

How to Connect to Amazon Redshift with SQL Server Management Studio

Introduction

You can connect to **Amazon Redshift** clusters from SQL client tools (e.g. SQL Server Management Studio, SQL Workbench, etc...) over Java Database Connectivity (JDBC) and Open Database Connectivity (ODBC) connections using the relative JDBC or ODBC drivers which **Amazon Redshift** offers for download. The following instructions explain how to connect to Amazon Redshift using SQL Server Management Studio and ODBC (we won't be using JDBC, we'll use ODBC).

In general, the steps you have to follow are 1) you'll need to set up a system level ODBC connection that points to the Amazon Redshift cluster and 2) you'll need to add a Linked Server in SQL Server Management studio.

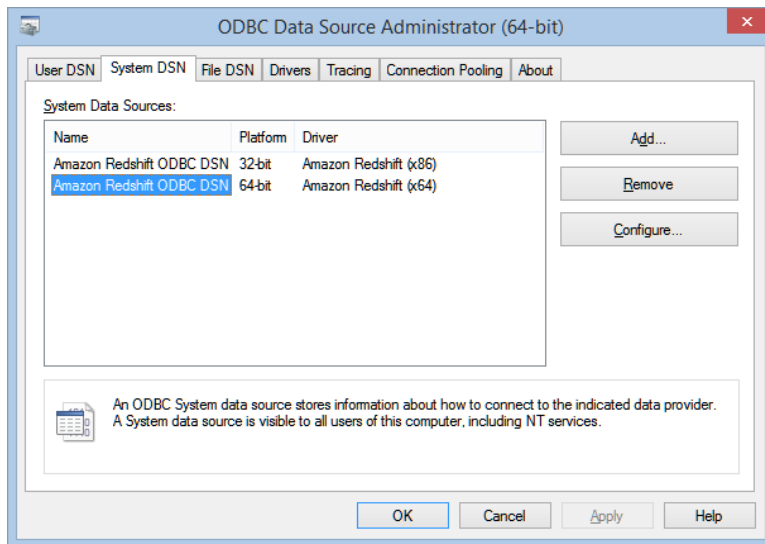
Part 1 Set Up ODBC Connection

Note, these show you how to do it using a 64-bit connect. You could use a 32-bit connection as well using the same steps.

1. From your Windows start menu, locate and launch the 64-bit ODBC Data Source Administrator.

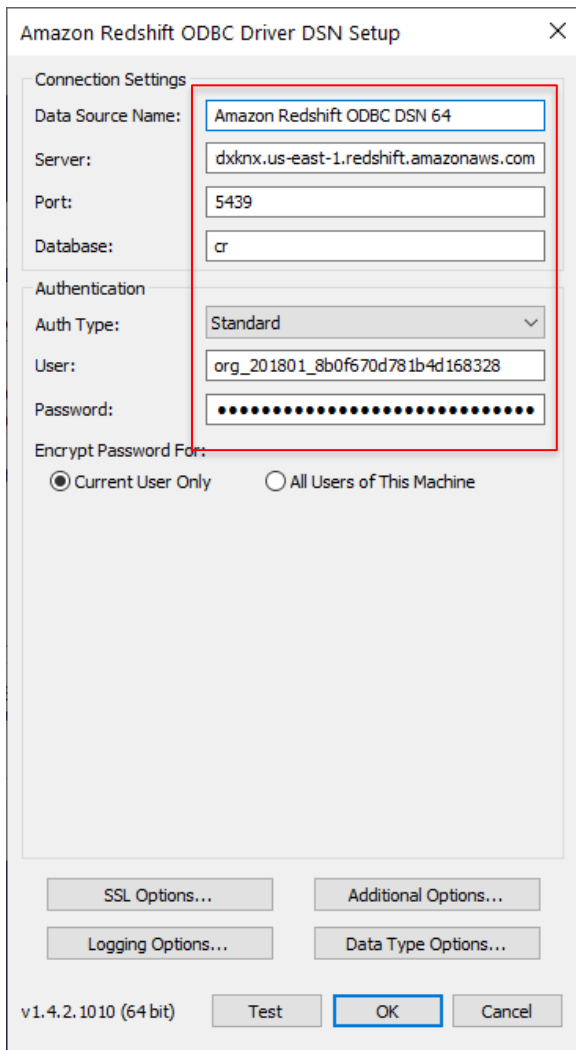
Special note(s): For this example, we are using the 64-bit version of the application, make sure you've selected the right one because both will be displayed when searching for the application name.

2. From the 'System DSN' tab, select the 64-bit data source and then click the 'Configure' command button.



Special note(s): Normally, with other drivers, you would first have to add the data source, but the installation wizard will create one for you.

3. Replace the default values with the necessary information. See more notes below on what values to place in each field.



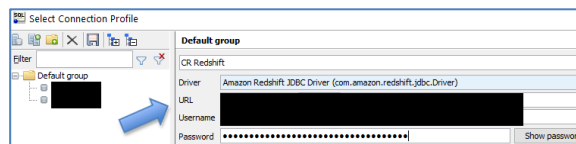
Data Source Name: Any custom name you can use. I'd recommend something similar to Amazon Redshift ODBC DSN 64-bit (especially if you want to add 32-bit later).
Server: This the full server path to the Amazon Redshift Cluster.
Port: the port you are connecting over
Database: The database you re connecting to.
User: The user name for the connection.
Password: The password for the connection.

If you are used to using SQL Workbench, you can get most of the information need for the Server, Port, and Database fields from the "URL" field in SQL Workbench (as shown below).

In the following URL:
 jdbc:redshift://domain.server.cluster.redshift.amazonaws.com:5439/cr

Here are the parts:
 Server: domain.server.cluster.redshift.amazonaws.com
 Port: 5439
 Database: cr

Screen shot from SQL workbench:



4. Click the "Test" command button to verify the information is correct and that you can connect to the cluster.

Amazon Redshift ODBC Driver DSN Setup

Connection Settings

Data Source Name: Amazon Redshift ODBC DSN 64

Server: dxknx.us-east-1.redshift.amazonaws.com

Port: 5439

Database: cr

Authentication

Auth Type: Standard

User: org_201801_8b0f670d781b4d168328

Password:

Encrypt Password For:

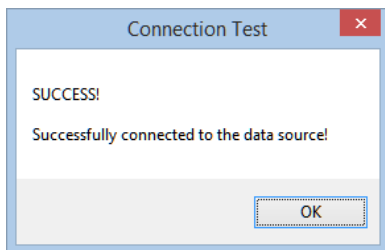
Current User Only All Users of This Machine

SSL Options... Additional Options...

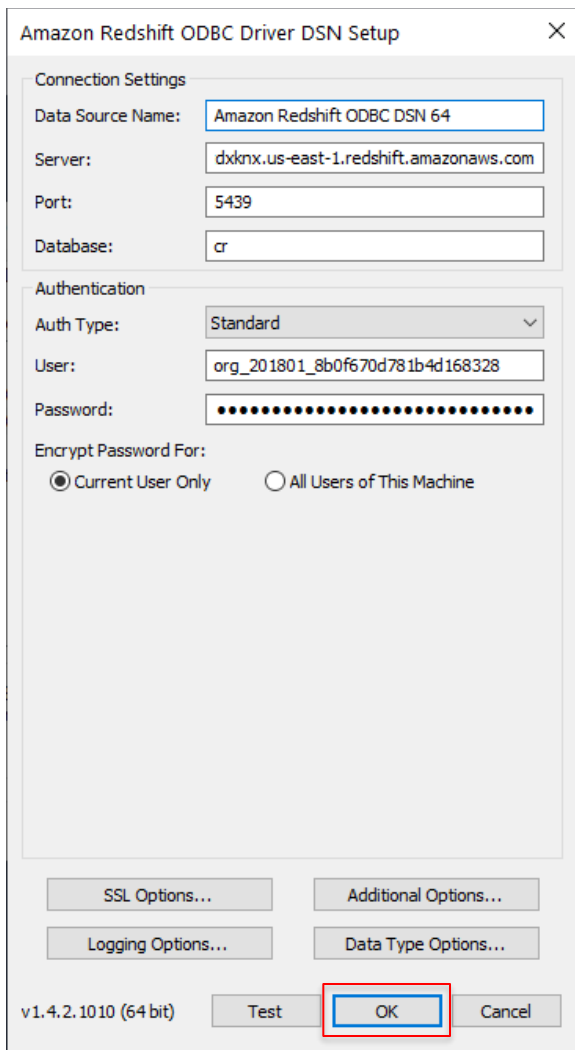
Logging Options... Data Type Options...

v1.4.2.1010 (64 bit) Test OK Cancel

5. If your settings were correct, you should get a "SUCCESS!" message. If not, verify you've entered each field correctly.



6. Click the 'Ok' command button to save the changes.

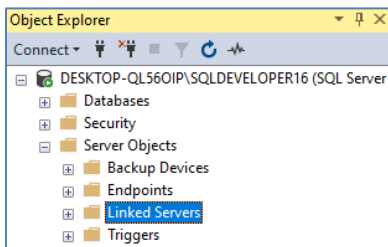


7. All Done!

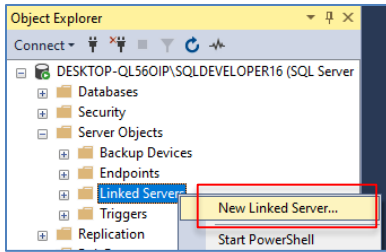
Part 1 Set Up SQL Server Linked Server

Note, these show you how to do it using SQL Server Management Studio 18.0.

1. Launch SQL Server Management Studio.
2. In the “Object Explorer” panel, navigate to “Server Objects > Linked Servers”.



3. Right-click on the “Linked Server” folder and then select the “New Linked Server” context menu item.



4. In the “New Linked Server” window, go to the “General” page on the left, and then enter the following values:

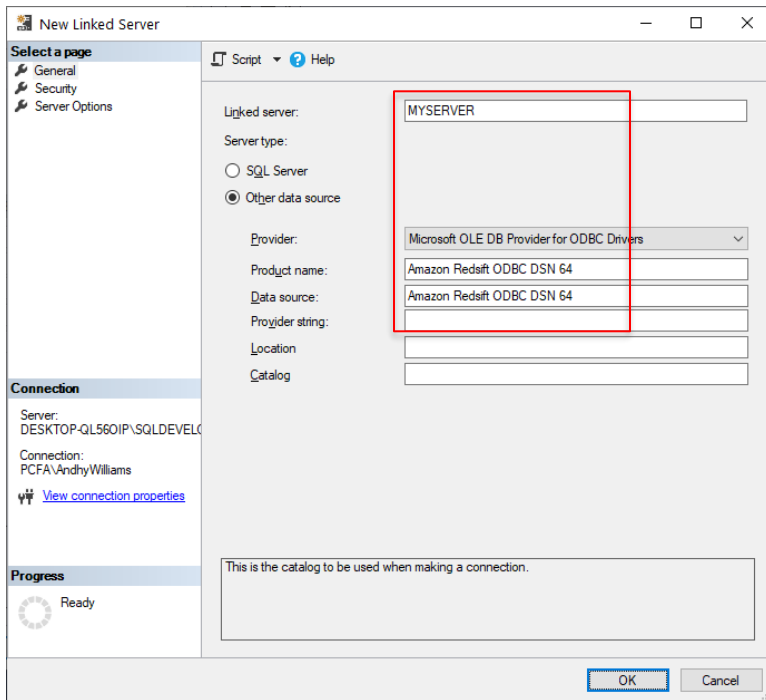
Linked server: Enter a customized name for your linked server. I suggest you use something that indicates the data source or database you’ll be connecting to.

Server type: Other data source.

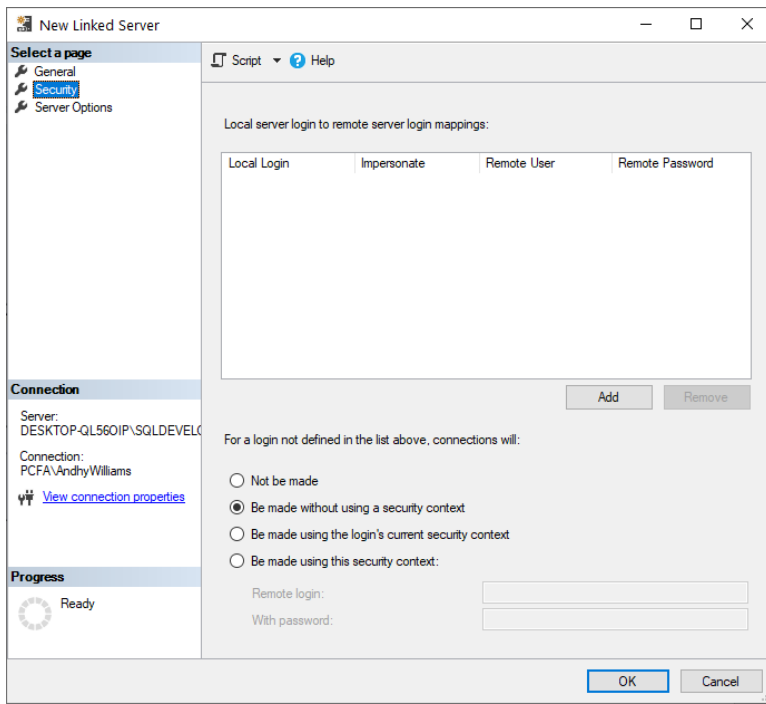
Provider: Microsoft OLE DB Provider for ODBC Drivers (Important! Make sure you select the compatible driver)

Product name: Amazon Redshift ODBC DSN 64 (this should match the name of the DSN you created in Part 1 above)

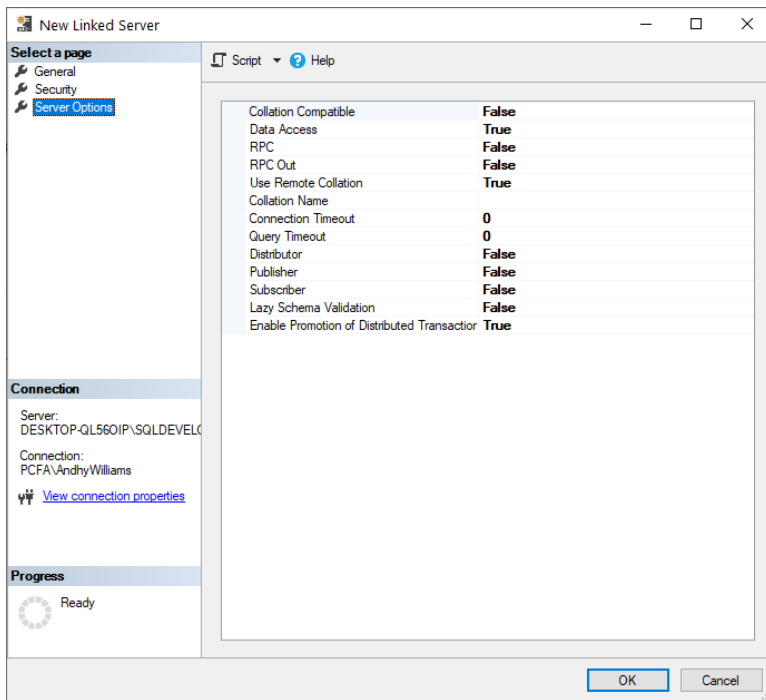
Data Source: Amazon Redshift ODBC DSN 64 (this should match the name of the DSN you created in Part 1 above)



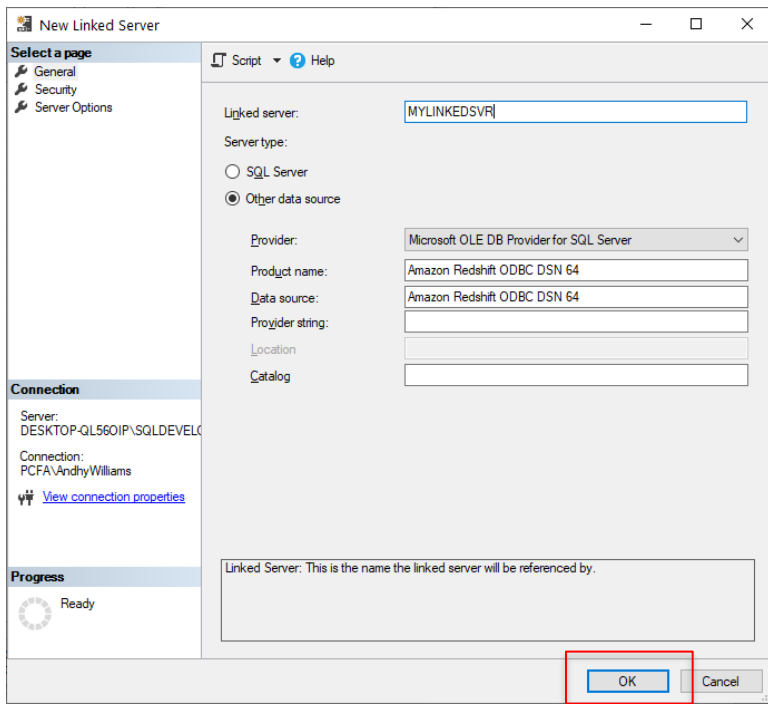
5. Under the “Security” page, you can leave the following settings:



- Under the “Server Options” page, you can leave the following settings (however, “RPC” and “RPC Out” sometimes need to be set to “True” to use certain linked server features):



- Click the “OK” command button to save the settings.



8. All done!