

HP Service Health Reporter

for the Windows® and Linux operating systems

Software Version: 9.30

Installation and Configuration Guide for High-Availability Cluster Environments

Document Release Date: March 2014
Software Release Date: July 2013



Legal Notices

Warranty

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

The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notice

© Copyright 2010-2014 Hewlett-Packard Development Company, L.P.

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

This product includes software developed by Andy Clark.

This product includes asm software which is Copyright (c) 2000-2005 INRIA, France Telecom All rights reserved.

This product includes jquery.sparkline.js software which is Copyright (c) 2007-2009, Adolfo Marinucci All rights reserved.

Trademark Notices

Adobe® is a trademark of Adobe Systems Incorporated.

Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.

UNIX® is a registered trademark of The Open Group.

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

Documentation Updates

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

- Software Version number, which indicates the software version.
- Document Release Date, which changes each time the document is updated.
- Software Release Date, which indicates the release date of this version of the software.

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

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

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

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

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

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

Support

Visit the HP Software Support Online web site at:

www.hp.com/go/hpsoftwaresupport

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

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

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

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

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

To find more information about access levels, go to:

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

Contents

1	Introduction	7
	SHR Setup in High Availability Environment	7
2	VCS Implementation Prerequisites	9
	Hostname and IP Address	9
	Setting Failover Nodes	9
	Verifying System Resources and Node Patch Levels	9
	Synchronizing System Clocks	10
	VCS Agents	10
3	Installing SHR on VCS	11
	Installing and Configuring SHR and Sybase IQ on the Same Node	11
	Installing SHR on the Primary Node	11
	Configuring SHR on the primary node	12
	Installing SHR on the secondary node	13
	Configuring SHR on the secondary node	14
	Creating Server Intelligence Agent (SIA) in the Secondary Node	16
	Creating Server Intelligence Agent (SIA) in the Secondary Node For Windows	16
	Creating Server Intelligence Agent (SIA) in the Secondary Node For Linux	19
	Creating SHR resource groups in VCS	27
	Prerequisites	27
	Validating SHR Installation	30
	Installing and Configuring SHR and Sybase IQ on Different Nodes	32
	Installing SHR	32
	Installing Sybase IQ	33
	Configuring Sybase IQ on Primary Node	33
	Configuring SHR on the primary node	33
	Installing SHR on the secondary node	35
	Configuring Sybase IQ on Secondary Node	36
	Configuring SHR on the secondary node	36
	Creating Server Intelligence Agent (SIA) in the Secondary Node	38
	Creating Server Intelligence Agent (SIA) in the Secondary Node for Windows	38
	Creating Server Intelligence Agent (SIA) in the Secondary Node for Linux	38
	Creating SHR Resource Groups in VCS	39
	Prerequisites	39
	Updating BusinessObjects DSN Details in SHR nodes	42
	Validating SHR Installation	43
4	Troubleshooting	45
	SHR Agent Script	45

VCS Log Files.....	45
SHR Resource Group Script Troubleshooting	45
A Appendix.....	47
Deploying Content Packs when SHR is running	47
Changing the Services' Startup Type	47
Creating Sybase IQ as a Service	47
Creating Sybase IQ Service	50
B We appreciate your feedback!.....	53

1 Introduction

This guide provides instructions on how to configure HP Service Health Reporter (SHR) in a high availability environment using the Veritas Cluster Server (VCS) 5.1 or 6.0. Configuring SHR in high availability environment improves its availability when used as a mission critical application.

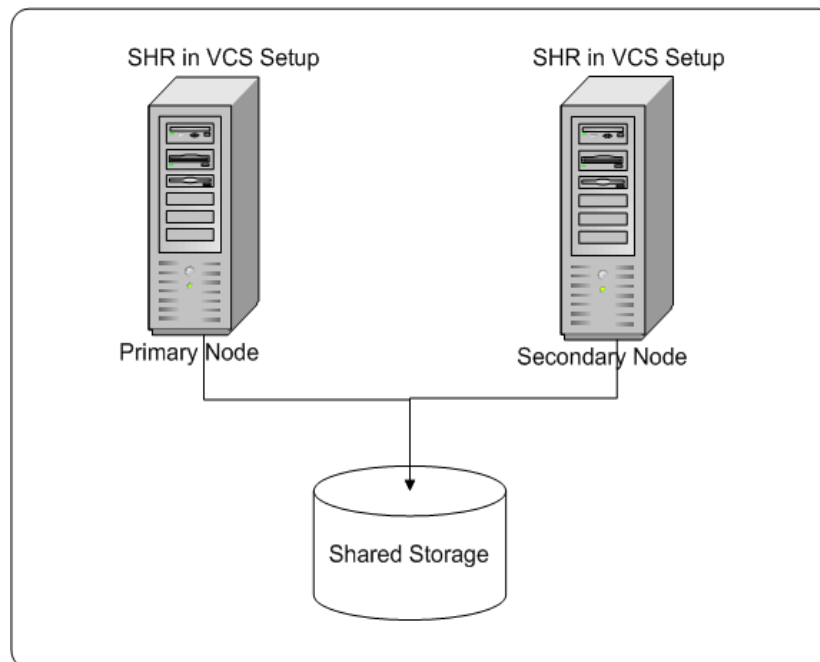
- This guide does not cover how to set up a Veritas cluster.
- This guide covers only new SHR installation. If SHR is already installed on the system, it cannot be converted to a HA cluster.

SHR Setup in High Availability Environment

This guide covers the configuration of a two node cluster using a shared disk with SHR 9.30 installed on both the clusters. However, this setup can be implemented using multiple nodes.

Figure 1 shows the SHR configuration in a high availability setup.

Figure 1 SHR Setup in HA Configuration



As shown in figure 1:

- 1 Install SHR on both the nodes of the cluster.
One node acts as a primary (active) node, and the other acts as a secondary (passive) node. SHR installation is supported in an active-passive setup of nodes only.
- 2 Configure a shared storage for both the nodes.

2 VCS Implementation Prerequisites

The primary requirement for a VCS implementation is that in case of a failover, all the designated processes are initiated seamlessly on the secondary (failover) node.

Hostname and IP Address

For a simple system failover implementation, there must be two or more servers that are each capable of hosting a unique “floating” hostname and associated IP address (wherever applicable) that are not associated with a physical node (that is a “logical” hostname and IP address).

Only one of the failover nodes hosts this name and IP address at any given time. During a system failover, the hostname and IP is “transferred” from the failed server to the failover node. The applications, however, will always access the same hostname and IP.

SHR stores the values of hostname and IP during installation for use at run time.

Setting Failover Nodes

To set failover machines, follow these steps:

- 1 In a two node cluster, set one system to function as the primary node and one system to function as secondary node and install the VCS cluster software on both.

Ensure that both the primary and secondary nodes have similar system resources.

This is because when you install the database and SHR; the database tuning parameters are set based on the system resources available on the machine on which it is installed. In case there is a failover and the secondary node has significantly less resources than the primary node, the parameters used to initialize and tune the database might not only be sub-optimal, but could also prevent the database from being started.

▶ If your hardware availability is limited, you might want to install the database and SHR on the less powerful node to avoid incompatible settings in case of a failover. However, it is best practice to use the more powerful node as the primary system.

- 2 Set up a shared storage.
- 3 Ensure that VCS is running. To verify, run the following command on both the nodes:

```
hastatus -sum
```

Verifying System Resources and Node Patch Levels

Verify that each failover node has similar resources (for example, RAM, swap) and patch levels for the operating system before installing SHR.

Synchronizing System Clocks

SHR has many time-dependent, time-critical processes. Therefore, it is important that each node in the cluster uses the same source for time synchronization to keep data collection, aggregation, reporting, and logging correct and consistent.

Ensure that both the primary and secondary nodes have the same system time.

VCS Agents

VCS uses “agents” for monitoring the status and health of various resources, bringing them online, shutting them down in normal and emergency situations. VCS includes the agents required to handle common resources such as:

- Network Interface Cards
- IP addresses
- Physical Disk drives
- Logical Disk drives

3 Installing SHR on VCS

Before configuring SHR on VCS, ensure that all the nodes in the cluster can access the shared storage for SHR through the Veritas Admin Console.

It is possible to install SHR in two different setups:

- [Installing and Configuring SHR and Sybase IQ on the Same Node](#)
- [Installing and Configuring SHR and Sybase IQ on Different Nodes](#)

Installing and Configuring SHR and Sybase IQ on the Same Node

This section describes how to install and configure SHR and Sybase IQ on the same node.



Install SHR on the primary node first and then on the secondary node. Avoid parallel installations.

Installing SHR on the Primary Node

For instructions on installing SHR, see [Chapter 3, Installing SHR](#) of the *HP Service Health Reporter Installation and Configuration Guide*.

For Windows

After SHR is installed:

- 1 Open the `AgentScript_SHR_VCS.pl` file from `%PMDB_HOME%\HA\Veritas\Windows\AgentScripts`.
- 2 Enter the drive letter of the shared storage in the `$SharedDriveLetter` parameter.
- 3 Save and close the file.



If you install SHR on Microsoft Windows Server 2003, download `junction.exe` from the Microsoft Web site, and place it in the `%PMDB_HOME%/bin` or any folder which is associated with the **classpath** environment variable.

Configuring SHR on the primary node

Follow these steps:

- 1 Assign the shared storage to the SHR primary node.
 - ▶ The shared storage can only be assigned to one node at a time.
- 2 For instructions on post-installation configuration of SHR, see [Chapter 4, Configuring SHR](#) of the *HP Service Health Reporter Installation and Configuration Guide*.

- ▶ While performing [Task 6: Create the Database Schema in Chapter 4](#) of the *HP Service Health Reporter Installation and Configuration Guide*, in the **Database File Location** field, specify the location of the shared storage.

For example:

For Windows, if the drive letter of the shared storage is **E**, then the location will be
E:\HP-SHR\Sybase\db.

For Linux, if the shared storage is /SHRmount, then the location will be
/SHRmount/HP-SHR/SybaseDB.

- 3 Deploy the Content Packs based on the topology that you have selected. For steps to deploy Content Packs, see [Chapter 5, Selecting and Installing the Content Packs](#) of the *HP Service Health Reporter Installation and Configuration Guide*.

- ▶ To deploy Content Packs after installation and configuration of SHR is complete, see [Deploying Content Packs when SHR is running](#) on page 47.

4 For Windows

Run the following command:

```
%PMDB_HOME%\..\nonOV\perl\bin\perl
%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\SHR_HA_Setup.pl
-sharedDrive <shared_drive_letter> -node primary -logicalhost
<logical_hostname> >> %PMDB_HOME%\HA\setup.log
```

where, <shared_drive_letter> is the drive letter of the shared storage (for example, G:), and <logical_hostname> is the logical host name for the SHR application.

- ▶ Type the above command in a single line.

For example,

```
%PMDB_HOME%\..\nonOV\perl\bin\perl
%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\SHR_HA_Setup.pl
-sharedDrive G -node primary -logicalhost example.example1.com >>
%PMDB_HOME%\HA\setup.log
```

Run the following command:

```
sc config OvCtrl start= demand

%PMDB_HOME%\..\Sybase\IQ-15_4\Bin64\iqdsn.exe -y -ws SHRDB -c
"uid=<database.username>;pwd=<password>;eng=<database.sybase.engine>;
dbf=<database.sybase.dbfileloc>\pmdb.db;links=tcPIP{host=<database.ho
st>;port=<database.port>}" -v -pe"
```

where,

<angular bracket>: The value is obtained from the %PMDB_HOME%\data\config.prp file.

<password>: The password of the PMDB database entered during post-installation of SHR.

For Linux

Run the following command:

```
/opt/OV/nonOV/perl/a/bin/perl $PMDB_HOME/HA/Veritas/Linux/  
SetupScripts/SHR_HA_Setup.pl -sharedDrive <shared_drive> -node  
primary -logicalhost <logical_hostname> -Bosqlpassword <password>  
-primaryhost <primary_node_hostname>
```

where, <shared_drive> is the location of the shared drive (for example, SHRMount), <logical_hostname> is the logical host name for the SHR application, and <primary_node_hostname> is the host name of the primary node.

► Type the above command in a single line.

For example,

```
/opt/OV/nonOV/perl/a/bin/perl $PMDB_HOME/HA/Veritas/Linux/  
SetupScripts/SHR_HA_Setup.pl -sharedDrive G -node primary  
-logicalhost example.example1.com -Bosqlpassword password  
-primaryhost example2.example3.com
```

- 5 Switch the shared storage from the primary node to the secondary node.
- 6 **Perform this step only if SHR is installed in Linux environment.**
 - a Open `ccm.config` located at `/opt/HP/BSM/BO/bobje/`.
 - b Search for the **SERVICENAME** and **SERVICENAME_AUDIT** parameters and note down their values.

Installing SHR on the secondary node

► Before starting installation on the secondary node, ensure that all the SAP BusinessObjects services are stopped on the primary node.

- 1 Start the SHR installation. For instructions on installing SHR, see [Chapter 3, Installing SHR](#) of the *HP Service Health Reporter Installation and Configuration Guide*.
- 2 After you agree to the licensing terms and conditions on the License Agreement page perform the following steps *before proceeding* with the installation:

For Windows

- a Open `PrimaryServer.ini` located at `%temp%/../HP-SHR`.
- b Search for the following parameters:

DATABASEUID

DATABASEUID_AUDIT

- c Replace the values of the above parameters with the primary node server name without the FQDN.

For example, if the complete server name is `server.example.com`, then use just `server` as the input value.

- d Save and close the file.

For Linux

- a Open another console session on the secondary node.
 - b Open the `Sp5response.ini` file in edit mode. This file is located at `/tmp/HP-SHR/`.
 - c Search for the following parameters:
SERVICENAME
SERVICENAME_AUDIT
 - d Replace the values of the above parameters with the values noted down from the primary node.
 - e Save and close the file
- 3 Continue with the installation in the first console.
- 4 **For Windows**
- After SHR is installed:
- a Open the `AgentScript_SHR_VCS.pl` file from `%PMDB_HOME%\HA\Veritas\Windows\AgentScripts`.
 - b Enter the drive letter of the shared storage in the `$SharedDriveLetter` parameter.
 - c Save and close the file.

➤ If you install SHR on Microsoft Windows Server 2003, download `junction.exe` from the Microsoft Web site, and place it in the `%PMDB_HOME%\bin` or any folder which is associated with the **classpath** environment variable.

Configuring SHR on the secondary node

1 For Windows

Copy `config.prp` from `%PMDB_HOME%\data\` on the primary node to the same location on the secondary node.

➤ If you change the database password in one of the SHR nodes using the Administration Console, copy `config.prp`, located at `%PMDB_HOME%\data\`, from that node to all the other SHR nodes.

Also, open `config.prp` on each node and change the value of **bo.cms** to the physical hostname of that particular node.

For Linux

- a Copy `config.prp` from `$PMDB_HOME/data/` on the primary node to the same location on the secondary node.
- b Open `config.prp` and replace the value of **bo.cms** with the host name of the secondary node.

➤ If you change the database password in one of the SHR nodes using the Administration Console, copy `config.prp`, located at `$PMDB_HOME\data\`, from that node to all the other SHR nodes.

Also, open `config.prp` on each node and change the value of **bo.cms** to the physical hostname of that particular node.

2 For Windows

Run the following command:

```
%PMDB_HOME%\..\nonOV\perl\bin\perl
%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\SHR_HA_Setup.pl
-sharedDrive <shared_drive_letter> -node secondary -logicalhost
<logical_hostname> >> %PMDB_HOME%\HA\setup.log
```

where, <shared_drive_letter> is the drive letter of the shared storage (for example, G:), and <logical_hostname> is the logical host name for the SHR application.

▶ Type the above command in a single line.

For example,

```
%PMDB_HOME%\..\nonOV\perl\bin\perl
%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\SHR_HA_Setup.pl
-sharedDrive G -node secondary -logicalhost example.example1.com >>
%PMDB_HOME%\HA\setup.log
```

Run the following command:

```
sc config OvCtrl start= demand

%PMDB_HOME%\..\Sybase\IQ-15_4\Bin64\iqdsn.exe -y -ws BSMR -c
"uid=<database.username>;pwd=<password>;eng=<database.sybase.engine>;
dbf=<database.sybase.dbfileloc>\pmdb.db;links=tcipip{host=<database.ho
st >;port=<database.port>}" -v -pe"

%PMDB_HOME%\..\Sybase\IQ-15_4\Bin64\iqdsn.exe -y -ws SHRDB -c
"uid=<database.username>;pwd=<password>;eng=<database.sybase.engine>;
dbf=<database.sybase.dbfileloc>\pmdb.db;links=tcipip{host=<database.ho
st>;port=<database.port>}" -v -pe"
```

where,

<angular bracket>: The value is obtained from the %PMDB_HOME%\data\config.prp file.

<password>: The password of the PMDB database entered during post-installation of SHR.

For Linux

Run the following command:

```
/opt/OV/nonOV/perl/bin/perl $PMDB_HOME/HA/Veritas/Linux/
SetupScripts/SHR_HA_Setup.pl -sharedDrive <shared_drive> -node
secondary -logicalhost <logical_hostname> -Bosqlpassword <password>
-primaryhost <primary_node_hostname>
```

where, <shared_drive> is the location of the shared drive (for example, \$SHRMount), <logical_hostname> is the logical host name for the SHR application, and <primary_node_hostname> is the host name of the primary node.

▶ Type the above command in a single line.


For example:

```
/opt/OV/nonOV/perl/a/bin/perl $PMDB_HOME/HA/Veritas/Linux/
SetupScripts/SHR_HA_Setup.pl -sharedDrive G -node secondary
-logicalhost example.example1.com -Bosqlpassword password
-primaryhost example2.example3.com
```

To verify whether SHR is installed properly on both the nodes and whether the correct folders are copied to the shared storage:

- After both the nodes are configured, the following folders from the HP-SHR directory are copied by the script on the shared drive:

- BusinessObjects
- PMDB
- PostgreSQL
- server

However, only partial contents of these folders are copied to the shared drive. The contents which are copied to the shared drive are marked with  in the HP-SHR folders on both the SHR nodes.

- Check the log files located at:

For Windows

```
%PMDB_HOME%\HA\setup.log
```

For Linux

```
$PMDB_HOME\HA\setup.log
```

Creating Server Intelligence Agent (SIA) in the Secondary Node

After installing SHR on both the nodes, you must create a Server Intelligence Agent (SIA) in the secondary node.


Creating Server Intelligence Agent (SIA) in the Secondary Node For Windows

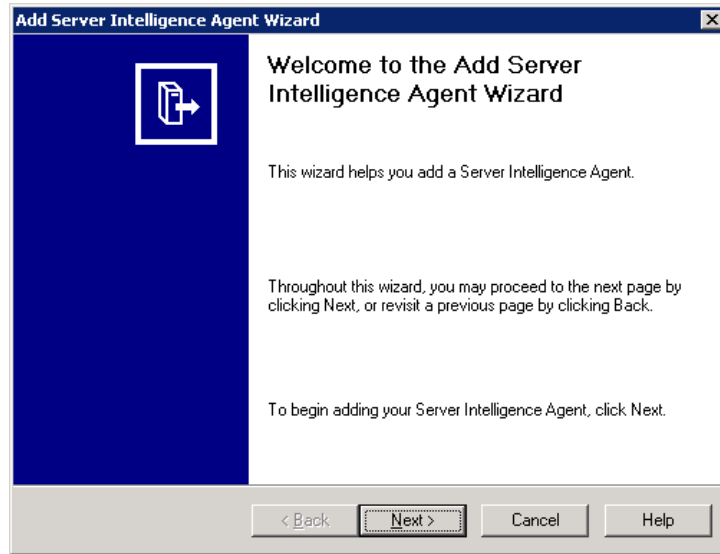
To create SIA in secondary node:

- 1 From the Microsoft Windows Services window, start the BOE120SQLAW service.
- 2 Start the Go to **Start** → **Programs** → **BusinessObjects XI 3.1** → **BusinessObjects Enterprise** → **Central Configuration Manager**. The Central Configuration Manager window opens.
- 3 Right-click **Server Intelligence Agent** and click **Stop Now**.
 - ▶ Do not close the Central Configuration Manager window.
- 4 Open the `<drive_letter>:\Program Files (x86)\Business Objects\BusinessObjects Enterprise 12.0\win32_x86\` folder.

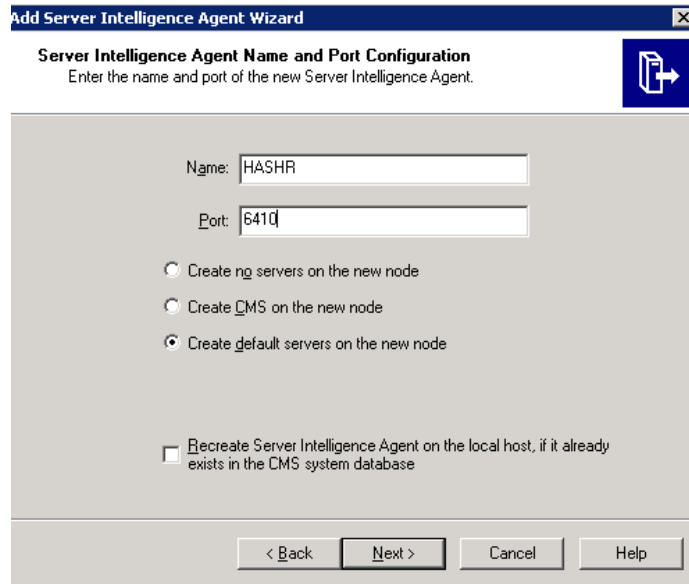
where, `<drive_letter>` is the drive letter where the SAP BusinessObjects is installed.
- 5 Delete all the files starting with `_boe`.
- 6 Run the following command in the command prompt:

```
sc delete BOE120SIAHOML01GEATON
```


- 7 Refresh the Central Configuration Manager window. The **Server Intelligence Agent** created by the installer is deleted.
- 8 In the Central Configuration Manager window, right-click **Business Objects Webserver** and click **Stop Now**.
- 9 Click **Add Server Intelligence Agent** () in the Central Configuration Manager window. The Add Server Intelligence Agent Wizard window opens.



- 10 Click **Next**. The Server Intelligence Agent Name and Port Configuration page opens.



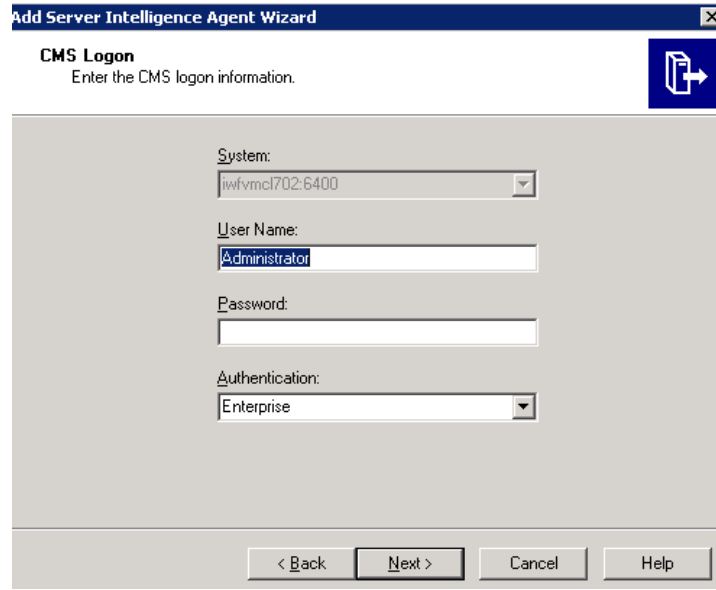
- 11 On the Server Intelligence Agent Name and Port Configuration page:
 - Specify the SIA name as **HASHR**.
 - Specify the SIA port number as **6410**.
 - Select **Create default servers on the new node** and click **Next**.

The New CMS Configuration page opens.

The screenshot shows a Windows-style dialog box titled "Add Server Intelligence Agent Wizard". Inside, the "New CMS Configuration" section is active, with the instruction "Please specify the configuration for the new CMS." and a blue arrow icon. The configuration fields are: "New CMS Port:" with an empty text box; "CMS System Database Data Source Name:" with an empty text box and a "Specify..." button; and "Auditing Database Data Source Name:" with a checked checkbox, an empty text box, and a "Specify..." button. At the bottom, there are four buttons: "< Back", "Next >", "Cancel", and "Help".

- 12 On the New CMS Configuration page:
 - Specify the new CMS port number as **6400**.
 - Click **Specify** next to the **CMS System Database Data Source Name** field.
 - The Select Database Driver window opens.
Select **SQL Anywhere (ODBC)** and click **OK**.
 - The Select Data Source window opens.
Click the **Machine Data Source** tab.
Select **BOE120** and click **OK**
 - The Connect to SQL Anywhere window opens.
In the **Password** field on the Login tab, specify the password.
Click **OK**.
 - You return to the New CMS Configuration page.
 - Click **Specify** next to the **Auditing Database Data Source Name** field.
 - The Select Database Driver window opens.
Select **SQL Anywhere (ODBC)** and click **OK**.
 - The Select Data Source window opens.
Click the **Machine Data Source** tab.
Select **BOE120_AUDIT** and click **OK**
 - The Connect to SQL Anywhere window opens.
In the **Password** field on the Login tab, specify the password.
Click **OK**.
 - You return to the New CMS Configuration page.
 - Click **Next**.

- 13 The CMS Logon page opens.



- 14 Enter the following credentials:

User Name: Administrator

Keep the **Password** field empty.


Click **Next**.

- 15 The Add Server Intelligence Agent Wizard window displays the summary of SIA details. Click **Finish**.

- 16 Go to the Central Configuration Manager window and start Business Objects Webserver and Server Intelligence Agent.

Wait until all the services start.

To check whether all the services are running:

- a Go to **Start** → **Programs** → **BusinessObjects XI 3.1** → **BusinessObjects Enterprise** → **Central Configuration Manager**. The Central Configuration Manager window opens.
- b Select the new SIA.
- c Click  in the Central Configuration Manager window. The Manage Servers window opens.
- d Check whether all the services against the new SIA name are in the **Running** state.

Creating Server Intelligence Agent (SIA) in the Secondary Node For Linux

To create SIA in secondary node:

- 1 Open a console and change the directory to `/opt/HP/BSM/BO/bobje`.
- 2 Run the following commands:

```
sh sawstartup.sh
```

- 3 Run the following command to start creating a new SIA:

```
su - SHRBOADMIN
```

Go to /opt/HP/BSM/BO/bobje and run the following command:

```
./serverconfig.sh
```

Steps 4-24 display the text displayed for creating a new SIA. The input for each step is displayed at the bottom of each image. Make sure you enter the specified input to move on to the next step.

4

```
-----  
SAP BusinessObjects  
What would you like to do?  
1 - Add a Server Intelligence Agent  
2 - Delete a Server Intelligence Agent  
3 - Modify a Server Intelligence Agent  
4 - List all Server Intelligence Agents in the config file  
  
[quit(0)]  
-----  
[4]1
```

Enter 1.

5

```
-----  
SAP BusinessObjects  
  
If it already exists in the CMS system database, do you want to recreate the  
Server Intelligence Agent on the local host?  
  
Use this option only if this Server Intelligence Agent does not exist on any hos  
ts in the deployment.  
  
[yes(3)/no(2)/back(1)/quit(0)]  
-----  
[no]
```

Enter 3.

6

```
-----  
SAP BusinessObjects  
  
Please enter the name of the new Server Intelligence Agent.  
  
[back(1)/quit(0)]  
-----  
[IWFVM01052]:
```

Enter PRD_SHR.

7

```
-----  
SAP BusinessObjects  
  
Please enter the port of the new Server Intelligence Agent.  
  
[back(1)/quit(0)]  
-----  
[ ]6410
```

Enter 6410.

8

```
-----  
SAP BusinessObjects  
  
noservers (Create no servers on the new node)  
cms (Create CMS on the new node)  
defaultservers (Create default servers on the new node)  
  
[noservers(4)/cms(3)/defaultservers(2)/back(1)/quit(0)]  
-----  
[noservers]2
```

Enter 2.

9

```
-----  
SAP BusinessObjects  
  
Enter the port of the new CMS.  
  
[back(1)/quit(0)]  
-----  
[default (6400)]6400
```

Enter 6400.

10

```
-----  
SAP BusinessObjects  
  
Specify Destination CMS database connection information.  
  
Select the type of database connection from the following:  
[Oracle(6)/DB2(5)/Sybase(4)/MySQL(3)/SQL Anywhere(2)/back(1)/quit(0)]  
-----  
[Oracle]2
```

Enter 2.

11

```
-----  
SAP BusinessObjects  
  
Specify Destination CMS database connection information.  
  
Enter the ODBC data source name (DSN) for connecting to your SQL Anywhere database.  
[back(1)/quit(0)]  
-----
```

Enter the value noted down for **SERVICENAME** while configuring SHR on the primary node.

12

```
-----  
SAP BusinessObjects  
  
Specify Destination CMS database connection information.  
  
Enter the user name for connecting to your SQL Anywhere database.  
[back(1)/quit(0)]  
-----  
[SHR] SHR
```

Enter SHR.

13

```
-----  
SAP BusinessObjects  
  
Specify Destination CMS database connection information.  
  
Enter the password for connecting to your SQL Anywhere database.  
  
[back(1)/quit(0)]  
-----  
[ ]
```

Enter the password.

14

```
-----  
SAP BusinessObjects  
  
Would you like to enable auditing?  
  
[yes(3)/no(2)/back(1)/quit(0)]  
-----  
[yes]3
```

Enter 3.

15

```
-----  
SAP BusinessObjects  
  
Specify auditing database connection information.  
  
Select the type of database connection from the following:  
[Oracle(6)/DB2(5)/Sybase(4)/MySQL(3)/SQL Anywhere(2)/back(1)/quit(0)]  
-----  
[SQL Anywhere]2
```

Enter 2.

16

```
-----  
SAP BusinessObjects  
  
Specify auditing database connection information.  
  
Enter the ODBC data source name (DSN) for connecting to your SQL Anywhere database.  
  
[back(1)/quit(0)]  
-----  
[shrlr012BOE120]
```

Enter the value noted down for **SERVICENAME_AUDIT** while configuring SHR on the primary node.

17

```
-----  
SAP BusinessObjects  
  
Specify auditing database connection information.  
  
Enter the user name for connecting to your SQL Anywhere database.  
  
[back(1)/quit(0)]  
-----  
[SHR]█
```

Enter SHR

18

```
-----  
SAP BusinessObjects  
  
Specify auditing database connection information.  
  
Enter the password for connecting to your SQL Anywhere database.  
  
[back(1)/quit(0)]  
-----  
[ ]█
```

Enter the password.

19

```
-----  
SAP BusinessObjects  
  
Enter the user name to connect to this CMS.  
  
[back(1)/quit(0)]  
-----  
[Administrator]Administrator█
```

Enter Administrator.

20

```
-----  
SAP BusinessObjects  
  
Enter the password to connect to this CMS.  
  
[back(1)/quit(0)]  
-----  
[ ]█
```

Leave this field blank. Press **Enter**.

21

```
-----  
SAP BusinessObjects  
  
Choose the number of the type of authentication to  
use when contacting the CMS  
  
1 - secEnterprise  
2 - secLDAP  
  
[back/quit(0)]  
-----  
[1]1█
```

Enter 1.

22

```
-----  
SAP BusinessObjects  
The following information will be used to create the new  
Server Intelligence Agent.  
CMS Name: IWVVM01052  
Server Intelligence Agent Name: SHR_CMS  
Server Intelligence Agent Port: 6410  
Create Default Servers: yes  
CMS Port: 6400  
CMS Database: BOE120  
Audit Database: BOE120_AUDIT  
Do you want to create the Server Intelligence Agent?  
[yes(3)/no(2)/back(1)/quit(0)]  
-----  
[yes]3
```

Enter 3.

23

```
-----  
SAP BusinessObjects  
What would you like to do?  
1 - Add a Server Intelligence Agent  
2 - Delete a Server Intelligence Agent  
3 - Modify a Server Intelligence Agent  
4 - List all Server Intelligence Agents in the config file  
[quit(0)]  
-----  
[4]0
```

Enter 0.

24

```
-----  
SAP BusinessObjects  
Are you sure you want to quit?  
[yes(1)/no(0)]  
-----  
[no]1
```

Enter 1.

25 Check if there are any processes which are still running using the following command:

```
ps -ef |grep '6400\|6410' |grep -v grep
```

If there are any processes still running, stop them manually.

26 Run the command `hastart`.

27 Stop all the services and switch the shared storage from the secondary node to the primary node.

To stop the SQLAnywhere service:

- a Go to `/opt/HP/BSM/BO/bobje`.
- b Run the command `/sawstop.sh`.
- c Enter the password.

To stop all the other services

- a Go to `/etc/init.d/`.
All the SHR services start with **HP**.
- b To stop a service, use the command:
`service <service name> stop`

Creating SHR resource groups in VCS

Prerequisites

Before creating SHR resource groups, change the following services' startup type to manual:

- HP_PMDB_Platform_Administrator
- HP_PMDB_Platform_Collection
- HP_PMDB_Platform_DB_Logger
- HP_PMDB_Platform_IM
- HP_PMDB_Platform_Message_Broker
- HP_PMDB_Platform_PostgreSQL
- HP_PMDB_Platform_Sybase
- HP_PMDB_Platform_Timer
- Business Objects Webservice
- BOE120SQLAW

For Linux

- Set the `VCS_HOME` environment variable in both the nodes.
- If the share drive is configured using Linux commands, then the `locking_type` parameter in the `lvm.conf` file must be set to zero. The `lvm.conf` file is located in `/etc/lvm`.
- Ensure that Veritas is running in both the nodes.

If Veritas is not running on any node, run the following command on that node:

```
$VCS_HOME\bin\hastart
```

Follow these steps to create SHR resource groups in VCS:

1 For Windows

Open `SHR_win_vcsconfigure.pl` from `%PMDB_HOME%/HA/Veritas/Windows/SetupScripts/`.

For Linux

Open `SHR_linux_vcsconfigure.pl` from `$PMDB_HOME/HA/Veritas/Linux/SetupScripts/`.

- Specify the following parameters under **User Customizable Parameters:**

For Windows

Parameters	Description
SHRNODE1	The physical host name of the primary node.
SHRNODE2	The physical host name of the secondary node.
SHRNODE1_IP_ADDRESS	The physical IP address of the primary node. For example: 16.123.45.678 .
SHRNODE2_IP_ADDRESS	The physical IP address of the secondary node. For example: 16.123.45.679 .
VIRTUAL_IP_ADDRESS_FOR_SHR	The 'virtual' IP address assigned to SHR. For example: 16.321.45.968 .
NETMASK_FOR_VIRTUAL_IP_ADDRESS_FOR_SHR	The subnet mask for the 'virtual' IP address of SHR.
NETWORK_INTERFACE1	The physical address of the primary node obtained by using the <code>ipconfig/all</code> command. For example, 00-50-56-93-02-F9 .
NETWORK_INTERFACE2	The physical address of the secondary node obtained by using the <code>ipconfig/all</code> command. For example, 00-50-56-93-02-F4 .
UNAME	The username of the Veritas Cluster administrator.
PWD	The password of the Veritas Cluster administrator. You must provide the password when you run the <code>SHR_win_vcsconfigure.pl</code> file.
DOMAIN	The domain to which the Veritas Cluster belongs.
MOUNT_POINT_FOR_SHR_SHARE	The drive letter of the shared storage. For example, G:\ .

Parameters	Description
FILESYSTEM	The file system type of the shared storage.
SIG_SHR_SHARE	The signature of the shared storage. To get the signature of the shared storage: <ol style="list-style-type: none"> 1 Open the command prompt. 2 Go to %VCS_HOME%\bin\. 3 Run the command: havol -getdrive
SHR_INSTALL_TYPE	The type of SHR installation. Type one of the following values to specify the SHR installation type: <ul style="list-style-type: none"> • 1 → SHR is installed along with Sybase IQ. The resource groups contain services for both SHR and Sybase IQ. • 2 → Remote Sybase IQ installation. The resource groups contain services only for Sybase IQ.

For Linux

Parameters	Description
SHRNODE1	The physical host name of the primary node.
SHRNODE2	The physical host name of the secondary node.
SHRNODE1_IP_ADDRESS	The physical IP address of the primary node. For example: 16.123.45.678 .
SHRNODE2_IP_ADDRESS	The physical IP address of the secondary node. For example: 16.123.45.679 .
VIRTUAL_IP_ADDRESS_FOR_SHR	The 'virtual' IP address assigned to SHR. For example: 16.321.45.968 .
NETMASK_FOR_VIRTUAL_IP_ADDRESS_FOR_SHR	The subnet mask for the 'virtual' IP address of SHR.
NETWORK_INTERFACE1	The physical address of the primary node obtained by using the ipconfig/all command. For example, 00-50-56-93-02-F9 .
MOUNT_POINT_FOR_SHR_SHARE	The drive letter of the shared storage. For example, G:\ .
SHRmount	The folder where the device is mounted.
VOLUME_GROUP_ON_SHARED_DISK	Name of Linux volume group which contains the volume.
NETWORK_INTERFACE	Name of the NIC device associated with the IP address.

Parameters	Description
ADDRESS	Virtual IP address associated with the interface. For example: 16.123.45.678 .
NETMASK	Subnet mask associated with the IP address.
FILESYSTEM	The file system type of the shared storage.
LOGICAL_VOLUME_ON_S HARED_DISK	Name of Linux LVM2 logical volume.
SHR_INSTALL_TYPE	The type of SHR installation. Type one of the following values to specify the SHR installation type: <ul style="list-style-type: none"> • 1 → SHR is installed along with Sybase IQ. The resource groups contain services for both SHR and Sybase IQ. • 2 → Remote Sybase IQ installation. The resource groups contain services only for Sybase IQ.

- 3 Run the `SHR_win_vcsconfigure.pl` script using the following command:

For Windows

```
%PMDB_HOME%\..\nonOV\perl\a\bin\perl.exe
"%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\
SHR_win_vcsconfigure.pl"
```

For Linux

```
/opt/OV/nonOV/perl/a/bin/perl $PMDB_HOME/HA/Veritas/Linux/
SetupScripts/SHR_linux_vcsconfigure.pl
```



Type the above command in a single line.

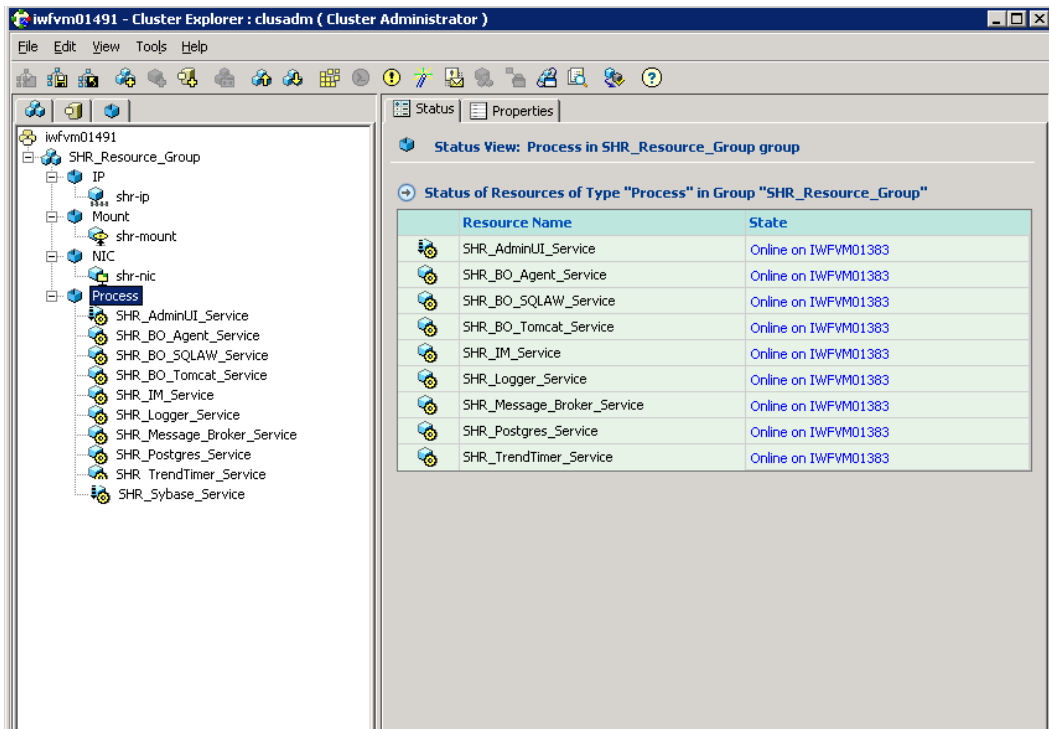
- 4 Open the Veritas Java console.
In the left pane, navigate to **SHR_Resource_Group** → **Mount** → **shr-mount**.
- 5 Click the **Properties** tab.
- 6 Edit the value of `FsckOpt` attribute to `-n`.
- 7 Save the configuration.

Validating SHR Installation

To validate whether SHR resource groups are created properly on both the nodes:

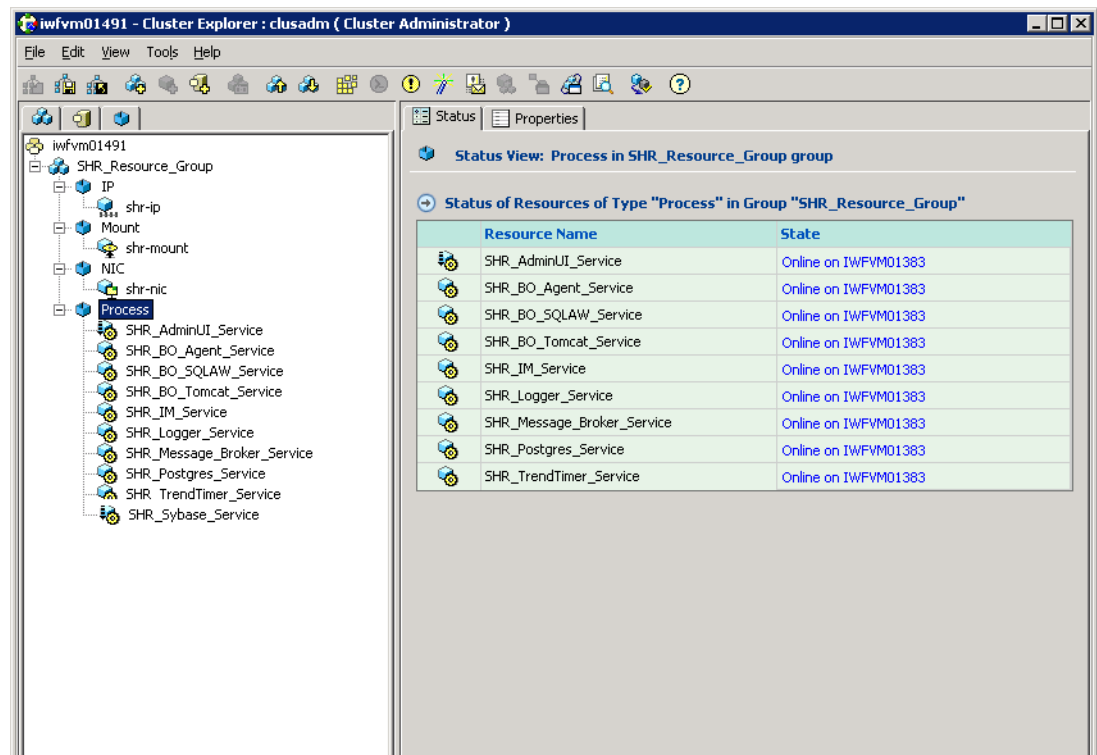
- 1 Go to the Veritas Administration Java Console.

Login to one of the nodes and see if all the services under SHR_Resource_Group are online.



For Linux :

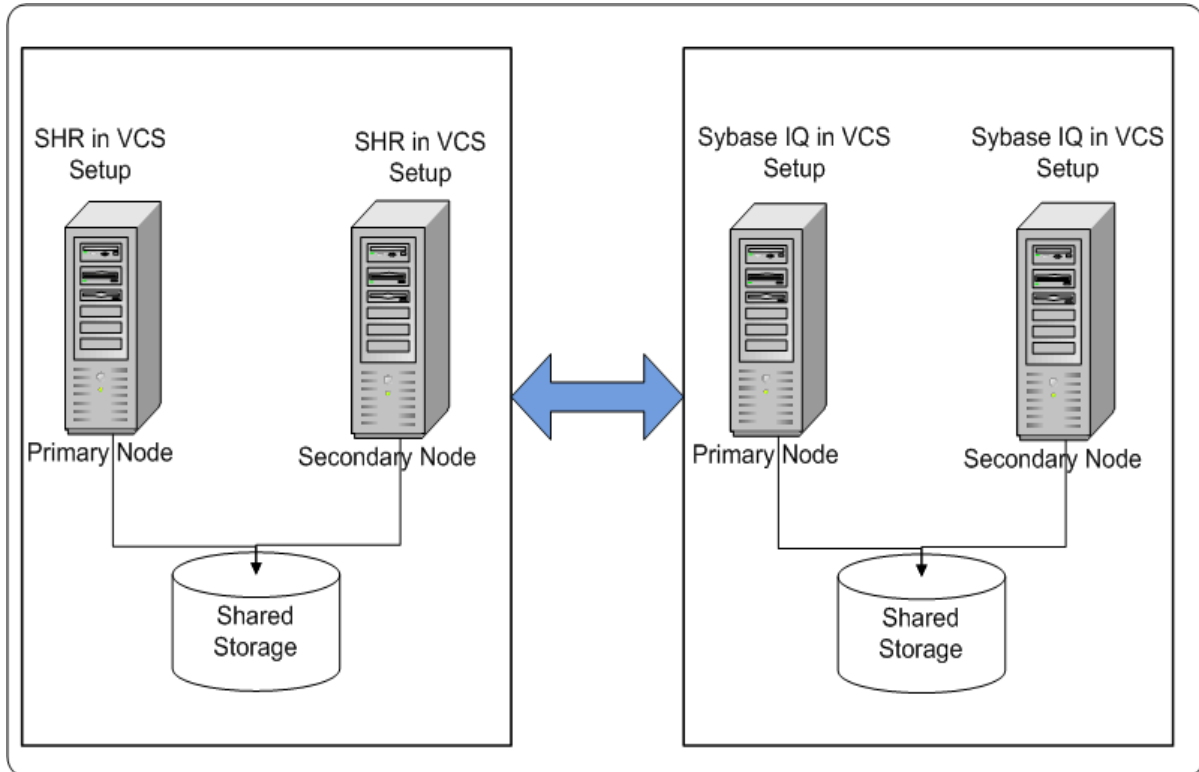
The screen for validating SHR resource group will be as shown below:



Installing and Configuring SHR and Sybase IQ on Different Nodes

Figure 2 displays the SHR installation on VCS setup with Sybase IQ installed on a different node with VCS setup.

Figure 2 SHR Setup with Remote Sybase IQ Installation



In a scenario where SHR and Sybase IQ are installed on different clusters, each node containing SHR must have a separate node, with Sybase IQ installed, assigned to it.

Installing SHR

Install SHR on both the primary and secondary nodes of the SHR cluster. For instructions on installing SHR, see [Chapter 3, Installing SHR](#) of the *HP Service Health Reporter Installation and Configuration Guide*.

► Install standalone SHR without Sybase IQ.

For Windows

After SHR is installed:

- 1 Open the `AgentScript_SHR_VCS.pl` file from `C:\HP-SHR\PMDB\HA\Windows\AgentScripts`.
- 2 Enter the drive letter of the shared storage in the `$SharedDriveLetter` parameter.
- 3 Save and close the file.

- ▶ If you install SHR on Microsoft Windows Server 2003, download `junction.exe` from the Microsoft Web site, and place it in the `%PMDB_HOME%/bin` or any folder which is associated with the **classpath** environment variable.

Installing Sybase IQ

Install Sybase IQ on both the remote primary and secondary nodes of the Sybase IQ cluster. For instructions on installing Sybase IQ, see [Remote Installation of Sybase IQ](#), in Chapter 3 of the *HP Service Health Reporter Installation and Configuration Guide*.

Create Sybase IQ as a Service

For Windows

For steps to create Sybase IQ as a service in Windows, see [Creating Sybase IQ as a Service](#) on page 47.

For Linux

The Sybase IQ service is created by the installer when installing SHR in Linux environment.

After you install Sybase IQ on both the Sybase IQ nodes:

- Assign the Sybase IQ shared drive to the Sybase IQ primary node.
 - ▶ The shared storage can only be assigned to one node at a time.

Configuring Sybase IQ on Primary Node

For Windows

- Copy the `HA.zip` folder from `%PMDB_HOME%\HA\` on the SHR primary node to `%PMDB_HOME%` on the Sybase IQ primary node.
- Copy the `nonOV` folder from `%PMDB_HOME%\..\` on the SHR primary node to `%PMDB_HOME%\..\` on the Sybase IQ primary node.
- Open `PmdbConfig.cfg` from `C:\HP-SHR\Sybase\IQ-15_4\Scripts` and replace the Sybase IQ server name with the common logical server name assigned to both the Sybase IQ nodes.
- Restart the Sybase IQ service.

For Linux

- Copy the `nonOV` folder from `$PMDB_HOME/../../` on the SHR primary node to `$PMDB_HOME/../../` on the Sybase IQ primary node

Configuring SHR on the primary node

Follow these steps:

- 1 Assign the shared storage to the SHR primary node.
 - ▶ The shared storage can only be assigned to one node at a time.

- 2 For instructions post-installation configuration of SHR, see [Chapter 4, Configuring SHR](#) of the *HP Service Health Reporter Installation and Configuration Guide*.

- ▶ • While configuring the connection to Sybase IQ in [Task 5: Configure the Database Connection](#) of the *Installation and Configuration Guide*, define the logical host name of the Sybase IQ node.
- While performing [Task 6: Create the Database Schema in Chapter 4](#) of the *HP Service Health Reporter Installation and Configuration Guide*, in the **Database File Location** field, specify the location on the shared storage.

For example:

For Windows, if the drive letter of the shared storage is **E**, then the location will be `E:\HP-SHR\Sybase\db`.

For Linux, if the shared storage is `/SHRmount`, then the location will be `/SHRmount/HP-SHR/SybaseDB`.

- 3 Deploy the Content Packs based on the topology that you have selected. For steps to deploy Content Packs, see [Chapter 5, Selecting and Installing the Content Packs](#) of the *HP Service Health Reporter Installation and Configuration Guide*.

- ▶ To deploy Content Packs after installation and configuration of SHR is complete, see [Deploying Content Packs when SHR is running](#) on page 47.

4 For Windows

Place the `Windows.zip` hotfix under `%PMDB_HOME%`. Extract the contents of the folder, and run the following command:

```
%PMDB_HOME%\..\nonOV\perl\bin\perl
%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\SHR_HA_Setup.pl
-sharedDrive <shared_drive_letter> -node primary -logicalhost
<logical_hostname> >> %PMDB_HOME%\HA\setup.log
```

where, `<shared_drive_letter>` is the drive letter of the shared storage (for example, G:), and `<logical_hostname>` is the logical host name for the SHR application.

- ▶ Type the above command in a single line.

Run the following command:

```
sc config OvCtrl start= demand

%PMDB_HOME%\..\Sybase\IQ-15_4\Bin64\iqdsn.exe -y -ws SHRDB -c
"uid=<database.username>;pwd=<password>;eng=<database.sybase.engine>;
dbf=<database.sybase.dbfileloc>\pmdb.db;links=tcipip{host=<database.ho
st>;port=<database.port>}" -v -pe"
```

where,

`<angular bracket>`: The value is obtained from the `%PMDB_HOME%\data\config.prf` file.

`<password>`: The password of the PMDB database entered during post-installation of SHR.

For Linux

Run the following command:

```
perl $PMDB_HOME/HA/Veritas/Linux/SetupScripts/SHR_HA_Setup.pl
-sharedDrive <shared_drive> -node primary -logicalhost
<logical_hostname> -Bosqlpassword <password> -primaryhost
<primary_node_hostname>
```

where, <shared_drive> is the location of the shared drive (for example, SHRMount), <logical_hostname> is the logical host name for the SHR application, and <primary_node_hostname> is the host name of the primary node.

► Type the above command in a single line.

For example,

```
/opt/OV/nonOV/perl/a/bin/perl $PMDB_HOME/HA/Veritas/Linux/
SetupScripts/SHR_HA_Setup.pl -sharedDrive G -node secondary
-logicalhost example.example1.com -Bosqlpassword password
-primaryhost example2.example3.com
```

- 5 Switch the shared storage from the primary node to the secondary node.
- 6 **Perform this step only if SHR is installed in Linux environment.**
 - a Open `ccm.config` located at `/opt/HP/BSM/BO/bobje/`.
 - b Search for the **SERVICENAME** and **SERVICENAME_AUDIT** parameters and note down their values.

Installing SHR on the secondary node

► Before starting installation on the secondary node, ensure that all the SAP BusinessObjects services are stopped on the primary node.

- 1 Start the SHR installation. For instructions on installing SHR, see [Chapter 3, Installing SHR](#) of the *HP Service Health Reporter Installation and Configuration Guide*.
- 2 **After you agree to the licensing terms and conditions on the License Agreement page perform the following steps before proceeding with the installation:**

For Windows

- a Open `PrimaryServer.ini` located at `%temp%/../HP-SHR`.
- b Search for the following parameters:

DATABASEUID

DATABASEUID_AUDIT

- c Replace the values of the above parameters with the primary node server name without the FQDN.

For example, if the complete server name is `server.example.com`, then use just `example` as the input value.

- d Save and close the file.

For Linux

- a Open another console session on the secondary node.
- b Open the `Sp5response.ini` file in edit mode. This file is located at `/tmp/HP-SHR/`.
- c Search for the following parameters:

SERVICENAME

SERVICENAME_AUDIT

- d Replace the values of the above parameters with the values noted down from the primary node.
 - e Save and close the file
- 3 Continue with the installation in the first console.

After SHR is installed:

- 1 Open the `AgentScript_SHR_VCS.pl` file from `C:\HP-SHR\PMDB\HA\Windows\AgentScripts`.
- 2 Enter the drive letter of the shared storage in the `$SharedDriveLetter` parameter.
- 3 Save and close the file.



If you install SHR on Microsoft Windows Server 2003, download `jUNCTION.exe` from the Microsoft Web site, and place it in the `%PMDB_HOME%/bin` or any folder which is associated with the **classpath** environment variable.

Configuring Sybase IQ on Secondary Node

- 1 Copy the `HA.zip` folder from `%PMDB_HOME%\HA\` on the SHR secondary node to `%PMDB_HOME%\` on the Sybase IQ secondary node.
- 2 Copy the `nonOV` folder from `%PMDB_HOME%\..\` on the SHR secondary node to `%PMDB_HOME%\..\` on the Sybase IQ secondary node.
- 3 Open `PmdbConfig.cfg` from `C:\HP-SHR\Sybase\IQ-15_4\Scripts` and replace the Sybase IQ server name with the common logical server name assigned to both the Sybase IQ nodes.
- 4 Restart the Sybase IQ service.

Configuring SHR on the secondary node

1 For Windows

Copy `config.prp` from `%PMDB_HOME%\data\` on the primary node to the same location on the secondary node.



If you change the database password in one of the SHR nodes using the Administration Console, copy `config.prp`, located at `%PMDB_HOME%\data\`, from that node to all the other SHR nodes.

Also, open `config.prp` on each node and change the value of **bo.cms** to the physical hostname of that particular node.

For Linux

Copy `config.prp` from `$PMDB_HOME/data/` on the primary node to the same location on the secondary node.

- ▶ If you change the database password in one of the SHR nodes using the Administration Console, copy `config.prp`, located at `$PMDB_HOME\data\`, from that node to all the other SHR nodes.

Also, open `config.prp` on each node and change the value of `bo.cms` to the physical hostname of that particular node.

Open `config.prp` and replace the value of `bo.cms` with the host name of the secondary node.

2 For Windows

Run the following command:

```
%PMDB_HOME%\..\nonOV\perl\bin\perl
%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\SHR_HA_Setup.pl
-sharedDrive <shared_drive_letter> -node secondary -logicalhost
<logical_hostname> >> %PMDB_HOME%\HA\setup.log
```

where, `<shared_drive_letter>` is the drive letter of the shared storage (for example, G:), and `<logical_hostname>` is the logical host name for the SHR application.

- ▶ Type the above command in a single line.

For example,

```
%PMDB_HOME%\..\nonOV\perl\bin\perl
%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\SHR_HA_Setup.pl
-sharedDrive G -node secondary -logicalhost example.example1.com >>
%PMDB_HOME%\HA\setup.log
```

Run the following commands:

```
sc config OvCtrl start= demand

%PMDB_HOME%\..\Sybase\IQ-15_4\Bin64\iqdsn.exe -y -ws BSMR -c
"uid=<database.username>;pwd=<password>;eng=<database.sybase.engine>;
dbf=<database.sybase.dbfileloc>\pmdb.db;links=tcip{host=<database.ho
st>;port=<database.port>}" -v -pe"

%PMDB_HOME%\..\Sybase\IQ-15_4\Bin64\iqdsn.exe -y -ws SHRDB -c
"uid=<database.username>;pwd=<password>;eng=<database.sybase.engine>;
dbf=<database.sybase.dbfileloc>\pmdb.db;links=tcip{host=<database.ho
st>;port=<database.port>}" -v -pe"
```

where,

`<angular bracket>`: The value is obtained from the `%PMDB_HOME%\data\config.prp` file.

`<password>`: The password of the PMDB database entered during post-installation of SHR.

For Linux

Run the following command:

```
perl $PMDB_HOME/HA/Veritas/Linux/SetupScripts/SHR_HA_Setup.pl
-sharedDrive <shared_drive> -node secondary -logicalhost
<logical_hostname> -Bosqlpassword <password> -primaryhost
<primary_node_hostname>
```

where, <shared_drive> is the location of the shared drive (for example, SHRMount), <logical_hostname> is the logical host name for the SHR application, and <primary_node_hostname> is the host name of the primary node.

▶ Type the above command in a single line.


For example,

```
/opt/OV/nonOV/perl/a/bin/perl $PMDB_HOME/HA/Veritas/Linux/
SetupScripts/SHR_HA_Setup.pl -sharedDrive G -node secondary
-logicalhost example.example1.com -Bosqlpassword password
-primaryhost example2.example3.com
```

For Windows

After both the nodes are configured, the following folders from the HP-SHR directory are copied on the shared drive:

- BusinessObjects
- PMDB
- PostgreSQL
- servers

However, only partial contents of these folders are copied to the shared drive. The contents which are copied to the shared drive are marked with  in the HP-SHR folders on both the SHR nodes.

Creating Server Intelligence Agent (SIA) in the Secondary Node

After installing SHR on both the nodes, you must create a Server Intelligence Agent (SIA) in the secondary node.

Creating Server Intelligence Agent (SIA) in the Secondary Node for Windows

For steps to create Server Intelligence Agent (SIA) in the secondary node for Windows, see [Creating Server Intelligence Agent \(SIA\) in the Secondary Node For Windows](#) on page 16.

Creating Server Intelligence Agent (SIA) in the Secondary Node for Linux

For steps to create Server Intelligence Agent (SIA) in the secondary node for Linux, see [Creating Server Intelligence Agent \(SIA\) in the Secondary Node For Linux](#) on page 19.

Creating SHR Resource Groups in VCS

- ▶ Create the SHR resource groups on both the SHR and remote Sybase IQ clusters.
- ▶ Ensure that the Environment Variable `OvInstallDir` is set on the remote Sybase IQ node where you install the SHR resource group.

Prerequisites

Before creating SHR resource groups, change the following services' startup type to manual:

- HP_PMDB_Platform_Administrator
- HP_PMDB_Platform_Collection
- HP_PMDB_Platform_DB_Logger
- HP_PMDB_Platform_IM
- HP_PMDB_Platform_Message_Broker
- HP_PMDB_Platform_PostgreSQL
- HP_PMDB_Platform_Sybase
- HP_PMDB_Platform_Timer
- Business Objects Webserver
- BOE120SQLAW

- ▶ For steps to change the services' startup type to manual, see [Changing the Services' Startup Type](#) on page 47.

For Linux

- Set the `VCS_HOME` environment variable in both the nodes.
- If the share drive is configured using Linux commands, then the `locking_type` parameter in the `lvm.conf` file must be set to zero. The `lvm.conf` file is located in `/etc/lvm`.
- Ensure that Veritas is running in both the nodes.

If Veritas is not running on any node, run the following command on that node:

```
$VCS_HOME\bin\hastart
```

Follow these steps:

1 For Windows

Open `SHR_win_vcsconfigure.pl` from `%PMDB_HOME%/HA/Veritas/Windows/SetupScripts/`.

For Linux

Open `SHR_linux_vcsconfigure.pl` from `$PMDB_HOME/HA/Veritas/Linux/SetupScripts/`.

2 Specify the following parameters under **User Customizable Parameters**:

For Windows

Parameters	Description
SHRNODE1	The physical host name of the primary node.
SHRNODE2	The physical host name of the secondary node.
SHRNODE1_IP_ADDRESS	The physical IP address of the primary node. For example: 16.123.45.678 .
SHRNODE2_IP_ADDRESS	The physical IP address of the secondary node. For example: 16.123.45.679 .
VIRTUAL_IP_ADDRESS_FOR_SHR	The 'virtual' IP address assigned to SHR. For example: 16.321.45.968 .
NETMASK_FOR_VIRTUAL_IP_ADDRESS_FOR_SHR	The subnet mask for the 'virtual' IP address of SHR.
NETWORK_INTERFACE1	The physical address of the primary node obtained by using the ipconfig/all command. For example, 00-50-56-93-02-F9 .
NETWORK_INTERFACE2	The physical address of the secondary node obtained by using the ipconfig/all command. For example, 00-50-56-93-02-F4 .
UNAME	The username of the Veritas Cluster administrator.
PWD	The password of the Veritas Cluster administrator. You must provide the password when you run the SHR_win_vcsconfigure.pl file.
DOMAIN	The domain to which the Veritas Cluster belongs.
MOUNT_POINT_FOR_SHR_SHARE	The drive letter of the shared storage. For example, G:\ .
FILESYSTEM	The file system type of the shared storage.
SIG_SHR_SHARE	The signature of the shared storage. To get the signature of the shared storage: <ol style="list-style-type: none"> 1 Open the command prompt. 2 Go to %VCS_HOME%\bin\. 3 Run the command: havol -getdrive
SHR_INSTALL_TYPE	The type of SHR installation. Type one of the following values to specify the SHR installation type: <ul style="list-style-type: none"> • 1 → SHR is installed along with Sybase IQ. The resource groups contain services for both SHR and Sybase IQ. • 2 → Remote Sybase IQ installation. The resource groups contain services only for Sybase IQ.

For Linux

Parameters	Description
SHRNODE1	The physical host name of the primary node.
SHRNODE2	The physical host name of the secondary node.
SHRNODE1_IP_ADDRESS	The physical IP address of the primary node. For example: 16.123.45.678 .
SHRNODE2_IP_ADDRESS	The physical IP address of the secondary node. For example: 16.123.45.679 .
VIRTUAL_IP_ADDRESS_FOR_SHR	The 'virtual' IP address assigned to SHR. For example: 16.321.45.968 .
NETMASK_FOR_VIRTUAL_IP_ADDRESS_FOR_SHR	The subnet mask for the 'virtual' IP address of SHR.
NETWORK_INTERFACE1	The physical address of the primary node obtained by using the <code>ipconfig/all</code> command. For example, 00-50-56-93-02-F9 .
MOUNT_POINT_FOR_SHR_SHARE	The drive letter of the shared storage. For example, G:\ .
SHRmount	The folder where the device is mounted.
VOLUME_GROUP_ON_SHARED_DISK	Name of Linux volume group which contains the volume.
NETWORK_INTERFACE_ADDRESS	Name of the NIC device associated with the IP address.
ADDRESS	Virtual IP address associated with the interface. For example: 16.123.45.678 .
NETMASK	Subnet mask associated with the IP address.
FILESYSTEM	The file system type of the shared storage.
LOGICAL_VOLUME_ON_SHARED_DISK	Name of Linux LVM2 logical volume.
SHR_INSTALL_TYPE	The type of SHR installation. Type one of the following values to specify the SHR installation type: <ul style="list-style-type: none">• 1 → SHR is installed along with Sybase IQ. The resource groups contain services for both SHR and Sybase IQ.• 2 → Remote Sybase IQ installation. The resource groups contain services only for Sybase IQ.

- 3 Run the `SHR_win_vcsconfigure.pl` file using the following command:

For Windows

```
%PMDB_HOME%\..\nonOV\perl\bin\perl.exe
"%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\
SHR_win_vcsconfigure.pl"
```

For Linux

```
perl $PMDB_HOME/HA/Veritas/Linux/SetupScripts/
SHR_linux_vcsconfigure.pl
```

▶ Type the above command in a single line.

4 For Linux

- a Open the Veritas Java console.
In the left pane, navigate to **SHR_Resource_Group** → **Mount** → **shr-mount**.
- b Click the **Properties** tab.
- c Edit the value of `FsckOpt` attribute to `-n`.
- d Save the configuration.

Updating BusinessObjects DSN Details in SHR nodes

▶ You must perform this task on the primary and secondary SHR nodes.

To update the BusinessObjects DSN details in SHR node:

- 1 Go to **Start Programs** → **BusinessObjects XI 3.1** → **BusinessObjects Enterprise** → **32-bit Data Source (ODBC)**.

The ODBC Data Source Administrator window opens.

- 2 Click the **System DSN** tab.
- 3 Under System Data Sources, select **BSMR**.
- 4 Click **Configure**.

The ODBC Configuration for SQL Anywhere window opens.

- 5 Click the **Network** tab.
- 6 Under TCP/IP Protocol Options, click **Host**.
- 7 In the **Value** field for Host, enter the logical host name of the Sybase IQ node.

▶ For SHR primary node, enter the logical host name of the Sybase IQ primary node, and for SHR secondary node, enter the logical host name of the Sybase IQ secondary node.

- 8 Click the **Login** tab.
- 9 In the **Server name** field, enter the logical host name of the Sybase IQ node.

▶ For SHR primary node, enter the logical host name of the Sybase IQ primary node, and for SHR secondary node, enter the logical host name of the Sybase IQ secondary node.

- 10 Click the **ODBC** tab and click **Test Connection**.

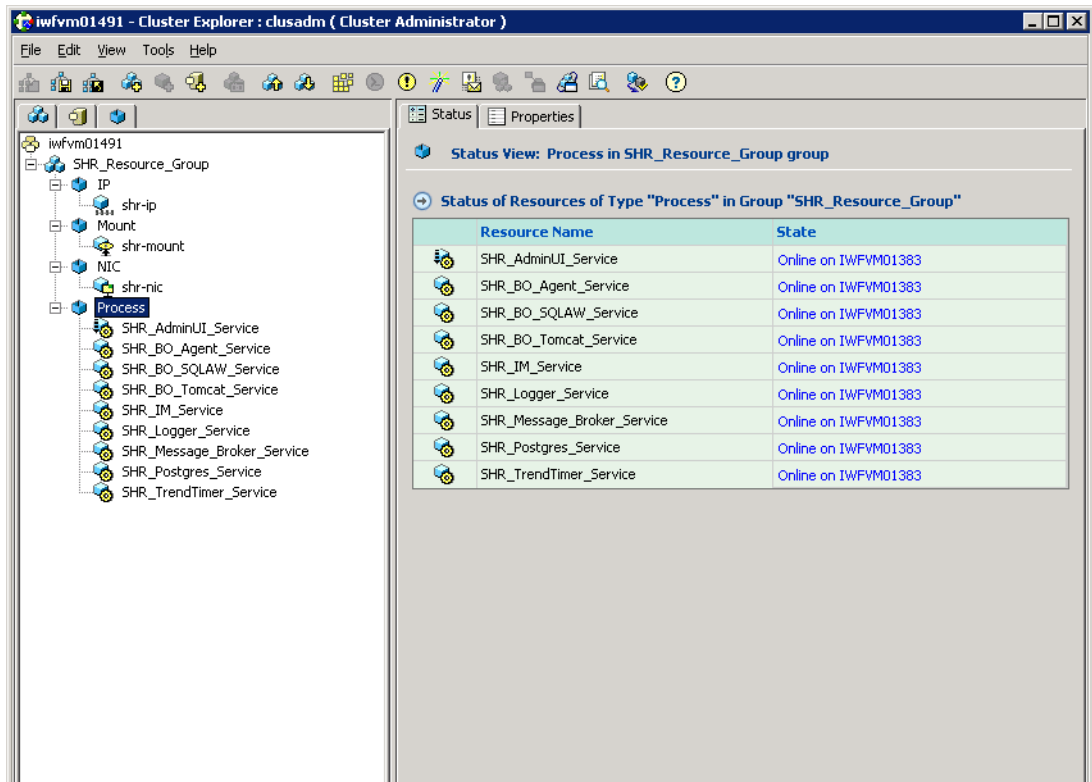
If you have entered the correct Sybase IQ node details, then the ODBC Configuration for SQL Anywhere window displays the Connection Successful message.

- 11 Click **OK**.
- 12 Click **OK** on the ODBC Data Source Administrator.

Validating SHR Installation

To validate whether SHR resource groups are created properly on both the nodes:

- 1 Go to the Veritas Administration Java Console on the SHR setup.
- 2 Login to one of the nodes and see if all the services under SHR_Resource_Group are online.

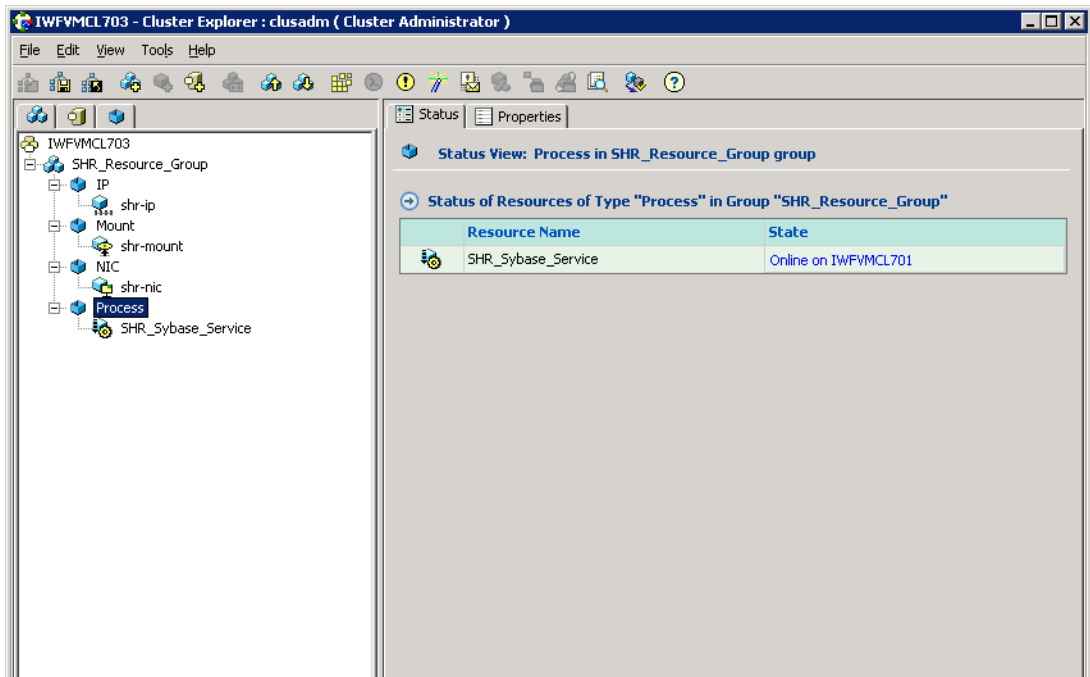


The screenshot shows the Cluster Explorer interface for node iwfv01491. The left pane displays a tree view of resources under the SHR_Resource_Group, including IP, Mount, NIC, and Process. The Process group contains several services: SHR_AdminUI_Service, SHR_BO_Agent_Service, SHR_BO_SQLAW_Service, SHR_BO_Tomcat_Service, SHR_IM_Service, SHR_Logger_Service, SHR_Message_Broker_Service, SHR_Postgres_Service, and SHR_TrendTimer_Service. The right pane shows the Status View for the Process in the SHR_Resource_Group group, displaying a table with the following data:

Resource Name	State
SHR_AdminUI_Service	Online on IWFVM01383
SHR_BO_Agent_Service	Online on IWFVM01383
SHR_BO_SQLAW_Service	Online on IWFVM01383
SHR_BO_Tomcat_Service	Online on IWFVM01383
SHR_IM_Service	Online on IWFVM01383
SHR_Logger_Service	Online on IWFVM01383
SHR_Message_Broker_Service	Online on IWFVM01383
SHR_Postgres_Service	Online on IWFVM01383
SHR_TrendTimer_Service	Online on IWFVM01383

- 3 Go to the Veritas Administration Java Console on the Sybase IQ setup.

Login to one of the nodes and see if all the services under SHR_Resource_Group are online.



4 Troubleshooting

For information on the location of the different SHR installation and post-installation log files and other basic installation troubleshooting steps, see [Chapter 9 Troubleshooting SHR Installation](#) of the *HP Service Health Reporter Installation and Configuration Guide*.

SHR Agent Script

SHR agent script monitors all SHR services and logs the status of each service into the log file specific to that service.

The log files for these services are kept in the `%PMDB_HOME%\HA\log` folder.

You can change the logging setting (for example log file size, debug level) by editing the `log4perl_shr_ha.conf` file located in the `%PMDB_HOME%\HA\common\config\` folder.

VCS Log Files

VCS generates two types of error message logs:

- Engine log
- Agent Log

The log files generated by these two log types are appended by an alphabets in the descending order. For example, the first file will be named as `<filename>_A.log`, the second file will be named as `<filename>_B.log`, and so on.

SHR Resource Group Script Troubleshooting

To troubleshoot any problems in the SHR resource group script:

- Check whether all the user customizable parameters are defined correctly in the script.
- Check the `SHR_Resource_creation.LOG` file present in the `%PMDB_HOME%\HA\Veritas\Windows\SetupScripts\` folder.

A Appendix

This appendix provides you with additional information relevant to SHR.

Deploying Content Packs when SHR is running

Follow these steps to deploy the Content Packs if SHR is already running:

- 1 Open `ha_config.prp` from the `%PMDB_HOME%\HA\common\config\` folder.
- 2 Remove '#' from the `#maintenance mode=true` parameter.
- 3 Save the file and exit.
- 4 Deploy the Content Packs from the Deployment Manager page in the Administration Console. For more information, see [Chapter 6, Selecting and Installing the Content Packs](#) of the *Installation and Configuration Guide*.
- 5 After you deploy the Content Packs, open `ha_config.prp`.
- 6 Add '#' to the `maintenance mode=true` parameter.
- 7 Save the file and exit.

Changing the Services' Startup Type

Follow these steps to change the services' startup type to manual:

- 1 On the SHR system, click **Start** → **Run**. The Run dialog box opens.
- 2 In the **Open** field, type `services.msc`. The Services window opens.
- 3 On the right pane, right-click the service which you want to start manually, and then click **Properties**.
- 4 Under the General tab, from the Startup type drop-down list, select **Manual**.
- 5 Click **OK**.
- 6 Close the Services window.

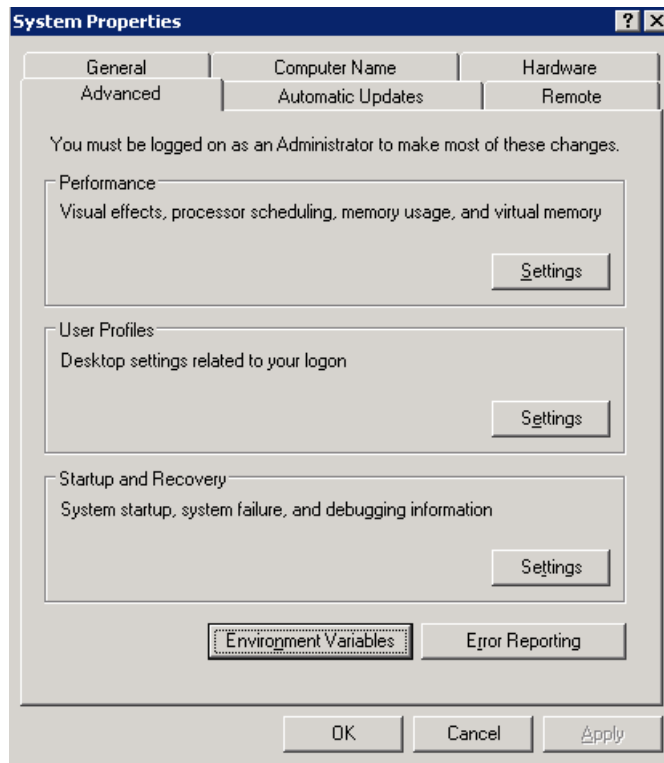
Creating Sybase IQ as a Service

Complete the following prerequisites before creating Sybase IQ as a service.

Task 1: Setting the PMDB_HOME environment variable on the remote Sybase IQ node

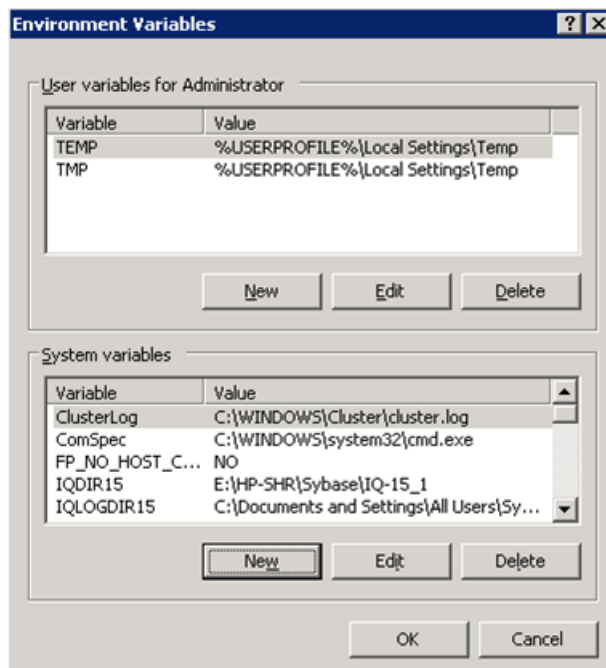
To set the PMDB_HOME environment variable:

- 1 Go to the **Control Panel** and double-click **System**.
The System Properties window opens.
- 2 Click the **Advanced** tab.

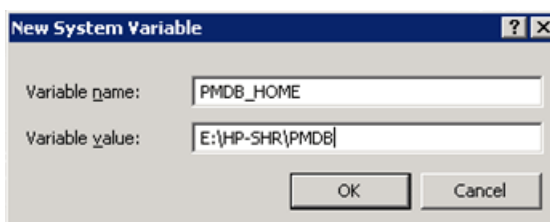


- 3 On the Advanced tab, click **Environment Variables**.

The Environment Variables window opens.



- In the System Variables box, click **New**.
The New System Variable window opens.
- In the **Variable name** field, enter **PMDB_HOME**.
In the **Variable value** field, enter **<product_installation_directory>\PMDB** where, **<product_installation_directory>** is the directory where Sybase IQ is installed.
For example, **E:\HP-SHR\PMDB**.



- Click **OK**.
- In the System Variables box, click **New**.
The New System Variable window opens.
- In the **Variable name** field, enter **OvInstallDir**.
In the **Variable value** field, enter **<product_installation_directory>** where, **<product_installation_directory>** is the directory where Sybase IQ is installed.
For example, **E:\HP-SHR**.
- Click **OK**.

Task 2: Copying files to the remote Sybase IQ node

Copy the following files to the remote Sybase IQ node.

The directories given below are the directories where the files are present as well as the directories where you must copy the files.

If these directories don't exist on the remote Sybase IQ node, create the directories before copying the files.

File Name	Directory
SybaseServiceCreation.bat	%PMBD_HOME%\bin\
JavaService.exe	%PMBD_HOME%\bin\JavaService\
JavaServiceDebug.exe	%PMBD_HOME%\bin\JavaService\
LGPL.txt	%PMBD_HOME%\bin\JavaService\
BSMRLogConfig.xml	%PMBD_HOME%\config
BSMRLogConfigClient.xml	%PMBD_HOME%\config
config.prp	%PMBD_HOME%\data
activemq-all-5.1.0.jar	%PMBD_HOME%\lib
commons-logging-1.0.4.jar	%PMBD_HOME%\lib
commons-logging-api.jar	%PMBD_HOME%\lib
log4j-1.2.15.jar	%PMBD_HOME%\lib
utils.jar	%PMBD_HOME%\lib

Task 3: Verifying if Sybase IQ service already exists

To verify whether Sybase IQ service already exists:

- 1 Go to **Start > Run**.
The Run window opens.
- 2 In the **Open** field, enter **Services.msc**.
- 3 The Services window opens. You can check whether the **HP SH Reporter Sybase Service** is present in the list of services.

If the **HP SH Reporter Sybase Service** exists, then remove the service before proceeding further.

To remove the service, run the following command:

```
%PMDb_HOME%\bin>SybaseServiceCreation.bat -remove
<product_installation_directory>
```

where, *<product_installation_directory>* is the directory where Sybase IQ is installed.

For example, %PMDb_HOME%\bin>SybaseServiceCreation.bat -remove
E:\HP-SHR.

Creating Sybase IQ Service

To create a new Sybase IQ service:

- 1 Open the command prompt and go to %PMDb_HOME%/bin.

- 2 Run the following command:

```
%PMDB_HOME%\bin>SybaseServiceCreation.bat -install  
<product_installation_directory>
```

where, <product_installation_directory> is the directory where Sybase IQ is installed.

For example, %PMDB_HOME%\bin>SybaseServiceCreation.bat -install
E:\HP-SHR.

- 3 Go to **Start > Run**.

The Run window opens.

- 4 In the **Open** field, enter **Services.msc**.

The Services window opens.

- 5 Right-click HP SH Reporter Sybase Service and click Start.

This starts the database.

To verify whether the database is started, go to task manager and check whether IQSRV15.exe is visible in the Process tab.

We appreciate your feedback!

If an email client is configured on this system, click

[Send Email](#)

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

Product name and version: HP Service Health Reporter 9.30

Document title: Installation and Configuration Guide

Feedback:



