disable the sync for a time period which exceeds the aging interval, CIs may be deleted by the aging mechanism. As a result, related data and configurations in BSM may be lost as well.

Workaround: If you plan to stop data synchronization between BSM and the central CMDB for a time period which exceeds the aging interval, it is recommended to disable the aging in the adapter. If the aging has been enabled and is changed to be disabled, it is recommended to run full data synchronization before stopping the data synchronization between BSM and the central CMDB. (QCCR1H65590)

When running a history-based push job (for changes), you can incorrectly select any integration TQL query, even those that are federated or contain virtual links.

To simplify the creation of integration points, the following adapters are supplied with template configurations that include default options and queries: Service Manager, DDMi, and Microsoft SCCM/SMS. This is relevant for users of Content Pack 8.00 or later.

If you start a population job (for the first time) on a TQL query that is currently being edited, saving the query may remove its "Active" status and cause the job to fail. If this occurs, running a full population job again will fix the problem.

A population job that uses the UCMDB 9.x adapter to retrieve federated data can retrieve only added or updated CIs, but cannot remove deleted CIs from the CMDB.

The EMC Control Center (ECC) database does not contain WWN (World Wide Name) information for FCHBAs (Fiber Channel Host Bus Adapters) attached to Storage Arrays. Therefore, this discovery populates the WWN attribute of FCHBA CIs with the ECC ID (internal to ECC) of the HBA. The script also populates the **data_note** attribute of each such FCHBA CI with a note that ECC does not have WWN info and duplication of this CI is possible.

Federation

If you set a property condition on a query node that may bring data from external data sources (federation) and the condition is not supported by one of the data sources, the TQL query calculation will fail.

When federation takes place to UCMDB through an intermediary server, the federation will fail if the CIT that is linked to the federated CIT is identified topologically, in part or in whole, by the federated CIT. For example, there may be a setup with three servers, where Server 1 is the local machine, which federates the IP CIT from Server 2, which in turn federates the same IP CIT from Server 3. When running the TQL query of node CIT linked to IP CIT, the query will fail, since a node CIT is identified by instances of IP CIT that are connected to it.

Federated nodes incorrectly show suggested values from the local CMDB, even when their only data sources are external.

If an integration point that supports a CIT that is being queried by the CI Selector in the IT Universe Manager, and this integration point does not support conditions on the display label, no results are shown.

Discovery and Integration Content

Discovery and Integration Content Pack 8.00 is included with BSM. There is no need to install it separately. Discovery and Integration Content Pack 9.01 is also supported (with limitation, see UCMDB Content Pack Support matrix for details) and can be installed separately after 9.12 is installed. Before installing any other content pack version, verify that it is compatible with the current version of BSM (see the relevant Content Pack documentation or check the SSO site for updated support matrix information).

Content Pack Documentation Updates

To read the latest versions of the relevant documents, access the following URLs:

- **<http://SERVER_NAME:PORT/ucmdb-ui>/docs/DDMContent.jsp** – Discovery and Integration Content Guide
- **<http://SERVER_NAME:PORT/ucmdb-ui>/docs/permissions.jsp** – the Permissions document
- **<http://SERVER_NAME:PORT/ucmdb-ui>/docs/readme.jsp** – the Release Notes (this file)
- **<http://SERVER_NAME:PORT/ucmdb-ui>/docs/whatsnew.jsp** – What's New in this release

RTSM Multilingual Support

Multi-Byte characters do not appear in titles and sub-titles in reports when exporting or previewing as PDF.

For reasons of compatibility, Integration Point names and Data Flow Management job names can include only English letters, numbers, and the underscore character (_).

Because the maximum string length for many UCMDB parameters is defined and documented in bytes, the real acceptable value length is shorter when multi-byte or language-specific characters are used.

In Enrichment Manager, required attributes in the **Node Definition** dialog box are not marked in bold for the Japanese, Chinese, and Korean versions.

Non-English characters should not be used in paths to different properties or adapter files.

Multi-byte characters should not be used in user passwords.

The action names in scheduled jobs are stored with localized names (according to the locale being used), but those names are displayed with no dependence on locale. Those action names may be user-modified and therefore will be user-specific.

You can now configure email settings using multi-byte characters. These settings were moved to the Infrastructure Settings Manager.

Excel can now open UTF-8 encoded CSV documents correctly.

HP Universal CMDB/RTSM does not fully support surrogate pairs and combining characters.

Documentation

- In the *Using MyBSM* guide (versions 9.10 and 9.12), there are various inaccuracies in the section **MyBSM Predefined Pages and Components**. Some pages and components are documented incorrectly; other components that are available in the MyBSM application are missing from the documentation. For a detailed description of these issues, see "Documentation Update - MyBSM Versions 9.10 and 9.12" on the HP Software Support Manuals site.

- If you experience a JavaScript error when opening the HP Business Service Management Documentation Library online help system, disable the "Show Exception Dialog Box" in the Java Console and open the help again.

- When viewing the HP Business Service Management Documentation Library online Help system in Internet Explorer 8, numbered or alphabetical lists may appear corrupted.

> **Workaround:** In IE 8, open **Tools > Compatibility View Settings**, and select **Display all web sites in Compatibility View**. Click **OK**. The incorrectly numbered lists appear correctly.

- The following information is missing from the Operations Management online help:

  You can propagate and sum up the events along the CI impact hierarchy using the **Event KPI Group And Sibling Rule (OMi)** for the KPI **Unresolved Events** and **Unassigned Events**.

  To configure this behavior, complete the following steps:

  a. Change the default group rule for the event based KPIs (unassigned, unresolved) to **Event KPI Group And Sibling Rule (OMi)**.

  b. Change the KPI Assignment Rule (**OMi KPI Assignments**) on CI Type **Configuration Item** to use the **Business Rule Event KPI Group and Sibling Rule (OMi)** (one change for each of the two KPIs in this assignment).

  c. Change the propagation rules on CI Type **Configuration Item** (**OMi Unassigned Event KPI Propagation** and **OMi Unresolved Event KPI Propagation**) to propagate the KPIs by using the **Event KPI Group And Sibling Rule (OMi)**.

  d. Go to the rule definition in the repositories UI and make the hidden rule parameters visible by selecting the check box to make the rule parameter configurable. Then, update the rule of the KPI in the KES assignment. After you save the assignment you can hide the rule parameters again.

  Alternatively, you can delete the existing KPIs before running the KES assignment. This action will cause the assignment to create the KPIs rather than update them.

  e. Synchronize *all* CIs. (This may take some time, depending on the number of CIs.)

Multilingual Support

BSM

French is not included in the installation UI for BSM, SiteScope, RUM, BPM (QCCR1I45161)

RUM Probe names with non-English characters are not readable in EUM Admin (QCCR1I38959)

CI Statuses from definitions "Changed from" and "Changed to" are displayed on BSM Server locale for OMi Event Console (QCCR1I53350)

Some parts of the OMi Content Pack items do not support MLU and are available only in the deployed language (BSM Server system locale) (QCCR1A123403)

OMi Performance Graphs > Graph Families are not localized (QCCR1A118712)

Find Matching Event window: meaningless characters in the IE 7 title bar in non-English language sessions (QCCR1A127305)

UI of SAM Monitor Performance page will be displayed on BSM server OS locale under any language session (QCCR1I15627)

BPM scripts must have only English characters in the name (QCCR1I38789)

Application > Service Health top pane tabs (Page Names) are not localized (QCCR1I45575)

To enable MLU support in Service Health Top View User specify Unicode font that will be used on Top View page in Infrastructure Settings Manager > Service Health Application > Top View Properties > "Top View Font Name".

To enable MLU support in PDF reports User should specify Unicode font in Infrastructure Settings Manager > Foundations > Reporting > "Unicode font path for displaying PDF characters" (QCCR1I21288)

The RTSM Class Model does not support multi-byte character sets. All class model items, including CI type, relationship, and attribute names, descriptions, and display labels, cannot contain multi-byte characters. (QCCR1I62755)

RUM

RUM Probe installation UI is not localized (QCCR1I37569)

RUM Engine 'Transaction Management Configuration' page UI will be on JVM locale instead of browser one (QCCR1I57500)

BPM

BPM console is not translated to Chinese language (QCCR1I57916)

Diagnostics

Diagnostics - no support for non-English characters in Java and .NET Probes names (QCCR1I57918)

SiteScope

Management reports by default do not support UTF-8 encoding. Workaround is to check International version check box in Preferences > General Preferences. (QCCR1I56586)

Run results for some monitors are shown according to the server locale or in English, instead of the client locale (QCCR1I30190)

Localized Service names are not readable while trying to add a Service monitor on WMI remote host. Workaround – use NetBios. (QCCR1I30808)

SiteScope – OMi integration – CI names characters and alert names are not readable in OMi Event console. Workaround is to use same locale as SiS server OS in the entities' names (QCCR1I43630)

When using the Microsoft Windows Resources monitor in a non-English locale, the monitor counters and run status summary are not readable. Workaround: Configure the monitor to use the Direct registry queries collection method. (QCCR1I54985)

Fixed Issues

Problems and limitations are identified with a Change Request number (QCCR*xxxxxxxx*). Use this number when looking for more information about the problem on the HP Software Support web site, or when communicating with your HP Support representative.

Issues Fixed in this Release

Add a configuration for alerts that will allow setting minimum transaction before triggering alert (QCCR1I52998)

No EUM ETL tables populated when same application is mapped to two different databases for BPM and RUM (QCCR1I62708)

Grant permissions for SLM to allow the aggregation button to not be grayed out without granting superuser access (QCCR1I33584)

User Report with Custom Query Builder (QCCR1I58563)

Selectors of large size are not read properly by matcher (QCCR1I62527)

Ampersand (&) character in email address recipient does not work (QCCR1I62331)

Exporting to CSV from a generated topology report with more than 33,000 rows creates an empty file (QCCR1I63554)

High availability documentation in BSM 9.01 Deployment Guide has inaccuracies (QCCR1I63664)

JMSUtils: Thread responsible for recover(reconnect) connections dies after ConcurrentModificationException (QCCR1I58867)

GDE PostProcessing engine is run twice if both internal and external processing is done (QCCR1I63127)

Failure to send CI status alert when defined on CI types Logical Application, Business Service and Business Process (QCCR1I58620)

Inconsistencies in Hardening Guide (QCCR1I63433)

BAC 8.06 Report Manager switches from 1 month to 21 hours in February (QCCR1I60230)

Not able to add contact information to the tooltip (QCCR1I37548)

Unable to access custom reports via URL (QCCR1I44968)

Excessive number of BLE Offline alerts, not finding the root cause (QCCR1I55184)

Add ability to remove recalculation tasks from UI (QCCR1I48846)

Alert engine sends duplicated notif_stat_t samples database (QCCR1I57049)

Scheduled Report in HTML format stored images (graphs, etc.) in the online directory for images, not the offline directory (QCCR1I59330)

Service Report does not take up entire space in PDF format (QCCR1I54859)

Reports publishing URLs with time frame parameters (QCCR1I52329)

Custom Reports do not use global time period in BAC 8.x (QCCR1I57995)

User Reports with large number of components should be properly generated (QCCR1I33307)

LDAP between 2 AD forests does not work (QCCR1I56314)

All email recipients are not listed in email alert (QCCR1I37981)

Need to see raw data in a scheduled Trend report (QCCR1I37066)

Using secure SMTP server (with user authentication) (QCCR1I54159)

Loading the CI Properties tab takes too much time for business application CI (QCCR1I60215)

Update a large number of alerts with one query (QCCR1I49018)

RUM should stop sending rum_session_id_t sample by default (QCCR1I63369)

BSM LDAP/AD cannot fail over automatically to a backup LDAP/AD server (QCCR1I47611)

EUM Enrichment for BPM 8 samples - first sample for certain tx-loc pair is ignored (QCCR1I60941)

In SLA Wizard the page of HIs and KPIs is not loading (QCCR1I60973)

Data upgrade- wrong dependency check between the truncate task and the reaggregation task (QCCR1I61329)

KES Upgrade - missing selector in the KpiConfig of the 8.x assignment (QCCR1I61738)

Reports from Performance Matrix are showing periods instead of lines (QCCR1I62529)

BSM 9.10 Deployment Guide states that UAC has to be disabled in Windows 2008 in order to install the application.The UAC has to be disabled only for the installation, after that it can be enabled again. (QCCR1I63966)

British English support for the SQL Server language settings (QCCR1I65097)

Admin→RTSM fails to load when you bypass a load balancer or reverse proxy (QCCR1I61726)

Health report in Service Catalog integration failed (QCCR1I62686)

Hierarchy component are not displaying any information. (QCCR1I63031)

Upgrading SLM KPI Propagation Rules (QCCR1I62752)

User does not get feedback about the execution of custom actions (QCCR1A104143)

KPI started showing value as "Critical" or "N/A" instead of 1.0 or zero (QCCR1A114431)

CLIP v9 HA deployment event forwarding to SM: Event and Incident changes made while primary DPS is down are lost (QCCR1A117525)

404 OprDefaultEntryPoint.jsp error while trying to open Event Browser in Mozilla (QCCR1A118704)

Action Panel: Sometimes the wrong tool is executed if the search bar is used (QCCR1A123002)

Internal server error appears while filtering by View in Performance Graphs (QCCR1A123368)

ConnectedServer tool returns uninformative error exception if user tries to change settings of nonexistent connection (QCCR1A123449)

Sorting by the duplicate count does not result in a usable order (QCCR1A125050)

Automatic Run Book: After import of run book rules, non-executable run book rules should be not active (QCCR1A123589)

Possible to save a connected server with an invalid Event Drilldown URL (QCCR1A123604)

Chinese font size of error tooltips is too small and difficult to read (QCCR1A124157)

Auditing does not work for Connected Server admin actions (QCCR1A124390)

Invalid rule can be saved (QCCR1A124814)

"Internal server error. Details: java.lang.NullPointerException" when "Launch Tool..." is invoked from the CI context menu (QCCR1A125029)

Content Pack Import shows line break in numbers of loaded content (QCCR1A126199)

CI Type not being passed in the URL for launching Graph Design Wizard (QCCR1A126455)

Content upload ended with errors that show the same error messages multiple times (QCCR1A126465)

Need ability to set CI subcomponent attribute from submit event API (QCCR1A126679)

TopView is still shown although an event is deselected (QCCR1A126701)

Node CI is not removed from the root node group if it is moved to another node group (QCCR1A127259)

Cache timeout and size for ECA too small (QCCR1A127407)

Database configuration wizard fails if you attempt to select an existing event database that does not exist (QCCR1A127443)

opr-checker.pl on Linux is not aware of the server type - some checks are only for DPS systems (QCCR1A127736)

Condition field in OMi event details is empty for events from IA that were triggered after some time (about 2 hours) of IA work (QCCR1A127789)

Dynamic topology synchronization from OM for UNIX creates all nodes with node role virtualised_system (QCCR1A127836)

Linux: opr-sdTool.sh -uploadpackage <path> reports error : line 14: [: -uploadpackage: binary operator expected (QCCR1A127869)

opr-support-utils cannot list license information (QCCR1A127887)

Command line tool is needed to allow automatically fetching trusted CA certificate via network (QCCR1A128150)

PCoE: OMi owning status overwritten by connection user (QCCR1A128675)

Wrong ETI will be passed to Create Correlation Rule wizard for certain events (QCCR1A129431)

Specifying NOT in the event WS query does not negate the query (QCCR1A129541)

Event query language does not recognize the related_ci[sub_component] property for queries (QCCR1A129543)

Event WS does not recognize query parameter control_transferred_to[state]. (QCCR1A129545)

Event WS query is severely limited by length of URL (QCCR1A129716)

Event WS ignores BDM query language construct "IS NULL" (QCCR1A129717)

Event WS returns error 500 when BTO query language "IN" operator is used (QCCR1A129898)

Need for validation tools for OMi event database (QCCR1A129906)

When OMi not enabled, BSM cannot do northbound (Connected Server/Forwarding Rule) using sample logger groovy script (QCCR1A130230)

OMi ignores "Notify" flag sent by OM for UNIX and always syncs back changes on messages done in OMi (QCCR1A130350)

Parameters are not validated against acceptable parameter types when some UIs are accessed using URLs (QCCR1A130687)

No feedback to operator whenever event forwarding begins retrying delivery of events and updates to a target server (QCCR1A130753)

Content Manager cannot import newline/linefeed characters in attribute values (QCCR1A130769)

A new created Page did not appear in the site map and in Application - Operations Management (QCCR1I56737)

EUM alert samples are not stored in the database. (QCCR1I61008)

Responsiveness of the active filters Location tab for End User Management reports (QCCR1I62118)

Do not change the name of a transaction for a Single Transaction Script in the CI Properties page (QCCR1I58438)

BPM and RUM data for an application is not visible in EUM reports. (QCCR1I61797)

PMi fails to graph data from the classic SiteScope Failover solution (QCCR1I60205)

Export command on reports and topologies is not supported (QCCR1I50730)

Issues with VMware when Transaction Management and Real User Monitor are used together (QCCR1I57087)

Null pointer exception Transaction Management Configuration tab (QCCR1I57484)

There are no longer major DPS machine performance issues. (QCCR1H35462)

The size of an attribute can now be decreased after increasing it. (QCCR1H33857)

After performing an upgrade from 9.01 to 9.02, the database version in the JMX is 9.02. (QCCR1H36083)

Advanced pane (visibility) menu of Direct Link and the info pane URL parameter are no longer inverted. (QCCR1H35198)

Change reports on newly added CIs now reads: "There are no changes in the selected CIs." (QCCR1H36195)

Different attributes cannot have the same display label. (QCCR1H32280)

The UCMDB client requests only JAR files that exist on the UCMDB server. (QCCR1H37214)

An Enrichment rule can now concatenate a blank space. (QCCR1H38073)

"Show CIT instances" for IPServiceEndpoint displays the column NetworkPortNumber without comma separated values. (QCCR1H39211)

When deleting a last link in TQL mode in the Enrichment Manager, the link is not removed and the following message is displayed: "Node or relationship in query is required". (QCCR1H27558)

CI attributes are displayed in alphabetical order when selecting the Create CI option from the ITU manager. (QCCR1H28359)

When a pattern based model is deleted, the corresponding scheduler job is also deleted. (QCCR1H35199)

TQL Queries can be opened under all conditions. (QCCR1H35033)

In IT Universe, if you right click a Virtual Compound Link from the Get Related pane, the Show Compound Path option is disabled. This will be enabled in a future version. (QCCR1H62436)

In the Asset Manager DB Adapter, the GDBA does not filter out properties with "null" values. (QCCR1H61655)

Java Integration adapters can be deleted after upgrading to 9.04. (QCCR1H62299)

Warning messages no longer appear and are not entered into the error log as a result of the DataContainer locating referenced objects with the same ID but a different type of Data In flow. (QCCR1H61790)

The problem of retrieving the network scope document encrypted with a non-default encryption key was resolved by exposing the importEncryptionKey method in Manager's JMX console. (QCCR1H33281)

The Scheduler definition for an interval repeat every x days no longer jumps to 1 week after reopening in Integration Studio. (QCCR1H36493)

Someone logged in with the Guest role cannot delete CIs or edit trigger TQLs. (QCCR1H29825)

The Hide Empty Folders button now hides only empty folders. (QCCR1H32053)

The Delete Candidate Reports can be generated even after deleting a CIT. (QCCR1H37197)

When trying to add a URL method to a CI type menu without entering a URL, a message appears telling the user to fill in the URL/Executable field. (QCCR1H37538)

Actual State output can be customized. (QCCR1H36411)

SMTP Server Mail setting is no longer ignored when a mail server is installed on the same machine as the UCMDB. (QCCR1H61363)

The Data Flow Probe Management Guide now specifies the correct location of the ucmdb_ licence.xml file. (QCCR1H61779)

In the Administration Guide, semi-colons have been removed from the chapter describing how to configure LDAP for Active Directory. (QCCR1H37362)

Authorization of a change in Configuration Manager now succeeds even with a Null Pointer Exception in UCMDB. (QCCR1H62586)

In the IT Universe, when viewing the central pane in text mode, Show CI instances no longer displays random values. (QCCR1H61648)

It is now possible to select the type CI Managed Object and perform a search in all objects. (QCCR1H61644)

Discovery Query triggers no longer fail due to a DB exception. (QCCR1H62487)

Pulling CIs from UCMDB 8.06 into 9.03 succeeds. (QCCR1H61628)

JMX Operation: exportFolderResources succeeds for UCMDB 9.x (QCCR1H61623)

The Java Web Service executeTopologyQueryByNameWithParameters can be successfully executed. (QCCR1H61898)

After upgrade to 9.03, TQLs with operator "IN" or "IN ignore case" are now working properly. (QCCR1H61925)

After upgrading to 9.03 from version 8.04, scheduler jobs (Administration > Scheduler) now appear in the UI and the scheduler is no longer broken. (QCCR1H62893)

Exporting report to CSV format no longer fills the empty cells with incorrect data. (QCCR1H32900)

Display name/description now appear correctly when navigating through CI-Type hierarchy. (QCCR1H32455)

The JVM used with RTSM in BSM no longer crashes. (QCCR1H39070)

There is now a working scroll bar for the probe list. (QCCR1H61383)

When installing the 9.03 CUP1 probe on a non-English Windows OS, the probe is able to download credentials from the UCMDB server. (QCCR1H37766)

Last access time no longer gets updated for decommissioned hosts. (QCCR1H38028)

Created a new JMX to correctly mark CP packages as factory. (QCCR1H38255)

Fixed problem when during deployment of new content packs all newly introduced packages were added as a user package. (QCCR1H38252)

After upgrading from UCMDB 9.01 to 9.03, the server processing results of discovery is no longer extremely slow. (QCCR1H38668)

Unnecessary indexes on temporary tables were removed and no longer cause performance overhead when inserting and deleting. (QCCR1H38102)

There is no longer a significant degradation in DB-related operations while TQL calc and data insertion are running in parallel. (QCCR1H36737)

The "delete from <temp table>" operation no longer has a high performance impact on an Oracle database. (QCCR1H26143)

Fixed issue of RTSM process (in BSM) running out of JVM memory. (QCCR1H37445)

During reconciliation, the Ignore Logic process no longer creates many CmdbModifiableObjects and does not throw a StackOverflowException. (QCCR1H37475)

Selecting the Show map option in Impact Analysis now opens a map. (QCCR1H37094)

Discovery job no longer gets stuck after performing an upgrade from UCMDB 9.02 to 9.03. (QCCR1H37234)

Embedded URLs for reports now work with LW-SSO enabled. (QCCR1H31812)

A Pattern Model can now be created with the same name as one that was previously deleted. (QCCR1H36725)

PDF reports in UCMDB version 9.0x can now be given a meaningful title. (QCCR1H30584)

Asset Manager Integration: Population job of 700K (CIs and links) no longer fails after 12 hours due to Out of Memory Exception (during getTopology stage). (QCCR1H34384)

Asset Manager: Jobs no longer fail because of a link with an end that was not part of that end's type table. (QCCR1H34514)

Generic DB Adapter: Enum transformer now supports case insensitive values. (QCCR1H34223)

Generic DB Adapter: Discriminator now supports "all other values" and "like". (QCCR1H34582)

Generic DB Adapter: The ID chunk size was raised during the getTopology stage to improve performance. (QCCR1H34587)

Generic DB Adapter: The number of SQLs was reduced during the getTopology stage to improve performance. (QCCR1H34588)

Generic DB Adapter: When using Oracle with UTF-16 (source external DS for population) as the default charset, an Invalid Charset exception is no longer thrown. (QCCR1H35502)

Generic DB Adapter now filters cross ID conditions (treats 1.* correctly). (QCCR1H35801)

Population: The createNextChunk is no longer very slow on large topologies with multiple connections. (QCCR1H35802)

Population: Anchor mapping flow was changed so it is now performed per chunk and not on entire topology. (QCCR1H35838)

Discovery jobs are no longer stuck in progress. (QCCR1H36186)

LDAP accounts now work with the UCMDB web service. (QCCR1H36233)

Users with no admin rights can no longer add relationships between CIs. (QCCR1H36258)

It is now possible to add for reports mail addresses with a hyphen in the domain. (QCCR1H36350)

Compare CIs Report now works with the Compare in CMDB option. (QCCR1H36405)

An exception no longer occurs when limiting credentials to a Probe. (QCCR1H36608)

After performing an upgrade from UCMDB 9.01 to 9.03, the Get Related CIs menu option is available. (QCCR1H36643)

After performing an upgrade from UCMDB 9.02 to 9.03, new users retain their assigned roles. (QCCR1H36735)

EUM App – PCBD page Failed to retrieve data if URL contains French characters (QCCR1I58145)

EUM App - PCBD page: Multibyte characters of language different from browser language are corrupted in report (QCCR1I58151)

Previously Fixed Issues

Platform Admin Guide: Need to clarify LDAP user synchronization feature (QCCR1I30096)

Unable to increase the trend measurement beyond 20 for users (QCCR1I48642)

DBVerify/PM logs should show reason why PM catalog is invalid (QCCR1I50388)

Admin user is not able to access Service Health application but other superusers can (DB corruption - duplicated rows in Pages/Components tables) (QCCR1I51767)

Modeling Studio is not accessible by any user except superuser (QCCR1I51891)

Force BSM to use the FQDN as part of the email handshake (QCCR1I52009)

Menu customization lost when user cloned (QCCR1I52010)

BSM deployment questions (QCCR1I52016)

Scheduled Report shows error message tracking information (QCCR1I52173)

Require data to 3 decimal places in RUM Tier Summary Report (QCCR1I52176)

Increase the alert description character limit (QCCR1I52590)

Model explorer shows "UCMDB Service is currently unavailable. Please try again in a few minutes." (QCCR1I53194)

Custom Query Builder component does not save filters with '=' in MyBSM (QCCR1I54007)

Error in the description header of the file foundations_sql_dbobjects_create.sql (QCCR1I54182)

vm_params.ini values set too low for DBLoader, MercuryAS and others (QCCR1I55942)

RTSM WSDLs missing in BSM 9.0 and 9.01 (QCCR1I58019)

Resolve Locations by IP is taking 5 minutes for 100 IPs - RUM reporting all location CI as UNKNOWN (QCCR1I58171)

MyBSM Workspace - Refresh is not working for application opened in a new window (QCCR1I39307)

Service Health Administration - Propagation assignment priorities are wrong (QCCR1I57021)

API needed for HI reset (QCCR1I47019)

SLM Forecasting - SLA Status report displays wrong Expected Breach Date (QCCR1I20506)

Extend Automated Schedule for SLM Recalculations (QCCR1I51234)

CI Over Time report always seems to display wrong values on the y-axis (QCCR1I52505)

Deduplication: OM for Windows events are assigned to OMi administrator although the corresponding event in OMi is not assigned to a user (QCCR1A99288)

Infrastructure content pack: Events are not correlated for "cluster node down impacts the cluster services running on the node".(QCCR1A99326)

No ETI appears for cluster node status (QCCR1A99688)

Failure to launch actions (QCCR1A103514)

Unexpected class loading in scripting server (QCCR1A103827)

Switch from OMi to Event channel closes BBC port on Firewall (QCCR1A105814)

Incident creation fails due to timeout while accessing the Service Manager server (QCCR109884)

Event details panel does not refresh after adding a new annotation (QCCR1A107300)

Closing correlated events has no impact on unresolved and unassigned KPIs (QCCR1A107752)

New domain controller role CIs are not created (QCCR1A108011)

Assigning events does not update assignment of related events. (QCCR1A108698, QCCR1A108700)

Reopening a symptom event produces an inconsistent assignment state compared to its still open cause event (QCCR1A108700)

History browser configuration dialog custom date range selection (QCCR1A108798)

Causes should be listed under a separate constraint type "Cause" in "Send test event" (QCCR1A108805)

Correlation Rules Manager and Generator should not require ETI Mappings permissions (QCCR1A108990)

Impossible to reopen an event that is owned in HP Operations Manager (QCCR1A109029)

Create correlation rule causes a timeout error and the retry button causes an error (QCCR1A109171)

Topology synchronization of HPOprSys package fails (QCCR1A109397)

Event Change and History Line web services report incorrect user login name and display name (QCCR1A109532)

Forwarding Rules Manager does not display Forwarding Type (QCCR1A109781)

Forwarding Manager allows creation of invalid forwarding rules (QCCR1A109783)

Instructions for uploading Operations Orchestration (OO)flows are missing (QCCR1A110072)

Online help: Event Details tab External Info has wrong icons and a part is missing (QCCR1A110858)

CI resolution for SiteScope related events (QCCR1A110925)

When the event exceeds its expiry date, the event will be auto-acknowledged or closed (QCCR1A112440)

Empty filters fail to validate during import (QCCR1A113052)

Content pack import fails for large content packs (QCCR1A113511)

If the active flag for a connected server is not set, a tool can still be executed through this server (QCCR1A115164)

OO 9 Support for OO flows shipped in Content Packs (QCCR1A116534)

Duplicate event detection in OM should update the corresponding SM ticket (QCCR1A115186)

URL rendering in annotations and CAs does not work anymore (QCCR1A116886)

Adding an annotation using event synchronization from an external server triggers a loop (QCCR1A119776)

Oracle Enterprise Manager recommends two additional indexes (QCCR1A119865)

OM ignores the read-only attribute of forwarded messages (QCCR1A119930)

Documentation should mention that the topology synchronization integration user has to be a local administrator in OM (QCCR1A120695)

Event forwarding from OM to SM stops working after setting the 'event forwarding expiration' parameter in the infrastructure settings to zero (QCCR1A120960)

JavaScript injection is possible using Event Details URL parameters (QCCR1A121427)

Port collision when installing BSM and an OM agent on the same system (QCCR1I48115)

BSM 9.0 - SiteScope Event Integration - Certificate server should be enabled on Gateway machine (for distributed deployment) (QCCR1I45910)

Sonic crashes with OOM when opr_gateway_queue_1 grows (QCCR1I47614)

If processing server name has trailing or leading spaces certificate forwarding in distributed OM environments will not work (QCCR1I50831)

Event web service filter reverses operands on AND and OR expressions and ignores parentheses (QCCR1I56128)

Siebel Application documentation for BSM 9.01 is unavailable (QCCR1I53303)

System Health - Probes Channel Data Flow status not reported (QCCR1I42860)

RUM report should show the request without response captured by the tool (QCCR1I53143)

RUM action summary report drill down by End User does not list all the users in the report (QCCR1I52207)

RUM engine stopped processing data (QCCR1I57432)

Add ability to install RUM DB into subdirectory (QCCR1I40377)

In BPM order of input fields is not the same when creating a new instance vs. updating an existing instance (QCCR1I57283)

Unable to select multiple transactions in the Triage Raw Data Report filters (QCCR1I52690)

Popup in the End User Monitor reports should have ability to be hidden or removed (QCCR1I50520)

Enable RUM end users reports to display data end users group alphabetically (QCCR1I57392)

BSM Dashboard shows same end-user group with different data (QCCR1I53192)

Transaction name not getting displayed in the Triage Raw Data Report (QCCR1I52689)

Business Process Distribution report rounding values (QCCR1I44899)

When activing RUM application, there is no warning message from EUM Admin UI even though the license expired (QCCR1I50474)

Add housekeeping features to CRS (QCCR1I33925)

Click one button to turn off all monitoring on one host (QCCR1I37549)

Add possibility to define a page with an URL with more than 1000 characters (QCCR1I48320)

Add feature to import RUM pages/applications (QCCR1I53333)

Schedule created in BSM gets created differently in BPM (QCCR1I53019)

Automatic Monitor Configuration in EUM (QCCR1I47234)

Compatibility with Windows 7 (QCCR1I34676)

Compatibility with Windows 2008 and Windows 7 (QCCR1I52022)

BSM is now able to populate SiteScope CIs on Dashboard (QCCR1H27221)

Fixed issue where the action of simultaneous touches by multiple DFM Probes places a high load on the UCMDB Server. Solution: configure the Discovery Probes to perform touches in non-overlapping time frames (QCCR1H28344)

Triggered CI: snmp@<CMDBID> invoked on the Discovery job Host Networking by SNMP now meets the discovery pattern input TQL conditions (QCCR1H28633)

Fixed problem of getting a Tanuki Java Service Wrapper license error in the eastern time zones from GMT +9 (QCCR1H29390)

Fixed problem of getting the error: "Connection to server has been lost" when it does not apply (QCCR1H29679)

Comparing CIs report now works correctly when CIs are in an "Updated Item" state (QCCR1H29915)

Parameterized views created in Modeling Studio now allow changes in the parameters when running the report based on the view (QCCR1H29869)

The encryption key location in the HP Universal CMDB Deployment Guide PDF for version 9.01 has been corrected (QCCR1H30570)

Scheduled change reports are now updating correctly (QCCR1H30571)

The "VLAN Ports by SNMP" job now creates a task when required for the triggered CIs (QCCR1H30102)

UCMDB replication job scheduling is now working correctly when changing the language in Internet Explorer (QCCR1H30020)

Base TQL for Template Based View is now visible in Package Manager (QCCR1H30678)

Views with grouping by attributes using regular expressions are now working correctly (QCCR1H29441)

Templates have replaced parameterized views. Users with "view" privileges have rights to change the values for template results, but not to change the template itself (QCCR1H30738)

Fixed Application-signature GUI problem. Adding a new entry with a product name that exists in another entry now works correctly (QCCR1H30408)

Users can no longer click the email button if the SMTP server has not been set up (QCCR1H30242)

Fixed issue where the J2EE Websphere by Shell job has missing classes and attributes previously discovered with the JMX pattern (QCCR1H26843)

Fixed issue where Atrium integration does not create a link correctly in Remedy (QCCR1H27263)

Fixed issue where the TCP and Host to Host Dependencies discoveries (the Servers by Network Data and Potential Servers by Network Data jobs) do not discover an out-of-scope server (QCCR1H27828)

Fixed issue where the SAP Solution Manager Topology by SAP JCO job fails with an out of memory error (QCCR1H26408)

Fixed issue where the ms_exchange_folder object has no required root_container attribute (QCCR1H28215)

Fixed issue where the MS Cluster by NTCMD job fails on Windows 2008 servers (QCCR1H28405)

Fixed issue where the Collect Network Data by Netflow job does not take the listenDurationInMinutes parameter into account (QCCR1H28621)

Fixed issue where discovery of Microsoft Exchange 2007 throws a System32 Junction Point error with NTCMD (QCCR1H29479)

Fixed issue where a SQL cluster is not correctly mapped due to Reconciliation ignoring data (QCCR1H27688)

Fixed issue where Siebel CRM 8 is not discovered (QCCR1H28233)