CREATING SQL SERVER 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 a SQL Server 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.
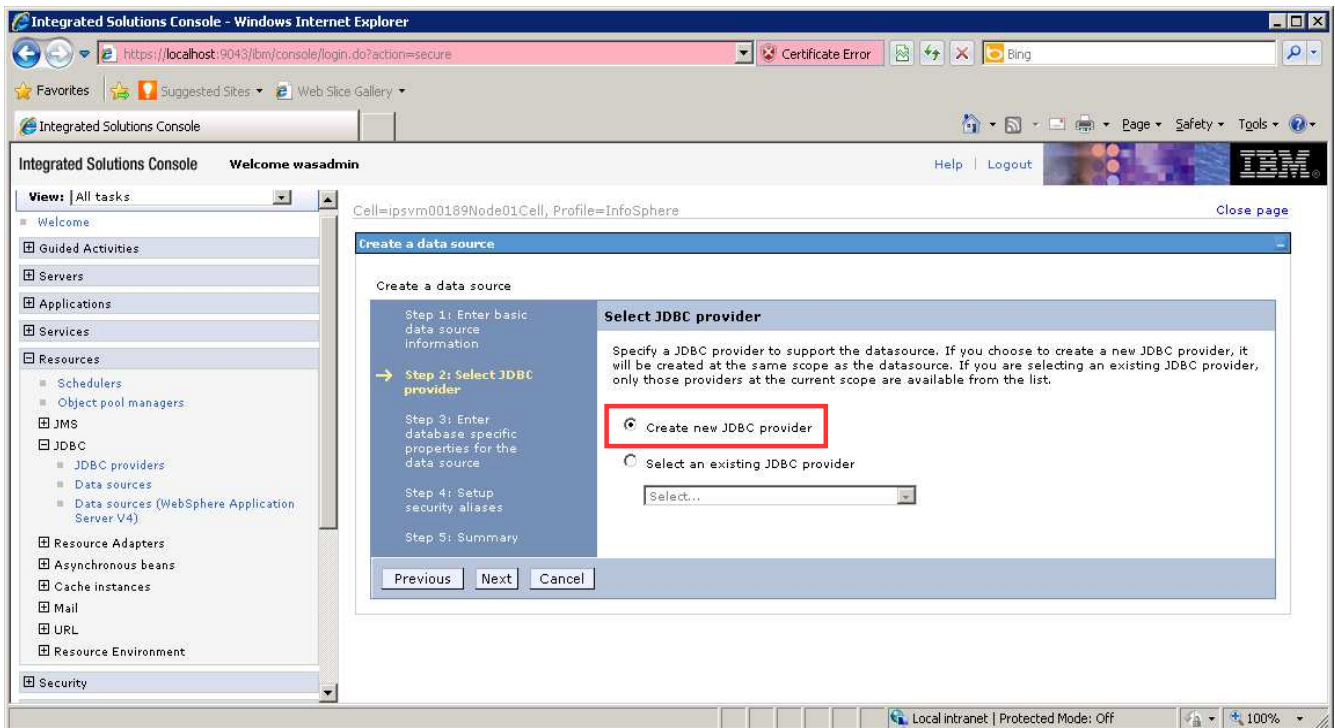6. Click **New**.

7. Enter *QSSRD Global XA DataSource* in the **Data source name** field.
8. Enter *jdbc/RCDBDataSourceXA* in the **JNDI name** field.
9. Click **Next**.
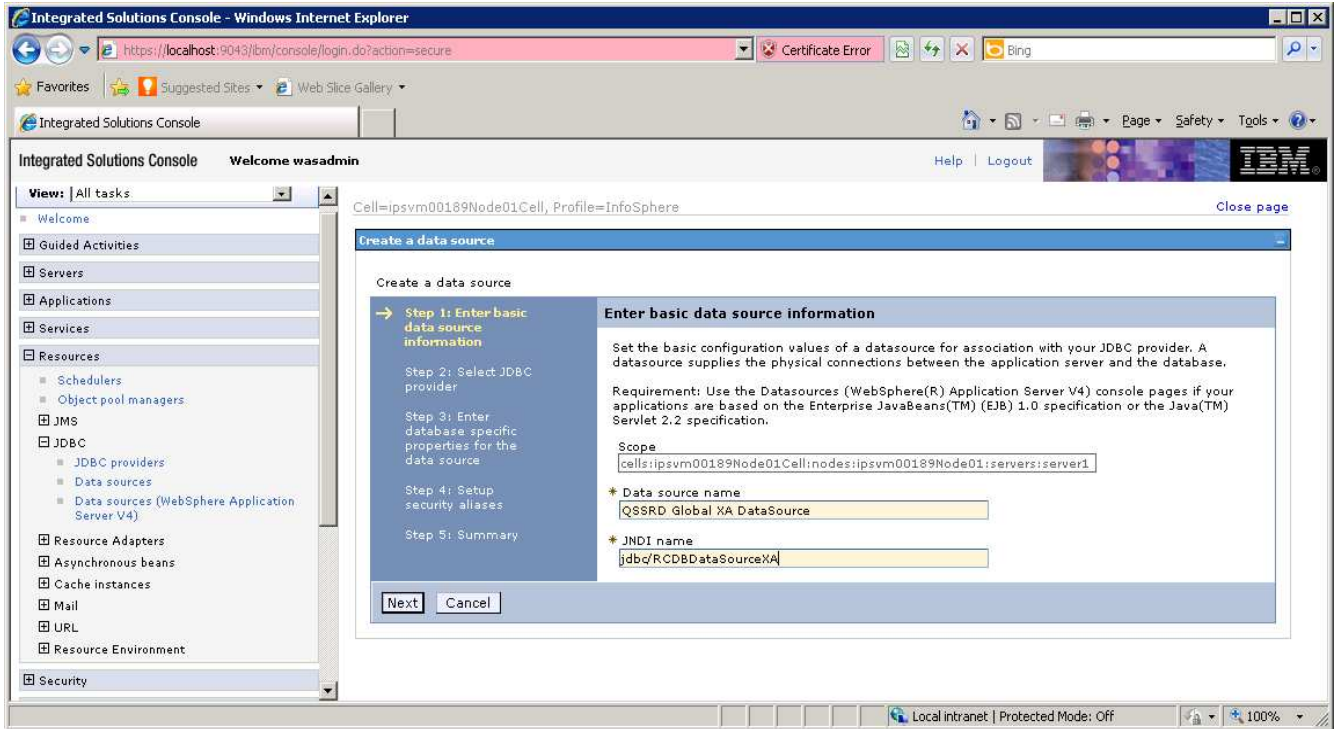
10. Select **Create new JDBC provider**.
11. Click **Next**.

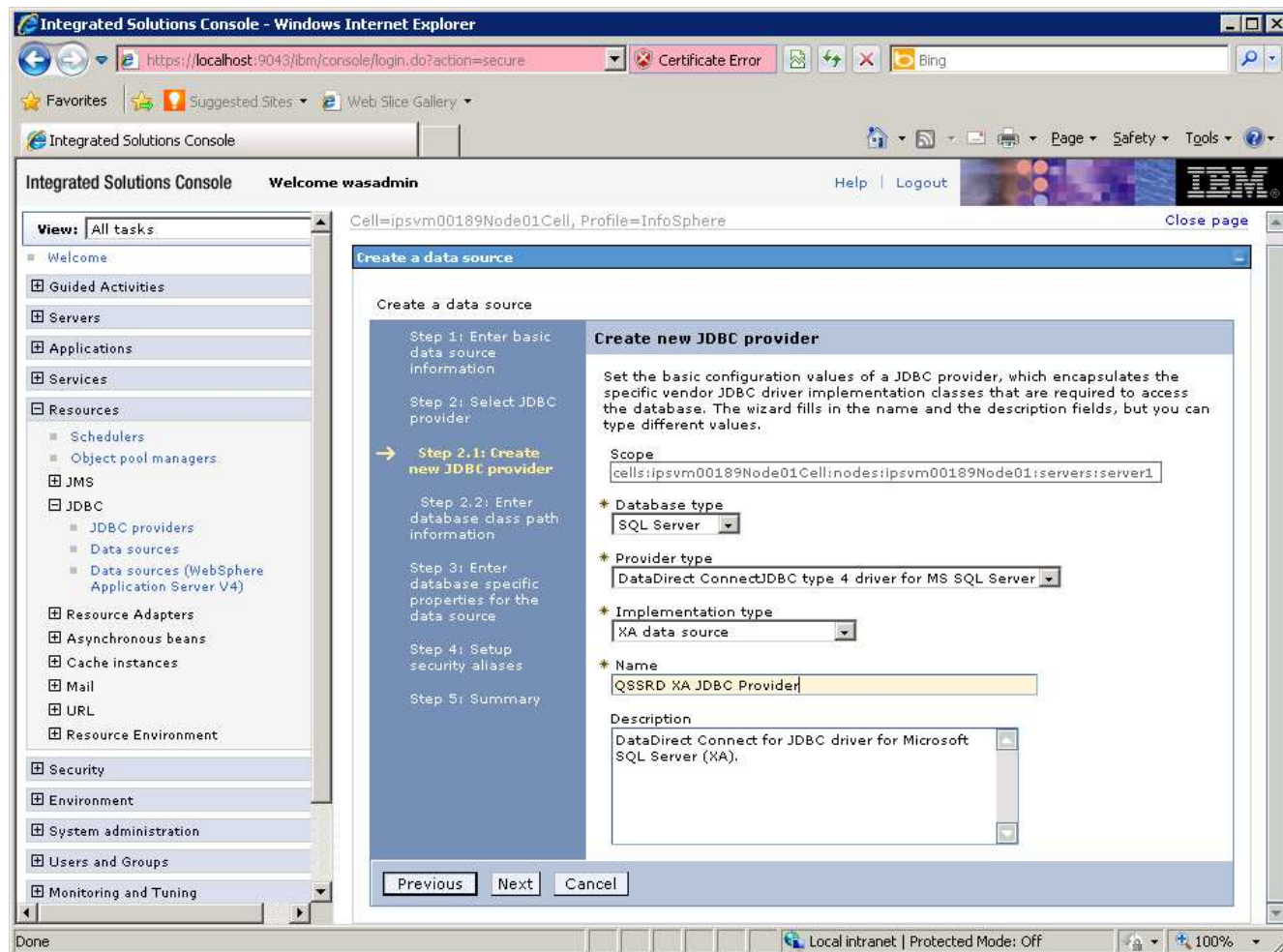*12.* Enter the information for the JDBC provider:
　　Database type: *SQL Server*
　　Provider type: *DataDirect ConnectJDBC type 4 driver for MS SQL Server*
　　Implementation type: *XA data source*
　　Name: *QSSRD XA JDBC Provider*

13. Click **Next**.

14. Click **Next** on the screen that follows. Do not modify this screen.

15. Enter the database information for the data source:
    (Note: Values entered should be the same as those specified in the
    `qssrd_repository.properties` file that was configured in the Standardization Rules
    Designer repository registration step. The sample values below illustrate a default
    configuration.)
    Server name: *the name of the system that hosts the SQL Server server*
    Database name: *the name of the SQL Server database where the Standardization Rules
    Designer repository was created*
    Port number: *the port number on which the SQL Server server listens. The default value
    is 1433.*
16. Uncheck **Use this data source in container managed persistence (CMP)**.
17. Click **Next**.

18. Select *QSSRD Credentials* from the **Component-managed authentication alias** drop down list.
19. Click **Next**.
20. Click **Finish**.
21. 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**.
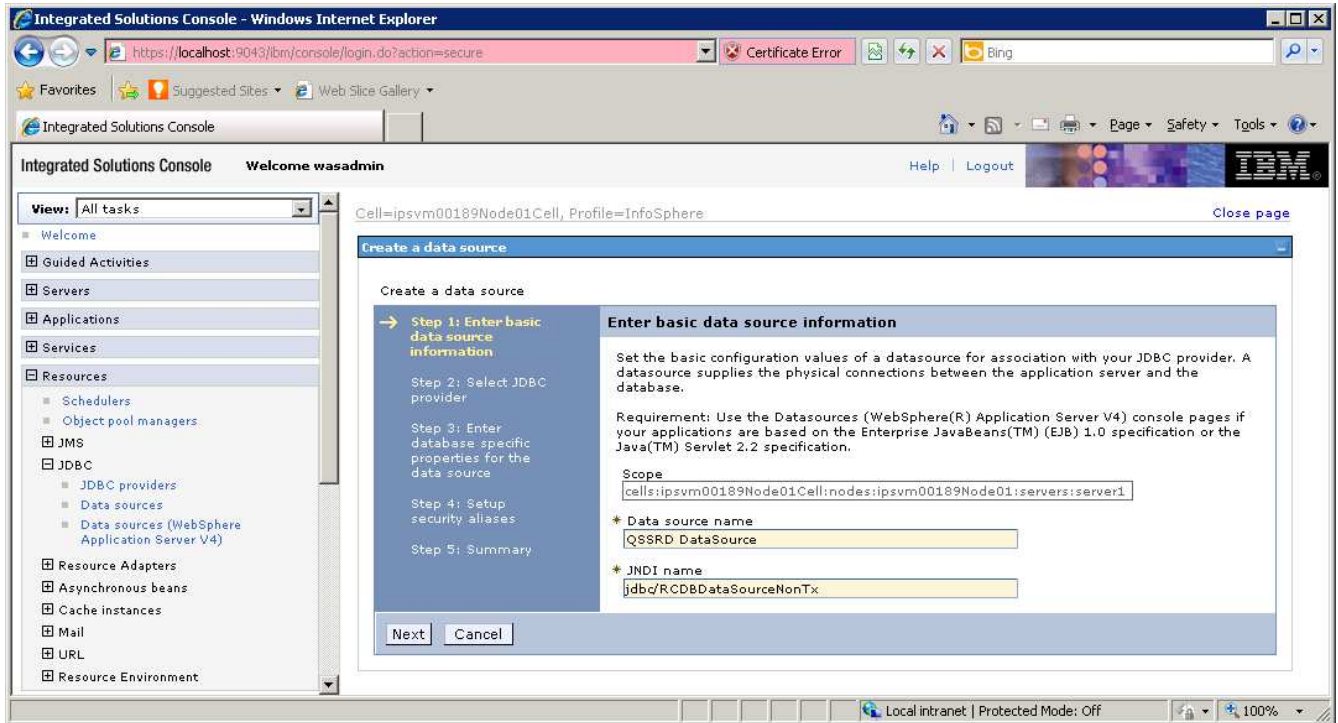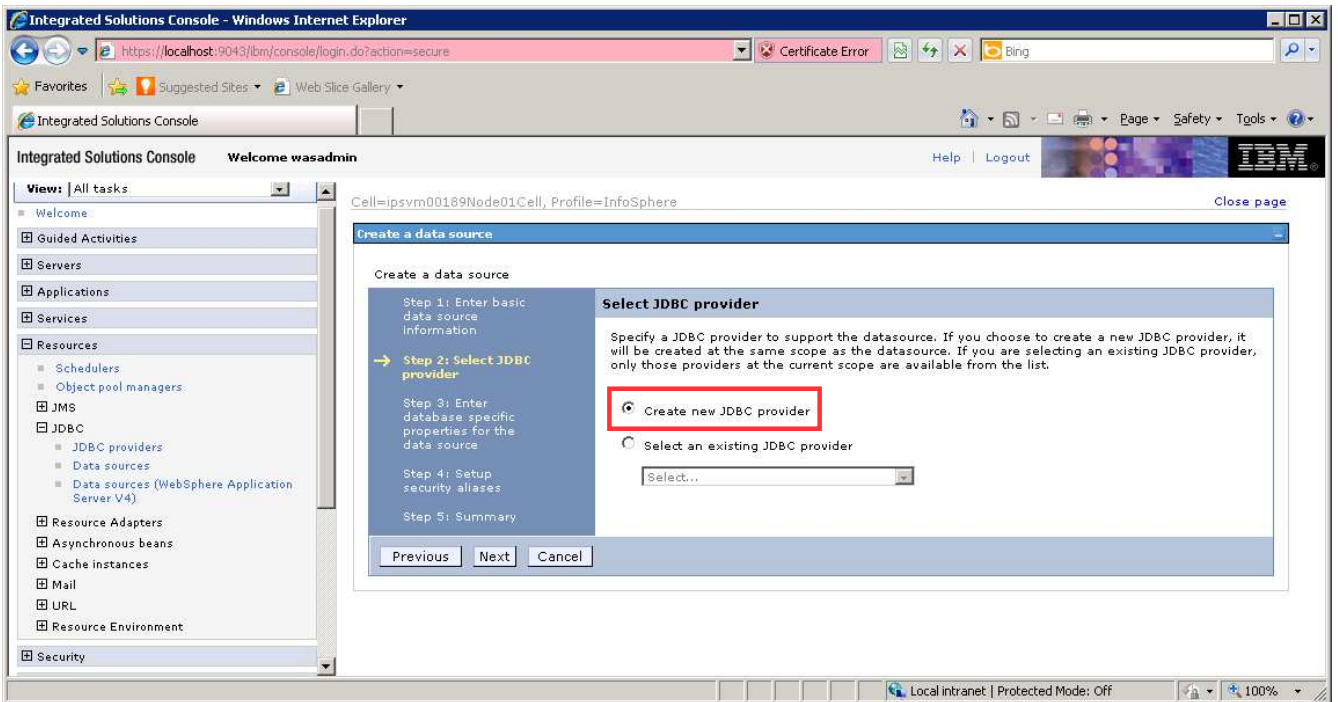
10. Select **Create new JDBC provider**.
11. Click **Next**.

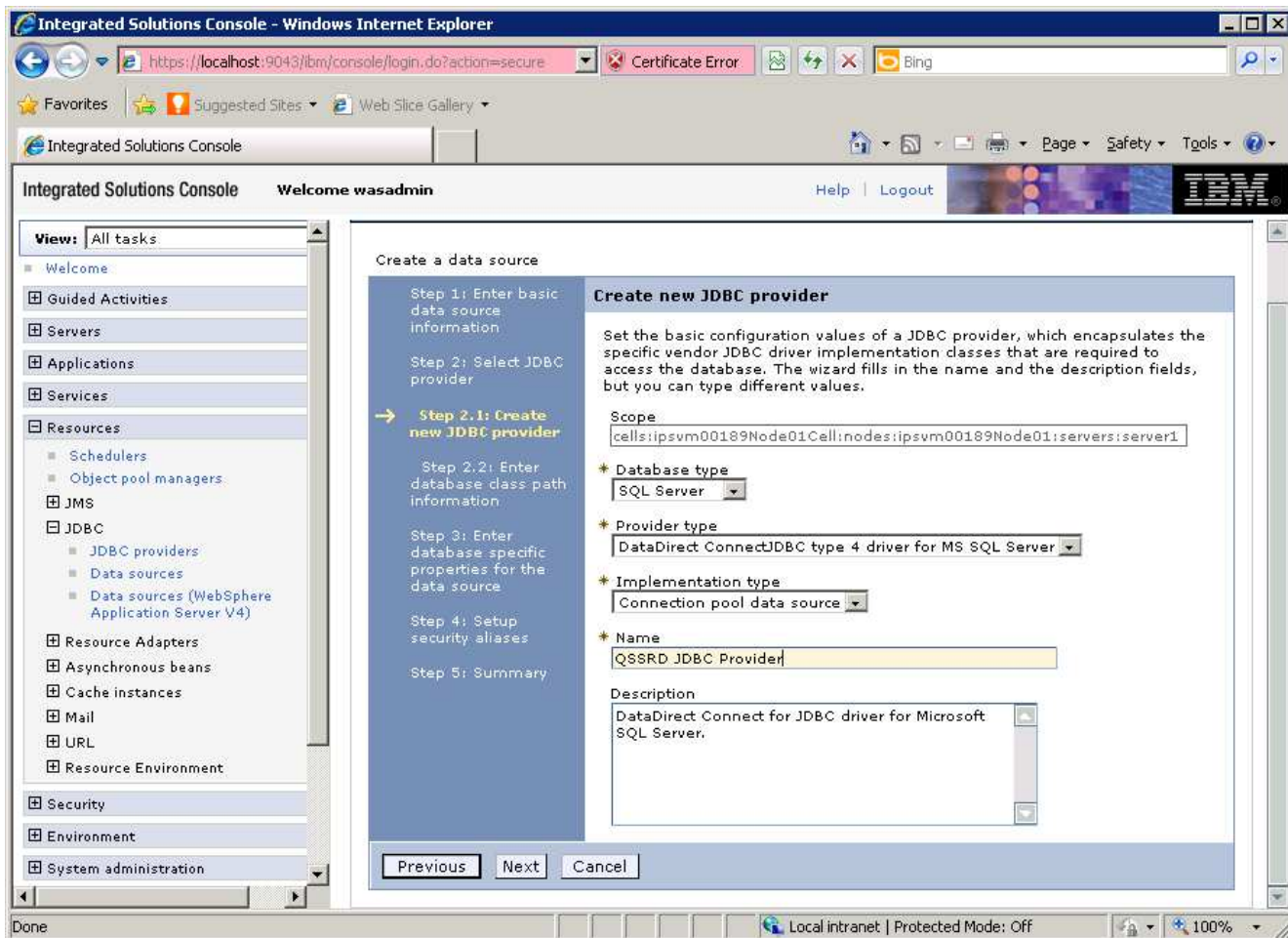*12.* Enter the information for the JDBC provider:
Database type: *SQL Server*
Provider type: *DataDirect ConnectJDBC type 4 driver for MS SQL Server*
Implementation type: *Connection pool data source*
Name: *QSSRD JDBC Provider*

13. Click **Next**.

14. Click **Next** on the screen that follows. Do not modify this screen.

15. Enter the database information for the data source:
    (Note: Values entered should be the same as those specified in the
    `qssrd_repository.properties` file that was configured in the Standardization Rules
    Designer repository registration step. The sample values below illustrate a default
    configuration.)
    Server name: *the name of the system that hosts the SQL Server server*
    Database name: *the name of the SQL Server database where the Standardization Rules
    Designer repository was created*
    Port number: *the port number on which the SQL Server server listens. The default value
    is 1433.*
16. Uncheck **Use this data source in container managed persistence (CMP)**.
17. Click **Next**.

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

Modify the QSSRD Data Source to set the user-defined data store helper and 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** in the right pane.

6. Select **Specify a user-defined data store helper**.
7. Enter *com.ibm.is.isf.j2ee.impl.was.ISFSQLServerReadCommittedDataStoreHelper*
8. Click **Apply** at the bottom of the screen. Do not click **Save** at this time.
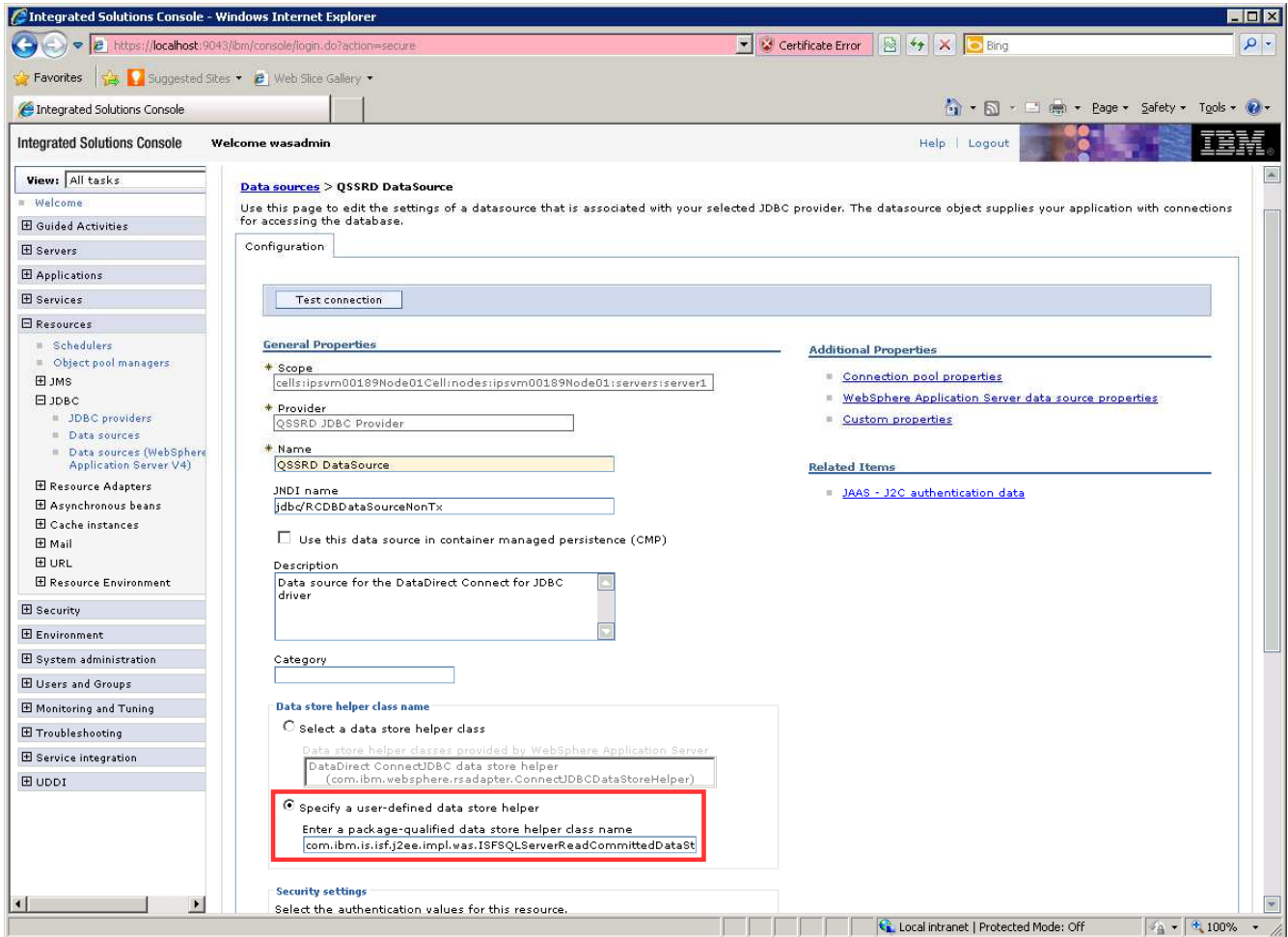
9. Click **WebSphere Application Server data source properties**.

10. Uncheck **Log missing transaction context**.
11. Check **Non-transactional data source**.
12. Click **OK** at the bottom of the page.
13. Click **Save**.
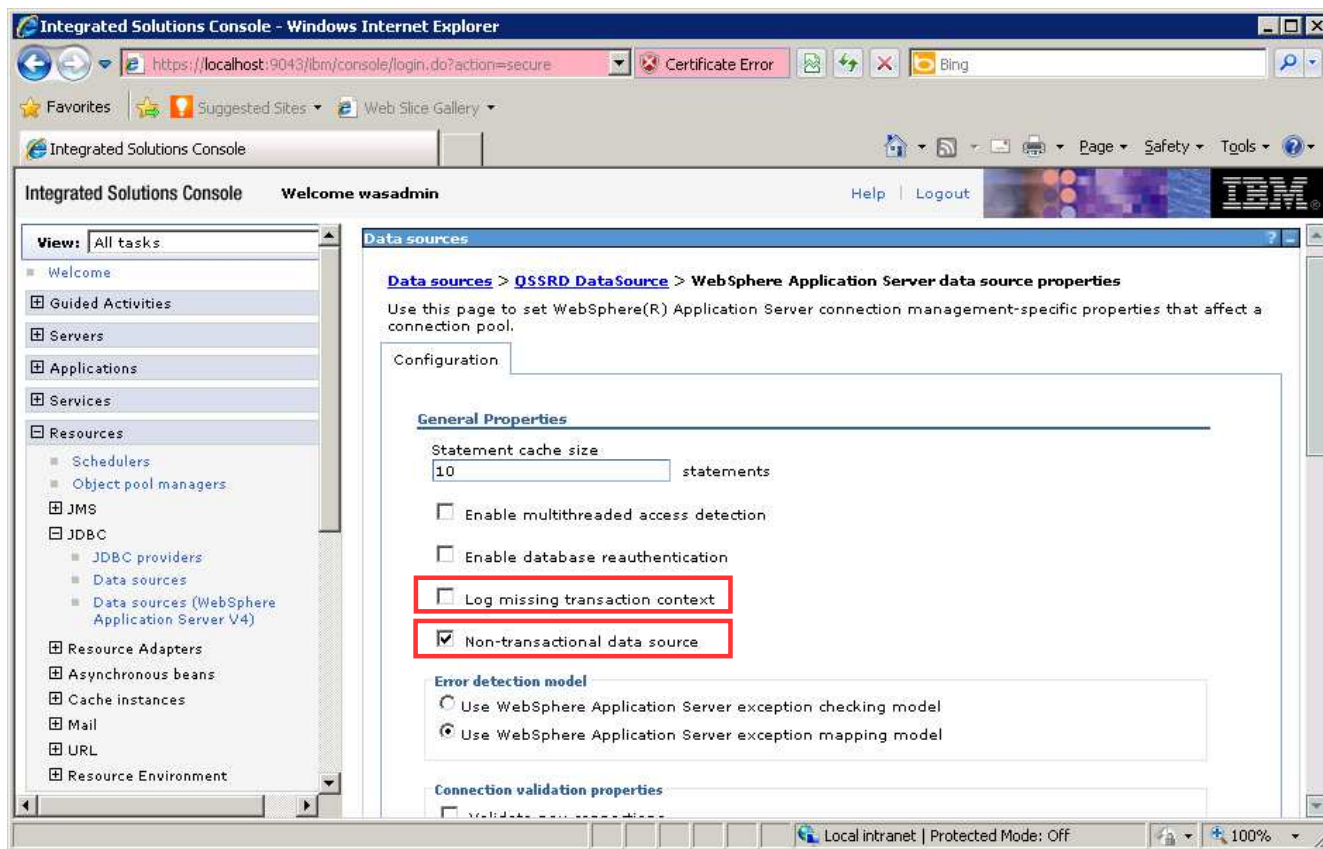
Modify the QSSRD Global XA DataSource to set the user-defined data store helper:

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** in the right pane.

6. Select **Specify a user-defined data store helper**.
7. Enter *com.ibm.is.isf.j2ee.impl.was.ISFSQLServerReadCommittedDataStoreHelper*
8. Click **OK** at the bottom of the page.
9. Click **Save**.
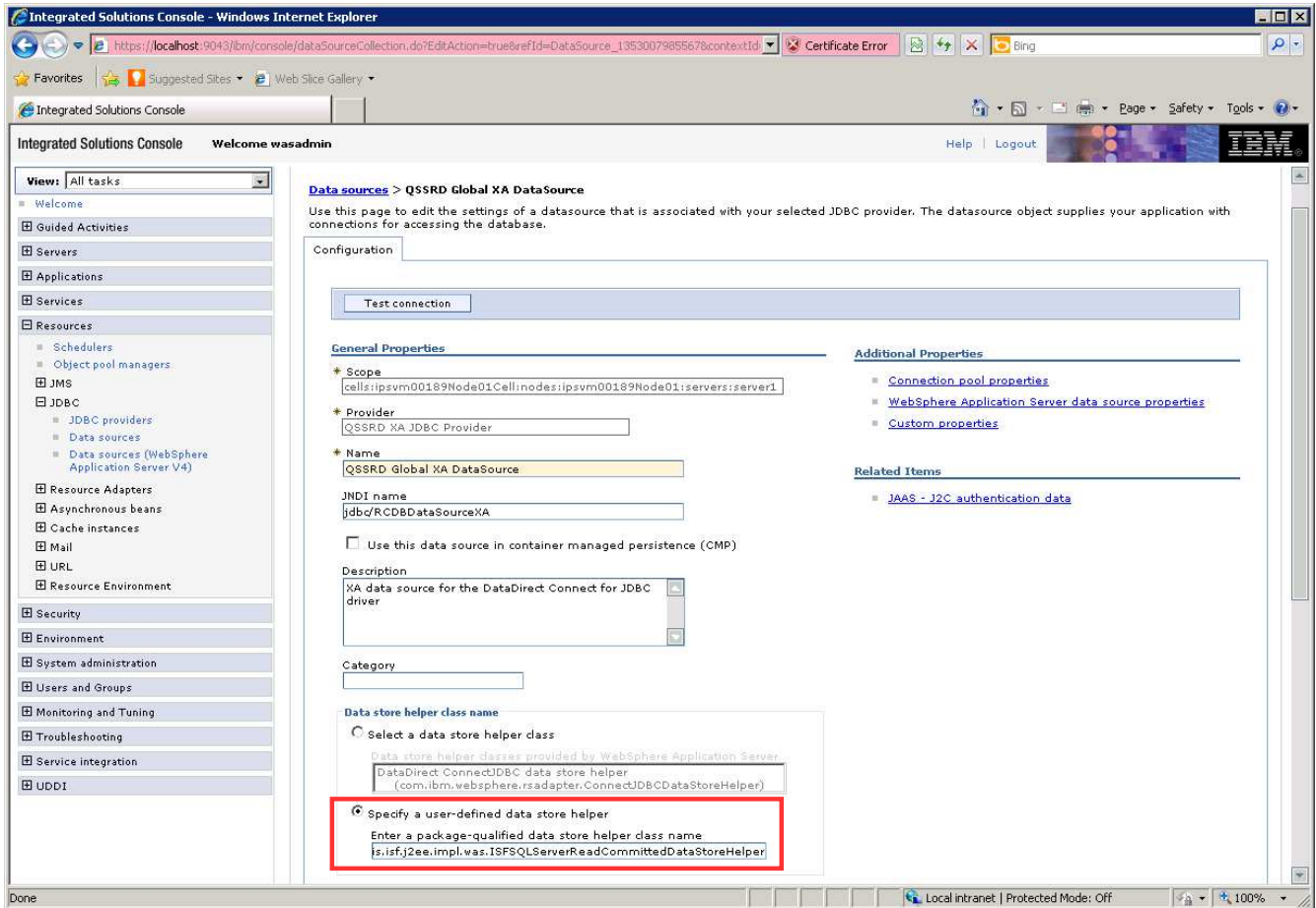
Modify the QSSRD JDBC Provider to set the correct path for the JDBC driver and the implementation class name:
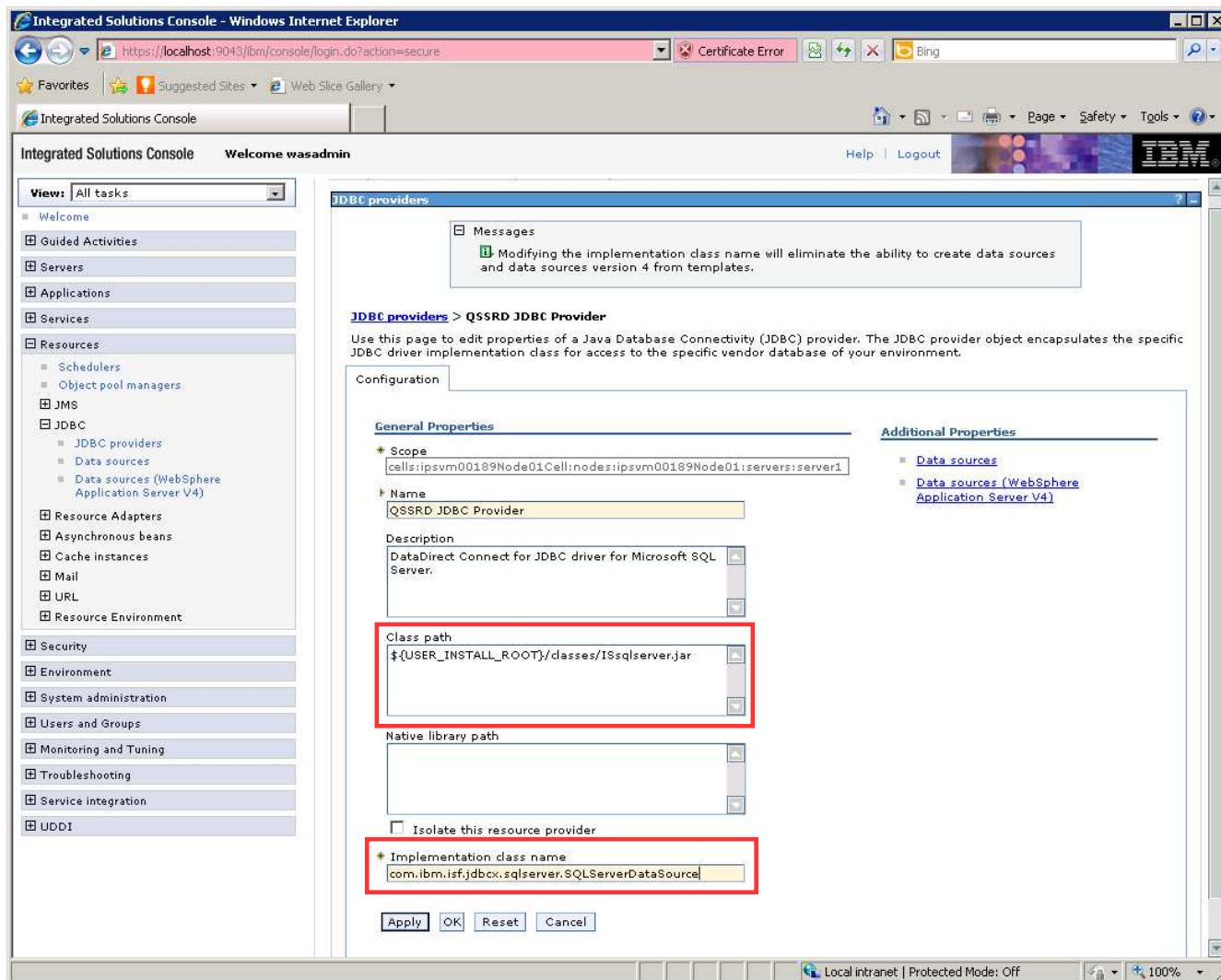
1. If you have not already done so, login to the WebSphere Application Server Administrative Console.
2. Expand the **Resources** node in the left pane.
3. Expand the **JDBC** node.
4. Click **JDBC providers**.
5. Click **QSSRD JDBC Provider** in the right pane.

6. Replace **Class path** values with *${USER_INSTALL_ROOT}/classes/ISsqlserver.jar*
7. Enter *com.ibm.isf.jdbcx.sqlserver.SQLServerDataSource* in the **Implementation class name** field.
8. Click **OK**.
9. Click **Save**.

Modify the QSSRD XA JDBC Provider to set the correct path for the JDBC driver and the implementation class name:
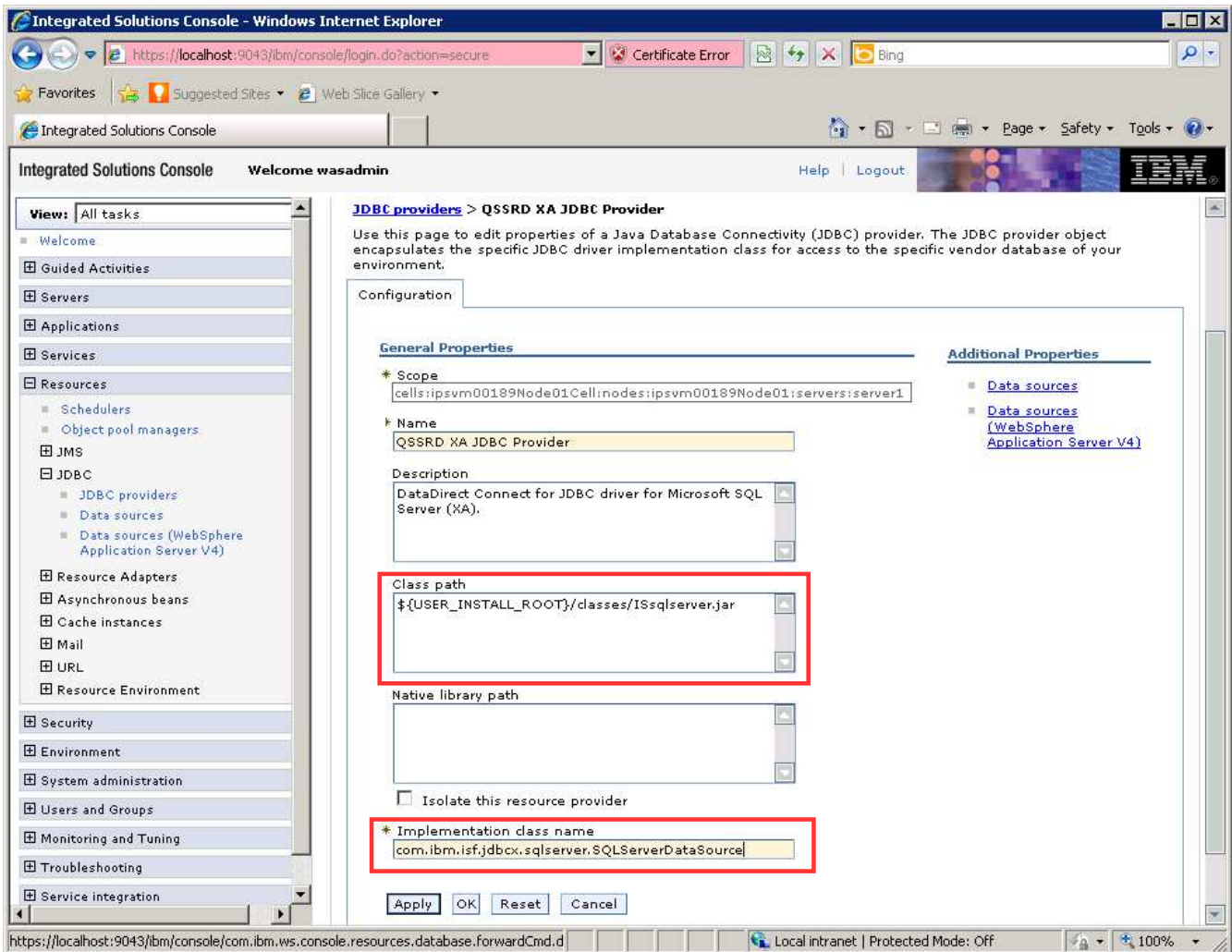
1. If you have not already done so, login to the WebSphere Application Server Administrative Console.
2. Expand the **Resources** node in the left pane.
3. Expand the **JDBC** node.
4. Click **JDBC providers**.
5. Click **QSSRD XA JDBC Provider** in the right pane.

6. Replace **Class path** values with *${USER_INSTALL_ROOT}/classes/ISsqlserver.jar*
7. Enter *com.ibm.isf.jdbcx.sqlserver.SQLServerDataSource* in the **Implementation class name** field.
8. Click **OK**.
9. Click **Save**.

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