

HP Service Health Reporter

For the Windows® and Linux operating systems

Software Version: 9.31

Troubleshooting Guide

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Troubleshooting HP Service Health Reporter

HP Service Health Reporter (SHR) is a cross-domain historical infrastructure performance reporting solution. It displays both top-down reports from Business Service Management (BSM) Business Service and Business Application or HP Operations Manager (HPOM) Node Group perspective to the underlying infrastructure. It also displays reports from the infrastructure to the impacted Business Services and Business Applications or Node Groups. It leverages the topology information to show how the underlying infrastructure health, performance, and availability are affecting your Business Services and Business Applications or Node Groups in the long term.

Like any other enterprise application, SHR can experience problems in any IT environment. These problems occur because of the complex behavior of the application, changing hardware and software demands, and infrastructure changes. Troubleshooting SHR means identifying and diagnosing problems with the aim of keeping the application functioning optimally.

About this Guide

This guide covers the common problems that you might encounter while using SHR and provides steps to troubleshoot them. Each problem is documented with a problem statement and the solution steps. The cause of the problem, if any, is explained in the solution.

When to use this guide?

Use this guide when you:

- Encounter problems configuring and operating SHR.
- Cannot view any data in the reports.
- Notice alerts in the SHR Administration Console related to database connection, data collection, job streams, or services.

How to use this guide?

This guide is organized into the following sections:

- [Troubleshooting Post-Installation Issues](#)
- [Troubleshooting Reporting Issues](#)
- [Troubleshooting Administration Issues](#)

Target Audience and Prerequisites

The target audience for this guide is those users who work with SHR on a regular basis and the administrators responsible for maintaining the product. The use of this guide

assumes some prerequisite knowledge. Readers must have a high-level understanding of SHR and the various features and functions. They are expected to have read the following product documentation:

- Installation and Configuration Guide
- Concepts Guide
- Online Help for Administrators
- Online Help for Users
- Release Notes

Introducing the SHR Log Files

This section covers the following topics:

- [Configuring DEBUG Levels in the SHR Log Files](#)
- [SHR Log File Inventory](#)

Configuring DEBUG Levels in the SHR Log Files

Before you can effectively use a log file to troubleshoot a problem, you must have detailed information about that problem in the specific log file. By default, the log file only displays INFO, ERROR, or FATAL types of messages. For detailed information, you can configure SHR to log DEBUG or ALL types of messages in the log file. A DEBUG type of message provides additional information about a particular error that occurred rather than just a simple error or warning message. To set the DEBUG level for a log file, perform the following steps:

1. Open the `BSMRLogConfigClient.xml` file from the `%PMDB_HOME%\Config` (Windows), `$PMDB_HOME/Config` (Linux) folder.
2. Search for a particular log file name. For example, to modify the level of the `transform.log` file, first search for the `transform.log` file. Each log file in SHR is associated with an [Appender](#)¹ component in the `BSMRLogConfigClient.xml` file. Searching for the log file displays the `<appender>` tag for that log file. For the `transform.log` file, the following Appender component appears:

¹ A logging framework generates output for multiple destinations, such as generating output of trace statements to the console or serializing it into a log file. In SHR logs, the Appender component defines this output medium. These components append themselves to the Logger component and relay the output to an output stream.

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```
<appender name="transformAppender" class="com.hp.bto.bsmr.util.logger.BSMRRollingFileAppender">
  <param name="File" value="{pmdb.home}/log/transform.log"/>
  <param name="Append" value="true"/>
  <param name="MaxFileSize" value="4MB"/>
  <param name="MaxBackupIndex" value="10"/>
  <layout class="org.apache.log4j.PatternLayout">
    <param name="ConversionPattern" value="%d{ISO8601}%5p,%C.%M,%m%n"/>
  </layout>
</appender>
```

3. Note the appender name for the log file. For example, for the transform.log file, the appender name is **transformAppender** as shown in the preceding example.
4. Search for the appender name string in the file. The Logger component for the specified appender name is displayed. For example, for the **transformAppender**, the following Logger component appears:

```
<logger name="com.hp.bto.bsmr.transform" additivity="false">
  <level value="INFO"/>
  <appender-ref ref="transformAppender"/>
  <appender-ref ref="errorAppender"/>
</logger>
```

5. In the <logger> tag of the string, change the <level value> from **INFO** to **DEBUG**.
6. Save changes and close the file.

Configure DEBUG Levels for loader, aggregate and runProc as follows:

1. Edit the config.prp file located at %PMDB_HOME%/data/config.prp (Windows), \$PMDB_HOME/data/config.prp (Linux) to enable debugging of loader, aggregate and runproc.
2. Edit the following field in config.prp file for loader.
loader.debug.level=INFO => change to loader.debug.level=DEBUG
3. Edit the following field in config.prp file for aggregate.
aggregate.debug.level=INFO => change to aggregate.debug.level =DEBUG
4. Edit the following field in config.prp file for runProc.
runProc.debug.level=INFO => change to runProc.debug.level=DEBUG

SHR Log File Inventory

SHR uses the **log4j** API for logging information. It maintains a log file for each module placed in the %PMDB_HOME%\log (Windows), \$PMDB_HOME/log (Linux) folder.

The following table lists the installation log files available in SHR and their location.

SR #	Log File	Location on Disk	Description
1	activemq.log	Windows:%PMDB_HOME%\activemq\data Linux:\$PMDB_HOME/activemq/data	Log file for PMDB Platform Message Broker. This log file is located in the %PMDB_HOME%\activemq\data folder.
2	Admin*.log	Windows:%PMDB_HOME%\adminServer\logs Linux:\$PMDB_HOME/adminServer/logs	Admin*.log
3	Aggregate.log	Windows:%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log	Contains log messages related to the loading of data from the rate tables to the hourly, daily, and forecast tables, and from the hourly tables to the daily tables.
4	Aggrgen.log	Windows:%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log	Contains log messages related to aggregate procedure generation. Appender:aggrgenAppender
	audit.log	Windows: %PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Records the start time, end time, and duration of back-end processes. When a process begins, the file assigns a Process Identification (PID) that also records when the process ends, showing that the PID for the process was terminated.
5	backend.log	Windows: %PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log information for all steps in the data processing job. Appender: backendLogAppender
6	BOEInstall_0.log	<SAP BOBJ Install Directory>\BusinessObjects Enterprise 12.0\Logging\BOEInstall_0.log <SAP BOBJ Install Directory>\BusinessObjects Enterprise 12.0\Logging\BOE_FP_3_5_Install_0.log	SAP BusinessObjects installation log files.
7	BSMRApp.log	Windows: %PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Application-wide log file that contains error messages from all the SHR modules except data processing. Appender: bsmrappender
8	BSMRCollectionService.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Log file for the PMDB Platform Collection Service.
9	BSMRDBLoggerSer	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Log file for the PMDB Platform DB

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	vice.log	Linux:\$PMDB_HOME/lo g/	Logger Service.
10	bsmrfrontend.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	Contains log messages related to the Administration Console UI web application. Appender: BSMRFrontEndAppender
11	Bsmrim.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	Contains log messages related to the internal monitoring of data processing job streams, Sybase IQ database, Performance Management database (PMDB) platform, and Content Packs. Appender: BSMRIMAppender
12	BSMRIMService.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	Log file for the PMDB Platform IM Service.
13	BSMRService.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	Log file for the PMDB Platform Administrator service.
14	Catalina*.log	%PMDB_HOME%\admin Server\logs Linux:\$PMDB_HOME/lo g/	Contains log messages about the Apache Tomcat server.
15	collections.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	Contains log messages related to the collection framework such as data sources configured collection, job scheduling, and maintenance. Appender: collectionAppender
16	collectStep.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	Contains log messages related to the collect step that moves data from the {PMDB_HOME}/collect directory to the {PMDB_HOME}/stage directory Appender: collectAppender
17	cpDataMigrate.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	cpDataMigrate.log Appender: cpDataMigrateAppender
18	cpPatchAppender	\${pmdb.home}/log/cpp atch.log Linux:\$PMDB_HOME/lo g/	Patch installation log file.
19	customgroup.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	Contains log messages related to importing of custom groups defined in an XML file. Appender: customgroupAppender
20	dbcollector.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	Contains log messages related to database collection. Appender: dbCollectorAppender
21	downtimeutility.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/lo g/	Contains log messages related to configuring downtime and enriching the performance data with configured downtime information.

			Appender: downtimeAppender
22	dw_abclauncher.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log messages related to job streams. Log messages specific to a process can be seen in the process-specific log file. For example, loader.log for the loader process. Appender: abclauncher-RollingLogFileAppender
23	Host-manager*.log	%PMDB_HOME%\adminServer\logs Linux:\$PMDB_HOME/log/	Host-manager*.log
24	hpacollector.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log messages related to HP Performance Agent collection. Appender: hpaCollectorAppender
25	IQ15Console.log	%USERPROFILE%\IQ15 Console.log	If you have installed Sybase IQ remotely, the log file is available at the following location on the remote system: %temp%\..\HPOvInstaller\HP-SHR-SybaseIQ_9.20\
26	Jakarta_service_*.log	%PMDB_HOME%\adminServer\logs	Jakarta_service_*.log
27	License.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contain messages for license-related tasks. Appender: licenseAppender
28	loader.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log messages related to data loading from the stage area to the data store.
	loadgen.log		Contains log messages related to data load procedure generation. Appender :loadgenAppender
29	Localhost*.log	%PMDB_HOME%\adminServer\logs	Contains log messages related to Server Access.
30	Manager*.log	%PMDB_HOME%\adminServer\logs	Manager*.log
31	mapperStep.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log messages related to transformation of collected data. Transformation includes pivot transform, rows filtering, and so on. Appender: mapperAppender
32	metadata.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log messages related to metadata repository persistence, access, and modification. Appender: MetadataRepositoryAppender
33	myBsm.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log messages related to launching of SHR reports from the

		og/	MyBSM console.
34	OvInstallerLog.txt	%temp%\..\HPOvInstaller\HP-SHR_9.30\HP-SHR_9.30_<timestamp>_HPOvInstallerLog.html %temp%\..\HPOvInstaller\HP-SHR_9.30\HP-SHR_9.30_<timestamp>_HPOvInstallerLog.txt.	This folder also stores log files for each component of SHR such as LCore components, OVPerl, and so on.
35	packagemanager.log	%PMDB_HOME%\log\packagemanager.log	Appender: pkgmgrAppender
36	Pmdb.iqmsg	<Sybaseiq DB path>	SybaseIQ log file information
37	Postgresql-<date and time>.log	Postgresql-<date and time>.log	PostgreSQL log file information
38	Postgresql-<date and time>.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Log file for the PostgreSQL service.
39	postinstallconfig.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Details on database schema creation on Sybase IQ, details on SHR Management database schema creation on Postgresql. Appender: postinstallAppender
40	reconcileStep.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log messages related to reconciliation of collected data. Appender: reconcileAppender
	remotepoller.log		Contains log messages related to configuration and metadata synchronization and data transfer between SHR server and the different collectors configured.
	runProc.log		Contains log messages related to execution of database procedures and functions associated with each content pack.
41	reloadAppender	\${pmdb.home}/log/reload.log	Log file for the contrib utility (reload.exe) that handles reload of failed data.
42	shiftmaint.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log messages related to populating the shift fact tables based on shift configured in Admininstation Console. Appender: shiftMaintAppender
43	stage.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/log/	Contains log messages related to data staging, and purging of staging area. Appender: stageAppender
44	Stderr*.log	%PMDB_HOME%\adminServer\logs	Contains messages logged to standard error by the Tomcat server.
45	Stdout*.log	%PMDB_HOME%\adminServer\logs	Contains messages logged to standard output by the Tomcat server.

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46	SybaseService.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/l og/	Log file for the PMDB Platform Sybase Service.
47	SybaseService.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/l og/	Contains error/log messages related to starting of Sybase IQ database from the Windows Service Manager.
48	topologycollector.l og	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/l og/	Contains log messages related to topology collection. Appender: topologyCollectorAppender
49	trend.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/l og/	Contains messages for all back-end processes of SHR. Each message specifies the start and end time for the logged process.
50	Trend.log	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/l og/	Log file for PMDB Platform Timer service.
51	Trendtimer_dbg.lo g	%PMDB_HOME%\log\ Linux:\$PMDB_HOME/l og/	Contains log messages related to the SHR timer service.
52	VC_collector/collec tor.log	\${pmdb.home}/log/VC _collector/collector.log	VC Collector logfiles Appender: vcAppender
53	(Only on Linux) <hostname>.0001.s rvlog <hostname>.0001.s tderr	/opt/HP/BSM/Sybase/I Q-15_4/logfiles	Sybase database log file.

Troubleshooting Installation Issues

This section of the guide covers the possible problems that can cause the SHR installation to fail and how you can troubleshoot them.

Symptom: SHR 9.31 (SHR931LIN_00001) Installation or Rollback fails in Linux

Description: You cannot install SHR 9.31 in Linux because OVC is disabled.

Resolution: Perform the following steps to resolve this issue:

1. Run `ovc -status -level 8` in the prompt to verify if `shrcb` is listed.
2. Run the following command in the prompt:
`ovcreg -add $PMDB_HOME/config/shr.xml`
3. Run the SHR 9.31 rollback script (`rollbackPatch.pl`) to clean up the system.
4. Reinstall SHR 9.31.

Symptom: Unable to Bring up SHR Services after Successful Installation

Description: If SHR is installed on a virtual machine that is not restarted after the installation, the environment variables set by the installer will not be available to the user resulting in SHR services not coming up in spite of multiple retry.

Resolution: After installing SHR, ensure that you restart the virtual machine.

Symptom: Remote Sybase IQ Database Creation Fails

In the HP Service Health Reporter Configuration Wizard, while trying to create the Sybase database file on a remote system, the post-install fails and the following error message is displayed:

```
<time stamp>,018 ERROR,  
com.hp.bto.bsmr.dao.helper.CreateSybaseIQDatabase.executeSQL,  
Could not connect to the database.
```

```
<time stamp>,049 ERROR,  
com.hp.bto.bsmr.dao.helper.CreateSybaseIQDatabase.executeSQL ,  
Specified database not found
```

Resolution1: This error occurs if the database file location specified in the HP Service Health Reporter Configuration Wizard includes one or more spaces in the file path. To resolve this problem, make sure that the specified database file location exists on the remote system. In addition, make sure that the path provided in the Post-Install wizard does not contain any spaces.

Resolution2: This error can occur when adequate disk space is not available on the drive. The installer does not warn in case of a remote database. Increasing the disk space should resolve the issue.

Resolution3: Apply the hot-fix `SHR_92_HF_REMOTE_SYBASE_SERVICE` for creating the Sybase IQ as a Windows service.

Symptom: Sybase IQ Hangs

Description: SHR servers that have four or less CPUs, Sybase IQ hangs because of low *iqgovern* parameter value that is computed automatically.

Resolution:

Windows:

Add "-iqgovern 50" parameter to the %SYBASE%\IQ-15_4\scripts\pmdbConfig.cfg file and restart the Sybase IQ database.

Linux:

Add "-iqgovern 50" parameter to the \$SYBASE/IQ-15_4/scripts/pmdbConfig.cfg file and restart the Sybase IQ database.

Symptom: (Only on Linux) SHR Fails to Create the Sybase Schema

Description: If SHR fails to create the Sybase schema after you complete the post-installation configuration tasks, an error message appears in the database log files. The Sybase database log files—`<hostname>.0001.srvlog` and `<hostname>.0001.stderr`—are present in the `/opt/HP/BSM/Sybase/IQ-15_4/logfiles` directory on Linux.

The following error message appears in the Sybase database log files:

```
"utility_db" (utility_db) stopped
```

Only the Sybase database log files show the error message; no error messages appear in the Administration console.

Resolution:

Restart the Sybase service by running the following command:

```
service HP_PMDB_Platform_Sybase start
```

Symptom: Database Schema Creation Takes too Long (Post-Install Step 3)

Description: During the post-install configuration stage, on the **Create Database Schema** page of the Administration Console, clicking **Next** after entering the required values produces no activity and users have to wait too long for the process to complete.

Resolution1: Clear the web browser cache, reload the page, and perform the steps again.

Resolution2: Sybase database file creation in Linux takes a long time to complete. You can monitor the progress in `{PMDB_HOME}\log\postinstallconfig.log` file.

Alternately, you can also monitor the size of `pmdb.iqtmp` or `pmdb_user_main01.iq` files to check the progress. If the browser causes a session time out, clear the web browser cache, reload the page, and perform the steps again.

Windows:

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Check whether the HP_PMDB_Platform_Sybase service has started and the iqsrv15.exe process running.

Linux:

Check whether the HP_PMDB_Platform_Sybase service has started.

Resolution3: If the database is on a remote system, cleanup the post-install folder and restart administrator service and remote Sybase service. If any database files are created in the <db folder name> of remote Sybase machine, clean them up and retry the post-installation.

Symptom: After Installation, User is Unable to Perform Post-Install Steps

Description: After installation, when user clicks **Next**, the subsequent page does not load despite enabling Java scripts to run.

Solution: This occurs when the system date on which SHR is installed is much older than that of the ESX (in case of a VM). In such a scenario, the Tomcat server does not allow any requests from the client. Hence, it is always advisable to update the system date to current and install.

Perform the following steps:

1. Change system date to current.
2. Apply the permanent license.
When the system date is changed by more than three months, the license expires.
3. Restart Admin service, Tomcat server, and SAP BusinessObjects servers.
4. Login and perform the post configuration again.

Symptom: Unable to Log on to the Administration Console

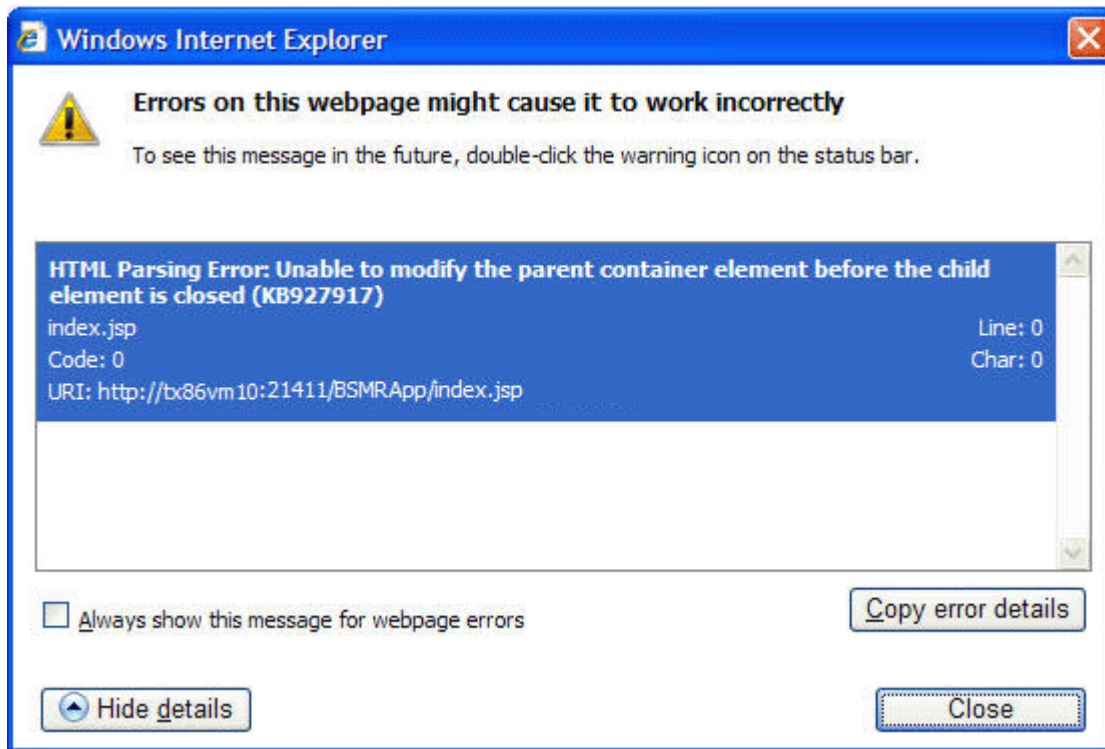
Description: After entering the user credentials in the Administration Console and clicking **Log in**, the following error message is displayed:



Resolution: Clear the web browser cache, reload the page, and perform the steps again.

Symptom: Error Seen in Administration Console

Description: The Administration Console displays the following Windows error message:



Resolution: Clear the web browser cache, reload the page, and perform the steps again.

Symptom: Reinstallation of Content Packs Fails on Windows

Description: Reinstallation of Content Packs fails on Windows.

Resolution: Follow these steps:

1. Check the %pmdb_home%/stage/failed_to_load folder and look for files with the names of stage tables related to the Content Pack that you are not able to reinstall. You can find stage table names in the %pmdb_home%/packages/Core<X>.ap/Core<X>.sql file. Identify the files with names that contain the name of a stage table that is related to the Content Pack that you want to reinstall and then delete them.
2. Start the reinstallation process again.

Symptom: Content Pack Uninstallation Fails

Description: When removing the Content Packs, the uninstallation process fails and the following error message is displayed in the %PMDB_HOME%\log\trend.log file:

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SQL Anywhere Error -210: User 'pmdb_admin' has the row in '<table_name>' locked

This failure occurs when one or more database connections have a shared lock on a database stage table.

Resolution:

To verify if the tables are locked, perform the following steps:

1. Click **Start > Programs > Sybase > Sybase IQ 15.3 > Interactive SQL Java**
The **Interactive SQL Java** console opens.
2. In the **Connect** dialog box, on the **Identification** tab, select **Supply user ID and password**.
3. Type the user name and password; click **OK**.
4. Under **SQL Statements**, type `sp_iqllocks`, and click **Execute all SQL statement(s)** to run the command.

If locked tables still exist, other SQL sessions might be open that you must close. If there are no locked tables, you can proceed with removing the Content Packs.

Symptom: SHR 9.30 Uninstallation Fails

Description: Uninstalling SHR might not have completely uninstalled Sybase IQ Server.

Resolution: Uninstall Sybase IQ Server Suite 15.3 (64-bit) manually and restart your system.

Symptom: After Uninstalling SHR 9.30, Reinstall Fails

Description: After uninstalling SHR on a Windows system, when a reinstall is performed, the installer fails to launch and displays a "Scripting Host not Found" error.

Resolution: This error is encountered when the Path environment variable in Windows is corrupted. Add the "%systemroot%\System32" string to the Path environment variable by performing the following steps:

1. Right-click **My Computer**, and then click **Properties**.
2. Click the **Advanced** tab.
3. Click **Environment Variables**.
4. In the **System Variable** group, select **Path**.
5. Click **Edit** and add the string "%systemroot%\System32" if missing.

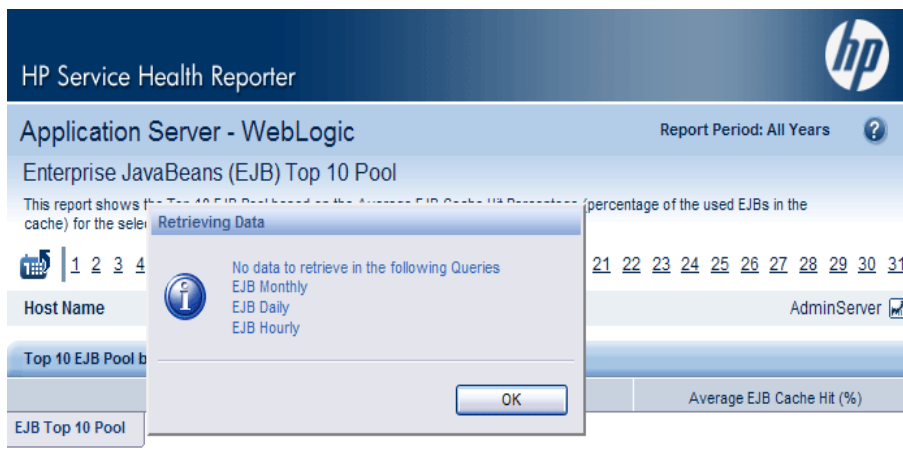
Troubleshooting Reporting Issues

SHR provides an interactive user interface—the SAP BusinessObjects InfoView interface that runs on your browser—to view the available reports. The reports are generated by running a query on the underlying data. At times, if the data is missing or there is a problem with SAP BusinessObjects, the report might not display any data.

This section of the guide covers the possible problems that lead to missing data in the reports and how you can troubleshoot them.

Symptom: No Data Retrieved for Reports

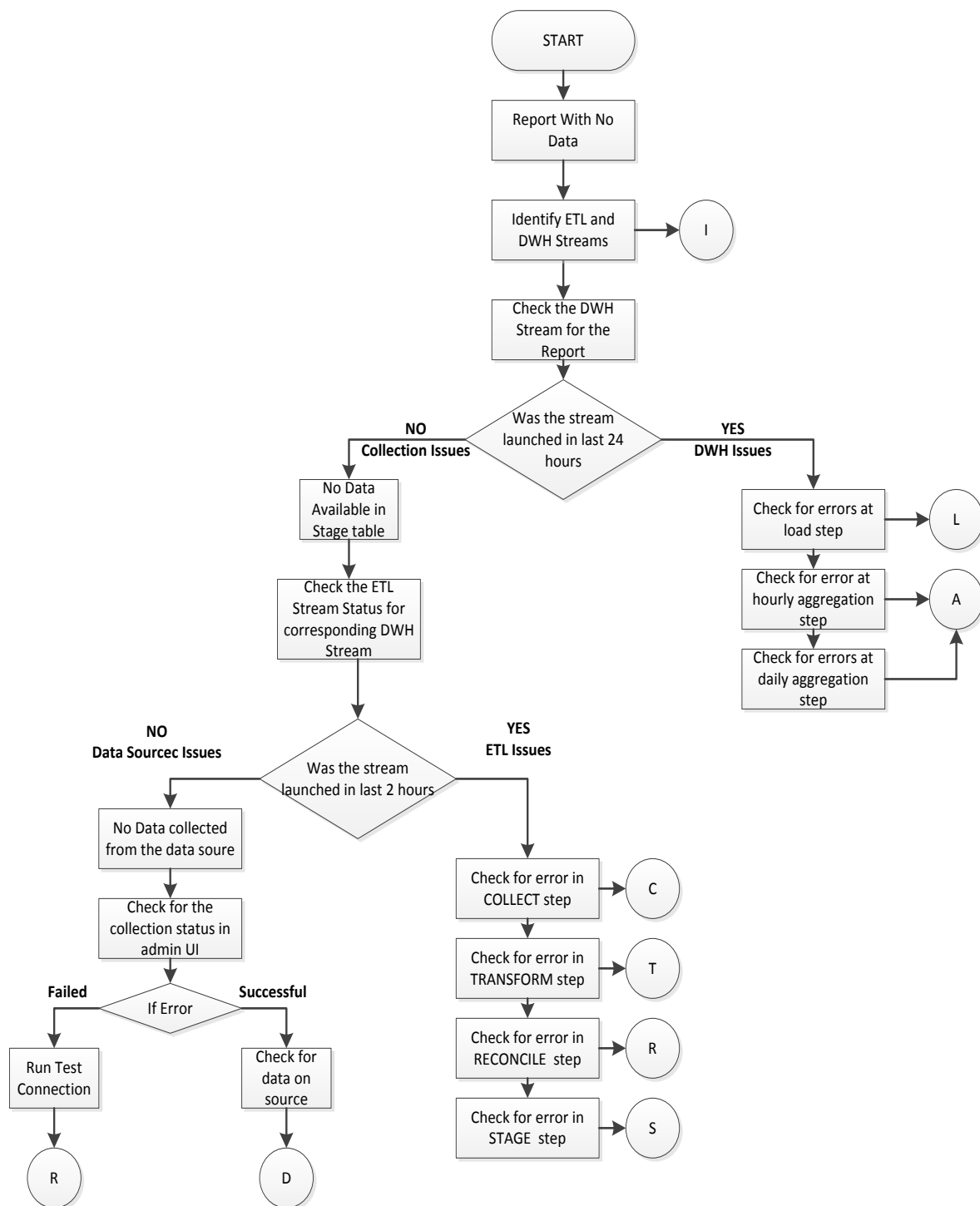
Description: After opening a report and specifying the prompts, a window appears with a message "No data to retrieve in the following Queries." For example, consider a WebLogic report such as WebLogic EJB Top 10 Pool report. The following figure shows the error message that appears.



Resolution: This problem could be due to any one of the following issue:

- 1) Incorrect prompt selection
- 2) No data available for the primary dimension
- 3) ETL issues
- 4) Aggregation issues
- 5) Source issue/not monitoring the nodes

The following flow chart provides the steps you must follow to troubleshoot the possible causes:



P (Ping)	If test connection failed then the reach ability to the data source needs to be verified. Check if all the required services on the source are running. See the Data source Troubleshooting section. If test connection is successful, refer to “D”.
D (Datasource)	There is no data available on the source. See the Data source Troubleshooting section.

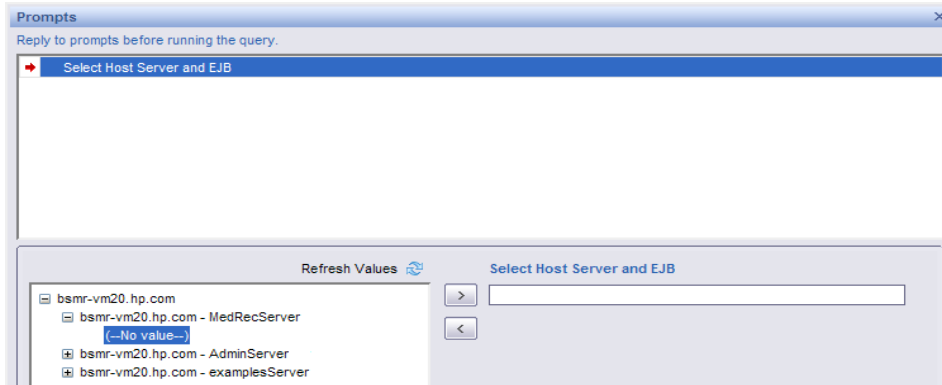
C (Collect)	<p>Symptom: The COLLECT step for the stream shows ERROR (Red icon) and files are piling up in the {PMDB_HOME}/collect folder.</p> <p>Contact HP Support if this is your scenario. There are no known cases when this should fail.</p>
T (Transform)	<p>Symptom: The TRANSFORM step for the stream shows ERROR (Red icon) and relevant files are piling up in the {PMDB_HOME}/failed_to_tranform folder. See Appendix to identify the metadata for the step of a stream. Contact HP Support if this is your scenario. There are no known cases when this should fail.</p>
R (Reconcile)	<p>Symptom: The RECONCILE step for the stream shows ERROR (Red icon) and relevant files are piling up in the {PMDB_HOME}/failed_to_reconcile folder. See Appendix to identify the metadata for the step of a stream.</p> <p>Resolution: See the Data source Troubleshooting section.</p>
S (Stage)	<p>Symptom1: The STAGE step for the stream shows ERROR (Red icon). Drill down detail, the following message is displayed "Database server not found". Also, relevant files are piling up in the {PMDB_HOME}/stage folder. See Appendix to identify the metadata for the step of a stream.</p> <p>Resolution:</p> <ol style="list-style-type: none"> 1. This can be due to temporary loss of connection to database and the next run of the step takes care of reprocessing data. 2. If the files are getting piled up in stage directory, check connectivity to the database. See the Database Alerts section. <p>Symptom2: The STAGE step for the stream shows ERROR (Red icon). Drill down detail, the following message is displayed "You have run out of space in pmdb_user_main DBSpace". Also, files are piling up in the {PMDB_HOME}/stage folder.</p> <p>Resolution:</p> <ol style="list-style-type: none"> 1. Increase the disk space if the drive is running full. 2. Increase the pmdb_user_main database space manually and start the HP_PMBD_Internal_Monitoring service in case the service is stopped or disabled. <p>Symptom3: The STAGE step for the stream shows ERROR (Red icon). Drill down detail, the following message is displayed "Insufficient buffers for". Also, files piling up in the {PMDB_HOME}/stage folder. This error occurs because the temporary cache is not adequately provisioned.</p>

	<p>Resolution:</p> <p>You can ignore this error if it occurs occasionally. If it occurs frequently, consider the following options:</p> <ol style="list-style-type: none">1. See the <i>HP Service Health Reporter Performance, Sizing, and Tuning Guide</i> for temporary cache configurations.2. Reduce the number of concurrent jobs you launch. See the <i>HP Service Health Reporter Online Help for Administrators</i>.
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<p>L, A, S (Load, Aggregate, SQL Executor)</p>	<p>Symptom1: The LOAD/AGGREGATE/EXEC_PROC step for the stream shows ERROR (Red icon). Drill down detail, the "Database server not found" message is displayed. Resolution:</p> <ol style="list-style-type: none"> 1. This can be due to temporary loss of connection to database; the next run of the step should resolve the reprocessing the data. <p>Symptom2: The LOAD/AGGREGATE/EXEC_PROC step for the stream shows ERROR (Red icon). Drill down detail, the "You have run out of space in pmdb_user_main DBSpace" message is displayed. Resolution:</p> <ol style="list-style-type: none"> 1. Increase the disk space if the drive is running full. 2. Increase the pmdb_user_main database space manually and start the HP_PMBD_Internal_Monitoring service if the service is stopped or disabled. <p>Symptom3: The LOAD/AGGREGATE/EXEC_PROC step for the stream shows ERROR (Red icon). Upon drilling down, the "Insufficient buffers for" message is displayed and data is stuck in source tables. See the <i>Reference</i> section to identify the metadata for the step of a stream. This error occurs because the temp cache is not adequately provisioned. Resolution: You can ignore this error if it occurs occasionally. If it occurs frequently, consider the following options:</p> <ol style="list-style-type: none"> 1. See the <i>HP Service Health Reporter Performance, Sizing, and Tuning Guide</i> for temporary cache configurations. 2. Reduce the number of concurrent jobs you launch. See the <i>HP Service Health Reporter Online Help for Administrators</i>.
<p>I (Identify Streams)</p>	<p>See the Report to Stream Mapping section to identify the stream associated with the report.</p>

Symptom: Unable to Refresh a Report

Description: You cannot refresh a report to display updated information because the cascading prompt value in the **Prompts** dialog box is missing. For example, consider a WebLogic report, the WebLogic EJB Cache Hit report. The following figure shows the problem that might occur when trying to refresh the report.



Resolution: This problem occurs because of missing data in the dimension tables for a query. To troubleshoot this problem, perform the following steps:

Note: The following steps are performed using the WebLogic EJB Top 10 Pool report as an example but you can perform these steps for any report.

1. Check the dimension table for data pertaining the query:
 - a. Click **Cancel** in the **Prompts** window.
 - b. On the report toolbar, click **Edit**.
 - c. If a Warning - Security message box appears, click **Yes**. The report opens in Edit mode.
 - d. On the toolbar, click **Edit Query**.
 - e. At the bottom of the report, click **EJB Monthly > View SQL**. The SQL Viewer dialog box opens, which displays the SQL for that query. Note that EJB Monthly is used as an example here. For any other report, you must edit the respective query.
 - f. Identify the dimension table from which the EJB name is fetched. In this example, the dimension table is K_CI_JEE_Server.
2. Access the database on which you want to check the presence of data:
 - a. Click **Start > Programs > Sybase > Sybase IQ 15.3 > Interactive SQL Java**. The Interactive SQL window and the Connect dialog box opens.
 - b. In the **Connect** dialog box, on the **Identification** tab, type the user ID and password to access the database.
 - c. In the **Server name** box, type the name of the database host. Otherwise, click **Find** to search the database host. The Find Servers dialog box opens.

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- d. Select the database that you want to connect to and click **OK**.
- e. Click **OK**.
3. Run the following command in the Interactive SQL Java window to check for data in the dimension table:

`select * from <dimension table name>`

In this example, the <dimension table name> is K_CI_JEE_Server.
4. If no data is present in the database, you must verify with the source and if required, debug the collected CSV files and the respective stage tables. For the steps to perform these tasks, see [Report displays partial or no data](#).

Symptom: Report Appears Blank after Refreshing

Description: After opening a report and applying the necessary prompts, the report does not display any data. The following figure shows a sample blank report:



Resolution: The report appears blank due to any one of the following issue:

- 1) Incorrect entry of measurable object (memory util, cpu util)
- 2) No data is displayed if the report is generated for the first section in a section based report.

The section is displayed in alphabetical order by default.

The report does not display any data because you might not have selected the time-drill filters for the report.

To resolve this problem, perform the following step:

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- 1) Set the time-drill filters on the **Report Filter** toolbar, if they are available for the report:

If context-based filters are available on the Report Filter toolbar, select the appropriate value from the drop-down list.

Reports might appear blank because of issues in the database such as missing business keys, table not loading, and so on. To investigate such errors, contact HP Support.

Symptom: Missing Data for Specific Time Period

Description: A selected report displays data for a particular time period even when drilled down to the day level. However, when the time period is changed to different week, the report does not display any data.



HP Service Health Reporter		Application Server - WebLogic		Report Period: 2/19/14 - 2/19/14	
WebLogic Top N Summary					
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24					
Business Service(s)		All			
Business View(s) / Group(s)		All			
Shift		Default Shift		Location	
Default					
Top 10 Servers by JVM Memory Utilization (%)					
Jee Server Name		Node Name		Average JVM Memory Utilization (%)	
Top 10 Servers by Execute Queue Wait Count					
Jee Server Name		Node Name		Average Wait Count	Average Throughput Rate (Per Sec)
Top 10 Servers by JDBC Delay Time					
Jee Server Name		Node Name		Average Delay Time (Milli Seconds)	Average Throughput Rate (Per Sec)
Top 10 Servers by EJB Wait Rate					
Jee Server Name		Node Name		Average Wait Rate (Per Min)	Average Cache Hit (%)

Resolution: This problem occurs because of missing data which could be due to one among the following issues:

- 1) ETL issues
- 2) Aggregation
- 3) No metric collection for selected time period
- 4) No particular SPI

Symptom: Generating Report returns a Database Error

Description: When generating a report, the following error is noticed:

```
A database error occurred. The database error text is:  
[Sybase][ODBC Driver][SQL Anywhere]Parse error: DSN 'BSMR' does  
not exist. (WIS 10901)
```

This symptom is noticed when the libraries for Linux mentioned in the “*Installation Prerequisites*” section of the *SHR Installation and Configuration Guide* are not installed. SHR requires them for the SAP BusinessObjects to establish a connection with Sybase IQ to display the reports. SAP BusinessObjects communicates with Sybase IQ database through a 32-bit data source name (DSN) called ‘BSMR’.

Resolution:

1. Ensure all the libraries for Linux mentioned in the “*Installation Prerequisites*” section of the *SHR Installation and Configuration Guide* are installed.
2. Verify that the IQDSN library is installed in the Linux system by running the following command:

```
ls /opt/HP/BSM/Sybase/IQ-15_4/bin32/iqdsn
```

If the IQDSN library is present skip the next step.

3. Install the Sybase 32-bit driver using the following command:

```
<installable_path>/packages/Sybase32bitdrive/setup.bin -f  
<installable_path>/packages/Sybase32bitdrive/installer.properties  
-DUSER_INSTALL_DIR="/opt/HP/BSM/Sybase" -  
DAGREE_TO_SYBASE_LICENSE=true -i silent
```

where, <installable_path> is the path of the media filesystem.

4. Run the following command to create the 32-bit DSN.

```
/opt/HP/BSM/Sybase/IQ-15_4/bin32/iqdsn -y -w BSMR -c  
"uid=pmdb_admin;pwd=<db password>;eng=<IQ DB engine  
name>;dbf=<db file location>;links=tcPIP{'host=<host  
name>;port=21424'}'" -v -pe -ns
```

Symptom: No Data in Smart Plugin (SPI) Data Source Reports

Description: This symptom is applicable to Microsoft SQLServer/Oracle/WebSphere/WebLogic reports that do not display any data.

Resolution: This problem occurs because of data logging issue with *HP Performance Agent* when both HP Operations Agent and HP Performance Agent are installed in

your environment. The table below consists of the data sources that the content pack uses. Due to improper summarization of metric ID and value ID, these reports fail to show data.

To resolve this, HP Operations Agent must be used for data logging instead of HP Performance Agent.

Content Pack Name	Data Sources (HP – Performance Agent)
Oracle	DBSPI_ORA_REPORT; DBSPI_ORA_GRAPH
MS SQL	DBSPI_MSS_REPORT; DBSPI_MSS_GRAPH
WebLogic	WBSSPI_METRICS; WBSSPI_RPT_METRICS
WebSphere	WLSSPI_METRICS ; WLSSPI_RPT_METRICS
Active Directory	ADSPI
Exchange 2007	EX2007_DATA
Exchange 2010	EXSPI_DATA

For more information and the resolution steps for SQL Server and Oracle reports, see the *Troubleshooting Data Logging with HP Performance Agent* section of the *SPI for Databases 12.04 Installation and Configuration Guide*.

For more information and the resolution steps for WebLogic reports, see the *Integrating WebLogic SPI with HP Performance Agent* section of the *SPI for WebLogic Application Server 7.04 Installation and Configuration Guide*.

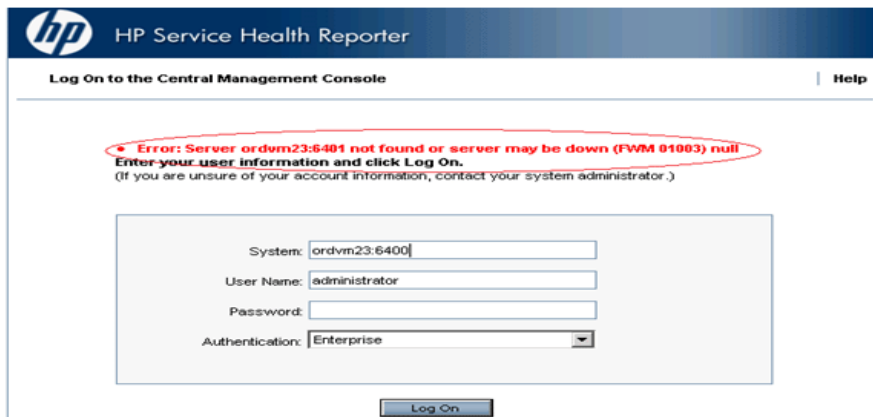
For more information and the resolution steps for WebSphere reports, see the *Integrating WebSphere SPI with HP Performance Agent* section of the *SPI for WebSphere Application Server 7.04 Installation and Configuration Guide*.

Symptom: SAP BusinessObjects Errors

This section covers some of the common errors related to SAP BusinessObjects encountered in SHR and the steps to troubleshoot them. These errors might prevent the reports from opening or showing data. In addition to these errors, SAP BusinessObjects provides a detailed list of errors for Web Intelligence reports at the following URL, http://help.sap.com/businessobject/product_guides/errors/12/0/en/html/.

SAP BusinessObjects Central Management Console Error

Description: When trying to access the SAP BusinessObjects Central Management Console, the following error message appears:

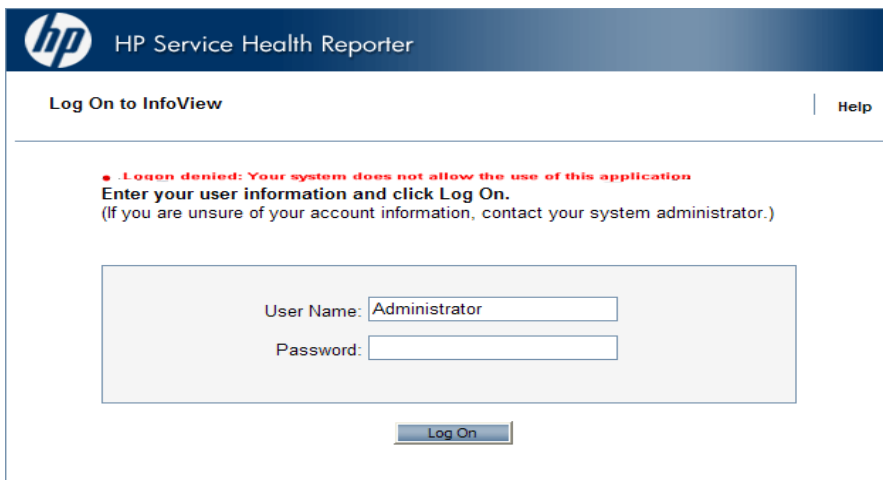


The screenshot shows the HP Service Health Reporter login interface. At the top, there is a blue header with the HP logo and the text "HP Service Health Reporter". Below the header, there is a navigation bar with "Log On to the Central Management Console" and a "Help" link. The main content area displays an error message in red text: "Error: Server ordvm23:6400 not found or server may be down (FWM 01003) null". Below the error message, there is a text box with the following fields: "System:" with the value "ordvm23:6400", "User Name:" with the value "administrator", "Password:" (empty), and "Authentication:" with a dropdown menu set to "Enterprise". At the bottom of the form, there is a "Log On" button.

Resolution: This error occurs when the specified port, 6400 in the preceding example, is locked by another web service.

SAP BusinessObjects InfoView Log in Error

Description: On the SAP BusinessObjects InfoView log on screen, type the user credentials and click **Log On**. The following error message appears:



The screenshot shows the SAP BusinessObjects InfoView login interface. At the top, there is a blue header with the HP logo and the text "HP Service Health Reporter". Below the header, there is a navigation bar with "Log On to InfoView" and a "Help" link. The main content area displays an error message in red text: "Logon denied: Your system does not allow the use of this application". Below the error message, there is a text box with the following fields: "User Name:" with the value "Administrator" and "Password:" (empty). At the bottom of the form, there is a "Log On" button.

This error occurs due to any one of the following issues:

- 1) SHR license expiry
- 2) Poor BuisnessObjects services
- 3) BuisnessObjects crashes

Resolution: The user can do any one of the following:

- 1) User can check for the license validity
- 2) Administrator can login to CMC/CCM and check for the status of servers if they are up and running

Note: CMC is available for both Windows and Linux platforms whereas CCM is available only on Windows platform.

Perform the following steps if tried to login through CMC:

- 1) Click **Start>Programs>BuisnessObjects XI 3.1>BuisnessObjects Enterprise Central Management Console**. The Central Management Console page opens.
- 2) Enter the Username and Password and click **Log On**. The CMC window opens.
- 3) Click **Servers**, under **Organize**. The server window opens.
- 4) Note the servers which are disabled under **Server Name**.
- 5) Right-click the disabled server, then click **Enable Server**.

This step has to be performed on all disabled servers.

Perform the following steps if tried to login through CCM:

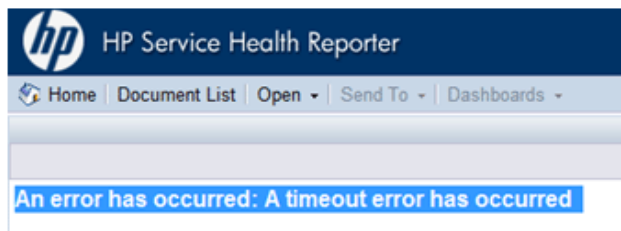
You can verify this from the SHR machine.

- 1) Click **Start>Programs>BuisnessObjects XI 3.1>BuisnessObjects Enterprise>Central configuration manager**.
- 2) Select Server Intelligent Agent and click **Manage Server** icon on the tool bar.
- 3) Enter the Admin Username and Password and click **Connect**.
- 4) Check for the current status of BuisnessObjects servers from the newly opened window.
- 5) Enable the down/disable servers if any and start the server.

To check the status of the license, see the Licensing page in the Administration Console. If the license has expired, you must renew the license, apply for a permanent license, or contact HP Support for assistance. For more information, see the "Managing licenses" section in the *HP Service Health Reporter Online Help for Administrators*.

Report Timeout Error

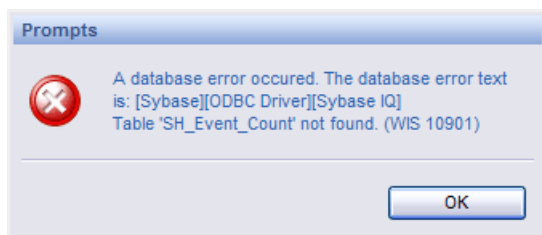
Description: While performing an action on an open report, such as changing the prompts, selecting the filters, or accessing the report tabs, the following error message appears:



Resolution: This error occurs when a Web Intelligence session is opened and kept idle for a long time. To resolve this, click **Document List** and reopen the required report.

Database Error

Description: While opening a report, the following error message appears:

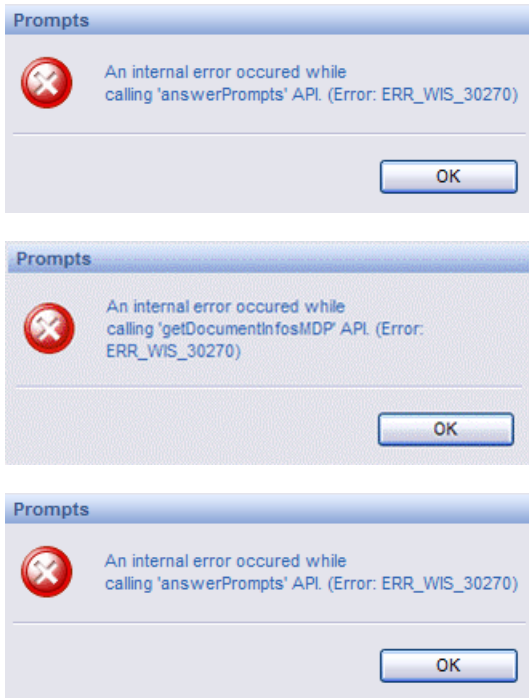


Resolution: This error occurs when the connection parameters for the SAP BusinessObjects Universe where the reports are hosted, do not connect to the proper Sybase IQ database instance server. To resolve this issue, make sure that the Universe is connected to the proper database. Perform the following steps:

1. Click **Start > Programs > BusinessObjects XI 3.1 > BusinessObjects Enterprise > Designer**. The SAP BusinessObjects Universe Designer opens.
2. In the **User Identification** dialog box, click **OK**.
3. On the **File** menu, click **Open**. The Open dialog box appears.
4. Select the Universe corresponding to the report that returns the error. For example, if the report belongs to System Management, select the System Management Universe.
5. Click **Open**.
6. On the **File** menu, click **Parameters**. The Universe Parameters dialog box opens.
7. Click the **Definition** tab.
8. Click **Edit** to edit the connection parameters. The Edit <connection type> connection dialog box opens.
9. In the **Data source name** field, select **BSMR**.
10. Click **Next** twice and then click **Finish**.

Internal Error

Description: While opening a report, one of the following error messages appear:



Resolution: This error occurs because the utilization of the system resources as well as SAP BusinessObjects internal services was very high at that particular moment when the Web Intelligence report was accessed. The SAP BusinessObjects services were in a waiting state for that moment when the report was accessed. To resolve this issue, click **OK** in the message box and refresh the report.

Tooltip not working in Firefox 10.0.3

Resolution: Upgrade the browser to a minor version like Firefox 10.0.6 or a major version like Firefox 11.

Internet Explorer Hangs when Zoom Level is 90–95%

Resolution: You must set the zoom level of the reports to any number except between 90–95%.

Symptom: Missing Input Controls Pane in Report

Description: After opening a report, user is unable to find input controls (wherever applicable). Perform the following steps:

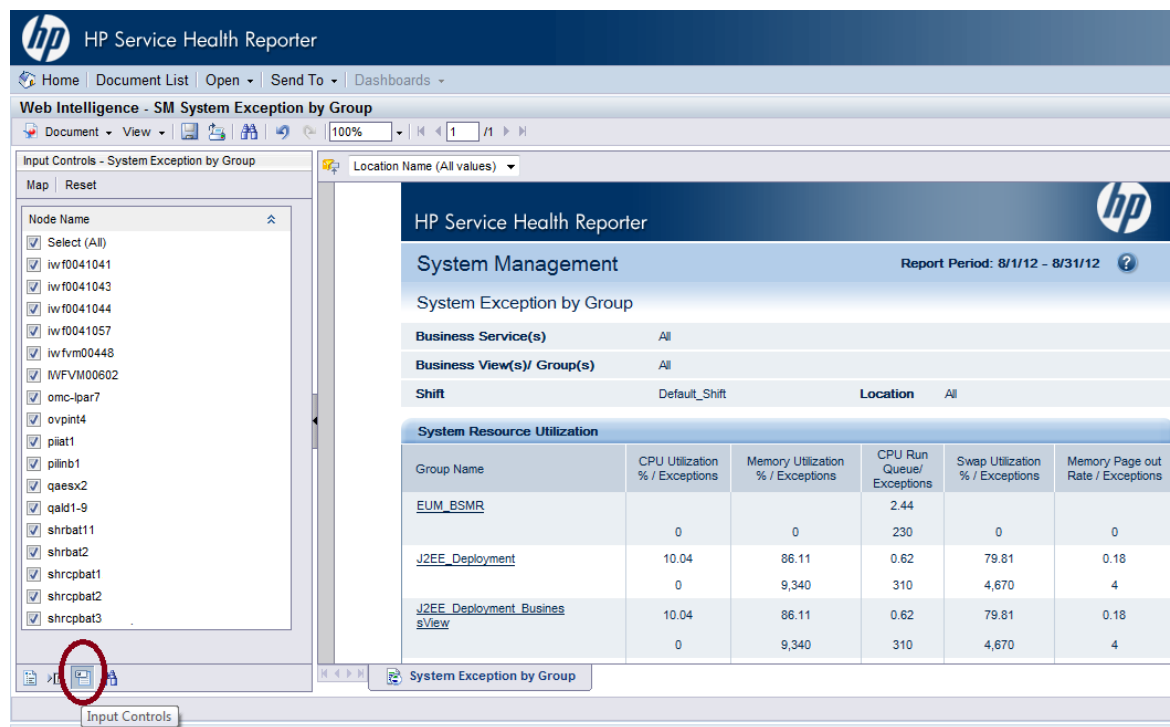
- 1) Click on the expand icon to the left to show the left panel, as per the following image:

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- 2) Click the **Input Control** icon below the left pane to get the list of input controls available for the report as shown below.



Symptom: Select/Unselect Input Control Data and then Drill Down from Current Level give Improper Results

Description: After opening a report, if you select/unselect input controls (wherever applicable) and then drill down from the current level, you get improper results. If this issue occurs intermittently, perform the following steps:

Resolution:

1. Select/unselect desired values from input control.
2. Drill up to first level (for example, up to all years in out of the box SHR reports).
3. Drill down so that data syncs up properly with the selected dimensions from input controls.

Symptom: Only Drill Icon Appears when Date Range is Across Years

Description: After refreshing a report for the selected dates which they span across years, only the drill icon appears in the drill bar section of the report with missing dates.

- 1) When the report is refreshed for a selected date range that spans across years, for example 17-Oct-2011 to 17-Oct-2012, only drill icon appears as follows:

Web Intelligence - WebLogic Servlet Performance Summary

Document View 100% 1 / 1

Input Controls - Servlet Performance Summary

Map Reset

Servlet Name

- Select (All)
- Accessor
- action
- AppManagerServlet
- Bootstrap
- /cache.jsp
- classes
- ClientClose
- ClientLogin
- ClientRecv
- ClientSend
- ConnectorServlet
- DeploymentService
- /EJBeanManagedClient.jsp
- /ExamplesHeader.jsp
- FileDistribution
- FileServlet
- HelpServlet
- HTTPCIntClose
- HTTPCIntLogin

Location (All values) Select Year Select Month

HP Service Health Reporter

Application Server - WebLogic Report Period: 10/17/11 - 10/17/12

Servlet Performance Summary

Business Service(s) All

Business View(s) / Group(s) All

Shift Default_Shift Location All

Node Name iw0041041.ind.hp.com JeeServer Name examplesServer

Servlet Request Rate and Response Time

Servlet Name	Request Rate (Per Second)		Execution Time (Mill Seconds)	
	Average	Maximum	Average	Maximum
JSPCServlet	0.00	0.00	11,031.00	11,031.00
/login/LoginForm.jsp	0.00	0.00	5,414.00	5,414.00
/EJBeanManagedClient.jsp	0.01	0.01	682.58	1,015.06

Servlet Performance Summary

- 2) Selecting the required **Year** in the analysis context (as displayed in the following image) solves this issue and the report can be drilled down/up for further analysis.

Troubleshooting Guide

Troubleshooting HP Service Health Reporter

Web Intelligence - WebLogic Servlet Performance Summary

Input Controls - Servlet Performance Summary

Location (All values) **2012** Select Month

HP Service Health Reporter

Application Server - WebLogic

Servlet Performance Summary

Report Period: 1/1/12 - 10/17/12

Business Service(s) All

Business View(s) / Group(s) All

Shift Default_Shift Location All

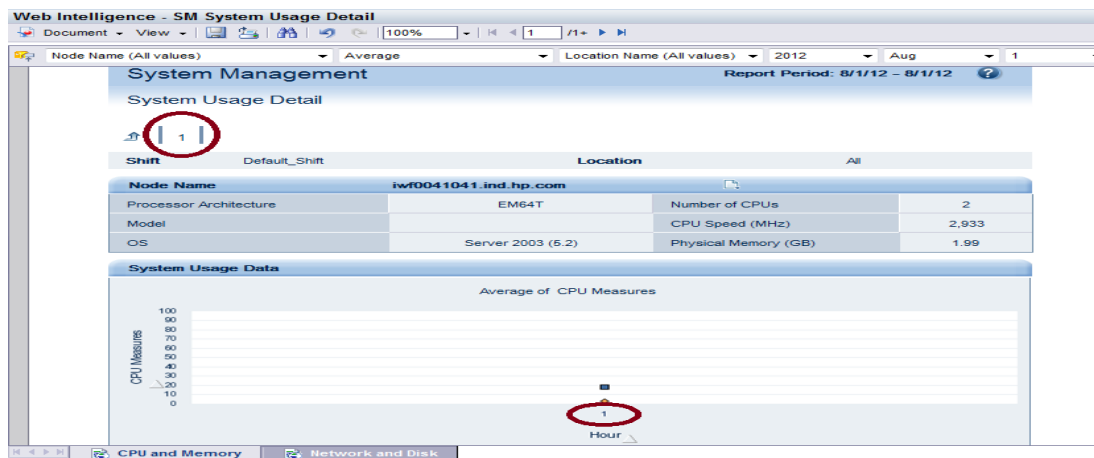
Node Name iwf0041041.ind.hp.com JeeServer Name examplesServer

Servlet Name	Request Rate (Per Second)		Execution Time (Milli Seconds)	
	Average	Maximum	Average	Maximum
JSPCServlet	0.00	0.00	11,031.00	11,031.00
/login/LoginForm.jsp	0.00	0.00	5,414.00	5,414.00
/EJBBeanManagedClient.jsp	0.01	0.01	682.58	1,015.06

Refreshing a Single-Day Data Report Returns Inaccurate Data

Description: When the report is refreshed for a single day, the report shows data only for the first hour instead of all 24 hours:

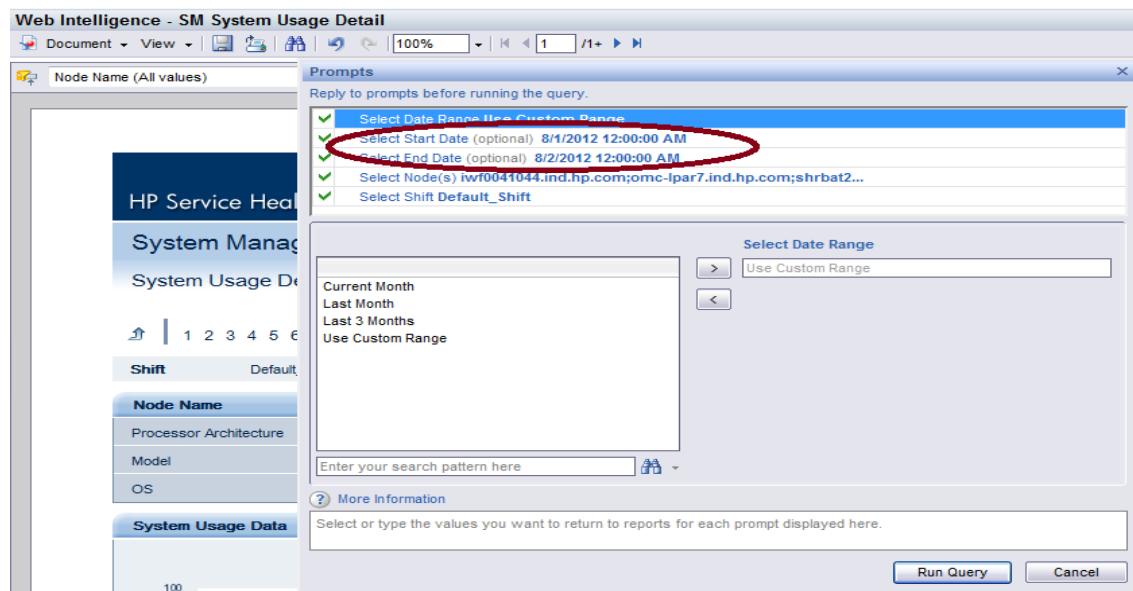
- 1) When a report is refreshed, for say 1-Aug-2012, the report shows data only for the first hour as follows.



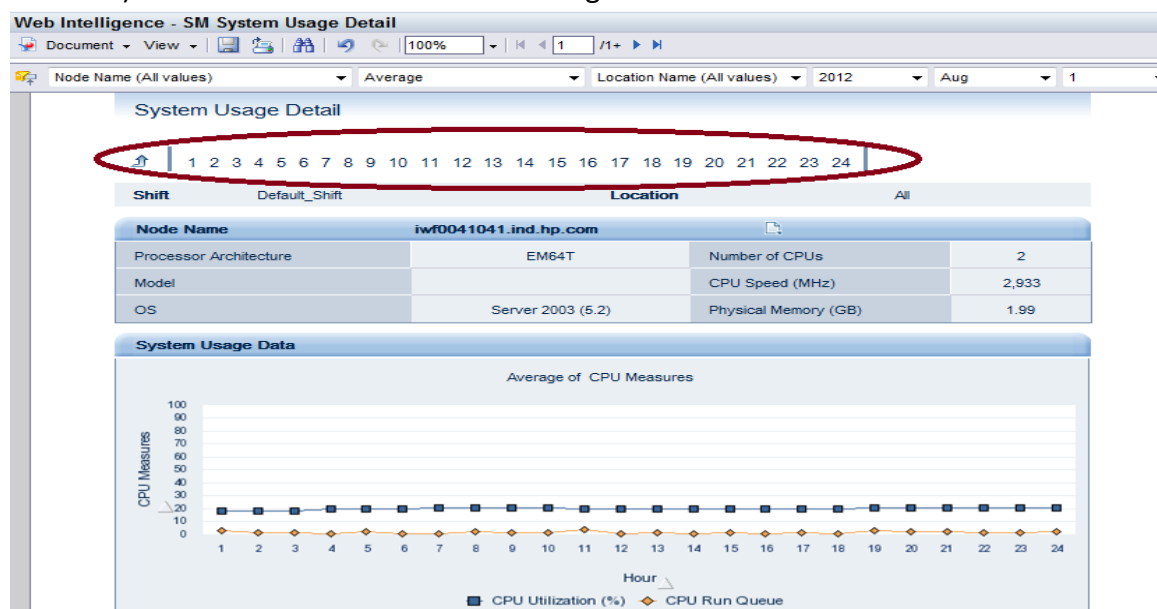
- 2) To fetch data for all 24 hours of a single day, refresh the report with **Select Start Date** as 1-Aug-2012 and **Select End Date** as 2-Aug-2012.

Troubleshooting Guide

Troubleshooting HP Service Health Reporter



3) Now data for all 24 hours of 1-Aug-2012 is shown as follows.



Symptom: InfoView Page Timeout Error

Resolution: The following steps will resolve the InfoView page timeout error.

1. In the web.xml file, set the variables.

logontoken enable=false,

session-timeout=120 (You must set these variables in all web.xml files of installed applications; you can set session timeout over 120 minutes too, but up to maximum 8 hours).

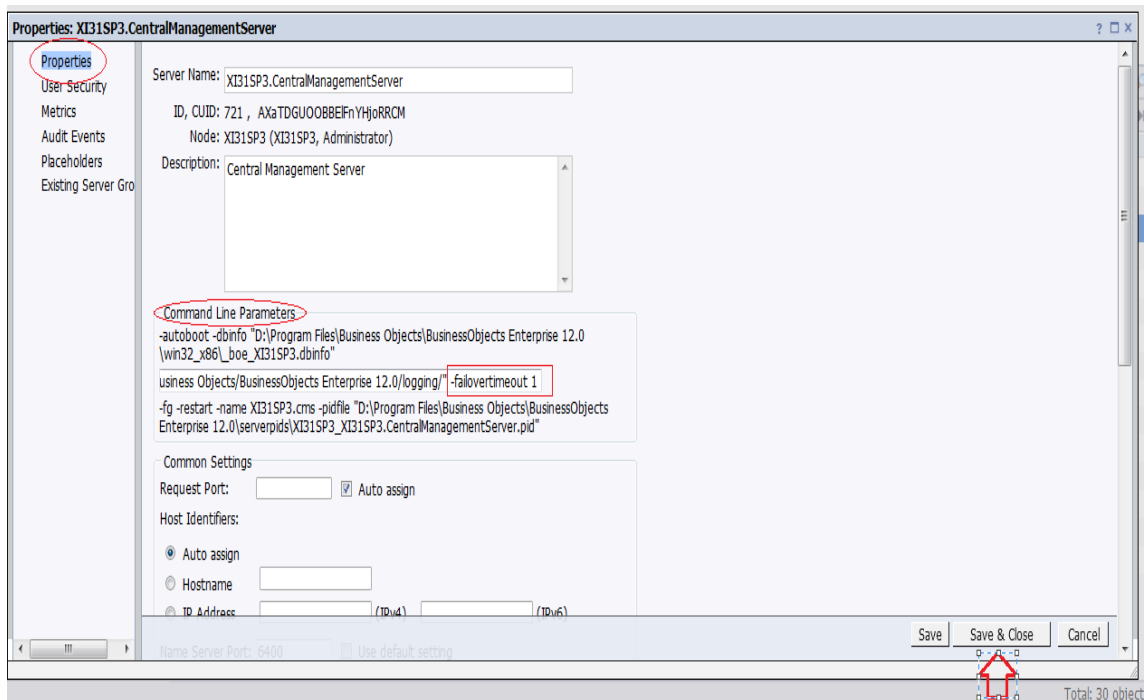
```
[<Install DIR>Program Files (x86)\Business
Objects\Tomcat55\webapps\CmcApp\WEB-INF
[<Install DIR>Program Files (x86)\Business
Objects\Tomcat55\webapps\InfoViewApp\WEB-INF
```


Troubleshooting Guide

Troubleshooting HP Service Health Reporter

```
[<Install DIR>Program Files (x86)\Business  
Objects\Tomcat55\webapps\InfoViewAppActions\WEB-INF  
[<Install DIR>Program Files (x86)\Business  
Objects\Tomcat55\webapps\CmcAppActions\WEB-INF  
[<Install DIR>Program Files (x86)\Business  
Objects\Tomcat55\webapps\AnalyticalReporting\WEB-INF  
[<Install DIR>Program Files (x86)\Business  
Objects\Tomcat55\webapps\OpenDocument\WEB-INF
```

2. Add **-failovertimeout 1** to the command line parameter of CMS for CMC.
3. Log on to CMC server.
4. Right-click **Central Management Server** and append the command line with the switch.
5. To add the switch, right-click **Central Management Server**.
6. Go to the command line, enter a space and append the switch.



Log on to InfoView and wait for 121 min to get web session and enterprise session timeout.

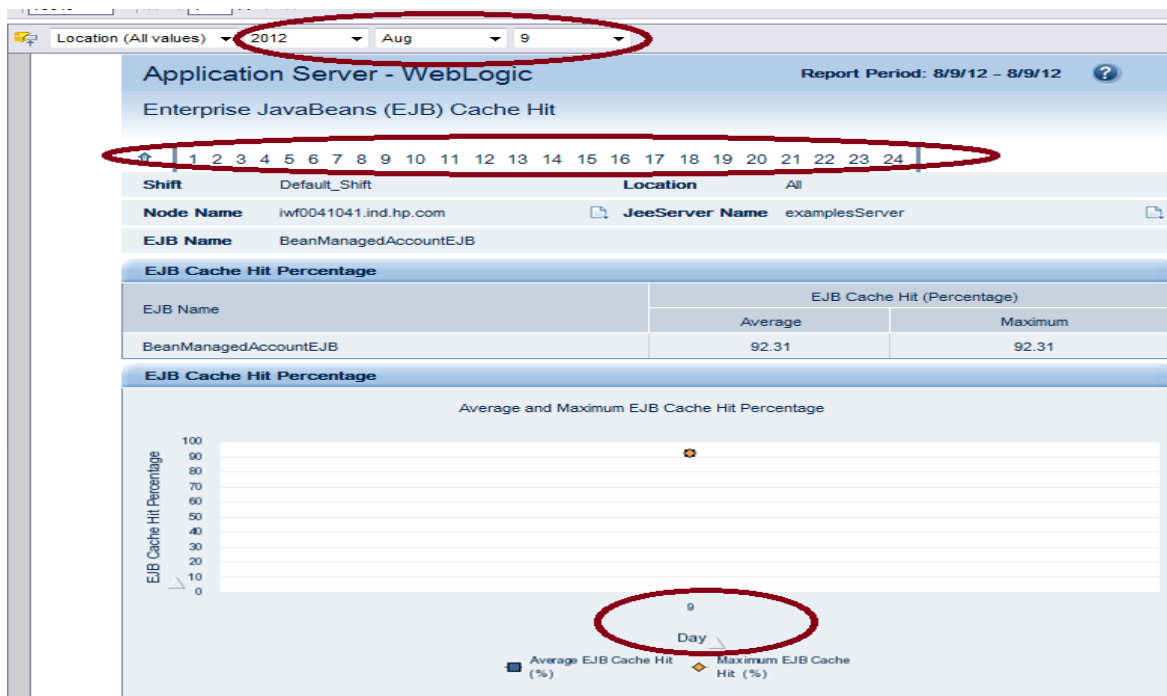
Setting the Sync Drill on Blocks

Description: After refreshing a report, when the report is drill down to “Hour” level dimension, entire report is not in sync at the same dimension, such as the first block on

Troubleshooting Guide

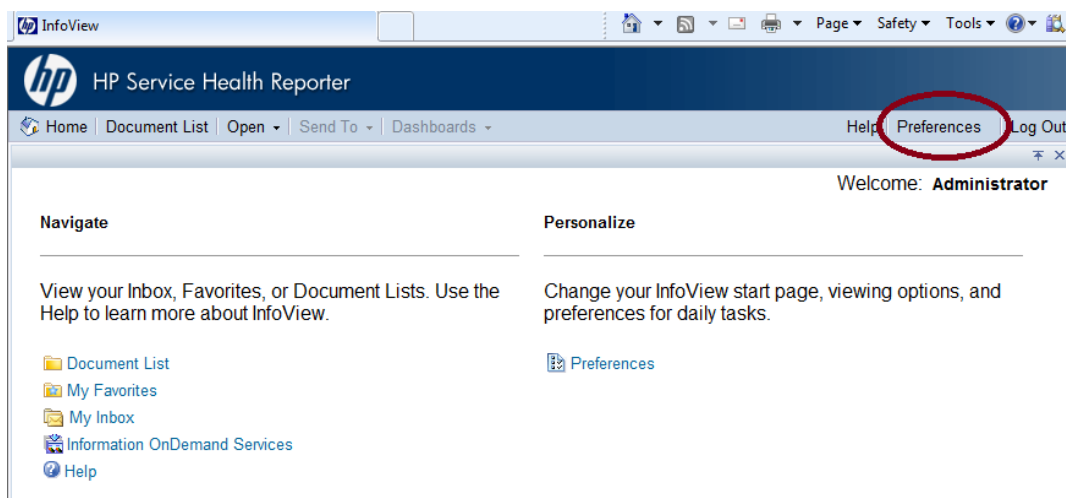
Troubleshooting HP Service Health Reporter

which drill was executed shows data at “Hour” level but the remaining blocks shows data at “Day” level.



This problem occurs because preferences are not set for the drill option. Perform the follow steps to set them:

- 1) Go to **Preferences** in InfoView:



- 2) Under **Web Intelligence**, from the **Drill options** section, select **Synchronize drill on report blocks** as follows.

Web Intelligence

Select a default view format:

- ☒ Web (no downloading required)
- ☐ Interactive (no downloading required)
- ☐ PDF (Adobe AcrobatReader required)

When viewing a document:

- ☐ Use the document locale to format the data
- ☒ Use my preferred viewing locale to format the data

Select a default creation/editing tool:

- ☒ Advanced (Java 2 required)
- ☐ Interactive (no downloading required)
- ☐ Desktop (Web Intelligence Rich Client required) [Install Now](#)
- ☐ Web Accessibility (508 Compliant)

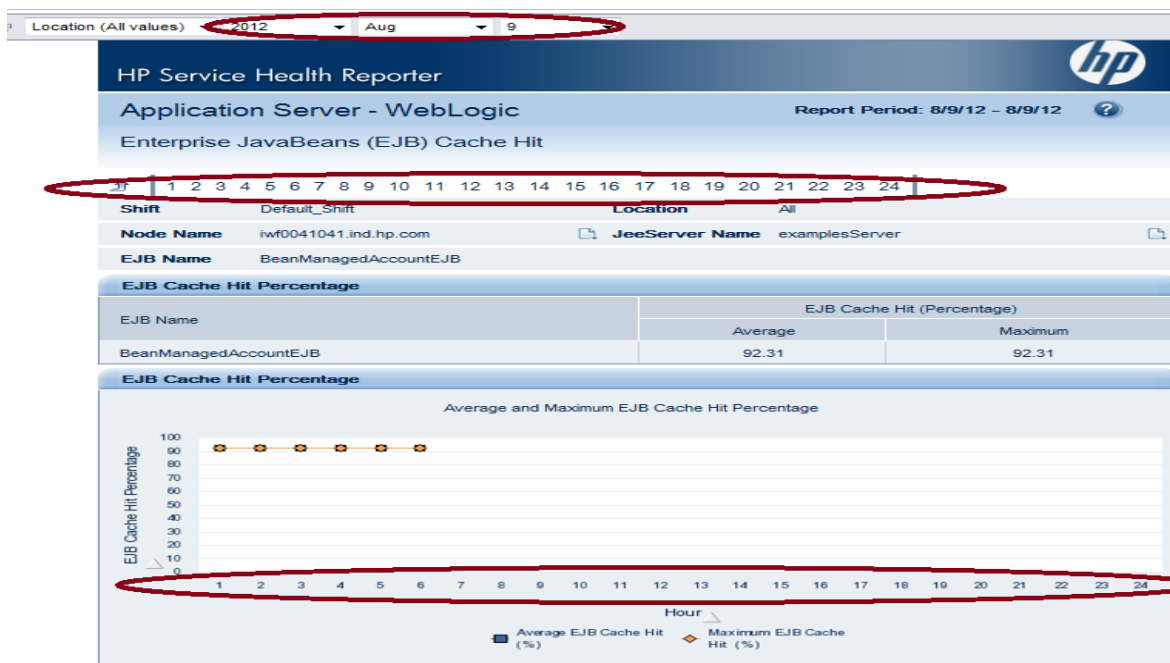
Select a default Universe:

No default universe [Browse ...](#)

Drill options:

- ☐ Prompt when drill requires additional data
- ☒ Synchronize drill on report blocks
- ☐ Hide Drill toolbar on startup

3) Click **OK**, then logout and log on again to InfoView. If the report is drilled down to hourly level, even the other blocks will get synchronized accordingly as follows:



High CPU Usage with Sybase IQ Exception Error in Log Files

Description: Reports fail to generate due to high CPU utilization and a "Sybase IQ Exception: Insufficient buffers for 'Sort'" error message appears in the SHR log files. This error occurs because cache (memory) for Sybase IQ is insufficient. So, system processes or streams are abandoned and data fails to load into SHR reports.

Resolution: In the configuration file (`pmdbConfig.cfg`), increase the variable settings for the `iqtc` and `iqmc` cache parameters as per available RAM in the system. The configuration file is available at:

`%SYBASE%\IQ-15_4\scripts\pmdbConfig.cfg` (for Windows)

`$SYBASE/IQ-15_4/scripts/pmdbConfig.cfg` (for Linux)

Some System Management Reports Fail in VMware vCenter Deployment

Description: When SHR is logging data from VMware vCenter, some System Management reports are empty or fail to generate.

Resolution: When VMware vCenter is the data source for SHR, only the following System Management reports are populated:

- SM Executive Summary
- SM System Availability Summary
- SM System Forecast Summary
- SM System Inventory
- SM Top and Bottom 5 Systems
- SM System Availability Detail

Symptom: SPI Availability Report Show higher-than-expected “Unknown Time”

Description: SHR sources the data from the respective classes such as `DBSPI_ORA_REPORT`, `EX2007_AVAILABILITY` and so on. To compute availability, a post-collection procedure populates the data in the content packs (such as Exchange, WebLogic, WebSphere, Oracle, and Microsoft SQL). The “Unknown Time” is marked when SHR has not received a valid data sample from the agent for a certain period (5 minute sample in `SR_tables`). The issue can occur in the following scenarios.

Scenario 1:

If duplicates exist in the dimension table (such as `K_CI_Oracle`, `K_CI_Exchange_Server`, and so on), then “Unknown Time” occurrence is possible. In case of duplicates (say two instances), one CI would be old and the other new. The old CI would not have logged data after the new CI entered the system. This duration of the old CI is marked as “Unknown Time” because no valid data is received from source.

Resolution: Perform the following steps to resolve this issue:

1. If you have SHR 9.20, upgrade to SHR 9.30 and then to SHR 9.31.
2. Use the “Dimension Life Cycle Manager” tool to delete the duplicate CIs.

For more information on deleting duplicate CIs, see section “Managing Dimensions” in the *HP Service Health Reporter Administration Guide (9.31)*.

Scenario 2:

Troubleshooting Guide

Troubleshooting HP Service Health Reporter

If CODA is facing issues, data logged from Agents will not have the complete set of samples (12 samples per hour). This results in unknown time showing up in SHR reports. For example, although the SPI policy for availability is configured to log data every 5 minutes, the Agent fails to log the complete set of samples every 5 minutes.

Resolution: To fix issues with missing data in CODA, log a case with HP Support for the Agent module.

Scenario 3:

If the SPI policies pertaining to availability are not configured to log the data every 5 minutes, (and instead logging data for say every 10 minutes), then for an hour SHR will have only 6 samples as against 12 from Agent. This can report 50% unknown time.

Resolution: To resolve this issue, configure the SPI policies to log availability data every 5 minutes.

Note: Any other mode of logging will report erroneous availability and also unknown time.

Troubleshooting Administration Issues

The SHR Administration Console is a web-based monitoring tool that you can use to monitor the various components of SHR, such as data collection, data processing, database, services, and so on. In a problem occurs, appropriate alerts are displayed on the Administration Console.

This section of the guide covers how to troubleshoot the alerts that appear on the Administration Console. In addition, this section covers some of the commonly encountered problems during data collection, data reconciliation, data processing, or while performing certain administrative tasks.

The Home page of the Administration Console gives you an overall view of the status of SHR, its associated services, the database, and the host platform.

Figure 1: The Home Page

The screenshot shows the HP SH Reporter Home page. It includes sections for HP SH Reporter Status Summary, HP SH Reporter ETL Status Summary, and HP SH Reporter Alerts. Callouts point to specific areas: 'Service Alerts' points to the Services Status section; 'Data Collection Alerts' points to the Collection Status table; 'ABC Alerts' points to the ABC Alerts tab; and 'Database Alerts' points to the Database Alerts tab.

HP SH Reporter Status Summary

Services Status	HP SH Reporter System Status	Database Status
HP SH Reporter Status	Source: Sun JMX	Status:
SAP BOBJ Enterprise status	Host name: pmdbvm17	Database type: sybase
	Operating System: Windows 2003	Host Name: pmdbvm17
	OS Version/OS Release: NA/5.2	Server name: pmdbvm17
	Number of CPU: NA	Port: 21424
	Physical Memory:	User name: pmdb_admin
	CPU Usage: NA	Size: 3,254 MB
	4min old data	

HP SH Reporter ETL Status Summary

Content Pack Name	Number Of Streams	Error
System_Management	8	6
Appserver_Weblogic	9	9
Core	0	0
System_Management_SIS	0	0
Database_MSSQL	9	8
System_Management_SIS_Coda	4	4

Collection Status

	Total		
HP OM	6	0	0
PA	42	0	2
OM	6	0	0

HP SH Reporter Alerts

Stream Name	Step Name	Message	Time
Appserver_Weblogic@Facts_Transaction	Aggregate_Daily_TransApp...		Apr 6, 2011 9:55:15 ...
Appserver_Weblogic@Facts_Transaction	Aggregate_Daily_TxThruRat...		Apr 6, 2011 9:55:15 ...
Appserver_Weblogic@Facts_ServerAvailabi...	Procedure.Populate_WLS_S...		Apr 6, 2011 9:55:16 ...
Appserver_Weblogic@Facts_ServerAvailabi...	Aggregate_Monthly_EXQueu...		Apr 6, 2011 9:55:16 ...
Exchange_Server@Facts_Recp	Aggregate_Daily_Exchange...		Apr 6, 2011 9:55:16 ...

When a problem occurs with any SHR component, the Home page displays an alert icon so that you can investigate and take appropriate action.

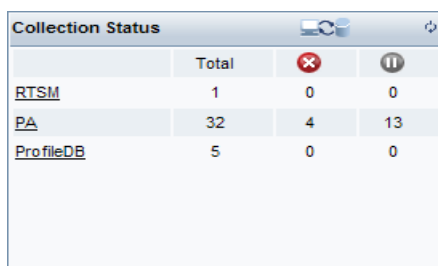
This section of the guide covers the following SHR-related alerts and the steps you must perform to resolve them:



- [Understanding Data Collection Alerts](#)
- [Understanding ABC Alerts](#)
- [Understanding Service Alerts](#)
- [Understanding Database Alerts](#)

Understanding Data Collection Alerts



The home page of the Administration Console monitors and displays the status of the data collected by SHR from the various data sources, such as Runtime Service Model (RTSM), HP Operations Manager (HPOM), Business Service Management (BSM) database, and HP Performance Agent (PA).

Figure 2: The Collection Status Pane



	Total		
RTSM	1	0	0
PA	32	4	13
ProfileDB	5	0	0


Two types of collection status information are displayed in the **Collection Status** pane of the home page, as indicated by the following icons:

-  Indicates that the collection from the specific data source failed.
-  Indicates that the collection never started from the specific data source.

For detailed information about the collection status, you can click the hyperlink of the data source type in the Collection Status pane to open the respective data source page. For example, clicking **RTSM** opens the Service Definition page.

This section of the guide explains the possible problems that might cause the collection to fail and the steps you must take to resolve these problems.

Symptom: Data Collection not Started or Failed

Description: The **Collection Status** pane on the home page lists the RTSM or HPOM data source in the  column. This indicates that the topology collection never started from these data sources.

Resolution: The data source that you are trying to connect to might be down and no connection is established. To resolve this problem, perform the following steps:

1. Check the connection status:
 - A. RTSM, HP OM

In the Administration Console, go to the **Topology Source > Service Definition** page to check the status for the RTSM or HPOM data source.

B. ProfileDB, OMi, HPOM

In the Administration Console, go to the **Collection Configuration > ManagementDB/ProfileDB** page to check the status for the ProfileDB data source. Similarly, for Operations Management i Software (OMi), go to the OMI page and for HPOM, go to the Operations Manager page.

C. Performance Agent

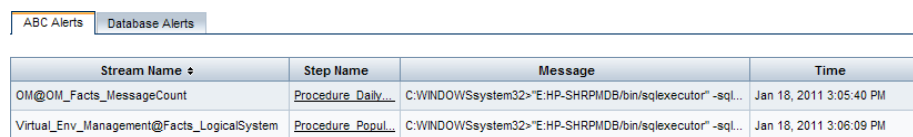
In the Administration Console, go to the **Collection Configuration > PA Data Source** page to check the status for the PA data source.

Click **Test Connection** to test the data source connection (double check the credentials using the configure option). In case the Test Connection check fails for any of the above scenarios, see the [Data source Troubleshooting](#) section.

Understanding ABC Alerts

To troubleshoot problems related to data processing, check the ABC Alerts table on the home page of the Administration Console. The 10 latest active data processing alerts encountered by the SHR workflow framework are displayed.

Figure 3: ABC Alerts



ABC Alerts			
Database Alerts			
Stream Name	Step Name	Message	Time
OM@OM_Facts_MessageCount	Procedure_Daily...	C:WINDOWSsystem32>"E:HP-SHRPMDb/bin/sqlxexecutor" -sql...	Jan 18, 2011 3:05:40 PM
Virtual_Env_Management@Facts_LogicalSystem	Procedure_Popul...	C:WINDOWSsystem32>"E:HP-SHRPMDb/bin/sqlxexecutor" -sql...	Jan 18, 2011 3:06:09 PM

Two types of alerts are generated by this workflow framework:

- **Errors:** This alert is generated when an active job stream fails to complete the execution process because of a serious error during the job. This halts the execution of the job stream.
- **Maximum execution time exceeded:** This alert is generated when a job fails to complete running within the defined execution time frame.

Viewing Details of an Alert

To view details of the displayed alert, click the hyperlink in the **Step Name** column of the table. An alert details window opens.

Figure 4: Alert Details Window

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Troubleshooting HP Service Health Reporter

Step Name	Reconcile_data
Process Id	57192
State	FINISHED
Status	WARNING
Detail Message	PID:31892 Send msg Status -> WARNING Ensure that collection service is up and running. Please refer to collections log files for error/warning details.
Log File	E:\HP-SHR\PMDB\log\transform.log
Command	bin/collection_audit -step reconcile -type WLSTransaction -category WLSSPL_RPT_METRICS
Max Retries	8640
Remaining Retries	8640
Max Execution Time (Mins)	60
Start Time	May 9, 2011 9:45:21 AM
End Time	May 9, 2011 9:45:43 AM

OK

In the alert details window, you can view the detailed error message, the command that was run when the error occurred, the remaining and the maximum number of retries, the maximum execution time, and the start and end times. If the job step continues to fail until the maximum number of retries is reached, the status of the stream will remain as error and will no longer be active. During the retry phase, if the maximum execution time is exceeded, the status of the stream changes to MAX_EXEC_TIME_EXCEEDED and will no longer be active. In this situation, the End Time will display NULL as the value.

The alert details window does not appear for those alerts that are caused by maximum execution time exceeded. You cannot click the **Step Name** column for these alerts to open the details window. For more information on these alerts, check the Data Processing page.

Additional Troubleshooting Tasks

- [ABC Alert - MAX_EXEC_TIME_EXCEEDED](#)
- [ABC Alert - ERROR](#)

Symptom: ABC Alert – ERROR (Max Exec Time Exceeded)

Description: On the Data Processing page of the Administration Console, the Step Status column displays the **ERROR** indicator for a particular job step. Checking the status of the job step shows the MAX_EXEC_TIME_EXCEEDED alert.

Cause: This alert is generated when the job step fails to complete executing within the defined execution time frame. To troubleshoot this type of error, perform the following steps:

1. On the Data Processing page, click the job step icon in the diagram to open a detailed message box about that job step.
2. Note the Process ID (PID) of the job step.
3. Browse to the %PMDB_HOME%\log (Windows), \$PMDB_HOME/log (Linux) folder and open the dw_abclauncher.log file.
4. Search for the PID in the log file.


5. Note the operating system PID of the job step. For example, an entry in the log file might look like:

```
2010-11-23 02:50:12,522 INFO [com.hp.bto.dw.common.log.DwLog] -  
Started step 'DataLoad_Oracle_DiskSort' of stream  
'Database_Oracle@Facts_DiskSort' with Process ID =  
119615[PID:35408]
```

In this example, the PID for the job step is 35408.

6. Validate this operating system PID with an operating system utility to check whether the process is running or not. For example, you can check for the process in the **Processes** tab of the Windows Task Manager window.
7. If the process is listed as active in the Windows Task Manager, perform any of the following steps:
 - Wait for the job step to complete.
 - If the job step execution does not complete after a day or two or if there is a problem with the job step corresponding to the PID according to the log file, end the process using the operating system utility and contact HP Support for assistance.
8. If the process is not listed in the operating system utility, wait for the workflow framework to rerun the job step. If the status continues to show Error, contact HP Support.

Symptom: ABC Alert – ERROR (Max Retries Exceeded)

Description: On the Data Processing page of the Administration Console, the Step Status column displays the  indicator for a particular job step. Checking the status of the job step shows the ERROR alert.

Resolution: This alert is generated when the job step failed to complete executing because of an error. To troubleshoot this type of error, perform the following steps:

1. On the Data Processing page, click the job step icon in the diagram to open a detailed message box about that job step.
2. Note the **Max Retries** and **Remaining Retries** fields.
3. If the **Remaining Retries** is zero, perform the following steps to abort the job stream:
 - a. Click **Start > Run**. The Run dialog box opens.
 - b. Type `cmd` in the **Open** field, and then press **ENTER**. The Command Prompt window opens.
 - c. Type the following command to abort the job stream:

```
abcBatchControl -abort -streamId <stream name>
```

In this instance, *<stream name>* is the name of the job stream.

Understanding Service Alerts


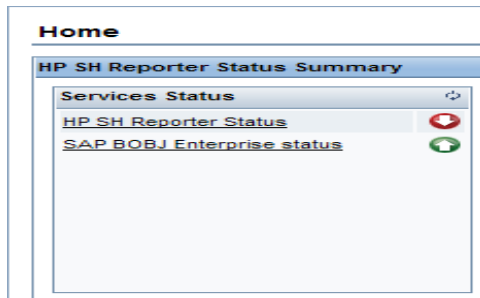






The Service Status pane on the home page shows the  icon for the SHR service status. This status indicates that the services are currently not running.

Figure 5: Service Status Pane on the Home Page



To investigate the problem further, you must check the Services page, where you can get the detailed information of the status of each SHR service.

Figure 6: Services Page in the Administration Console

Services			
Service : HP SH Reporter Status			
Service Name	Description	Status	Start/Stop
HP_PMDB_Platform_Collection	PMDB Collection Framework Service		Stop
HP_PMDB_Platform_IM	HP Service Health Reporter Internal Monitoring Framework		Stop
HP_PMDB_Platform_Message_Broker	Responsible for handling JMS messages.		Stop
HP_PMDB_Platform_DB_Logger	Does IM logging by using Message Broker Service		Stop
HP_PMDB_Platform_Timer	HP SH Reporter Timer Service to schedule data store jobs.		Stop
HP_PMDB_Platform_PostgreSQL	Postgres Database Running		Stop

In case of Error/Warning status against the HP PMDB Platform Collection, ensure adequate free disk space on the drive where SHR is installed (at least 15% free space of total disk space).

If any of the service listed in [Figure 6](#) shows error, restart the service using the Start/Stop link or the Windows Service panel. In case you have trouble restarting the service or in case the service goes down frequently, contact HP Support.

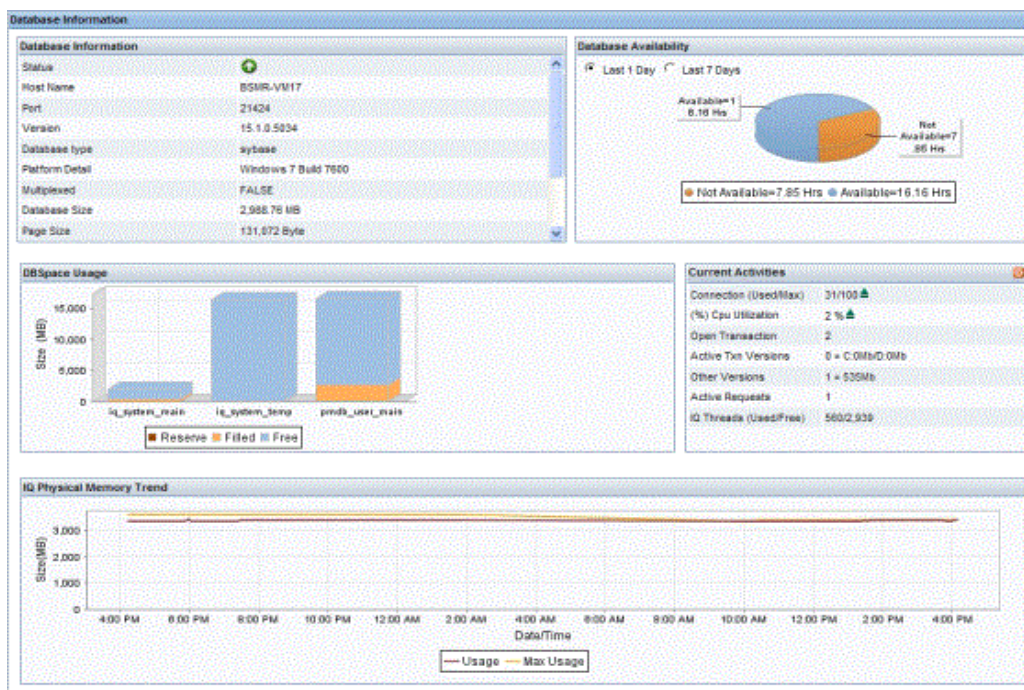
Understanding Database Alerts

Using the home page of the Administration Console, you can monitor the status of the SHR database connection, the availability, and space usage of the database. In the event of any problems, appropriate alerts are displayed in the following sections of the home page:

- **Database Status:** This pane displays the status of the database connection. In case the connection to the database cannot be established, the 🛑 status icon is displayed.
- **Database Alerts:** This table displays a list of warnings or errors messages related to the database.

For detailed information about the database, you can check the Database Monitoring page in the Administration Console.

Figure 7: The Database Monitoring Page



This section explains how to troubleshoot database-related alerts.


Symptom: Database Alert on Home Page

Description: The Database Alerts table on the home page displays the "Error while creating new db space file={0}.iq at the location {1}" message.

Resolution: When 70 to 85 percent of the database space is utilized, a warning message is generated in the Database Alerts table. SHR automatically resolves it by creating a new database space file. However, if a problem occurs during the creation of the database space file, this error message is generated.

Currently, the new database file is created in the same folder where the Sybase IQ database files exist. If the drive does not have enough space, the above error occurs. To resolve this problem, check the disk space and add more according to your requirements or manually create the new database file in another drive.

Symptom: Database Connection Failure

Description: The Database Status pane on the home page of the Administration Console shows the  icon.

Resolution: Restart the database (restart HP_PMDB_Platform_Sybase service from the Windows Service panel). In case you have trouble restarting the service or in case the service goes down frequently, contact HP Support.

Note: If Sybase IQ is installed on a remote system, you must perform these steps on the remote system. The name of the Sybase IQ service might be different from the one mentioned in the steps as it depends on the name that was defined when the service was first created in the remote system.

Symptom: Job Streams not Loading or Running

Description: After installing the content packs and configuring SHR to collect data, you notice that the Data Processing page of the Administration Console does not display any active streams. The job streams are not loading or running.

Resolution: Ensure that the HP_PMDB_Platform_Timer service is running.

Symptom: SAP BusinessObjects InfoView Logon from VM Fails

Description: After launching the SAP BusinessObjects InfoView from the Administration Console on a virtual machine, log on fails despite providing correct user credentials.

Resolution: This problem occurs if SHR is installed on a virtual machine and at the time of installation, the host name on the virtual machine is not correctly set. The HP Software installer configured SAP BusinessObjects using the incorrect host name. However, the installer used correct host name in the %PMDB_HOME%/data/config.prp file. Ideally, the installer should use the same host name across all components.

To resolve this problem, perform the following steps:

1. Click **Start > Programs > BusinessObjects XI 3.1 > BusinessObjects Enterprise > Central Configuration Manager**. The Central Configuration Manager window opens.
2. Right-click **Apache Tomcat 5.5.20**, and then click **Stop** to stop the Tomcat service.
3. Right-click **Server Intelligence Agent (HOML01GEATON)** and then click **Stop** to stop the SIA service.
4. Right-click **Server Intelligence Agent (HOML01GEATON)** and then click **Properties**. The Server Intelligence Agent (HOML01GEATON) Properties dialog box opens.

5. On the **Configuration** tab, select the **Change Cluster Name to** check box, and then type the new name of the virtual or physical machine.
6. Click **OK**.
7. Right-click **Server Intelligence Agent (HOML01GEATON)** and then click **Start** to restart the SIA service first.
8. Right-click **Apache Tomcat 5.5.20** and then click **Start** to restart the Tomcat service next.
9. Close the **Central Configuration Manager** window.
10. In the Administration Console, click **Administration > SAP BusinessObjects**. The SAP BusinessObjects page opens.
11. Click **Launch InfoView**. The BusinessObjects InfoView Login page opens.

Symptom: Sybase IQ Process Continues Running after Platform Service is stopped

Description: Stopping the PMDB Platform Sybase service when the Sybase IQ database is down does not ensure that the Sybase IQ process (iqsrv15.exe) stops running.

Resolution: To resolve this problem, you must manually stop the Sybase IQ process after stopping the PMDB Platform Sybase service. Perform the following steps:

1. Stop the Sybase IQ process (iqsrv15.exe) from the Task Manager.
 - a. On the desktop, right-click the taskbar, and then click **Task Manager**. The Windows Task Manager window opens.
 - b. Click the **Process** tab.
 - c. Select the **Show processes from all users** check box and then locate the iqsrv15.exe process in the displayed list of processes.
 - d. Select **iqsrv15.exe** and click **End Process**.

Note: If Sybase IQ is installed on a remote system, you must perform these steps on the remote system. The name of the Sybase IQ service might be different from the one mentioned in the steps as it depends on the name that was defined when the service was first created in the remote system. For more information, see the *HP Service Health Reporter Installation and Configuration Guide*.

Symptom: Internet Explorer 9 Fails to Launch the Administration Console

Description: SHR Administration Console does not launch with Internet Explorer 9.

Resolution: Launch the Administration Console after opening Internet Explorer in the Compatibility Mode.

Symptom: Administration Console Web Page Error

Description: When you log on or browse through the Administration Console, the following error message is displayed on the web page:

An Error Occurred:

```
duplicate Id for a component
cp_installed:cp_installed_table:j_id61

about:blank#

java.lang.IllegalStateException: duplicate Id for a component
cp_installed:cp_installed_table:j_id61

at
org.ajax4jsf.application.TreeStructureNode.apply(TreeStructureNode
.java:68)

at
org.ajax4jsf.application.TreeStructureNode.apply(TreeStructureNode
.java:92)
```

Resolution1:

This error occurs because of duplicate IDs that were created for the same web page. To resolve this, clear the web browser cache and refresh the page.

Resolution2:

Start the Administrator service.

Windows:

- Open command prompt and type ***services.msc***.
- Right-click on ***HP_PMDB_Platform_Administrator*** service restart.

Linux:

Run service ***HP_PMDB_Platform_Administrator*** restart.

Symptom: ABC Stream – Stage Always in Warning State

Description: Status of stage step in ABC stream is always in warning state. This occurs when the stage moves CSV files to %PMDB_HOME%/stage/failed_to_stage (Windows), \$PMDB_HOME/stage/failed_to_stage (Linux) if it encounters any error due to wrong data.

Resolution: When you see stage step in WARNING state, correct the data in the CSV files manually and put them back to %PMDB_HOME%/stage/failed_to_stage (Windows) , \$PMDB_HOME/stage/failed_to_stage (Linux) so that data is moved during next run.

Symptom: Connection to RTSM Server through Administration Console Fails

Description: When the user changes the application root context in BSM9.2x, test connection fails. BSMRApp.log shows following message:
Failed to connect with http://<HostName>:21212/setup1/axis2/services/UcmdbService for CMDDB,
org.apache.axis2.AxisFault: Service not found operation terminated.

Resolution:

To be performed in SHR Server

1. Edit config.prp file located at %PMDB_HOME%/data/config.prp (Windows), \$PMDB_HOME/data/config.prp (Linux)
2. Modify ucmdbservice.url=/axis2/services/UcmdbService to ucmdbservice.url=/setup1/axis2/services/UcmdbService (assuming new root context is *setup1*)

To be performed in BSM System

1. After you have changed the root context from BSM/jmx-console, stop the server and edit the following configuration files. Assume that your new root context is *setup1*.
2. Edit the file ..\HPBSM\odb\deploy\axis2\WEB-INF\web.xml and add the following lines:

```
<init-param>  
    <param-name>axis2.find.context</param-name>  
    <param-value>>false</param-value>  
</init-param>
```
3. Edit the file ..\HPBSM\odb\deploy\axis2\WEB-INF\conf\axis2.xml and add the following line:

```
<parameter name="contextRoot"  
locked="false">setup1/axis2</parameter>
```
4. Restart the server.

Symptom: Unable to Launch the Central Management Console or the InfoView Console from the Administration Console

Description: *This is observed only on non-English systems.*

In the Administration Console, the **Administration > SAP BOBJ** menu fails to launch the Central Management Console or InfoView Console.

Resolution:

1. Open the following file:
 - On Windows: %pmdb_home%/config/data/config.prp
 - On Linux: \$pmdb_home/config/data/config.prp

2. Make sure that the fully qualified domain name of the SHR system is correctly specified in the file.

Symptom: SHR Server and Remote Collector Unable to Communicate Across Networks

Description: When the SHR server and the Remote Collector are hosted on different networks, they are unable to communicate with each other.

Resolution: Ensure that the outbound connections from both networks are open and inbound connection is restricted to a single port that the communication broker must listen to. Perform the following steps on the SHR server and the Remote Collector to enable communication across networks:

On the SHR Remote Collector:

1. From the Command Line Interface (CLI), run the following command:
`ovconfchg -edit`
2. Add the following lines:
`[bbc.cb]`
`SERVER_PORT=<port_no>`
where, "port_no" is the port open for communication.
3. Restart the bbc service by running the following command:
`ovc -restart`

On the SHR server:

1. From the Command Line Interface (CLI), run the following command:
`ovconfchg -edit`
2. Add the following lines:
`[bbc.cb.ports]`
`PORTS=<server_FQDN-1:port_no>;=<server_FQDN-2:port_no>`
where, "server_FQDN" is the SHR Remote Collector's Fully Qualified Domain Name (FQDN) and "port_no" is the port open for communication. The port number must be the same as that configured on the SHR Remote Collector. You can configure multiple collectors this way with different port numbers for different SHR servers.
3. Restart the bbc service by running the following command:
`ovc -restart`

After performing the earlier steps on both the SHR server and the SHR Remote Collector, configure the SHR Collector and add it through the SHR Administration Console. For more information, see the *HP Service Health Reporter Installation and Configuration Guide*.

Note: Proxy configuration is not required if at least one port is open for inbound communication. Otherwise, you must configure reverse channel proxy (RCP). For more information, refer the whitepaper named *Configuring outbound-only communication with HP OpenView Operations for UNIX 8*.

Symptom: Sybase IQ Database Runs out of Space

Description: Sybase IQ database is out of space due to data logging from data sources.

Resolution: If the disk where Sybase IQ database is installed has run out of space, you can configure the database to log new data into a new physical drive.

Note: Take a full backup of the data in case of a disaster recovery. For more information, see “Database backup and recovery” in the *SHR Installation and Configuration Guide*.

1. Stop all SHR services except the **HP_PMDB_Platform_Sybase** service.
2. From the **Start** button, launch the **Sybase-> Sybase IQ-> Sybase Central** application.
3. From the **Connections** menu, click **Connect with Sybase IQ**. The Connect window appears.
4. Fill out the authentication credentials and make other relevant selections.
5. Click **Connect**. The Sybase Central application appears.
6. From the right pane, double-click **Dbspaces-> pmdb_user_main**.
7. From the **File** menu, click **New-> File**. The Add File(s) window appears.
8. Click **Add**. The File Details window appears.
9. Populate the fields as relevant to your environment; select the new drive.
10. Click **OK-> Next-> Finish**.

Symptom: Content Pack Installation Hangs

Description: When installing content packs from SHR Administration > Deployment Manager, the installation does not progress and spikes CPU utilization of the system.

Resolution: If the content pack installation hangs, locate the “datapipe_manager” system process and terminate it. The SHR Administration Console>Administration>Deployment Manager will report that content pack installation had failed. Now, uninstall the content pack and begin installation again.

Symptom: HP OM Topology Collection Configurations Missing

Description: Although HPOM topology collection is configured and saved through the SHR Administration Console, they are missing.

Resolution: This issue is seen when you have upgraded from SHR 9.1 to 9.2 version. This occurs because SHR 9.2 employs the PostgreSQL database where a few additional configurations need to be performed as follows:

1. Log into the PostgreSQL database with administrator credentials using the pgAdmin III application from your SHR system.
2. Find the *dwabc* database and locate the *dict_db_ds* table.
3. Add “0” to the column named “rac”.
4. Commit the changes.
5. Configure and save the OM topology collection from the SHR Administration Console again.

Symptom: SQL Anywhere 12 Server Process Crashes

Description: The BOE120SQLAW service goes down after trying to insert the 'LONG' data into one of the auditing table columns and SHR InfoView reports are not accessible.

Resolution: Perform the following steps to resolve this problem:

Linux:

1. Log on to the SHR system as root user.
2. Run the following commands in the prompt:
 - `su - SHRBOADMIN`
 - `source $BOBJEDIR/setup/env.sh`
 - `cd $BOBJEDIR/SQLAW/Bin`
 - `dbisqlc`
3. Log on to the SQL Anywhere AUDIT database with the following credentials:
User ID : SHR
Password : pmdb_admin
DB name : <HOSTNAME>BOE120_AUDIT
Server : <HOSTNAME>BOE120_SHR
where HOSTNAME is the system name where SHR is installed.
4. Execute the following query.
`ALTER TABLE AUDIT_DETAIL ALTER Detail_Text long NVARCHAR`

Windows:

1. Log on to the SHR system.
2. Run the following command in the prompt:
 - `dbisql`
3. Log on to the SQL Anywhere AUDIT database with the following credentials:
User ID: <HOSTNAME> (For example: iwfv00310)
Password: pmdb_admin
DB name: BOE120_AUDIT
Server: BOE120SQLAW_<hostname> (For example: BOE120SQLAW_iwfv00310)
4. Execute the following query.
`ALTER TABLE AUDIT_DETAIL ALTER Detail_Text long NVARCHAR`

Troubleshooting Data Source Issues

Troubleshooting HP Operations Agent Data Source Issues

Checking Data Availability on HP Operations Agent using JCDAUTIL?

Set the environment variable in the command prompt to get additional options
C:\>SET CODAMAGIC=0x05201993

1. To dump latest data in the data source for all instances.

For Windows: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -dumpds <datasource>

Example: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -dumpds SCOPE

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -dumpds <datasource>

Example: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -dumpds SCOPE

2. To dump metric list of a data source and a class.

For Windows: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -obj

Example: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -obj

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -obj

Example: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -obj

3. To dump last data for a data source and a class.

For Windows: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics> -last

Example: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -last

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics> -last

Example: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -last

4. To dump first data for a data source and a class.

For Windows: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics> -first
Example: %ovinstalldir%/jre64/bin/ava -jar %OVINSTALLDIR%/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -first

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics> -first

Example: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -first

5. To dump last hours' summarized (by five min) data for a data source and class.

For Windows : %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics_list> -b <mm/dd/yyyy.hh:mi:ss> -e <mm/dd/yyyy.hh:mi:ss> -s fivemin

Example: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -b 07/18/2012.10:00:00 -e 07/18/2012.11:00:00 -s fivemin

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics_list> -b <mm/dd/yyyy.hh:mi:ss> -e <mm/dd/yyyy.hh:mi:ss> -s fivemin

Example: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -b 07/18/2012.10:00:00 -e 07/18/2012.11:00:00 -s fivemin

6. To dump last hours' raw data for a data source and class.

For Windows: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics_list> -b <mm/dd/yyyy.hh:mi:ss> -e <mm/dd/yyyy.hh:mi:ss> -raw

Example: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -b 07/18/2012.10:00:00 -e 07/18/2012.11:00:00 -raw

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics_list> -b <mm/dd/yyyy.hh:mi:ss> -e <mm/dd/yyyy.hh:mi:ss> -raw

Example: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -b 07/18/2012.10:00:00 -e 07/18/2012.11:00:00 -raw

7. To dump last hours' summarized (by five min) data for a data source and class in a CSV format.

For Windows: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics_list> -b <mm/dd/yyyy.hh:mi:ss> -e <mm/dd/yyyy.hh:mi:ss> -s fivemin -l " " > file.csv

Example: %ovinstalldir%/jre64/bin/java -jar %OVINSTALLDIR%/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -b 07/18/2012.10:00:00 -e 07/18/2012.11:00:00 -s fivemin > cpu.csv

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds <datasource> -o <class> -n <hostname> -m <comma_separated_metrics_list> -b <mm/dd/yyyy.hh:mi:ss> -e <mm/dd/yyyy.hh:mi:ss> -s fivemin -l "," > file.csv

Example: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar /opt/OV/java/jcodautil.jar -ds SCOPE -o CPU -n pihpt1. example.domain.com -m BYCPU_ID, BYCPU_STATE -b 07/18/2012.10:00:00 -e 07/18/2012.11:00:00 -s fivemin > cpu.csv

Troubleshooting HP Operations Agent Connectivity Issues

Perform the following steps to check the reachability and availability of data source for reporting.

1. Check that the host is reachable.

ping -n <hostname>

If ping fails, check the connectivity to the host.

Note: If the node is behind a firewall, ping might be blocked.

2. Check to see if the agent is up and running using following command.

For Windows: %ovinstalldir%/jre64/bin/java -jar

%OVINSTALLDIR%/java/jcodautil.jar -ping -n <hostname>

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar

/opt/OV/java/jcodautil.jar -ping -n <hostname>

Ping of OvBbcCb and CODA should be successful. But if the jcodautil ping fails, check the status of agent by running ovc -status command on the agent system and check that all the services are running as shown in the following sample output.

```
# ovc -status
coda      OV Performance Core      COREXT      (14434) Running
opcmgsi   OVO Message Interceptor      AGENT,EA    (14444) Running
ovbbccb   OV Communication Broker      CORE        (14425) Running
ovcd      OV Control                    CORE        (14424) Running
ovconfd   OV Config and Deploy          COREXT      (14426) Running
#
```

Troubleshooting Empty CPU Data for Last Two Days

Perform the following steps to debug data availability on source.

1. Check that the host is reachable.

ping -n <hostname>

If ping fails, check the connectivity to the host.

Note: If the node is behind a firewall, ping might be blocked.

2. Check to see if the agent is up and running using the following command.

For Windows: %ovinstalldir%/jre64/bin/java -jar
 %OVINSTALLDIR%/java/jcodautil.jar -ping -n <hostname>
For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar
 /opt/OV/java/jcodautil.jar -ping -n <hostname>

Ping of OvBbcCb and CODA should be successful. But if the jcodautil ping fails, check the status of agent by running ovc -status command on the agent system and check that all the services are running as shown in the following sample output.

```
# ovc -status
coda      OV Performance Core      COREXT      (14434)    Running
opcmgsi   OVO Message Interceptor    AGENT,EA    (14444)    Running
ovbbccb   OV Communication Broker    CORE        (14425)    Running
ovcd      OV Control                  CORE        (14424)    Running
ovconfd   OV Config and Deploy       COREXT      (14426)    Running
#
```

3. Check to see if data is being collected and logged in HP Operations Agent by running the following command.

For Windows: _%ovinstalldir%/jre64/bin/java -jar
 %OVINSTALLDIR%/java/jcodautil.jar -ds SCOPE -o CPU -m
 BYCPU_ID,BYCPU_CPU_TOTAL_UTIL -h -last -n <hostname>
Example: %ovinstalldir%/jre64/bin/java -jar
 %OVINSTALLDIR%/java/jcodautil.jar -ds SCOPE -o CPU -m
 BYCPU_ID,BYCPU_CPU_TOTAL_UTIL -h -last -n piiat1. example.domain.com
For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar
 /opt/OV/java/jcodautil.jar -ds SCOPE -o CPU -m
 BYCPU_ID,BYCPU_CPU_TOTAL_UTIL -h -last -n <hostname>
Example: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar
 /opt/OV/java/jcodautil.jar -ds SCOPE -o CPU -m
 BYCPU_ID,BYCPU_CPU_TOTAL_UTIL -h -last -n piiat1. example.domain.com

Time Stamp	CPU ID	Total CPU %
03/26/12 5:05:00	0	0.78
03/26/12 5:05:00	1	1.92
03/26/12 5:05:00	2	2.33
03/26/12 5:05:00	3	2.07
03/26/12 5:05:00	4	1.19
03/26/12 5:05:00	5	2.45
03/26/12 5:05:00	6	1.17
03/26/12 5:05:00	7	1.10

If you don't see data for the last two days, contact HP Support.

Troubleshooting Data Holes in Reports

Perform the following steps to debug data availability on source.

1. Check that the host is reachable

ping -n <hostname>

If ping fails, check the connectivity to the host.

Note: If the node is behind a firewall, ping might be blocked.

2. Check to see if the agent is up and running using following command.

For Windows: %ovinstalldir%/jre64/bin/java -jar

%OVINSTALLDIR%/java/jcodautil.jar -ping -n <hostname>

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar

/opt/OV/java/jcodautil.jar -ping -n <hostname>

Ping of OvBbcCb and Coda should be successful. But if the jcodautil ping fails, check the status of agent by running ovc -status command on the agent system and check that all the services are running as shown in the following sample output.

```
# ovc -status
coda      OV Performance Core      COREXT      (14434)    Running
opcmgsi   OVO Message Interceptor     AGENT,EA    (14444)    Running
ovbbccb   OV Communication Broker     CORE        (14425)    Running
ovcd      OV Control                   CORE        (14424)    Running
ovconfd   OV Config and Deploy        COREXT      (14426)    Running
#
```

3. Run the following command to check if you have one row every five minutes between the given start and end time. Start and end time format are mm/dd/yyyy.hh:mi:ss

For Windows: %ovinstalldir%/jre64/bin/java -jar

%OVINSTALLDIR%/java/jcodautil.jar -ds SCOPE -o GLOBAL -m

GBL_MEM_UTIL,GBL_CPU_TOTAL_UTIL,GBL_DISK_UTIL -h -b

03/25/2013.10:00:00 -e 03/25/2013.11:00:00 -n p1at1.example.domain.com

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar

/opt/OV/java/jcodautil.jar -ds SCOPE -o GLOBAL -m

GBL_MEM_UTIL,GBL_CPU_TOTAL_UTIL,GBL_DISK_UTIL -h -b 03/25/2013.10:00:00 -e

03/25/2013.11:00:00 -n p1at1.example.domain.com

```
# ovcodautil -ds SCOPE -o GLOBAL -m GBL_MEM_UTIL,GBL_CPU_TOTAL_UTIL,GBL_DISK_UTIL -h -b 03/25/2013.10:00:00 -e 03/25/2013.11:00:00 -n p1at1.ind.hp.com
Time      Memory
Stamp      CPU %      %
03/25/13 10:00:00    1.77    88.70
03/25/13 10:05:00    2.00    88.75
03/25/13 10:10:00    1.69    88.74
03/25/13 10:15:00    1.64    88.75
03/25/13 10:20:00    1.65    88.75
03/25/13 10:25:00    1.44    88.75
03/25/13 10:30:00    1.50    88.75
03/25/13 10:35:00    1.66    88.75
03/25/13 10:40:00    1.48    88.75
03/25/13 10:45:00    1.62    88.75
03/25/13 10:50:00    1.53    88.75
03/25/13 10:55:00    1.33    88.75
#
```


Troubleshooting Missing Dimensions – SHR Displays One Instance when Multiple Instances Exist

Perform the following steps to debug data availability on source.

1. Check that the host is reachable

ping -n <hostname>

If ping fails, check the connectivity to the host.

Note: If the node is behind a firewall, ping might be blocked.

2. Check to see if the agent is up and running using the following command.

For Windows: %ovinstalldir%/jre64/bin/java -jar

%OVINSTALLDIR%/java/jcodautil.jar -ping -n <hostname>

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar

/opt/OV/java/jcodautil.jar -ping -n <hostname>

Ping of OvBbcCb and Coda should be successful. But if the jcodautil ping fails, check the status of agent by running ovc -status command on the agent system and check that all the services are running as shown in the following sample output.

```
# ovc -status
coda          OV Performance Core          COREXT      (14434)  Running
opcmsgi       OVO Message Interceptor            AGENT,EA    (14444)  Running
ovbbccb       OV Communication Broker            CORE        (14425)  Running
ovcd          OV Control                          CORE        (14424)  Running
ovconfd       OV Config and Deploy               COREXT      (14426)  Running
#
```

3. Check that there are **KEY** metrics by running the following command.

For Windows: %ovinstalldir%/jre64/bin/java -jar

%OVINSTALLDIR%/java/jcodautil.jar -ds DBSPI_ORA_REPORT -o

DBSPI_ORA_REPORT -obj -n example.domain.com

For Linux: /opt/HP/BSM/JRE64/bin/java -cp /opt/OV/java/ -jar

/opt/OV/java/jcodautil.jar -ds DBSPI_ORA_REPORT -o DBSPI_ORA_REPORT -obj -n

piiat1. example.domain.com

DBSPI_ORA_REPORT KEY UTF8 INSTANCENAME

DBSPI_ORA_REPORT KEY R64 METRICID

DBSPI_ORA_REPORT KEY R64 VALUEID

DBSPI_ORA_REPORT GGE R64 VALUE

DBSPI_ORA_REPORT KEY UTF8 SYSTEMID

DBSPI_ORA_REPORT KEY UTF8 OBJECTID

If you find "NON" instead of "KEY", SPI is not configured for logging multiple instances of data to CODA. This results in data loss. Apply the same step to any Agent SPIs.

To switch data logging from DSI and CODA, create the following file

%OVDATADIR\conf\dsi2ddf\nocoda.opt

Note: By default, nocoda.opt file is not present.

Presence of nocoda.opt file implies that all the datasource data is getting logged in to CODA. (Except for the datasource whose names are mentioned in the nocoda.opt file)

Absence of nocoda.opt file implies that all the datasource data is getting logged in to DSI. SHR does not support multiple instances of data logging to DSI.

4. Check the last logged data time stamp for each instance. Check that all missing instances are listed and that the time stamp is the same as with the instance that displays data in SHR.

```
%ovinstalldir%\jre64\bin\java -jar
%OVINSTALLDIR%\java\jcodautil.jar -ds DBSPI_ORA_REPORT -o
DBSPI_ORA_REPORT -last -flat -n <hostname>
C:\> %ovinstalldir%\jre64\bin\java -jar
%OVINSTALLDIR%\java\jcodautil.jar -ds
DBSPI_ORA_REPORT -o DBSPI_ORA_REPORT -last -flat -n USNYCDBS
example.test.com
```

```
=== 03/26/13 9:15:00 PM
Instance           : 0
INSTANCENAME       : p123
METRICID           : 119.00
VALUEID            : 1.00
VALUE              : 109.71
SYSTEMID           : example.test.com
OBJECTID           : p123
```

```
=== 03/26/13 9:15:00 PM
Instance           : 1
INSTANCENAME       : p123
METRICID           : 201.00
VALUEID            : 1.00
VALUE              : 5.00
SYSTEMID           : example.test.com
OBJECTID           : p123
```

Troubleshooting Data Collection Failure across all Configured Nodes

Description: Data collection in SHR fails with an Address already in use error logged in the topologycollector.log file.

Resolution: This error occurs when the number of TCP/IP ports used exceeds the default value of 5000. To resolve this problem, you must make changes in the Windows Registry. Follow these steps:

1. Click **Start > Run**. The Run dialog box opens.

2. In the **Open** box, type `regedit`. The Registry Editor window opens.
3. On the left pane, expand **HKEY_LOCAL_MACHINE**, expand **SYSTEM**, expand **CurrentControlSet**, expand **Services**, expand **Tcpip**, and then click **Parameters**.
4. On the right pane, right-click anywhere, point to **New**, and then click **DWORD Value** to add a new entry. Add the following entries:
 - `MaxUserPort` = 65535 (decimal)
 - `MaxFreeTcbs` = 65535 (decimal)
 - `MaxHashTableSize` = 65535 (decimal)
 - `TcpTimedWaitDelay` = 30 (decimal)

Restart the system after making changes in the Registry Editor.

Microsoft SQL servers take up a new CIID when data sources are recreated in HPOM

Description: The collection module obtains same Microsoft SQL server instance with a different CIID when data sources are recreated on the HPOM because the instance key metrics of SPI is used to generate the `CI_UID`. When DSI logging is enabled (default mode) on the SPI source instead of the HPOM, no metrics are marked as key metrics. But, if it is changed, the `instance_name` becomes a key metric which generates a different `CI_UID`.

Resolution: Create the `%OVDATADIR\conf\dsi2ddf\nocoda.opt` file in Windows and the `/var/opt/OV/conf/dsi2ddf/nocoda.opt` file in Linux to make the SPI log to HPOM instead of DSI (on recreation) so that SHR always obtains the key metrics.

Data loading into SHR fails due to NaN values

Description: When data collection from HP Operations agent attempts to load Not a Number (NaN) values into the numeric columns of fact tables, data type conversion errors are seen. The error can be viewed from the SHR Administration Console>Internal Monitorng>Data Processing>Content Pack Component Name (SysPerf_Domain) where a count of errors is listed.

Resolution: Browse to the `{PMDB.HOME}/config/collection.properties` file and add the following property:

```
pa.metric.default.metric.list=10,13.
```

Restart the `HP_PMDB_Platform_Collection` collection service.

All NaN values are replaced and data loading occurs properly.

Note: This workaround might impact performance because each metric collected from the HP Operations agent data source undergoes validation.

Troubleshooting RTSM Issues

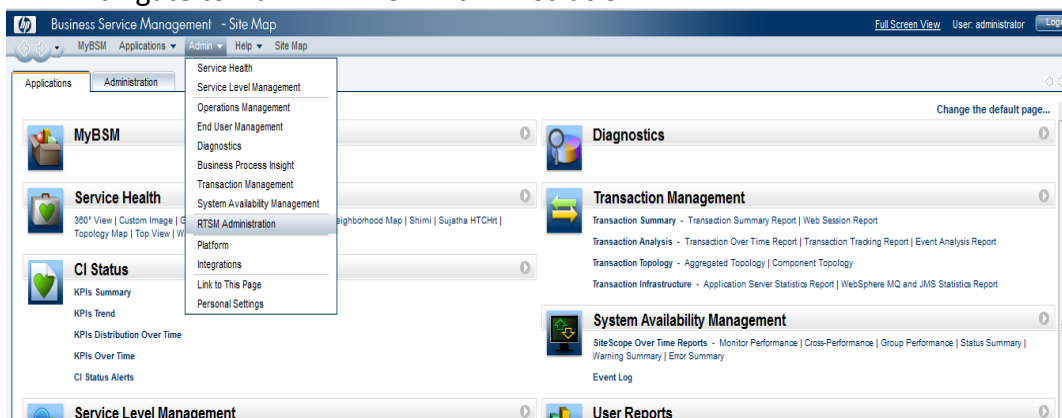
Test Connection on Administration Console to RTSM Fails

Perform the following step:

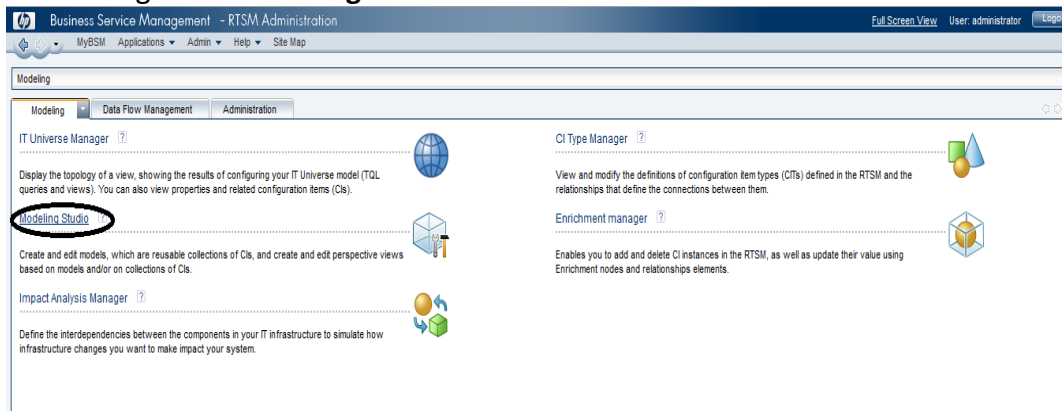
For a BSM distributed setup, ensure that you have provided the hostname and port of the Data Processing Server and not the Gateway Server.

Data Collection from RTSM-discovered HP Operations Agent Nodes Fails

1. Log on to BSM console using the following URL: <http://<hostname>/topaz>
2. Navigate to **Admin > RTSM Administration**.

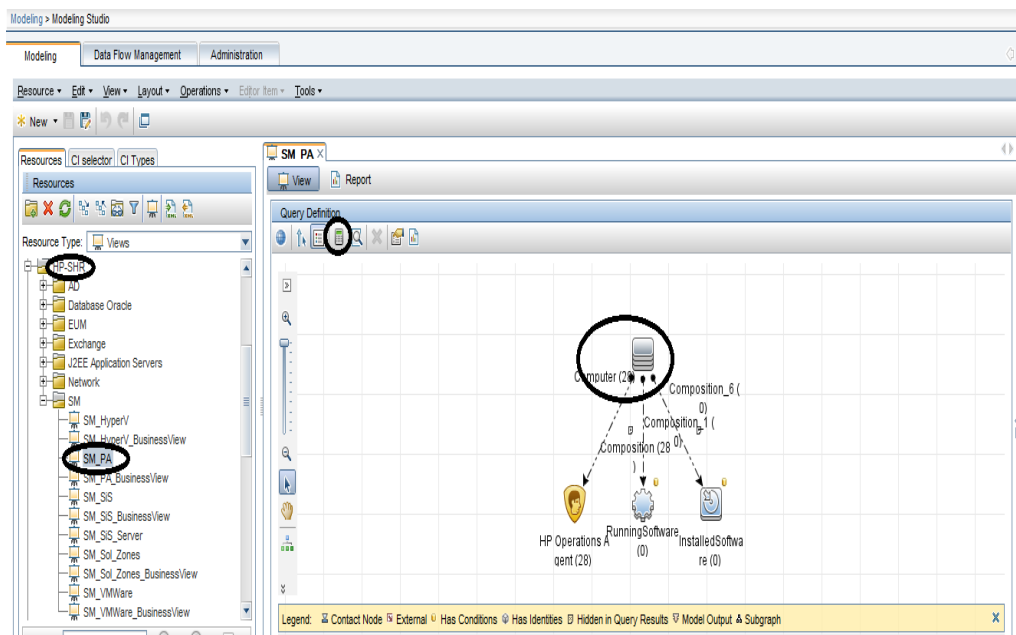


3. Navigate to **Modeling Studio**.



4. On the **Resources** tab, expand HP-SHR folder -> SM -> SM_PA and double-click **SM_PA view**.
5. On the left hand pane, the view appears. Click the calculator icon and check the number of instances of Configuration Item (CI) Type **Computer**.

Troubleshooting Data Source Issues



6. In the preceding sample, there are 28 instances of CI Type **Computer**. This indicates that there must be 28 agent data sources from where SHR collects performance metrics and reports on System Infrastructure Management.

Finding Attribute Value for the CI Type – HP Operations Agent

1. Right-click **Computer** and select **Show Element Instances**. A popup appears with the CI instances and their attributes.

The screenshot shows the HP Business Service Management (BSM) interface. The 'CI Instances' window is open, displaying a table of CI instances for the selected query node. The table has four columns: Display Label, PrimaryDnsName, Monitored By, and CI Type. The instances are listed for various components like AD, Database Oracle, EUM, Exchange, J2EE Application Servers, Network, SM, SM_HyperV, SM_HyperV_BusinessView, and SM_PA.

Display Label	PrimaryDnsName	Monitored By	CI Type
hwf1088155	hwf1088155	[OM, NNM]	nt
hwf1088156	hwf1088156	[OM, NNM]	nt
hwf1088159 (Management Server)	hwf1088159	[OM, NNM]	nt
hwf1088160	hwf1088160	[OM, NNM]	unix
hwf1088164	hwf1088164	[OM]	nt
hwf1088168	hwf1088168	[OM]	nt
hwf1088203	hwf1088203	[OM]	nt
hwf1089074	hwf1089074	[OM, NNM]	nt
hwf1089076	hwf1089076	[OM]	nt
hwf1089077	hwf1089077	[OM, NNM]	nt
hwf1089079	hwf1089079	[OM, NNM]	nt
hwf1089109	hwf1089109	[OM, NNM]	nt
hwf1089145	hwf1089145	[OM]	nt
hwf1089146	hwf1089146	[OM]	nt
hwf1089147	hwf1089147	[OM]	nt
hwf1089148	hwf1089148	[OM]	nt

- If the **PrimaryDnsName** attribute of **Computer** CI Type is blank for a CI's (host) in that view, it will not be configured for collecting performance metrics.

To verify whether the same number of data sources is discovered in SHR, follow the steps:

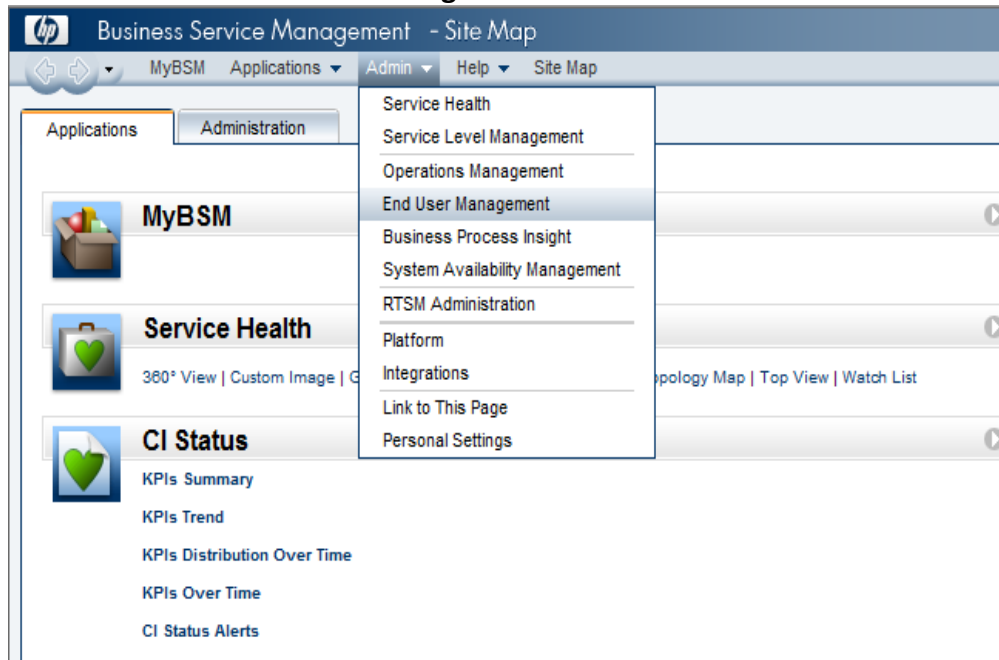
1. Log on to SHR Administration Console using the following link:
<http://<hostname>:21411/BSMRApp>
2. Navigate to the **Collection Configuration** page.

Troubleshooting BPM and RUM Issues

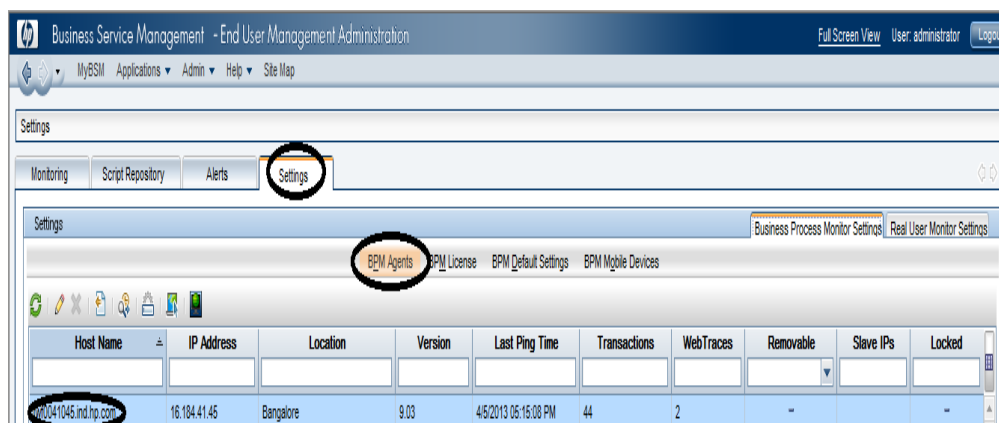
Checking Whether BPM Agents are configured

To check whether Business Process Monitor (BPM) agents are configured, perform the following steps:

1. Login to BSM console using the following URL:
<http://<hostname>/topaz>
2. Go to **Admin -> End User Management**.



3. Navigate to **Settings -> select Business Process Monitor Settings** and select **BPM Agents**.

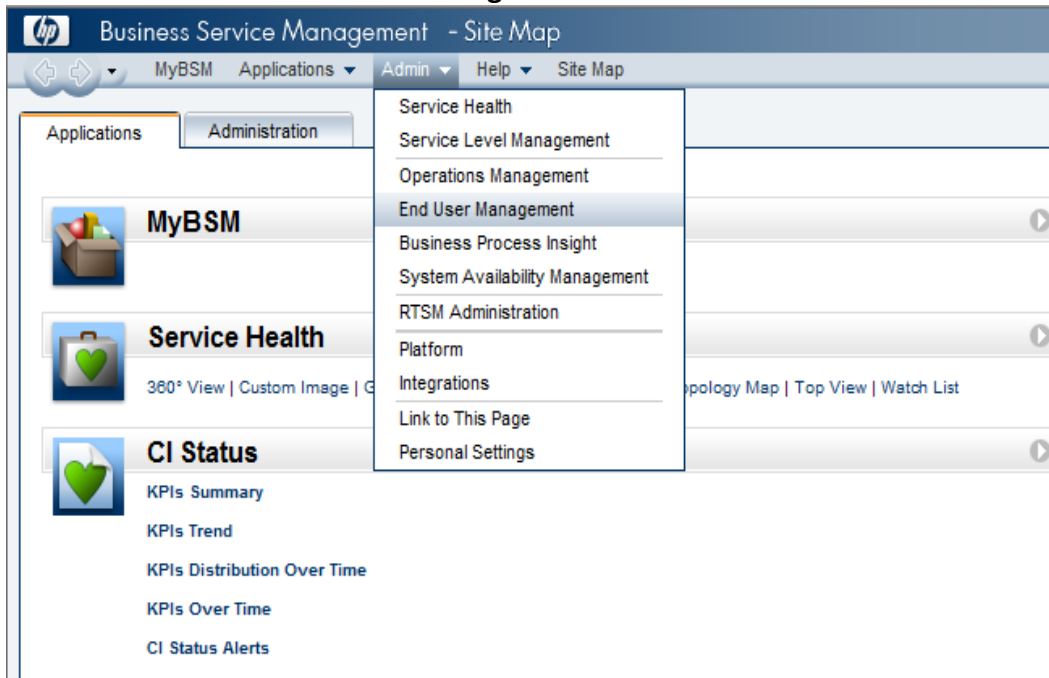


4. Verify that BPM Agents are configured in BSM.

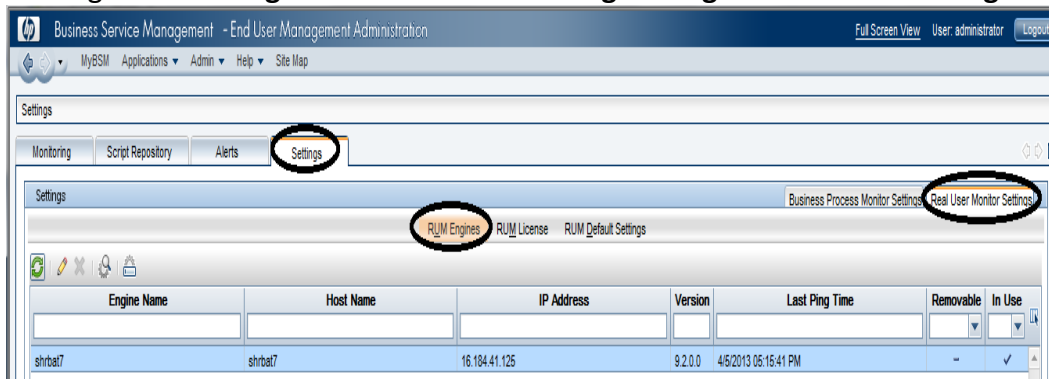
Checking Whether RUM Agents are configured

To check whether Real User Monitor (RUM) agents are configured, perform the following steps:

1. Login to BSM console using following URL: <http://<hostname>/topaz>
2. Go to **Admin -> End User Management**.



3. Navigate to **Settings -> Real User Monitoring Settings** and select **RUM Engines**.



4. Verify whether RUM engine is configured in BSM.

Checking Data Availability for Reporting in BPM and RUM

Perform the following steps to check availability of data in profile database for BPM.

1. SHR collects data for reporting on BPM performance metrics from profile database. So data availability should be checked on profile database.
2. SHR uses the Profile DBCollector to get data from profile database and generate the CSV files that are later consumed by the ETL streams for transformation and loading. DBCollector has two approaches to query data from source database and generates CSV files.

Two Step Process to Generate CSV

- a) Queries profile database and creates a replica of source database tables in SHR's Sybase IQ database.
- b) Performs join query within source database replica tables created in SHR's Sybase IQ database and dumps out CSV.

One Step Process to Generate CSV

- a) Collection policy decides on which approach to follow in generating the CSVs.
-
3. SHR queries each of these tables individually and incrementally for creating the replica for those tables in SHR Sybase IQ database. For dimension table, SHR gets full table data whereas for fact tables it gets incremental data.
 4. SHR uses SAMPLETIME column from all the fact tables/view to perform incremental collection to get two hour worth of data every hour. It queries one hour of duplicate data every hour to accommodate late arriving data in profile database. SAMPLETIME column in profile database is time in UTC (seconds from 1/1/1970 00:00:00).
 5. SHR parses the latest SAMPLETIME column value, from each collection cycle, for each of the fact table separately and uses this next run as the starting point for collection.
 6. Use following command to generate the queries that SHR fires on the profile database to get data:

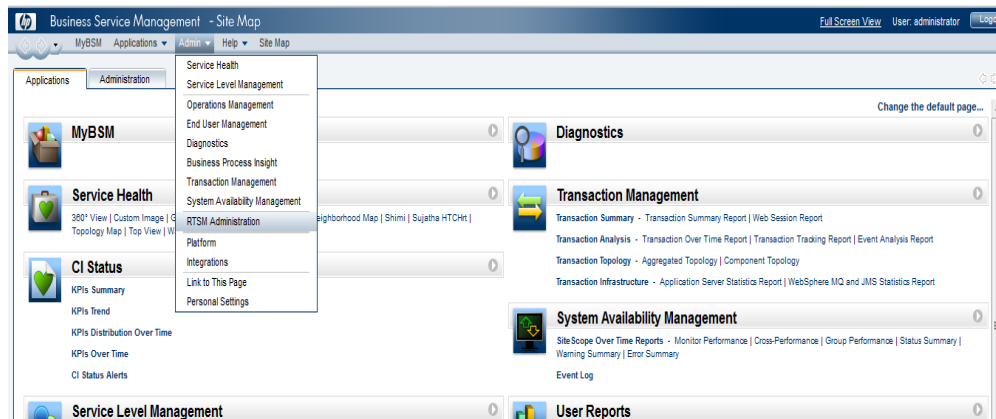
```
shr_utility -getQueries  
{PMDB_HOME}/lib/bpm_dbcollector.xml
```
 7. This generates the queries that run on the source profile database and check for availability of data.

Troubleshooting SiteScope Issues

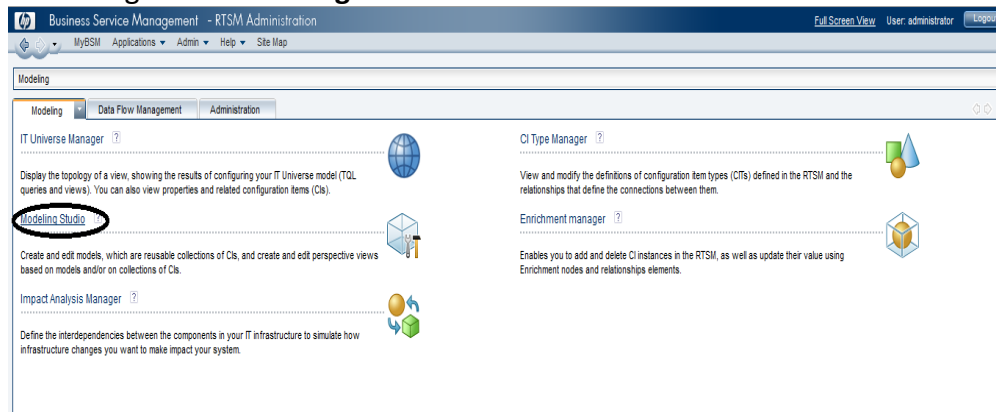
How many SiteScope servers is SHR reporting on?

1. Login to BSM admin console using following URL:
http://<bsm_host_name>/topaz
2. Navigate to **Admin -> RTSM Administration**.

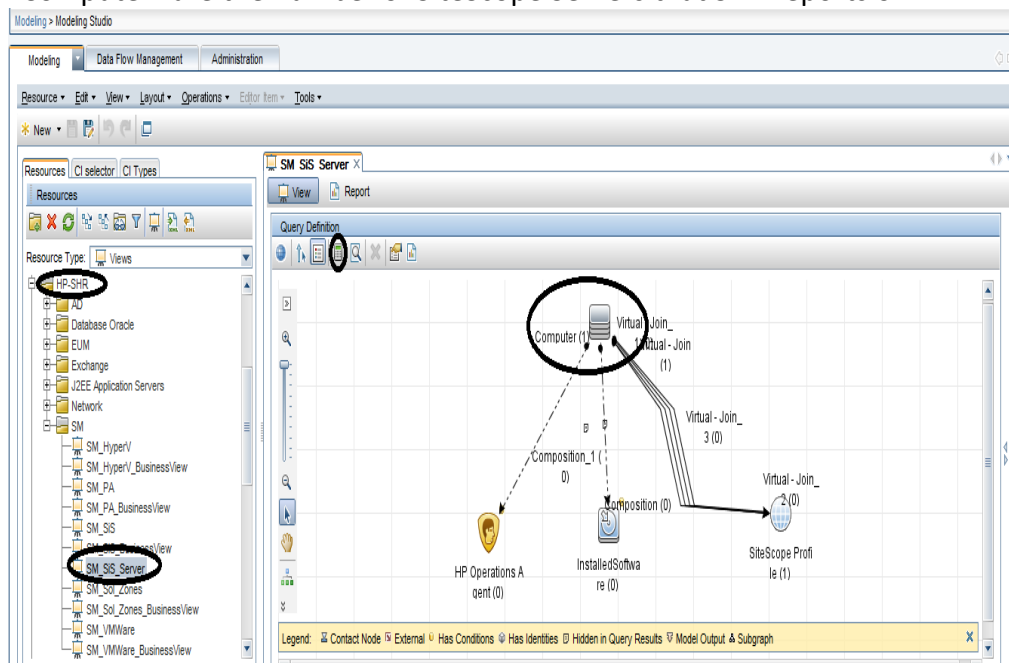
Troubleshooting Data Source Issues



3. Navigate to **Modeling Studio**.

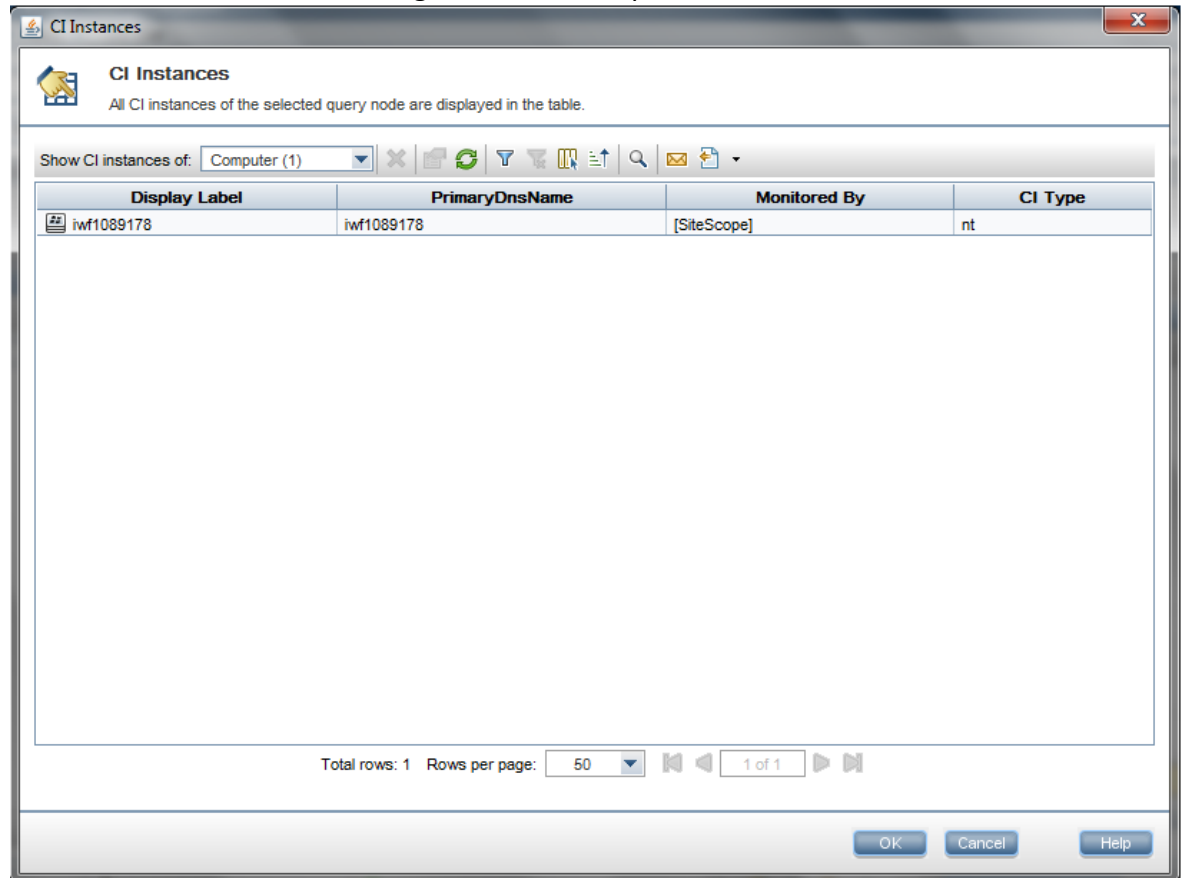


- From the **Resources** tab, expand **HP-SHR folder -> SM -> SM_SiS_Server** and double-click **SM_SiS_Server** view.
- On the right-hand pane with view detail, the instances of CI Type "Computer" are the number of SiteScope Servers that SHR reports on.



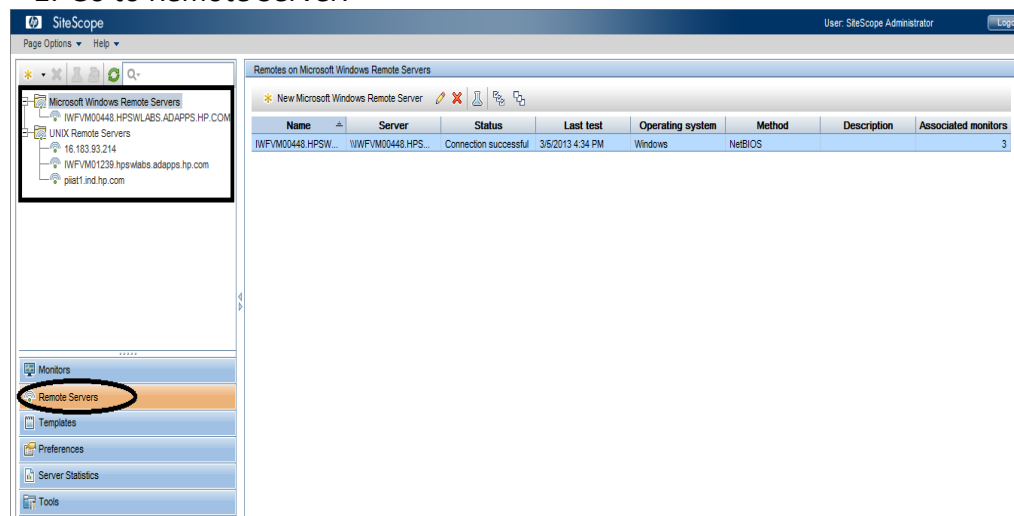
6. To check the SiteScope servers, right-click on the "Computer" CI type and select **Show Element Instances**. Check the **PrimaryDnsName** attribute. SHR

uses this attribute to configure collection and get the performance metrics about the remote servers configured on SiteScope.



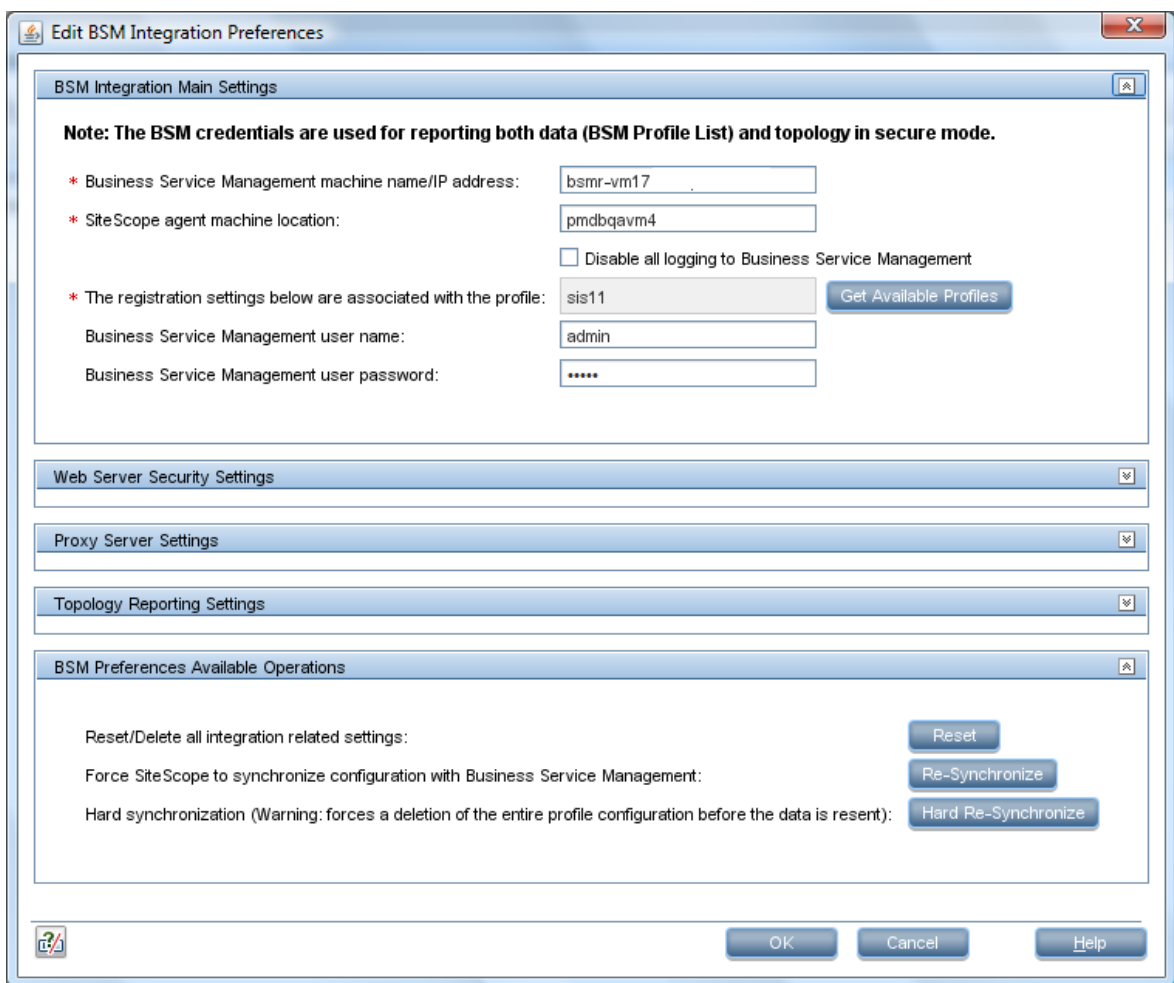
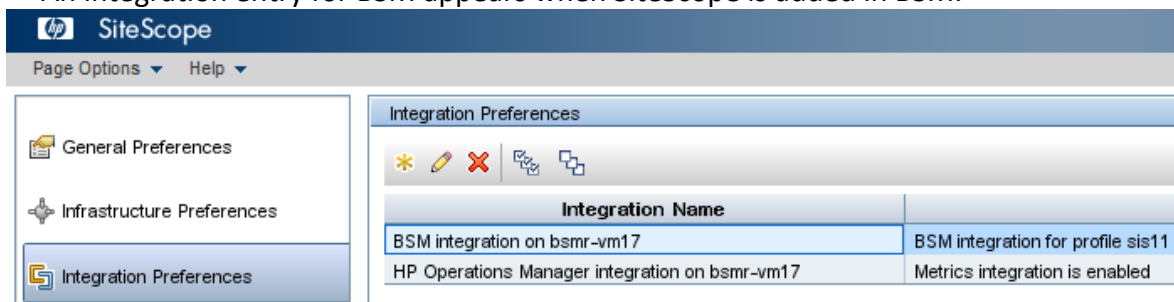
How many Servers (Windows/UNIX) does SiteScope Server Monitor?

1. Log on to SiteScope server using the following URL:
<http://<hostname>:8080/SiteScope/servlet>
2. Go to Remote Server.



Checking Whether BSM Integration is enabled on the SiteScope Server

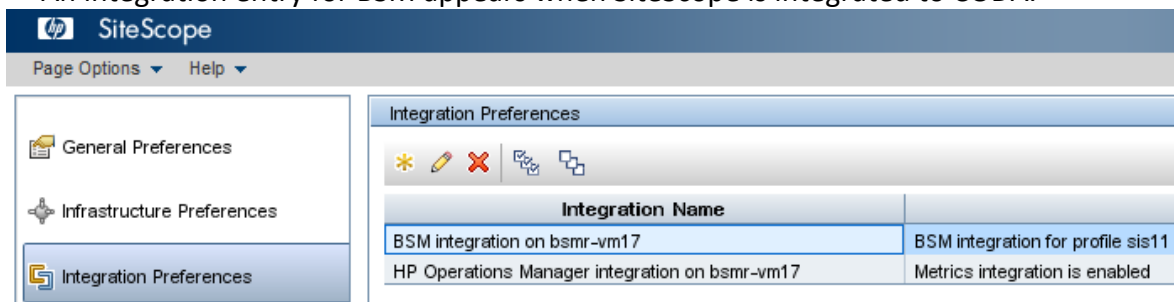
1. Log on to SiteScope home page.
2. Go to **Preferences -> Integration Preferences**.
3. An integration entry for BSM appears when SiteScope is added in BSM.



All managed nodes from SiteScope are automatically synced to BSM when the integration is complete. You can perform a Re-Synchronize or Hard Re-Synchronize operation if required.

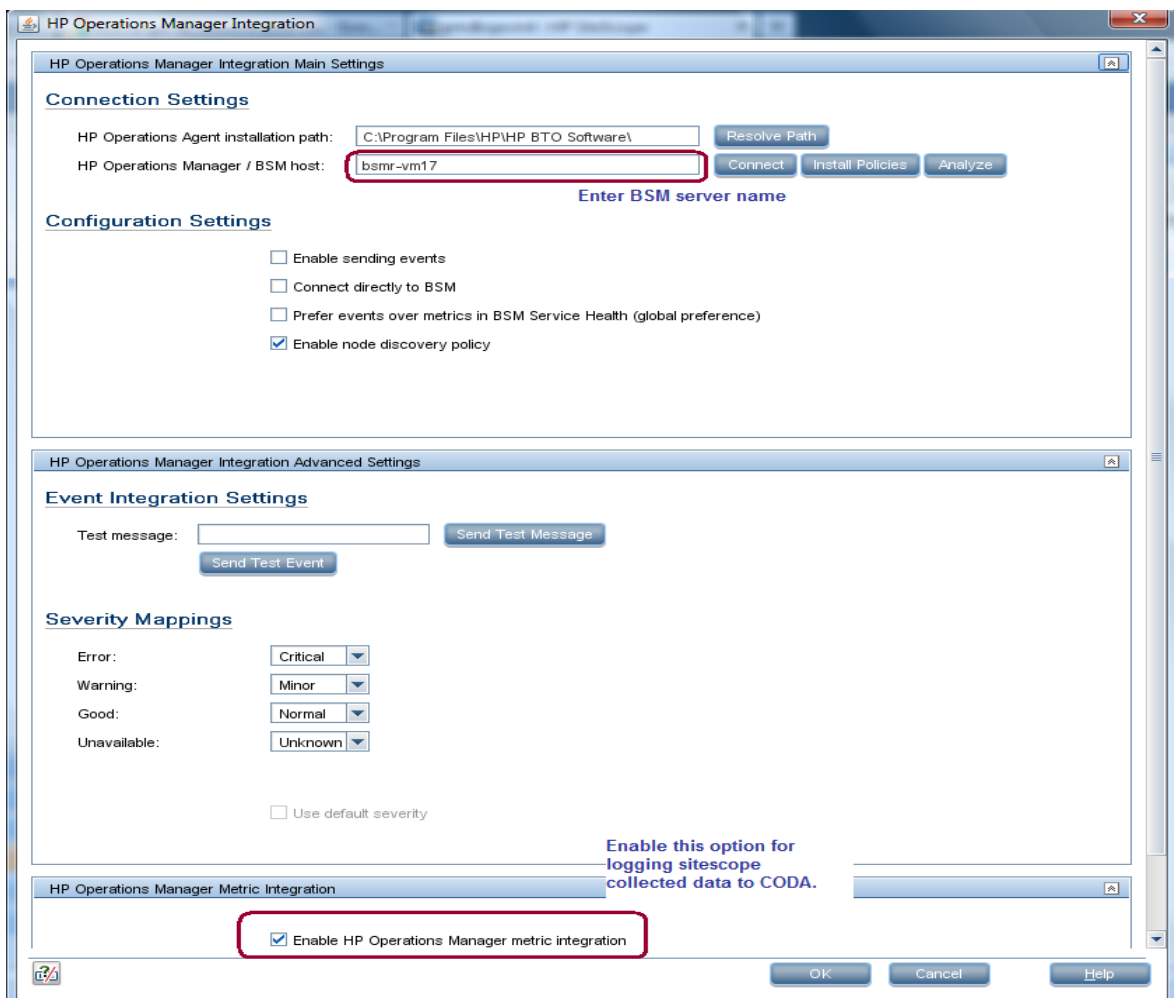
Checking Whether CODA Integration is enabled on the SiteScope Server

1. Log on to SiteScope home page.
2. Go to **Preferences -> Integration Preferences**.
3. An integration entry for BSM appears when SiteScope is integrated to CODA.



4. If integration is not listed in the above screen, Click on the * icon and select **HP Operations Manager Integration**.

Enable SiteScope to integrate with HP Operations agent for data logging. For more information, see the *Working with Operations Manager and BSM Using the HP Operations Agent* chapter of the *Using SiteScope Guide*.



Checking Data Availability for SiteScope Performance Metrics in CODA

1. SHR queries CODA data store running on SiteScope server to get performance metrics for reporting.
2. The data source that SHR queries to get SiteScope data is AGENTLESS.
3. SHR queries follow classes within AGENTLESS data source to get performance data.
 - a. GLOBAL
 - b. MEMORY
 - c. DISK
 - d. SYSTEM
 - e. QUEUE__LENGTH
 - f. QUEUE__STATISTICS
 - g. UPTIME
 - h. PHYSICALDISK
 - i. IO__STATS
 - j. NETIF
 - k. NETWORK__INTERFACE
 - l. NETWORK__STATS
 - m. CPU
 - n. FILESYSTEM
4. See the **Troubleshooting HP Operations Agent Data Source Issues** for details on how to check availability for a class and data source.

Mapper (data transformation step) crashes when collecting data from SiteScope Profile Database

Problem: When SHR collects system performance data (initial history) from the SiteScope profile database, the mapper crashes due to low system memory.

Resolution: Browse to the {PMDB.HOME}/config/collection.properties file. Edit this property--mapper.memory.map.size=30000. The default value is 30,000. Decrease the value (for example: 20000) until mapper runs smooth with available memory.

Troubleshooting Data Collection Problems

Symptom: No Dimension or Fact Collection despite Configuring Data Sources

Description: After configuring the respective data source through Administration Console (RTSM/HPOM), the respective dimension or fact CSVs are not collected by the collector.

Resolution: To resolve this problem, perform the following steps:

1. Check topologycollector.log file under the following folder location to check for obvious errors.

Windows: %PMDB_HOME%/log

Linux: \$PMDB_HOME/log

2. Check if the appropriate collection policies are installed on the collector by either checking for files in %PMDB_HOME%/config/collection_policy folder (Windows)/ \$PMDB_HOME/config/collection_policy (Linux) or by running the **ovpolicy -list** command.
3. Check for existence of cmdb_0_*.csv or sn_0_*.csv in %PMDB_HOME%/config/ds folder for Windows or \$PMDB_HOME/config/ds for Linux (depending on RTSM and OMSN configuration respectively) and verify that the details of the data source configured is correctly present in these files.

Symptom: No Fact Collection despite configuring Service Definition

Description: Fact CSVs are not available at the following location %PMDB_HOME%/collect (Windows), \$PMDB_HOME/collect (Linux).

Resolution: To resolve this problem, perform the following steps:

1. Run **ovpolicy -list** and check whether the CMDB collection policies are installed on the collector. Alternatively, you can also check for collection policy XMLs in

Windows: %PMDB_HOME%/config/collection_policy folder

Linux: \$PMDB_HOME/config/collection_policy folder

2. Verify whether dimension collection is occurring or not and whether there are any VIEW*NODEDOMAIN*.csv in collect folder.
3. Log on to Administration Console and ensure that the platform_poller_ds_process stream under PMDB_Platform group is not in error state. This is the stream that brings in all *NODEDOMAINMAP*.csv

from various collectors and then performs PA node distribution among collectors.

4. Also, ensure if any remote collectors are configured. If yes, PA data source distribution is appropriately done via the Administration Console for all collectors. Because, in case of local-only collector, all the PA nodes discovered during topology collection are automatically assigned to the local collector. But, even if a single remote collector is configured, the distribution of nodes is performed based on rules or manual assignment done by the administrator.

Symptom: Fact Collection is Occurring and Data is Available at %PMDB_HOME%/extract Folder but not picked by Streams

Description: Fact CSVs are collected from the source by the collector and available at the following location %PMDB_HOME%/extract (Windows), \$PMDB_HOME/extract. But the corresponding ABC stream in the Administration Console shows the collect step status as not started.

Resolution: The only reason it can happen is because the “platform_poller_data_process” stream from “PMDB_Platform” is in error state or is yet to process the collected data. Log on to Administration Console and check the status of the above mentioned stream. ABC stream will automatically process it next time.

Symptom: Collection not occurring from Collector

Description: No dimension CSVs or Fact CSVs are available in %PMDB_HOME%/collect folder (Windows), \$PMDB_HOME/collect (Linux). No data is available in the reports for these hosts.

Resolution1:

1. Check for connection-related issues to the collector through the collector configuration page (under Administration) in the Administration Console.
2. Check %PMDB_HOME%/log/remotepoller.log file for Windows and \$PMDB_HOME/log/remotepoller.log for Linux and verify errors during data download from the collectors.
3. Check if “platform_poller_data_process” stream from “PMDB_Platform” is in error state or is yet to process the collected data. Log on to Administration Console and check the status of the above mentioned stream.
4. Check whether the collection policies are installed on the collector system.

Symptom: No Collection due to *OVCONFD* Service not Running

Description: OVCONFD service stops due to disk space full situation and does not start automatically once the space issue is resolved.

Resolution: Run the following command.

1. Check the status of the service.
ovc -status
2. Check the status of ***ovconfd*** in the output.
3. If it is stopped, execute the START command.
ovc -start ovconfd.

This will start the service and collection of data would continue.

Symptom: Policy and Data Source Report Collector Error

Resolution:

1. Check if the collector is reachable. Launch **Administration Console -> Collection Configuration -> HP Operations Agent**. Select a host from the **Host name** column and click **Test Connection**.
2. Check if the certificate installation is correct by running the ***ovcert -check*** command.

Symptom: Missing Data Source Metadata Files

Windows: %PMDB_HOME%/config/ds folder

Linux: \$PMDB_HOME/config/ds folder

Resolution:

1. The data source metadata CSV files are of the form pa*.csv, cmdb*.csv, sn*.csv and db*.csv
2. Ensure that all expected data sources are configured by verifying through the Administration Console.
3. Run the command ***ovconfchg -edit*** and check whether the following entries are present in the configuration settings page –
 - On Windows
[sec.cm.client]
CERTIFICATE_SERVER=<server>
[sec.core]

CORE_ID=82553e92-dbd2-7566-0dd9-f9a20a672df8

[sec.core.auth]

MANAGER=<server>

MANAGER_ID=82553e92-dbd2-7566-0dd9-f9a20a672df8

- On Linux –

[ctrl.env]

LD_LIBRARY_PATH=./opt/HP/BSM/Sybase/IQ-

15_4/lib64:/opt/HP/BSM/JRE64/lib/amd64/server:/opt/HP/BSM/Sybase/shared/JRE-

6_0_24_64BIT/lib/amd64/server:/opt/HP/BSM/JRE64/lib/amd64:/opt/HP/BSM/JRE64/lib/amd64:/opt/HP/BSM/JRE64/lib/amd64/xawt:/opt/HP/BSM/Postgres/lib:/opt/OV/lib64:

PATH=/opt/BSM/JRE64/bin:/usr/kerberos/sbin:/usr/kerberos/bin:/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin:/opt/HP/BSM/PMDB/bin:/opt/OV/bin:/opt/OV/lib64:/opt/HP/BSM/Sybase/IQ-15_4/bin64:/root/bin

PMDB_HOME=/opt/HP/BSM/PMDB

[sec.cm.client]

CERTIFICATE_SERVER=<server>

[sec.core]

CORE_ID=26e40652-de97-7566-1f14-b683668d176a

[sec.core.auth]

MANAGER=<server>

MANAGER_ID=26e40652-de97-7566-1f14-b683668d176a

4. If the ctrl.env values are not set on Linux, run the following commands:

- a. /opt/OV/bin/ovconfchg -ns ctrl.env -set LD_LIBRARY_PATH
./opt/HP/BSM/Sybase/IQ-15_4/lib64:/opt/HP/BSM/JRE64/lib/amd64/server:/opt/HP/BSM/Sybase/shared/JRE-6_0_24_64BIT/lib/amd64/server:/opt/HP/BSM/JRE64/lib/amd64:/opt/HP/BSM/JRE64/lib/amd64:/opt/HP/BSM/JRE64/lib/amd64/xawt:/opt/HP/BSM/Postgres/lib:/opt/OV/lib64:
- b. /opt/OV/bin/ovconfchg -ns ctrl.env -set PATH
/opt/HP/BSM/JRE64/bin:/usr/kerberos/sbin:/usr/kerberos/bin:/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin:/opt/HP/BSM/PMDB/bin:/opt/OV/bin:/opt/OV/lib64:/opt/HP/BSM/Sybase/IQ-15_4/bin64:/root/bin

- c. `/opt/OV/bin/ovconfchg -ns ctrl.env -set PMDB_HOME /opt/HP/BSM/PMDB`
- 5. Run the command `ovc -status -level 8` and in the output check whether **shrcb** component is listed.


```
shrcb    SHR Policy call backs          shrcb    (3053) Running
-> START attempted at      Tue Apr 30 16:11:52 2013
-> Entered STARTING state at Tue Apr 30 16:11:52 2013
-> Entered STARTED state at  Tue Apr 30 16:11:52 2013
```

Note that the component need not be running, but may be stopped or aborted. However, the listing should include the shrcb component. If this component is not listed, run the `/opt/OV/bin/ovcreg -add /opt/HP/BSM/PMDB/config/shr.xml` command on Linux and `%ovinstalldir%/bin/ovcreg -add %PMDb_HOME%/config/shr.xml` on Windows respectively.

- 6. When the above changes are made, run the **ovc -restart** command.
- 7. Run the **remotepollerutility -syncds -pollername local** command to sync all collection data sources to the local collector. To sync data sources to other remote collectors configured, run the same command by changing local to the name that was used to configure the remote collector in the Administration Console.

Symptom: Error Message in the aggregate.log File

The `aggregate.log` file (available under the `$PMDb_HOME/log` directory on Linux and the `%PMDb_HOME%\log` directory on Windows) shows the following error message:

Failed to execute aggregate SQL

Completed aggregate <XML_file>

Resolution:

To resolve this problem, log on to the SHR system as administrator or root, and then run the following command:

aggregate config=<XML_file> regenerate=true

In this instance, <XML_file> is the file name displayed in the error message.

Symptom: No Data Collection from Host and Empty Reports

Description: Data collection from a host does not occur even though the same has been discovered and configured for collection. The issue might be that the connection to CODA

for that host has been lost resulting in data collection failure. In such cases, Collection has a feature called blacklisting that marks a node when connection to the same fails while hourly collection is happening. Once marked, after every 2 retries at a particular run interval, the same is doubled for the next couple of runs. This continues till the run frequency reaches 24 hours after which it remains the same. So collection from that host is initiated once a day only. During these runs, at any time if the host is reachable again, then the run interval is reverted to the initial collection schedule frequency of the host (1 hour by default). Also, the list of blacklisted hosts can be seen at any point by connecting to the Java JMX console for Collection Service at port 21409 under the **Collection Administration** Mbeans section.

Resolution: Ensure that the node is reachable and responding and also that the CODA services are running on the same. Once done, restart Collection Service on the SHR collector.

Symptom: No Data Collection in HPOM Topology from Host resulting in Empty Reports

Description: Data collection from a host does not occur even though is discovered and configured for collection. WHEN SHR is unable to connect to the HP Performance Agent during the dimension collection run that occurs every 12 hours (720 minutes), fact collection does not occur and reports do not show any data.

Resolution: Decrease the default dimension collection interval value of 12 hours (720 minutes). In the `{PMDB_HOME}/config/collection.properties` file, decrease the value of the "sn.dim.collection.interval.mins" property to any number higher than 60.

Symptom: No Data Collection from Network Performance Server

Description: Data collection of both topology and fact from Network Performance Server (NPS) stops, but files keep accumulating in the `%pmdb_home%\extract\temp` folder.

The `dbcollector.log` file reports the following error:

Error -210: User 'another user' has the row in 'd_ComponentTopology' locked

This occurs because the `d_ComponentTopology` table is being updated at exactly at the same time that SHR is querying for data.

Resolution: In NPS, modify the update time of the `d_ComponentTopology` table to a different value. Otherwise, in SHR, from the `PMDB_HOME/config/collection.properties` file, set the parameter `relative.schedule.type=true` and restart the data collection.

Symptom: Data Gaps in Reports due to no Data Collection from Nodes

Description: SHR reports show data gaps when data is not collected from a node or when a node is a newly added.

When collection for a node resumes after an outage (node is down, or connection issues, or connection disable/enable through Performance Agent data source page), the SHR Collector collects data from the last point within the max-history limit.

When a new node added to SHR, the SHR Collector collects data based on the “init” history configuration. By default, after the first “init” history data processing, data aggregation processes data for only the last two days.

Resolution: By default, SHR aggregates data from nodes for only the last two days. To aggregate data older than two days, run the hourly and daily aggregation commands manually using the following options:
`aggregate config=<xml file name> processall=true execute=true`
(The XML file is available in the *PMDB_HOME/scripts* folder)

Example:

```
aggregate config=  
%PMDB_HOME%\scripts\SR_SM_CPU_SH_SM_CPU_Hourly_CPU_Details.xml  
processall=true execute=true
```

SHR Collector Infinitely Reprocesses Failed-to-Process Files and Degrades System Performance

Problem: SHR Collector endlessly reprocesses files that failed to process endlessly and utilizes massive system resources.

Resolution: SHR Collector reprocesses files in the *\$PMDB_HOME\collect\temp* folder for three days. After three days, SHR moves the files to the *\$PMDB_HOME\collect\temp\archive* folder and stops reprocessing them. If you want to process the files again, manually move them back to the *\$PMDB_HOME\collect\temp* folder.

SHR Reconciliation Infinitely Reprocesses Failed-to-Reconcile Files and Degrades System Performance

Problem: SHR data reconciliation step endlessly reprocesses files that failed to reconcile and utilizes massive system resources.

Resolution: SHR Reconciliation reprocesses files in the *\$PMDB_HOME\stage\failed_to_reconcile* folder for three days. After three days, SHR moves the files to the *\$PMDB_HOME\stage\failed_to_reconcile\archive* folder and stops reprocessing them. If you want to process the files again, manually move them back to the *\$PMDB_HOME\stage\failed_to_reconcile* folder.

No Data Collection from Profile DB/Management DB/OMi Event Data source

Problem: When changes are made to the Profile DB/Management DB/OMi Event database collection configurations for more than once, it leads to piling up db_poller_map (Postgres) table with invalid or old entries. Remote poller sync fails and database domains are not discovered in {PMDB_HOME}/config/ds/db_0_domainmap_0_local.csv.

Resolution: To resolve this problem, perform the following steps:

- Login to Postgres database using PgAdmin.
- Identify the invalid domain map IDs:

```
SELECT * FROM db_poller_map where db_fk NOT IN (SELECT db_id FROM dict_db_ds)
```
- Delete the invalid domain map IDs:

```
DELETE FROM db_poller_map where db_fk NOT IN (SELECT db_id FROM dict_db_ds)
```
- Run the following local poller utility commands from the console (Linux shell or Microsoft Windows Command Prompt).

```
remotepollerutility -syncds -type DB -pollername local  
remotepollerutility -syncpolicy -type DB -pollername local
```
- Verify the updated entries in {PMDB_HOME}/config/ds/db_0_domainmap_0_local.csv

No Data Collection due to Remote Poller Exception

Description: Policy Owner reports an issue when Remote Poller is distributing the policy. Remote Poller sync does not occur for the specific domain and data collection does not initiate.

Resolution: Perform the following steps to resolve the issue:

- Enable DEBUG mode for RemotePoller in the following file:
{PMDB_HOME}/config/BSMRLogConfigClient.xml
- Run the following collection configuration command:

```
collection_config -collect {PMDB_HOME}/lib/<*_DBCCollector.xml> -cp <ETL Package name>
```

Example

```
collection_config -collect {PMDB_HOME}/lib/OM_DBCCollector.xml -cp ETL_OM
```

- Open the RemotePoller log and search for the **Header xml** that is named in this pattern—shr-xxxxxxxxxxxxxxxxx_header.xml— identify the file including its path.
- Run the following command:

```
ovpolicy -install -file <absolute path of the header xml file> -ovrg server
```

The following output is generated:
<Cannot install because owner of the policy is xxx>
- Open the header xml and obtain the content of policy owner tag.
- Run the following command:

```
ovpolicy -setowner -ovrg server -polid <shr-xxxxxxxxxxxxxxxxx xxx>
```
- Run the following command in the prompt:

```
ovcreg -add {PMDB_HOME}/config/shr.xml
```
- Run the following collection config command:

```
collection_config -collect {PMDB_HOME}/lib/OM_DBCCollector.xml -cp ETL_OM
```

Troubleshooting High Availability (HA) Issues

Symptom: SHR_HA_Setup.pl Errors during Execution

Description: SHR_HA_Setup.pl located at

%PMDB_HOME%/HA/Veritas/Linux/SetupScripts for Windows,
\$PMDB_HOME/HA/Veritas/Linux/SetupScripts for Linux errors out at execution.

Resolution: Make sure Shared drive is available and re-run the script.

Symptom: SHR_HA_Setup.pl Fails to Initialize in Second Node

Description: SHR_HA_Setup.pl fails to initialize in the second node when using default file located at the %PMDB_HOME%/data folder.

Resolution: Copy config.prp from the first node to the %PMDB_HOME%/data folder of second node and rerun the script.

Symptom: SHR_HA_Setup.pl Returns the “Not able to update ovcert” Error Message

Resolution:

1. Check the output of the following command:
ovcert –status to see if all servers are running.
2. Run the **ovc –check** command.

If any of the mentioned services fails to provide the required output, execute the following commands:

- ovc –kill
- ovc –start

Symptom: Sybase takes Longer to Stop during Setup Script Execution

Resolution: If Sybase takes longer time to stop during setup script execution, open another session and stop the service manually in the back-end as follows so that the script resumes execution.

Linux:

```
ps -aef | grep iqsrv15 | grep -v grep | awk '{print$2}'  
kill PID
```

Windows:

find <ID> by running the command
tasklist /FI "SERVICES eq HP_PMDB_Platform_Sybase"

Execute the following command by passing the ID
taskkill /pid <ID>/F

Symptom: After running SHR_Linux_vcsconfiguration.pl Script, SHR Services Show as Unknown

Resolution: Run the following commands:

```
$VCS_HOME/bin/hastop -local -force  
$VCS_HOME/bin/hastart
```

Symptom: Service status appears to be “Fault” in VERITAS Service due to PostgreSQL.

Description: VERITAS shows the service as faulted. PostgreSQL server fails to start when it encounters permission issues on its data folders. The corresponding error message “Permission denied on any of the files/folders in postgres data directory” is observed in the log at %pmdb_home%/../Postgres/data/log folder.

Resolution: Change the owner of both the folders under <sharedrive>/HP-SHR/PostgreSQL folder to administrator and run the following command:

```
CACLS <sharedrive>\HP-SHR\PostgreSQL\data /T /E /P <hostname>\postgres:F
```

Following symptoms and solutions are specific to HA (Windows) environment.

Symptom: Connection Failure to Administration Console, InfoViewApp, and CMC using Logical Name of Cluster

Resolution:

1. Check whether the logical name is DNS resolved. Execute,
2. nslookup <logical IP > or ping -a <ip >
3. Check whether the logical name is present in config.prp
4. In case the hostname is not DNS resolved, it can be replaced with IP address as workaround.

Symptom: IP Resource in VERITAS not coming up

Resolution:

1. Check that the logical IP, subnet mask, primary node name, secondary node name, and their MAC address is correctly configured in VERITAS.
2. Check that the logical IP is not present in the network settings.

Symptom: “Unable to get data in reports – Sybase not found” Error while Opening Report

Resolution:

1. Check the logical name of the remote Sybase IQ is DNS resolved and check if you are able to connect to the Sybase IQ using the Sybase IQ client in the SHR server box.
2. In SAP BusinessObjects ODBC, check whether you have “BSMR” in system DSN. Check if the test connection works fine or not.

Symptom: Sybase is Down, but the Status in VERITAS Shows Online

Resolution: Check for **iqsrv** service in Task Manager. The process should be running even when Sybase is stopped.

Symptom: During Failover to other Node, Tomcat Service does not Stop Gracefully

Resolution: This happens very intermittently. It takes lot of time and hangs while stopping. Kill the process manually from Task Manager.

Symptom: During Secondary Node Setup, Servers in SAP BusinessObjects Stop and do not Come Up

Resolution: This is expected behavior. The server (HOML01GEATON) is deleted during the secondary node setup and is replaced with HASHR. It should be up and running and vice versa for primary node.

Troubleshooting Client Authentication Certificate Problems

Symptom: Unable to Logon to SHR after Enabling Client Authentication Certificate

Administration Console:

Log file location: Check the log file located at the following location:

Windows:

Check the logs located at %PMDB_HOME%/adminServer/logs

catalina.2013-06-13.log

hpshreporter-stderr.2013-06-13.log

hpshreporter-stdout.2013-06-13.log

Linux:

Check the Catalina.out log file located at \$PMDB_HOME/adminServer/logs.

InfoViewApp Console:

Windows:

Check the logs located at %PMDB_HOME%/BOWebServer/logs

boe120tomcat-stderr.2013-06-13.log

boe120tomcat-stdout.2013-06-13.log

Linux:

Check the Catalina.out log file located at \$PMDB_HOME/BOWebServer/logs

Problem: You will see the following error message in the log file:

“PKIX path validation failed .Could not determines revocation status.”

This occurs when the CRL URL configured for certificate revocation is not reachable through the configured HTTP proxy host/port or HTTPS proxy host/port. To identify this issue, enable Certificate Path Tracing as follows.

Resolution:

1. Change the HTTP proxy host or HTTPS proxy host so that CRL URL is reachable. Make changes in the respective configuration files as specified in the *“Client Authentication Certificate for SHR”* section of the *HP Service Health Reporter Installation and Configuration Guide*.
2. Stop the service.
3. Execute the PERL command as mentioned in the *“Client Authentication Certificate for SHR”* section of the *HP Service Health Reporter Installation and Configuration Guide*.
4. Start the service.

Symptom: Login to Administration Console Fails after Enabling Client Authentication Certificate

Problem: After selecting the certificate, Administration Console checks for the username extracted from the certificate in SAP BusinessObjects Central Management Console under Administrator group. If the user does not exist, the following message is displayed.



Resolution:

1. Logon to SAP BusinessObjects Central Management Console.
2. Create the User as per the Username Extraction configured in the server.xml file.
3. Assign it to the Administrators group.

Symptom: Administration Console Prompts for Username/ password after Configuring Client Authentication Certificate

Problem: It happens when the properties of config.prp are not set properly as mentioned in the “Client Authentication Certificate for SHR” section of the *HP Service Health Reporter Installation and Configuration Guide*.

Resolution1:

Check the following properties from the config.prp file located at
%PMDB_HOME%/data (Windows), \$PMDB_HOME/data (Linux)

1. shr.loginMethod is set to certbased
2. shr.auth.classes is set to
com.hp.bto.bsmr.security.auth.BOTrustedAuthenticator

Resolution2:

1. Check the date of the `login.jsp` file located at
%PMDB_HOME%/BOWebServer/webapps/InfoViewApp/login.jsp
2. If the current system date does not reflect, change to it.

Symptom: Administration Console Logon Failure

Description: After enabling Client Authentication Certificate, logon to Administration Console fails. The log file displays the following message:

“SEVERE: Exception invoking periodic operation:
java.lang.OutOfMemoryError: GC overhead limit exceeded”

Windows:

hpshreporter-stderr.2013-06-13.log located at %PMDB_HOME%/adminServer/logs.

Linux:

Catalina.out located at `$PMDB_HOME/adminServer/logs`

This issue occurs when the list of the certificates to be downloaded from the CRL distribution point for the verification of certificate revocation is too large.

Resolution: To overcome this issue, Java heap space needs to be included. Perform the following steps to increase the heap space:

Windows:

1. Stop **HP_PMDB_Platform_Administrator** service from the Windows services menu.
2. Edit service.bat located at `%PMDB_HOME%/adminServer/bin`
Edit `-XX:MaxPermSize=256m, --Jvmmx 256` : Increase the value as per the size of the CRL URL.
3. Increase MaxpermSize as per the requirement.
4. Recreate the service.
Go to `%PMDB_HOME%/adminServer/bin`,
service.bat remove C:/HP-SHR/
service.bat install C:/HP-SHR/

Linux:

1. Stop HP_PMDB_Platform_Administrator service.
2. Edit the catalina.sh located at `$PMDB_HOME/adminServer/bin` folder.
3. Edit the MaxPermSize argument `"-XX:MaxPermSize=256m"` of `JAVA_OPTS`
4. Start the HP_PMDB_Platform_Administrator service.

Enabling Certificate Processing Trace

Solution: The system property `-Djava.security.debug=certpath` of the Java Runtime Environment (JRE) can be set to enable the tracing of certificate processing. The output is very useful for developers and support validation of the user certificate, including the processing of the certificate revocation.

Perform the following steps to enable certificate path tracing:

Windows:

1. Stop the HP_PMDB_Platform_Administrator service from the Windows services menu.
2. Edit service.bat located at `%PMDB_HOME%/adminServer/bin`
Include `"-Djava.security.debug=certpath"` as part of JVM Arguments.
3. Recreate the service.
Go to `%PMDB_HOME%/adminServer/bin`,
service.bat remove C:/HP-SHR/
service.bat install C:/HP-SHR/

Linux:

1. Stop the HP_PMDB_Platform_Administrator service.
2. Edit the catalina.sh located at \$PMDB_HOME/adminServer/bin
Include “ -Djava.security.debug=certpath” as part of JVM Arguments.
3. Start the HP_PMDB_Platform_Administrator service.

Known Limitations in SHR Reports:

When data is gathered from HP SiteScope (data collection from RTSM/BSM Profile database), certain known limitations or gaps exist in SHR reports of Systems and Virtualization content packs.

System Management

The following table lists the known gaps in SHR reports when data is sourced from HP SiteScope (BSM Profile database):

Report	Known Limitations
SM Heat Chart	No data available in “Physical Disk” and “Network” tabs
SM System Usage Detail	No data available in “Physical Disk” and “Network” tabs

Virtualization

The following table lists the known gaps in SHR virtualization reports when data is sourced from HP SiteScope (BSM Profile database):

** Only VMware virtualization is supported by HP SiteScope integration with SHR. Hence, only this virtualization technology appears across the reports when data is sourced from SiteScope.*

Report	Metrics that are unavailable in reports with SiteScope integration
SM Virtualization Host Inventory	Processor Architecture, Disk Count, VM Count
SM Virtualization Logical System Inventory	State, Number of Disk, Number of LAN, Minimum CPU Entitlement, Maximum CPU Entitlement
SM Virtualization Logical Systems Performance Summary	Logical System Physical CPU Utilization
SM Virtualization Top and Bottom N Logical Systems	OS Type, Average Physical CPU Utilization (%), Average Physical Memory Utilization (%)
SM Virtualization Top and Bottom N Nodes	Processor Architecture, Number of Logical Systems, Average Grade of Service
SM Virtualization Virtual Infrastructure Inventory	Logical System OS

SM Virtualization Logical System Performance Details	Physical CPU Utilization
SM Virtualization VMware ESX Server Detail Inventory	Number of disks, Number of network interfaces
SM Virtualization VMware Cluster Detail Inventory	CPU Capacity, Number of Network Interfaces unavailable in VMware ESX Node inventory VMware ESX Resource Pool Inventory tab will be empty CPU Limit, Number of disks, Number of network interfaces unavailable in Logical System Inventory
SM Virtualization VMware Inventory	Number of disks, Number of network interfaces, CPU Unreserved
SM Virtualization VMware Logical System Memory Bottleneck Details	Average Physical Memory Utilization Percentage
SM Virtualization VMware Top and Bottom N ESX Servers	Average Swap Utilization (%)
SM Virtualization VMware Top and Bottom N Logical System	Average Physical CPU Utilization (%), Average Physical Memory Utilization (%)

Reference

Generating Reports to Stream Mapping Information

Download the supportability “tool – shr_utility.zip”.

Follow the commands described in the readme.txt packaged along with it to install the utility. Run the following command to get the streams associated with a report:

```
shr_utility – rept –name <name of the report> -l <output location>
```

This command generates a ReportToStreamMapping.html file.

Checking if Data is stuck in Source Table

Launch PostgreSQL interface (**Start > Program Files > PostgreSQL 9.0 > PG Admin III**)

Run the following SQL:

```
SELECT name_,value_ FROM job_stream_dt stream,job_stream_step_dt
step,job_stream_step_metadata_dt metadata
WHERE stream.hjid=step.job_stream_dt_hjid
AND step.hjid=metadata.job_stream_step_dt_hjid
AND stream.dwid='<stream name>'
```

Troubleshooting Guide

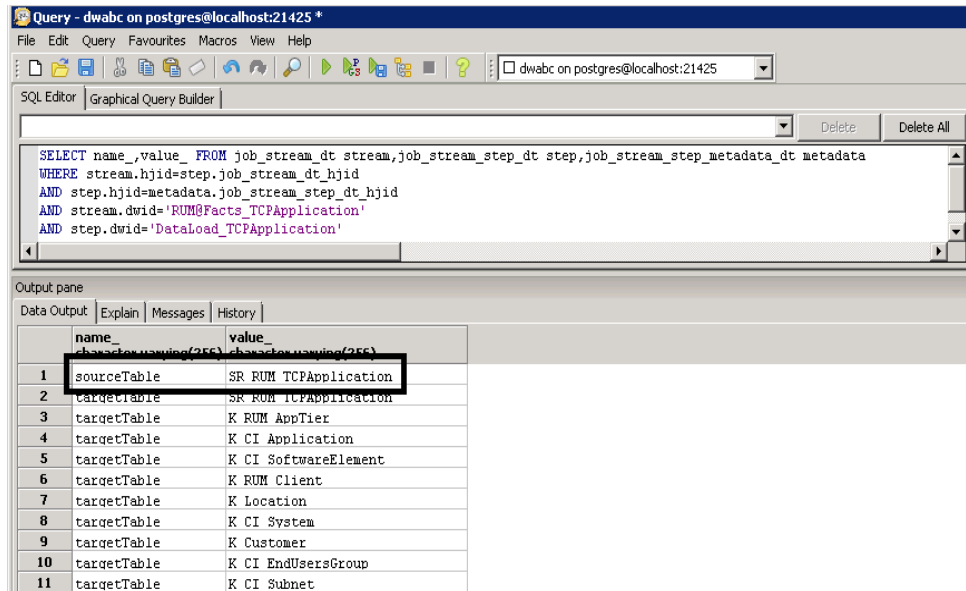
Troubleshooting Client Authentication Certificate Problems

AND step.dwid='<step name>'

AND name_='targetTable'

In the generated output, there is a key value pair. It represents metadata associated with the step. Lookup the generated output for a key called “sourceTable” and “targetTable” (Value_ preceding with SR_) as show in the following figure.

Query max (ta_period) from source and target tables and check that the difference does not exceed six hours.



We appreciate your feedback!

If you have comments about this document, you can [contact the documentation team](#) by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on Troubleshooting Guide (Service Health Reporter 9.31)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to docfeedback@hp.com.