CREATING ORACLE DATA SOURCES

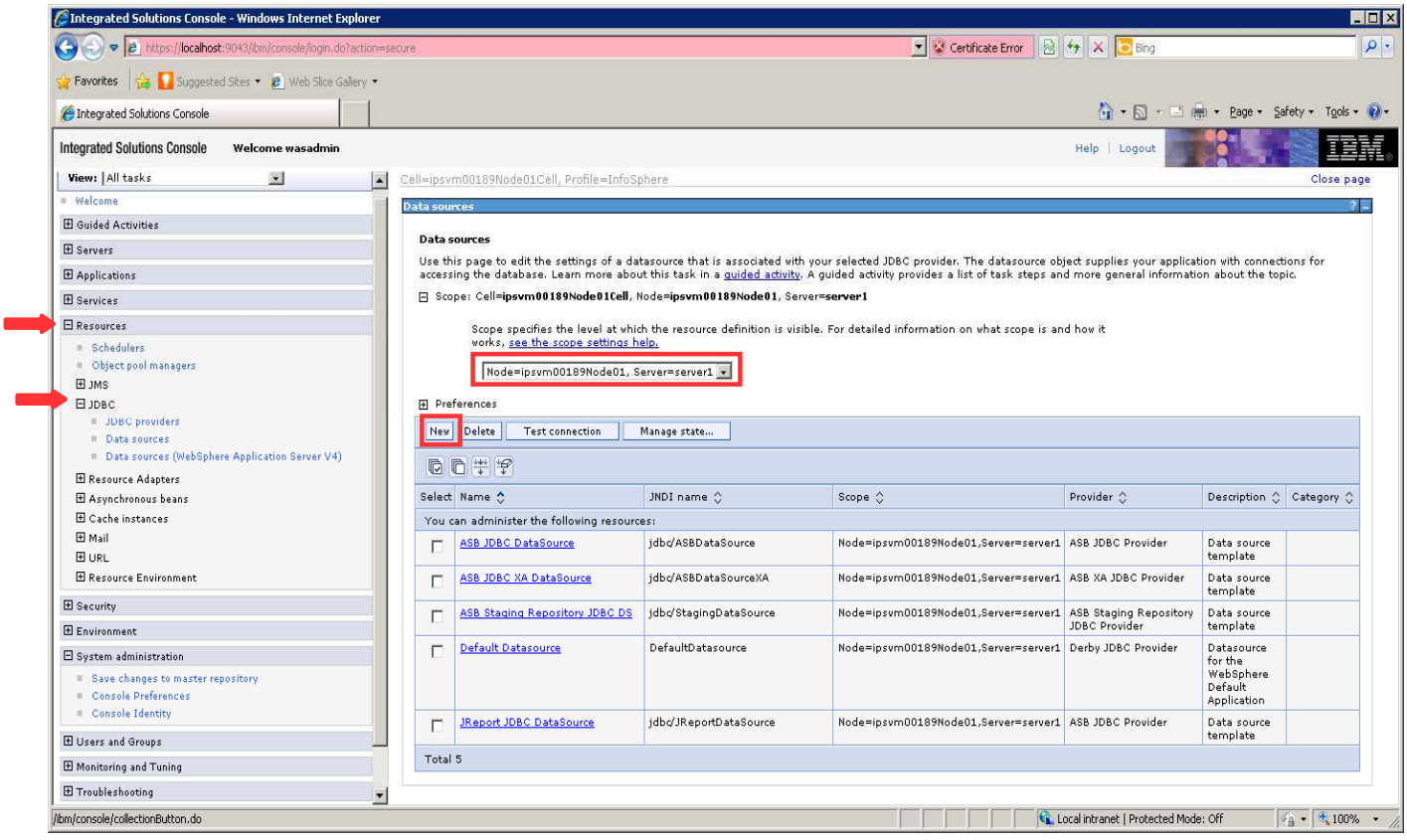
This document describes how to create and configure WAS (WebSphere Application Server) JDBC (Java Database Connectivity) data sources for a Standardization Rules Designer installation that uses an Oracle repository.

Two data sources are required:
1. An XA (distributed transaction) data source.
2. A non-transactional connection pool data source.

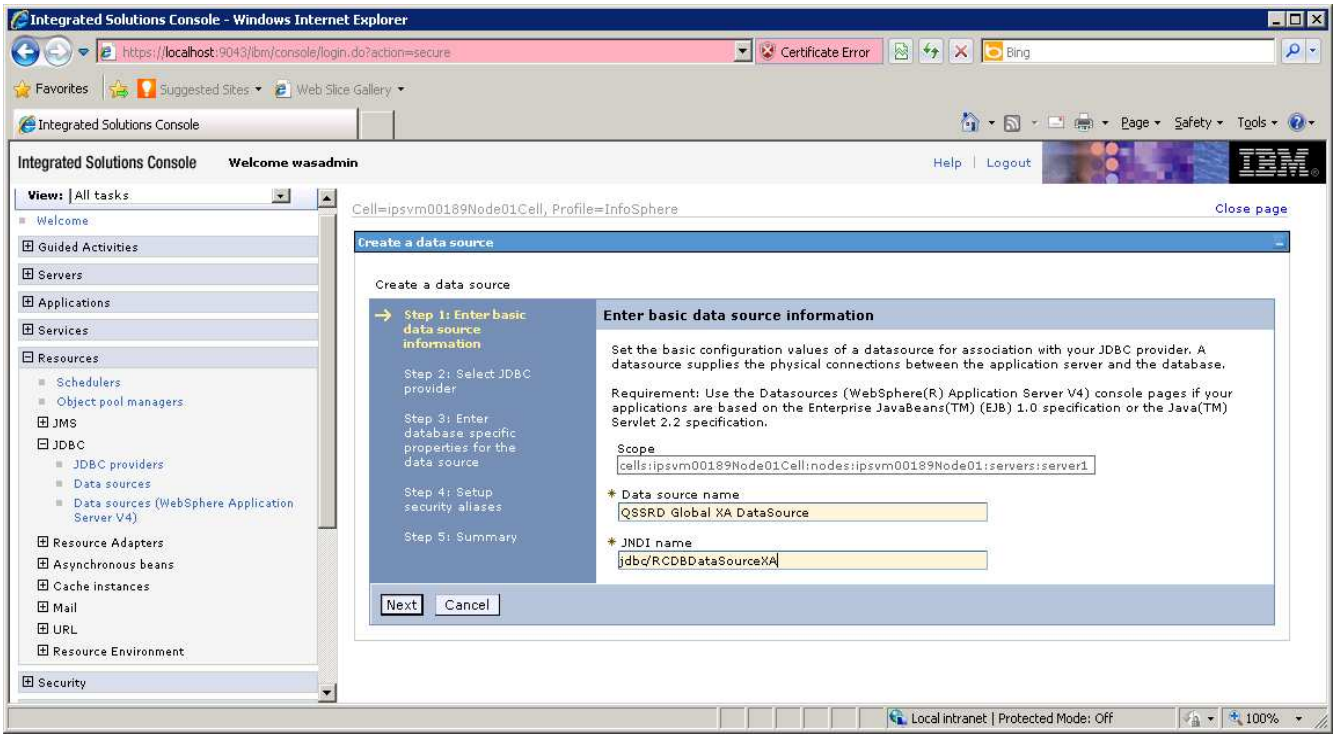
Complete the steps listed below to create each data source.

Create the distributed transaction data source:

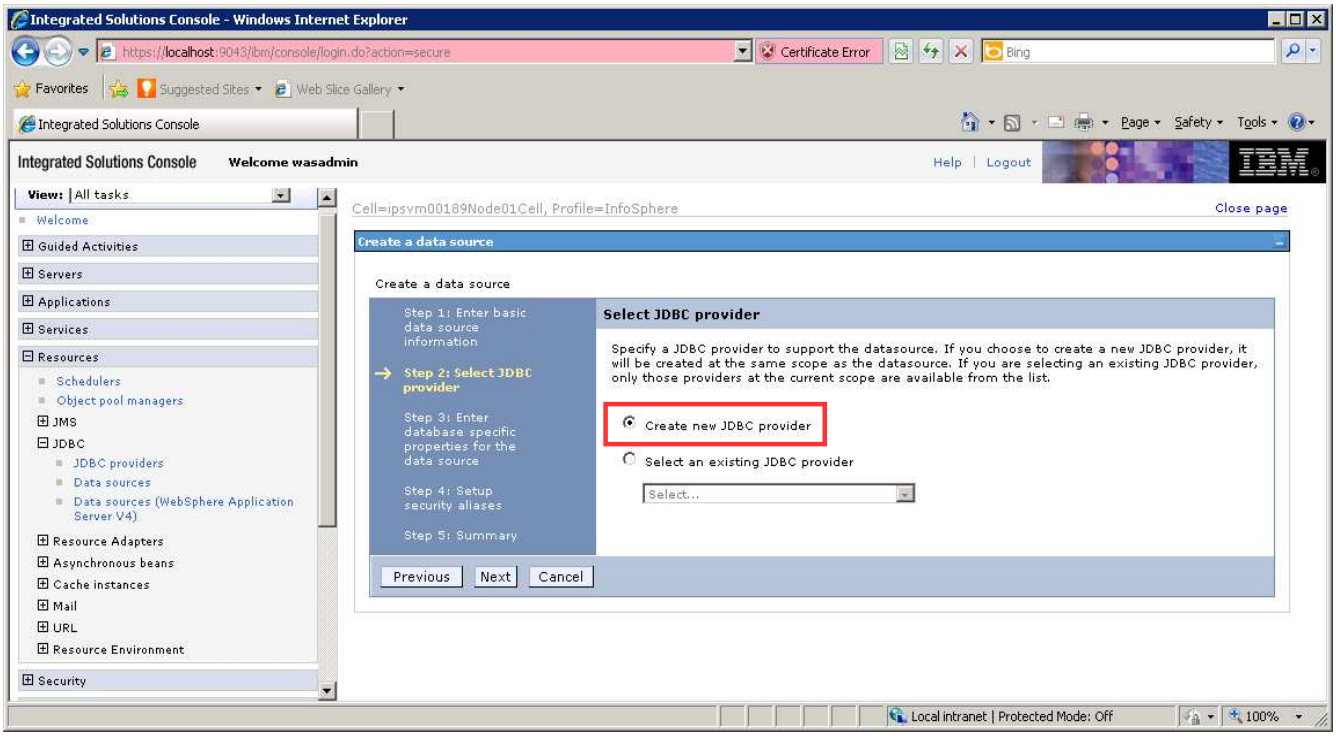
1. Login to the WebSphere Application Server Administrative Console.
2. Expand the **Resources** node in the left pane.
3. Expand the **JDBC** node.
4. Click **Data sources**.
5. Select the **Scope** for the data source from the drop down list in the right pane.
6. Click **New**.



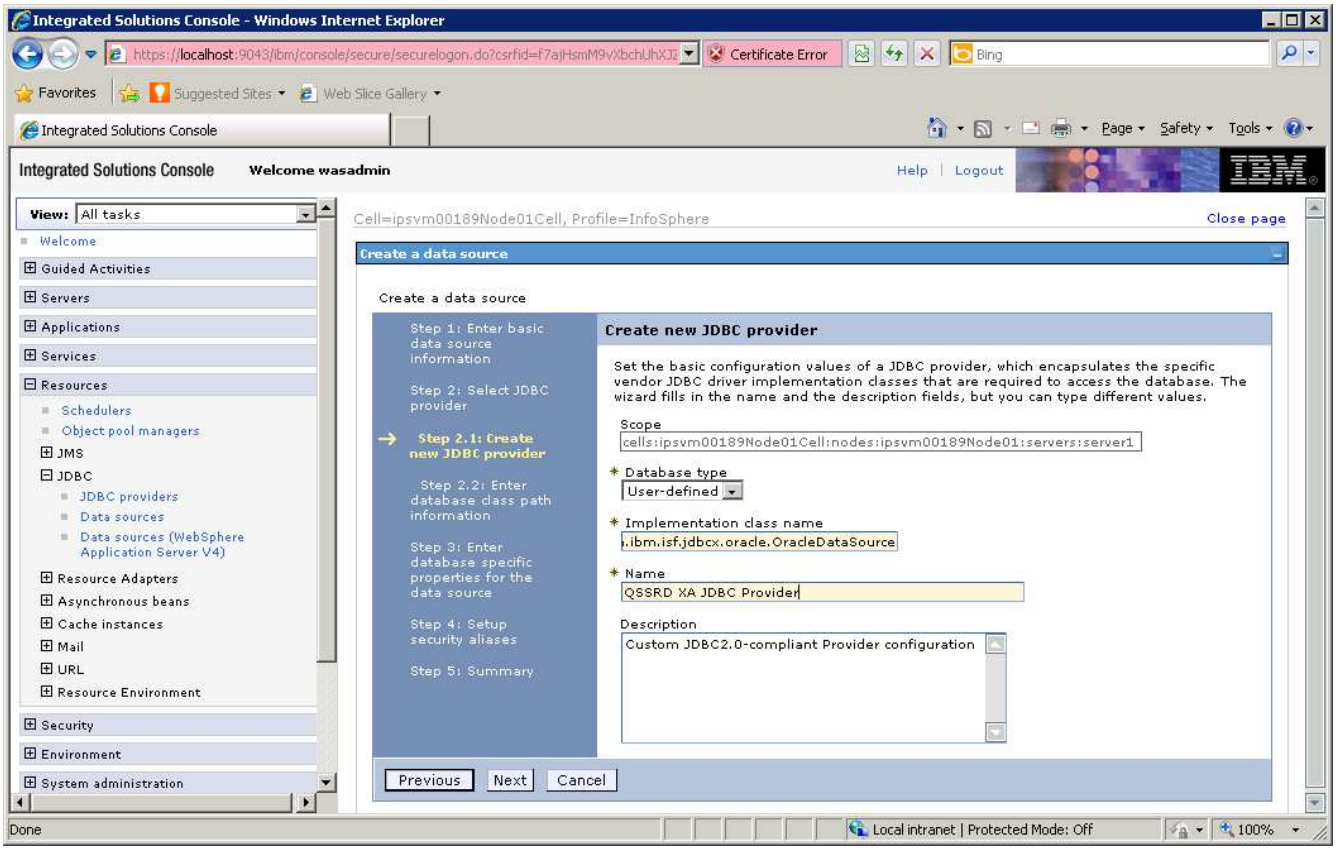
7. Enter *QSSRD Global XA DataSource* in the **Data source name** field.
8. Enter *jdbc/RCDBDataSourceXA* in the **JNDI name** field.
9. Click **Next**.



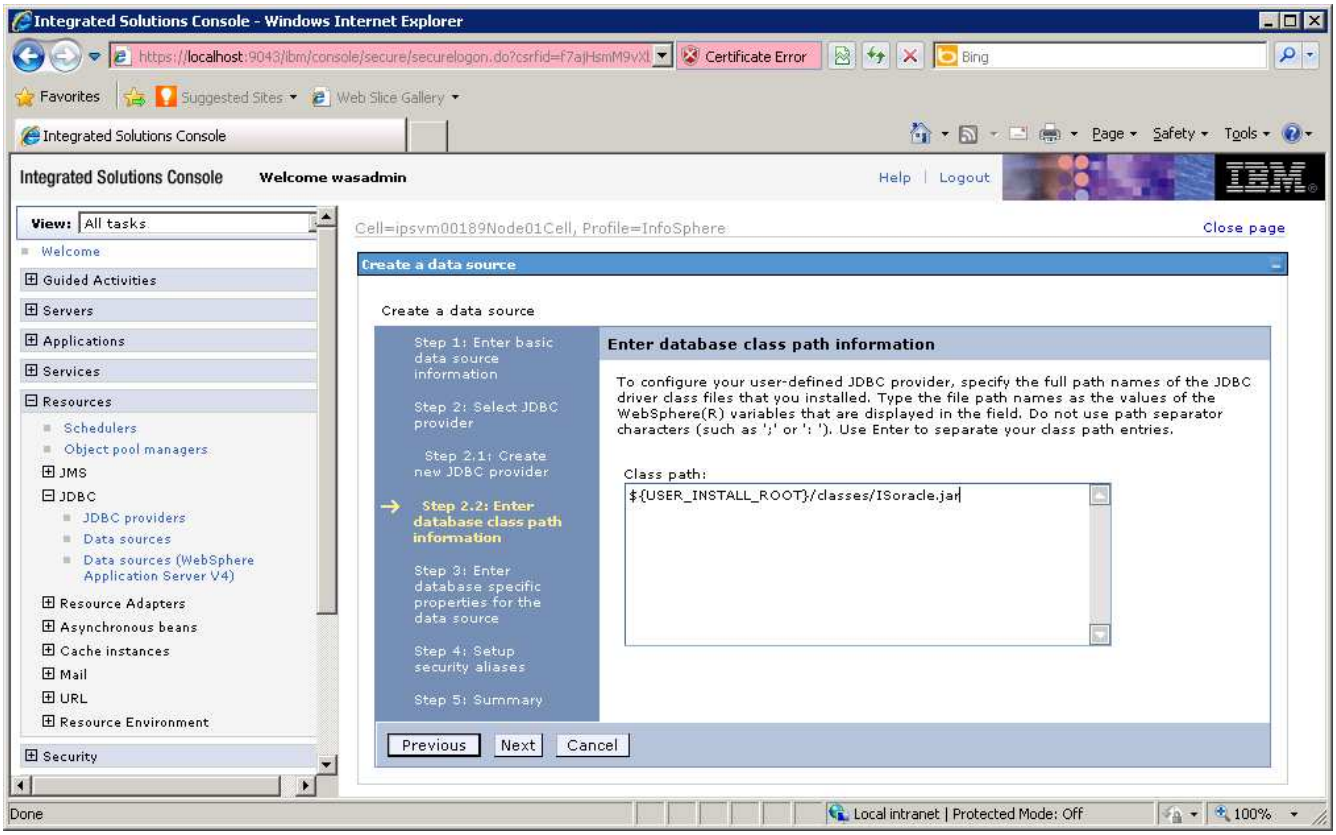
10. Select **Create new JDBC provider**.
11. Click **Next**.



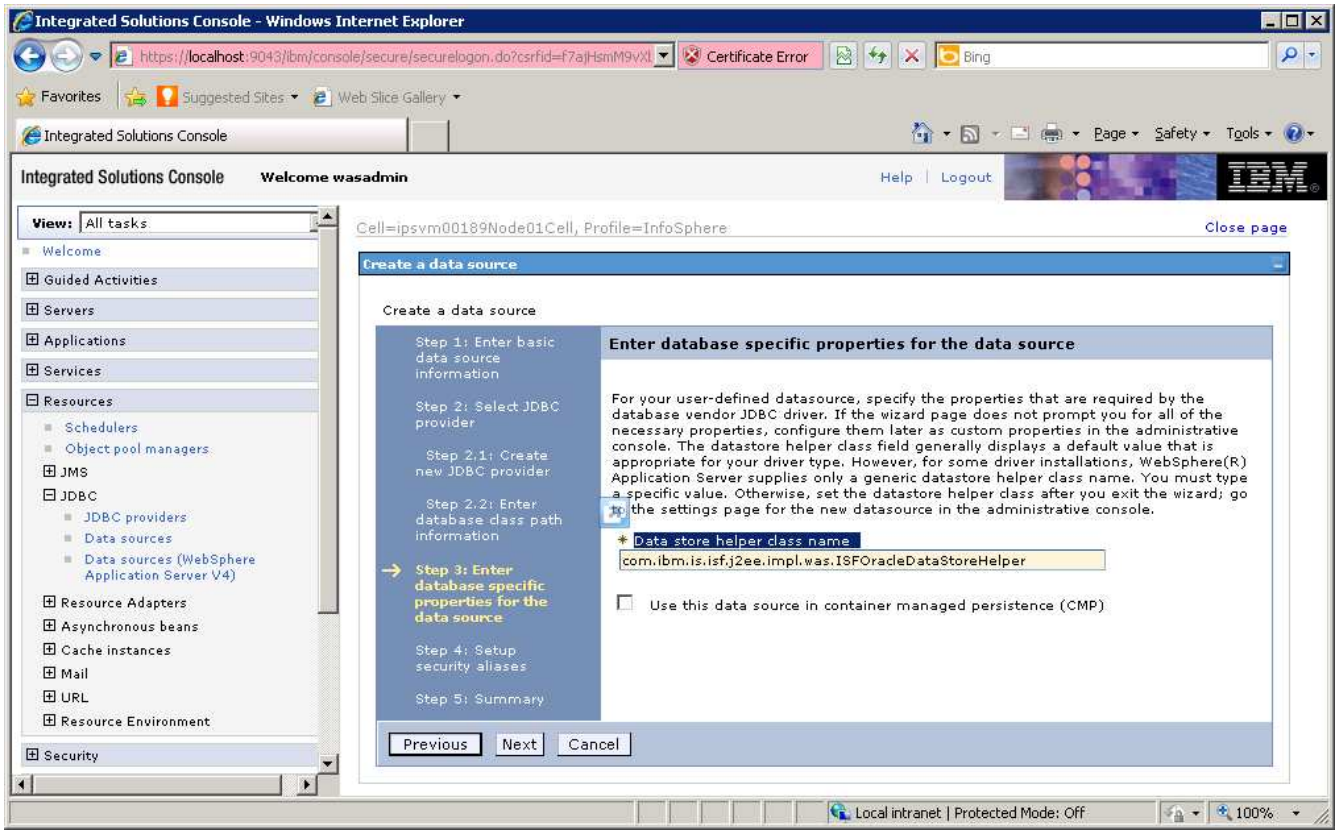
12. Enter the information for the JDBC provider:
    Database type: *User-defined*
    Implementation class name: *com.ibm.isf.jdbcx.oracle.OracleDataSource*
    Name: *QSSRD XA JDBC Provider*
13. Click **Next**.



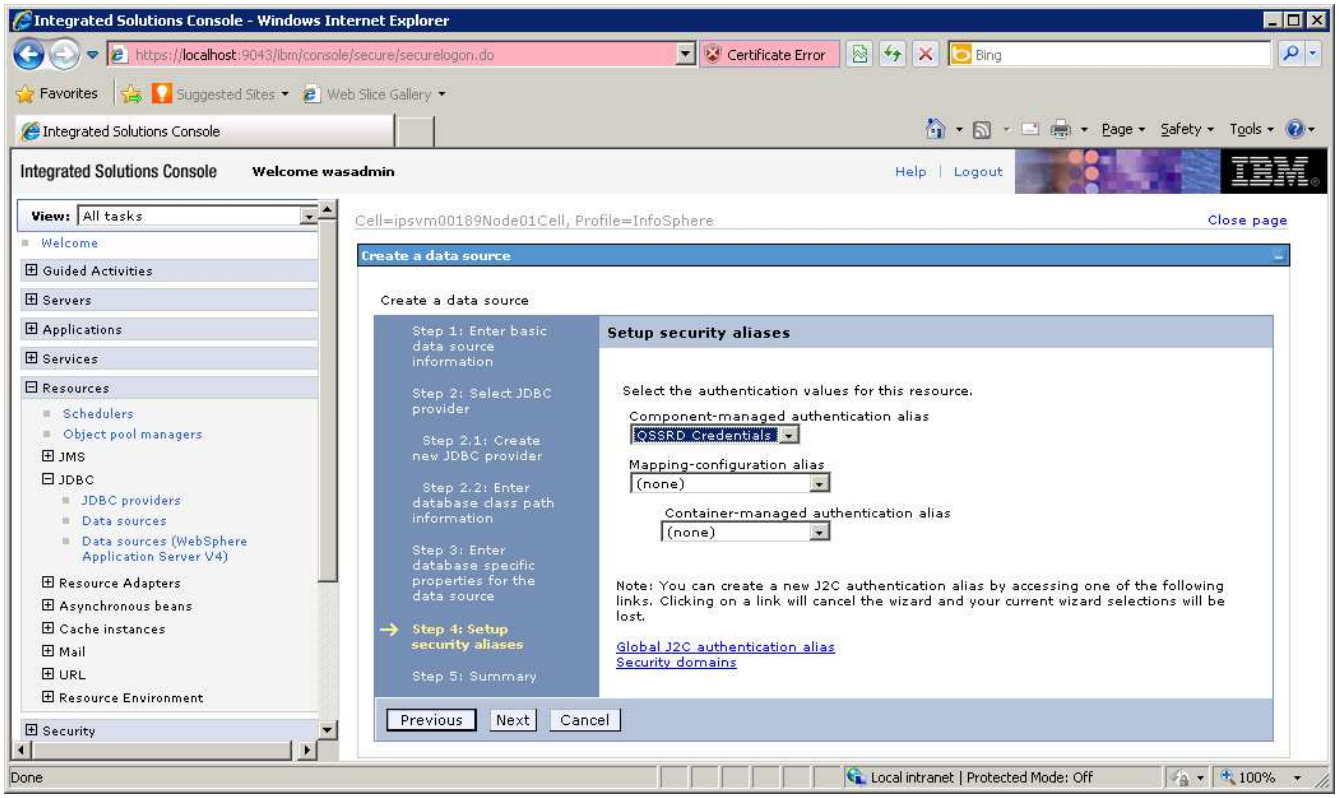
14. Enter *${USER_INSTALL_ROOT}/classes/ISoracle.jar* in the **Class path** field.
15. Click **Next**.



16. Enter *com.ibm.is.isf.j2ee.impl.was.ISFOracleDataStoreHelper* in the **Data store helper class name** field.
17. Uncheck **Use this data source in container managed persistence (CMP)**.
18. Click **Next**.

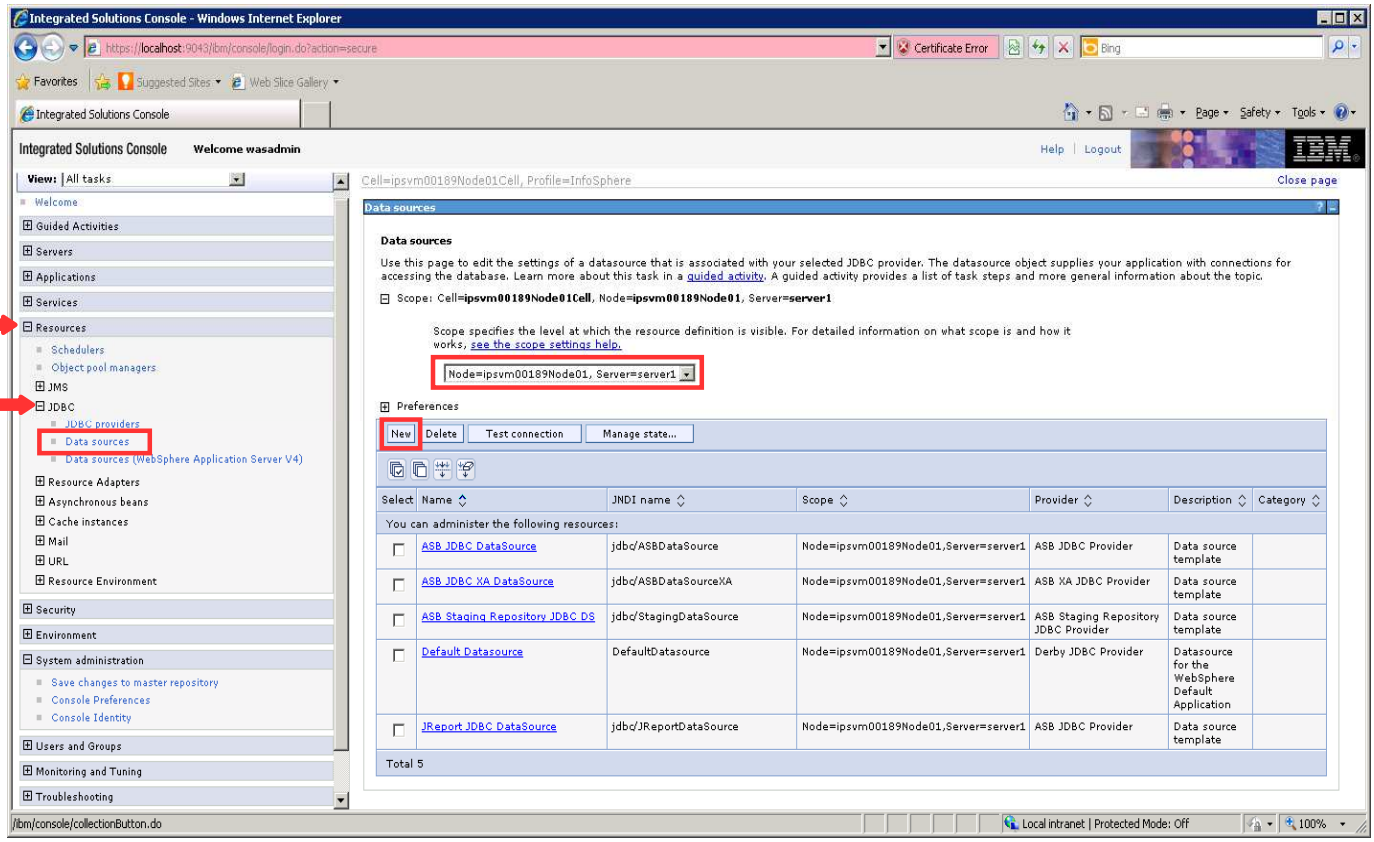


19. Select *QSSRD Credentials* from the **Component-managed authentication alias** drop down list.
20. Click **Next**.
21. Click **Finish**.
22. Click **Save**.

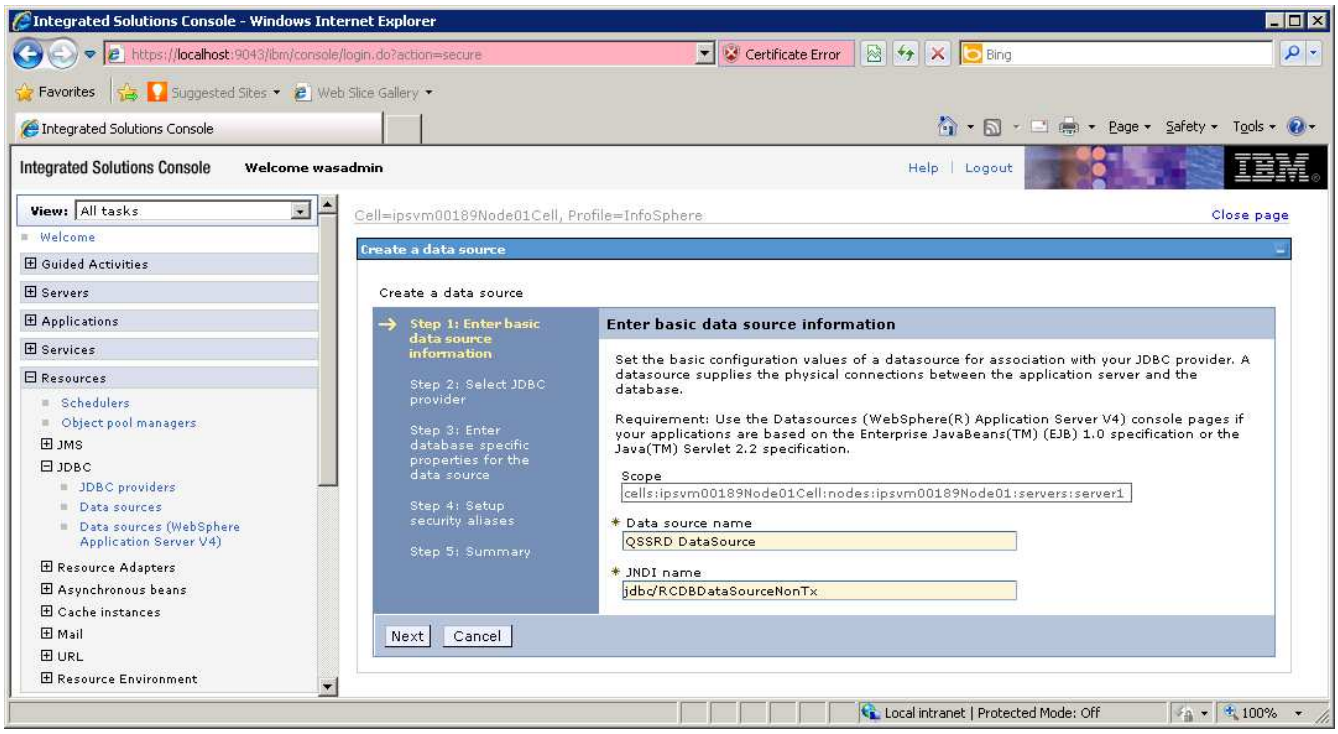


Create the non-transactional connection pool data source:

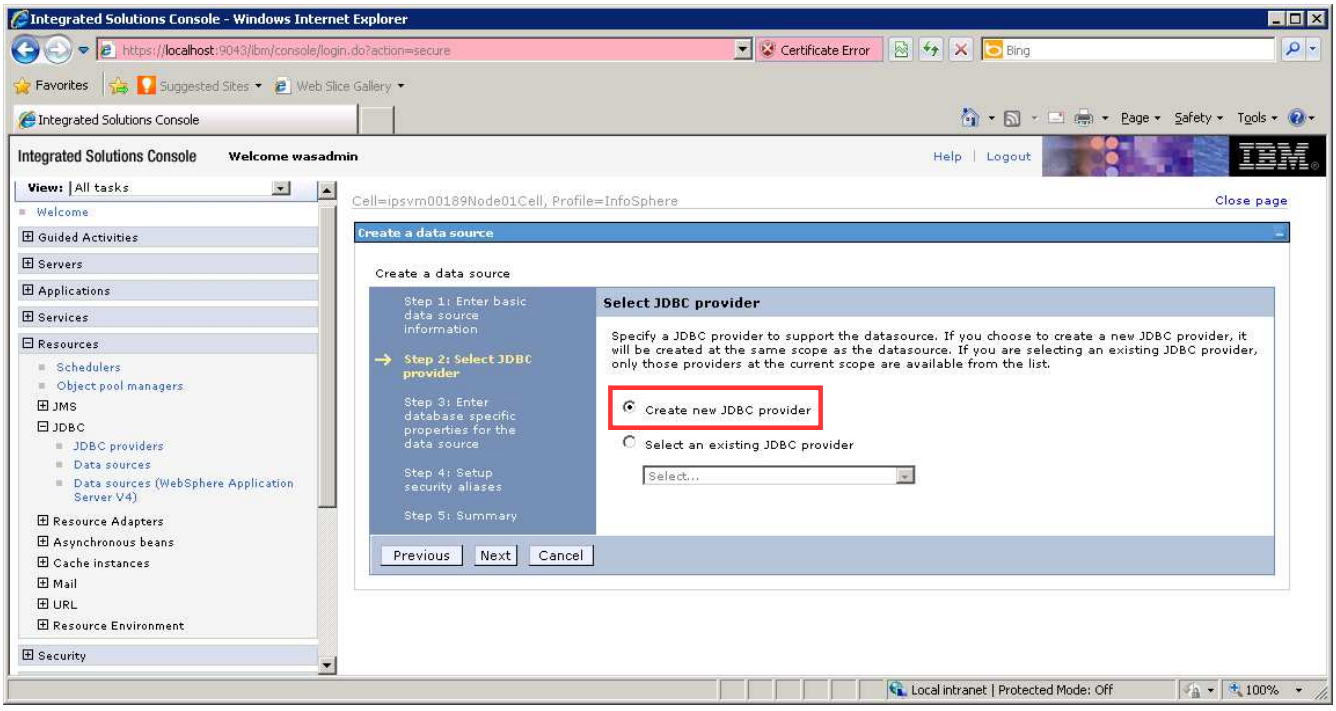
1. If you have not already done so, login to the WebSphere Application Server Administrative Console.
2. Expand the **Resources** node in the left pane.
3. Expand the **JDBC** node.
4. Click **Data sources**.
5. Select the **Scope** for the data source from the drop down list in the right pane.
6. Click **New**.



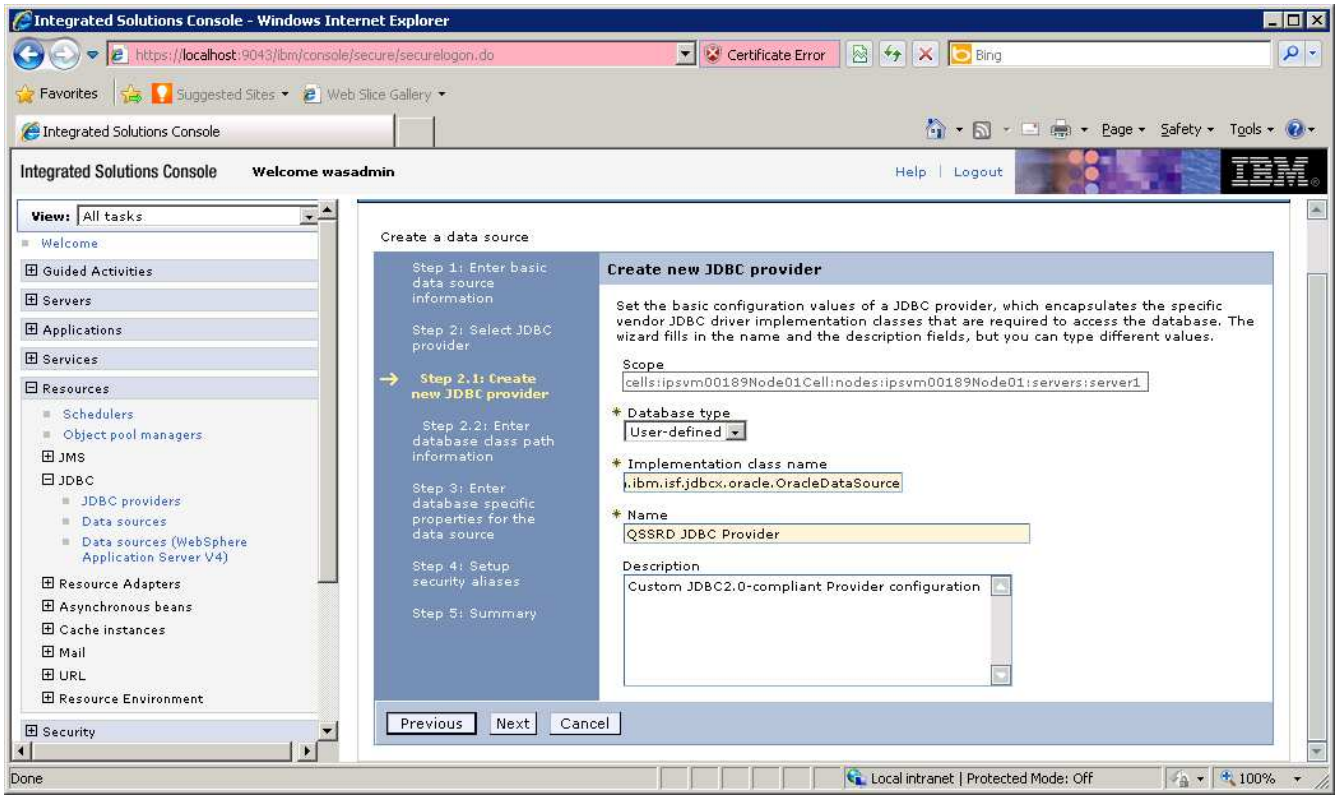
7. Enter *QSSRD DataSource* in the **Data source name** field.
8. Enter *jdbc/RCDBDataSourceNonTx* in the **JNDI name** field.
9. Click **Next**.



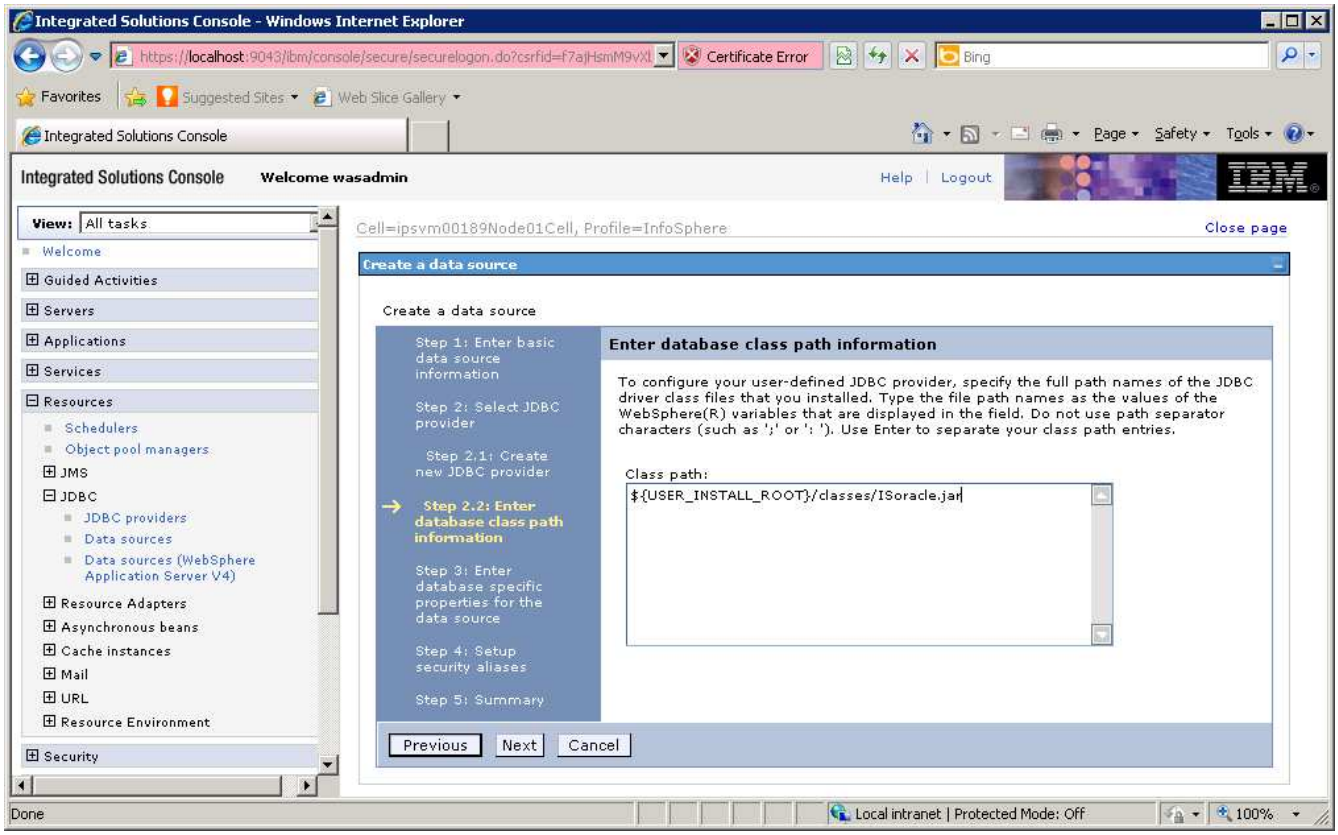
10. Select **Create new JDBC provider**.
11. Click **Next**.



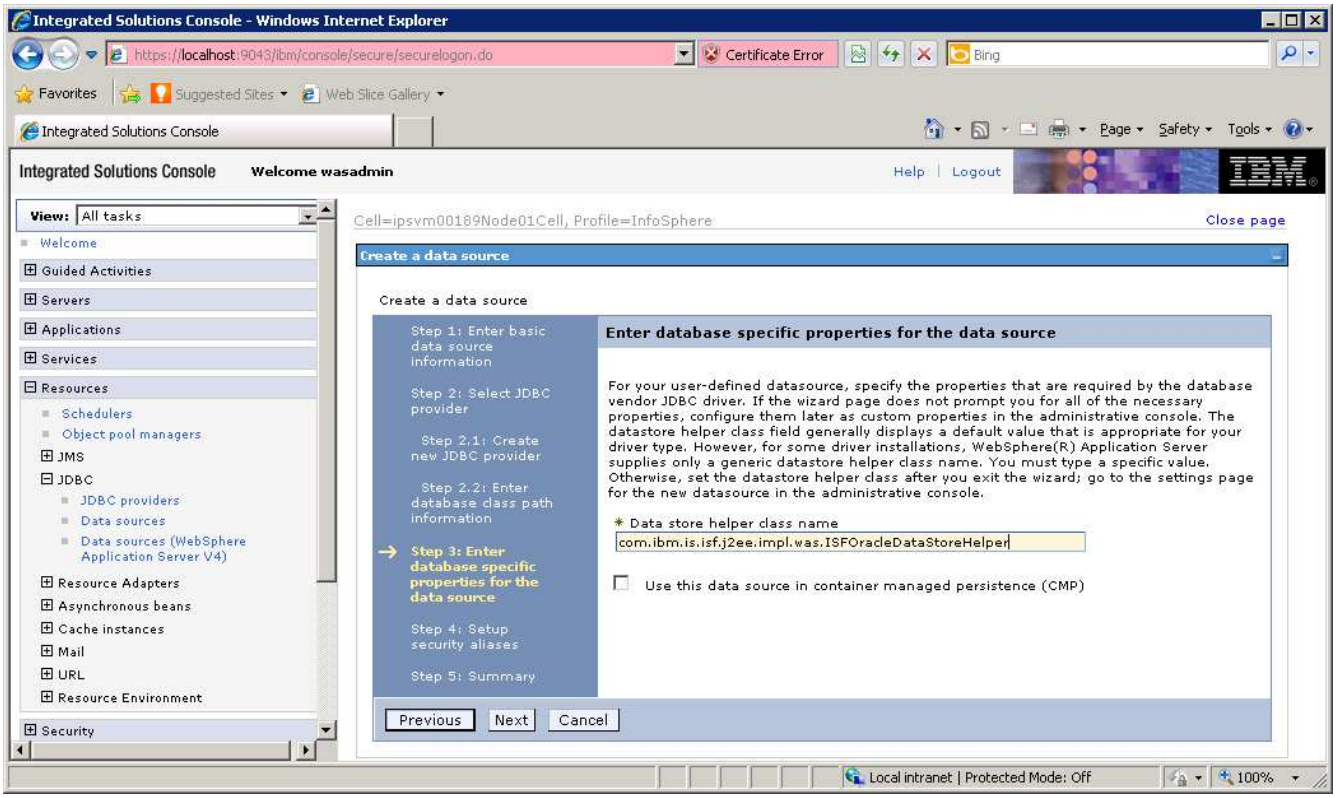
12. Enter the information for the JDBC provider:
    Database type: *User-defined*
    Implementation class name: *com.ibm.isf.jdbcx.oracle.OracleDataSource*
    Name: *QSSRD JDBC Provider*
13. Click **Next**.



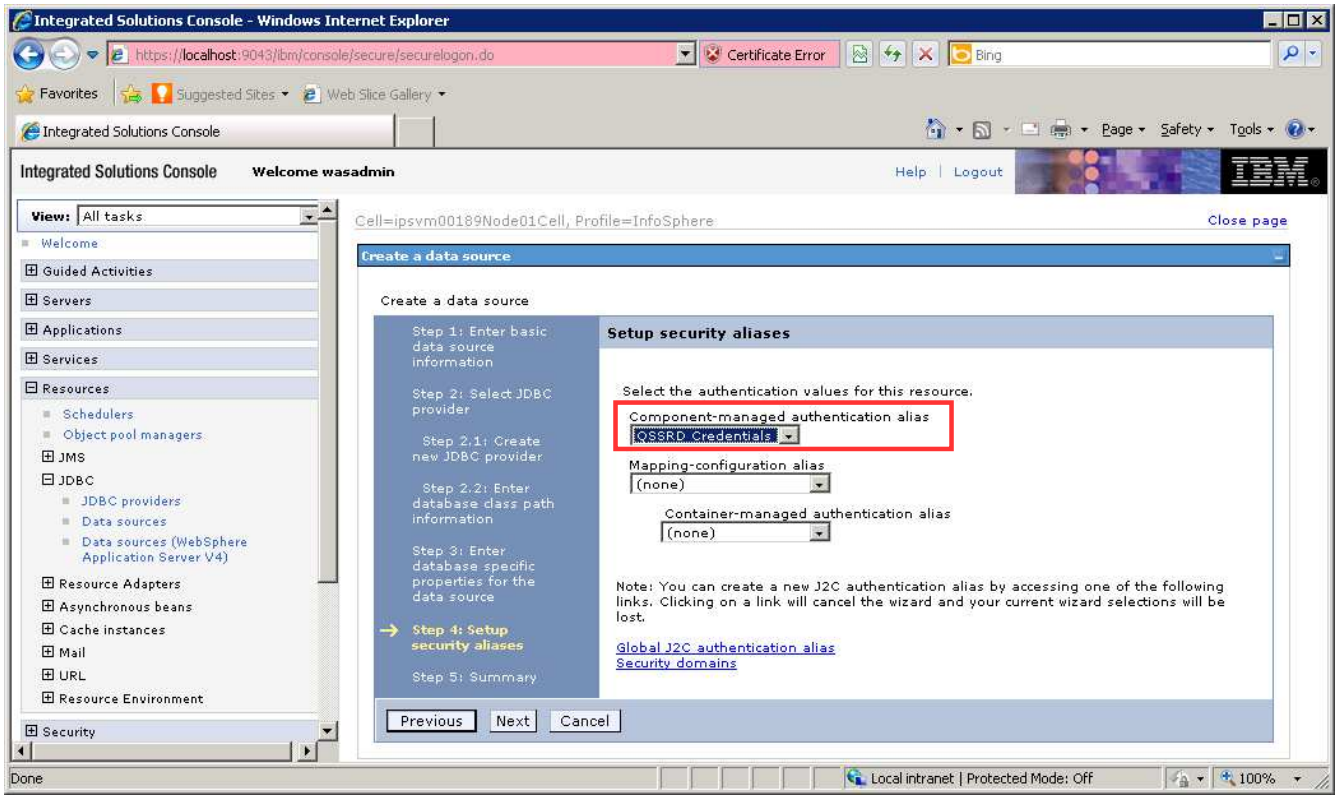
14. Enter *${USER_INSTALL_ROOT}/classes/ISoracle.jar* in the **Class path** field.
15. Click **Next**.



16. Enter *com.ibm.is.isf.j2ee.impl.was.ISFOracleDataStoreHelper* in the **Data store helper class name** field.
17. Uncheck **Use this data source in container managed persistence (CMP)**.
18. Click **Next**.

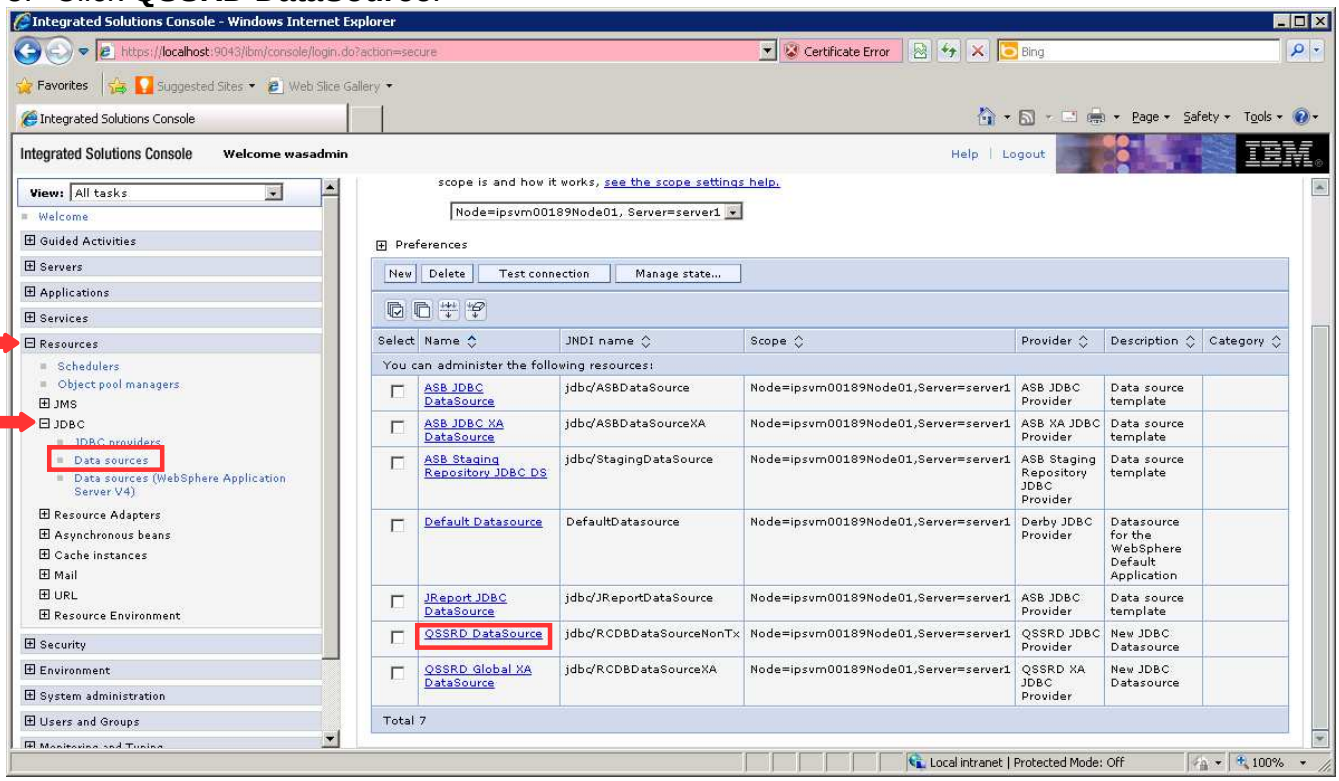


19. Select *QSSRD Credentials* from the **Component-managed authentication alias** drop down list.
20. Click **Next**.
21. Click **Finish**.
22. Click **Save**.

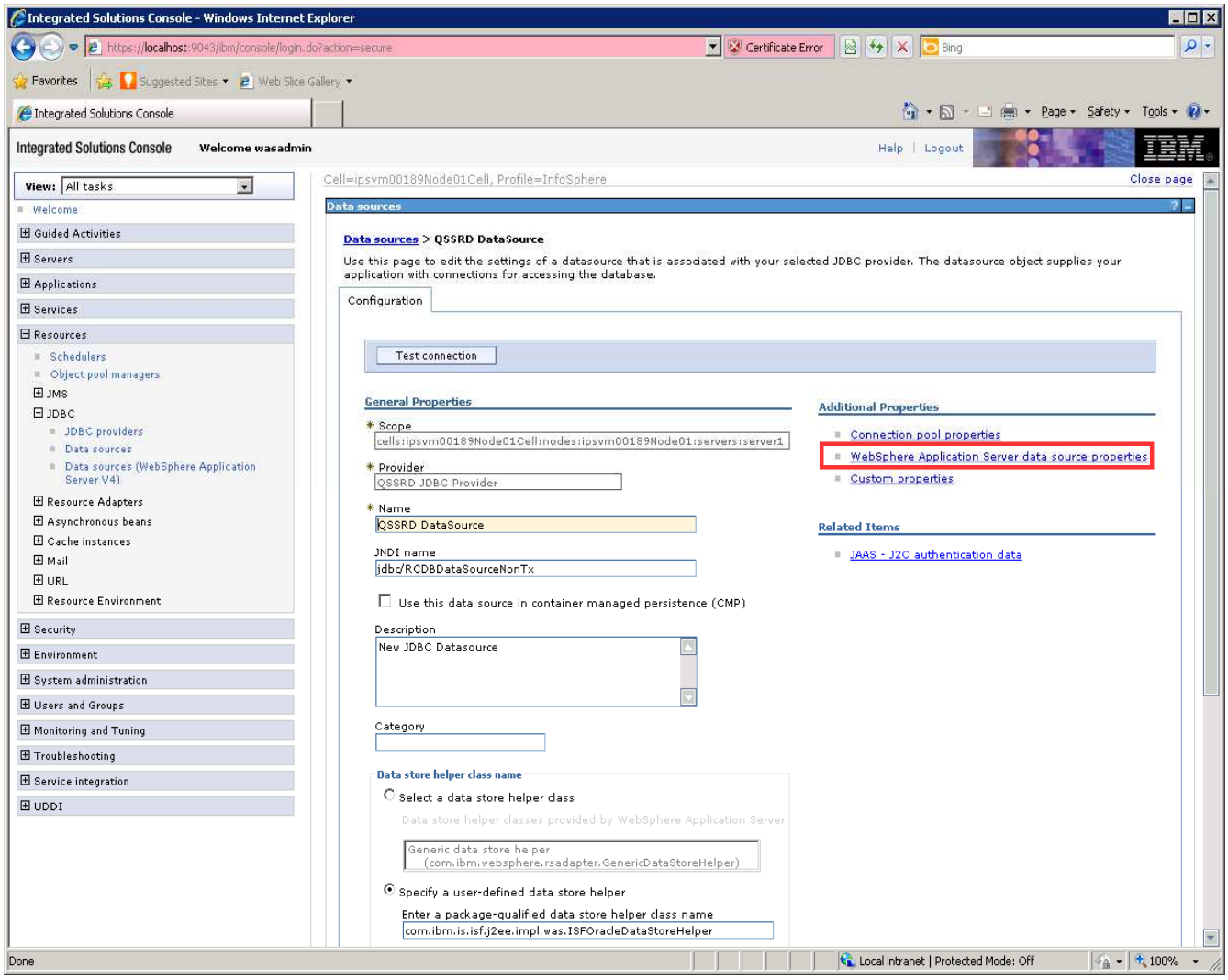


Modify the QSSRD DataSource to set the non-transactional data source properties:

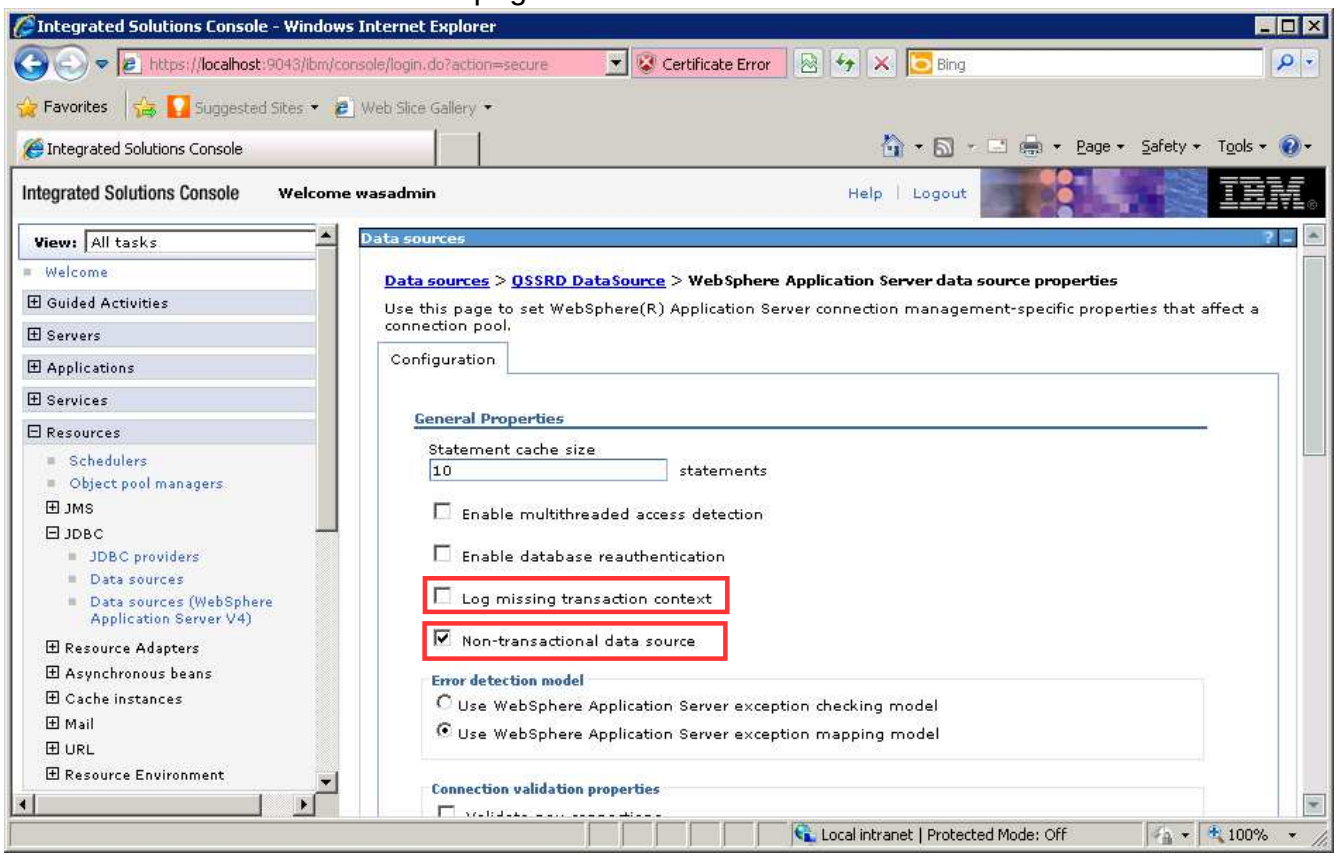
1. If you have not already done so, login to the WebSphere Application Server Administrative Console.
2. Expand the **Resources** node in the left pane.
3. Expand the **JDBC** node.
4. Click **Data sources**.
5. Click **QSSRD DataSource**.



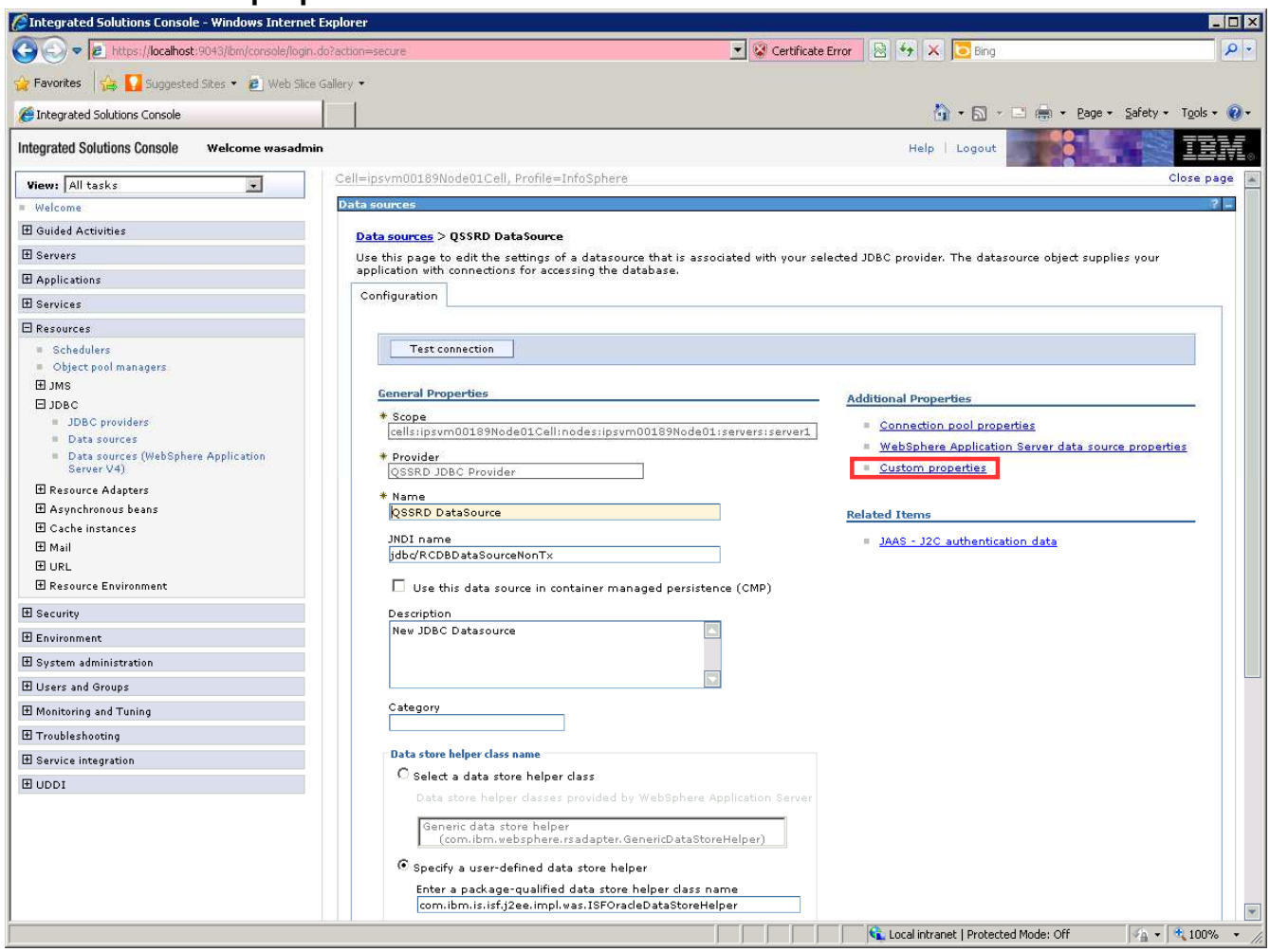
6. Click **WebSphere Application Server data source properties**.



7. Uncheck **Log missing transaction context**.
8. Check **Non-transactional data source**.
9. Click **OK** at the bottom of the page. Do not click **Save** at this time.



10. Click **Custom properties**.

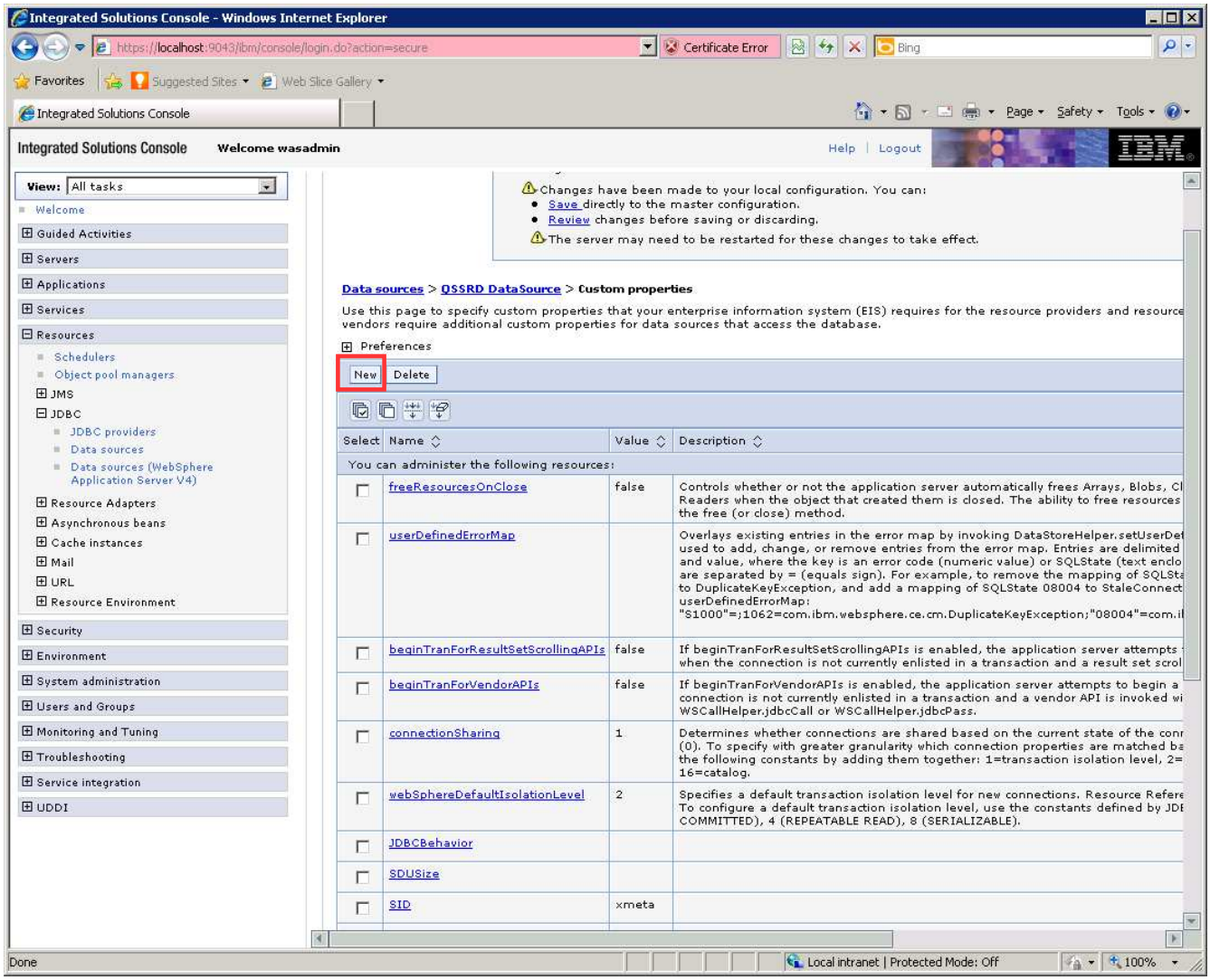


11. Find and modify the following properties as indicated:

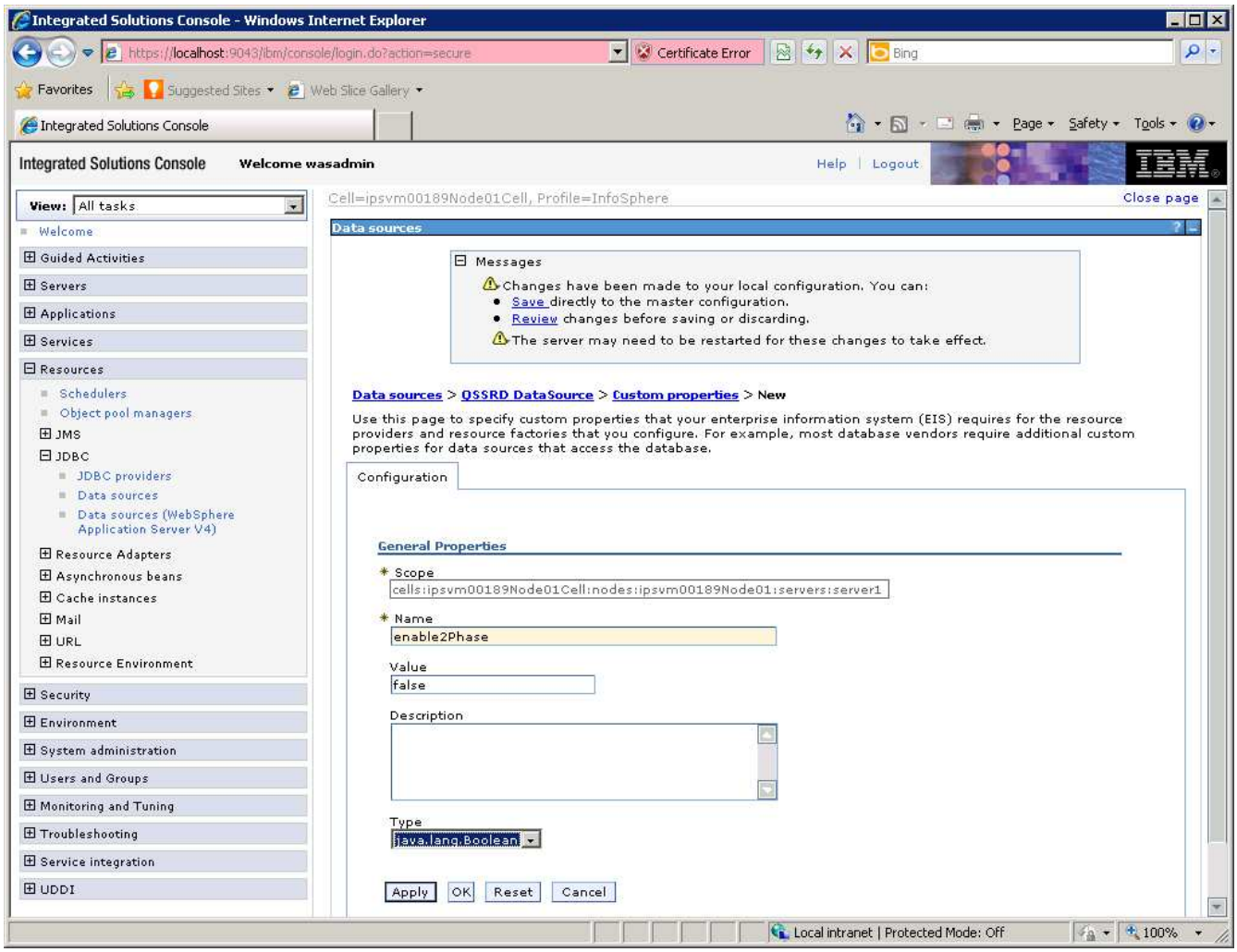
Name	Value
`webSphereDefaultIsolationLevel`	*2*
`SID`	*Unique system identifier for the Oracle database*
`batchPerformanceWorkaround`	*TRUE*
`serverName`	*Database system host name*
`portNumber`	*Database system port*
`queryTimeout`	**Delete** this property

Add the enable2Phase property:

1. Click **New**.

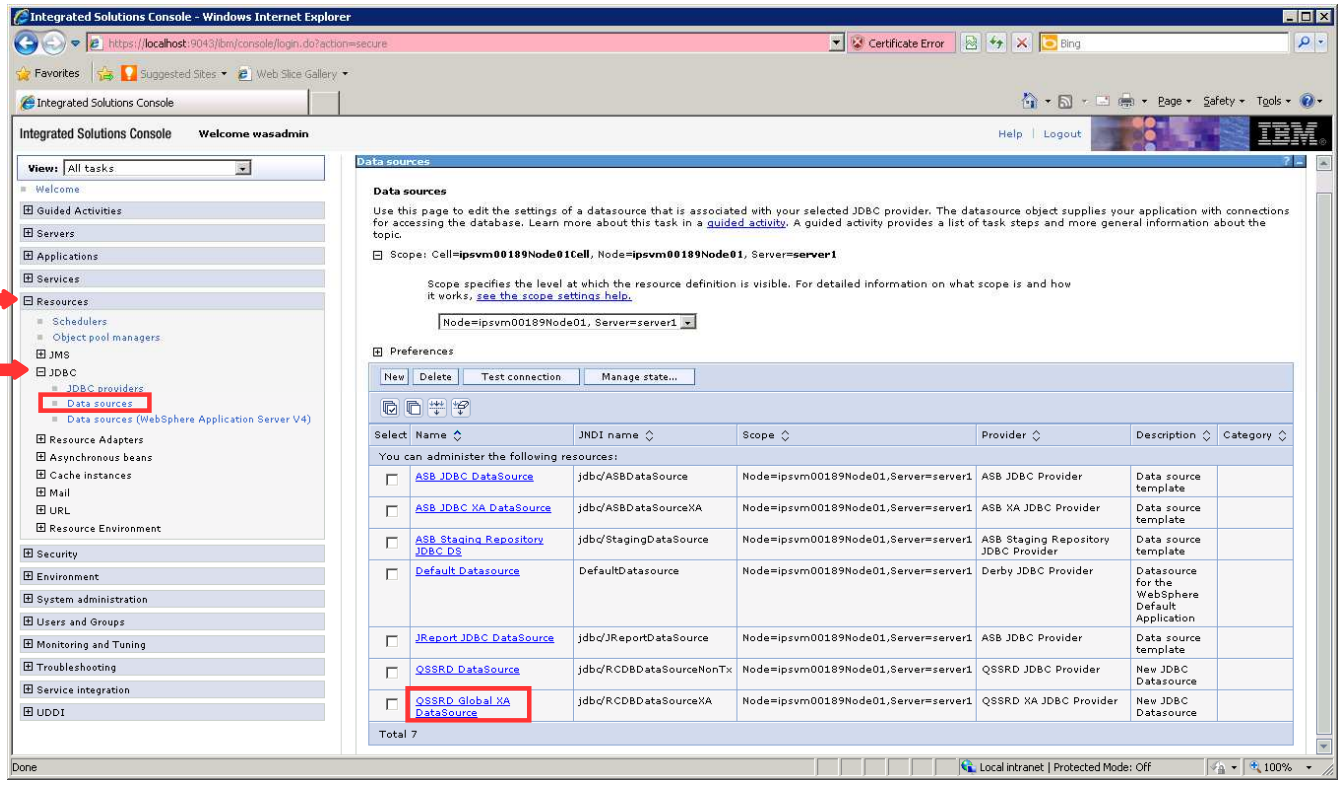


2. Enter *enable2Phase* in the **Name** field.
3. Enter *false* in the **Value** field.
4. Select *java.lang.boolean* in the **Type** field.
5. Click **OK**.
6. Click **Save**.

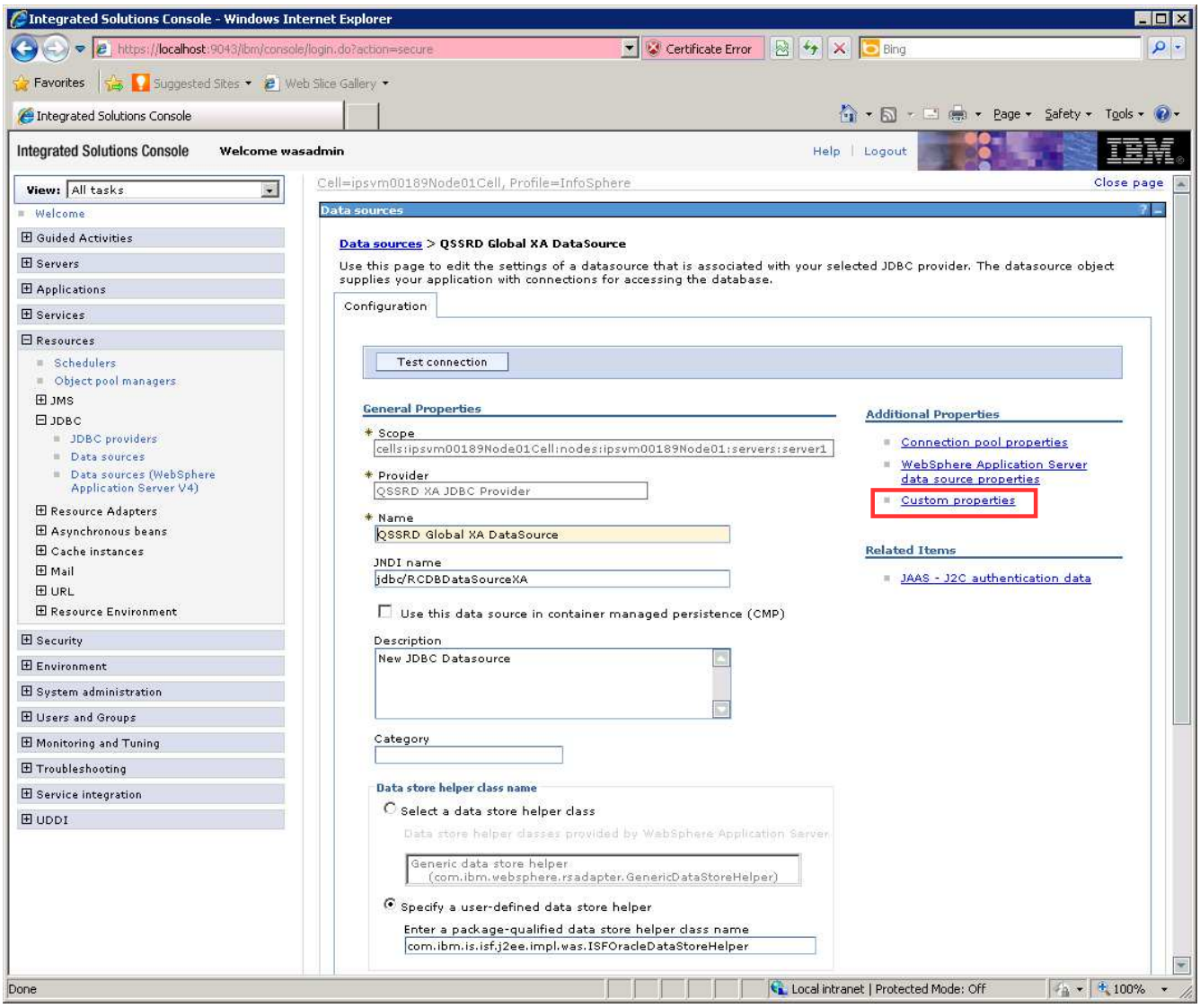


Modify the QSSRD Global XA DataSource to set the connection properties:

1. If you have not already done so, login to the WebSphere Application Server Administrative Console.
2. Expand the **Resources** node in the left pane.
3. Expand the **JDBC** node.
4. Click **Data sources**.
5. Click **QSSRD Global XA DataSource**.



6. Click **Custom properties**.

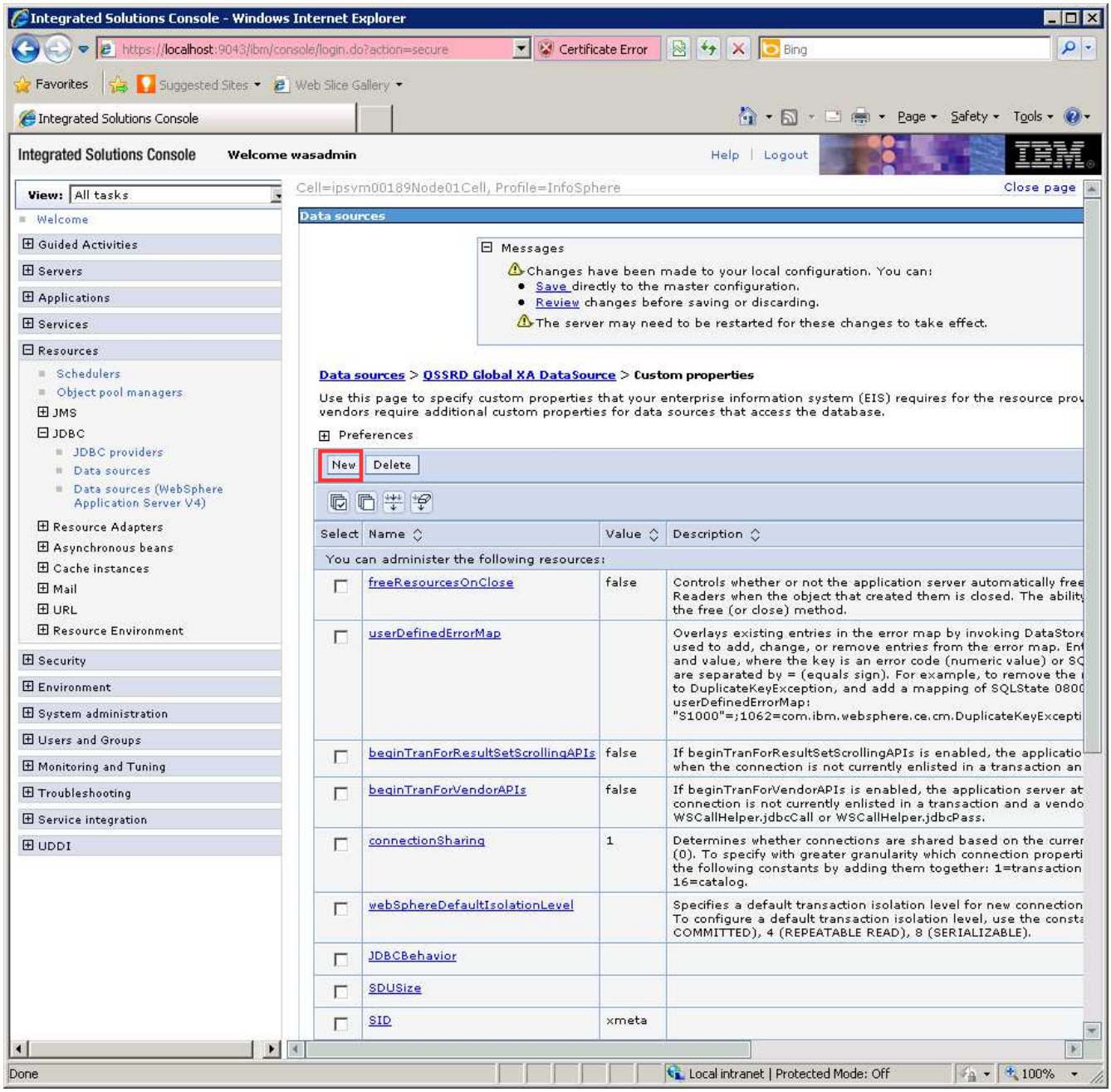


7. Find and modify the following properties as indicated:

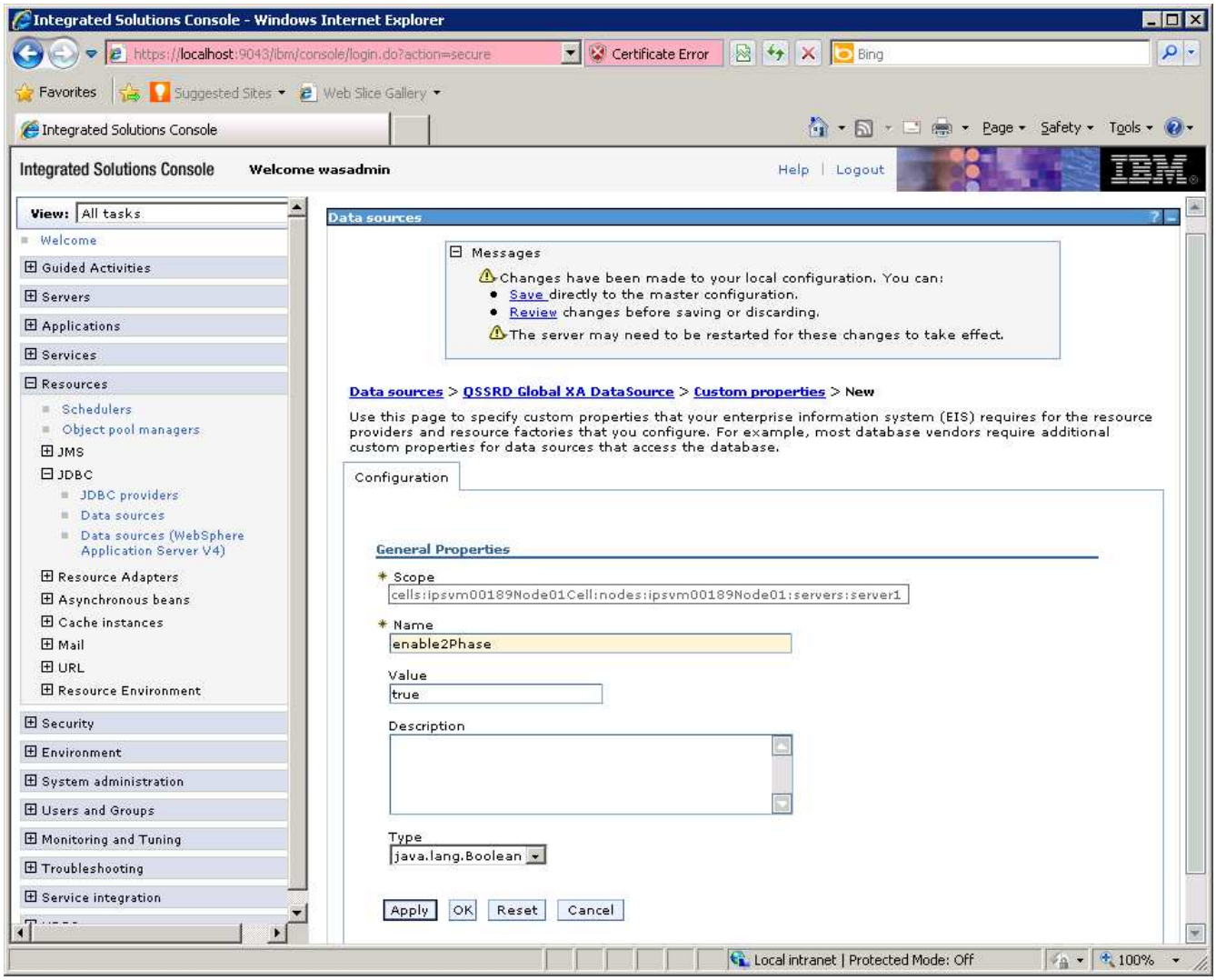
Name	Value
`webSphereDefaultIsolationLevel`	*2*
`SID`	*Unique system identifier for the Oracle database*
`batchPerformanceWorkaround`	*TRUE*
`serverName`	*Database system host name*
`portNumber`	*Database system port*
`queryTimeout`	**Delete** this property

Add the enable2Phase property:

1. Click **New**.



2. Enter *enable2Phase* in the **Name** field.
3. Enter *true* in the **Value** field.
4. Select *java.lang.boolean* in the **Type** field.
5. Click **OK**.
6. Click **Save**.



The Standardization Rules Designer data source creation step for Oracle is now complete.