Oracle® Fail Safe

Tutorial

Release 4.1.1 for Microsoft Windows

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Oracle Fail Safe Tutorial, Release 4.1.1 for Microsoft Windows

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Preface

Oracle Fail Safe supports a wide variety of high-availability business solutions on Windows clusters. Oracle Fail Safe support includes Oracle databases and all applications that is configured as a Windows service.

This guide provides step-by-step procedures to help you learn how to implement high-availability solutions with Oracle Fail Safe.

Audience

This guide is intended for anyone who wants to learn the basic operations of Oracle Fail Safe on Windows systems.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Related Documents

In addition to this document, the Oracle Fail Safe documentation set includes the following:

- *Oracle Fail Safe Release Notes for Microsoft Windows*

- *Oracle Fail Safe Concepts and Administration Guide for Microsoft Windows*

- *Oracle Fail Safe Error Messages for Microsoft Windows*

- *Oracle Fail Safe Installation Guide for Microsoft Windows*

- For online assistance, Oracle Fail Safe Manager provides online help topics and a link to the online documentation set. From the **Help** menu bar in Oracle Fail Safe Manager, select **Help Topics** to access the online help topics.

Refer to the following documentation for information about related products:

- For more information about cluster systems, see the Microsoft Windows Failover Clusters documentation.

- For more information about other related products, see the documentation for those products.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

1

Using This Tutorial

This chapter provides information that you must know before using this tutorial.

1.1 Intended Uses

This tutorial is designed to be used in one of the following ways:

- A quick overview of the steps needed to configure resources (such as single-instance databases) using Oracle Fail Safe to ensure high availability of the same

- A step-by-step introduction to using Oracle Fail Safe Manager

  If you intend to use the tutorial this way, first ask your cluster administrator for at least five IP addresses that you can use on the cluster for virtual addresses. In addition, it is best to follow the lessons in order.

This tutorial provides the basic steps for configuring resources to make them highly available; it does not provide detailed information on the concepts behind high availability. You may find it helpful to refer to the Oracle Fail Safe Concepts and Administration Guide while using this tutorial.

1.2 Cluster Setup

This tutorial is intended to be run on a two-node cluster.

1.3 Navigation

To navigate through the HTML version of the tutorial, use the left arrow and the right arrow to go through each lesson sequentially. You can return to the Table of Contents at any time by clicking the Contents link. You can access the rest of the Oracle Fail Safe documentation set by clicking the Product link.

1.4 Terminology

The following terminologies are frequently used in this tutorial:

- **Cluster:** A group of independent computing systems that operates as a single virtual system.

- **Failover:** The process of taking cluster resources offline on one node and bringing them back online on another node. This process can either be planned (upgrades or maintenance) or unplanned (system failure).

- **Group:** A logical collection of cluster resources that forms a minimal unit of failover. In a failover situation, the group is moved to a failover node. A group resides on only one cluster node at a time. In newer versions of failover clusters, "service or application" or "clustered role" is referred to as a group.

- **Resource:** A physical or logical component that is available to a computing system. For example, disks, the network IP address, Forms Servers, Reports Servers, and Web servers are resources.

- **Virtual address:** A network address at which the resources of a group can be accessed, regardless of the hardware server hosting those resources.

- **Virtual server:** A group with one or more virtual addresses.

2

Starting Oracle Fail Safe Manager and Validating the Cluster

This chapter describes the steps necessary to invoke Oracle Fail Safe Manager and to validate the cluster.

2.1 Starting Oracle Fail Safe Manager

To start Oracle Fail Safe Manager from the taskbar, click the **Start** button, select **All Programs**, then the Oracle home into which you installed Oracle Fail Safe Manager, then select **Oracle Fail Safe Manager**.

2.2 Populating the Tree View

When you start Oracle Fail Safe Manager, the Oracle Fail Safe Manager window opens. If there are no clusters added to the tree view, then select **Add Cluster** action under the **Actions** menu to open the Add Cluster dialog box. Once the dialog box opens, enter the cluster alias you want to manage. If the tree view is populated, but the cluster you want to manage is not in the tree view, see Section 2.3.
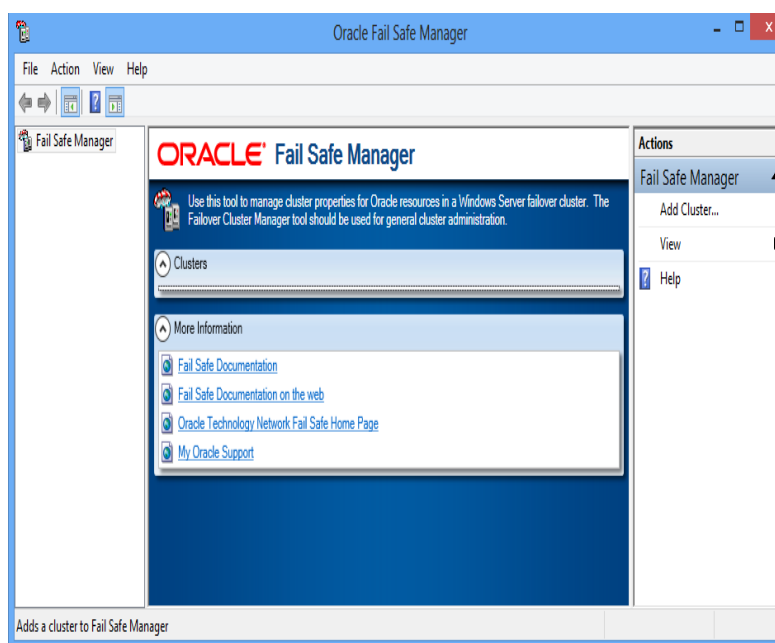
2.3 Adding a Cluster to a Populated Tree View

If the tree view contains a list of clusters, but not the one you want to manage, you can add a cluster to the populated tree view. From the **Actions** menu in the right pane of the screen, select **Add Cluster**. This opens the Add Cluster dialog box with Cluster Alias field and Connect using different credentials check box.
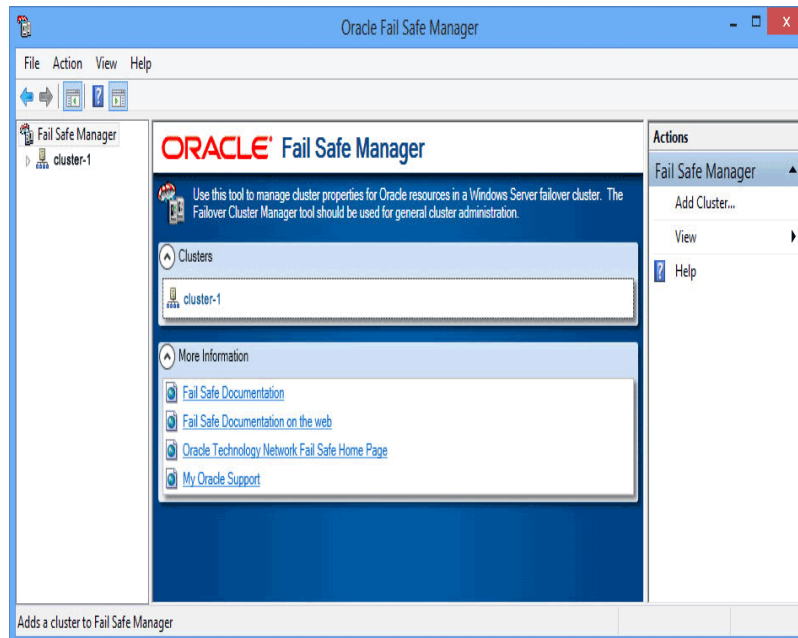
2.4 Using the Add Cluster and Windows Security Dialog Box

Enter the alias for the cluster to manage in the **Cluster Alias** field.

If you want to use another user's credentials, then select **Connect using different credentials** option. This opens a Windows Security Cluster Credentials dialog box that enables you to enter new credentials for administering the cluster.
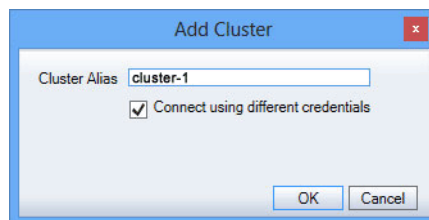
Enter the username and password in the fields provided. If you want the credentials to be saved, then select the **Remember my credentials** option and click **OK**. The credential is saved in the Windows credentials cache so that when you connect to the cluster, Oracle Fail Safe Manager checks to see if there are any saved credentials for that cluster and use the same to connect to the cluster.

2.5 Connecting to the Cluster

After the tree view is populated with one or more cluster aliases, you must connect to the cluster or clusters before you can manage them with Oracle Fail Safe Manager.

In the tree view, select the cluster to which you want Oracle Fail Safe Manager to connect. Then select **Connect** in the **Actions** menu on the right pane of the screen. It establishes a connection with Oracle Fail Safe Server immediately.
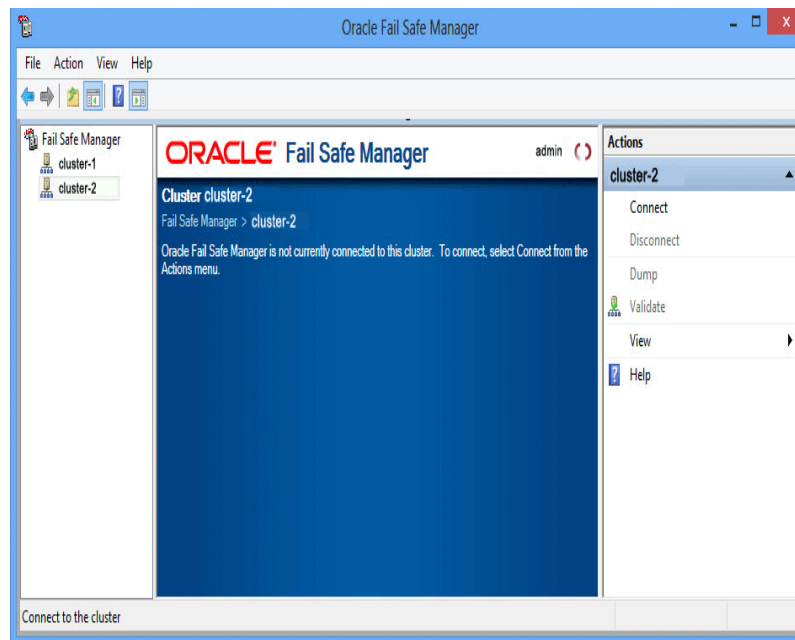
2.6 Validating the Cluster

Before beginning work with Oracle Fail Safe Manager, validate that the cluster hardware and software are correctly configured by choosing the **Validate** cluster action.

The first time you connect to a cluster after you install or upgrade Oracle Fail Safe software, Oracle Fail Safe Manager prompts you to run the **Validate** operation to validate the installation of the cluster.

If this is not your first time using Oracle Fail Safe with this cluster, select **Validate** from the **Actions** menu on the right pane of the screen.
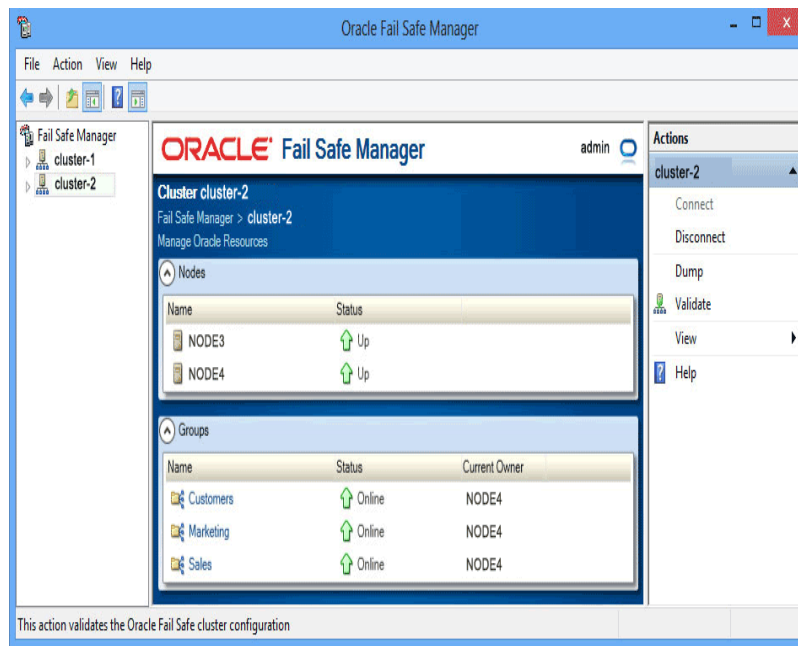
2.7 Viewing the Results of the Validate Cluster Operation

Oracle Fail Safe displays the progress of the **Validate** cluster operation in the progress window.

Validating cluster cluster-2

NODE4 : Starting verification of cluster cluster-2
NODE4 : Gathering cluster information
NODE3 : Gathering cluster information

NODE4 : Verifying the Oracle homes

NODE4 : Verifying the Oracle Services for MSCS installation
  NODE4 has Oracle Fail Safe Server version 4.1.1.0 installed in Ofs41_home1
  NODE3 has Oracle Fail Safe Server version 4.1.1.0 installed in Ofs41_home1

NODE4 : Verifying the Oracle Services for MSCS resource providers
Verifying the Generic Service resource
 Checking DLLs for resource provider

Verifying the Oracle Management Agent resource
 Checking DLLs for resource provider
 Checking for software installation
  The Oracle Management Agent software is not installed on any of the cluster nodes

Verifying the Oracle Database resource
 Checking DLLs for resource provider
 Checking for MSCS resource DLLs provided by Oracle
 Checking for software installation
  NODE4 has Oracle Database version 12.1.0.2 installed in OraDB12Home1
  NODE3 has Oracle Database version 12.1.0.2 installed in OraDB12Home1

The clusterwide operation completed successfully.

Print Save As... Cancel Close

3

Creating a Sample Single-Instance Database

This lesson shows you how to create a sample single-instance database called **TestDb**. The rest of this tutorial assumes you have created this database.

3.1 Opening the Create Sample Database Dialog Box

Select **Create Sample Database** from the **Actions** menu of Oracle Resources. The Create Sample Database dialog box opens.
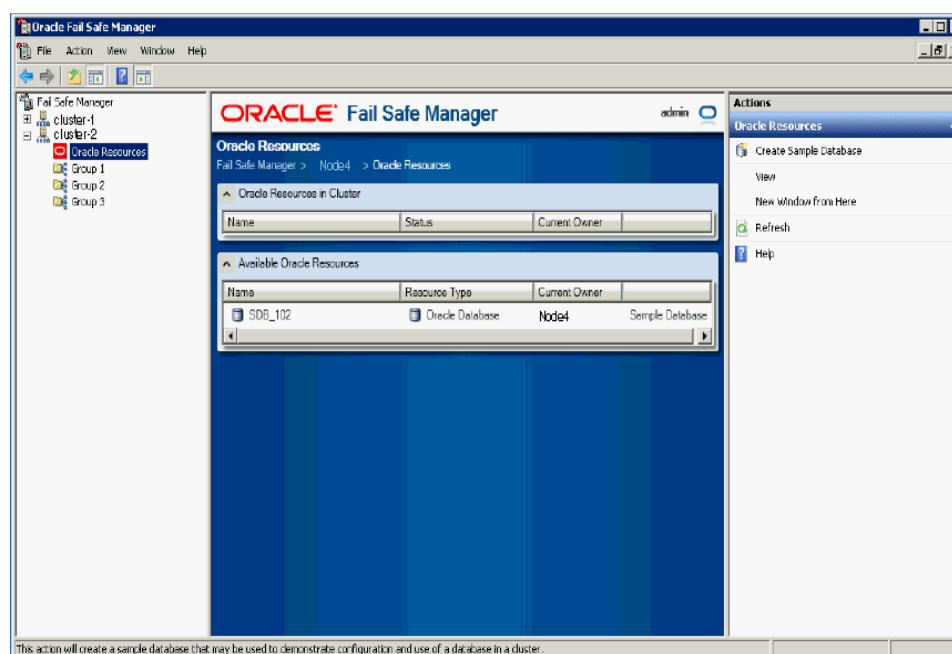
3.2 Using the Create Sample Database Dialog Box

Enter a service name of **TestDb** to be used across the cluster for the sample database in the **Service Name** field. In the **Disk** resource field, select a disk on which to build the sample database, and then in the **Database Version** field, select the version of the Oracle database you want to create. If you click the drop-down list against **Database Version**, then it shows the Oracle home names in which to create it.

If Operation System Authentication is not being used, then enter a valid password for the database SYS Account configuration and confirm the same in the respective **Password** and **Confirm Password** fields.

Starting with Oracle Database 12c Release 1 (12.1), Oracle Database supports the use of Oracle Home User, specified at the time of installation. An Oracle Home User is a low-privileged Windows User Account specified during installation that runs most of the Windows services required by Oracle for the Oracle home. If the user selects an Oracle Home User, then the user must enter a password and confirm the same in the fields provided under Oracle Home User Password group.

Click **OK**.

> **See Also:**
>
> ■ "Specify Oracle Home User Name and Password" in *Real Application Clusters Installation Guide* for your platform
>
> ■ "Supporting Oracle Home User on Windows" in *Oracle Database Platform Guide for Microsoft Windows*

Do not use the sample database as a production database.

3.3 Viewing the Progress of the Clusterwide Operation

A progress window opens displaying the progress of the creation of sample database on node operation. When the operation completes, Oracle Fail Safe opens a Clusterwide Operation Status window to let you know whether the operation has completed successfully.

Click **OK**.

Creating sample database "TestDb" on node "Node4"
  NODE4 : Performing Initialization processing
  NODE3 : Gathering cluster information needed to perform the specified operation
  NODE4 : Gathering cluster information needed to perform the specified operation
  NODE4 : Analyzing cluster information needed to perform the specified operation
  NODE4 : Preparing for configuration of resource TestDb
  NODE4 : Creating the standalone resource
Calling the Database Configuration Assistant to create sample database; this will take
a few minutes...

Copying database files
1% complete
3% complete
11% complete
18% complete
26% complete
33% complete
37% complete
Creating and starting Oracle instance
40% complete
45% complete
50% complete
55% complete
56% complete
60% complete
62% complete
Completing Database Creation
66% complete
70% complete
73% complete
85% complete
96% complete
100% complete
Look at the log file "C:\Oracle\cfgtoollogs\dbca\TestDb\TestDb.log" for further
details.

Starting database TestDb
Instance name : INS4
Database name : TestDb
Database Version : 12.1.0.2
Parameter File : F:\OFSDB\Admin\TestDb\pfile\INIT.ora

NODE4 : Validating the standalone resource
Validating the database for service name TestDb:
NODE4 : Standalone resource TestDb.was created successfully
The clusterwide operation completed successfully.

Print   Save As...   Cancel   Close

Clusterwide Operation Status   ×

The clusterwide operation completed successfully.

OK

4

Validating a Standalone Single-Instance Database

The Validate Standalone Database operation performs validation checks to ensure that the standalone database is configured correctly on the node where it resides and to remove any references to the database that may exist on other cluster nodes before adding it to a group. (References to the database may exist on other cluster nodes if the database was once added to a group and then later removed.) This ensures that the database can be made highly available using Oracle Fail Safe.

Because Oracle Fail Safe created it, you may not validate the database that you created in Chapter 3. However, for demonstration, you do so in this lesson.

4.1 Using the Validate Standalone Database Command

Select the **TestDb** database to validate, then select **Validate** from the **Actions** menu of the Oracle Resources view. You can also right-click the resource in the Available Oracle Resources list to view actions at Available Resource level and select **Validate**.
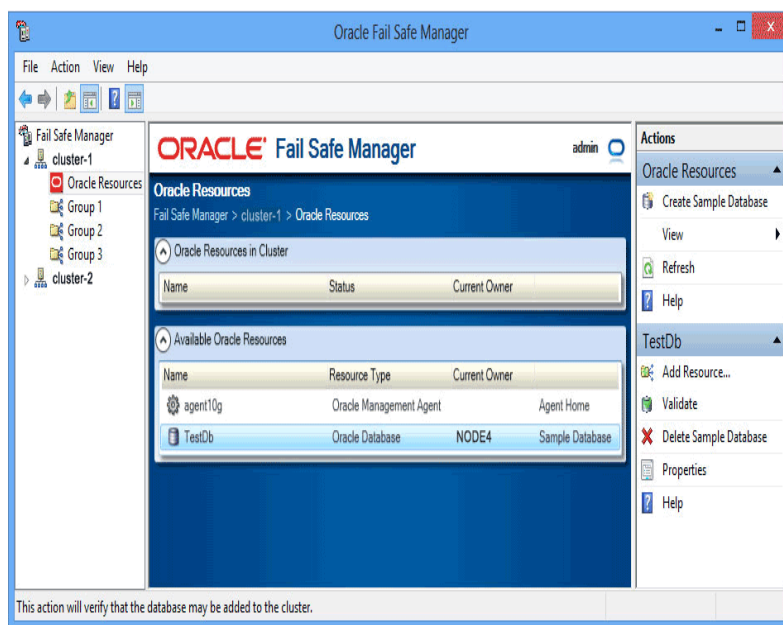
4.2 Using the Validate Standalone Database Dialog Box

Depending on whether an operating system authentication is enabled, Oracle Fail Safe may open the Enter Database SYS Account Password window to confirm that you have SYS account privileges to validate the sample database. If this window opens, enter the password for the SYS account.

Enter Database SYS Account Password

Database

Instance Name OFS1

Node NODE4

SYS Account

Password [   ]

[OK] [Cancel]

4.3 Viewing the Progress of the Clusterwide Operation

Oracle Fail Safe displays the results of the Validate Standalone Database operation. (During the operation, a message window may ask to start the TestDb instance. If this message is displayed, click **Yes**.)
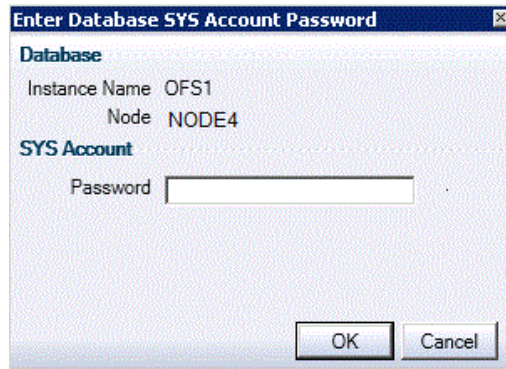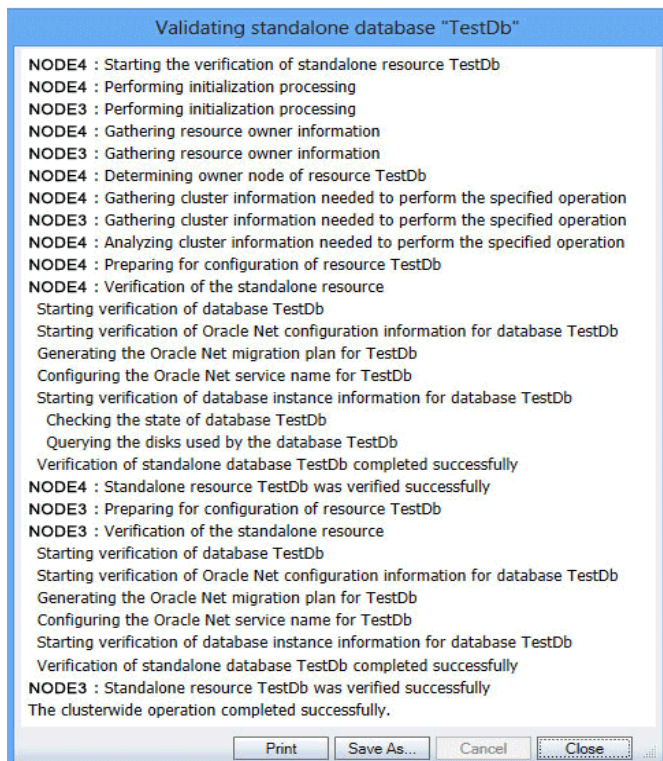
Validating standalone database "TestDb"

NODE4 : Starting the verification of standalone resource TestDb
NODE4 : Performing initialization processing
NODE3 : Performing initialization processing
NODE4 : Gathering resource owner information
NODE3 : Gathering resource owner information
NODE4 : Determining owner node of resource TestDb
NODE4 : Gathering cluster information needed to perform the specified operation
NODE3 : Gathering cluster information needed to perform the specified operation
NODE4 : Analyzing cluster information needed to perform the specified operation
NODE4 : Preparing for configuration of resource TestDb
NODE4 : Verification of the standalone resource
 Starting verification of database TestDb
 Starting verification of Oracle Net configuration information for database TestDb
 Generating the Oracle Net migration plan for TestDb
 Configuring the Oracle Net service name for TestDb
 Starting verification of database instance information for database TestDb
  Checking the state of database TestDb
  Querying the disks used by the database TestDb
 Verification of standalone database TestDb completed successfully
NODE4 : Standalone resource TestDb was verified successfully
NODE3 : Preparing for configuration of resource TestDb
NODE3 : Verification of the standalone resource
 Starting verification of database TestDb
 Starting verification of Oracle Net configuration information for database TestDb
 Generating the Oracle Net migration plan for TestDb
 Configuring the Oracle Net service name for TestDb
 Starting verification of database instance information for database TestDb
 Verification of standalone database TestDb completed successfully
NODE3 : Standalone resource TestDb was verified successfully
The clusterwide operation completed successfully.

[Print] [Save As...] [Cancel] [Close]

5

Adding a Single-Instance Database to a Group

This lesson shows how to add a single-instance database to a group. When you add a single-instance database to a group, you make that database highly available. If the node on which the database is currently running is taken offline or fails, the database is restarted on a surviving cluster node.

In this lesson, you will add the sample database that you created in Chapter 3 to Group 1 group.

## 5.1 Starting the Add This Resource to a Group Wizard

Select the resource you want to add to a group, then select **Add Resource** action from the **Actions** menu of the Oracle Resources view. Or right-click the selected resource in the Available Oracle Resources group to select **Add Resource** from the Available Oracle Resources actions.
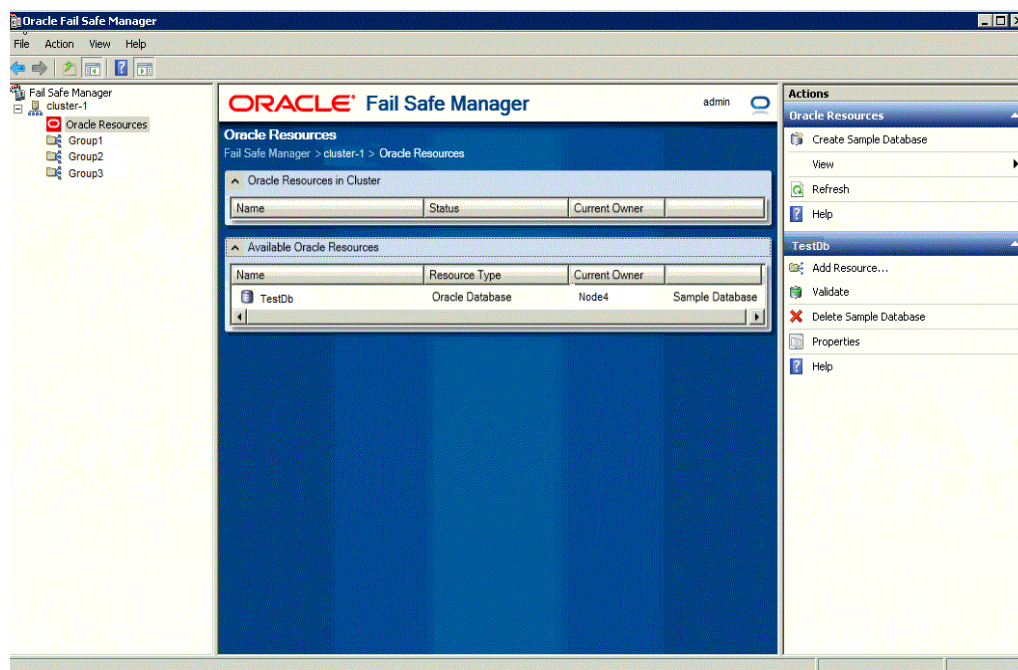
5.2 Adding Cluster Resource Name

Microsoft failover clusters allows you to use any text string for the name of a resource. By default, Oracle Fail Safe uses the instance ID for the database. You can change the

name to something more meaningful if desired. For example, the cluster resource name is changed to "Test Database" here.
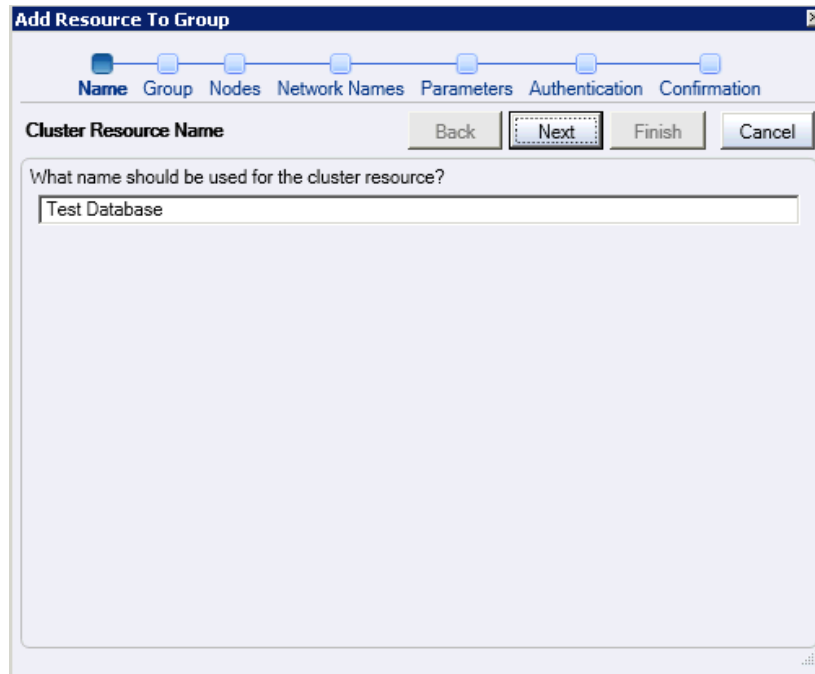

5.3 Using the Add Resource to Group Wizard

The Add Resource to Group guided process wizard opens to assist in the configuration of the cluster resource. On this page, select the cluster group that will own the database. This group should own the disks used by the database. If Oracle Fail Safe finds that any of the disks are owned by a different group, then it asks you if you want to move those disks to the selected group.

Click **Next**.
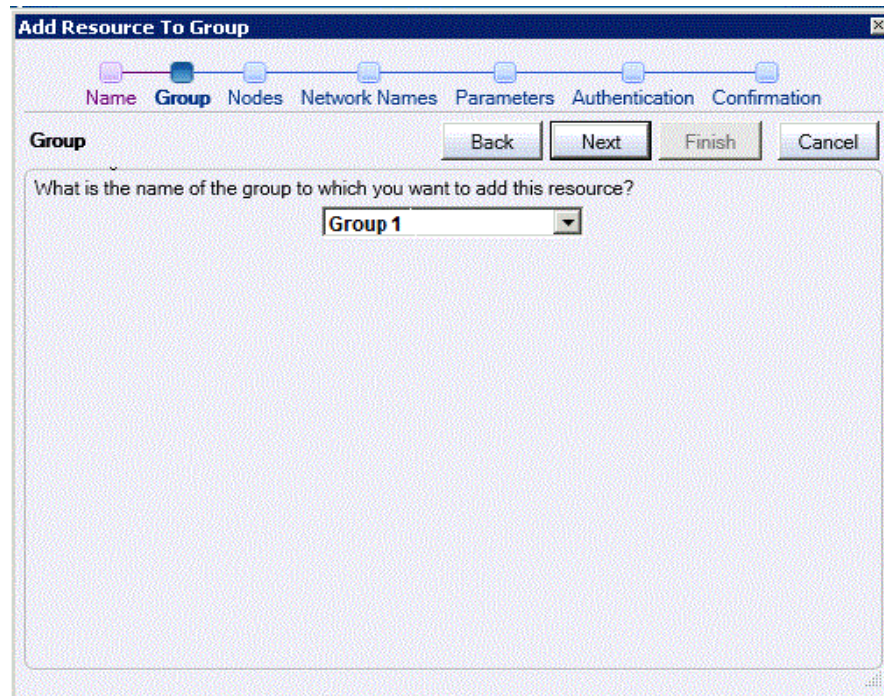
5.4 Specifying the Nodes

If there are more than two nodes in the cluster, then it is necessary to determine which nodes could possibly host the database. Select the desired nodes from the **Available** list and move them to the **Selected** list. If any of the resources currently residing in the group exclude one of the nodes as a possible owner, then that node is shown in the **Unavailable** list. Also, the nodes that are not currently online is shown in the **Unavailable** list.
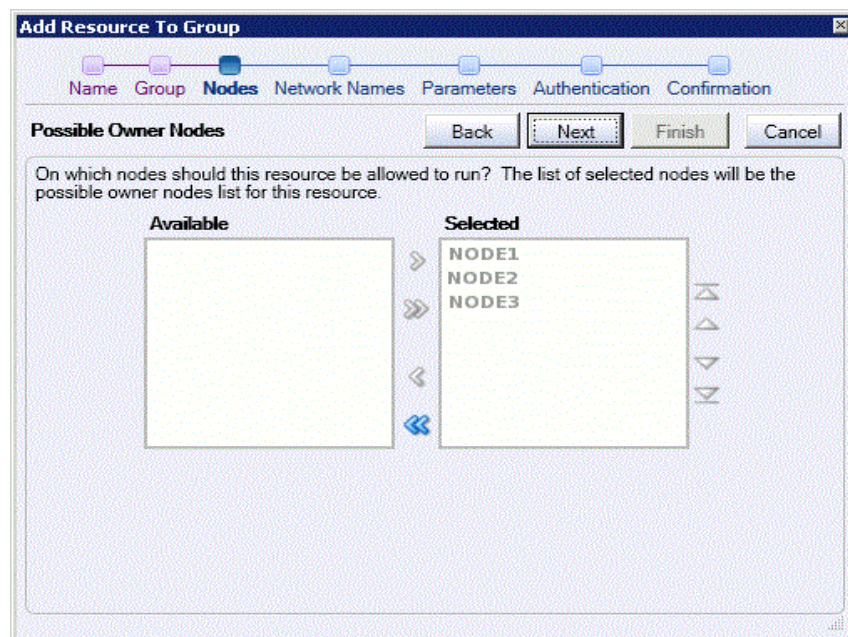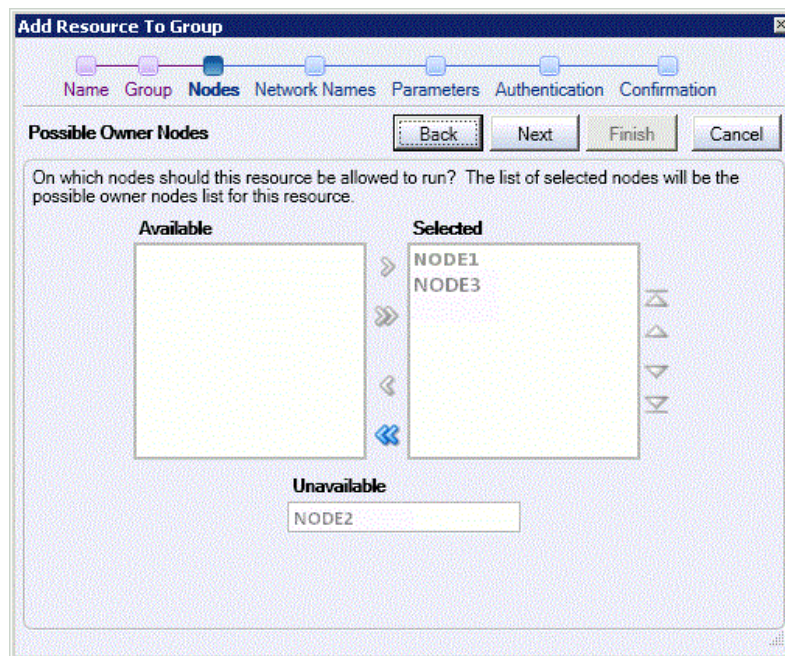
5.5 Specifying the Virtual Host

If the cluster group has multiple network virtual addresses and it currently does not have any Oracle network TNS listeners configured, then you must select the addresses the new network listener should use for incoming database connections. Select the desired virtual addresses from the **Available** list and move them to the **Selected** list.
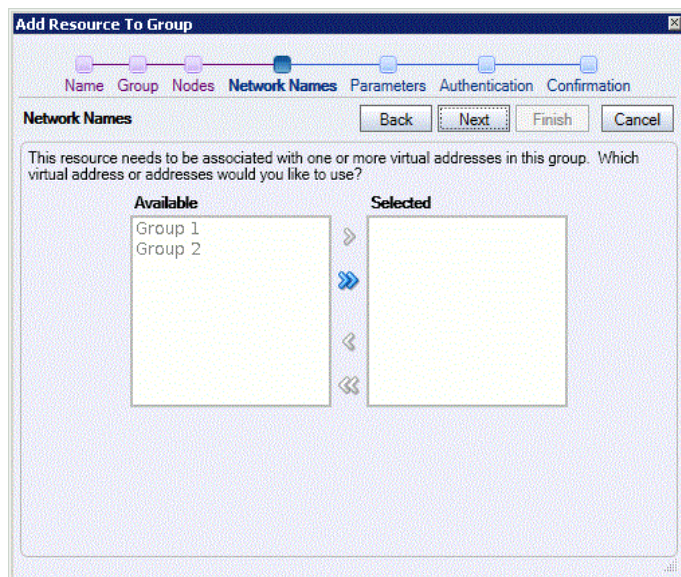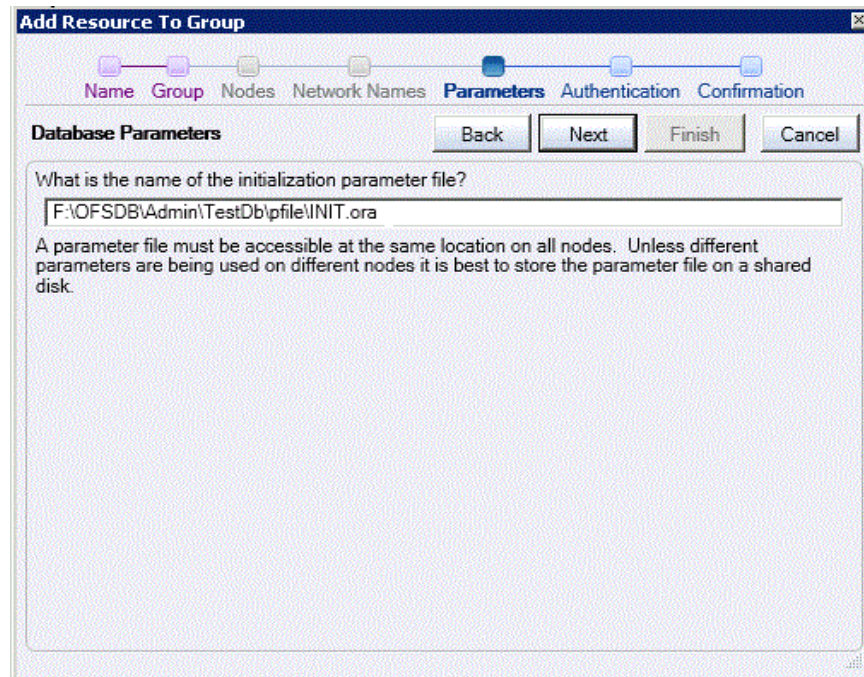

5.6 Specifying the Database Parameters

The **Database Parameters** file field is retrieved automatically. Enter the file name for the database parameters file (`pfile`). For most applications it is best to store the pfile on a shared disk in the group rather than on a node local disk. However, in situations where some nodes may not have the same resources available (such as memory or CPUs), it may be helpful to use a different pfile for each node in the cluster so that the

database can be started using parameters that are appropriate for each particular node. However, when using local files, the pfile must have the same path and file name, that is, each node must use the exact file name that is entered on this page.

Click **Next**.

5.7 Specifying Database Authentication

On this page, if operating system authentication is not enabled cluster wide, then the database is configured to use either operating system authentication or password authentication through the SYS database user.

Click **Next**.

If there is an Oracle Home User configured, then Oracle Fail Safe displays an additional set of password fields for the Oracle Home User. Ensure that you provide the Oracle Home User password too.

5.8 Confirming the Addition of the Database Resource

Click **Finish** to begin the process of configuring the database so that it may be accessed as a cluster resource.
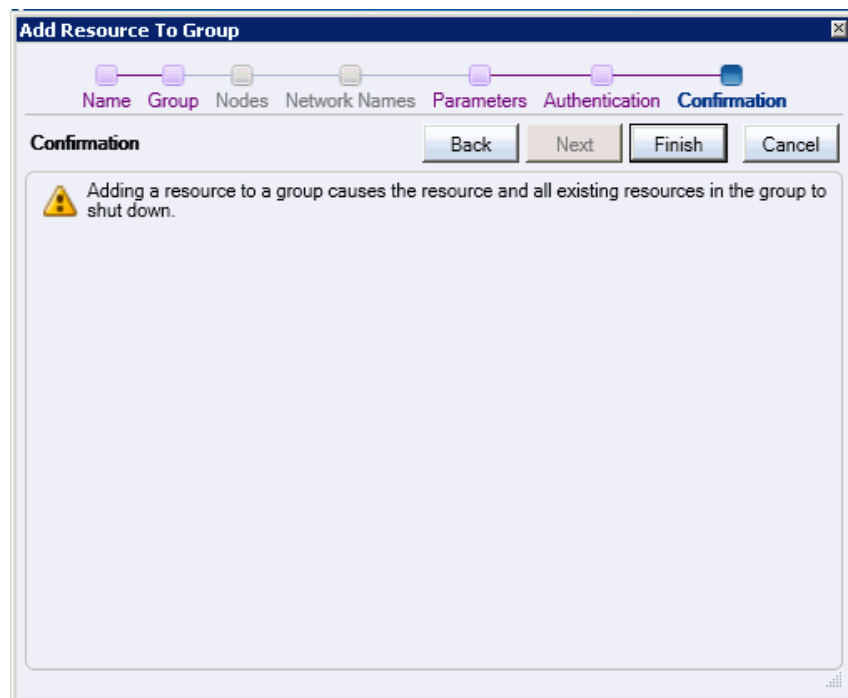
5.9 Viewing the Progress of Add Resource to Group Operation

Clicking **Finish** opens the Adding resource to group progress window.

Adding resource "TestDb" to group "Group 1"

ISWIN1 : Completed configuration of resource TestDb
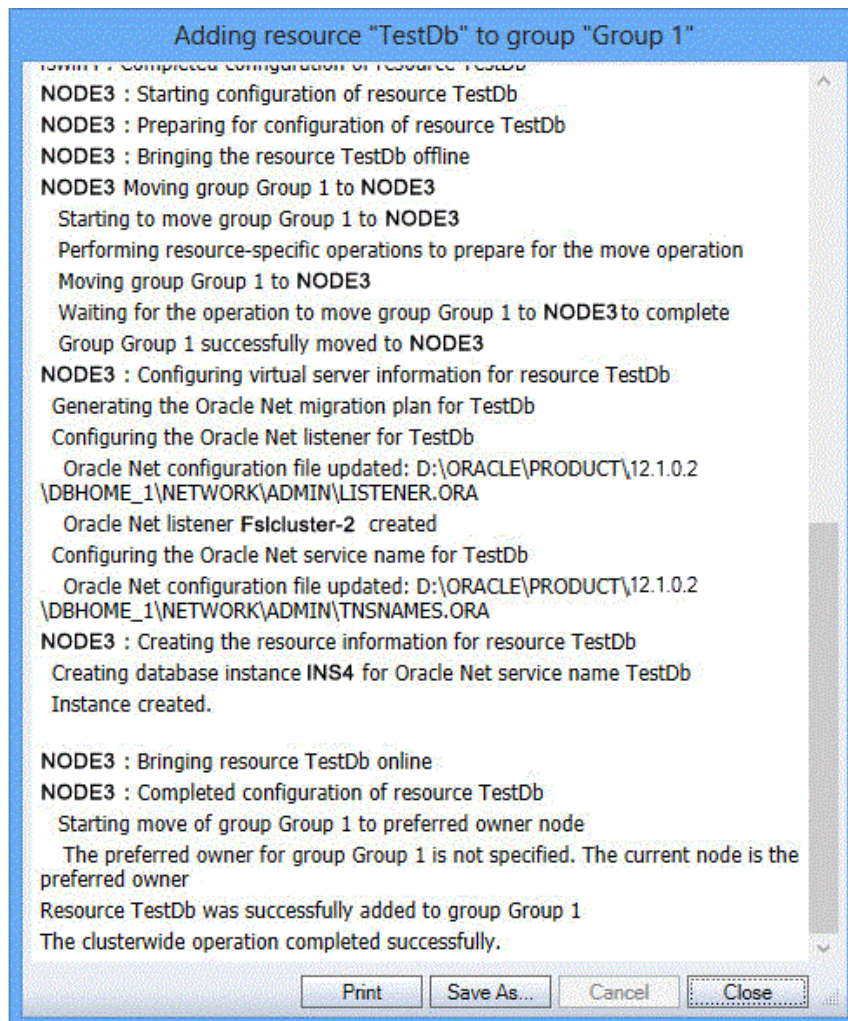NODE3 : Starting configuration of resource TestDb
NODE3 : Preparing for configuration of resource TestDb
NODE3 : Bringing the resource TestDb offline
NODE3 Moving group Group 1 to NODE3
   Starting to move group Group 1 to NODE3
   Performing resource-specific operations to prepare for the move operation
   Moving group Group 1 to NODE3
   Waiting for the operation to move group Group 1 to NODE3 to complete
   Group Group 1 successfully moved to NODE3
NODE3 : Configuring virtual server information for resource TestDb
  Generating the Oracle Net migration plan for TestDb
  Configuring the Oracle Net listener for TestDb
    Oracle Net configuration file updated: D:\ORACLE\PRODUCT\12.1.0.2
\DBHOME_1\NETWORK\ADMIN\LISTENER.ORA
    Oracle Net listener FslcLuster-2 created
  Configuring the Oracle Net service name for TestDb
    Oracle Net configuration file updated: D:\ORACLE\PRODUCT\12.1.0.2
\DBHOME_1\NETWORK\ADMIN\TNSNAMES.ORA
NODE3 : Creating the resource information for resource TestDb
  Creating database instance INS4 for Oracle Net service name TestDb
  Instance created.

NODE3 : Bringing resource TestDb online
NODE3 : Completed configuration of resource TestDb
   Starting move of group Group 1 to preferred owner node
    The preferred owner for group Group 1 is not specified. The current node is the
preferred owner
Resource TestDb was successfully added to group Group 1
The clusterwide operation completed successfully.

Print   Save As...   Cancel   Close

6

Validating a Group

A group validation process checks that the selected group is configured correctly. Over time, as your system becomes more complex and hardware and software configurations change, you may find that resource dependencies have changed. The **Validate** action makes it easy to restore the configuration of the Oracle Resources to working order. When you use the **Validate** action, Oracle Fail Safe attempts to correct any configuration problem it finds. It is not necessary to validate a group immediately after you create it, but it is done in this lesson to demonstrate the operation.

## 6.1 Using the Validate Group Command

In the tree view, right-click the **Group 1** group name, then select **Validate**. Or select a group in the middle-pane of the screen, then select **Validate** from the **Actions** menu in the Cluster view.
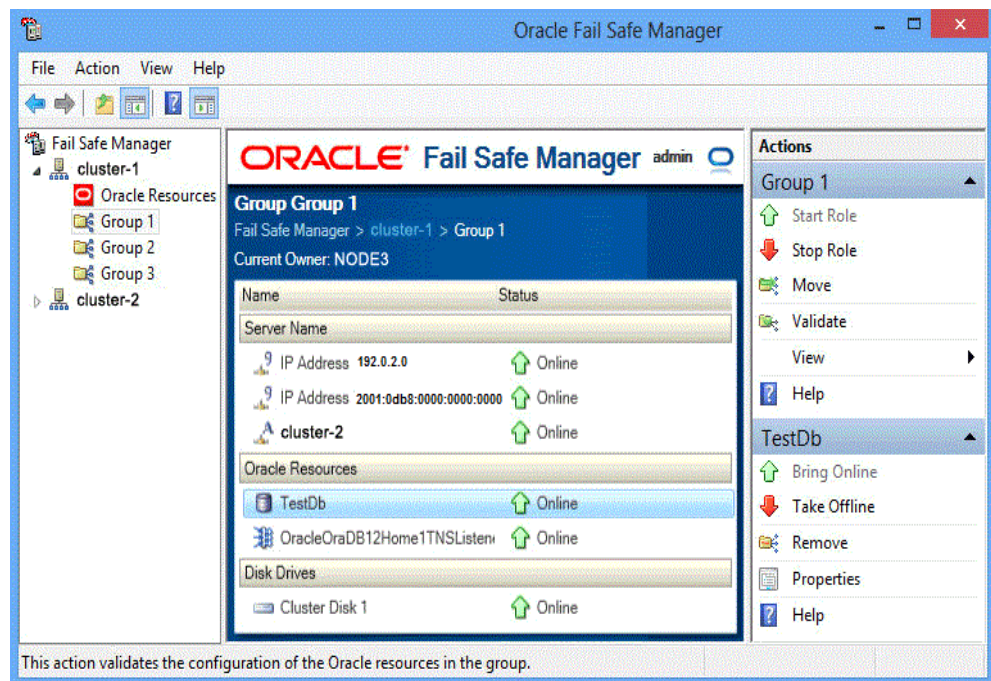
6.2 Viewing Progress

As the **Validate** operation is applied clusterwide and involves numerous steps, it can take a few minutes to complete. Oracle Fail Safe Manager displays the progress of the operation to you in a progress window.

When the operation is complete, click **OK** in the Cluster Operation Status window and **Close** in the Validating group "Group 1" window.

7
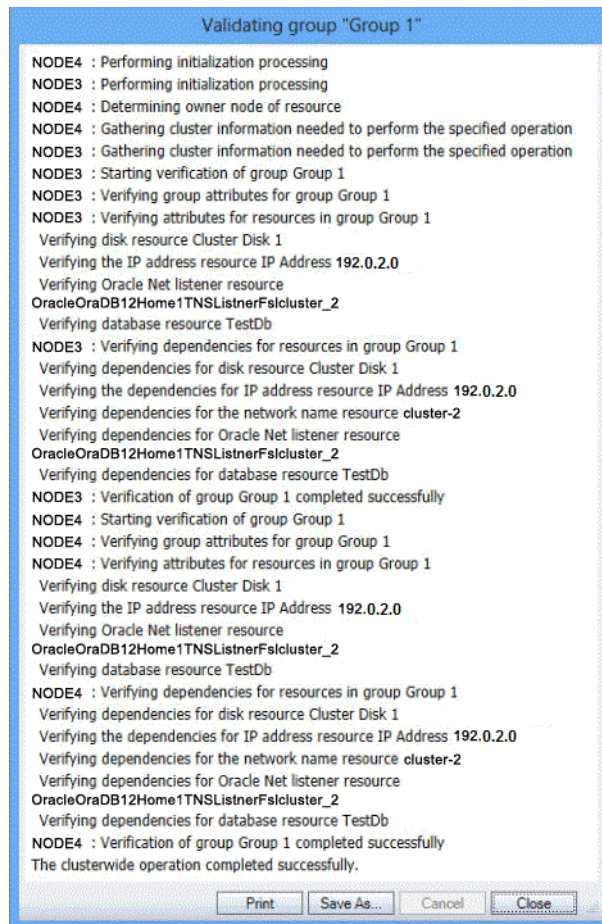
Balancing the Workload

Oracle Fail Safe Manager makes it easy to balance the workload across the nodes in the cluster using a process called planned failover. You can use planned failover to adjust the initial setup of the cluster, or to adjust the setup if the cluster environment changes.

7.1 Performing a Planned Failover

Create three groups: **Sales**, **Marketing**, and **Customers**. Create **Sales**, **Marketing**, and **Customers** on **Node4**.

Enable failback for each group, and set the current node of each group at the top of the Preferred Owner Nodes list.

The following figure shows the initial configuration of the cluster:
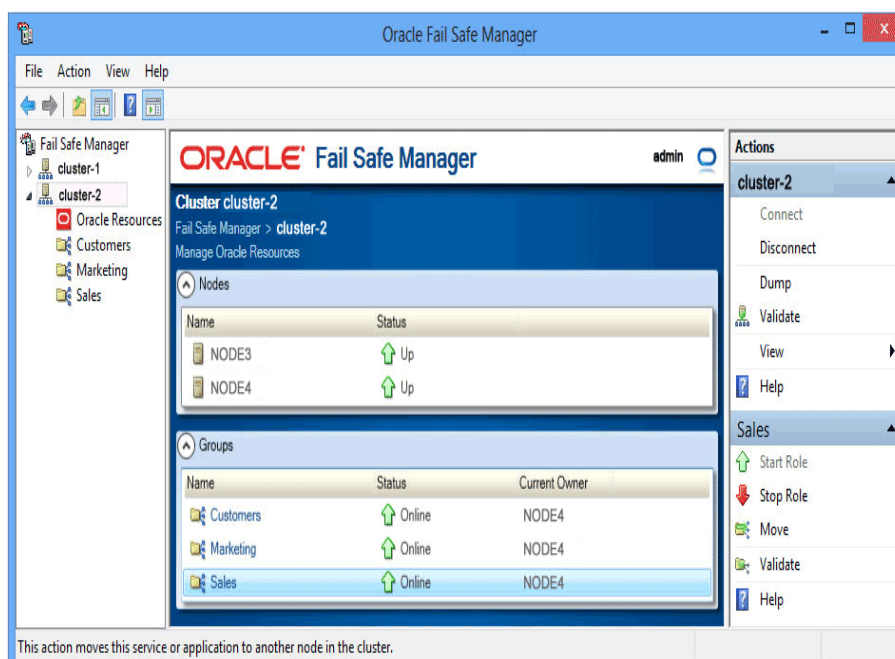
Suppose that you have recently added more CPUs to **Node3**. **Node3** can better handle the load of the **Sales**, **Marketing**, and **Customers** groups. You can move the groups to the new, more capable system with minimal interruption in service to your users.

7.2 Moving the Sales Group

Because **Node3** is the more robust system, the first step is to move **Sales**, **Marketing**, and **Customers** groups to **Node3**.

To move the Sales group from **Node4** to **Node3**, right-click the **Sales** group and select **Move**. (Your node names will be different.) Or select **Move** in the **Actions** menu of the **Sales** Group view.

If there are more than two nodes in the cluster, then a submenu listing the possible nodes is displayed. You must select the desired target node from the submenu.
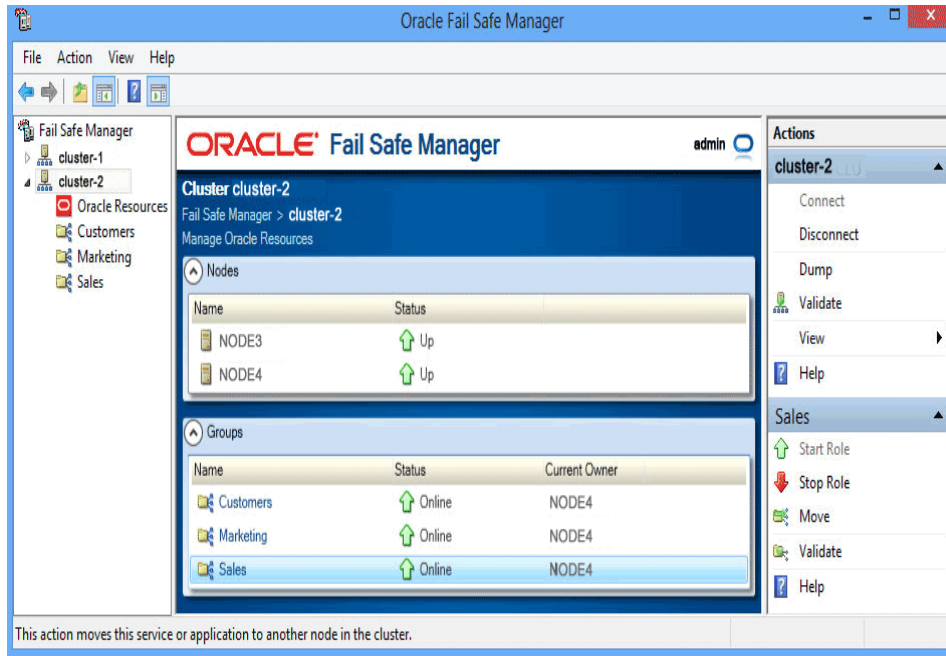
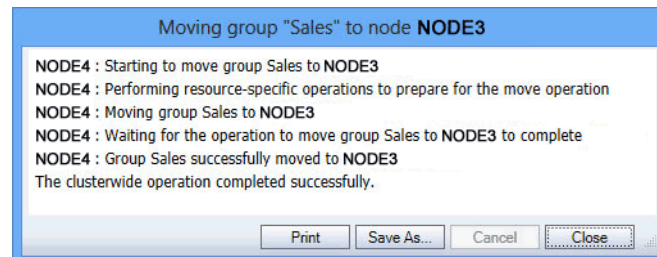## 7.3 Confirming the Move Group Operation

A confirmation window asks to move the **Sales** group to **Node3**. Click **Yes**.
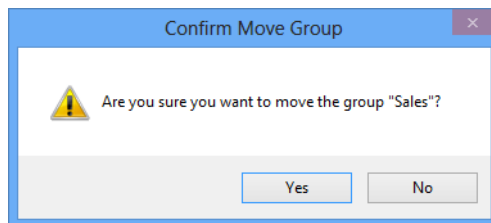

7.4 Finishing Moving the Group

The Moving Group window displays the progress of the move operation. When the move is finished, click **OK** in the Clusterwide Operation Status window, then click **Close** in the Moving Group "Sales" to node NODE3 window.
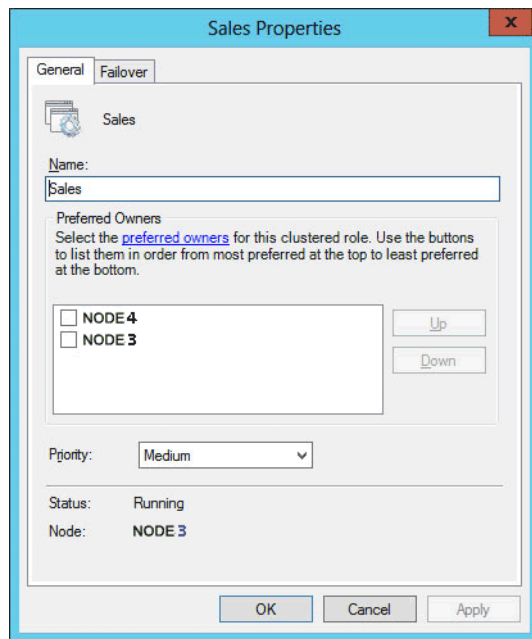
7.5 Checking the Preferred Owner Nodes List

Select the **Sales** group in Microsoft Windows Failover Cluster Manager window, then click the **Properties** action under the **Actions** menu in the right bottom pane of the window. This opens the General property page of Sales group.
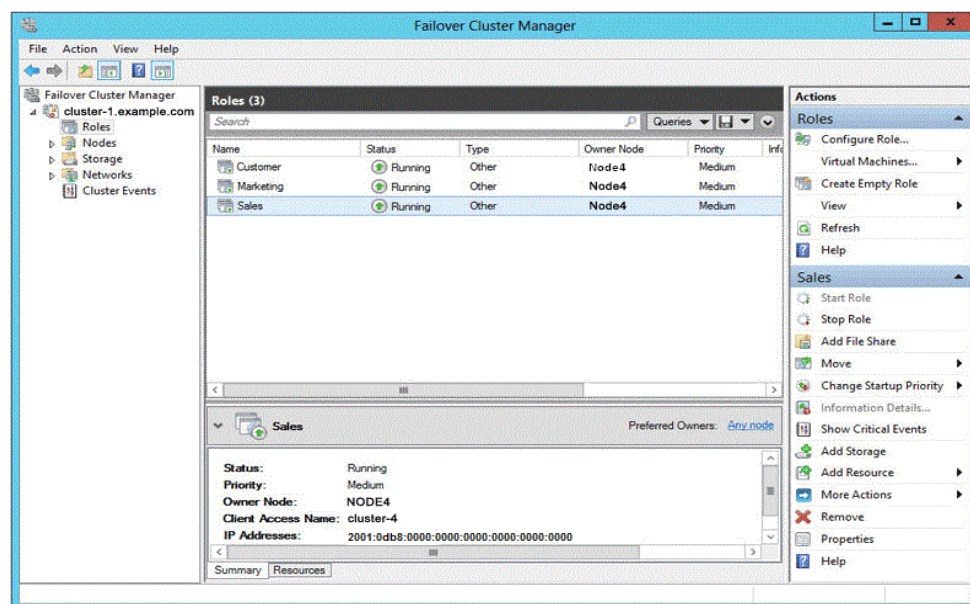
Check the **Preferred owners** list. The data on this window indicates that **Node4** is the preferred owner node. However, now that you have rearranged the configuration, you probably want **Node3** to be the preferred owner node. With the current settings, if **Node3** fails and the **Sales** group fails over to **Node4**, the **Preferred owners** list indicates that you prefer the **Sales** group to reside on **Node4**; failback does not occur when **Node3** comes online.

7.6 Rearranging the Preferred Nodes List

Re-arrange the **Preferred owners** list so that **Node3** is first in the list and **Node4** is second. Select **Node3** from the **Preferred owners** list and click the **Up** button. The **Preferred owners** list should list **Node3** first and **Node4** second.

Repeat this process for **Customers** and **Marketing** groups, ensuring that the node on which you want each group to reside when both cluster nodes are up is first in their respective **Preferred owners** list.
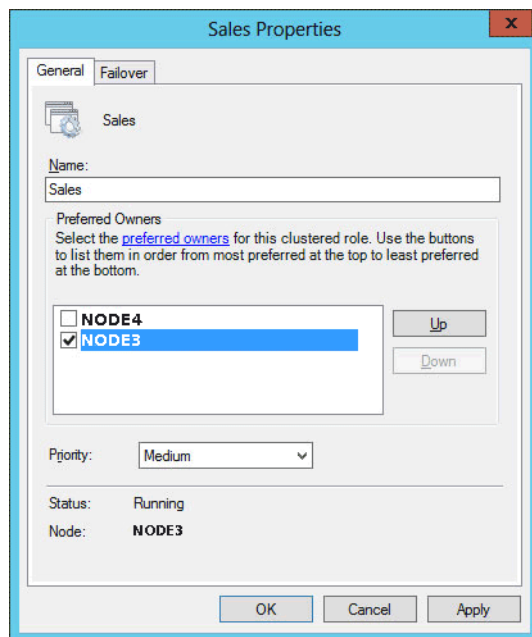
7.7 Viewing the Balanced Workload

When you finish the planned failover, the Oracle Fail Safe Manager tree view should appear similar to the following image when you expand the **cluster-2** cluster folder in the tree view on left pane of the window with the **Sales** group shown as selected in the middle pane and its corresponding actions displayed in the bottom frame of the right pane, and cluster actions in the top frame of the **Actions** menu in the right pane of the window.

8
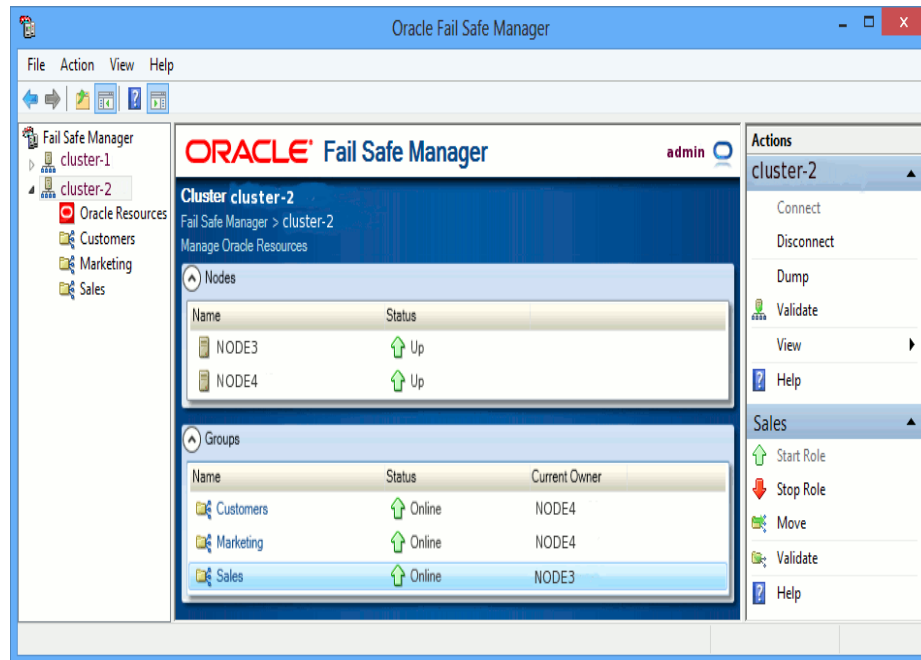
Identifying the Location of Fail-Safe Databases to Client Applications

Typically, end-user applications identify the location of a database by its physical node address. When you add a database to a group, the location of the database in the group is identified by the virtual address of the group.

8.1 Updating the tnsnames.ora File

If your end-user applications use tnsnames.ora to locate databases, use a tool such as Oracle Net Assistant to change the host value in tnsnames.ora on client systems from the physical node address to the virtual address of the group. Oracle Fail Safe makes this update for you on the server systems and the client system from which you run Oracle Fail Safe Manager.

9
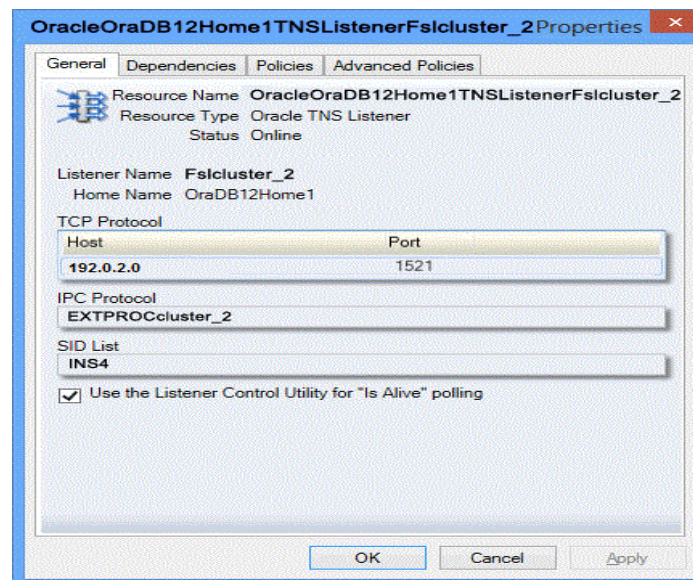
Removing a Resource from a Group

When you are done experimenting with a resource, you probably want to delete it from the cluster. Before you can delete it from the cluster, you must first remove it from the group to which you added it. You can only use the Remove from Group command to remove those resources from a group that you added with the Add Resource to Group Wizard.

9.1 Selecting the Remove This Resource From The Group Action

Select **TestDb** from the middle pane of the window. Then, from the **Actions** menu in the left pane of the window, select **Remove**.
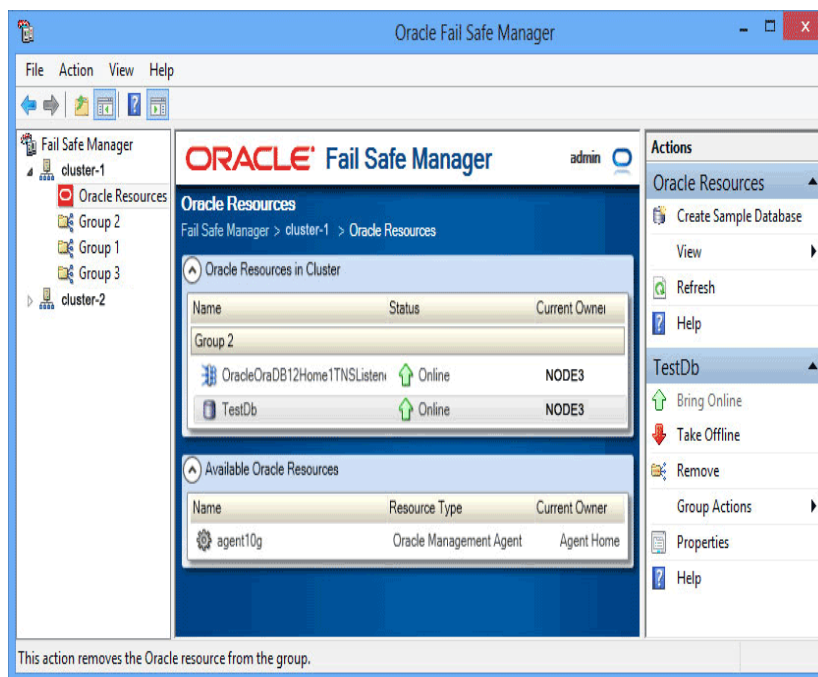
9.2 Confirming the Remove Resource from Group Request

When you remove **TestDb** resource from the group, Confirm Remove Resource from Group dialog box opens asking, "Removing the database "TestDb" from the group causes all of the databases in the group to shut down. All database users will be disconnected. Continue?" Click **Yes**.
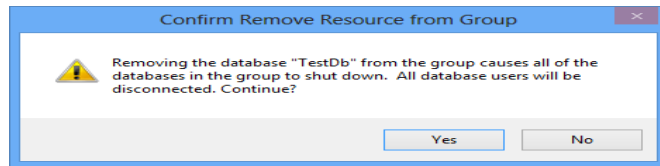
## 9.3 Monitoring the Clusterwide Operation

Oracle Fail Safe opens a window and begins the remove operation. The upper portion of the window displays the status of individual resources in the group, and the lower portion of the window displays the progress of the remove operation.

Click **OK** in the Clusterwide Operation Status window, then click **Close** in the Removing Resource window.

10
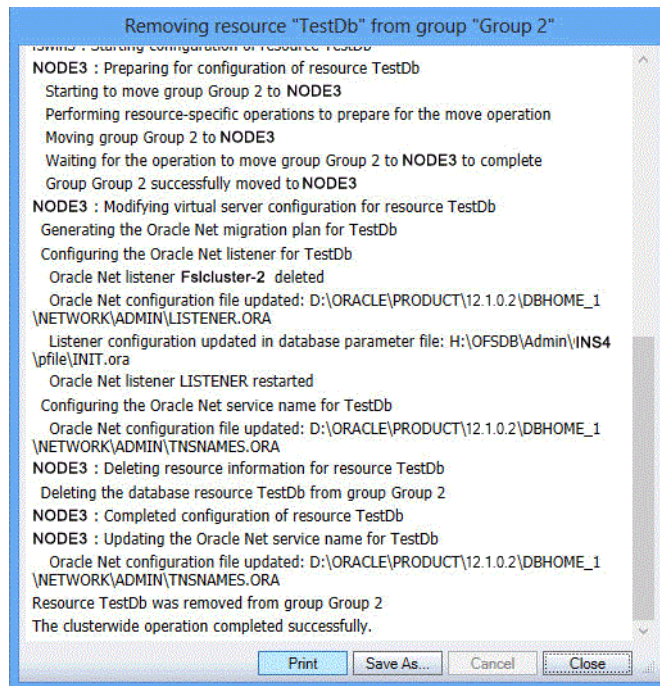
Deleting a Sample Database from the Cluster

Use the Delete Sample Database command to delete any database that you created with the Create Sample Database command. Do not use the Delete Sample Database command to delete databases created using other means.

10.1 Using the Delete Sample Database Command

If the database is still in a group, remove it, using the method described in Chapter 9. Then, in the tree view or the middle pane of the screen, select **TestDb**. On the **Actions** menu in the right pane of the screen, select **Delete Sample Database**.
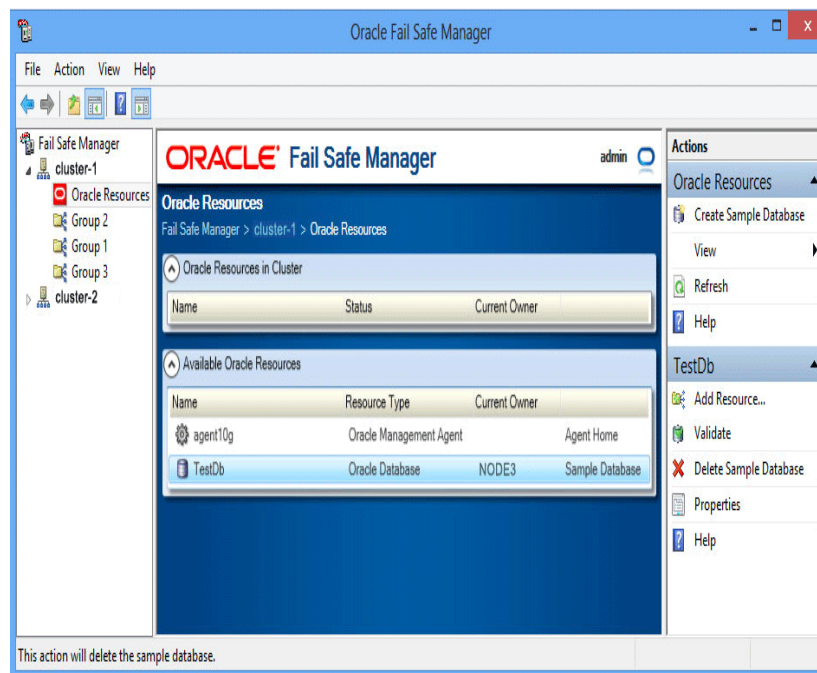
10.2 Confirming the Delete Sample Database Command

Oracle Fail Safe asks you to confirm whether to permanently destroy the sample database. Click **Yes** to delete the database resource.
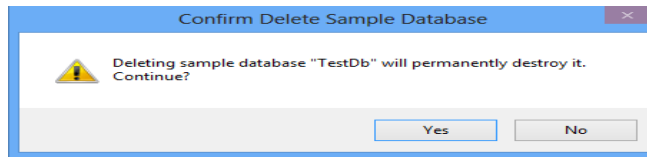
10.3 Authenticating Your Privileges to Delete the Database

Depending on whether an operating system authentication is enabled, Oracle Fail Safe may open the Enter Database SYS Account Password window to confirm that 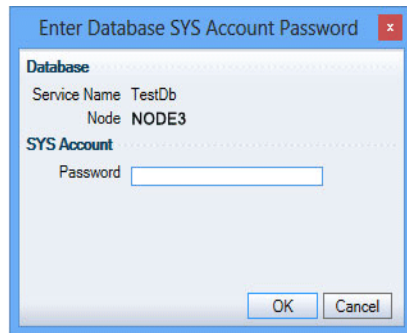you have SYS account privileges to delete the sample database. If this window opens, enter the password for the SYS account.

10.4 Viewing the Progress of the Clusterwide Operation

When the operation completes, Oracle Fail Safe opens a Clusterwide Operation Status window to let you know whether the operation has completed successfully.

Click **OK** in the Clusterwide Operation Status window, then click **Close** in the Deleting Sample Database window.

Deleting sample database "TestDb"

NODE3 : Starting the deletion of standalone resource TestDb
NODE3 : Performing initialization processing
NODE3 : Preparing for configuration of resource TestDb
NODE3 : Deleting the standalone resource
Starting to delete the standalone sample database TestDb

Connecting to database
4% complete
9% complete
14% complete
19% complete
23% complete
28% complete
47% complete
Updating network configuration files
48% complete
52% complete
Deleting instance and datafiles
76% complete
100% complete
Look at the log file "C:\Oracle\cfgtoollogs\dbca\TestDb.log" for further details.

NODE3 : Standalone resource TestDb was deleted successfully
The clusterwide operation completed successfully.

Print   Save As...   Cancel   Close