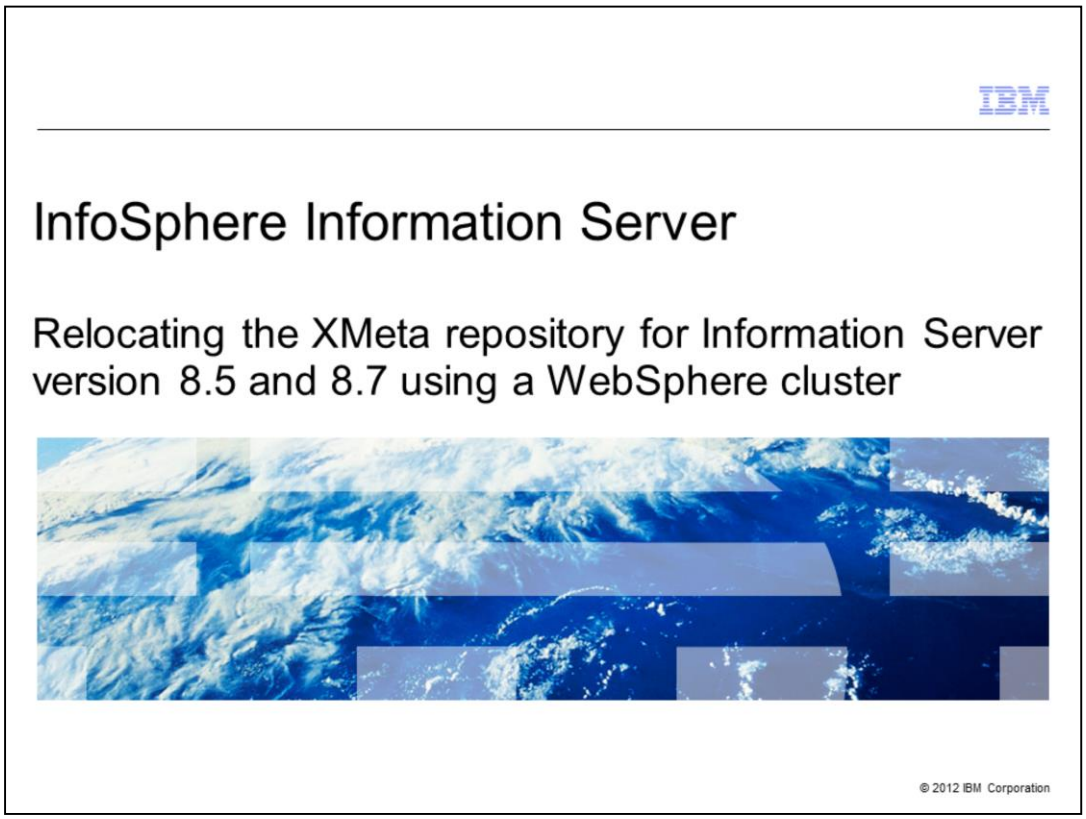
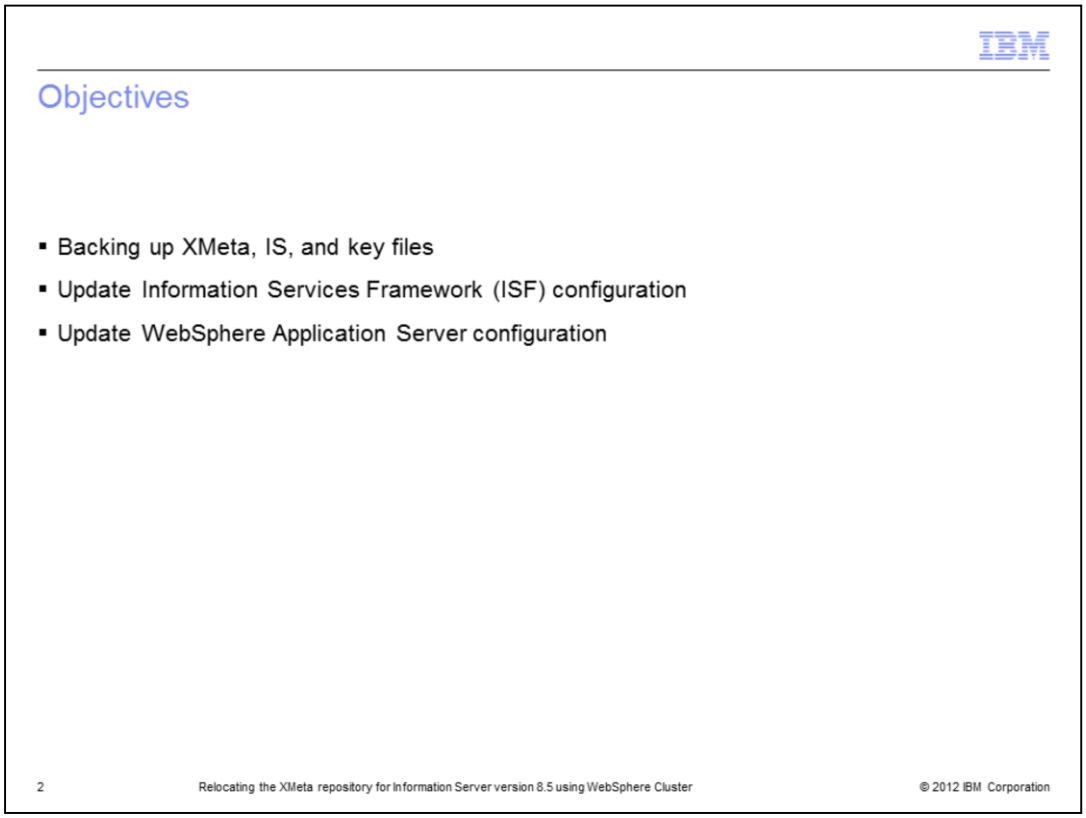
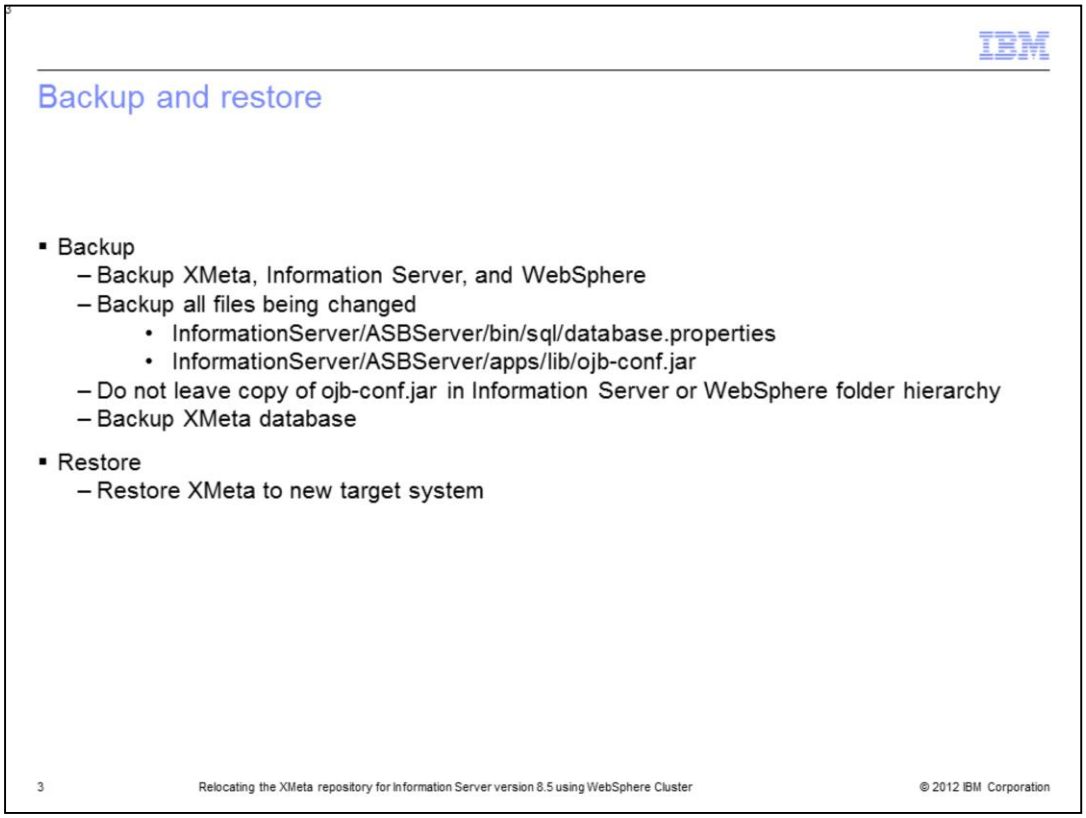


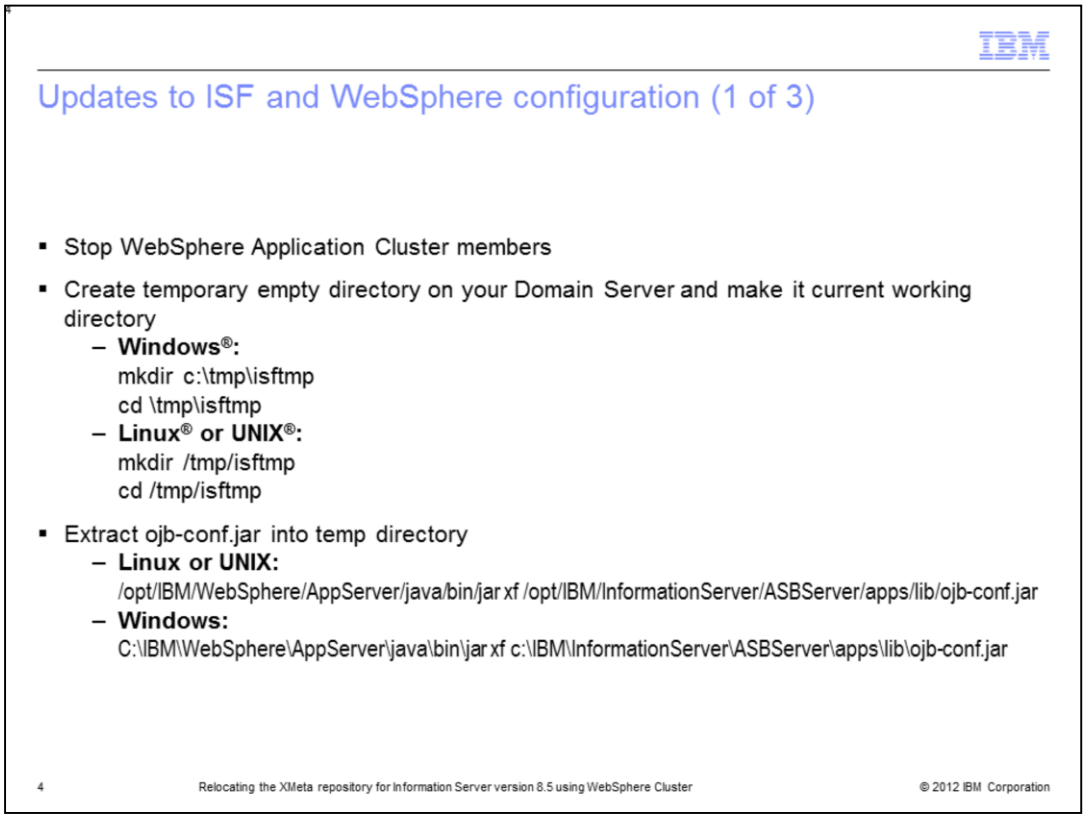
This presentation describes the steps needed to move the XMeta repository from one database server to another for Information Server version 8.5 and 8.7 using a WebSphere® cluster. If your Information Server installation does not use a WebSphere cluster, see the IBM Education Assistant module for non-clustered WebSphere.



The objectives of this presentation are to describe what needs to be backed up and how to update the Information Services Framework configuration, referred to as the ISF configuration. This presentation also describes what changes need to be made to the WebSphere cluster.



Before you make any changes to XMeta, Information Server, or WebSphere, it is good practice to take a complete backup of all three installations. It is safest to do a cold backup of the WebSphere Application Server by stopping WebSphere before you do the backup. It is also good practice to make a copy of all the files that are changed during this process to make it easier to revert back if necessary. The files that are key to make copies of are displayed on this slide. Ensure the backup of ojb-conf.jar is not left in the IBM Information Server or WebSphere folder hierarchy. Backup the XMeta database on the source system and restore to the target system using the backup and restore tools provided with the database. Backup the affected files before changing them in this procedure.

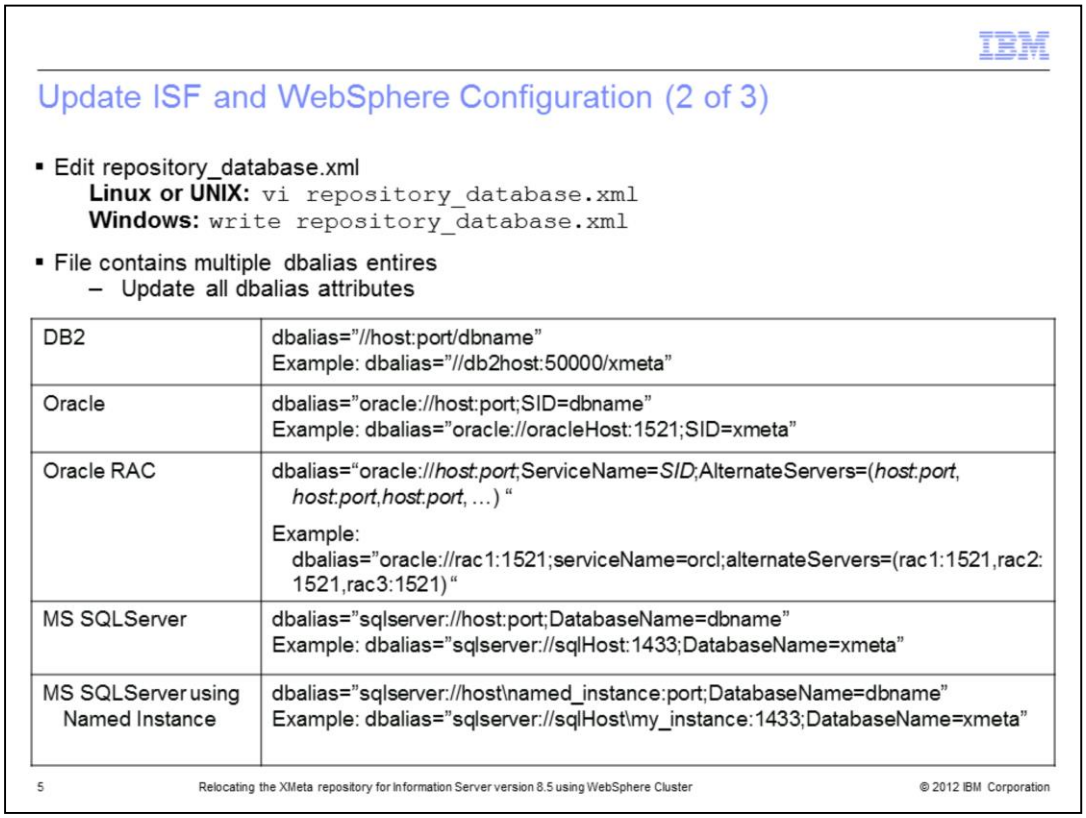


The next step is to update the ISF configuration. To do this, first you will need to stop the WebSphere Application Cluster members.

After stopping the WebSphere Application cluster members, create a temporary directory on your domain server and set it as your current working directory.

While in your newly created temp directory, extract the ojb-conf.jar file using the jar utility of a JDK, for example, the JDK in WebSphere.

There are example commands on this slide. This command will extract ojb-conf.jar and place the contents in your temp directory.



IBM

Update ISF and WebSphere Configuration (2 of 3)

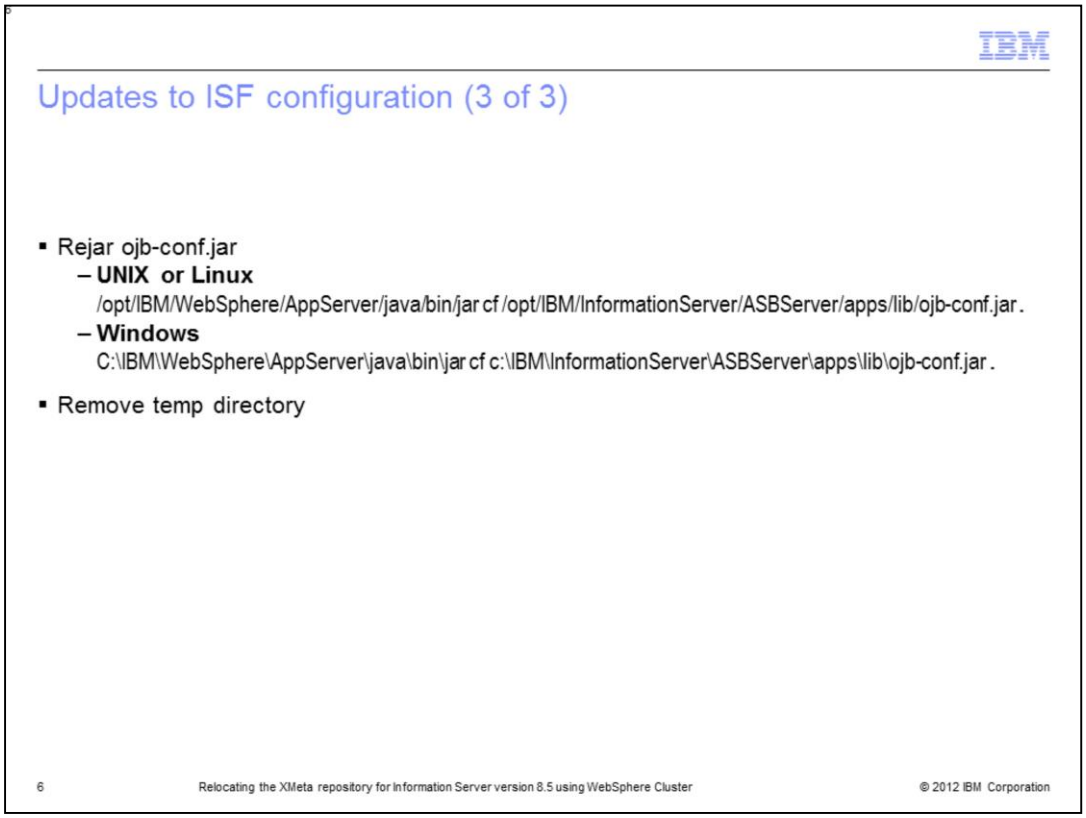
- Edit repository_database.xml
  Linux or UNIX: `vi repository_database.xml`
  Windows: `write repository_database.xml`
- File contains multiple dbalias entires
  - Update all dbalias attributes

DB2	dbalias="//host:port/dbname" Example: dbalias="//db2host:50000/xmeta"
Oracle	dbalias="oracle://host:port;SID=dbname" Example: dbalias="oracle://oracleHost:1521;SID=xmeta"
Oracle RAC	dbalias="oracle://*host:port*;ServiceName=*SID*;AlternateServers=(*host:port*, *host:port*,*host:port*, …) " Example: dbalias="oracle://rac1:1521;serviceName=orcl;alternateServers=(rac1:1521,rac2:1521,rac3:1521)"
MS SQLServer	dbalias="sqlserver://host:port;DatabaseName=dbname" Example: dbalias="sqlserver://sqlHost:1433;DatabaseName=xmeta"
MS SQLServer using Named Instance	dbalias="sqlserver://host\named_instance:port;DatabaseName=dbname" Example: dbalias="sqlserver://sqlHost\my_instance:1433;DatabaseName=xmeta"

5 Relocating the XMeta repository for Information Server version 8.5 using WebSphere Cluster

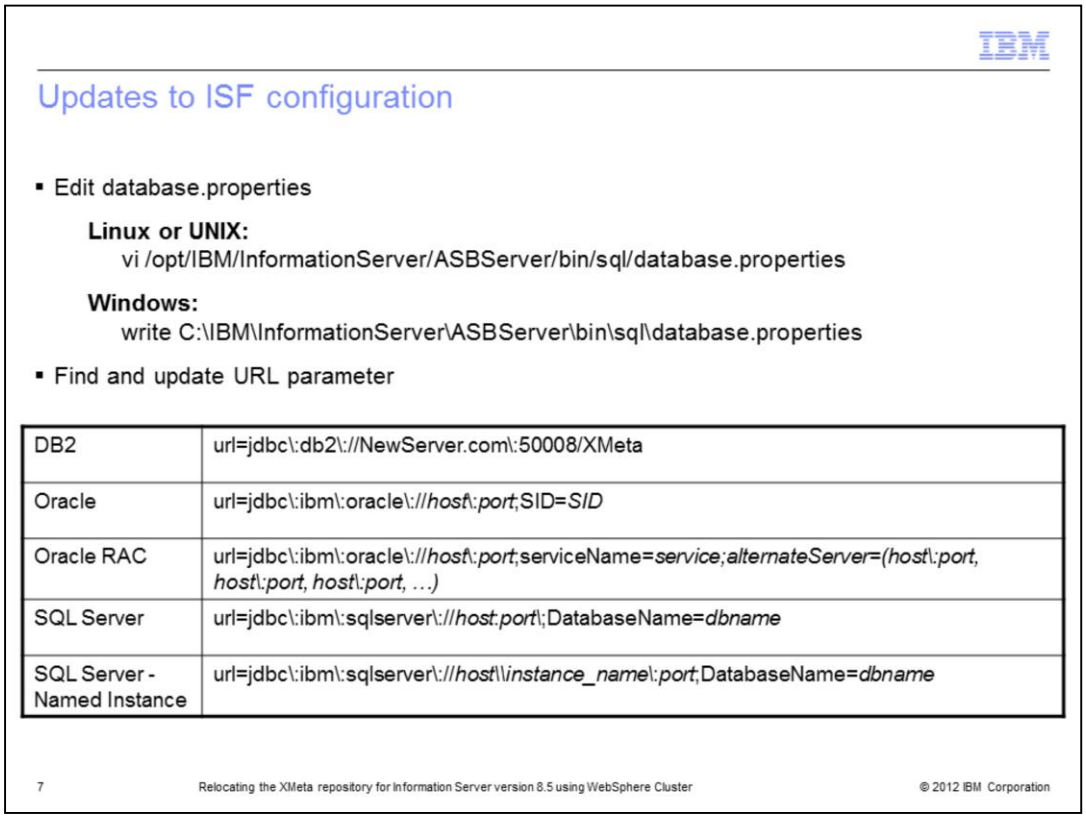
The next step is to edit the repository_database.xml file that is in your temp directory. Use the vi command for Linux and UNIX or open the file in Wordpad by using the write command if on Windows. Search for all of the dbalias attributes. Use the table displayed on this slide to correctly update this field. Edit every dbalias attribute in the file with the new host, port and dbname value, and save the file.

If you are using Sql Server named instances, note that the format is sqlserverHostname\named_instance.

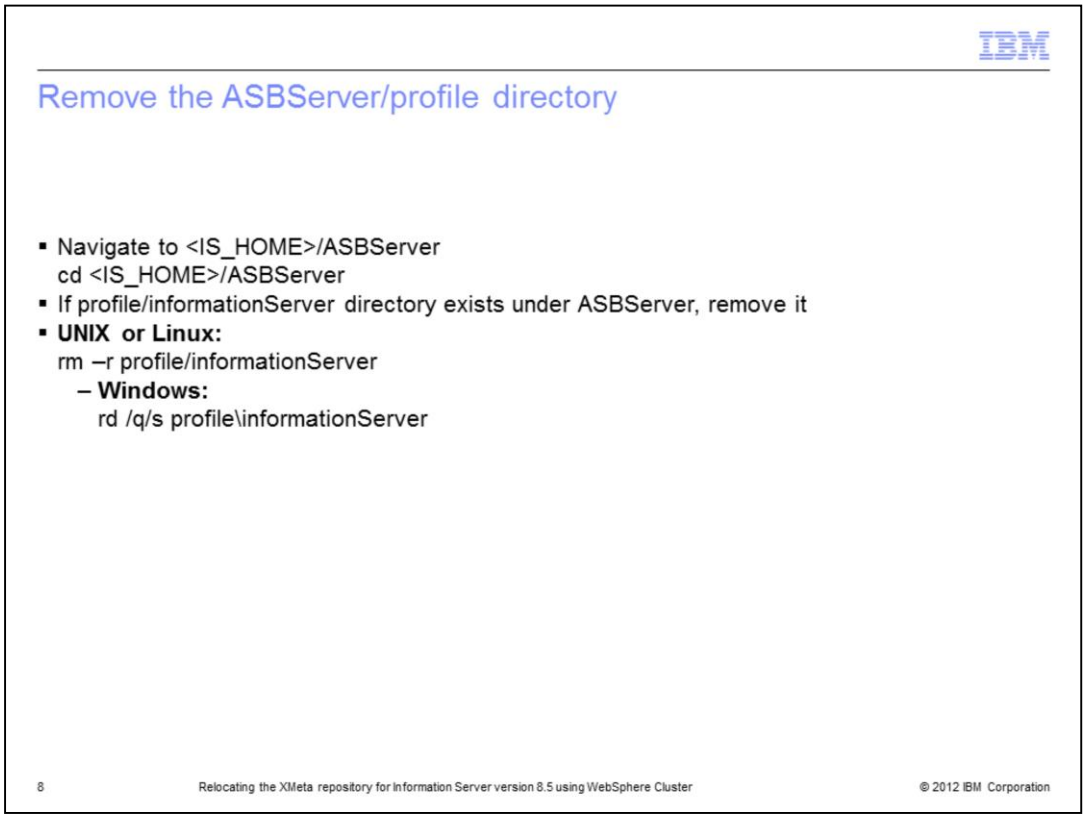


After updating the dbalias attribute, you can now re-jar ojb-conf.jar with the updated repository_database.xml file using the jar utility of a JDK. For example, the JDK in WebSphere. Be sure you are still in your temp directory. This slide includes example commands. Be sure your paths are correct for your installation. You must remember to put the “space dot” at the end of the jar command.

After this step is completed, you need to delete the temp directory.

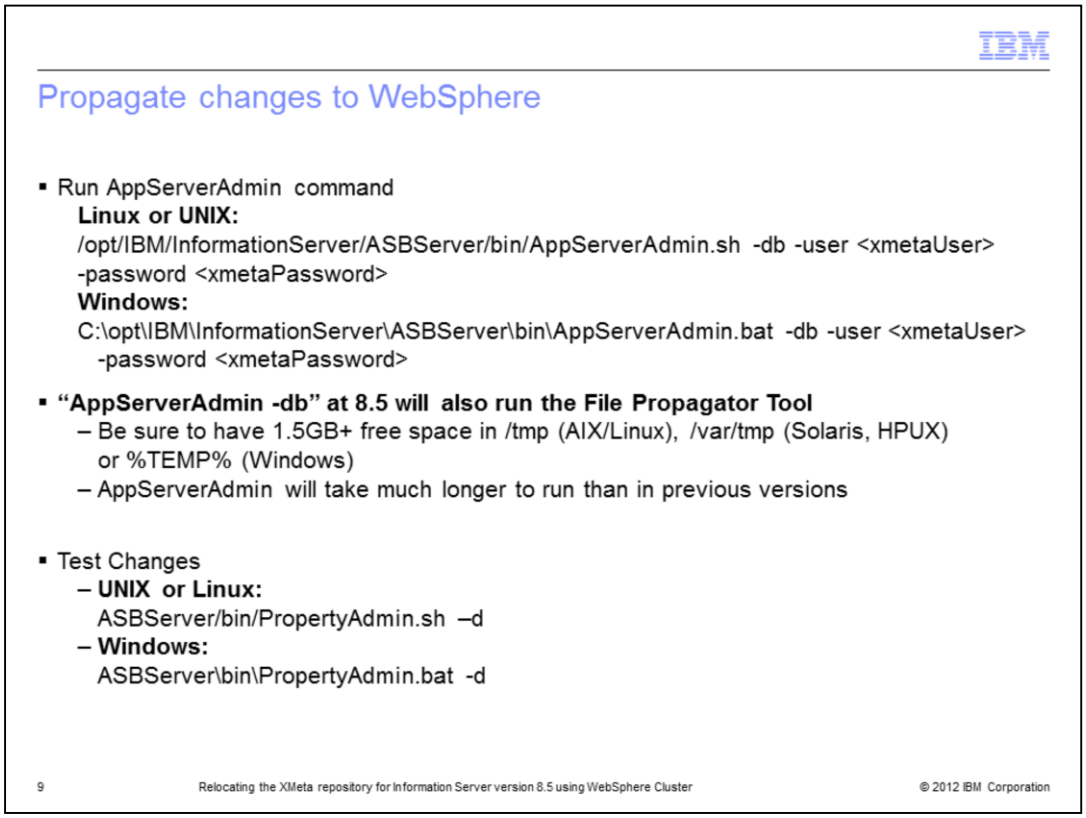


The next step is to edit the database.properties file in the InformationServer/ASBServer/bin/sql directory. Find and update the URL parameter to reflect the new repository server name and port. After updating, save the file.



The next step is to remove the InformationServer/ASBServer/profile/informationServer directory. Navigate to your InformationServer home directory and then change directories to the ASBServer subdirectory.

Check to see if the profile/informationServer directory exists. If it does exist, remove the directory using one of the commands on this slide.

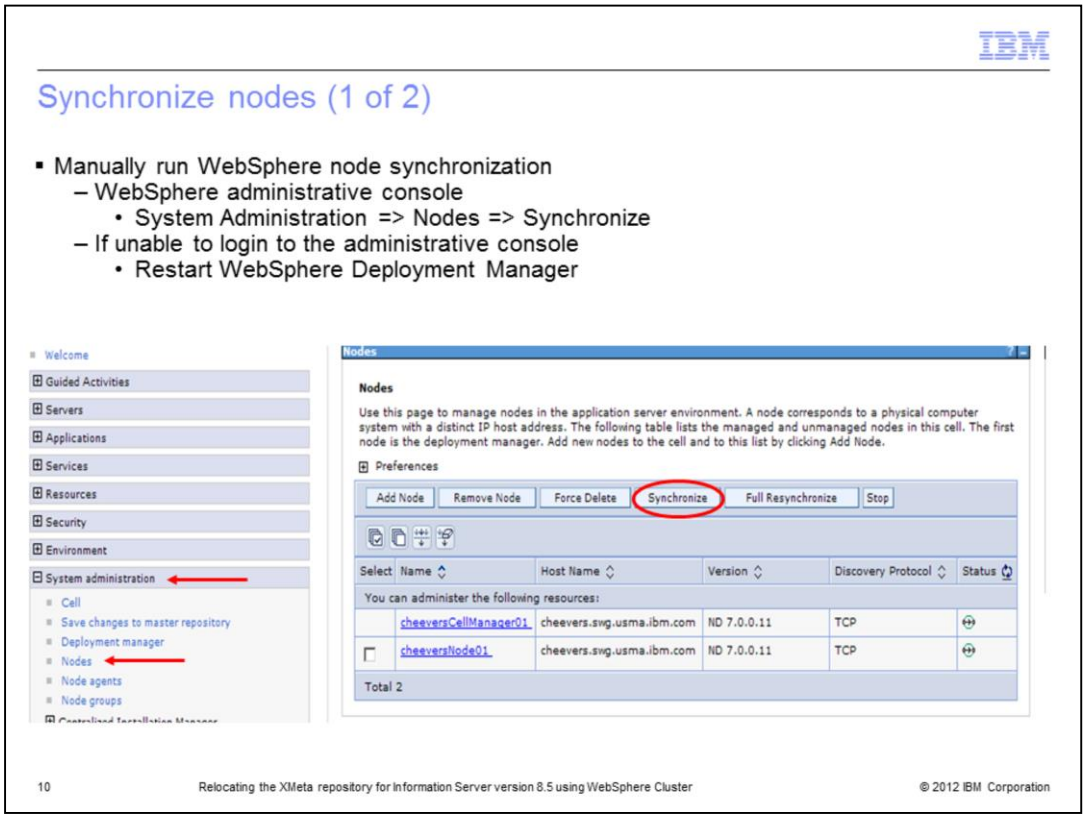


At version 8.5, the changes to ojb-conf.jar also need to be propagated to WebSphere. The AppServerAdmin -db command will run the FilePropagator tool so the command will take longer to complete than in previous versions of Information Server and requires at least 1.5GB of free space in temp.

Run the AppServerAdmin command as shown in the example in this slide. If your XMeta password has changed, this step will also reset it to the new password.

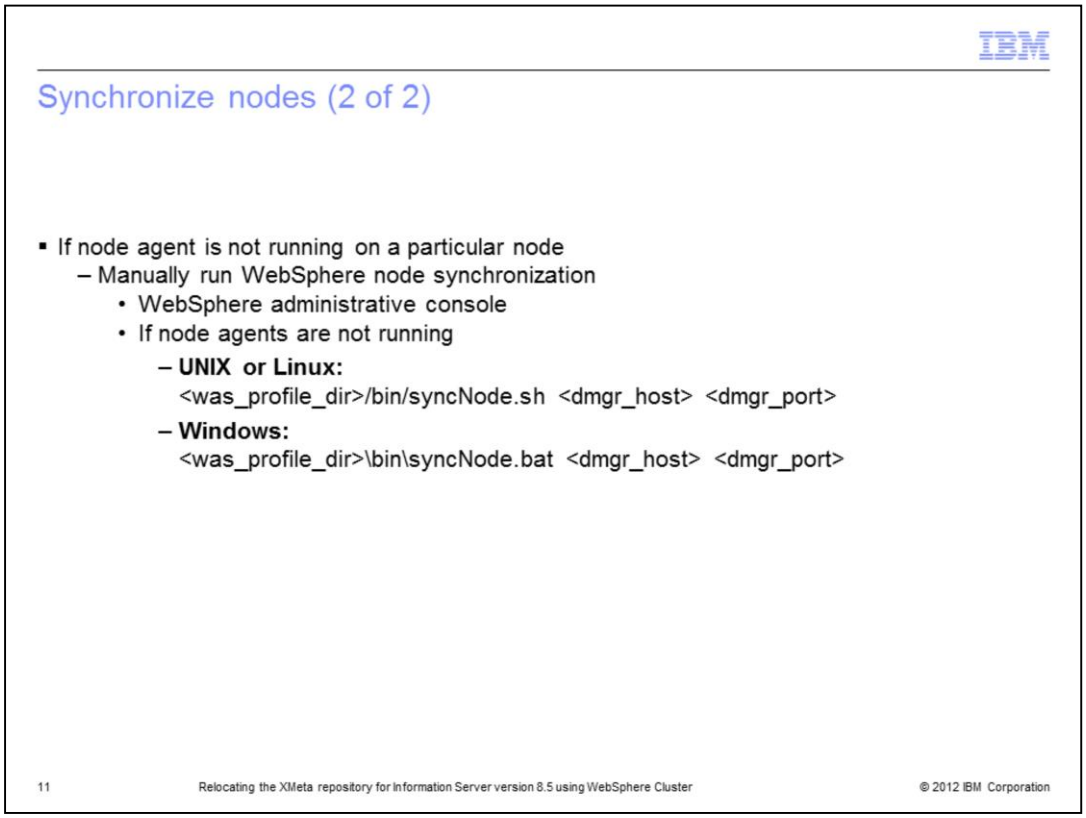
Once AppServerAdmin completes, it is best to check that the new ojb-conf.jar is correct. To do this, run the PropertyAdmin command in ASBServer/bin. You just need to be sure that this command returns successfully. If it does not, go back and check the changes you made to ojb-conf.jar before continuing.

Once AppServerAdmin is complete, you will need to synchronize the nodes.

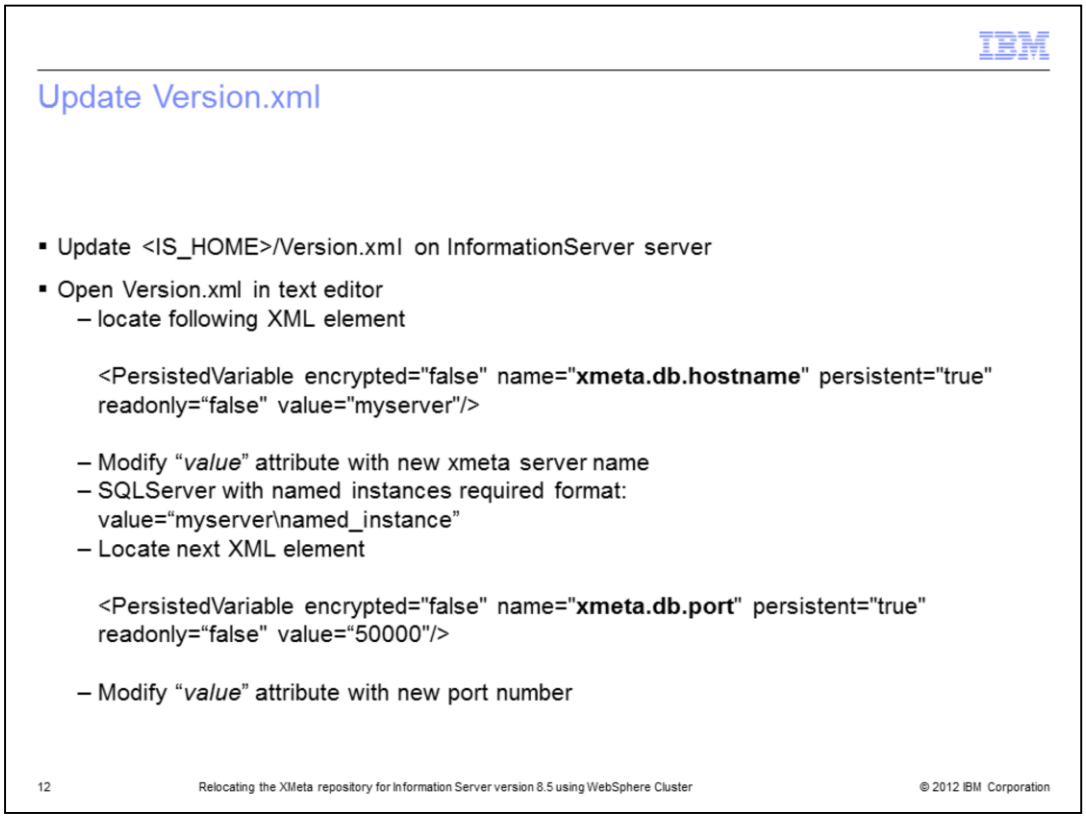


Next, you will need to manually run WebSphere node synchronization. This can be done through the WebSphere administrative console. From the administrative console, click System Administration, Nodes, and click the Synchronize button.

In some cases, you may not be able to login to the WebSphere administrative console after making the changes in the previous slides. If this is the case, restart the WebSphere Deployment manager. This allows you to get back into the WebSphere Administrative Console.



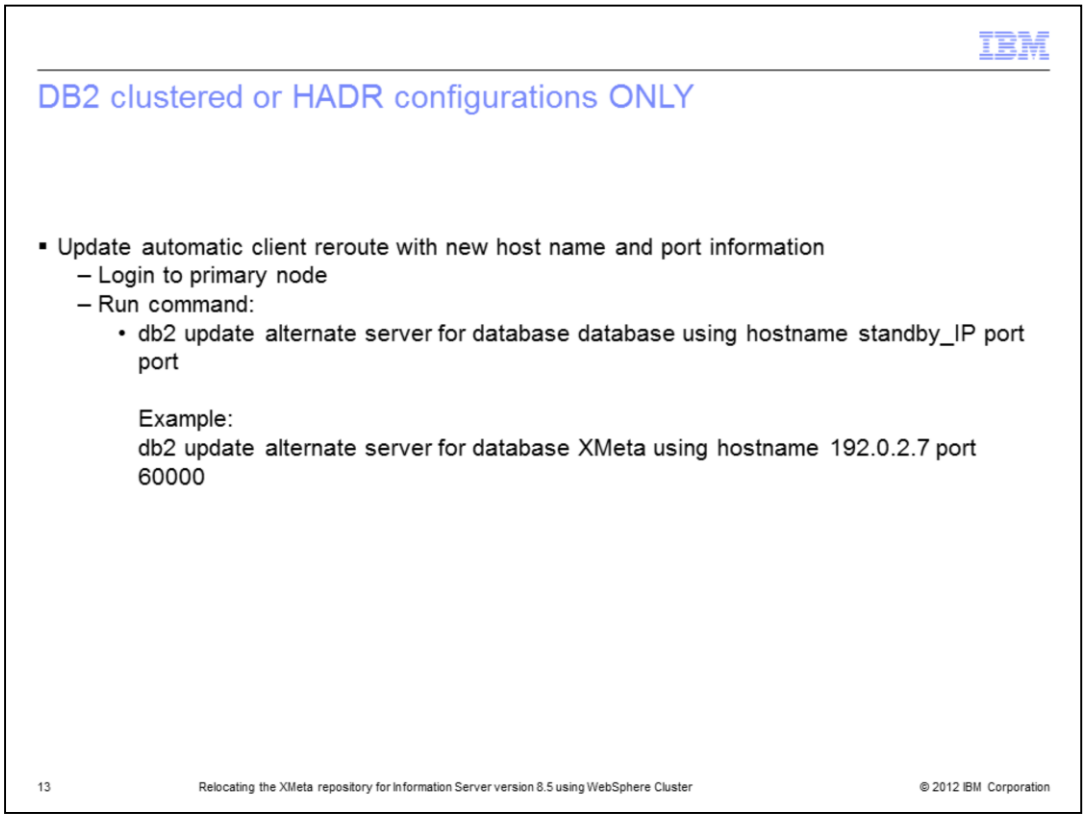
If there is a node or nodes in the cluster where the node agent is not running, you will not be able to do the synchronization by way of the WebSphere Administrative console. In this case, you can do the synchronization by running the syncNode command shown in this slide on the node profile which needs to be synchronized. dmgr_host is the name of the host running the Deployment Manager and dmgr_port is the port the Deployment manager is running on. The default value for dmgr_port is 8879.



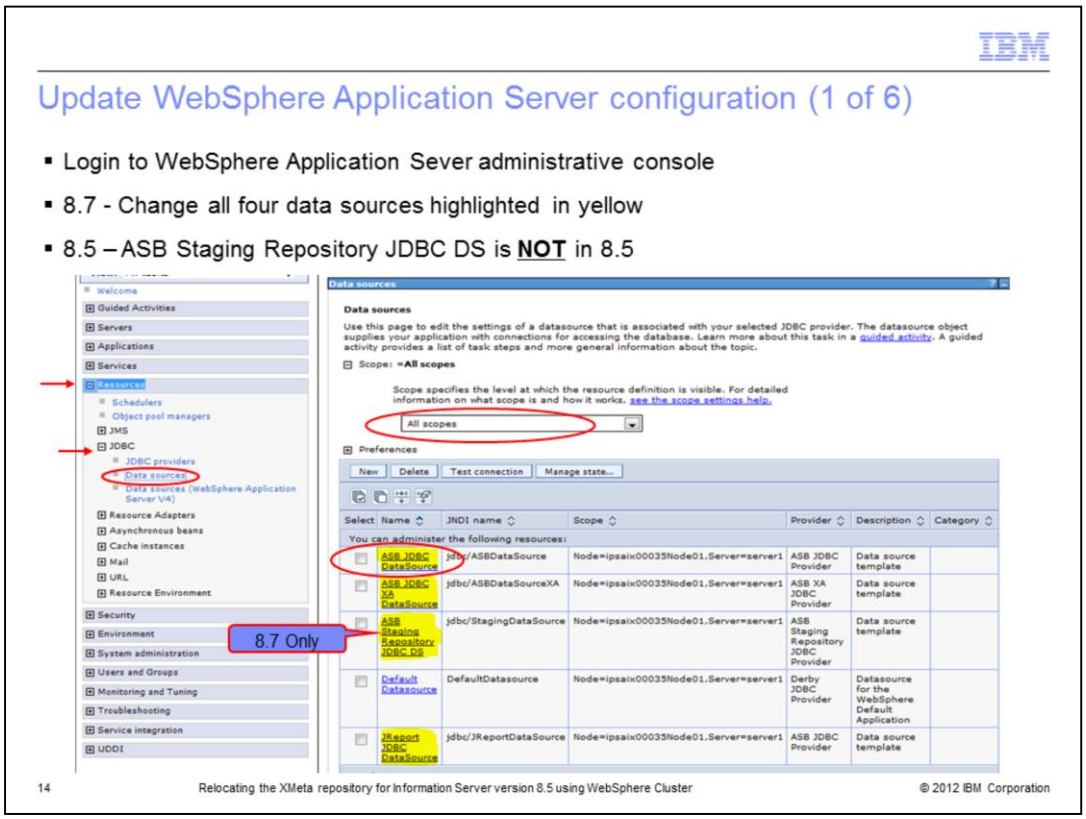
Next, update the values in the Version.xml file. This file contains the installation records that are used by the installation program. Keeping the file current avoids problems with future installations. The Version.xml file is located in the IBM InfoSphere™ Information Server installation directory on the same server as the ojb-conf.jar file.

Open the Version.xml file in a text editor and locate the PersistedVariable XML element that has the name attribute equal to xmeta.db.hostname. You will need to modify the value attribute to contain the correct XMeta server name. Note that if you are using SQL Server with named instances, you will need to use the format of servername\named_instance for the XMeta server name.

Next you need to locate the PersistedVariable XML element that has the name attribute equal to xmeta.db.port. Modify the value for port if your port number has changed. Save your changes.



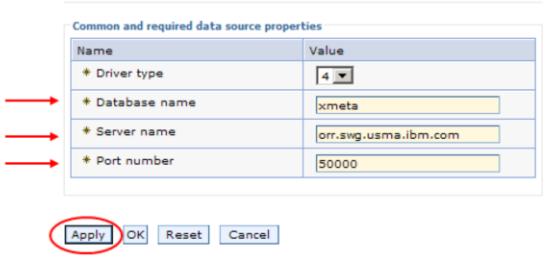
In an IBM InfoSphere Information Server installation with a clustered DB2 database system setup, you must update the automatic client reroute with the new host name and port information. This slide shows the format of the update alternate server command along with an example of the command. If you are not using Information Server with a clustered DB2 database, skip this step.



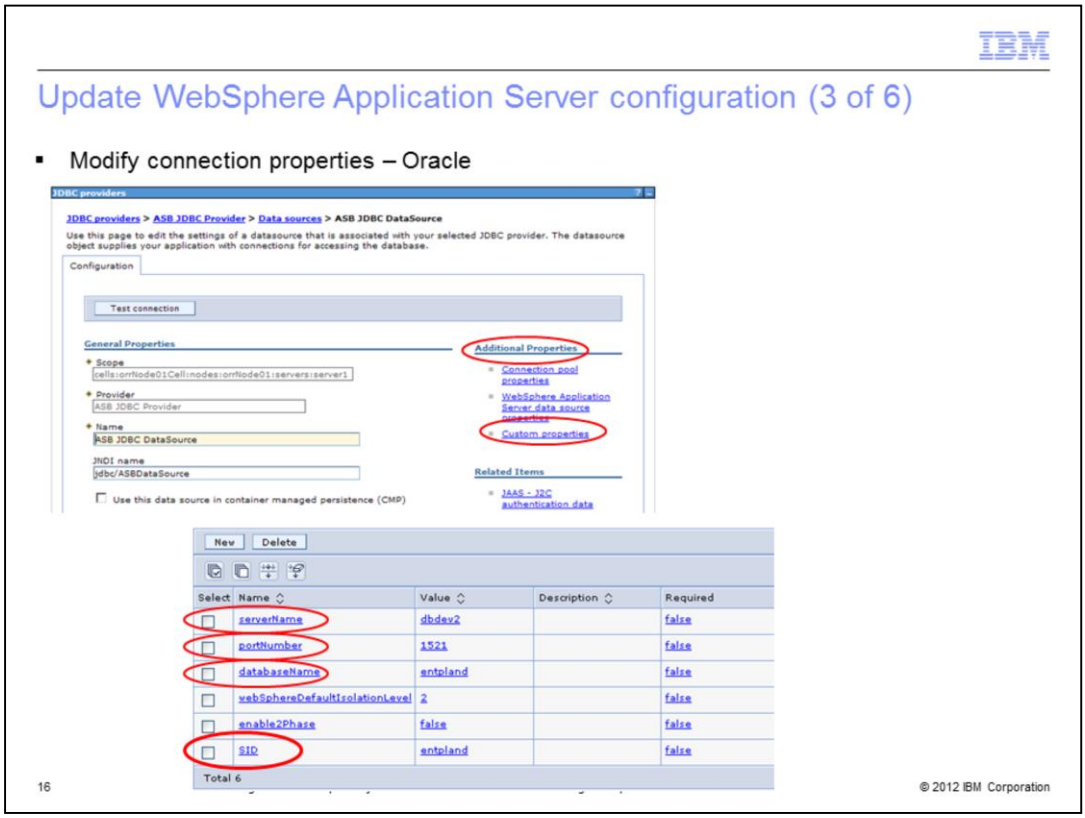
Login to the WebSphere Application Server administrative console. Click the Resources tab on the left side and then click JDBC and then Data sources underneath. This will display four data sources in version 8.5 and five data sources in 8.7. In addition to the four in 8.5, 8.7 also includes the ASB Staging Repository JDBC data source. The changes described in the next few slides will need to be done on all of the data sources highlighted in yellow on this slide. To start, click the first data source, ASB JDBC DataSource. If you do not see the data sources as displayed on this slide, go to the Scope section, click the drop down and select All scopes. All of the data sources should now appear in the box.

Update WebSphere Application Server configuration (2 of 6)

- Modify connection properties – DB2



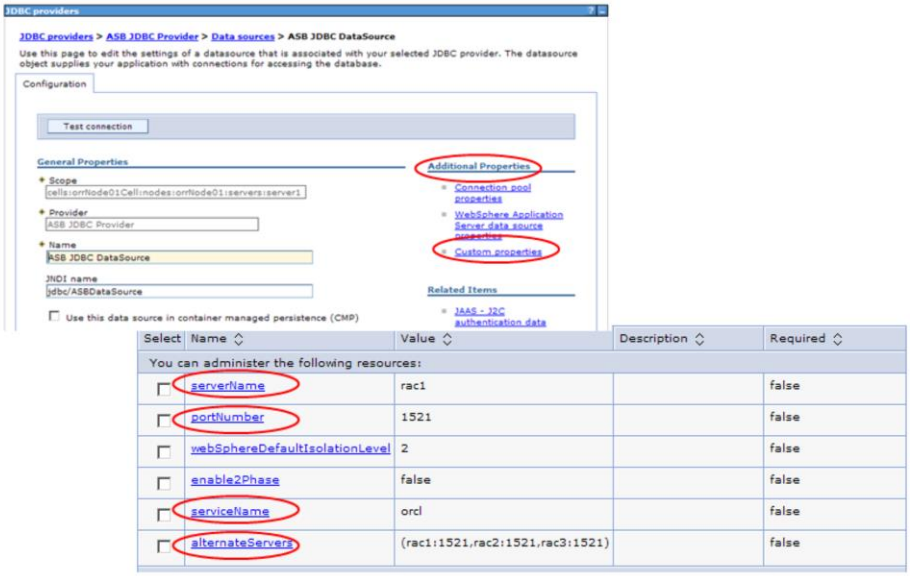
For XMeta on DB2, scroll to the bottom of the screen for the data source and modify the connection properties as required. Click Apply.



For XMeta on Oracle, on the Configuration tab, click Custom Properties on the right side under the Additional Properties heading. Once in Custom Properties, click the settings that have changed and set them to the appropriate values. Click Apply.

Update WebSphere Application Server configuration (4 of 6)

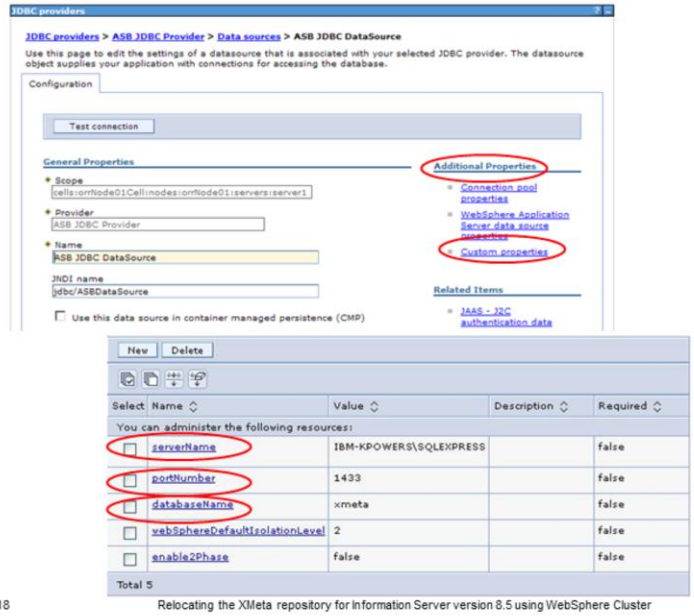
- Modify connection properties – Oracle RAC



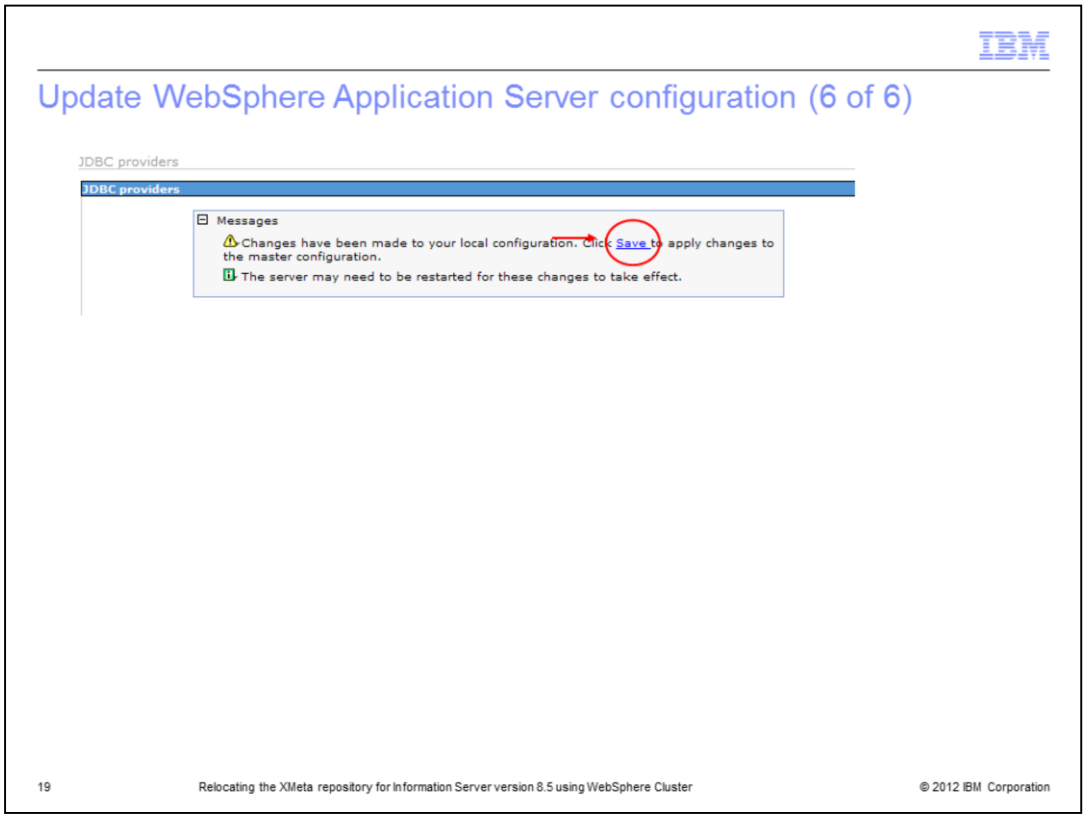
This slide displays an example of an Oracle RAC configuration. Click the values that have changed and set the values appropriately.

Update WebSphere Application Server configuration (5 of 6)

- Modify connection properties – SQL Server



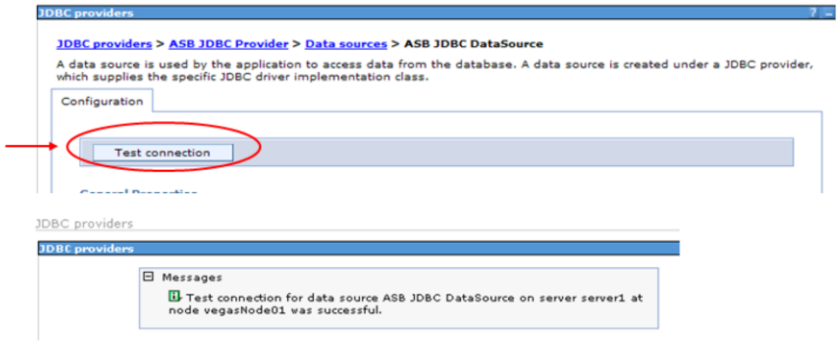
This slide displays an example on SQL Server. Click the settings that have changed and set them to the appropriate values. If you are using SQLServer named instances, be sure your server name is in the format of servername\instancename as displayed in the example on this slide. Click Apply.



In the Messages box at the top of the page, click Save to save to the master configuration.

Test connection

- Test connection



- Restart
  - WebSphere Cluster Members
  - WebSphere Node Agents
  - WebSphere Deployment Manager

20 Relocating the XMeta repository for Information Server version 8.5 using WebSphere Cluster © 2012 IBM Corporation

Once the changes have been saved, test your new connection by clicking the Test connection button at the top of the Data Sources page where you made the server changes. If the connection is successful, you will see a message at the top of the screen indicating success. If it is unsuccessful, go back and check the modified data source settings.

Once the test completes successfully, go back and modify the remaining data sources in the same manor. After all changes have been made, saved, and successfully tested, restart the WebSphere cluster members, the WebSphere node agents, and then lastly, the WebSphere Deployment Manager.

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