

Explore Azure Synapse Analytics

BY NITIN

OBJECTIVES

- UNDERSTOOD WORKING OF INGESTION AND TRANSFORMATION OF DATA.
 - I CREATED A SYNPASE WORKPLACE AND STORAGE ACCOUNT FOR DALALAKE, AN APACHE SPARK POOL, A DATA EXPLORER POOL, AND A DEDICATED SQL POOL.
-

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XtremeLabs: DP-203T00-A-CEP [DP-203T00-A-M01-CEP] Module 01: Explore Azure Synapse Analytics

Note: If Welcome to Microsoft Azure screen is shown then click **Cancel**.

2. Use the [**>**] button to the right of the search bar at the top of the page to create a new Cloud Shell in the Azure portal, select the **PowerShell** environment. On the **Getting started** window, select **Mount storage account**, select the subscription from the drop-down and then select **Apply**. On the **Mount storage account** window, select **We will create a storage account for you** and then select **Next**. The cloud shell provides a command line interface in a pane at the bottom of the Azure portal, as shown here:

The screenshot shows the Microsoft Azure Portal with the 'All services' dashboard. The left sidebar lists categories like Favorites, Recents, and Recommended for you. The main area displays icons for various services: Microsoft Entra ID, Virtual machines, Resource groups, App Services, Storage accounts, SQL databases, and Cost Management. Below these are AI + machine learning, Analytics, Compute, and Containers. A central message box says 'Deployment is in progress' with details: Subscription: XLabs-910, Resource group: 4d335bb4-c496-4cbf-adb0-6ef1a022b73d/resourcegroups/cloud-shell-storage-eastus, Storage account: cs210032003e58fecb9, File share: cs-xlab-jgj-910-xtremelabs-us-10032003e58fecb9, Region: East US.

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Support

ENG IN 3:08 PM 10/21/2024

labs.xtremelabs.io/LabViewerConnection/DetachLab... Microsoft Azure Portal | Microsoft Home - Microsoft Azure

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for this exercise and run the **setup.ps1** script it contains:

Paste Content Paste Content

```
cd dp-203/Allfiles/labs/01
./setup.ps1
```

6. If prompted, choose which subscription you want to use (this will only happen if you have access to multiple Azure subscriptions).

7. When prompted, enter a suitable password to be set for your Azure Synapse SQL pool.

Note: Be sure to remember this password! Additionally, the password cannot contain all or part of the login name.

8. Wait for the script to complete - this typically takes around 20 minutes, but in some cases may take longer. While you are waiting, review the [What is Azure Synapse Analytics?](#) article in the Azure Synapse Analytics documentation.

< >

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Support

Microsoft Azure

Search resources, services, and docs (G+/-) Copilot

Azure services

Create a resource Quickstart Center Azure AI services Kubernetes services Virtual machines App Services Storage accounts SQL databases

Azure Cosmos DB More services

Resources

Recent Favorite

Switch to Bash Restart Manage files New session Editor Web preview Settings Help

```
Registering resource providers...
Microsoft.Synapse : Registered
Microsoft.Sql : Registered
Microsoft.Storage : Registered
Microsoft.Compute : Registered
Your randomly-generated suffix for Azure resources is cg9hro2
Finding an available region. This may take several minutes...
Trying australiaeast
Using australiaeast
Creating dp203-cg9hro2 resource group in australiaeast ...
Creating synapsecg9hro2 Synapse Analytics workspace in dp203-cg9hro2 resource group...
(This may take some time!)
```

3:23 PM 10/21/2024 ENG IN

labs.xtremelabs.io/LabViewerConnection/DetachLab... Microsoft Azure Portal | Microsoft Azure dp203-cg9hro2 - Microsoft Azure portal.azure.com/#@xtremelabs.onmicrosoft.com/resource/subscriptions/4d335bb4-c496-4cbf-adb0... Copilot

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17% Completed
Lab Time Left: 03:25:49

Lab Actions

4. Explore Azure Synapse Analytics

Explore Synapse Studio:

Synapse Studio is a web-based portal in which you can manage and work with the resources in your Azure Synapse Analytics workspace.

1. When the setup script has finished running, in the Azure portal, go to the **dp203-xxxxxx** resource group that it created, and notice that this resource group contains your Synapse workspace, a Storage account for your data lake, an Apache Spark pool, a Data Explorer pool, and a Dedicated SQL pool.

2. Select your Synapse workspace, and in its **Overview** page, in the **Open Synapse Studio** card, select **Open** to open Synapse Studio in a new browser tab. Synapse Studio is a web-based interface that you can use to work with your Synapse Analytics workspace.

3. On the left side of Synapse Studio, use the >> icon to expand the menu - this reveals the different pages within Synapse Studio

Page: 4/9

Support

Microsoft Azure Home > Resource groups > dp203-cg9hro2 Resource group

Search

Create, Manage view, Delete resource group, Refresh, Export to CSV, Open query

Overview, Essentials, Resources, Recommendations

Filter for any field..., Type equals all, Location equals all

Showing 1 to 4 of 4 records. Show hidden types, No grouping

Name	Type	Location	Actions
datalakecg9hro2	Storage account	Australia East	...
sparkcg9hro2 (synapsecg9hro2/sparkcg9hro2)	Apache Spark pool	Australia East	...
sqlcg9hro2 (synapsecg9hro2/sqlcg9hro2)	Dedicated SQL pool	Australia East	...
synapsecg9hro2	Synapse workspace	Australia East	...

Switch between a list view of your resources and a summary chart view of resource counts.

Give feedback

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- **Name:** Products
- **Description:** Product list via HTTP
- **Connect via integration runtime:** AutoResolveIntegrationRuntime
- **Base URL:**
<https://raw.githubusercontent.com/MicrosoftLearning/dp-203-azure-data-engineer/master/Allfiles/labs/01/adventureworks/products.csv>
- **Server Certificate Validation:** Enable
- **Authentication type:** Anonymous

4. After creating the connection, on the Source data store page, ensure the following settings are selected, and then select **Next >**:

- **Relative URL:** *Leave blank*
- **Request method:** GET
- **Additional headers:** *Leave blank*
- **Binary copy:** Unselected
- **Request timeout:** *Leave blank*
- **Max concurrent connections:** *Leave blank*

5. On the **Source** step, in the **Configuration** substep, select **Preview data** to see a preview of the product data your pipeline will ingest, then close the preview.

6. After previewing the data, on the **File format settings** page, ensure the following settings are selected, and then select **Next >**:

- **File format:** DelimitedText
- **Column delimiter:** Comma (,)
- **Row delimiter:** Line feed (\n)
- First row as header: Selected

Page: 5/9

Microsoft Azure | Synapse Analytics > synapsecg9hr

Preview data

Linked service: Nproducts

Object: <https://raw.githubusercontent.com/MicrosoftLearning/dp-203-azure-data-engineer/master/Allfiles/labs/01/adventureworks/products.csv>

Preview Schema

ProductID	ProductName	Category	ListPrice
771	Mountain-100 Silver, 38	Mountain Bikes	3399.9900
772	Mountain-100 Silver, 42	Mountain Bikes	3399.9900
773	Mountain-100 Silver, 44	Mountain Bikes	3399.9900
774	Mountain-100 Silver, 48	Mountain Bikes	3399.9900
775	Mountain-100 Black, 38	Mountain Bikes	3374.9900
776	Mountain-100 Black, 42	Mountain Bikes	3374.9900
777	Mountain-100 Black, 44	Mountain Bikes	3374.9900
778	Mountain-100 Black, 48	Mountain Bikes	3374.9900
779	Mountain-200 Silver, 38	Mountain Bikes	2319.9900
780	Mountain-200 Silver, 42	Mountain Bikes	2319.9900

Discover

Previous Next Cancel



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- **Column delimiter:** Comma (,)
- **Row delimiter:** Line feed (\n)
- **Add header to file:** Selected
- **Compression type:** None
- **Max rows per file:** Leave blank
- **File name prefix:** Leave blank

10. On the **Settings** step, enter the following settings and then click **Next >**:

- **Task name:** Copy products
- **Task description:** Copy products data
- **Fault tolerance:** Leave blank
- **Enable logging:** Unselected
- **Enable staging:** Unselected

11. On the **Review and finish** step, on the **Review** substep, read the summary and then click **Next >**.

12. On the **Deployment** step, wait for the pipeline to be deployed and then click **Finish**.

13. In Synapse Studio, select the **Monitor** page, and in the **Pipeline runs** tab, wait for the **Copy products** pipeline to complete with status of **Succeeded** (you can use the **Refresh** button on the Pipeline runs page to refresh the status).

14. View the **Integrate** page, and verify that it now contains a pipeline named **Copy products**.

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Microsoft Azure | Microsoft Azure Portal | dp203-cg9hro2 - Mic | synapsecg9hro2 - Mic | synapsecg9hro2 - Azu | + | - | X

web.azure-synapse.net/en/home/copywizard?workspace=%2Fsubscriptions%2F4d335bb4-c496... | ☆ | F | Search | Discover more | ENG IN | 3:50 PM | 10/21/2024

Microsoft Azure | Synapse Analytics > synapsecg9hro2 | 1 | 1 | ? | XLab-JGJ-910@xtremelabs.us | LAB DIRECTORY

Copy Data tool

Properties

Source

Destination

Settings

5 Review and finish

Review

Deployment

HTTP

Deployment complete

Deployment step

Validating copy runtime environment

> Creating datasets

> Creating pipelines

> Running pipelines

Datasets and pipelines have been created. You can now monitor and edit the copy pipelines or click finish to close Copy Data Tool.

Finish | Edit pipeline | Monitor

labs.xtremelabs.io/LabViewerConnection/DetachLabManual?la... Microsoft Azure Portal | dp203-cg9hro2 - Micro | synapsecg9hro2 - Mic | synapsecg9hro2 - Azur + — □ ×

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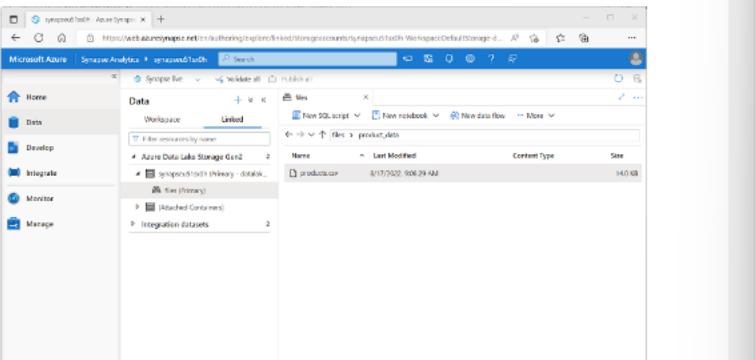
45% Completed
Lab Time Left: 03:06:42

Lab Actions ▾

6. Explore Azure Synapse Analytics

View the ingested data:

✓ 1. On the Data page, select the **Linked** tab and expand the **Azure Data Lake Storage Gen2** and then expand the **synapsexxxxxxxx (Primary) datalake** container hierarchy until you see the **files** file storage for your Synapse workspace. Then select the file storage to verify that a folder named **product_data** containing a file named **products.csv** has been copied to this location, as shown here:



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Synapse live Validate all Publish all

Data

Workspace **Linked**

Filter resources by name

- Azure Data Lake Storage Gen2 2
 - synapsecg9hro2 (Primary - datalak...) files (Primary)
 - (Attached Containers)
- Integration datasets 2

Copy products

Other users in your workspace may have access to modify this item. Do not use this item unless you trust all users who may have access to the workspace.

Activities

Search activities

- > Synapse
- > Move and transform
- > Azure Data Explorer
- > Azure Function
- > Batch Service
- > Databricks
- > Data Lake Analytics
- > General
- > HDInsight
- > Iteration & conditionals
- > Machine Learning

Validate Debug Add trigger

Copy data

Copy_0qz

Parameters Variables Settings Output

New

3:51 PM 10/21/2024 ENG IN

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Showing 1 to 1 of 1 cached items

2. Right-click the **products.csv** data file and select **Preview** to view the ingested data. Then close the preview.

Use a serverless SQL pool to analyze data

Now that you've ingested some data into your workspace, you can use Synapse Analytics to query and analyze it. One of the most common ways to query data is to use SQL, and in Synapse Analytics you can use a serverless SQL pool to run SQL code against data in a data lake.

1. In Synapse Studio, right-click the **products.csv** file in the file storage for your Synapse workspace, point to **New SQL script**, and select **Select TOP 100 rows**.

2. In the **SQL Script 1** pane that opens, review the SQL code that has been generated, which should be similar to this:

```
-- This is auto-generated code
SELECT
    TOP 100 *
FROM
    OPENROWSET(
```

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Support

Microsoft Azure | Synapse Analytics Search

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products.csv

Path https://datalakecg9hro2.dfs.core.windows.net/files/products_data/prod Modified 10/21/2024, 3:49:56 PM

With column header On

PRODUCTID	PRODUCTNAME	CATEGORY	LISTPRICE
771	Mountain-100 Silver	Mountain Bikes	3399.9900
772	Mountain-100 Silver	Mountain Bikes	3399.9900
773	Mountain-100 Silver	Mountain Bikes	3399.9900
774	Mountain-100 Silver	Mountain Bikes	3399.9900
775	Mountain-100 Black	Mountain Bikes	3374.9900
776	Mountain-100 Black	Mountain Bikes	3374.9900
777	Mountain-100 Black	Mountain Bikes	3374.9900
778	Mountain-100 Black	Mountain Bikes	3374.9900
779	Mountain-200 Silver	Mountain Bikes	2319.9900
780	Mountain-200 Silver	Mountain Bikes	2319.9900

OK

Showing 1 to 1 of 1 cached items

Other users in your workspace may have access to modify this item. Do not use this item unless you trust all users who may have access to the workspace.

Content Type Size
14.0 KB

3:54 PM 10/21/2024 ENG IN

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- **Legend (series) maximum:** Leave blank
- **Category label:** Leave blank

The resulting chart should resemble this:

ProductCount

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Synapse Analytics > synapsecg9hro2 Search 1 1 ? **XLab-JGJ-910@xtremelabs.us** LAB DIRECTORY

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Synapse live Validate all Publish all

files Count Products by ...

Run Undo Publish Query plan Connect to Built-in ...

```
1 SELECT
2 Category, COUNT(*) AS ProductCount
3 FROM
4 OPENROWSET(
```

Results Messages

View Table Chart Save as image

ProductCount

Legend position: bottom - center

Legend (series) label

Legend (series) minimum value

Legend (series) maximum value

Category label

00:00:03 Query executed successfully.

4:47 PM 10/21/2024

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c0	c1	c2	c3
ProductID	ProductName	Category	ListPrice
771	Mountain-100 Silver, 38	Mountain Bikes	3399.9900
772	Mountain-100 Silver, 42	Mountain Bikes	3399.9900
...

6. Uncomment the `,header=True` line (because the products.csv file has the column headers in the first line), so your code looks like this:

Paste Content

Paste Content

```
%pyspark
df = spark.read.load('abfss://files@datalakecg9hro2.dfs.core.windows.net/product_data/products.csv', format='csv'
## If header exists uncomment line below
, header=True)
display(df.limit(10))
```

7. Rerun the cell and verify that the results look like this:

ProductID	ProductName	Category	ListPrice
771	Mountain-100 Silver, 38	Mountain Bikes	3399.9900
772	Mountain-100 Silver, 42	Mountain Bikes	3399.9900
773	Mountain-100 Silver, 44	Mountain Bikes	3399.9900
774	Mountain-100 Silver, 48	Mountain Bikes	3399.9900
775	Mountain-100 Black, 38	Mountain Bikes	3399.9900

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Support

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Synapse live Validate all Publish all

files Count Products by C... Notebook 1

Run all Undo Publish Outline Attach to sparkcg9hro2

Ready

```
1 %%pyspark
2 df = spark.read.load('abfss://files@datalakecg9hro2.dfs.core.windows.net/product_data/products.csv', format='csv'
3 ## If header exists uncomment line below
4 ##, header=True
5 )
6 display(df.limit(10))
```

[1] 3 min 17 sec session started in 2 min 50 sec 301 ms. Command executed in 27 sec 478 ms by XLab-JGJ-910 on 4:54:3

Job execution Succeeded Spark 2 executors 8 cores View in monitoring Open Spark UI

View Table Chart Export results

_c0	_c1	_c2	_c3
771	Mountain-100 Silver, 38	Mountain Bikes	3399.9900
772	Mountain-100 Silver, 42	Mountain Bikes	3399.9900
773	Mountain-100 Silver, 44	Mountain Bikes	3399.9900
774	Mountain-100 Silver, 48	Mountain Bikes	3399.9900
775	Mountain-100 Black, 38	Mountain Bikes	3399.9900

4:55 PM ENG IN 10/21/2024

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Headsets	3
Wheels	14
....

11. In the results output for the cell, select the **Chart** view. The resulting chart should resemble this:

Category	Sum(count)
Bib-Shorts	2
Bike Stands	2
Bottom Brackets	3
Caps	2
Cleaners	2
Derailleurs	3
Forks	2
Handlebars	8
Helmets	3
Jerseys	8
Locks	3
Mountain Frames	32
Pedals	3
Road Bikes	45
Saddles	8
Socks	4
Tires and Tubes	11
Touring Frames	18
Wheels	14

12. If it is not already visible, show the **Properties** page by selecting the **Properties** button (which looks similar to *) on the right end of the toolbar. Then in the Properties pane, change the notebook name to **Explore products** and use the Publish button on the toolbar to save it.

13. Close the notebook pane and stop the Spark session when prompted. Then view the **Develop** page to verify that the notebook has been saved.

⌚ Page: 7/9 ⌚

synapsecg9hro2 | Search | 1 | 1 | ? | 🔍 | XLab-JGJ-910@xtremelabs.us | LAB DIRECTORY | Accept | Reject | More options | X

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Synapse live | Validate all | files | Count Products by C... | Notebook 1 | Run all | Undo | Publish | Outline | Attach to: sparkcg9hro2 | ... | Chat | Print | Edit | Export | Ready

View | Table | **Chart** | Export results

Category	Sum(count)
Bib-Shorts	2
Bike Stands	2
Bottom Brackets	3
Caps	2
Cleaners	2
Derailleurs	3
Forks	2
Handlebars	8
Helmets	3
Jerseys	8
Locks	3
Mountain Frames	32
Pedals	3
Road Bikes	45
Saddles	8
Socks	4
Tires and Tubes	11
Touring Frames	18
Wheels	14

4:58 PM 10/21/2024

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11. In the results output for the cell, select the **Chart** view. The resulting chart should resemble this:

12. If it is not already visible, show the **Properties** page by selecting the **Properties** button (which looks similar to *) on the right end of the toolbar. Then in the Properties pane, change the notebook name to **Explore products** and use the Publish button on the toolbar to save it.

13. Close the notebook pane and stop the Spark session when prompted. Then view the **Develop** page to verify that the notebook has been saved.

Previous Exercise < Next Exercise >

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Support

Microsoft Azure | dp203-cg9hro2 - x | synapsecg9hro2 - x | synapsecg9hro2 - x | +

web.azuresynapse.net/en/authoring/explore/linked/notebooks/Notebook%20...

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synapsecg9hro2

Search

Synapse live Validate all Publish all

Data Workspace Linked

Filter resources by name

Azure Data Lake Storage Gen2 2

- synapsecg9hro2 (Primary - datalak...
 - files (Primary)
- (Attached Containers)

Integration datasets 2

files Count Products by C... Explore products

Run all Undo Publish Outline ...

Ready

```
1
2 I('abfss://files@datalakecg9hro2.dfs.core.windows
3 uncomment line below
4
5
6 )
```

[2] ✓ 2 secmand executed in 1 sec 894 ms by XLab-JGJ-910 on 4:57:04 PM, 11: Job execution Succeeded Spark 2 executors 8 cores

View in monitoring Open Spark UI

ProductID ProductName

771	Mountain-100 Silver, 38
772	Mountain-100 Silver, 42
773	Mountain-100 Silver, 44
774	Mountain-100 Silver, 48
775	Mountain-100 Black, 38
776	Mountain-100 Black, 42
777	Mountain-100 Black, 44

5:09 PM ENG IN 10/21/2024

labs.xtremelabs.io/LabViewerConnection/DetachLabManual... Microsoft Azure Portal | dp203-cg9hro2 - Micro... synapsecg9hro2 - Micro... synapsecg9hro2 - Azure + labs.xtremelabs.io/LabViewerConnection/DetachLabManual?labInst... web.azure.synapse.net/en/authoring/explore/workspace/storageaccounts/synapsecg9hro2-Workspac... XLab-JGJ-910@xtremelabs.us LAB DIRECTORY

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3. When the SQL pool has started, select the **Data** page; and on the **Workspace** tab, expand **SQL databases** and verify that **sqlxxxxxxxx** is listed (use icon at the top-left of the page to refresh the view if necessary).

4. Expand the **sqlxxxxxxxx** database and its **Tables** folder, and then in the ... menu for the **FactInternetSales** table, point to **New SQL script**, and select **Select TOP 100 rows**.

5. Review the results of the query, which show the first 100 sales transactions in the table. This data was loaded into the database by the setup script, and is permanently stored in the database associated with the dedicated SQL pool.

6. Replace the SQL query with the following code:

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```
SELECT d.CalendarYear, d.MonthNumberOfYear, d.EnglishMonthName,
       p.EnglishProductName AS Product, SUM(o.OrderQuantity) AS UnitsSold
FROM dbo.FactInternetSales AS o
JOIN dbo.DimDate AS d ON o.OrderDateKey = d.DateKey
JOIN dbo.DimProduct AS p ON o.ProductKey = p.ProductKey
```

Page: 8/9

Microsoft Azure | Synapse Analytics | Search | 1 notifications | 3 messages | ? | XLab-JGJ-910@xtremelabs.us | LAB DIRECTORY

Synapse live | Validate all | Publish all

Home | Data | Workspace | Linked | Filter resources by name

SQL database | 1

- sqlcg9hro2 (SQL)
 - Tables
 - External tables
 - External resources
 - Views
 - Programmability
 - Schemas
 - Security

files | New SQL script | New notebook | More

files > products_data

Name	Last Modified	Content Type	Size
products.csv	10/21/2024, 3:49:56 PM		14.0 KB

Showing 1 to 1 of 1 cached items

5:16 PM 10/21/2024

labs.xtremelabs.io/LabViewerConnection/DetachLabManual... Microsoft Azure Portal | dp203-cg9hro2 - Micro... synapsecg9hro2 - Micro... synapsecg9hro2 - Azure + labs.xtremelabs.io/LabViewerConnection/DetachLabManual?labInst... web.azure.synapse.net/en/authoring/explore/workspace/sqlscripts/SQL%20script%201?subFolderPath... XLab-JGJ-910@xtremelabs.us LAB DIRECTORY

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EnglishProductName, p.EnglishProductSubcategory
ORDER BY d.MonthNumberOfYear

7. Use the **Run** button to run the modified query, which returns the quantity of each product sold by year and month.

8. If it is not already visible, show the **Properties** page by selecting the **Properties** button (which looks similar to *) on the right end of the toolbar. Then in the Properties pane, change the query name to **Aggregate product sales** and use the **Publish** button on the toolbar to save it.

9. Close the query pane, and then view the **Develop** page to verify that the SQL script has been saved.

10. On the **Manage** page, select the **sqlxxxxxx** dedicated SQL pool row and use its  icon to pause it.

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Microsoft Azure | Synapse Analytics | Search | 1 notifications | 4 messages | 1 alert | ? | XLab-JGJ-910@xtremelabs.us | LAB DIRECTORY

Synapse live | Validate all | Publish all

Data | Workspace | Linked | files | Aggregate product . | Publishing completed | Successfully published

Run | Undo | Publish | Query |

1 SELECT d.CalendarYear, d.MonthNumberOfYear
2 | | p.EnglishProductName AS Product, SU
3 FROM dbo.FactInternetSales AS o
4 JOIN dbo.DimDate AS d ON o.OrderDateKey =
5 JOIN dbo.DimProduct AS p ON o.ProductKey =
6 GROUP BY d.CalendarYear, d.MonthNumberOfYe
7 ORDER BY d.MonthNumberOfYear

Properties

General | Related (0)

Name * | Aggregate product sales

Description

Type | .sql script

Size | 458 bytes

Results settings per query ⓘ

First 5000 rows (default)

All rows

Results | Messages

View | Table | Chart | ...

Search

CalendarYear	MonthNumber...	EnglishMont
2022	1	January
2022	1	January

00:00:12 Query executed successfully.

5:22 PM 10/21/2024

labs.xtremelabs.io/LabViewerConnec... Microsoft Azure Portal | Micro dp203-cg9hro2 - Microsoft A synapsecg9hro2 - Microsoft / synapsecg9hro2 - Azure Syna X + labs.xtremelabs.io/LabViewerConnection/Detach... Instance ID:6728958 XtremeLabs: DP-203T00-A-CEP [DP-203T00-A-M01-CEP] Module 01: Explore Azure Synapse Analytics created to avoid unnecessary Azure costs.

1. Close the Synapse Studio browser tab and return to the Azure portal.

2. On the Azure portal, on the **Home** page, select **Resource groups**.

3. Select the **dp203-xxxxxxx** resource group for your Synapse Analytics workspace (not the managed resource group), and verify that it contains the Synapse workspace, storage account, SQL pool, and Spark pool for your workspace.

4. At the top of the **Overview** page for your resource group, select **Delete resource group**.

5. Enter the **dp203-xxxxxxx** resource group name to confirm you want to delete it, and select **Delete**.

After a few minutes, your Azure Synapse workspace resource group and the managed workspace resource group associated with it will be deleted.

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labs.xtremelabs.io/LabViewerConnec... Microsoft Azure Portal | Micro dp203-cg9hro2 - Microsoft A synapsecg9hro2 - Microsoft / synapsecg9hro2 - Azure Syna XLab-JGJ-910@xtremel... LAB DIRECTORY (XTREMELEABS.O...

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Resources Recommendations Filter for any field... Type equals all Location equals all Add filter Showing 0 to 0 of 0 records. Show hidden types No grouping List view

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Duration: 240 minutes
Status: **Completed**

Take Lab

Lab Title: [DP-203T00-A-M02-CEP] Module 02: Query files using a serverless SQL pool
Duration: 120 minutes
Status: Not Initiated

Take Lab

Lab Title: [DP-203T00-A-M03-CEP] Module 03: Transform data using a serverless SQL pool
Duration: 120 minutes
Status: Not Initiated

Take Lab

Lab Title: [DP-203T00-A-M04-CEP] Module 04: Analyze data in a lake database
Duration: 120 minutes
Status: Not Initiated

Take Lab

Lab Title: [DP-203T00-A-M05-CEP] Module

Lab Title: [DP-203T00-A-M06-CEP] Module

