Exercise instructions

Preface

- Access your lab image by using the instructions that your instructor provides.

Note

Substitution values

Use the following substitution values when you encounter them in the exercise instructions.

`<wps_home>` is `/opt/IBM/WebSphere/PortalServer`

`<was_home>` is `/opt/IBM/WebSphere/AppServer`

`<wp_profile>` is `/opt/IBM/WebSphere/wp_profile`

`<dmgr_profile>` is `/opt/IBM/WebSphere/AppServer/profiles/Dmgr`

Section 1: Starting and stopping servers

__ 1. Start the deployment manager.

    __ a. Open a terminal window and change directories to `<dmgr_profile>/bin`.

    __ b. Enter the following command: `./serverStatus.sh -all -user wpsadmin -password IBMp0rtal`

    __ c. If the deployment manager (dmgr) is stopped, start it with the command: `./startManager.sh`

__ 2. Start WebSphere Portal Server and log in.

    __ a. From a terminal window and change directories to `<wp_profile>/bin`.

    __ b. Enter the following command: `./serverStatus.sh -all -user wpsadmin -password IBMp0rtal`

    __ c. If WebSphere Portal is stopped, enter the following command: `./startServer.sh WebSphere_Portal`

    __ a. Log in to WebSphere Portal. Start a web browser and enter the following address: `http://portal00:10039/wps/portal`

    __ b. Enter `wpsadmin` for the user ID and `IBMp0rtal` for the password and click **Log in**.

    __ c. Verify that you can log in successfully, then log out.

__ 3. Start server1.

    __ a. Open a terminal window, and change to the directory `<was_home>/profiles/cw_profile/bin`

    __ b. Enter the command: `./startServer.sh server1`

Section 2: Use the Configuration Wizard to create a Portal cluster

__ 1.   Log in to the Configuration Wizard.

   __ a.   Start the Firefox web browser and go to the configuration wizard at
           `http://portal00:10200/ibm/wizard`.

   __ b.   Use `installadmin` as the user ID and `IBMp0rtal` for the password and log in.
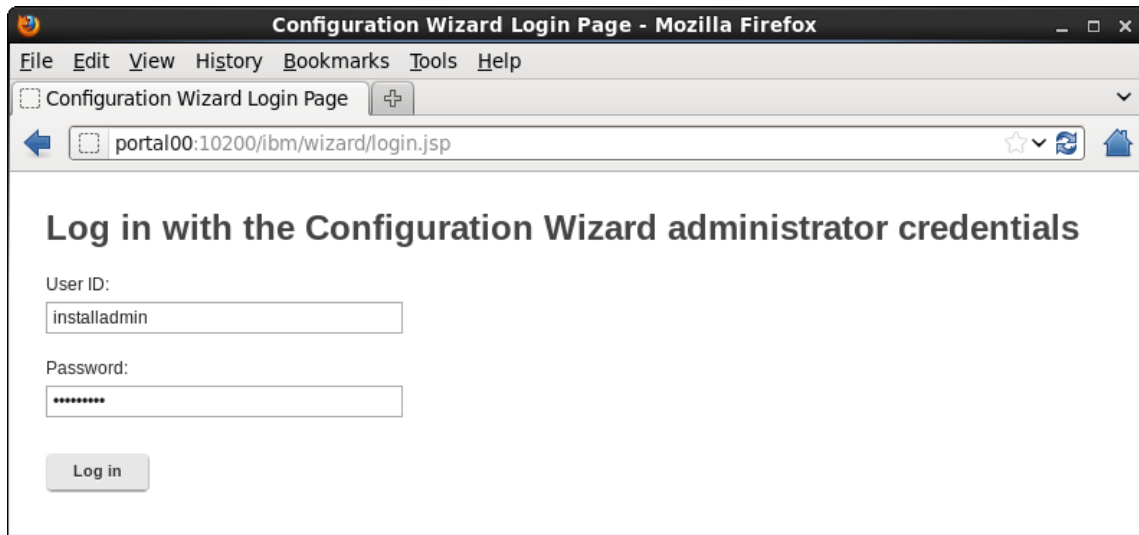
__ 2.   Use the Configuration Wizard to create a cluster.

   __ a.   Click **Set Up a Cluster.**
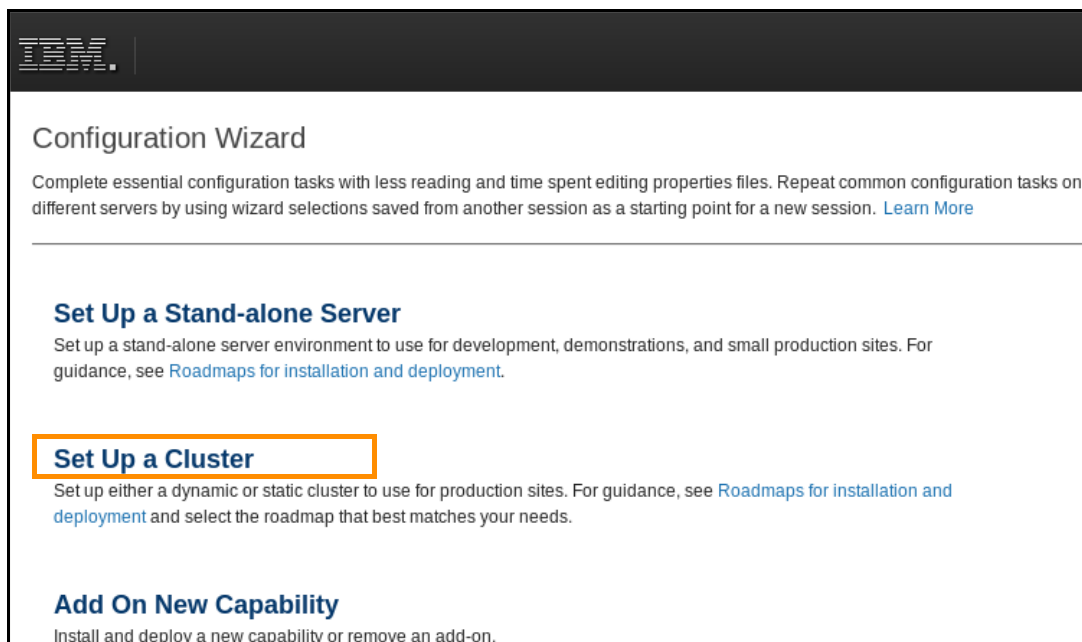
__ b.   Click **Create a Cluster**.

__ 3.   Begin the three-step process to create a cluster.

__ a.   Answer questions about the system information.

__ b.   Keep the default settings, and click the right arrow to go to the Basic Cluster Settings pane.

__ c. Answer questions about the basic cluster settings.

Basic Cluster Settings

Where is the deployment manager: ◉ On the same server as portal
                                    ○ On a remote server

What type of cluster do you want to create: Static cluster   ?

__ d. Keep the default settings of **On the same server as portal** and **Static cluster**. Click the right arrow to go to the next pane.

__ e. Answer questions about the Portal information as follows.

  - WebSphere Portal administrator ID: `wpsadmin`

  - WebSphere Portal administrator password: `IBMp0rtal`

  - Release configuration user: `db2inst1`

  - Release configuration password: `IBMp0rtal`

Portal Information   **Deployment Manager**   **Cluster Settings**

*WebSphere Portal administrator ID: wpsadmin   ?

*WebSphere Portal administrator password: ••••••••   ?

*Re-enter the password   ••••••••

*Release configuration user: db2inst1   ?

*Release configuration password: ••••••••   ?

*Re-enter the password   ••••••••

__ f. Click the right arrow to go to the Deployment Manager pane.

__ g. Answer questions about the deployment manager as follows.

  - WebSphere Application Server administrator ID: `wpsadmin`

  - WebSphere Application Server administrator password: `IBMp0rtal`

  - Deployment manager cell name: `portal00Cell01`

  - Deployment manager node name: `portal00CellManager01`

- Deployment manager path:
`/opt/IBM/WebSphere/AppServer/profiles/Dmgr`

__ h. Click the right arrow to go to the Cluster Settings pane.

__ i. For the cluster name, keep the default: `PortalCluster`.
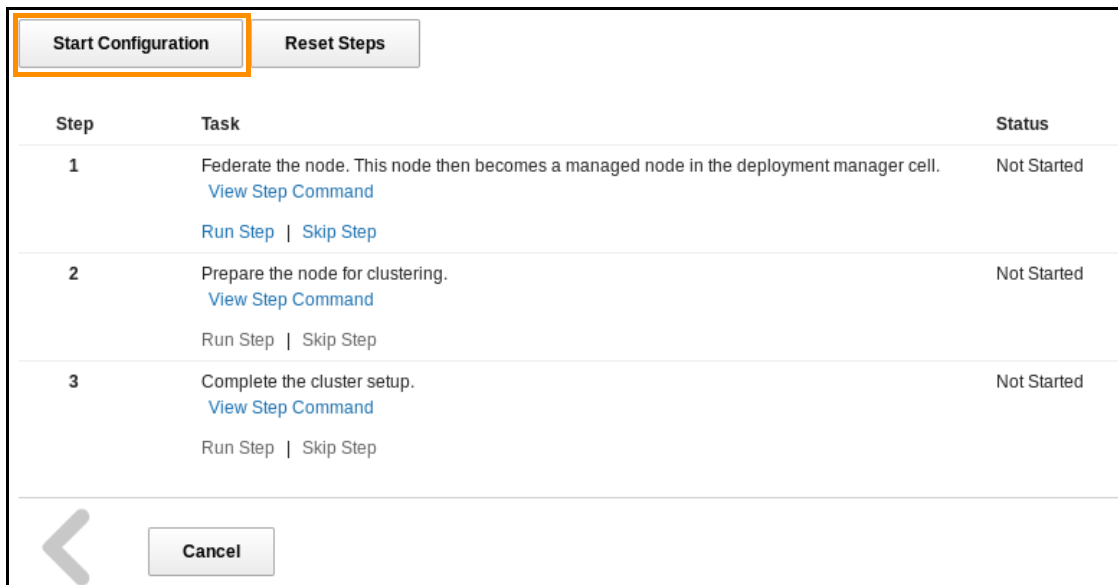
__ j. Click the right arrow to go to the next pane.

__ 4.   You are now at the third step, Configuration.

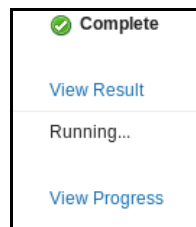__ a.   Click **Start Configuration** to begin the configuration process.

__ b.   Click **OK** in the confirmation box.

There are no manual steps in this configuration, so each task runs automatically until it completes. As each step runs, you see a View Progress link. You can click the link to open a window that shows progress messages.

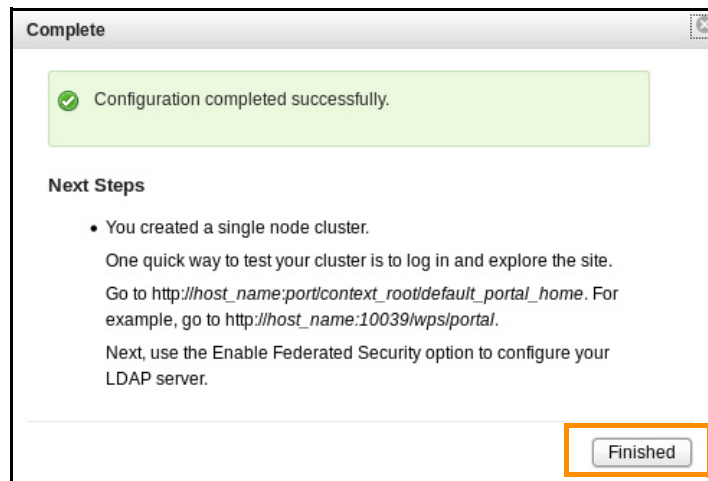If a step completes successfully (or fails), you can click the **View Result** link to see the log messages.

__ c.   While Step1 is running, click **View Progress**. Follow the messages until you see **Build Successful**. This step is then marked complete, and the next step begins.

__ d.   While Step 2 is running, click **View Progress**.

__ e.   While Step 3 is running, click **View Progress**.

__ f. After all three steps complete successfully, click **Finished**.

Step	Task	Status
1	Federate the node. This node then becomes a managed node in the deployment manager cell. View Step Command Run Step | Skip Step	✅ Complete View Result
2	Prepare the node for clustering. View Step Command Run Step | Skip Step	✅ Complete View Result
3	Complete the cluster setup. View Step Command Run Step | Skip Step	✅ Complete View Result

Finished

__ g. Click **Finished** again on the success message.

Complete

✅ Configuration completed successfully.

Next Steps

- You created a single node cluster.

  One quick way to test your cluster is to log in and explore the site.

  Go to http://*host_name:port/context_root/default_portal_home*. For example, go to http://*host_name:10039/wps/portal*.

  Next, use the Enable Federated Security option to configure your LDAP server.

Finished

The Next Steps shows a quick way to test the cluster. It suggests that you go to the WebSphere Portal in a web browser. It is also suggested to use the Enable Federated Security option to configure the LDAP Server, but you completed this task manually in the previous exercise.
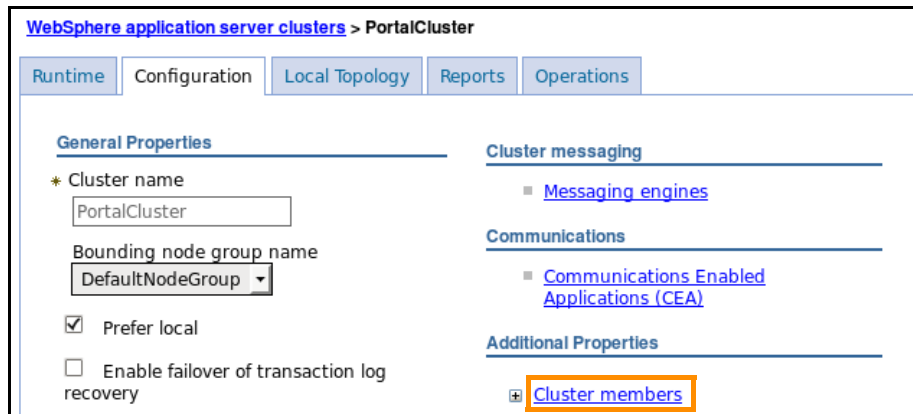
Section 3: Verify the Portal Cluster

__ 1. Verify access to the WebSphere Portal Server.

__ a. Start a web browser and enter the following address:
`http://portal00:10039/wps/portal`

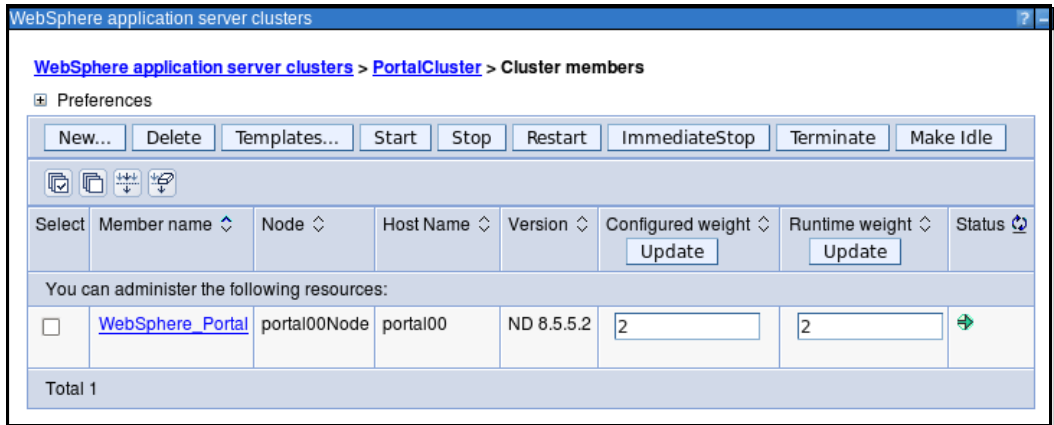__ b. Log in by using `wpsadmin` for the user ID and `IBMp0rtal` for the password and click **Log in**.

__ c.   When you successfully log in, you verify that you have a running WebSphere Portal instance.

__ d.   Log out of the portal.

__ 2.   Explore the Portal cluster by using the administrative console of the deployment manager.

__ a.   Access the administration console (WebSphere Integrated Solutions Console) for the deployment manager. Start a Firefox web browser and enter the web address: `http://portal00:9060/ibm/console`

__ b.   Log in with the user ID `wpsadmin` and password `IBMp0rtal`.

__ c.   In the left navigation of the administrative console, click **Servers > Clusters > WebSphere Application Server clusters**.
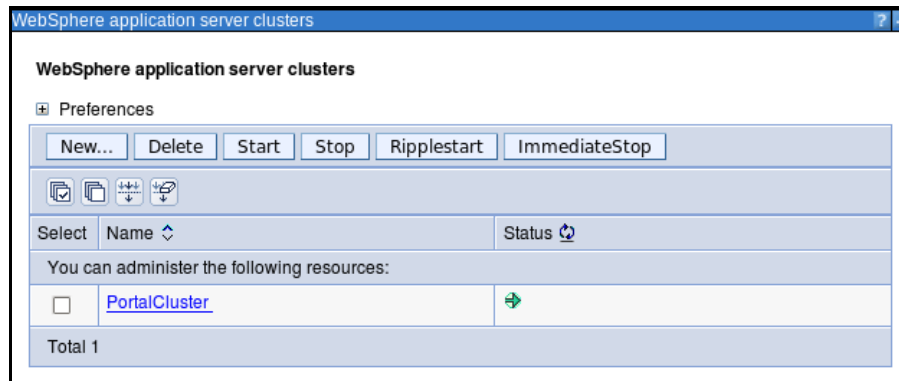
__ d.   You see the PortalCluster link, and its status is Started. Click the **PortalCluster** link to examine configuration information about the cluster.

__ e.   On the configuration tab, under Additional Properties, click **Cluster Members**.

__ f.   Verify that you see the WebSphere_Portal listed as a cluster member.

WebSphere application server clusters						
WebSphere application server clusters > **PortalCluster** > **Cluster members**						
⊞ Preferences						
[New...] [Delete] [Templates...] [Start] [Stop] [Restart] [ImmediateStop] [Terminate] [Make Idle]						
Select	Member name ⌃	Node ⌃	Host Name ⌃	Version ⌃	Configured weight ⌃ [Update]	Runtime weight ⌃ [Update]	Status ↻
You can administer the following resources:						
☐	WebSphere_Portal	portal00Node	portal00	ND 8.5.5.2	2	2	➡
Total 1						

__ g.   Log out of the administrative console.

End of exercise