

Use-case3: Ingesting the data from Source(Blob Storage) updated by third party vendors regularly, transferring and loading the data to Sink(ADLS GEN2)

Requirement:

Products.csv will be updated by third party vendors regularly. Currently in the blob storage and we need to bring the products dataset to Datalake.

Note: You can create a Dashboard for the project to organize the resources related to the project at one place.

Click on Dashboard => Create => Custom =>

Dashboard >

Create a dashboard ...

Search

Custom

Create a custom dashboard.

Azure inventory

This dashboard uses Azure Resource Graph to provide a summary view of all your azure resources.

Azure Co

This dashbo performance DB resource

Microsoft Azure

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

Customer-360

Save Preview Cancel

+ Add tiles

You can resize, move, edit tiles, or add tiles to your dashboard.

Create Resource Group :

Home > Resource groups >

Create a resource group ...

Basics Tags Review + create

Resource group - A container that holds related resources for an Azure solution. The resource group can include all the resources for the solution, or only those resources that you want to manage as a group. You decide how you want to allocate resources to resource groups based on what makes the most sense for your organization. [Learn more](#)

Project details

Subscription * ⓘ Pay-As-You-Go ▼
Resource group * ⓘ reatil-project-rg ✓

Resource details

Region * ⓘ (Asia Pacific) Central India ▼

Review + create

< Previous

Next : Tags >

Home >

Resource groups ⚙ ...

Default Directory (aratishatti15gmail.onmicrosoft.com)

+ Create ⚙ Manage view ▾ ↻ Refresh ⬇ Export to CSV 🔗 Open query ⚙ Assign tags

Filter for any field... Subscription equals all Location equals all × + Add filter

Showing 1 to 2 of 2 records.

No grouping ▾

<input type="checkbox"/> Name ↑↓	Subscription ↑↓	Location ↑↓
<input type="checkbox"/>  NetworkWatcherRG	Pay-As-You-Go	Central India
<input type="checkbox"/>  reatil-project-rg	Pay-As-You-Go	Central India

Note: Once a resource has been created, you have the option to add it to the dashboard for quick access.

Create Storage Account Resource - “trendytechretailsa”

To create a Storage Account blob storage follow below steps:

[Home](#) > [Storage accounts](#) >

Create a storage account

Basics | Advanced | Networking | Data protection | Encryption | Tags | Review

Instance details

Storage account name ⓘ * trendytechretailsa

Region ⓘ * (Asia Pacific) Central India

[Deploy to an edge zone](#)

Performance ⓘ * ☒ Standard: Recommended for most scenarios (general-purpose v2 account)
☐ Premium: Recommended for scenarios that require low latency.

Redundancy ⓘ * Locally-redundant storage (LRS)

[Review](#) < Previous Next : Advanced >

<https://portal.azure.com/#>

Note: In case of blob storage Hierarchical namespace will be disabled.

[Home](#) > [Storage accounts](#) >

Create a storage account

Basics | Advanced | Networking | Data protection | Encryption | Tags | Review

Location centralindia

Storage account name trendytechretailsa

Deployment model Resource manager

Performance Standard

Replication Locally-redundant storage (LRS)

Advanced

Enable hierarchical namespace	Disabled
Enable network file system v3	Disabled
Allow cross-tenant replication	Disabled
Access tier	Hot

[Create](#) < Previous Next > [Download a template for automation](#)

Note : After creating resources go to Setting => Configuration => Enable (Allow Blob anonymous access) => click on “Save”

Home > trendytechretailsa

trendytechretailsa | Configuration

Storage account

Search

Save Discard Refresh Give feedback

- Object replication
- Blob inventory
- Static website
- Lifecycle management
- Azure AI Search

Settings

- Configuration**
- Data Lake Gen2 upgrade
- Resource sharing (CORS)
- Advisor recommendations
- Endpoints
- Locks

Monitoring

The cost of your storage account depends on the usage and the options you choose below

Account kind
StorageV2 (general purpose v2)

Performance ⓘ
☒ Standard ☐ Premium

ⓘ This setting cannot be changed after the storage account is created.

Secure transfer required ⓘ
☐ Disabled ☒ Enabled

Allow Blob anonymous access ⓘ
☐ Disabled ☒ Enabled

ⓘ Some blobs may become anonymously readable.

Allow storage account key access ⓘ
☐ Disabled ☒ Enabled

Allow recommended upper limit for shared access signature (SAS) expiry interval ⓘ
☒ Disabled ☐ Enabled

Note: Once a resource has been created, you have the option to add it to the dashboard for quick access.

Create Storage Account Resource with hierarchical namespace enabled under the resource group -

Home > Storage accounts >

Create a storage account

Basics Advanced Networking Data protection Encryption Tags Review

Select the subscription in which to create the new storage account. Choose a new or existing resource group to organize and manage your storage account together with other resources.

Subscription * Pay-As-You-Go

Resource group * reatil-project-rg
[Create new](#)

Instance details

Storage account name ⓘ * trendytechretaildgen2

Region ⓘ * (Asia Pacific) Central India

[Review](#) < Previous Next : Advanced >

Create a storage account ...

Basics Advanced Networking Data protection Encryption Tags Review

Hierarchical Namespace

Hierarchical namespace, complemented by Data Lake Storage Gen2 endpoint, enables file and directory semantics, accelerates big data analytics workloads, and enables access control lists (ACLs) [Learn more](#)

Enable hierarchical namespace



Access protocols

Blob and Data Lake Gen2 endpoints are provisioned by default [Learn more](#)

Enable SFTP ⓘ

☐

Enable network file system v2 ⓘ

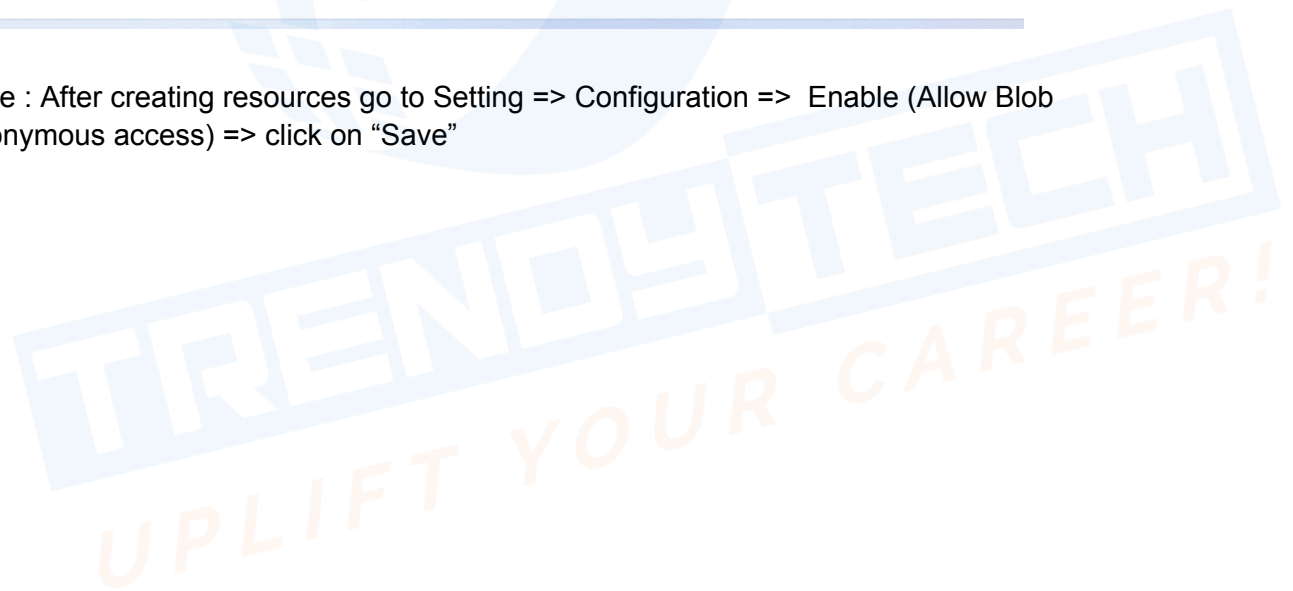
☐

Review

< Previous

Next : Networking >

Note : After creating resources go to Setting => Configuration => Enable (Allow Blob anonymous access) => click on "Save"



Home > trendytechretaild1gen2

trendytechretaild1gen2 | Configuration

Storage account

Search

Save Discard Refresh Give feedback

Microsoft Defender for Cloud

Data management

- Redundancy
- Data protection
- Blob inventory
- Static website
- Lifecycle management

Settings

- Configuration**
- Resource sharing (CORS)
- SFTP
- Advisor recommendations
- Endpoints

The cost of your storage account depends on the usage and the options you choose below.

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☒ Standard ☐ Premium

ⓘ This setting cannot be changed after the storage account is created.

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☐ Disabled ☒ Enabled

Allow Blob anonymous access ⓘ
☐ Disabled ☒ Enabled

ⓘ Some blobs may become anonymously readable.

Allow storage account key access ⓘ
☐ Disabled ☒ Enabled

Allow recommended upper limit for shared access signature (SAS) expiry interval ⓘ
☒ Disabled ☐ Enabled

Create Data Factory Resource

Home > Data factories >

Create Data Factory

One-click to create data factory with sample pipeline and datasets. [Try it](#)

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ Pay-As-You-Go

Resource group * ⓘ reatil-project-rg [Create new](#)

Instance details

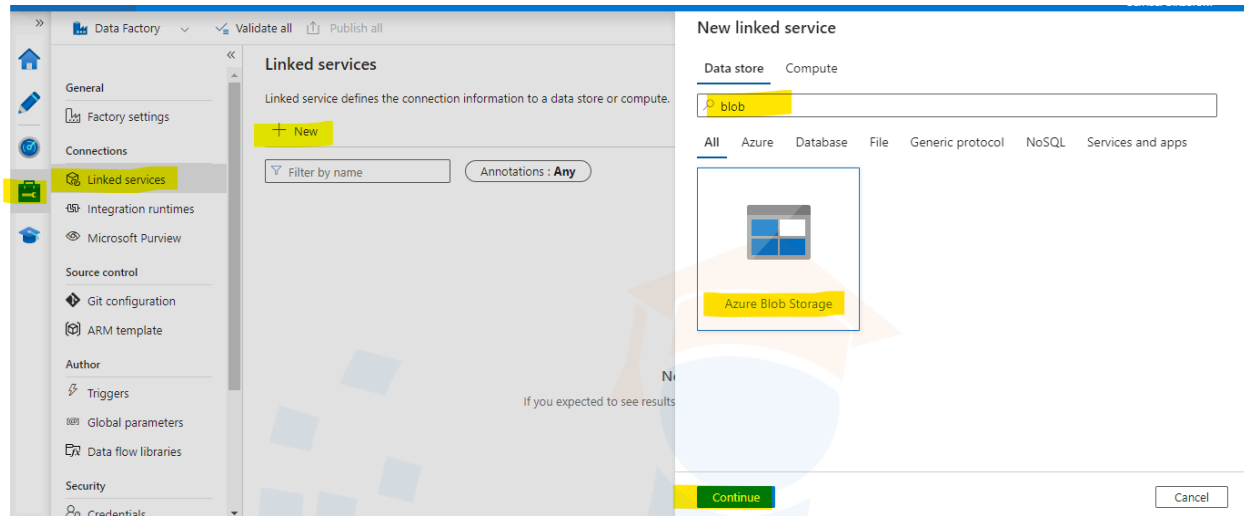
Name * ⓘ trendytechretaildf1 ✓

Region * ⓘ East US

Version * ⓘ V2

Previous Next **Review + create**

Create two Linked Services in ADF, one pointing the Source (BlobStorage) and other pointing the Sink(ADLSGen2)



Creation of linked service pointing the Source (BlobStorage)

New linked service

Azure Blob Storage [Learn more](#)

Name *

ls_products_raw

Description

Connect via integration runtime * ⓘ

AutoResolveIntegrationRuntime

Authentication type

Account key

Connection string **Azure Key Vault**


Account selection method ⓘ

☒ From Azure subscription ☐ Enter manually

Azure subscription ⓘ

Pay-As-You-Go (ef8b47c5-7bc0-46f9-856f-69466d151b69)

New linked service

 Azure Blob Storage [Learn more](#)

☒ From Azure subscription ☐ Enter manually

Azure subscription ^①

Pay-As-You-Go (ef8b47c5-7bc0-46f9-856f-69466d151b69)

Storage account name *

trendytechretailsa

Additional connection properties

+ New

Test connection ^①

☒ To linked service ☐ To file path

Annotations

+ New

> Parameters

> Advanced ^①

✓ Connection successful

Create

Back




Test connection

Cancel

Creation of linked service pointing the Source (BlobStorage)

New linked service

 Azure Data Lake Storage Gen2 [Learn more](#)

Name *

ls_adls_products_raw

Description

Connect via integration runtime * ^①

AutoResolveIntegrationRuntime

Authentication type

Account key

Account selection method ^①

☒ From Azure subscription ☐ Enter manually

Azure subscription ^①

Pay-As-You-Go (ef8b47c5-7bc0-46f9-856f-69466d151b69)

✓ Connection successful

Create

Back



Test connection

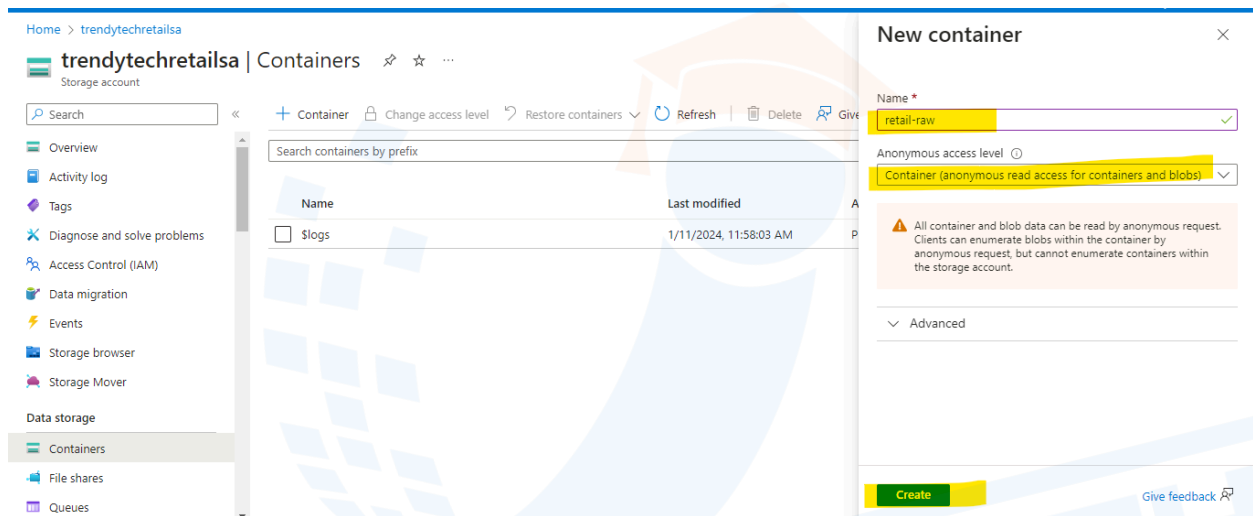
Cancel

Note: After creating linked services in Azure Data Factory, be sure to publish these changes to make them active and available for use in your data workflows.

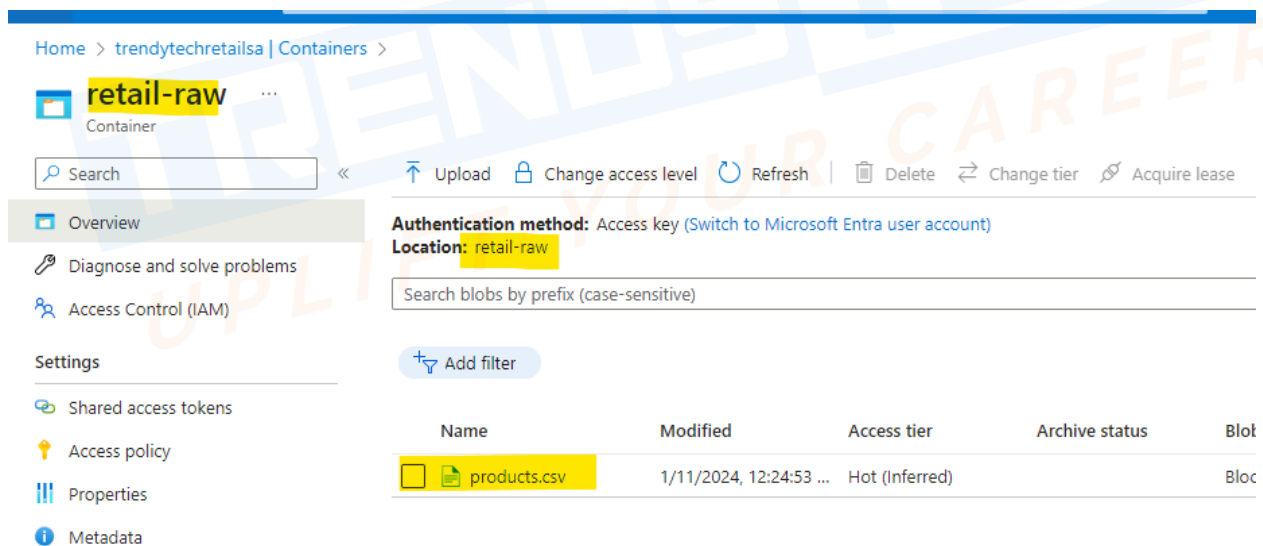
Upload the products.csv dataset to a container “retail-raw”in blob storage “trendytechretailsa”

First create the container “retail-raw”in blob storage:

Click on Container option in Data Storage => new container (**retail-raw**)=> set Anonymous access level to “**Container (anonymous access for container and blob)**”

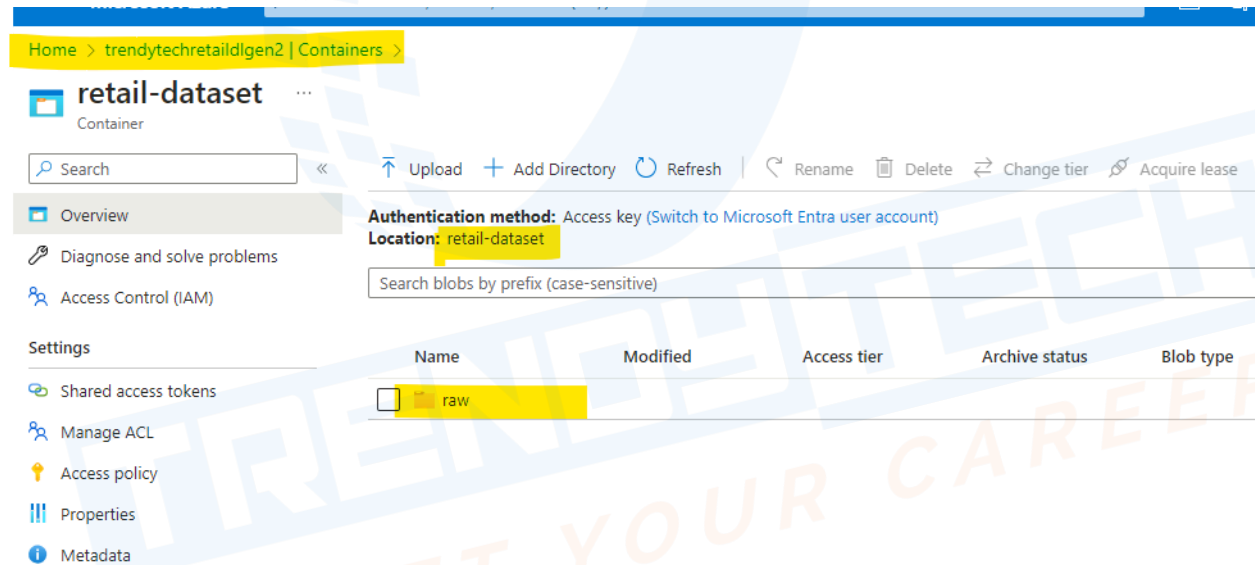
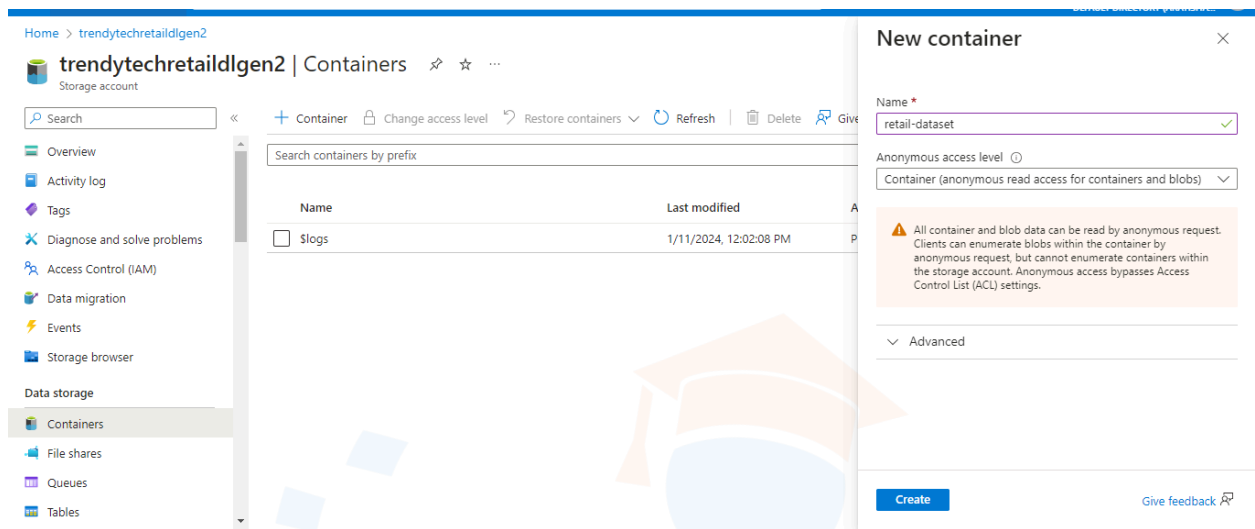


Then upload the products.csv dataset in it.



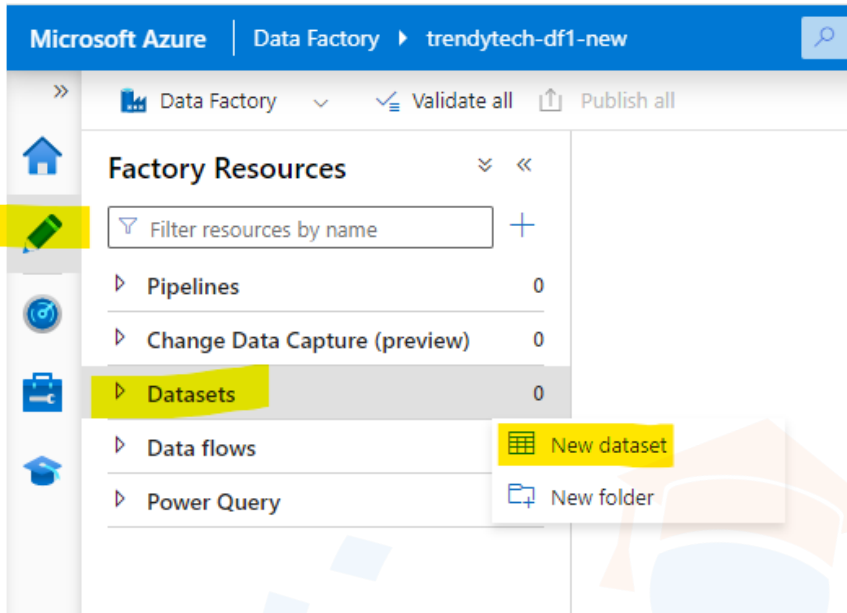
Also in Adls gen2 storage create container “retail-dataset” and ad directory “raw

”



Create two Datasets, one for the products.csv source file in blob storage and the target dataset in csv format in ADLSGen2.

To create dataset click on Author => Datasets => New datasets



Creating a Dataset, one for the products.csv source file in blob storage

Set properties

Name

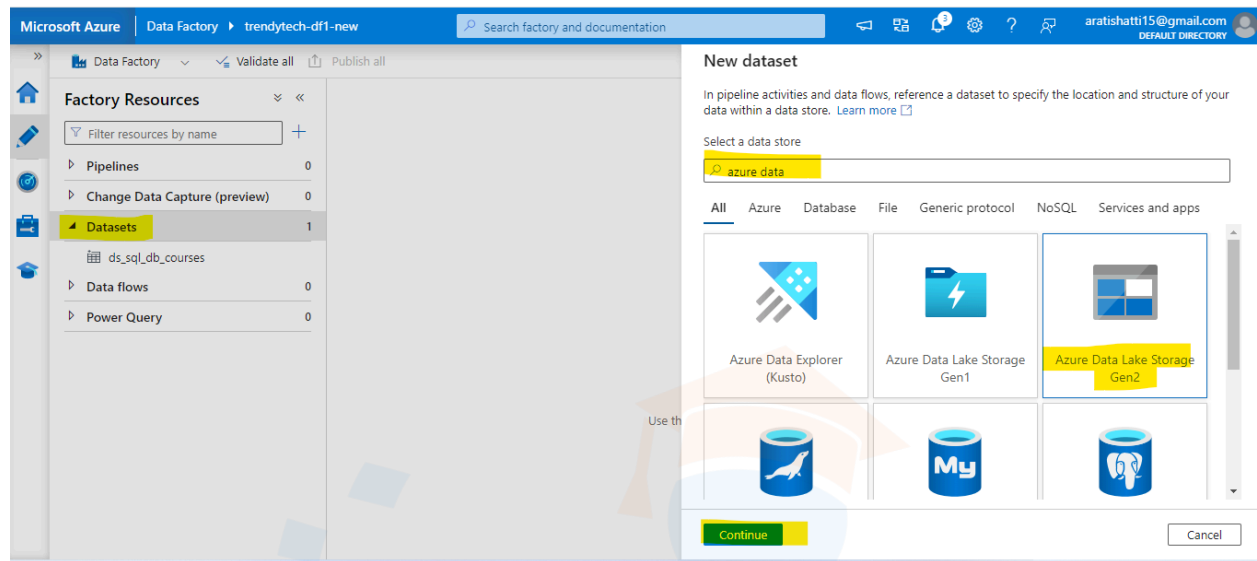
Linked service *

File path
 / /

First row as header ☒

Import schema
☐ From connection/store ☐ From sample file ☒ None

Dataset creation for sink (ADLS gen2) please check below steps:



While creating a dataset for sink after browsing the directory mention file name “products.csv” explicitly.

Set properties

Name

Linked service *

File path
 / /

First row as header ☒

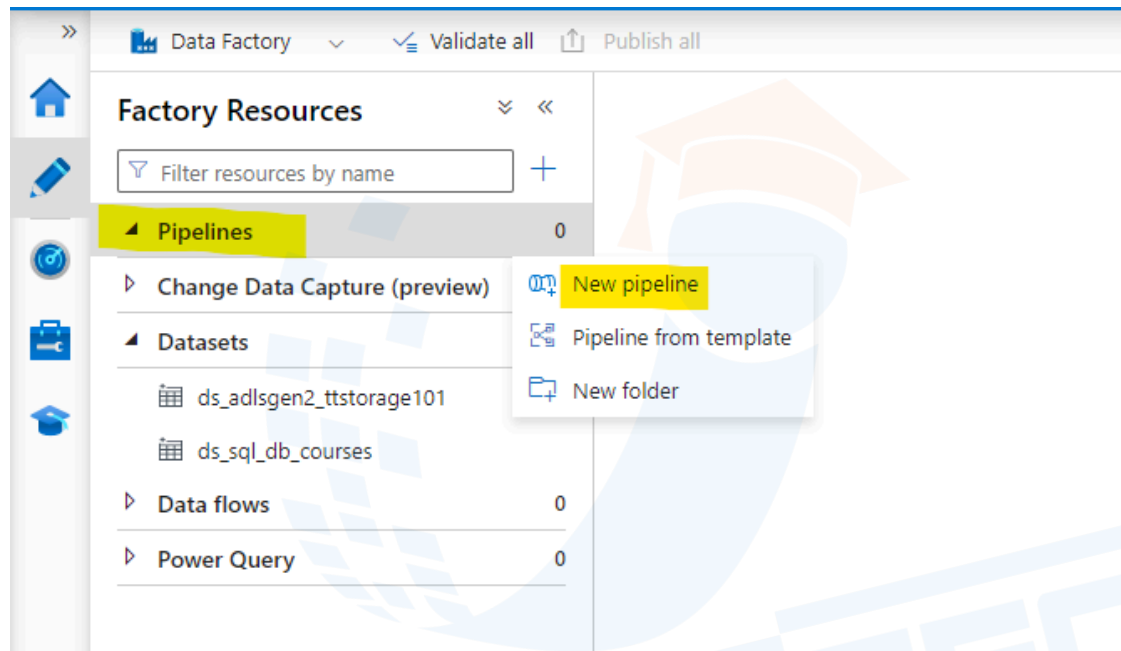
Import schema
☐ From connection/store ☐ From sample file ☒ None

Note: After creating datasets in Azure Data Factory, be sure to publish these changes to make them active and available for use in your data workflows.

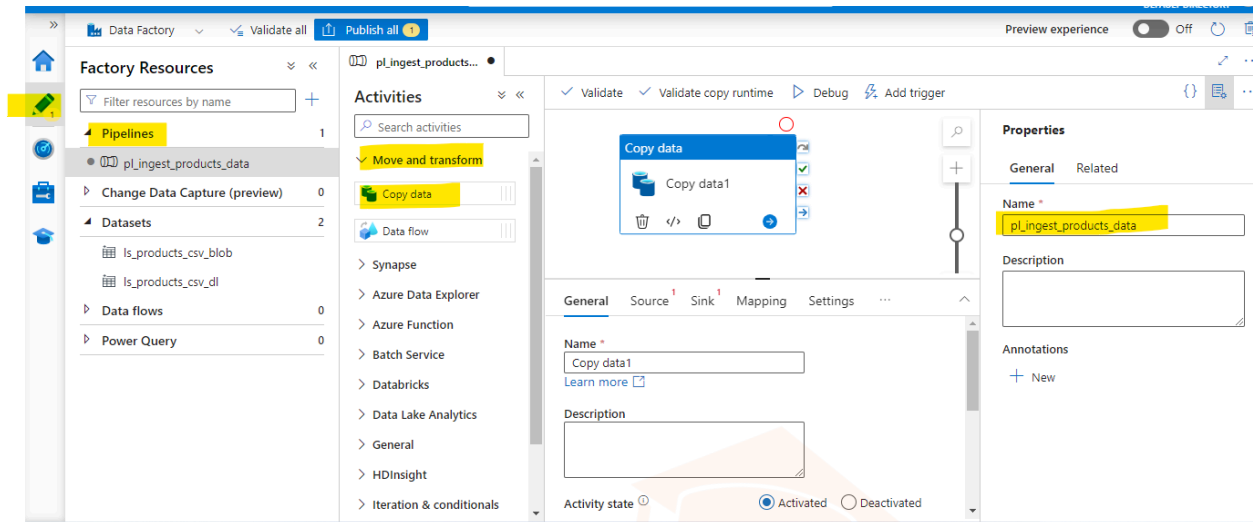
Create Pipeline and choose the source and sink to execute the required copyactivity.

Now we will create the pipeline and we will keep the copy activity in it –pl_ingest_products_data

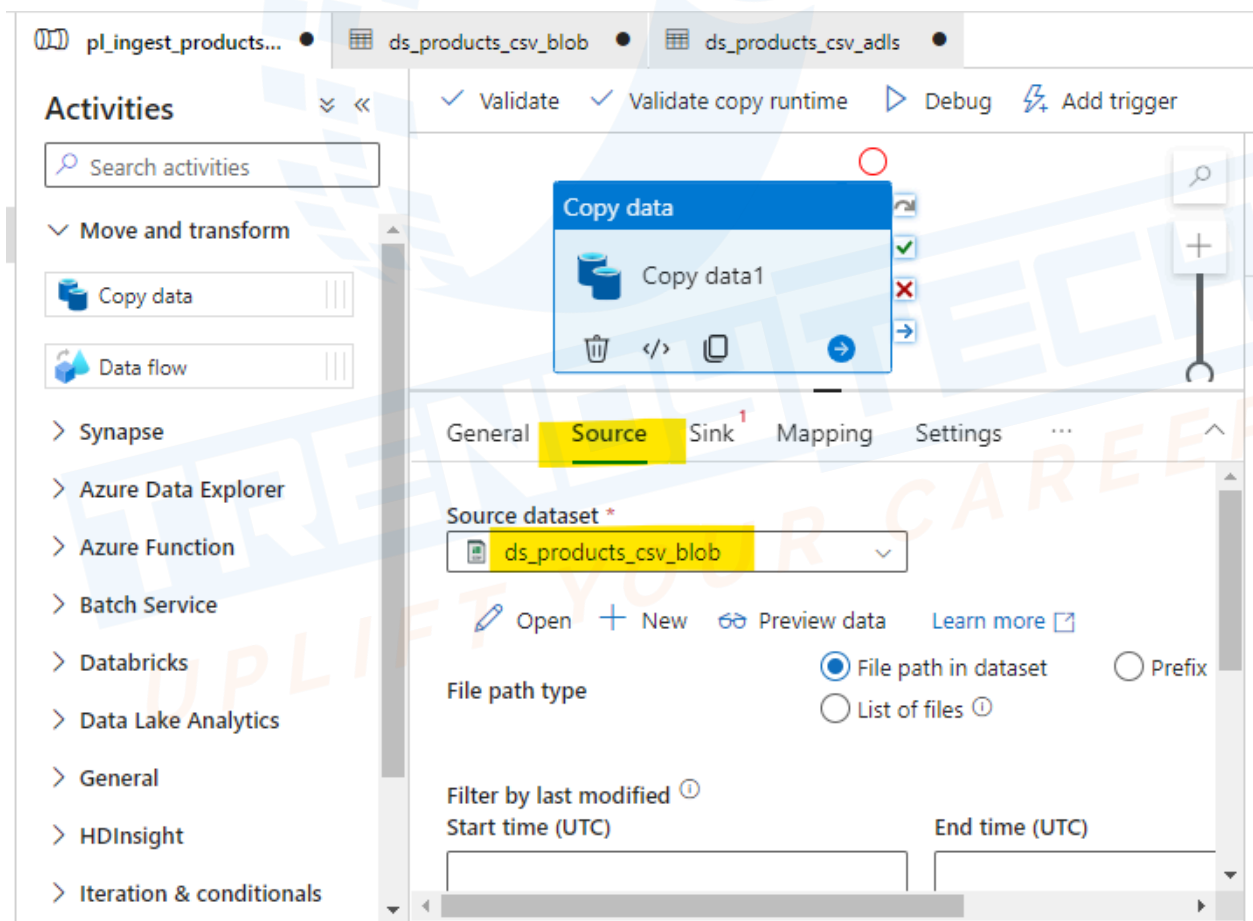
Click on three dots for pipelines option you will get below screen



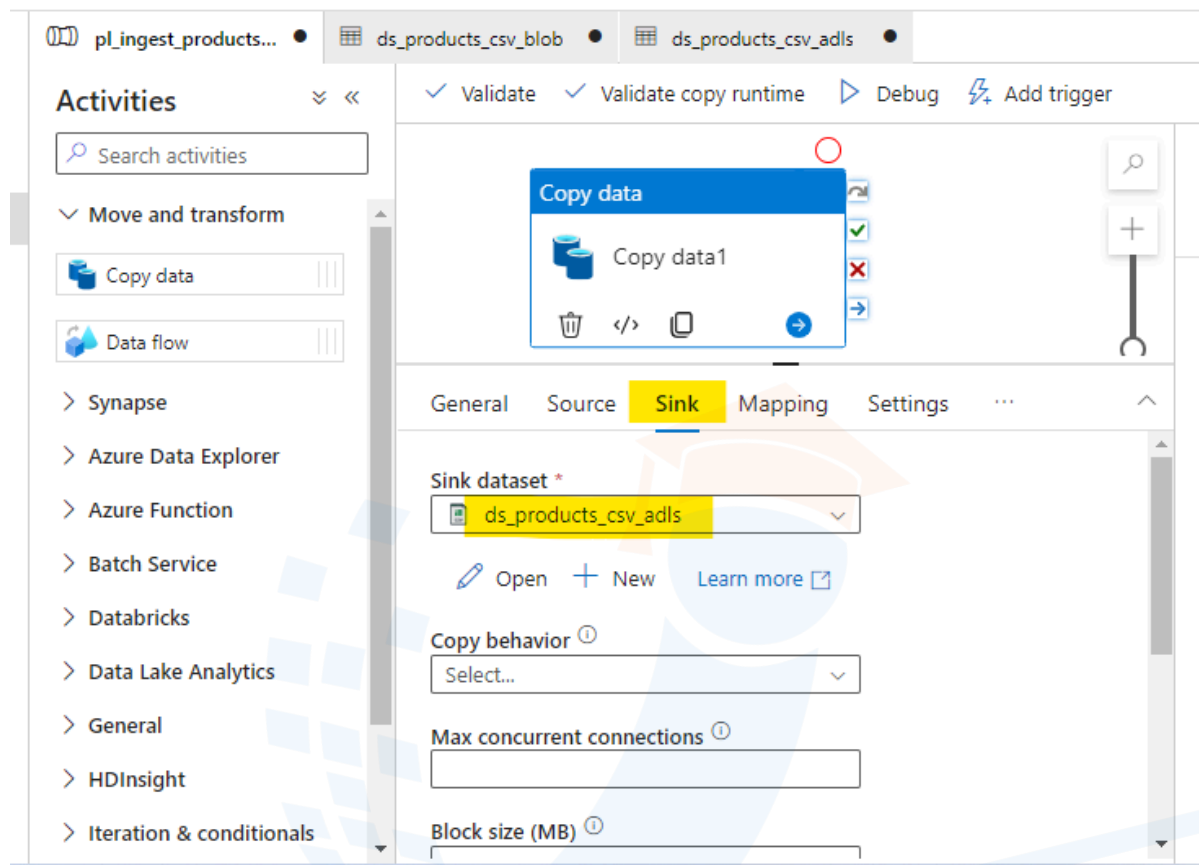
TRENDY TECH
UPLIFT YOUR CAREER!



Now in source select dataset for products.csv in blob storage “ds_products_csv_blob”

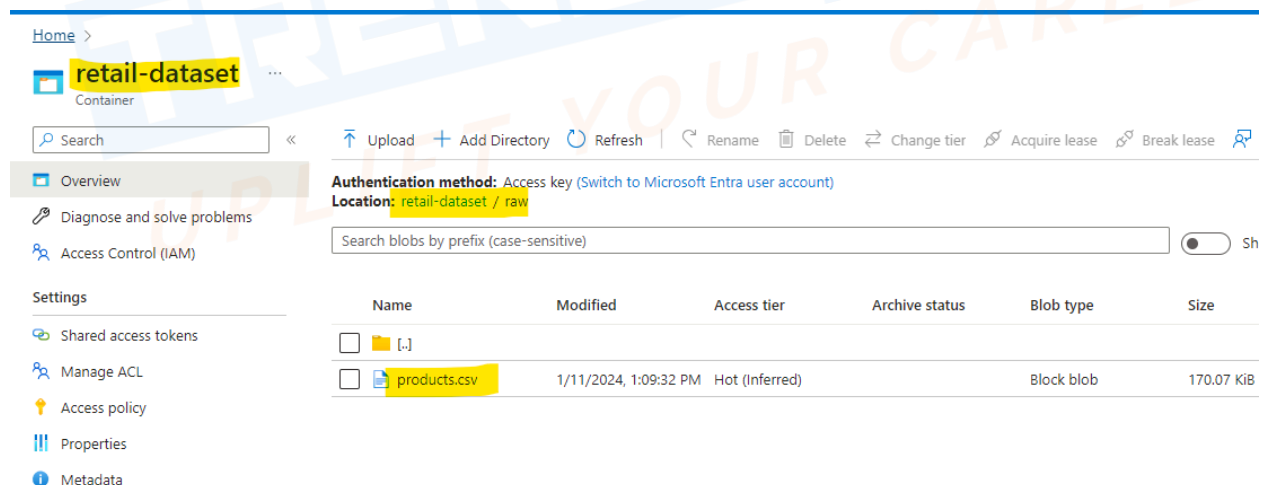


Now in sink select dataset for sink here “ds_products_csv_adls”



- Debug the pipeline and validate it. And if this is successful then publish the pipeline.

Also in your ADLS gen2 storage you will see the data copied after successfully running the pipeline. Refer below screenshot.

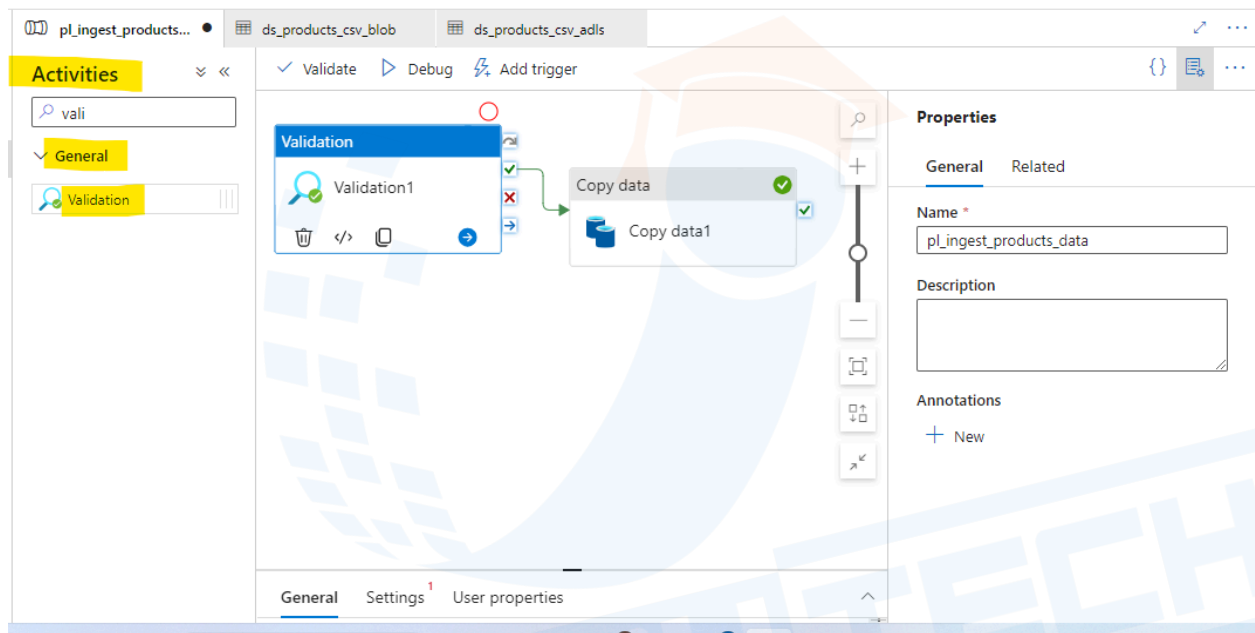


Note: After creating new pipelines in Azure Data Factory, be sure to publish these changes to make them active and available for use in your data workflows.

To Enhance The Above Process To Make It Production Ready

1.Pick the file as soon as it is available in blob storage without manual intervention.

Bring in the “**Validation activity**” present under the “**general category** “.

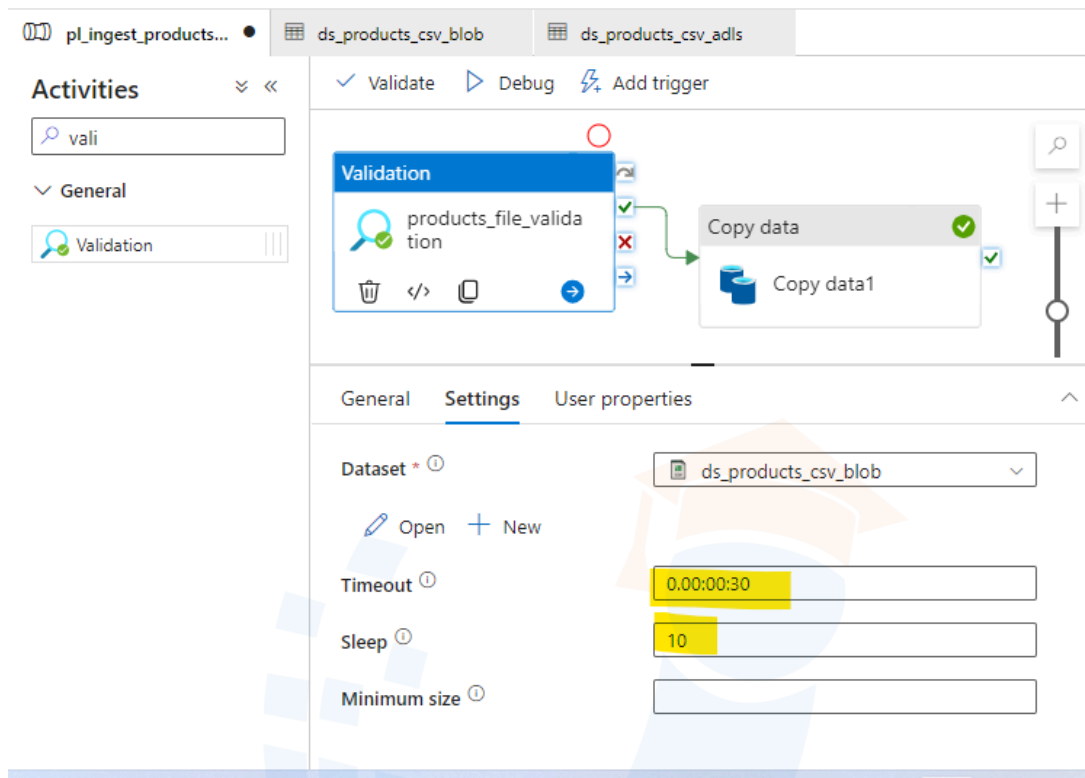


Set the values for timeout and sleep parameters to automatically pick any new files that are added to the source.

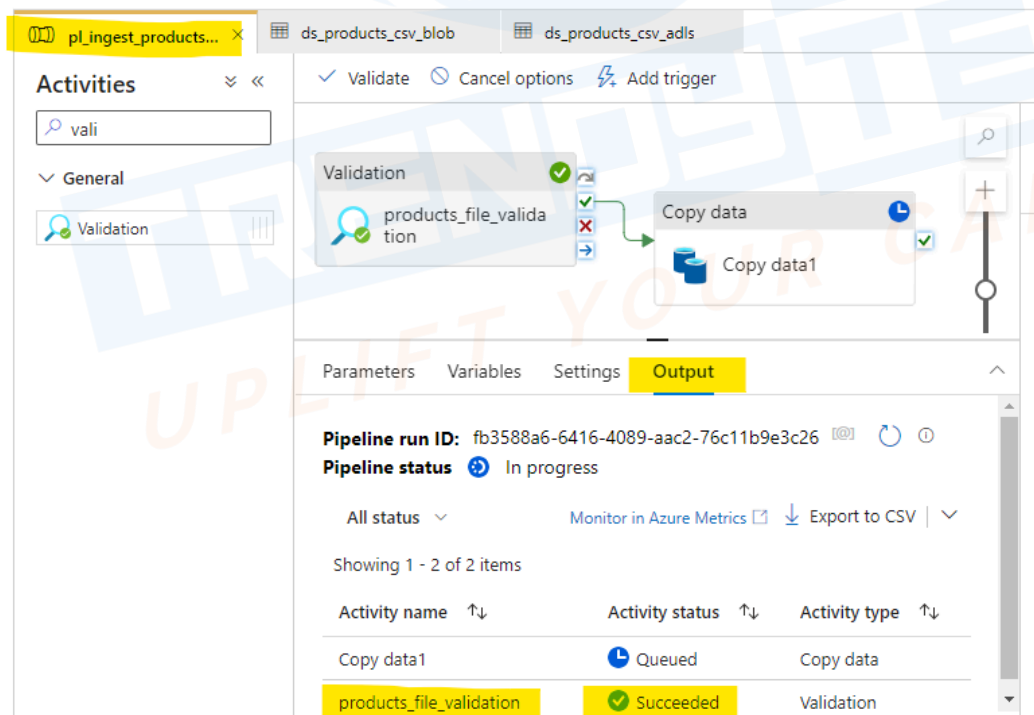
Note: Before this please remove the file in Source(Blob) and sink(ADLS gen) .

Click on Debug => Then within the mentioned time upload the file (products.csv) in blob storage
=> Check whether validation activity has been passed or not.

Ex: Mention 10 sec as time and can check validation activity mentioned above.

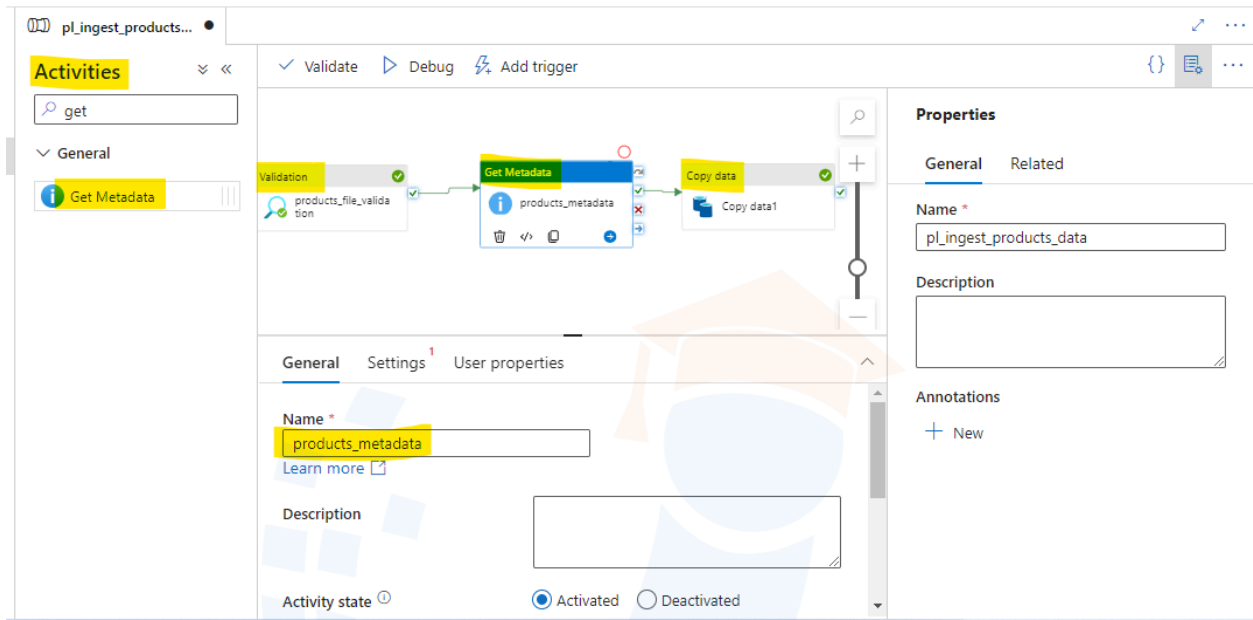


If validation has been successful it will invoke copy data activity, you can see the output as below

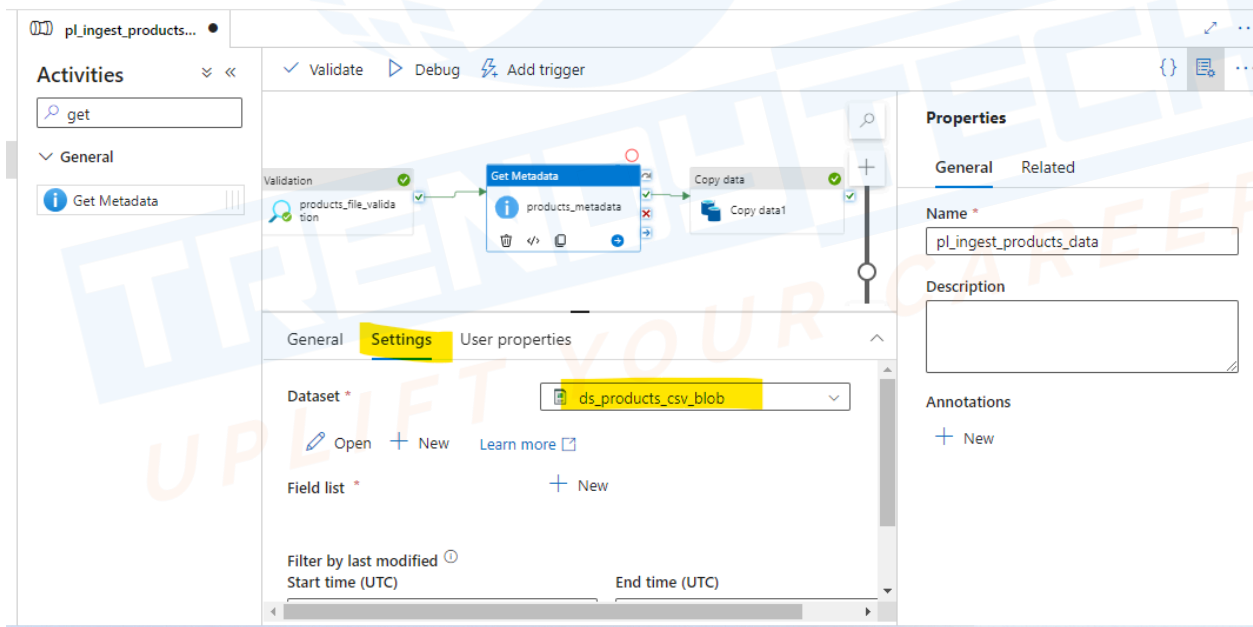


2. Perform Basic Validation/sanity check before ingesting the Datalake.

Use the “Get Metadata activity” to perform **basic validations** like column count, file size.



Mentioning the source dataset refer the attached screenshot, you can keep other setting as it is.



Note: In the Get Metadata activity, by utilizing the "field list" option, we can specify the file properties we desire, such as existence, column count, size, and other relevant attributes.. Refer attached screenshot

ate an [Publish all](#)

Resources

✓ Validate ▶ Debug ⚡ Add trigger

General **Settings** User properties

Dataset * ds_products_csv_blob

[Open](#) [+ New](#) [Learn more](#)

Field list * [+ New](#) [Delete](#)

☐ Argument

☒ Exists

☒ Column count

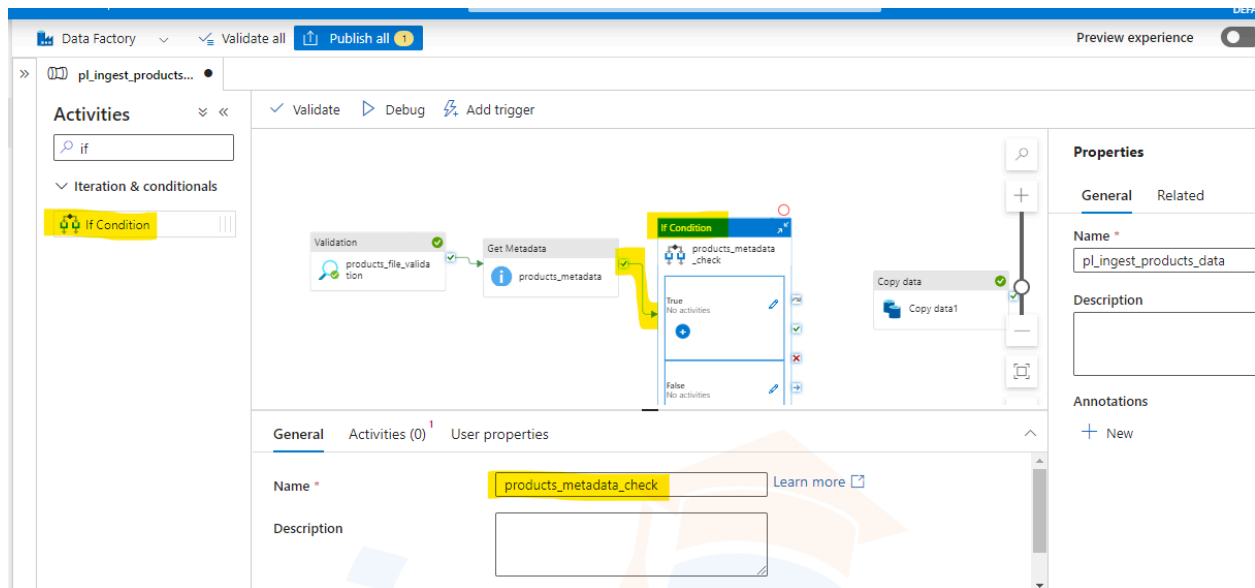
☒ Size

Filter by last modified ⓘ

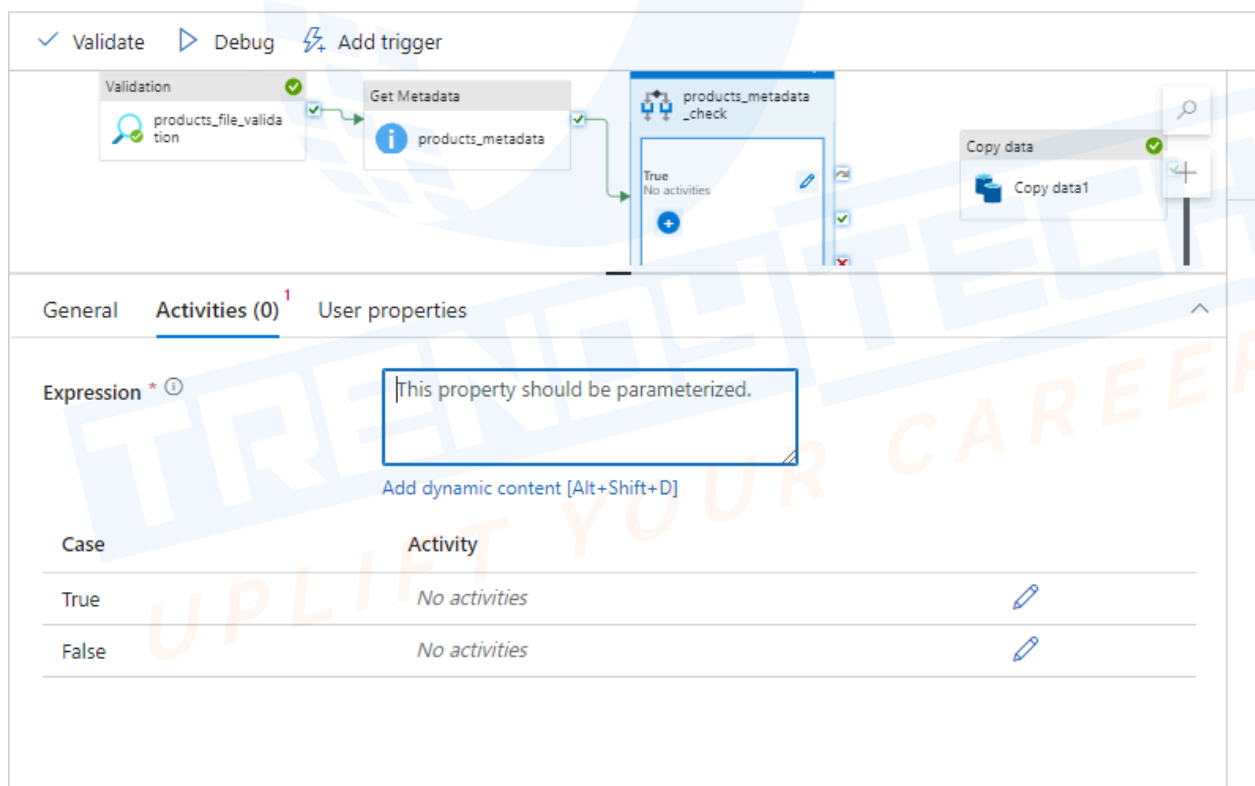
Start time (UTC)

End time (UTC)

To validate the column count, an additional activity, specifically an "If Condition," will be necessary.



To mention the activity click on “Add dynamic content”

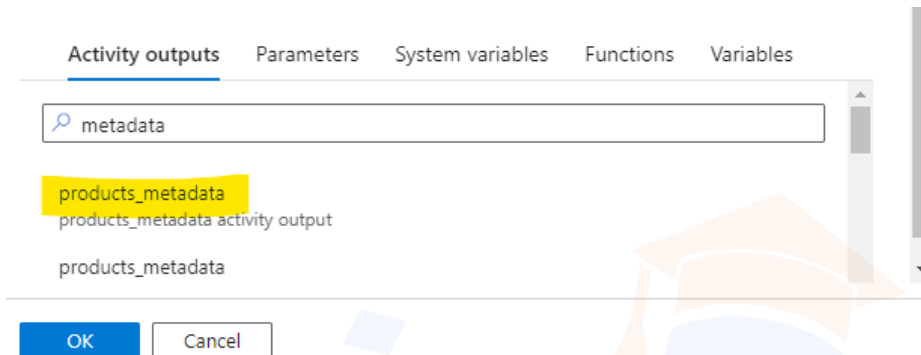


Now to check the column count, basically it should be 6 as per this products.csv file we will follow below process

a. First mention “@equals()”

=> @equals ()

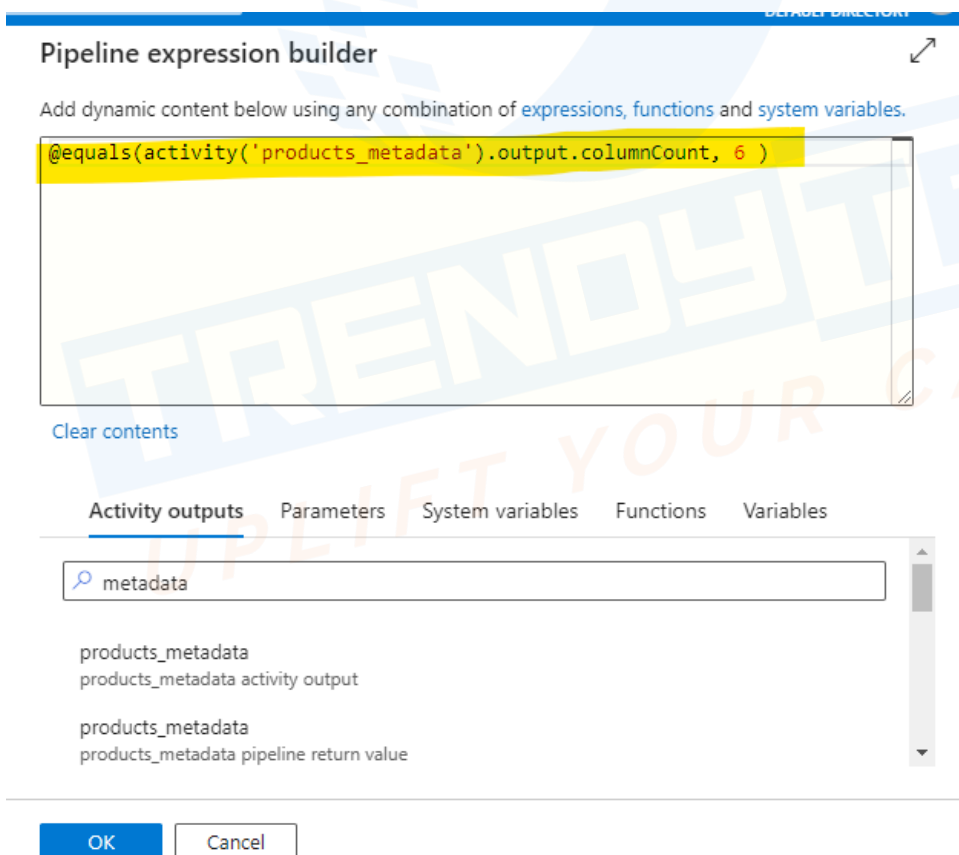
b. Then select “products metadata output”



=> @equals (activity('products_metadata').output)

C. To calculate column count add “.columnCount”

=> @equals (activity('products_metadata').output.columnCount, 6)



When this "If Condition" evaluates to "True," it is essential to execute the Copy Data activity.

To accomplish this, click on the "Edit" option for the "True" branch, and then paste the previously created Copy Data activity ("copy data 1").

late all Publish all 1

✓ Validate ▶ Debug ⚡ Add trigger

Validation products_file_validation

Get Metadata products_metadata

products_metadata_check

True
No activities

False
No activities

Copy data Copy data1

General **Activities (0)** User properties

Expression ^① `@equals(activity('products_metadata...`

Case	Activity
True	No activities
False	No activities

✓ Validate ✓ Validate copy runtime ▶ Debug ⚡ Add trigger

`pl_ingest_products_data` > `products_metadata_check` > True activities

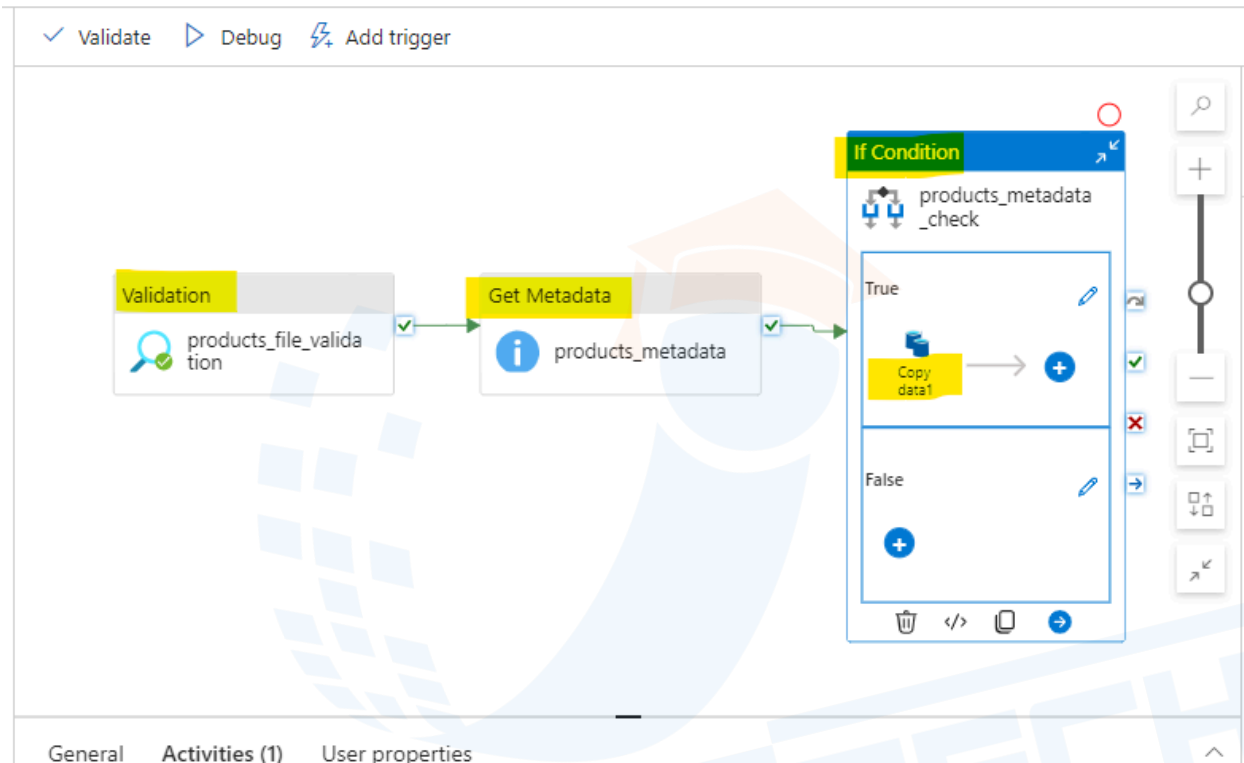
Copy data Copy data1

General **Source** Sink Mapping Settings User properties

Name * [Learn more](#)

Description

The resulting pipeline configuration is illustrated in the image below. After the validation process is completed, the Get Metadata activity is executed. If the column count validation is successful, the file will be copied from the source(Blob storage) to the sink (ADLS gen2).



Debug the pipeline and validate it.

Note: Before this please remove the file in Source(Blob) and sink(ADLS gen) .

Click on Debug => Then within the mentioned time upload the file (products.csv) in blob storage
=> Check pipeline runs

Upon the successful execution of the pipeline, the "products.csv" file will be transferred to the specified sink, namely "trendytechretaildlgen2," within the "raw" folder of the "retail-dataset" container.

Home > trendytechretaildlgen2 | Containers >

retail-dataset

Container

Search

Upload

Add Directory

Refresh

Rename

Delete

Change tier

Acquire lease

Break lease

Overview

Diagnose and solve problems

Access Control (IAM)

Settings

Shared access tokens

Manage ACL

Access policy

Properties

Metadata

Authentication method: Access key (Switch to Microsoft Entra user account)

Location: retail-dataset / raw

Search blobs by prefix (case-sensitive)

Name	Modified	Access tier	Archive status	Blob type	Size
[.]					
products.csv	1/11/2024, 2:32:04 PM	Hot (Inferred)		Block blob	170

Note: After creating new pipelines in Azure Data Factory, be sure to publish these changes to make them active and available for use in your data workflows.

You can check the output of each activity.

Parameters

Variables

Settings

Output

Pipeline run ID: 5488c906-2189-4f91-a997-a094e2727493

Pipeline status: ✓ Succeeded

View debug run consumption

All status

List

Monitor in Azure Metrics

Export to CSV

Showing 1 - 4 of 4 items

Activity name	Activity status	Activity type	Run start	Duration
Copy data1	✓ Succeeded	Copy data	1/11/2024, 2:31:51 PM	16s
products_metadata_check	✓ Succeeded	If Condition	1/11/2024, 2:31:50 PM	18s
products_metadata	✓ Succeeded	Get Metadata	1/11/2024, 2:31:42 PM	6s
products_file_validation	✓ Succeeded	Validation	1/11/2024, 2:31:28 PM	12s

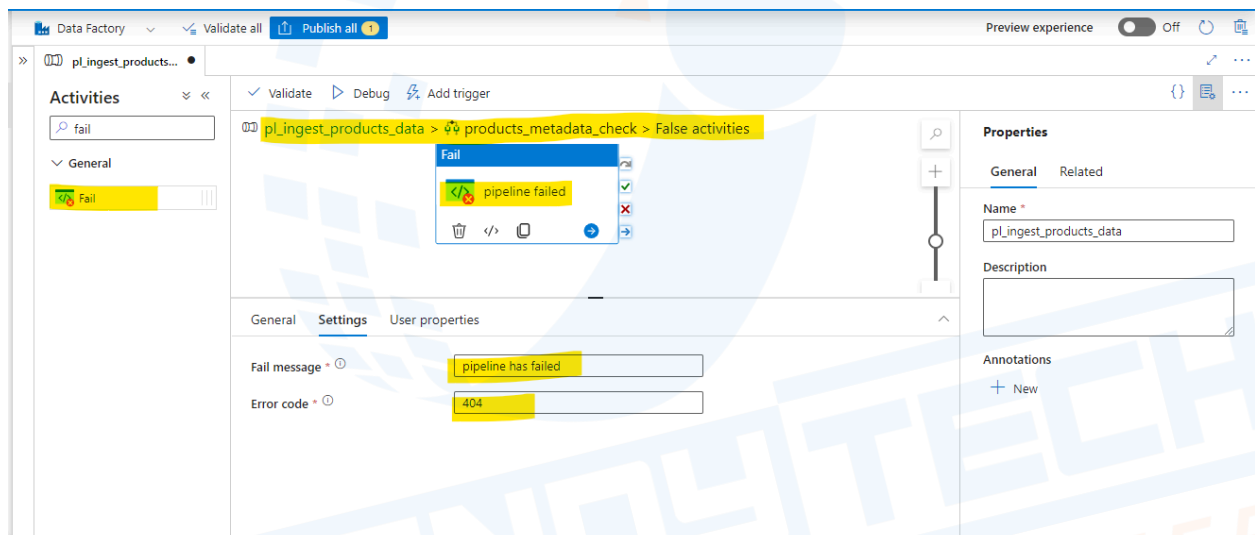
3.Notify When The Pipeline Execution Fails.

Note: Before this please remove the file in Source(Blob) and sink(ADLS gen) .

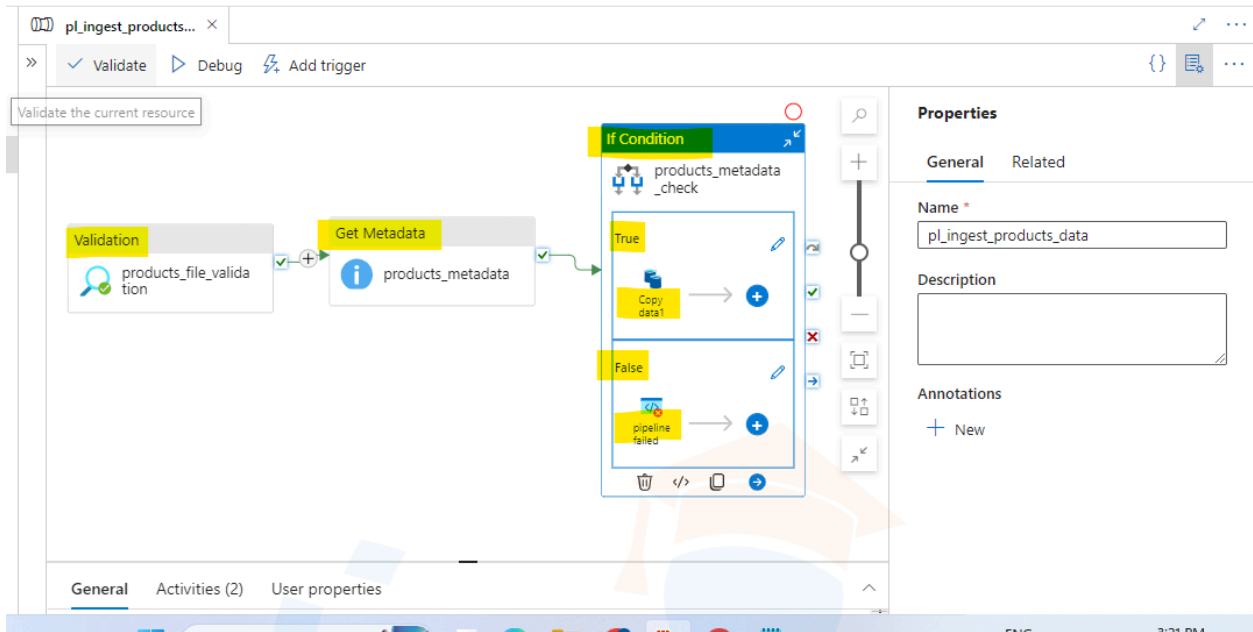
Use Fail activity to indicate in case the above If condition data validation process fails and use Alert Rule to notify the pipeline failure.

When this "If Condition" evaluates to "False," the pipeline will fail and it should show us the message regarding its failure.

To accomplish this, click on the **"Edit"** option for the **"False"** branch, and then **add the "Fail activity"** and add message pipeline failed with error code suppose 404.



The depicted pipeline configuration is presented in the image below. Following the validation process, the Get Metadata activity is triggered. Upon successful column count validation, the file is transferred from the source (Blob storage) to the sink (ADLS Gen2). In the event of a validation failure, the process proceeds to the "False" branch, displaying a failure message in the pipeline logs.



Debug the pipeline and validate it.

Note: Before this please remove the file in Source(Blob) and sink(ADLS gen) .

Furthermore, make a copy of the "pipeline.csv" file to a different location, such as the desktop. Subsequently, edit the copied file by removing the value of the last column in the first row. Utilize this modified file for debugging purposes.

In this modified file, the last column has been removed, resulting in the following structure.

```

1,2,Quest Q64 10 FT. x 10 FT. Slant Leg Instant U,,59.98
2,2,Under Armour Men's Highlight MC Football Clea,,129.99,http://images.acmesports.sports/Under+Armour+Men%27s+Highlight+MC+Football+Cleat
3,2,Under Armour Men's Renegade D Mid Football Cl,,89.99,http://images.acmesports.sports/Under+Armour+Men%27s+Renegade+D+Mid+Football+Cleat
4,2,Under Armour Men's Renegade D Mid Football Cl,,89.99,http://images.acmesports.sports/Under+Armour+Men%27s+Renegade+D+Mid+Football+Cleat
5,2,Riddell Youth Revolution Speed Custom Footbal,,199.99,http://images.acmesports.sports/Riddell+Youth+Revolution+Speed+Custom+Football+Helmet
6,2,Jordan Men's VI Retro TD Football Cleat,,134.99,http://images.acmesports.sports/Jordan+Men%27s+VI+Retro+TD+Football+Cleat
7,2,Schutt Youth Recruit Hybrid Custom Football H,,99.99,http://images.acmesports.sports/Schutt+Youth+Recruit+Hybrid+Custom+Football+Helmet+2014
8,2,Nike Men's Vapor Carbon Elite TD Football Cle,,129.99,http://images.acmesports.sports/Nike+Men%27s+Vapor+Carbon+Elite+TD+Football+Cleat
9,2,Nike Adult Vapor Jet 3.0 Receiver Gloves,,50.0,http://images.acmesports.sports/Nike+Adult+Vapor+Jet+3.0+Receiver+Gloves
10,2,Under Armour Men's Highlight MC Football Clea,,129.99,http://images.acmesports.sports/Under+Armour+Men%27s+Highlight+MC+Football+Cleat
11,2,Fitness Gear 300 lb Olympic Weight Set,,209.99,http://images.acmesports.sports/Fitness+Gear+300+lb+Olympic+Weight+Set
12,2,Under Armour Men's Highlight MC Alter Ego Fla,,139.99,http://images.acmesports.sports/Under+Armour+Men%27s+Highlight+MC+Alter+Ego+Flash+Football...
13,2,Under Armour Men's Renegade D Mid Football Cl,,89.99,http://images.acmesports.sports/Under+Armour+Men%27s+Renegade+D+Mid+Football+Cleat

```

Publish the pipeline, then click on "Debug." Within the specified timeframe (10 seconds in this case), upload the file ("products.csv") to the Blob storage. Finally, review the pipeline run for the desired outcomes.

As pipeline has failed it is showing message highlighted in below screenshot **"pipeline has failed"**

Pipeline runs

Triggered Debug Rerun Cancel options Refresh Edit columns List Gantt

Filter by run ID or name Chennai, Kolkata, Mu... : Last 24 hours Pipeline name : All Status : All

Add filter X

Showing 1 - 5 items Last refreshed 0 minutes ago

<input type="checkbox"/>	Pipeline name ↑↓	Run start ↑↓	Run end ↑↓	Duration	Status ↑↓	Triggered by	Run ID	Parameter
<input type="checkbox"/>	pl_ingest_products...	1/11/2024, 3:27:49 PM	1/11/2024, 3:28:08 PM	19s	Failed	Manual trigger	8b60335b-ae14-4207-	
<input type="checkbox"/>	pl_ingest_products...	1/11/2024, 3:25:05 PM	1/11/2024, 3:26:04 PM				eb2c41-479f-4242-4	
<input type="checkbox"/>	pl_ingest_products...	1/11/2024, 2:31:26 PM	1/11/2024, 2:32:08 PM				88c906-2189-4f91-4	
<input type="checkbox"/>	pl_ingest_products...	1/11/2024, 1:29:28 PM	1/11/2024, 1:29:52 PM				3588a6-6416-4089-	
<input type="checkbox"/>	pl_ingest_products...	1/11/2024, 1:09:18 PM	1/11/2024, 1:09:35 PM				982bda-4bb7-4719	

Error

Copy to clipboard

Operation on target pipeline failed failed: pipeline has failed

Also the column count is 5 refer below screenshot.

Output

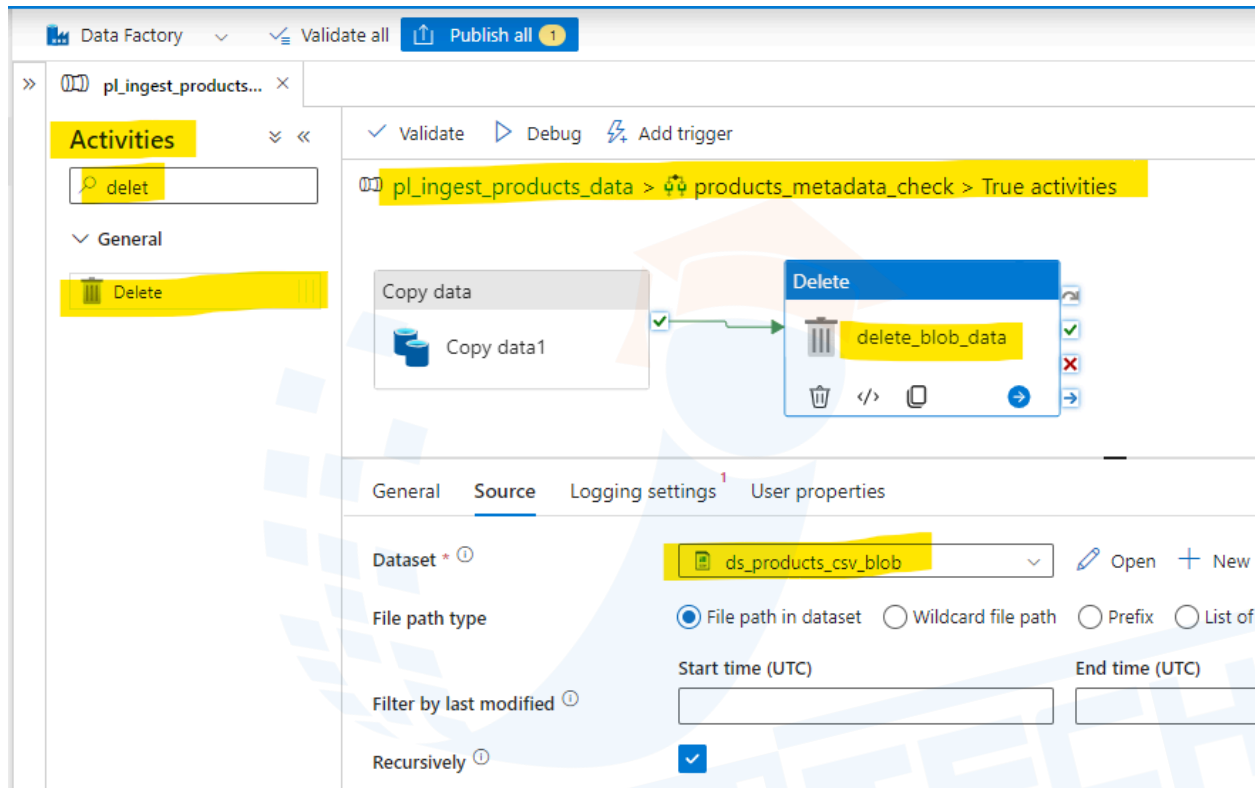
Copy to clipboard

```
{
  "exists": true,
  "size": 174069,
  "columnCount": 5,
  "effectiveIntegrationRuntime": "AutoResolveIntegrationRuntime (Central India)",
  "executionDuration": 0,
  "durationInQueue": {
    "integrationRuntimeQueue": 1
  },
  "billingReference": {
    "activityType": "PipelineActivity",
    "billableDuration": [
      {
        "meterType": "AzureIR",
        "duration": 0.016666666666666666,
        "unit": "Hours"
      }
    ]
  }
}
```

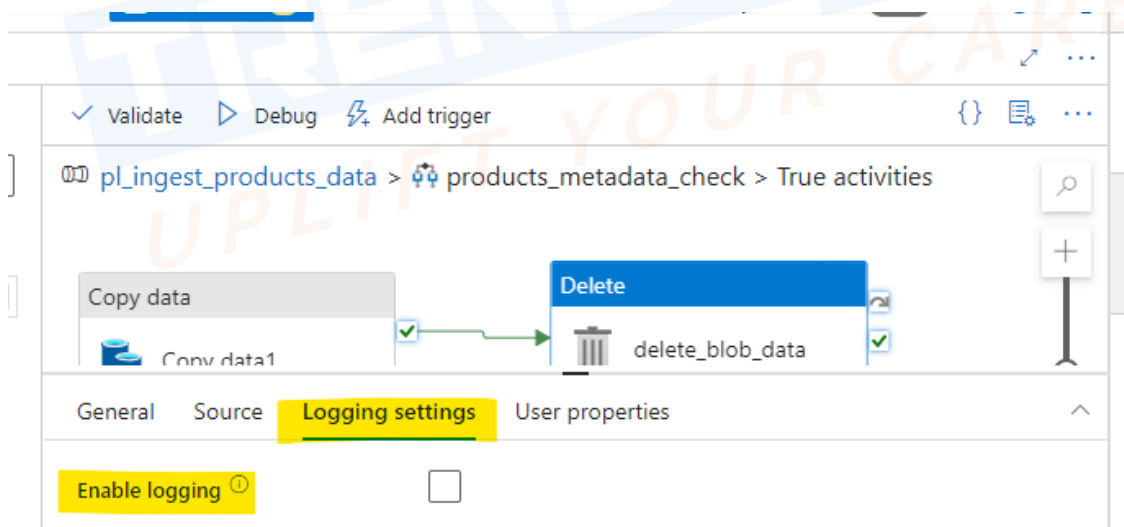
To delete the source data after copy activity has been done.

Follow below steps:

Drag delete activity in “True” blogger of if condition=>Renamed it (“delete_blob_data”) => In Source add the blob storage dataset of pipeline.csv “ds_products_csv_blob”



Also disable logging



Publish the pipeline, then click on "Debug." Within the specified timeframe (10 seconds in this case), upload the file ("products.csv") to the Blob storage. Finally, review the pipeline run for the desired outcomes.

Pipeline run ID: 5b954ba2-440a-44d3-96ab-a1ff65b5a8f3

Pipeline status

Succeeded

[View debug run consumption](#)

All status

List

Monitor in Azure Metrics

Export to CSV

Showing 1 - 5 of 5 items

Activity name	Activity status	Activity type	Run start	Duration	Integration runtime	User properties
delete_blob_data	Succeeded	Delete	1/11/2024, 3:49:13 PM	6s	AutoResolveIntegration	
Copy data1	Succeeded	Copy data	1/11/2024, 3:48:56 PM	16s	AutoResolveIntegration	
products_metadata_check	Succeeded	If Condition	1/11/2024, 3:48:56 PM	24s		
products_metadata	Succeeded	Get Metadata	1/11/2024, 3:48:49 PM	6s	AutoResolveIntegration	
products_file_validation	Succeeded	Validation	1/11/2024, 3:48:42 PM	7s		

4.Create a Trigger and associate it to the pipeline to schedule the pipeline execution.

New trigger

Name *

tr_products_data

Description

Type *

Schedule

Start date * ⓘ

1/11/2024, 4:04:00 PM

Time zone * ⓘ

Chennai, Kolkata, Mumbai, New Delhi (UTC+5:30)

Recurrence * ⓘ

Every 24 Hour(s)

☐ Specify an end date

OK

Cancel

New trigger

Type *

Schedule

Start date * ⓘ

1/11/2024, 4:04:00 PM

Time zone * ⓘ

Chennai, Kolkata, Mumbai, New Delhi (UTC+5:30)

Recurrence * ⓘ

Every 24 Hour(s)

☐ Specify an end date

Annotations

+ New

Start trigger ⓘ

☐ Start trigger on creation

OK

Cancel

Add triggers

Choose trigger...

Search

+ New

tr_products_data

Microsoft Azure | Data Factory | trendytechretaildf1 | Search factory and documentation

Factory Resources

- Pipelines 1
 - pl_ingest_products_data
- Change Data Capture (preview) 0
- Datasets 2
 - ds_products_csv_adls
 - ds_products_csv_blob
- Data flows 0
- Power Query 0

Activities

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

Validation

products_file_validation

Edit trigger

Type *
ScheduleTrigger

Start date * ⓘ
1/11/2024, 4:04:00 PM

Time zone * ⓘ
Chennai, Kolkata, Mumbai, New Delhi (UTC+5:30)

Recurrence * ⓘ
Every 24 Hour(s)

☐ Specify an end date

Annotations
+ New

Status ⓘ
☒ Started ☐ Stopped

OK Cancel

Activity runs

Pipeline run ID f77386fb-2ea2-4962-bc4f-99c2efd58d85

All status ▾ List ▾

Monitor in Azure Metrics ☒ Export to CSV ▾

Showing 1 - 5 items

Activity name ↑↓	Activity status ↑↓	Activity type ↑↓	Run start ↑↓	Duration ↑↓	Integration runtime	User properties ↑↓
delete_blob_data → ↻	✓ Succeeded	Delete	1/11/2024, 4:14:32 PM	6s	AutoResolveIntegration	
Copy data1	✓ Succeeded	Copy data	1/11/2024, 4:14:15 PM	16s	AutoResolveIntegration	
products_metadata_check	✓ Succeeded	If Condition	1/11/2024, 4:14:14 PM	25s		
products_metadata	✓ Succeeded	Get Metadata	1/11/2024, 4:14:08 PM	6s	AutoResolveIntegration	
products_file_validation	✓ Succeeded	Validation	1/11/2024, 4:14:01 PM	6s		

Steps to create the alert click on Monitor => Alert & Metrics => New Alert Rule :

Microsoft Azure | Data Factory | trendytechretaildf1 | Search factory and documentation

Alerts & metrics

Refresh Metrics New alert rule

There are no alert rules configured.

New alert rule

Alert rule name *
retail_pipeline_failure

Description

Severity *

Target criteria * ⓘ
+ Add criteria

ⓘ There will be a monthly rate for the configured criteria. Learn

Configure Email/SMS/Push/Voice notification * ⓘ
+ Configure notification

DEFAULT DIRECTORY

Add criteria

Select one metric to set up the alert condition.

Metrics ↑↓

Failed activity runs metrics
Failed pipeline runs metrics
Failed SSIS integration runtime start metrics
Failed SSIS package execution metrics
Failed trigger runs metrics
Integration runtime available memory
Integration runtime available node count
Integration runtime CPU utilization
Integration runtime queue duration
Integration runtime queue length
Maximum allowed entities count
Maximum allowed factory size (GB unit)

Continue Cancel

Note: In case you encounter an error during the configuration of notifications, please refer to the following steps.

Configure notification

Notify your team via email and text messages, send push notifications to mobile devices, or integrate with functions, logic apps, or integrating with external services.

☒ Create new ☐ Use existing

Action group name *
retail pipeline failure

Short name *
retailfailed

Notifications *
[+ Add notification](#)

[Add action group](#) [Cancel](#)

Failed

```
{
  "error": {
    "code": "MissingSubscriptionRegistration",
    "message": "The subscription is not registered to use namespace 'microsoft.insights'. See https://aka.ms/rps-not-found for how to register subscriptions.",
    "details": [
      {
        "code": "MissingSubscriptionRegistration",
        "target": "microsoft.insights",
        "message": "The subscription is not registered to use namespace 'microsoft.insights'. See https://aka.ms/rps-not-found for how to register subscriptions."
      }
    ]
  }
}
```

Go to Subscriptions => select your subscription => Resource Providers => [microsoft.insights](#) (register this service)

Home > Subscriptions > Subscriptions > Pay-As-You-Go

Subscriptions

Default Directory (aratishatti15gmail.onmicrosoft.c...)

[+ Add](#) [Advanced options](#)

Search: Subscriptions : Filtered (1 of 1)

My role == all
Status == all
[Add filter](#)

Subscription name ↑↓
Pay-As-You-Go

Pay-As-You-Go | Resource providers

Subscription

[Search](#) [Register](#) [Unregister](#) [Refresh](#) [Feedback](#)

Provider	Status
microsoft.insights	NotRegistered

[Resources](#)
[Preview features](#)
[Usage + quotas](#)
[Policies](#)
[Management certificates](#)
[My permissions](#)
[Resource providers](#)
[Deployments](#)
[Deployment stacks](#)
[Properties](#)

[Home](#) > [Subscriptions](#) >

Subscriptions

Default Directory (aratishatti15gmail.onmicrosoft.com)

[+ Add](#) [Advanced options](#) ▾

[Search for any fiel...](#)

Subscriptions : **Filtered (1 of 1)**

My role == **all**

Status =

Subscription name ↑↓

Subscription ID ↑↓

My role ↑↓

[Pay-As-You-Go](#)

ef8b47c5-7bc0-46f9-856f-69466d151b69 Account admin

Continuation of Alert Creation :

Configure notification

Notify your team via email and text messages or automate actions using webhooks, runbooks, functions logic apps or integrating with external ITSM solutions.

☒ Create new ☐ Use existing

Action group name *

retail pipeliene failure

Short name *

retailfailed

Notifications *

[+ Add notification](#)

[Add action group](#)

[Cancel](#)

Add the **email id** on which you want to receive the emails and click on “**Add notification**”.

Add notification

Learn more about [Pricing](#) and [Privacy statement](#).

Action name *

NewAction

Select which notifications you'd like to receive

☒ Email

trendytech@gmail.com

☐ SMS

Country code

1

Phone number *

1234567890

Carrier charges may apply.

☐ Azure app push notifications

Enter your email used to log into your Azure account. [Learn about connecting to your Azure resources using the Azure app.](#)

Add notification

Cancel

Mention the name of the Action group and its short name.

TRENDYTECH
UPLIFT YOUR CAREER!

Configure notification

Notify your team via email and text messages or automate actions using webhooks, runbooks, functions logic apps or integrating with external ITSM solutions.



☒ Create new ☐ Use existing

Action group name *

retail pipeline failure

Short name *

retail fail

Notifications	Action type	Actions
NewAction	Email/SMS/Push/Voice	 

+ Add notification

Add action group Cancel

And Create Alert.

Now again set the trigger for future time for the pipeline with the file which has 5 columns.

(Use a copy of the "pipeline.csv" file that was created to a different location, such as the desktop by removing the value of the last column in the first row. Utilize this modified file for debugging purpose.)

Note : In this case Trigger won't fail.

Trigger runs

All Schedule Tumbling window Storage events Custom events Refresh Edit columns

Chennai, Kolkata, Mu... : Last 24 hours Trigger name : All Status : All

Showing 1 - 3 items

Trigger name ↑↓	Scheduled time	Trigger time ↑↓	Status ↑↓	Pipelines	Message
tr_products_data	1/11/2024, 4:48:00 PM	1/11/2024, 4:48:00 PM	✓ Succeeded	1	
tr_products_data	1/11/2024, 4:14:00 PM	1/11/2024, 4:14:00 PM	✓ Succeeded	1	
tr_products_data	1/11/2024, 4:09:59 PM	1/11/2024, 4:10:00 PM	✓ Succeeded	1	

But pipeline will be failed refer the attached

DEFACTO DIRECTORY

Pipeline runs

Triggered Debug Rerun Cancel options Refresh Edit columns List Gantt

Filter by run ID or name Chennai, Kolkata, Mu... : Last 24 hours Pipeline name : All Status : All






Runs : Latest runs Triggered by : All Add filter X


Showing 1 - 3 items Last refreshed 0 minutes ago

<input type="checkbox"/>	Pipeline name ↑↓	Run start ↑↓	Run end ↑↓	Duration	Triggered by	Status ↑↓	Run
<input type="checkbox"/>	pl_ingest_products_data	1/11/2024, 4:48:00 PM	1/11/2024, 4:48:29 PM	29s	tr_products_data	Failed	Origina
<input type="checkbox"/>	pl_ingest_products_data	1/11/2024, 4:14:00 PM	1/11/2024, 4:14:40 PM	40s	tr_products_data	Succeeded	Origina
<input type="checkbox"/>	pl_ingest_products_data	1/11/2024, 4:10:00 PM	1/11/2024, 4:10:24 PM	25s	tr_products_data	Failed	Origina

Also in case of alert you will receive email over your registered mail id as follows

TRENDY TECH
UPLIFT YOUR CAREER!







Microsoft A...


4:51 pm

Unsubscribe



to me ▾

 Microsoft Azure

 **Your Azure Monitor alert was triggered**

Azure monitor alert rule retail_pipeline_alert was triggered for trendytechretaildf1 at January 11, 2024 11:21 UTC.

Rule ID	/subscriptions/ef8b47c5-7bc0-46f9-856f-69466d151b69/resourcegroups/reatil-project-rg/providers/Microsoft.Insights/metricalerts/retail_pipeline_alert View Rule >
Resource ID	/subscriptions/ef8b47c5-7bc0-46f9-856f-69466d151b69/resourcegroups/reatil-project-rg/providers/Microsoft.DataFactory/factories/trendytechretaildf1 View Resource >

Alert Activated Because:

Metric name	PipelineFailedRuns
Metric namespace	factories/trendytechretaildf1
Dimensions	ResourceId = /SUBSCRIPTIONS/EF8B47C5-7BC0-46F9-856F-69466D151B69/RESOURCEGROUPS/REATIL-PROJECT-RG/PROVIDERS/MICROSOFT.DATAFACTORY/FACTORIES/TRENDYTECHRETAILDF1
Time Aggregation	Total
Period	Over the last 1 mins
Value	1
Operator	GreaterThan
Threshold	0
Criterion Type	StaticThresholdCriterion

Note: At the end delete all the resources that you have created.