Exercise 2. Configuring the portal database

What this exercise is about

This exercise provides an introduction to WebSphere Portal configuration.

This exercise includes the following tasks:

- Configuring the database
- Verifying the data transfer

What you should be able to do

At the end of this exercise, you should be able to:

- Use the WebSphere Portal configuration wizard to transfer the WebSphere Portal configuration database from Derby to DB2

Introduction

WebSphere Portal is installed initially with an Apache Derby database. The database that is immediately available for use is good for demonstration and portlet and theme development environments. For production environments, you must configure portal to use a production-level database such a DB2. The Configuration Wizard is a tool to transfer the data and configure a new database server.

The primary Configuration Wizard options are based on your target configuration topology, such as a stand-alone server or a cluster. The database transfer option is included with both **Set Up a Stand-alone Server** and **Set Up a Cluster**.

Requirements

Student must complete Exercise 1: Installing WebSphere Portal Server 8.5 successfully before attempting this exercise.

The DB2 server must be running.

Exercise instructions

Preface

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

Section 1: Configuring the database

Information

Transferring databases to DB2

In this task, you run the Portal wizard to transfer the data from the Derby database to the newly created DB2 databases.

The following steps describe how to transfer the portal configuration data to DB2 with the configuration wizard when you configure the portal database.

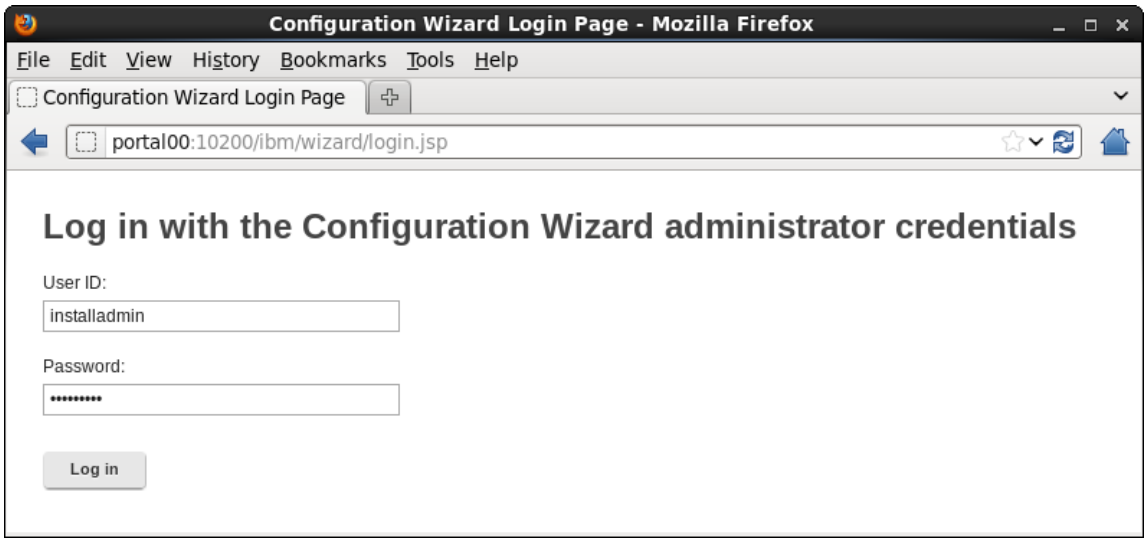
__ 1. Start the configuration wizard.

__ a. Open a terminal window, and change to the directory `/opt/IBM/WebSphere/AppServer/profiles/cw_profile/bin`

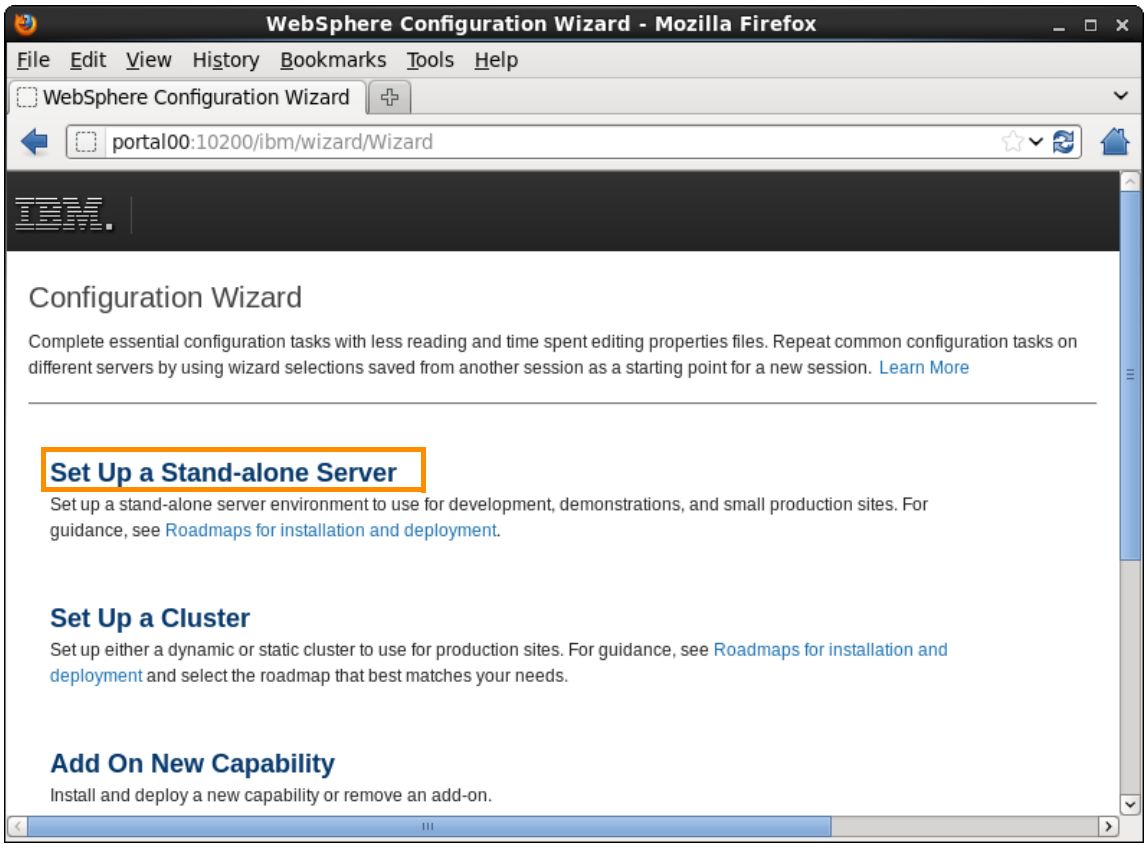
__ b. Enter the command `./startServer.sh server1`

__ c. Start a Firefox browser and log in to the configuration wizard at `http://portal00:10200/ibm/wizard/`. If you get a warning for an untrusted connection, click **Add Exception**, and then **Confirm Security Exception**.

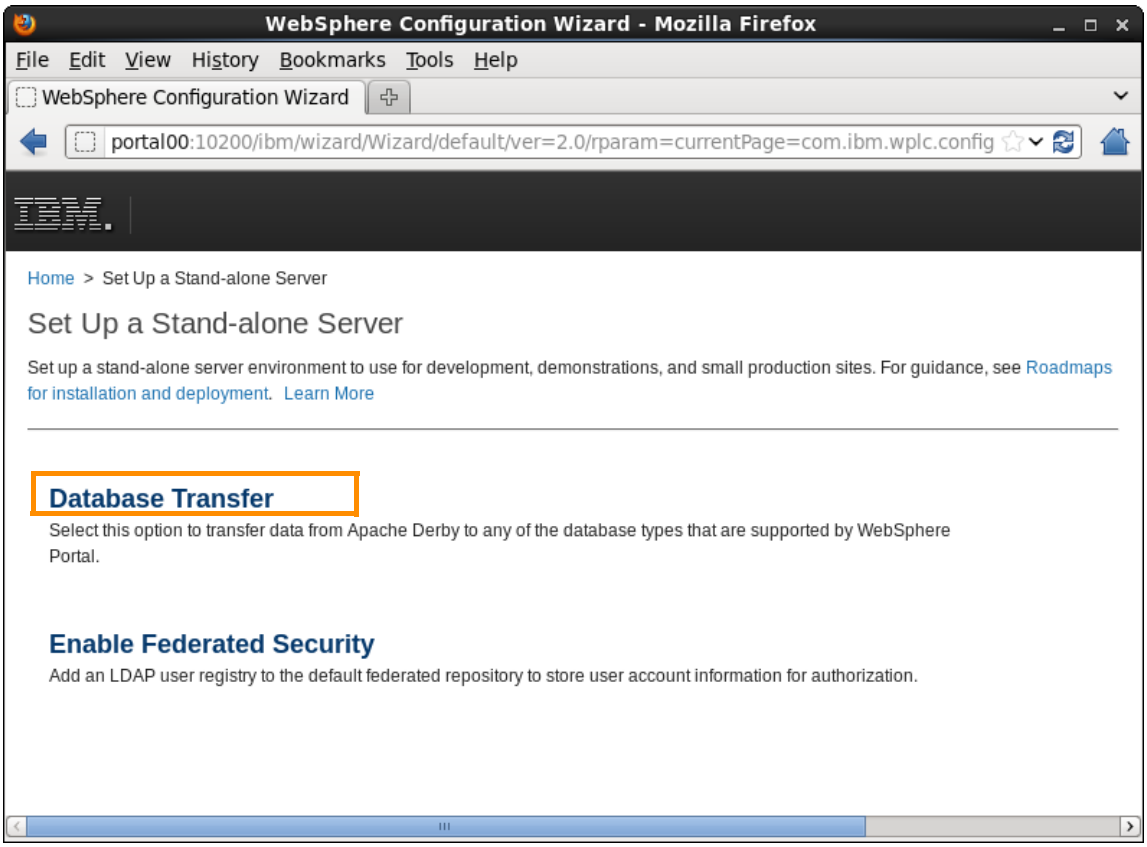
__ d. Use `installadmin` as the user ID and `IBMp0rtal` for the password and log in.



__ e. On successful login, the following screen is shown. Click **Set up a Stand-alone Server**.

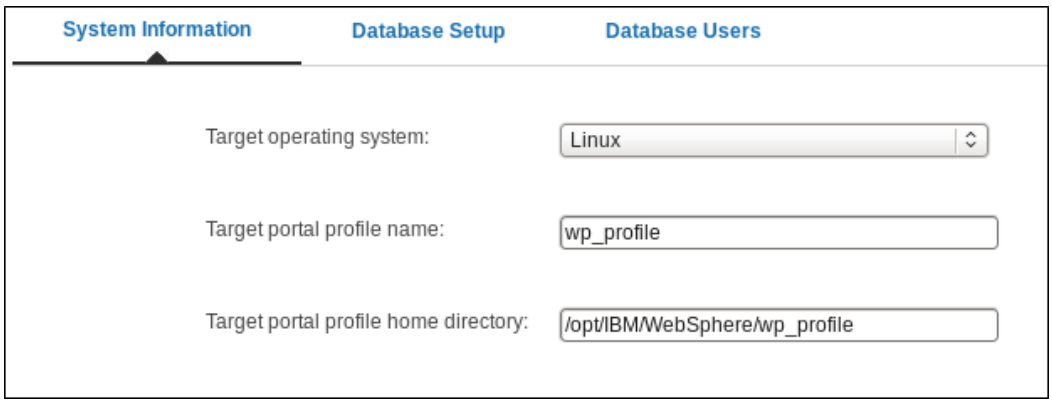


__ f. On the following screen, click **Database Transfer**.



__ 2. Provide the system information.

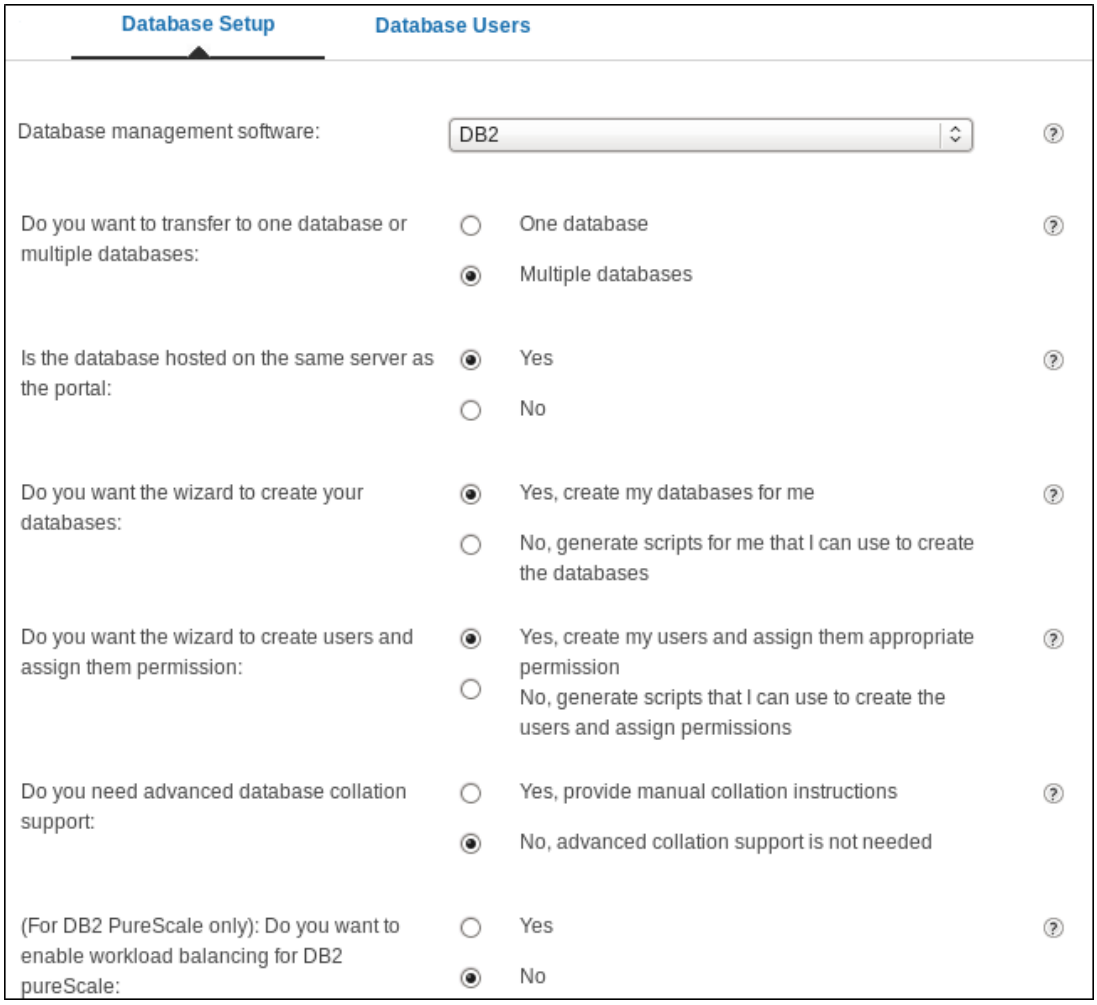
__ a. Accept the default values for target OS, portal profile name, and home directory.



__ b. Click the right arrow to move to the Database Setup section.

__ 3. Provide the database setup information.

__ a. Verify that the following questions are answered as shown. These values are the defaults.



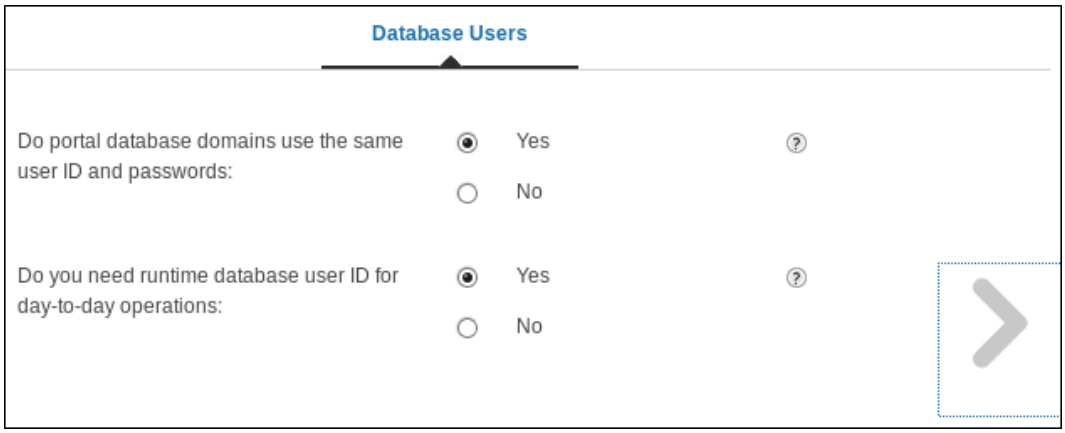
- Database management software: **DB2**
- Do you want to transfer to one database or multiple databases: **Multiple databases**
- Is the database hosted on the same server as the portal: **Yes**
- Do you want the wizard to create your databases: **Yes create my database for me**.
- Do you want the wizard to create users and assign them permission: **Yes, create my users and assign them the appropriate permission**.
- Do you need advanced database collation support: **No, advanced collation support is not needed**.

- (for DB2 PureScale only): Do you want to enable workload balancing for DB2 pureScale: **No**

__ b. Click the right arrow to move to the Database User section.

__ 4. Provide the database user information.

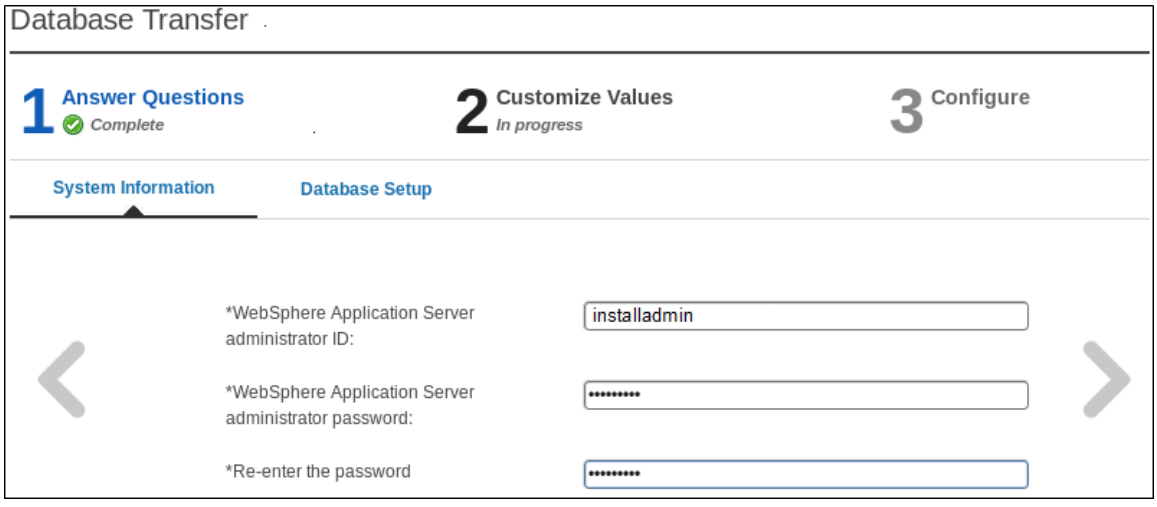
__ a. Verify that the following questions are answered as shown. These values are the defaults.



- Do portal database domains use the same user ID and passwords: **Yes**
- Do you need runtime database user ID for day-to-day operations: **Yes**

__ b. Click the right arrow to move to Section 2 Customize values.

__ 5. Provide the customized values.

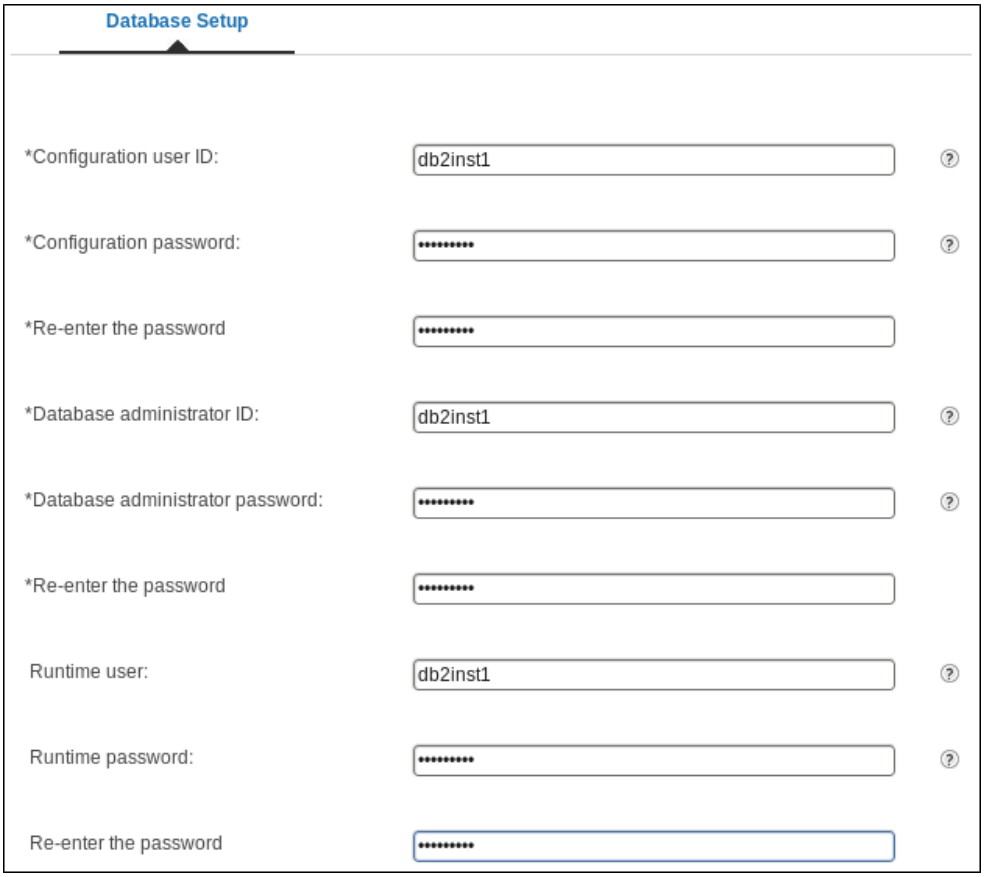


__ a. Enter `installadmin` for administrator ID.

__ b. Enter `IBMp0rtal` for the password.

__ c. Click the right arrow to move to the Database Setup section.

__ 6. Provide values for the database setup.

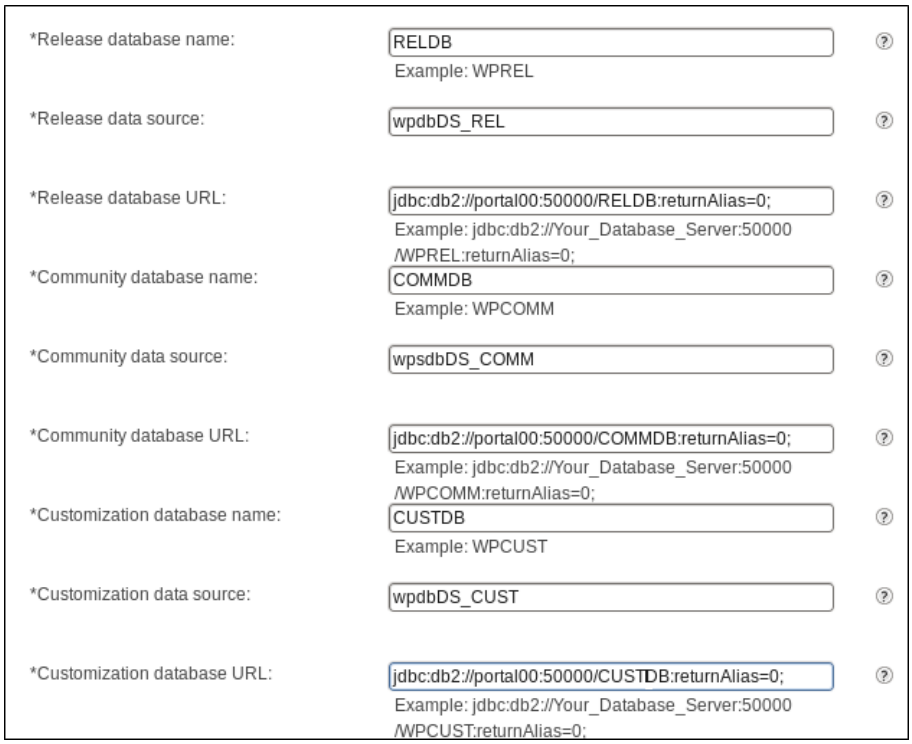


__ a. Enter `db2inst1` for Configuration user ID and `IBMp0rtal` for password.

__ b. Enter `db2inst1` for database Administrator user ID and `IBMp0rtal` for password.

__ c. Enter `db2inst1` for database Runtime user ID and `IBMp0rtal` for password.

__ 7. Scroll down to update more of the Database Setup values with the following information.



__ a. Release database name: `RELDB`

__ b. Release data source: `wpdbDS_REL`

__ c. Release database URL: `jdbc:db2://portal00:50000/RELDB:returnAlias=0;`

__ d. Community database name: `COMMDB`

__ e. Community data source: `wpdbDS_COMM`

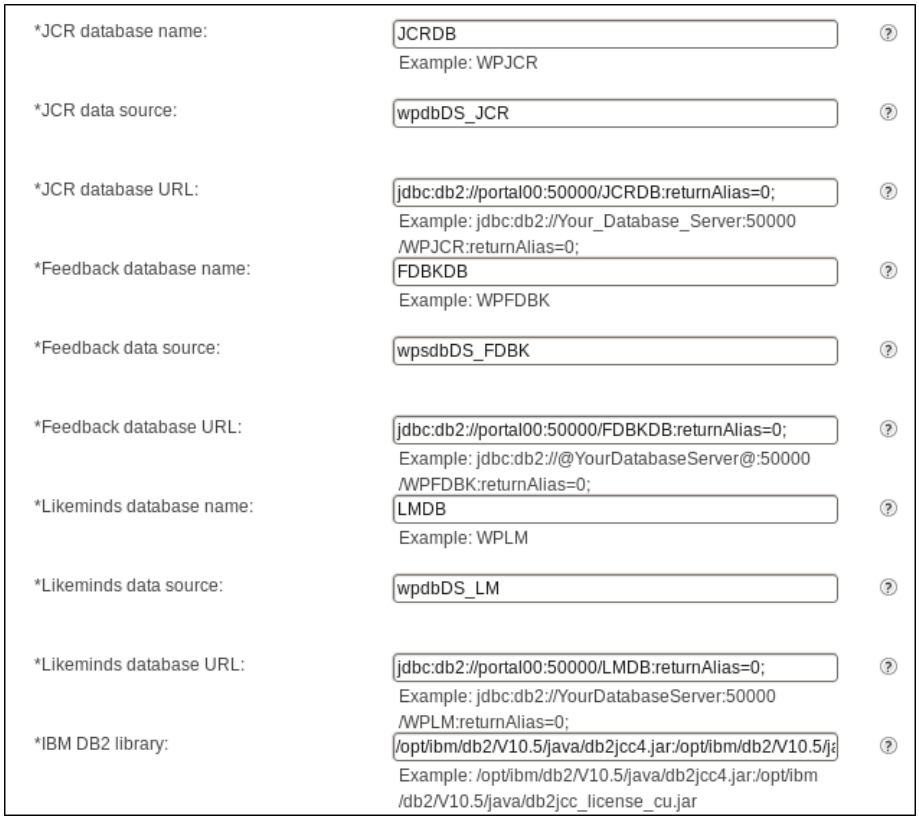
__ f. Community database URL:
`jdbc:db2://portal00:50000/COMMDB:returnAlias=0;`

__ g. Customization database name: `CUSTDB`

__ h. Customization data source: `wpdbDS_CUST`

__ i. Customization database URL:
`jdbc:db2://portal00:50000/CUSTDB:returnAlias=0;`

__ 8. Scroll down to update more of the Database Setup values with the following information.



__ a. JCR database name: `JCRDB`

__ b. JCR data source: `wpdbDS_JCR`

__ c. JCR database URL: `jdbc:db2://portal00:50000/JCRDB:returnAlias=0;`

__ d. Feedback database name: `FDBKDB`

__ e. Feedback data source: `wpdbDS_FDBK`

__ f. Feedback database URL:
`jdbc:db2://portal00:50000/FDBKDB:returnAlias=0;`

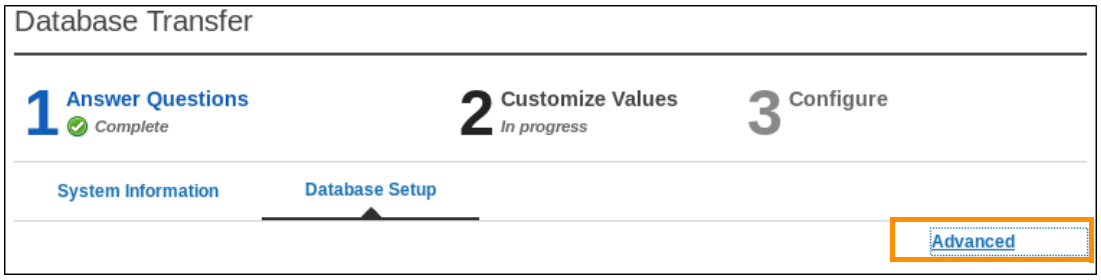
__ g. Likeminds database name: `LMDB`

__ h. Likeminds data source: `wpdbDS_LM`

__ i. Likeminds database URL: `jdbc:db2://portal00:50000/LMDB:returnAlias=0;`

__ j. IBM DB2 library:
`/opt/ibm/db2/V10.5/java/db2jcc4.jar:/opt/ibm/db2/V10.5/java/db2jcc_license_cu.jar`

__ 9. Click the **Advanced** link to enter more configuration values.



__ 10. Scroll down to update more of the Database Setup values with the following information.

__ a. Release schema: `release`

__ b. Release runtime user role: WP_BASE_RUNTIME_USERS

__ c. Release configuration user role: `WP_BASE_CONFIG_USERS`

__ d. Release database node: `wpsNode`

__ e. Release XDbName: `RELDB`

__ f. Community schema: `community`

__ g. Community runtime user role: `WP_BASE_RUNTIME_USERS`

__ h. Community configuration user role: `WP_BASE_CONFIG_USERS`

__ i. Community DB2 node: `wpsNode`

__ 11. Scroll down to update more of the Database Setup values with the following information.

__ a. Community XDbName: `COMMDB`

__ b. Customization schema: `customization`

__ c. Customization runtime role: `WP_BASE_RUNTIME_USERS`

__ d. Customization configuration user role: `WP_BASE_CONFIG_USERS`

__ e. Customization DB2 node: `wpsNode`

__ f. Customization XDbName: `CUSTDB`

__ g. JCR schema: `jcr`

__ h. JCR runtime user role: `WP_BASE_RUNTIME_USERS`

__ i. JCR configuration user role: `WP_BASE_CONFIG_USERS`

__ j. JCR database node: `wpsNode`

__ 12. Scroll down to update more of the Database Setup values with the following information.

__ a. JCR XDbName: `JCRDB`

__ b. Feedback schema: `feedback`

__ c. Feedback runtime role: `WP_BASE_RUNTIME_USERS`

__ d. Feedback configuration user role: `WP_BASE_CONFIG_USERS`

__ e. Feedback DB2 node: `wpsNode`

__ f. Feedback XDbName: `FDBKDB`

__ g. Likeminds schema: `likeminds`

__ h. Likeminds runtime user role: `WP_BASE_RUNTIME_USERS`

__ 13. Scroll down to update the rest of the Database Setup values with the following information.

__ a. Likeminds configuration user role: `WP_BASE_CONFIG_USERS`

__ b. Likeminds DB2 node: `wpsNode`

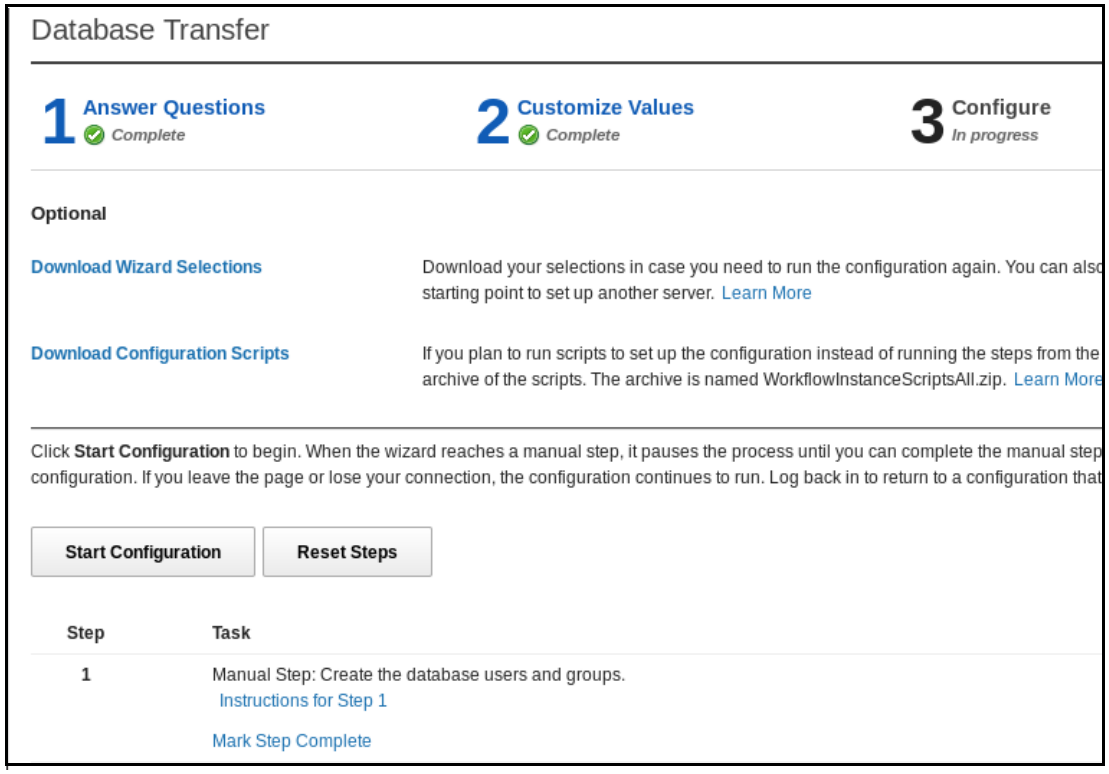
__ c. Likeminds XDbName: `LMDB`

__ d. IBM DB2 driver: `com.ibm.db2.jcc.DB2Driver`

__ e. IBM DB2 JDBC provider: `wpdbJDBC_db2`

__ 14. Complete the database setup.

__ a. Click the right arrow to move to Section 3 Configure.



Note

Configuration Wizard: Database Transfer

When you start the configuration, the wizard uses the information that you provided to transfer the Portal database from Derby to DB2.

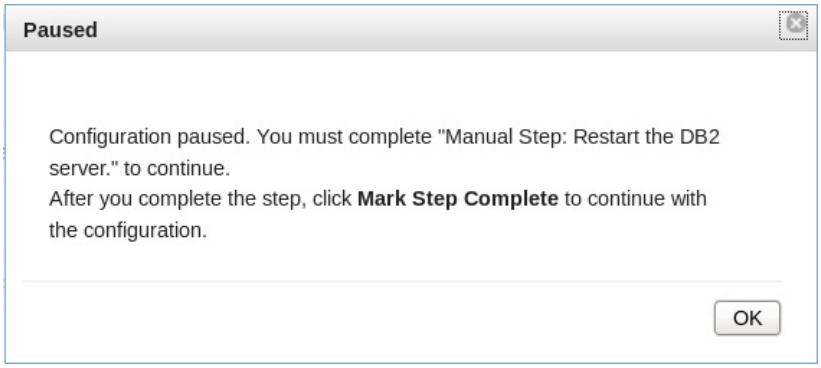
When the wizard reaches a manual step, it pauses the process until you can complete the manual step. You cannot cancel a running configuration. If you leave the page or lose your connection, the configuration continues to run. Log back in to return to a configuration that is in progress.

__ 15. Start the database configuration.

__ a. Click **Start Configuration**. Click **OK** on the message box.

__ b. Mark Step 1 complete. The DB2 user `db2inst1` and group `dasadm1` were created during the DB2 installation. Click **Mark Step Complete**.

__ 16. Step 5 is a manual step. You must restart the DB2 server.



__ a. Click **OK**.

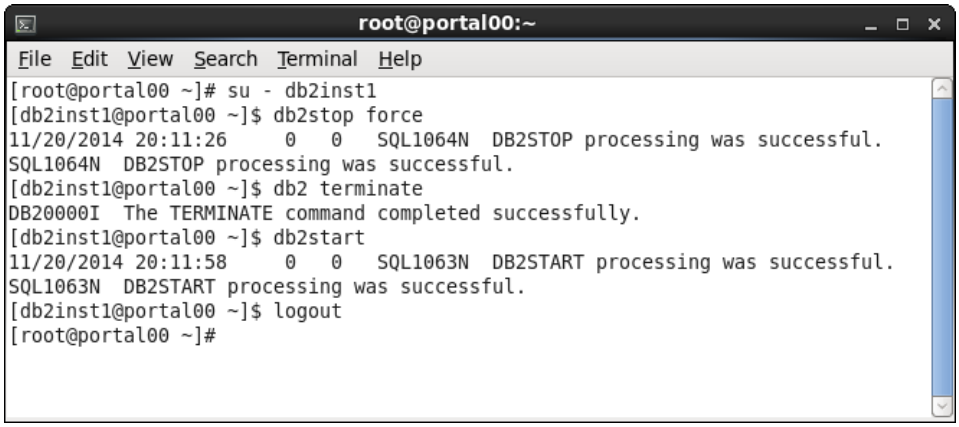
__ b. Open a terminal window and enter the command: `su - db2inst1`

__ c. Enter the command: `db2stop force`

__ d. Enter the command: `db2 terminate`

__ e. Enter the command: `db2start`

__ f. Enter the command: `logout`



__ g. For Step 5, click **Mark Step Complete**. The remaining steps run automatically by running commands and scripts.

__ h. Verify that all steps complete successfully.

Step	Task	Status
1	Manual Step: Create the database users and groups. Instructions for Step 1 Mark Step Complete	Complete View Result
2	Back up the properties files that the wizard uses during the configuration. View Step Command Run Step | Skip Step	Complete View Result
3	Create your databases. View Step Command Run Step | Skip Step	Complete View Result
4	Set up your database. View Step Command Run Step | Skip Step	Complete View Result
5	Manual Step: Restart the DB2 server. Mark Step Complete	Complete View Result

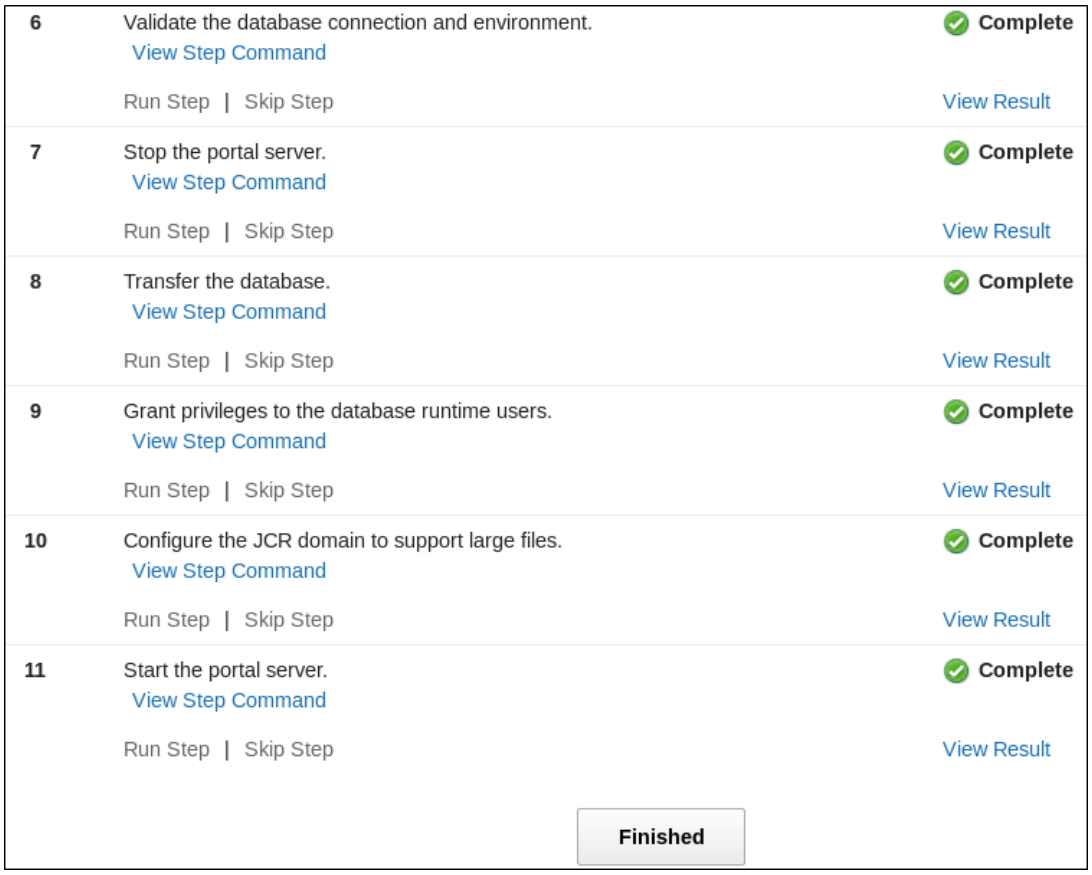
Some manual steps provide instructions that you can read by clicking the *Instructions* link. Automatic steps allow you to see the commands that run by clicking the *View Step Command* link. Each step provides a *View Result* link, which is helpful to read if the step fails for some reason.

Troubleshooting

Failed tasks

If any task fails, you can try to fix it by using the following steps.

1. Click **View Result** and look for the error message. Most often you find that one or more configuration values are mistyped. You can then click **Reset** on the step, make the correction, and then run the step again.
2. It might also be helpful to look at the failure logs at `/opt/IBM/WebSphere/wp_profile/ConfigEngine/log` to discover the cause of the failure.



__ i. Click **Finished**.

__ j. You see a “Configuration completed successfully” message and a list of “Next Steps”. Click **Finished** to close the Next Steps pane and exit the configuration wizard.

__ k. Click **Log Out** on the Configuration Wizard banner.

__ l. Close the web browser.

