Provisioning an Azure SQL Data Warehouse

Overview

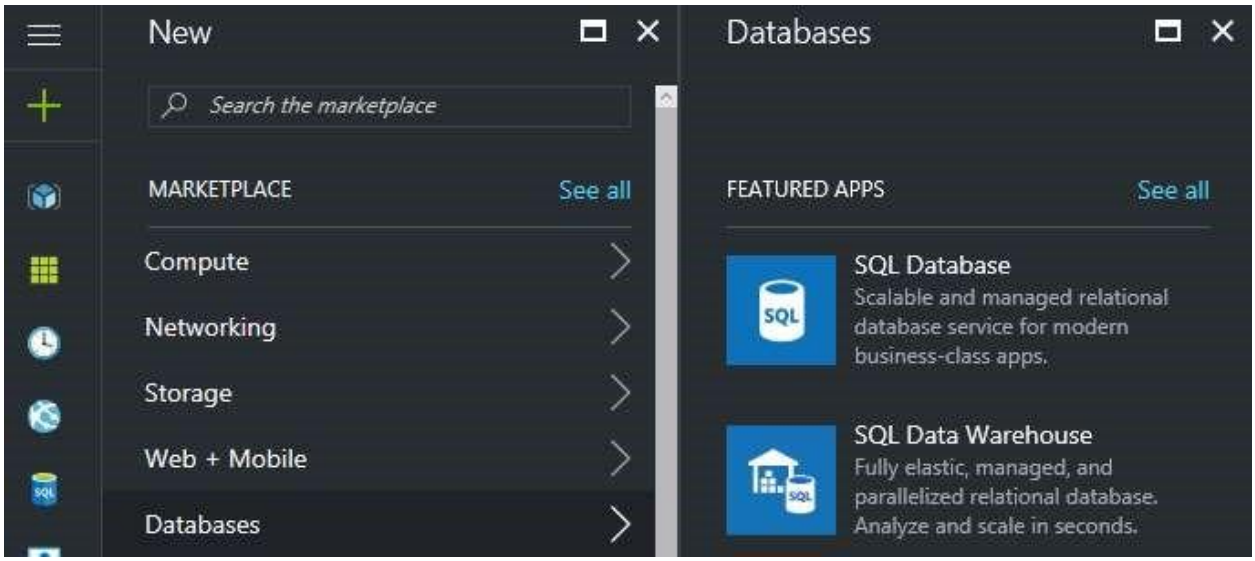
In this demo, you will provision an Azure SQL Data Warehouse. You will create an instance preloaded with sample data, configure firewall rules, and connect to the SQL DW

Exercise 1: Provision SQL DW

In this exercise, you will provision and configure a new SQL DW.

1. Sign in to the Azure Portal by using your subscription.

2. In the Portal, click New, Databases, then click SQL Data Warehouse:



3. On the SQL Data Warehouse blade, provide values for the following settings, leaving the others with defaults:

Setting	Value	Notes
Database name	Create a name	This does not need to be unique, unlike the server name below

Subscription	Select the same subscription you used in Lab 1	
Resource group	Select Use existing and select lab from Lab 1	
Select source	Select Sample	
Performance	Move the slider left, to 100 DWU.	

4. Click Server.

5. On the Server blade, click Create a new server.

6. On the New Server blade, provide values for the following settings, leaving the others with defaults:

Setting	Value	Notes
Server name	Create a name	This must be unique across Azure.
Server admin login		
Password		Must be at least 8 characters
Confirm password		Write this down for future use in the course labs.
Location	Choose a region close to you	

7. Click Select.

8. Click Pin to Dashboard for your own convenience.

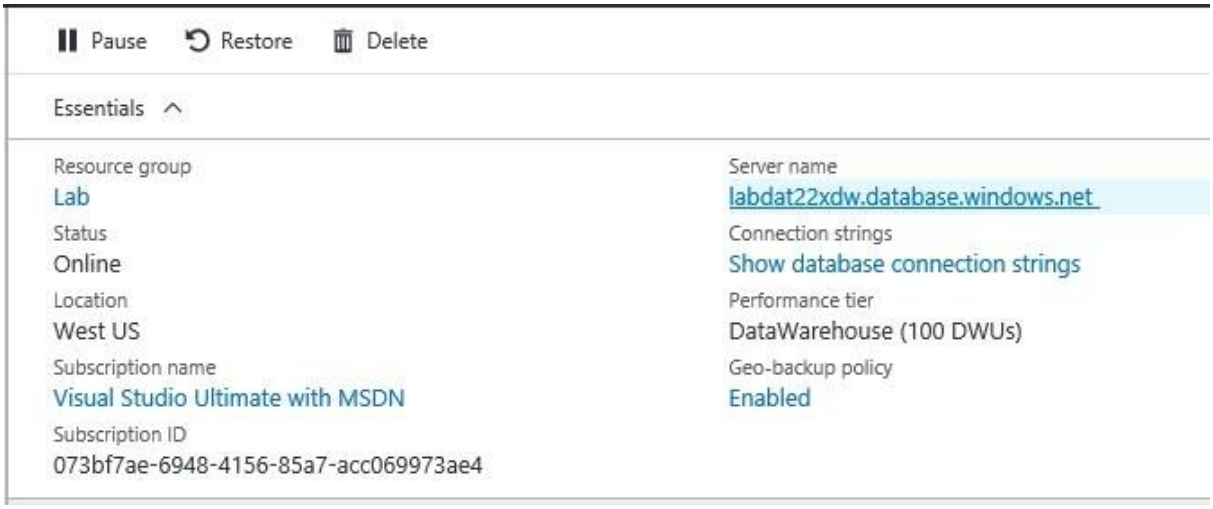
9. Review your settings, then click Create.

10. Watch for the notification of the successful deployment.

Exercise 2: Configure SQL DW after deployment

In this exercise, you will review and configure your new SQL DW.

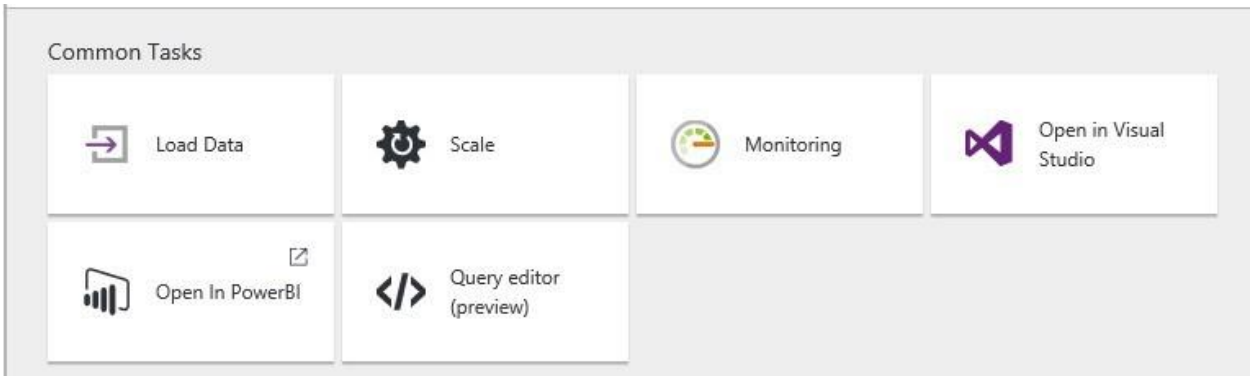
1. In the Azure Portal, review the SQL DW blade. If necessary, click on the pinned item representing your SQL DW to open the blade.



2. Note the Server name link. This will be the address you will need to supply to client applications later in the labs.

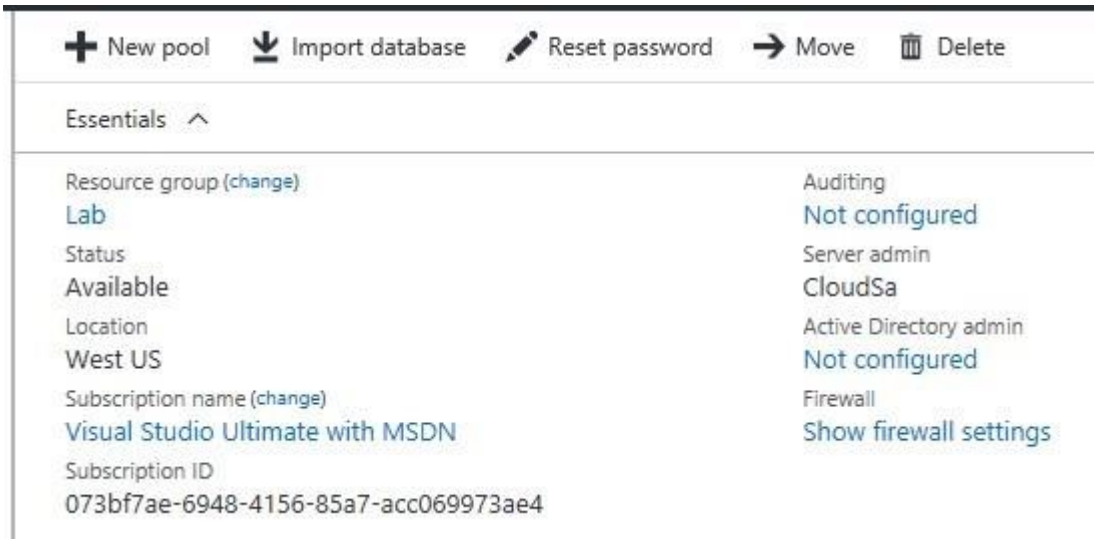
3. Note the SQL DW database name in the upper left corner. You will need to note this to connect to the database from clients once you have connected to the server. For example:

4. Review the links to Common tasks. You will use some of these in labs:



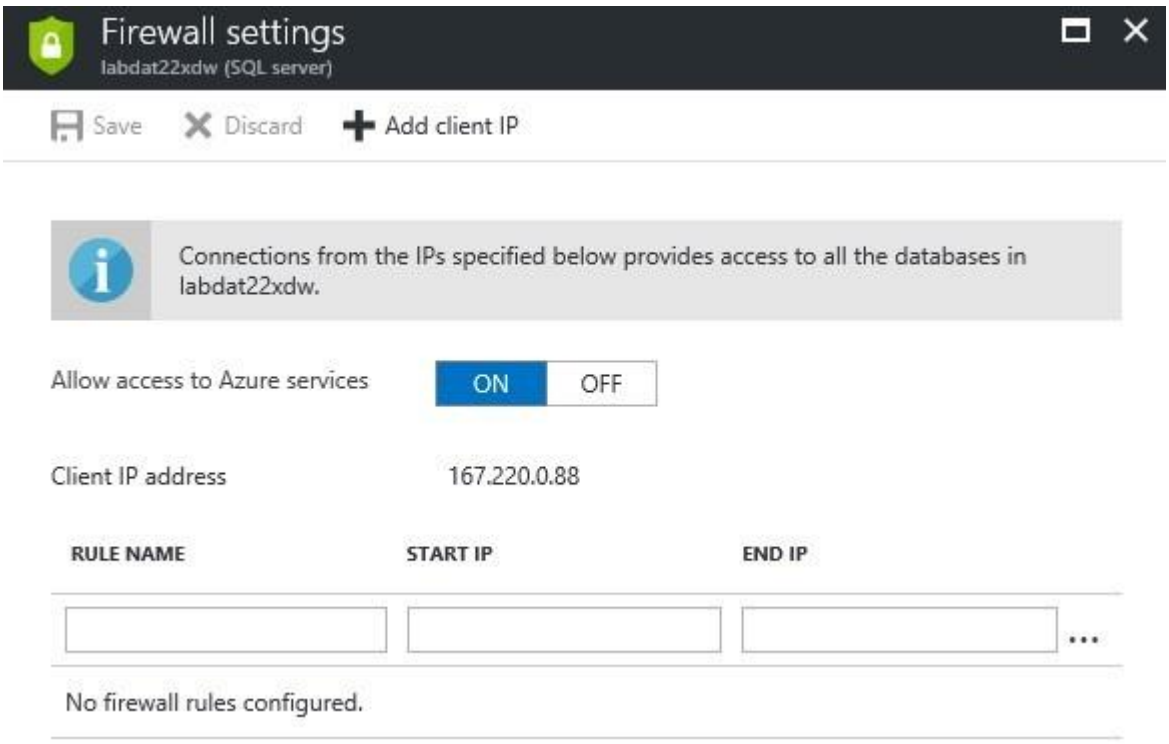
5. Click the link under Server name in the Essentials section.

6. Review the Essentials section in the Server blade:



7. Note the Server admin name and link to firewall settings. Click Show firewall settings.

8. In the Firewall settings blade, review the existing rules.



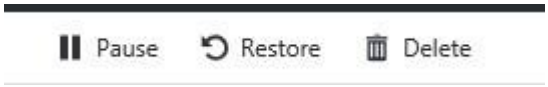
9. If you selected Allow access to Azure services during provisioning, it will be set to ON here. If you did not, turn it on now and click Save.

10. Note that no other rules are configured, and no other IP addresses have been authorized to connect to your SQL DW. Question: will your Azure lab VM be able to connect to the SQL DW with the current settings?

11. Close the Firewall settings blade to return to the SQL server blade.

12. Close the SQL server blade to return to the SQL data warehouse blade.

13. Note the location of the Pause link. Do not select it now, but you will pause your SQL DW at the end of this lab.



14. Close the SQL data warehouse blade to return to the Dashboard. Leave the Portal window open for the next exercise.

1. Use your taskbar shortcut (or other preferred method) to launch SQL Server Management Studio (SSMS).

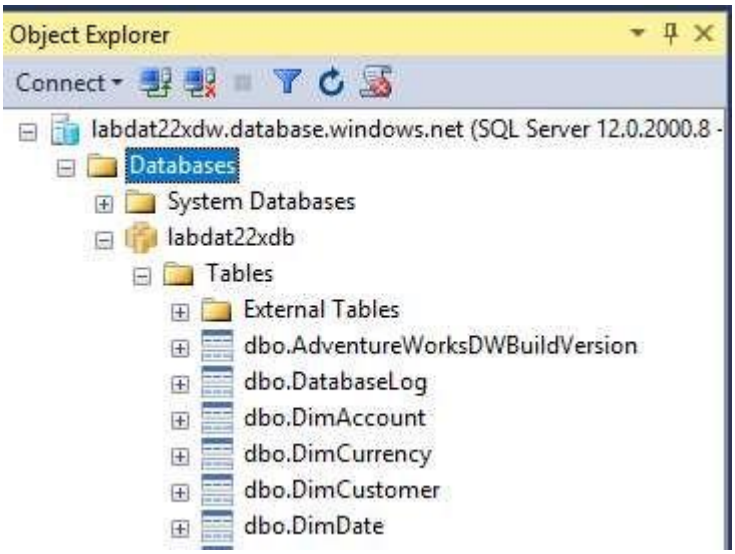
2. In the Connect to Server dialog, enter the Server name of your SQL DW, using the information in the Portal.

3. Change the Authentication drop-down list to SQL Server Authentication.

4. In the Login and Password boxes, provide the Server admin and password you configured during provisioning of the SQL DW. For your convenience, click Remember password.

5. Click Connect.

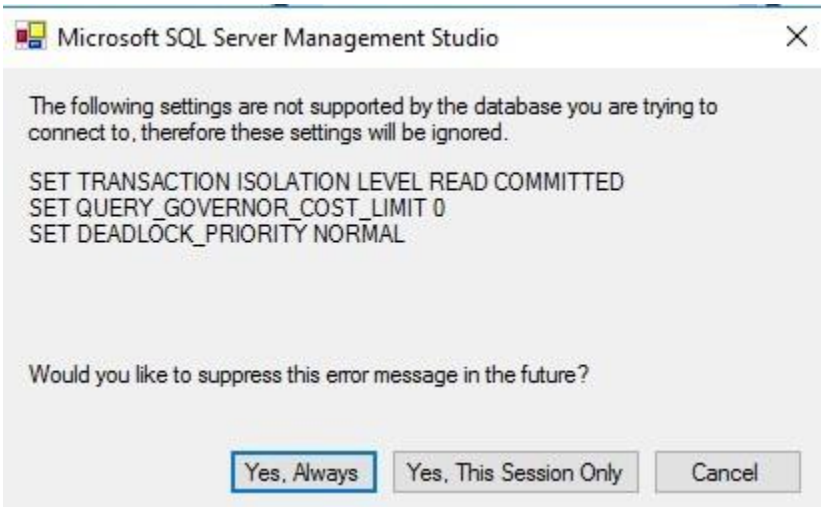
6. In the Object Explorer pane, expand the node for your SQL DW, and continue to expand nodes to see the database and sample tables that were loaded into your SQL DW during provisioning.



7. Expand the Views node and locate the view dbo.SalesByCategory.

8. On the SSMS toolbar, click the New Query button.

9. Note the dialog that appears on connection to the SQL DW. By default, SSMS sets certain connection-level settings, of which these three are not currently supported:



10. Click Yes, Always to suppress this message for future connections from this VM.
11. Click in the new query window, then confirm that your SQL DW database name appears in the database list on the toolbar:

12. In the query window, enter the following T-SQL query: SELECT SalesAmount, ProductLine FROM dbo.SalesByCategory;

13. Click the Execute button on the toolbar.

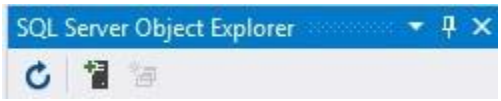
14. Review the results. Note the information provided in the status bar at the bottom of the SSMS window:

15. You have now successfully connected to and queried your SQL DW. Exit SSMS.

16. Using your task bar shortcut (or other preferred method), launch Visual Studio 2015.

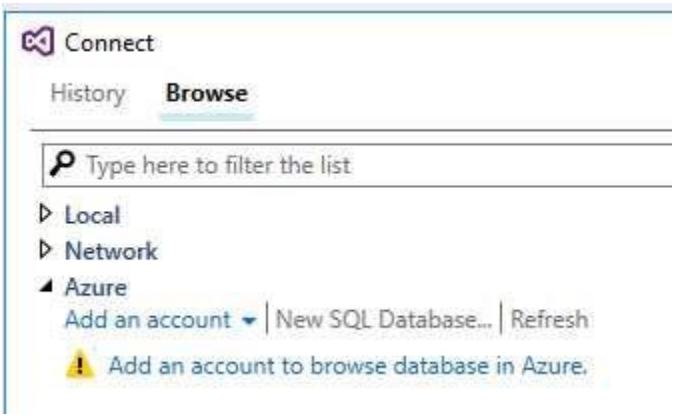
17. If the SQL Server Object Explorer pane is not visible, select it from the View menu.

18. In the SQL Server Object Explorer toolbar, click the Add SQL Server button:



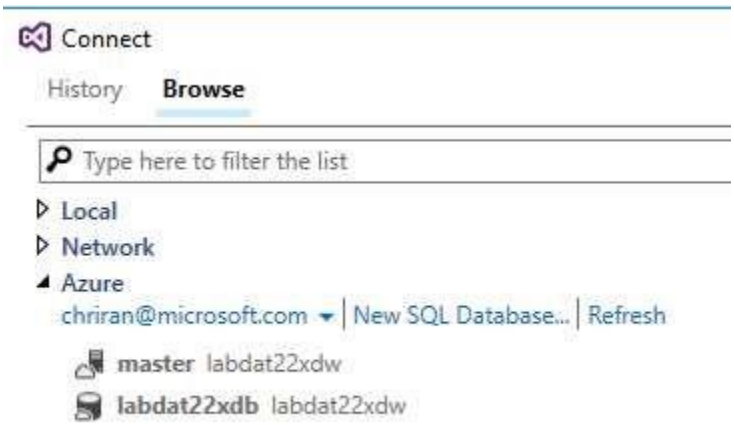
19. Like SSMS, you can directly add the Server name and credentials of your SQL DW to the Connect dialog. However, you can also associate your Azure subscription with Visual Studio, and browse your Azure resources. Let's do that.

20. In the Connect dialog, expand the Azure node:



21. Click Add an account and log in to your Microsoft account (the same one you used to log in to the portal).

22. The Connect dialog will refresh to display a list of Azure SQL DW and (SQL DB) databases associated with your subscription:



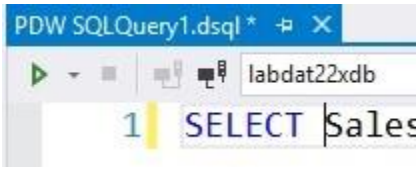
23. Select your lab database, and notice that the connection string is filled out for you in the lower portion of the dialog. Provide your User Name and Password, then click Connect.

24. Browse your SQL DW database in the Object Explorer pane.

25. Right-click on the database node, and click New Query… from the context menu:

26. In the query window, enter the same query you used in SSMS: SELECT SalesAmount, ProductLine FROM dbo.SalesByCategory;

27. In the toolbar at the top of the query window, mouse over the triangle to discover the Execute button. Note: this is not the Attach… button on the Visual Studio toolbar.



28. Review the results and the status bar to see connection and query information. As you have seen, the query experience is similar between SSMS and Visual Studio. You may use whichever tool you prefer to perform labs in this course.