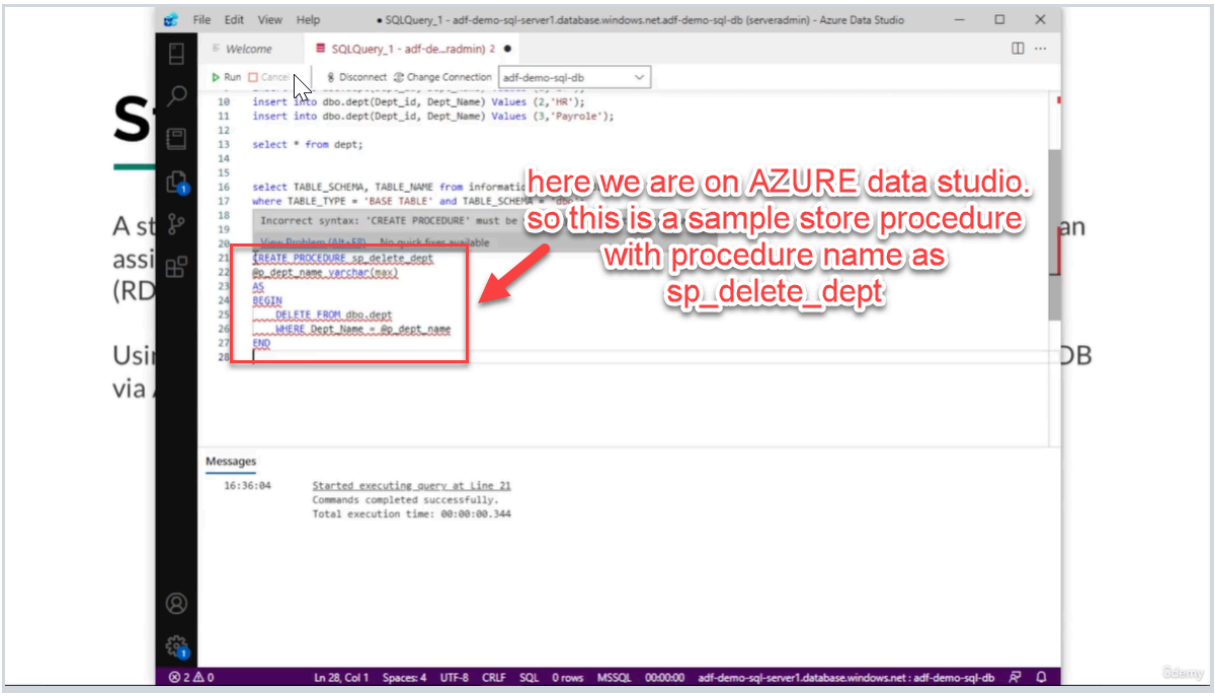
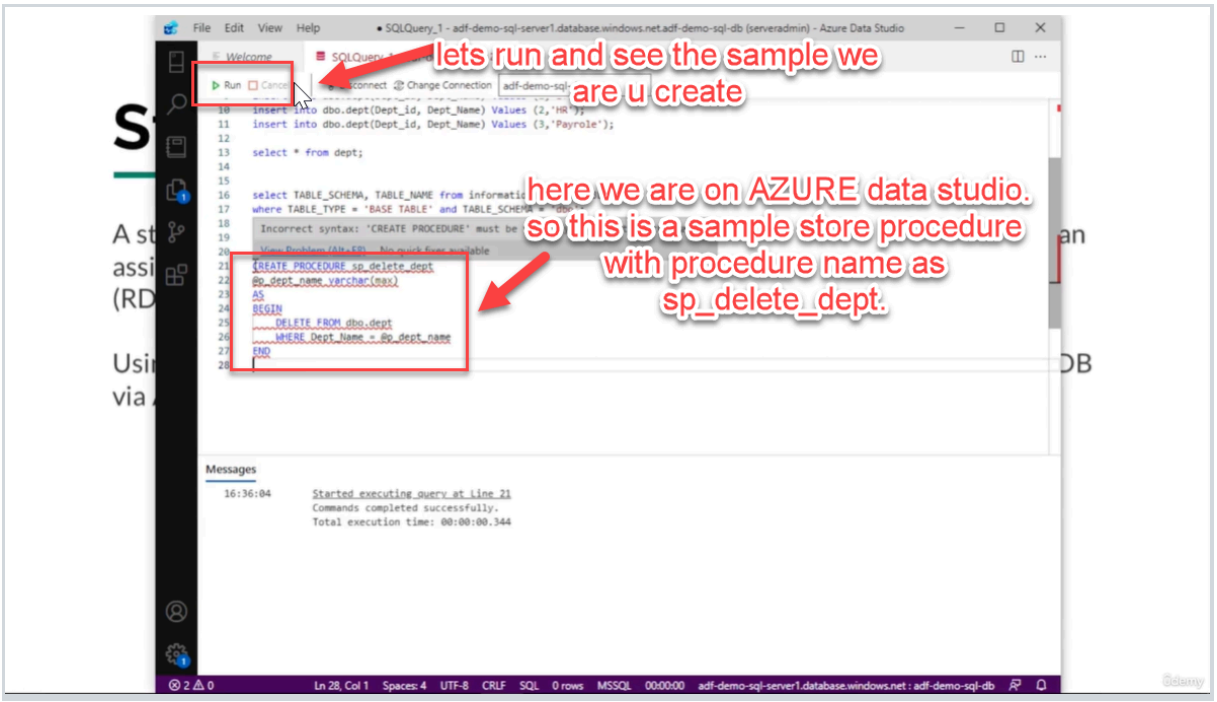
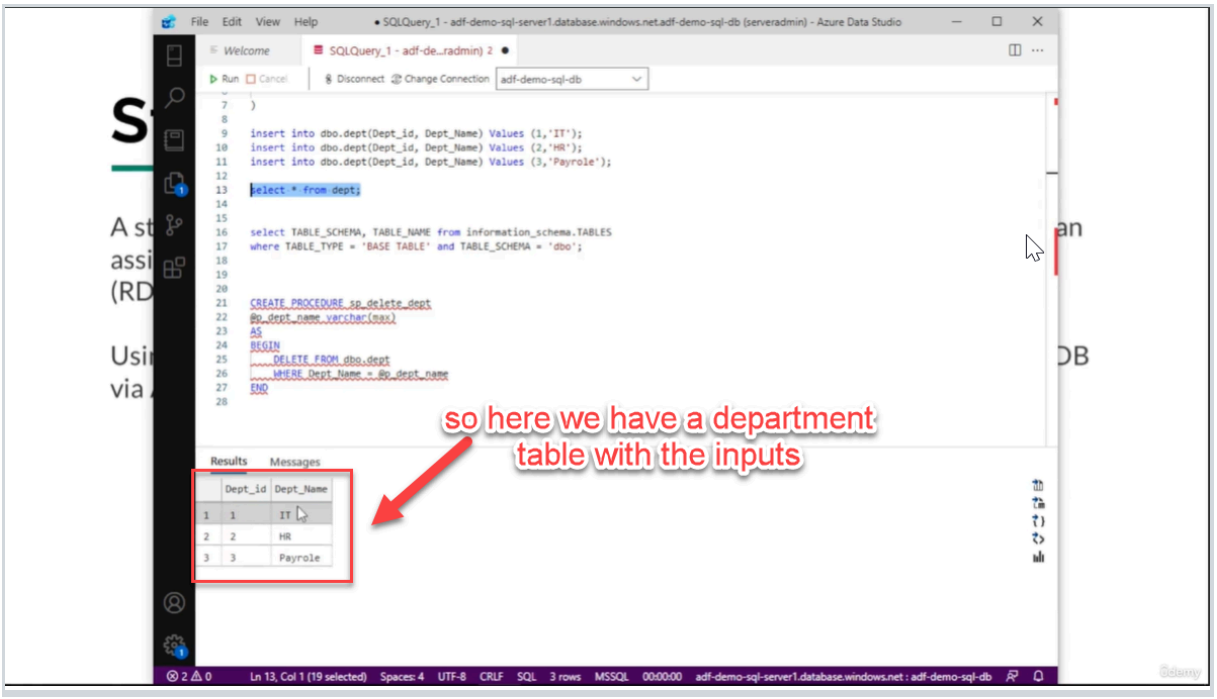
Stored Procedure Activity

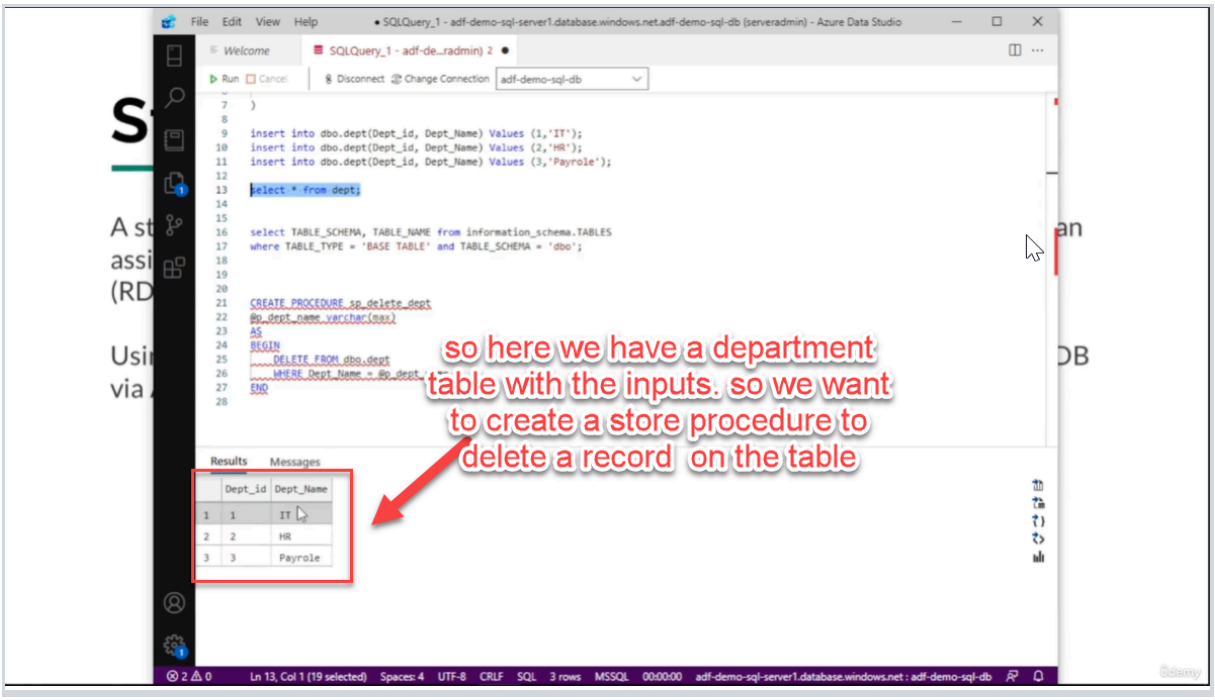
A stored procedure is a set of Structured Query Language (SQL) statements with an assigned name, which are stored in a relational database management system (RDBMS) as a group, so it can be reused and shared by multiple programs.

Using Stored Procedure Activity you can execute a stored procedure inside your DB via ADF

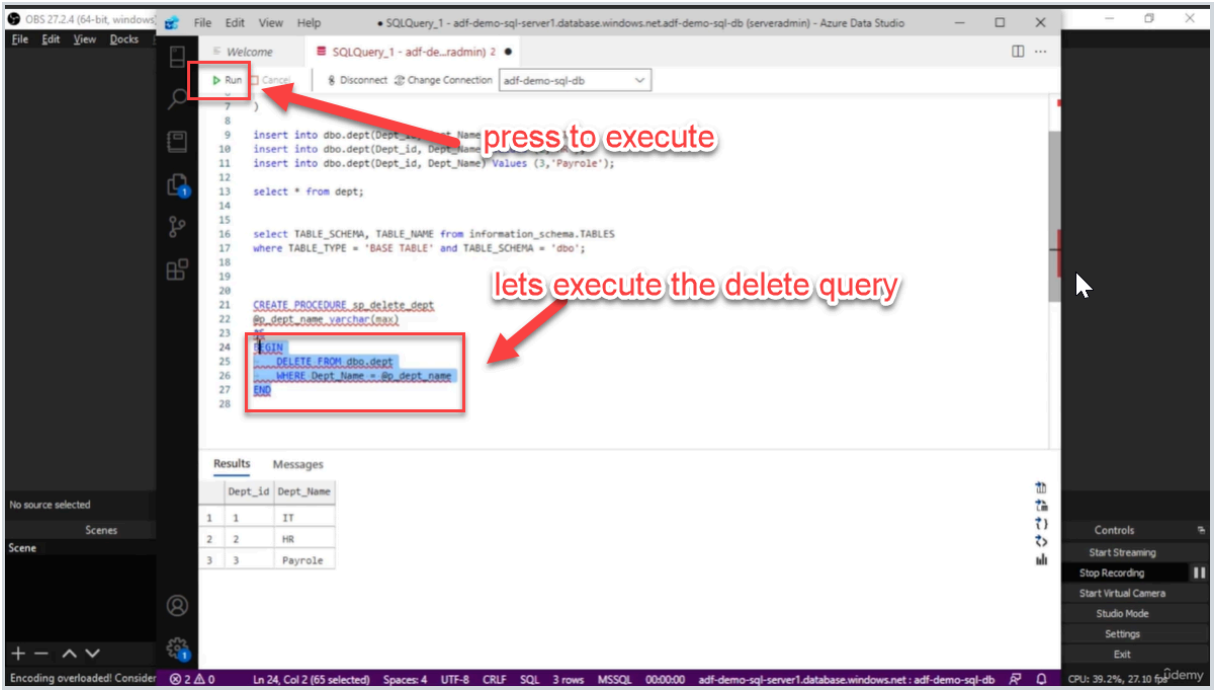


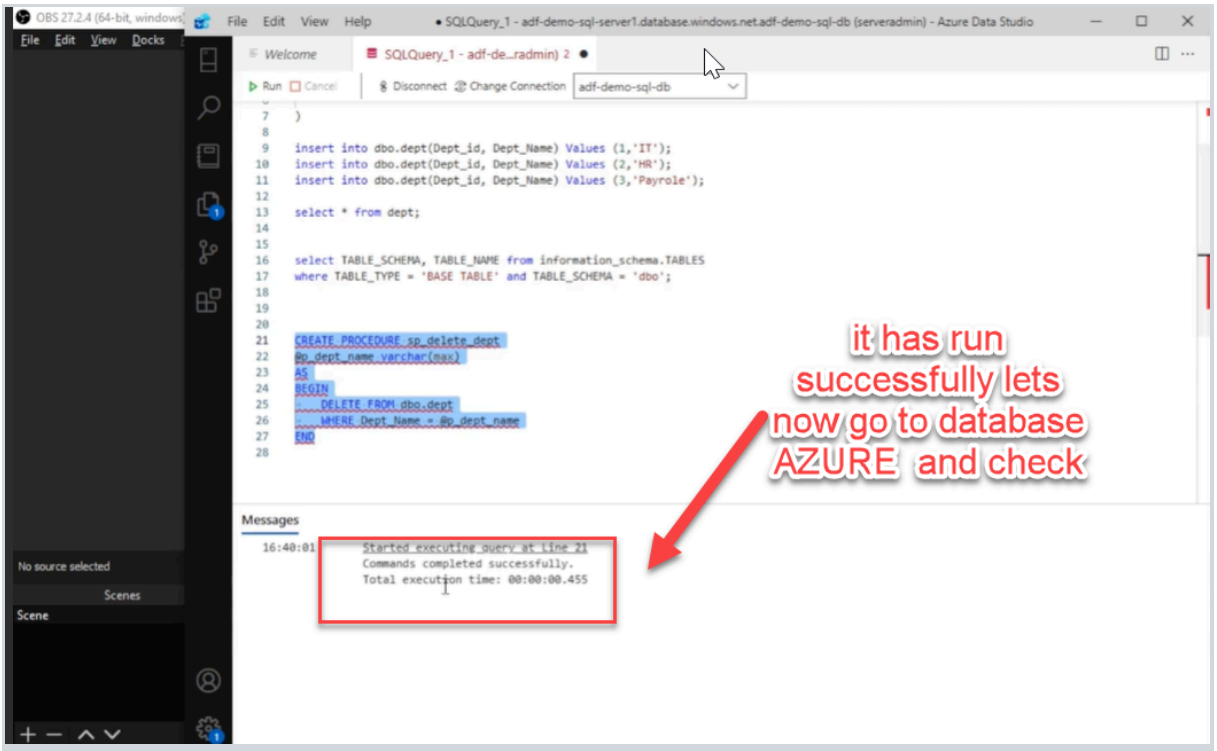

lets run and see the sample we are u create
here we are on AZURE data studio. so this is a sample store procedure with procedure name as sp_delete_dept.
Messages
16:36:04 Started executing query at Line 21
Commands completed successfully.
Total execution time: 00:00:00.344

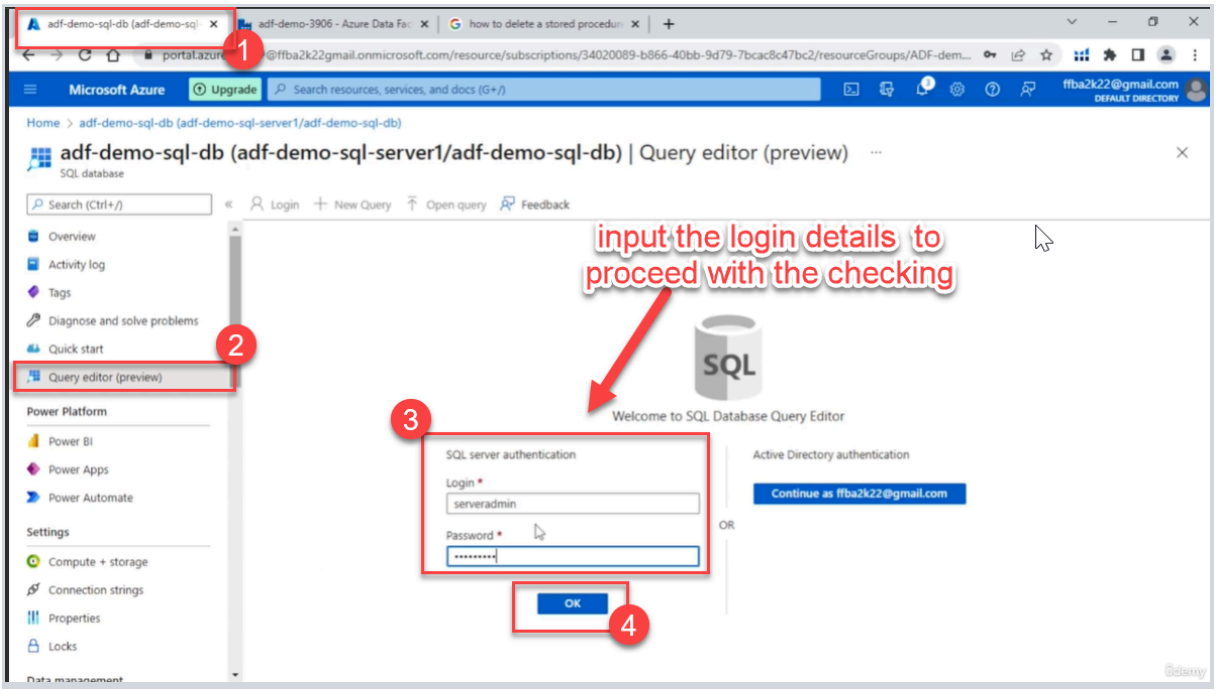

so here we have a department table with the inputs
Results
Messages
Dept_id Dept_Name
1 1 IT
2 2 HR
3 3 Payrole

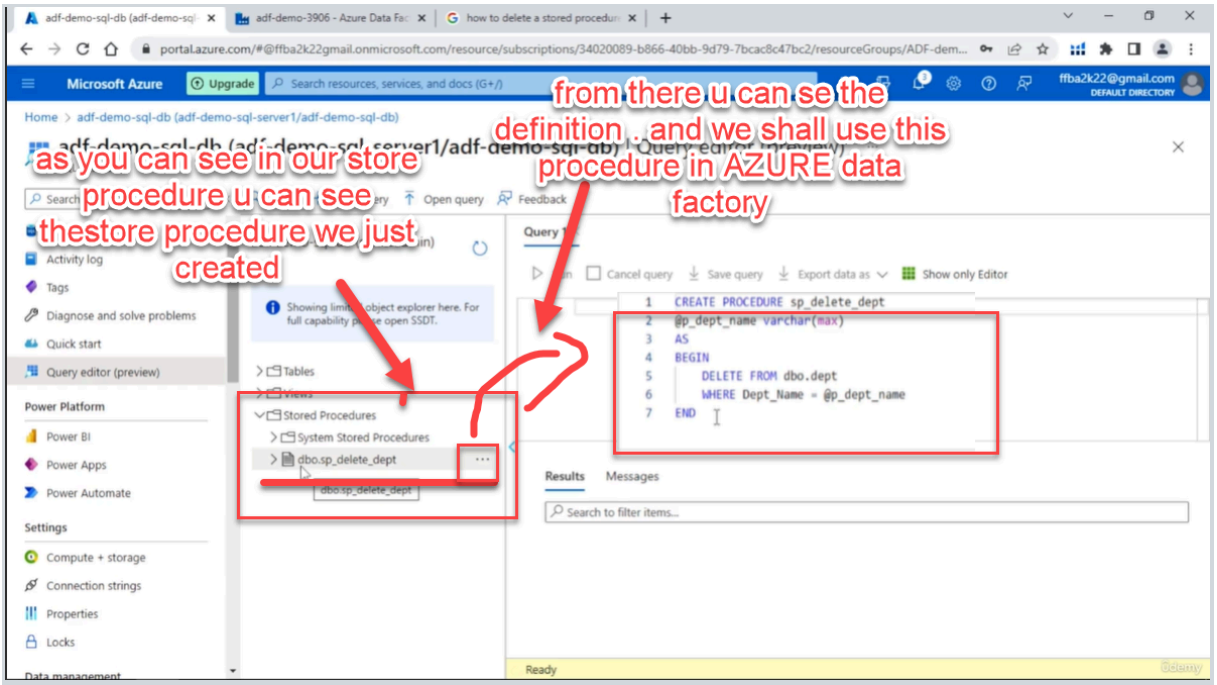


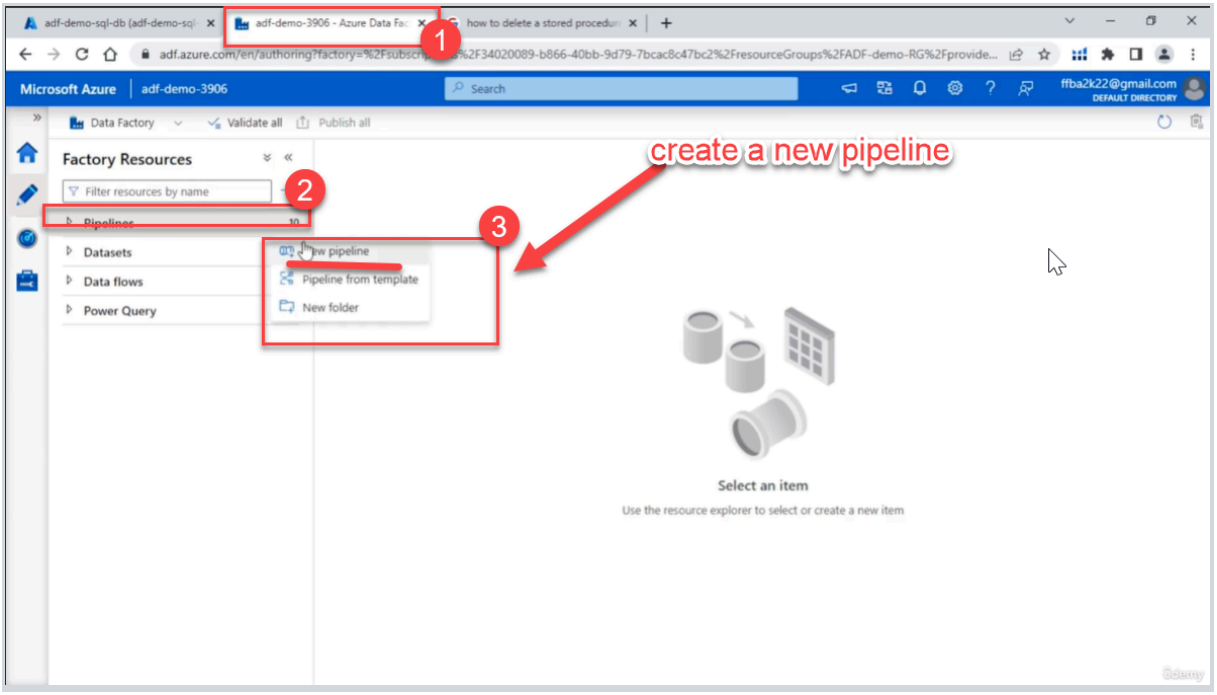
22 decembre vendredi 2023 à 08h

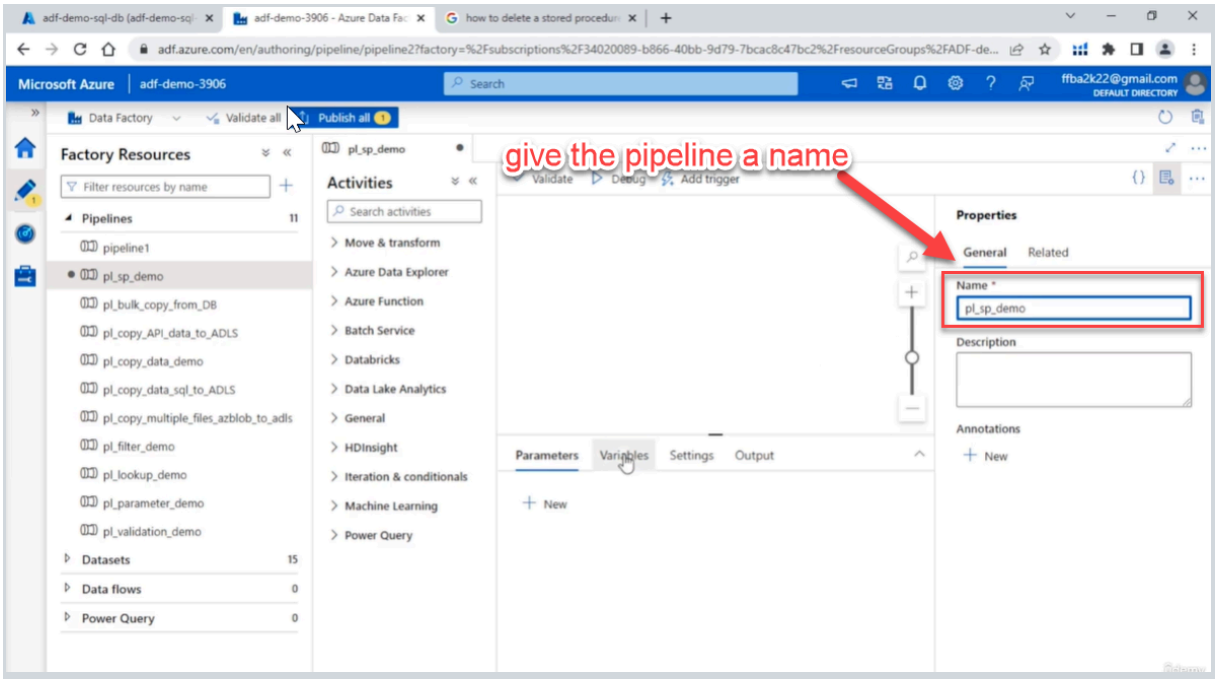



File Edit View Help
• SQLQuery_1 - adf-demo-sql-server1.database.windows.net.adf-demo-sql-db (serveradmin) - Azure Data Studio
Welcome
SQLQuery_1 - adf-de...radmin) 2
Run
Cancel
Disconnect
Change Connection
adf-demo-sql-db
insert into dbo.dept(Dept_id, Dept_Name) Values (1,'IT');
insert into dbo.dept(Dept_id, Dept_Name) Values (2,'HR');
insert into dbo.dept(Dept_id, Dept_Name) Values (3,'Payrole');
select * from dept;
select TABLE_SCHEMA, TABLE_NAME from information_schema.TABLES
where TABLE_TYPE = 'BASE TABLE' and TABLE_SCHEMA = 'dbo';
CREATE PROCEDURE sp_delete_dept
@p_dept_name varchar(max)
AS
BEGIN
DELETE FROM dbo.dept
WHERE Dept_Name = @p_dept_name
END
it has run successfully lets now go to database AZURE and check
Messages
16:40:01
Started executing query at Line 21
Commands completed successfully.
Total execution time: 00:00:00.455
No source selected
Scenes
Scene


adf-demo-sql-db (adf-demo-sql
adf-demo-3906 - Azure Data Fa
how to delete a stored procedur
1
Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
ffba2k22@gmail.com
DEFAULT DIRECTORY
Home > adf-demo-sql-db (adf-demo-sql-server1/adf-demo-sql-db)
adf-demo-sql-db (adf-demo-sql-server1/adf-demo-sql-db) | Query editor (preview)
SQL database
Search (Ctrl+/)
Login
New Query
Open query
Feedback
Overview
Activity log
Tags
Diagnose and solve problems
Quick start
2
Query editor (preview)
Power Platform
Power BI
Power Apps
Power Automate
Settings
Compute + storage
Connection strings
Properties
Locks
input the login details to proceed with the checking
SQL
Welcome to SQL Database Query Editor
3
SQL server authentication
Login *
serveradmin
Password *
OK
4
OR
Active Directory authentication
Continue as ffba2k22@gmail.com

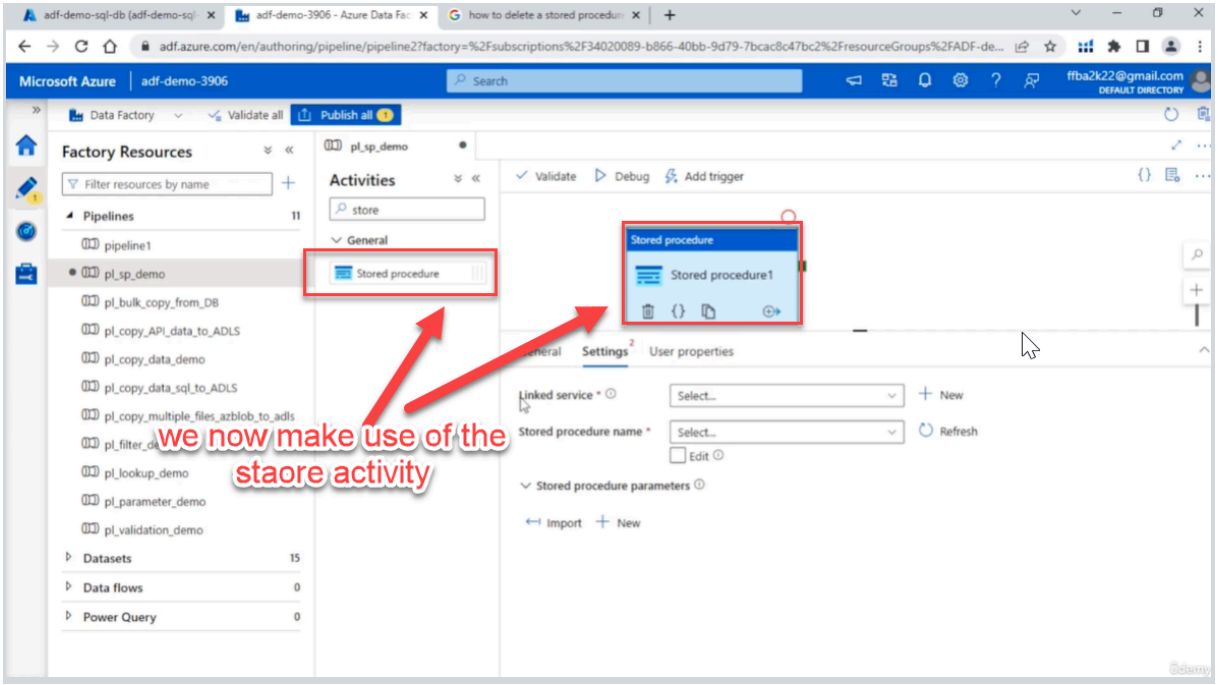

as you can see in our store procedure u can see thestore procedure we just created
from there u can se the definition , and we shall use this procedure in AZURE data factory
CREATE PROCEDURE sp_delete_dept
@p_dept_name varchar(max)
AS
BEGIN
DELETE FROM dbo.dept
WHERE Dept_Name = @p_dept_name
END

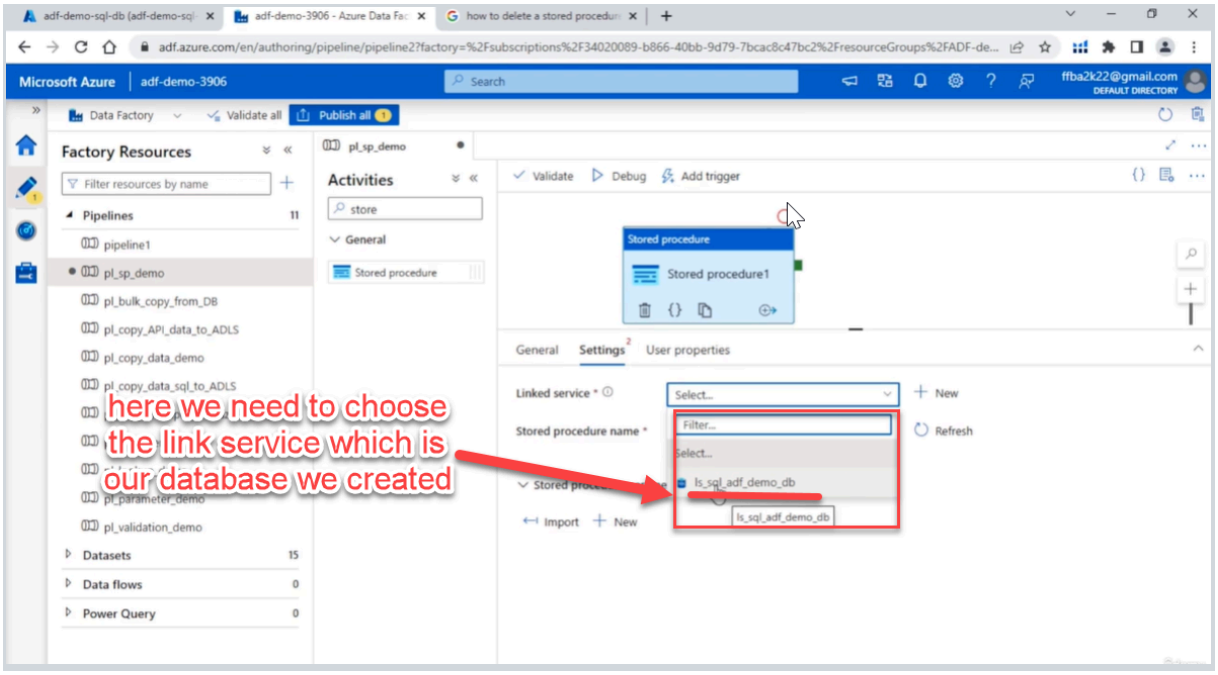

1
2
3
create a new pipeline
Factory Resources
Datasets
Data flows
Power Query
Pipeline from template
New folder
Select an item
Use the resource explorer to select or create a new item

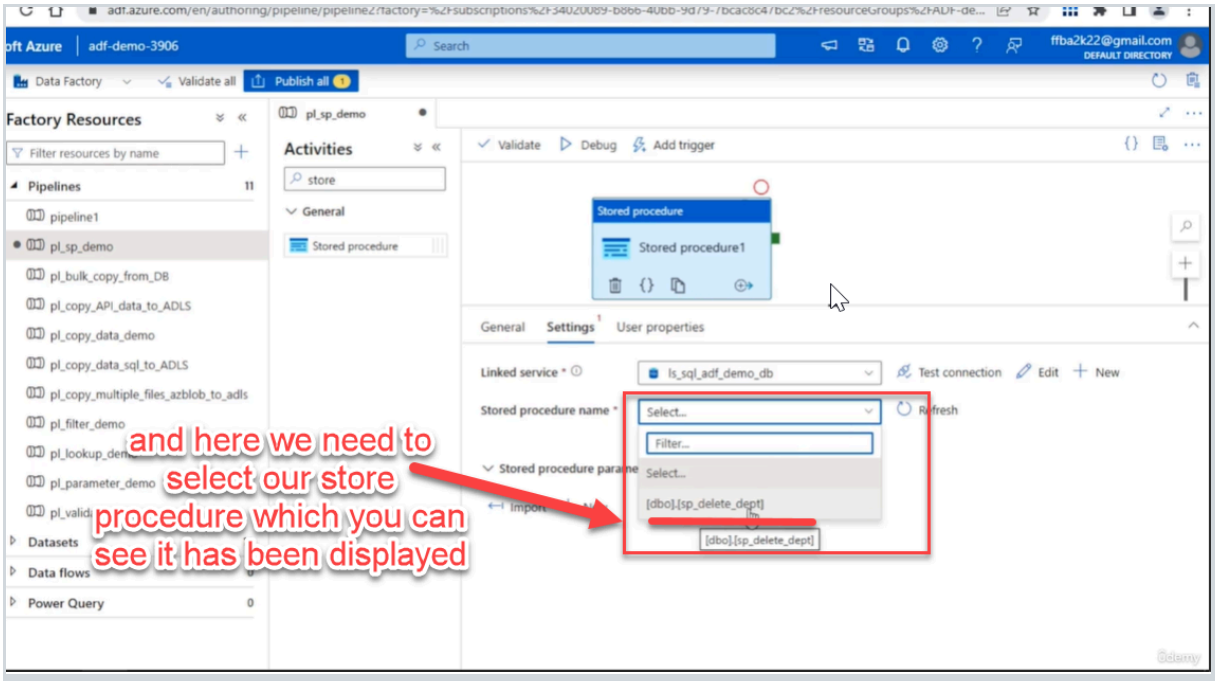


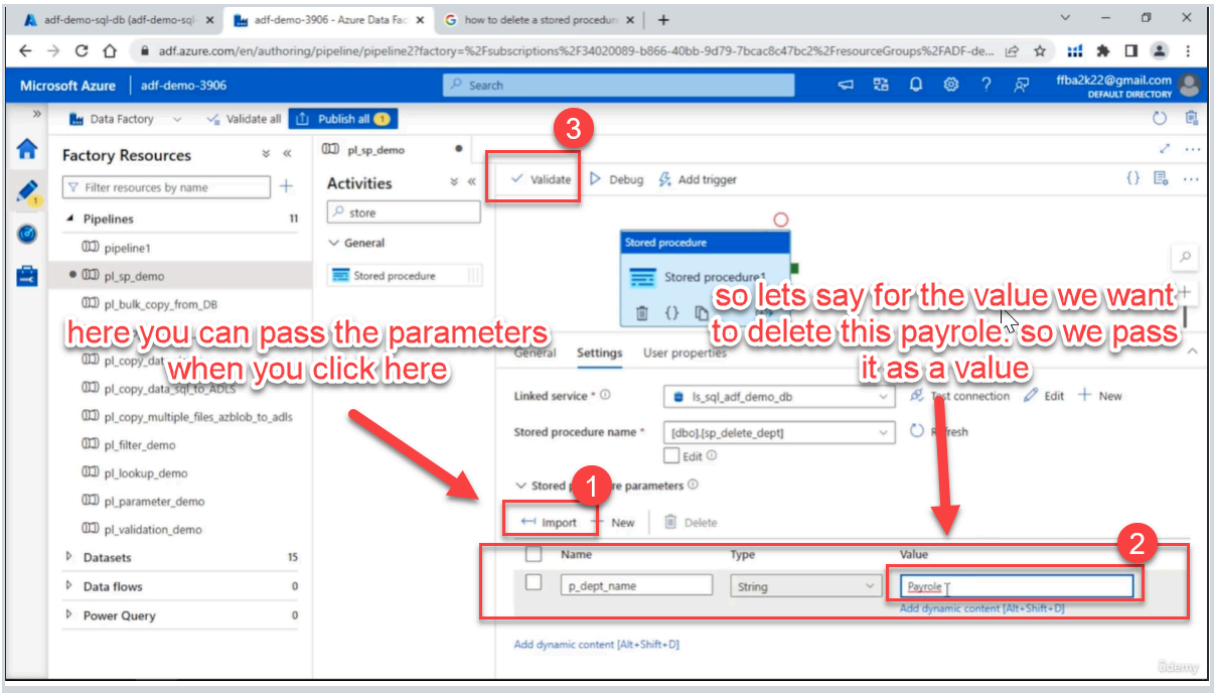
Samedi 23 décembre 2023 à 20h
(sunday)

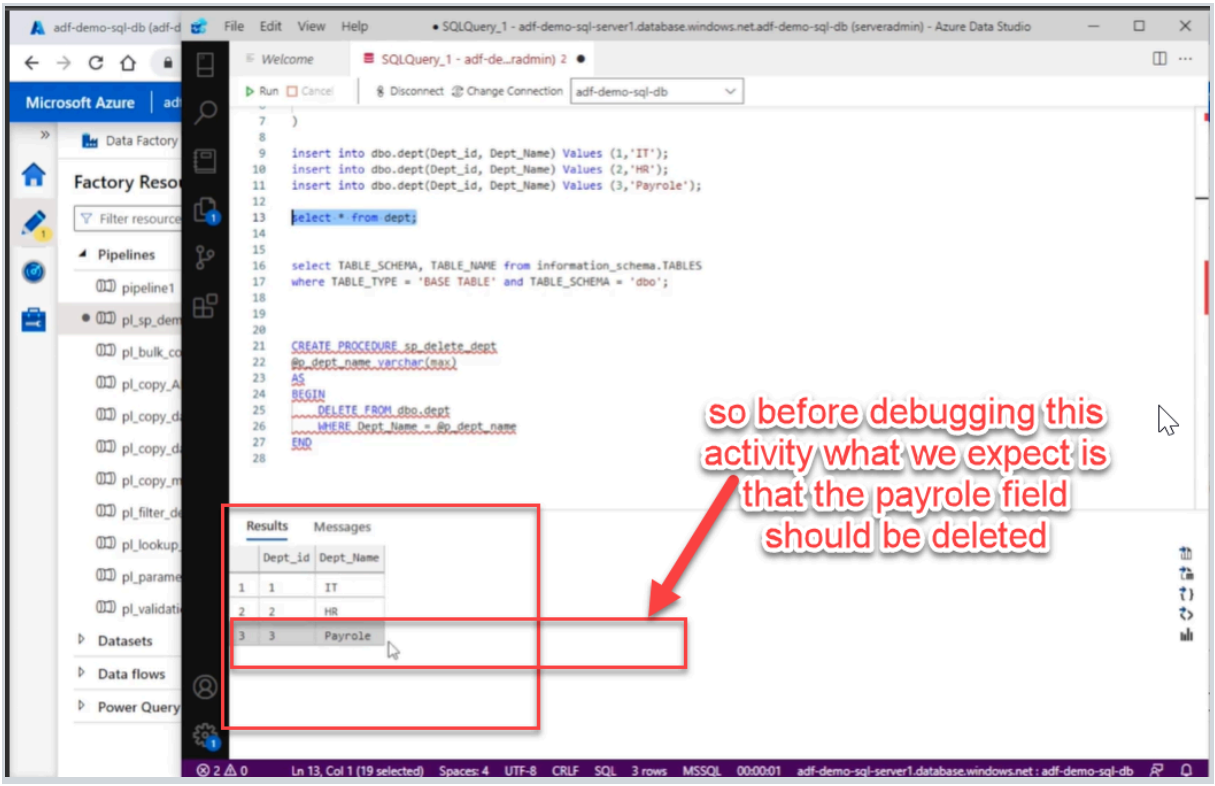
Mardi 26 decembre 2023 à 19h

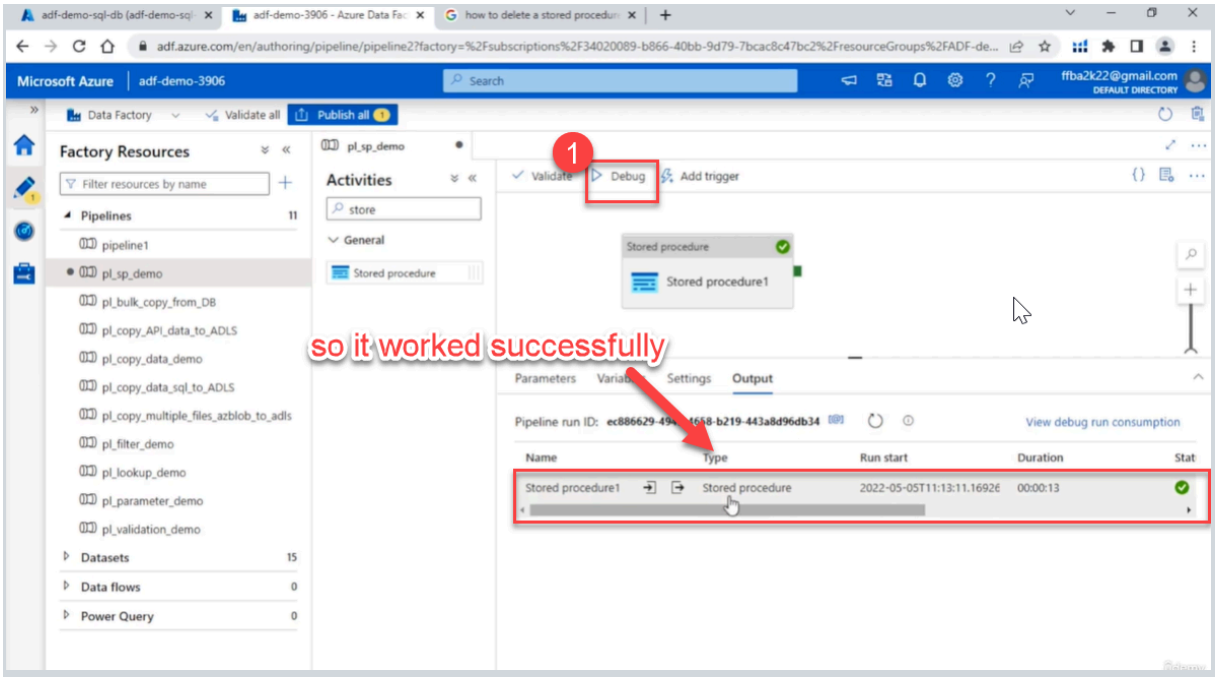


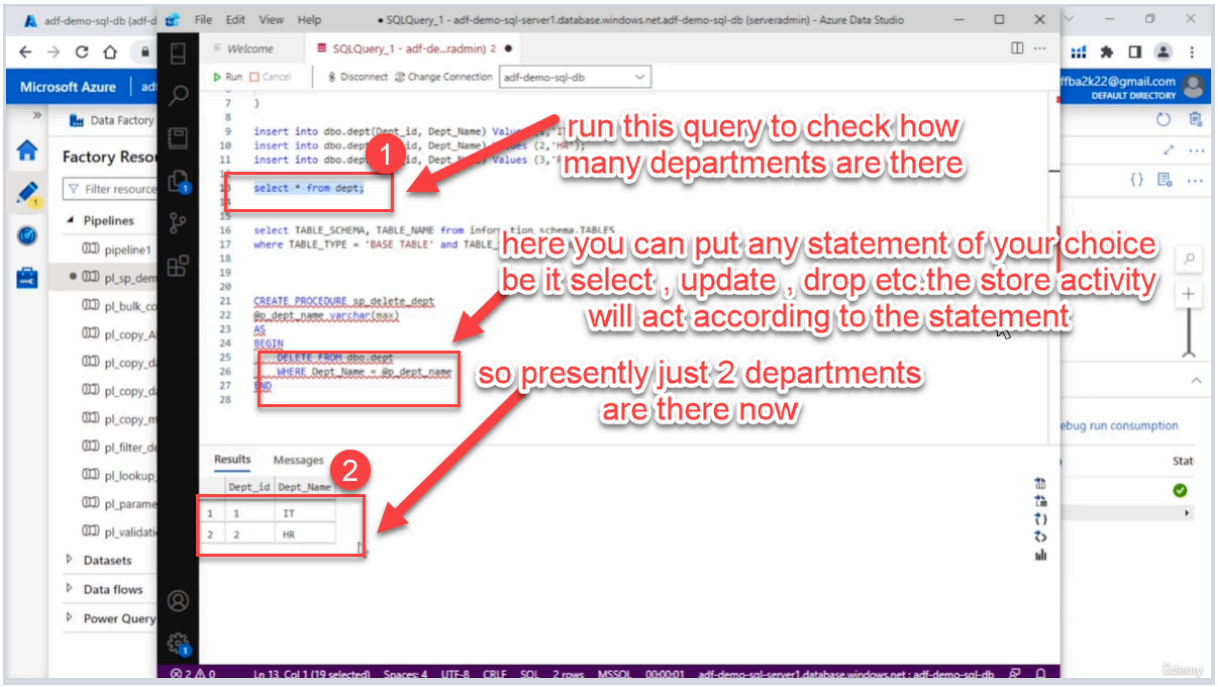

here we need to choose
the link service which is
our database we created
Factory Resources
Activities
Stored procedure
Stored procedure1
Linked service *
Stored procedure name *
ls_sql_adf_demo_db


and here we need to
select our store
procedure which you can
see it has been displayed
Factory Resources
Activities
Stored procedure
Stored procedure1
Linked service *
Stored procedure name *
ls_sql_adf_demo_db
[dbo].[sp_delete_dept]


here you can pass the parameters when you click here
so lets say for the value we want to delete this payrole. so we pass it as a value
Validate
Debug
Add trigger
Stored procedure
Import
New
Delete
Name
Type
Value
p_dept_name
String
Payrole
Add dynamic content [Alt+Shift+D]
1
2
3


so before debugging this activity what we expect is that the payrole field should be deleted
Results
Messages
Dept_id
Dept_Name
1 IT
2 HR
3 Payrole


Factory Resources
Pipelines
pl_sp_demo
Activities
store
General
Stored procedure
Validate
Debug
Add trigger
Stored procedure1
so it worked successfully
Parameters
Settings
Output
Name
Type
Run start
Duration
Stored procedure1
Stored procedure
2022-05-05T11:13:11.1692E
00:00:13


run this query to check how many departments are there
here you can put any statement of your choice be it select , update , drop etc the store activity will act according to the statement
so presently just 2 departments are there now
select * from dept;
CREATE PROCEDURE sp_delete_dept
@p_dept_name varchar(max)
AS
BEGIN
DELETE FROM dbo.dept
WHERE Dept_Name = @p_dept_name
END
Results
Messages
Dept_id
Dept_Name
1
IT
2
HR

Real World Scenario #4

Insert pipeline run details in a SQL DB for audit purpose.

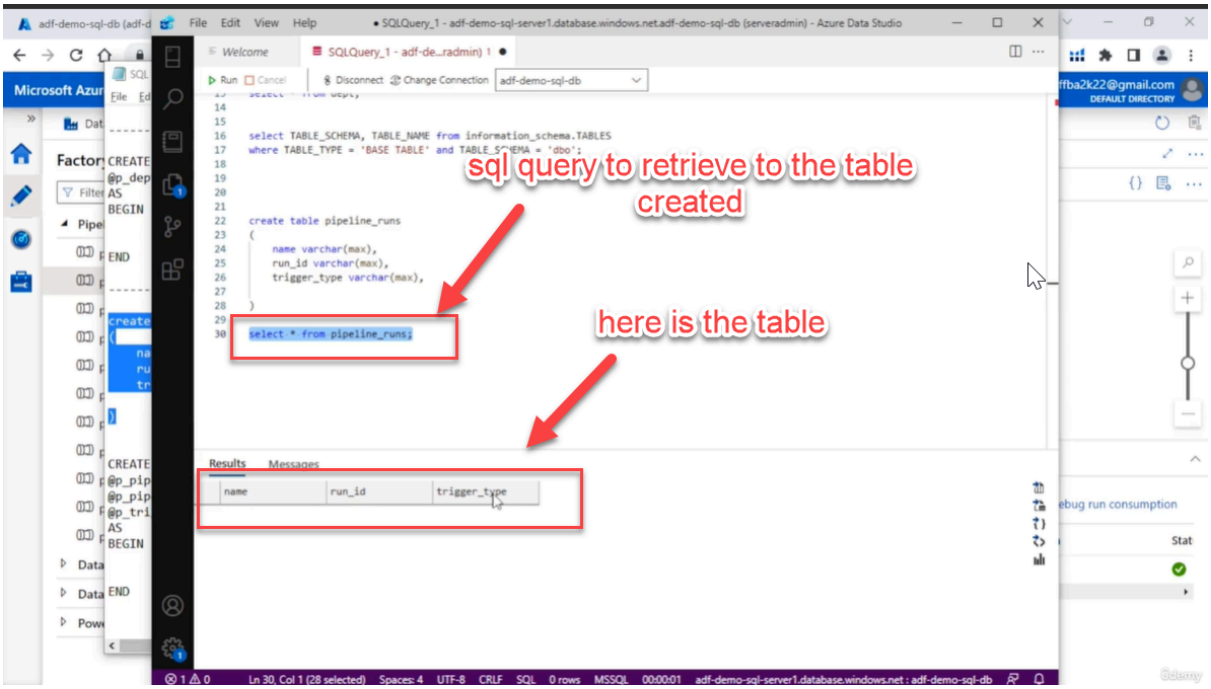
here we need to create an sqly table to hold and store the pipeline details
and we can use store procedure to insert values n that table

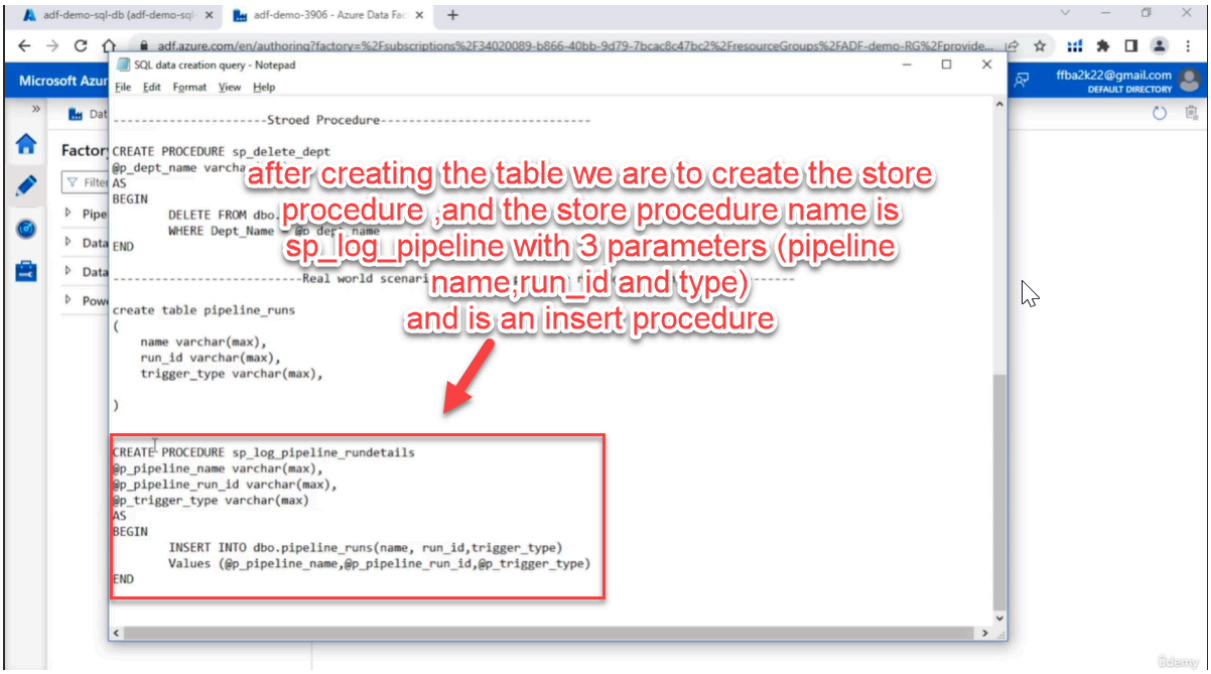
12:19 AM
12/28/2023

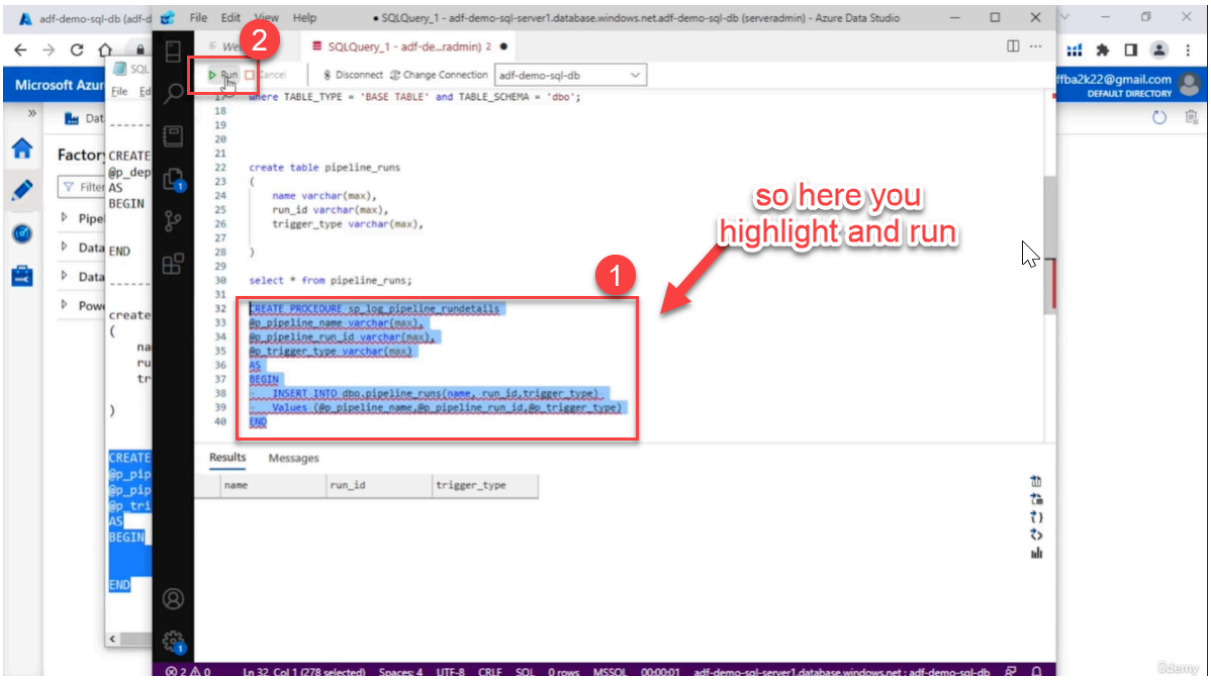
laptop is low could not continue since there is no light

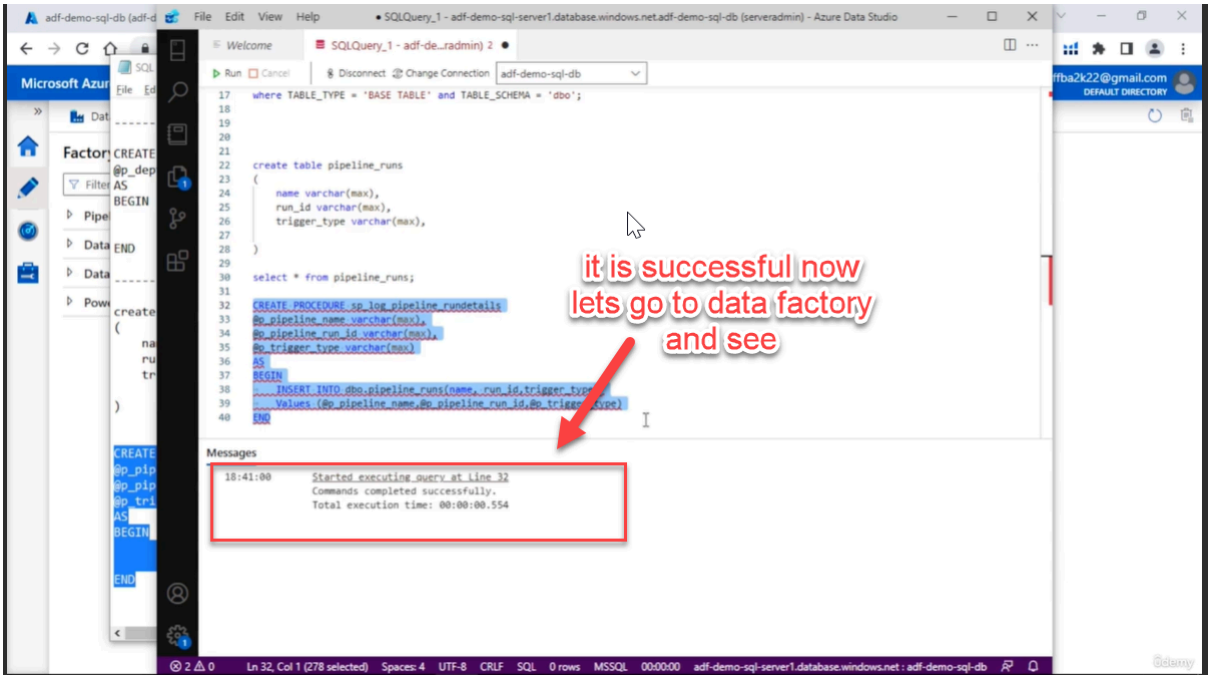
Mercredi 27 décembre 2023 à 14h28

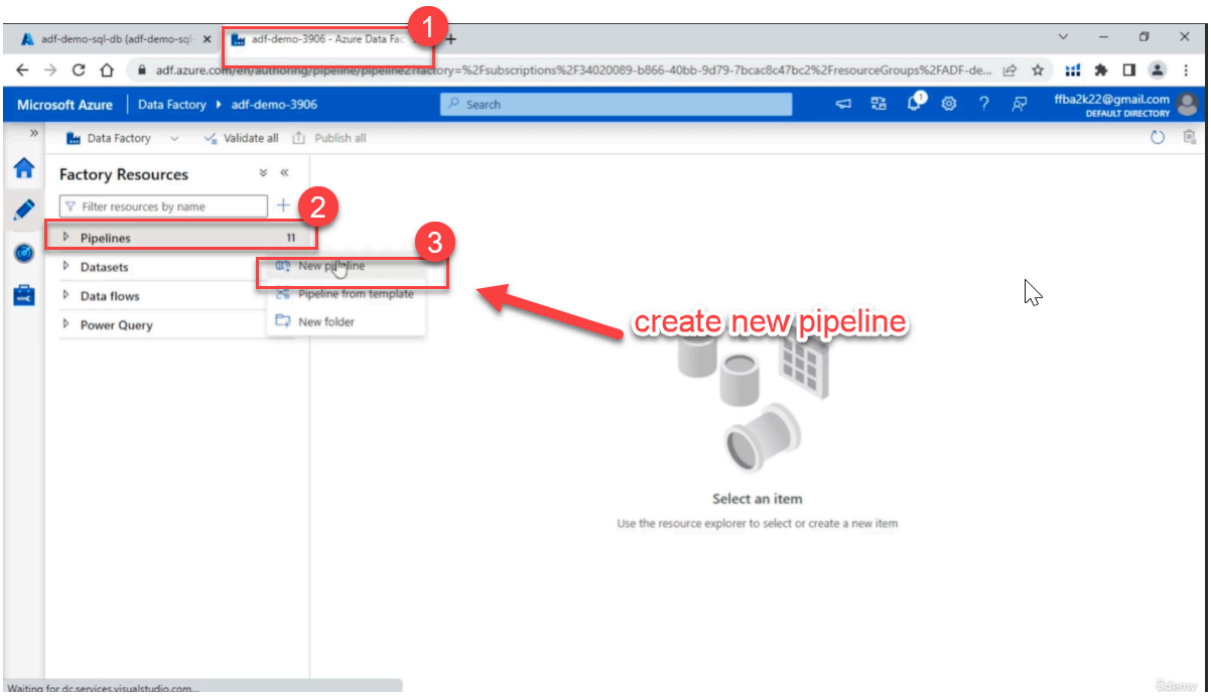
Mercredi 27 décembre 2023 à 21h par andré

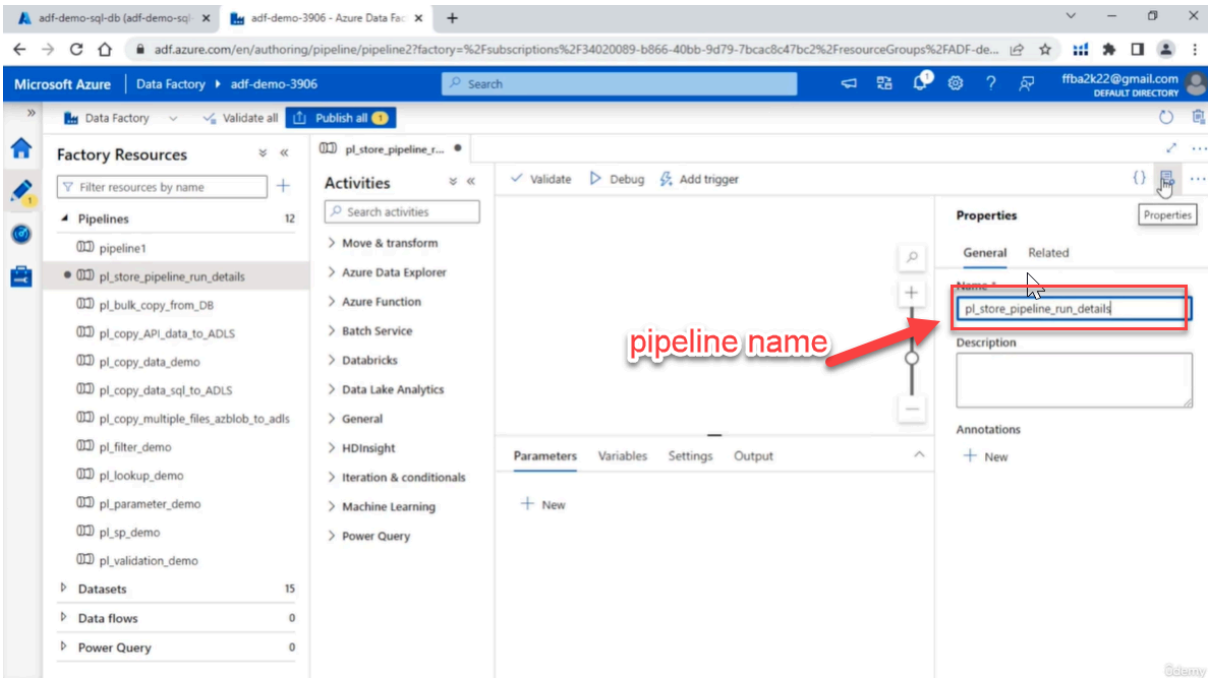


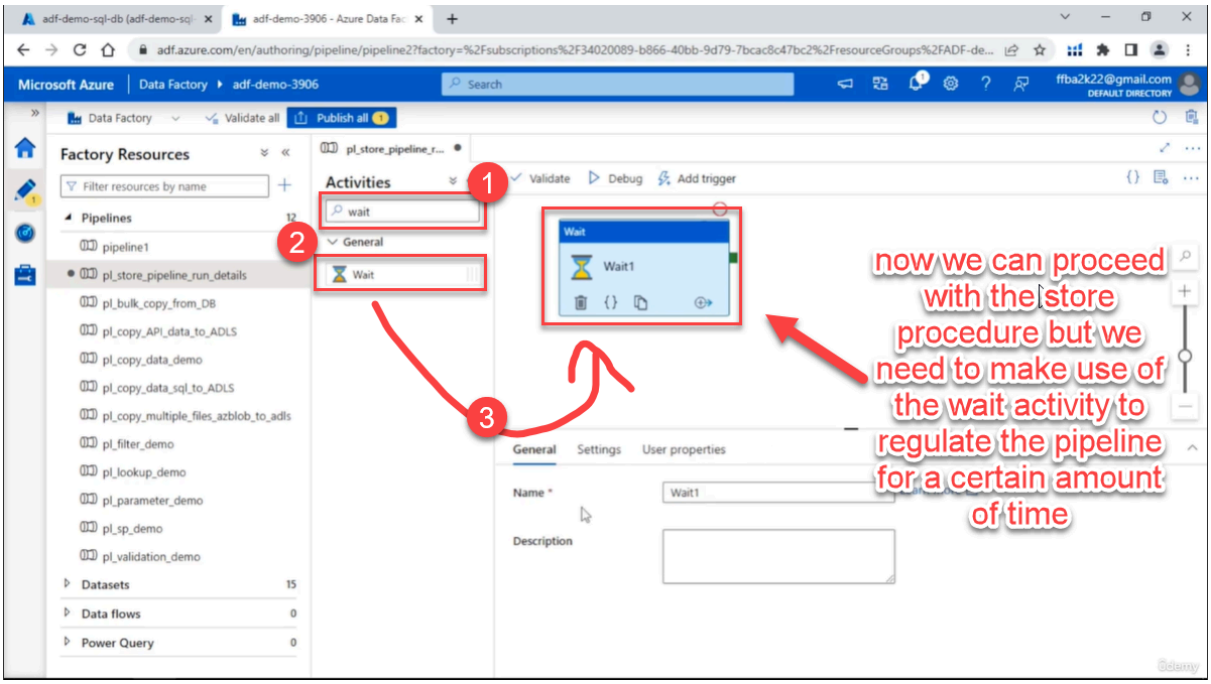


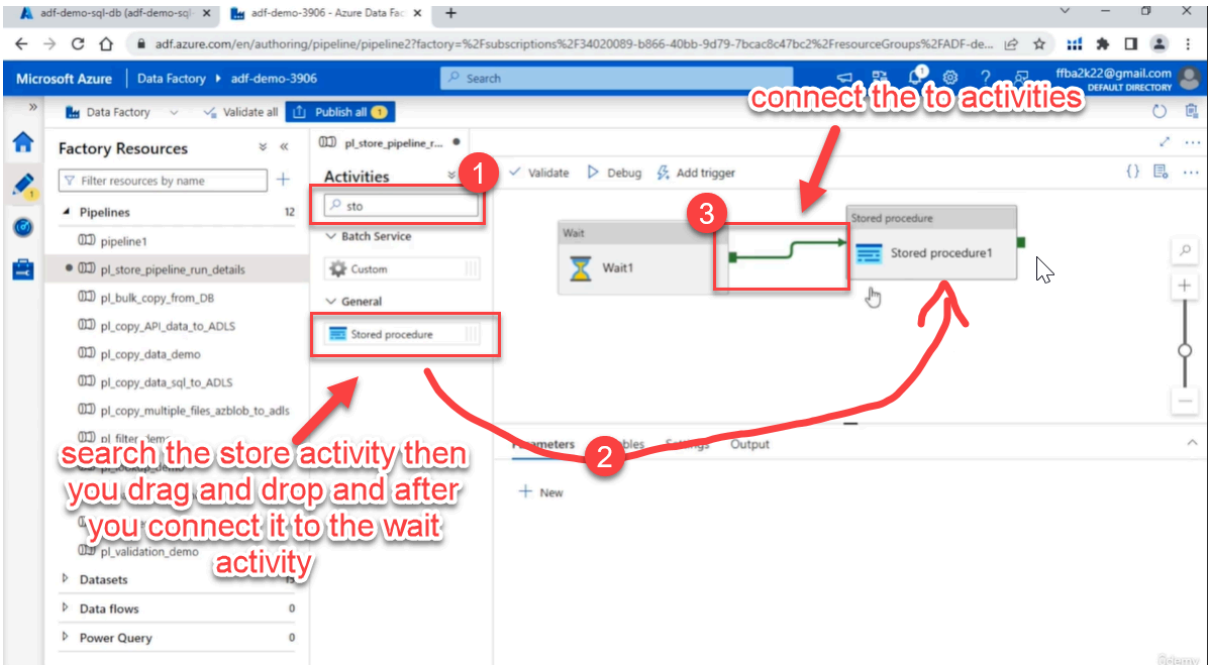

2
so here you
highlight and run
1
Results
Messages
name
run_id
trigger_type

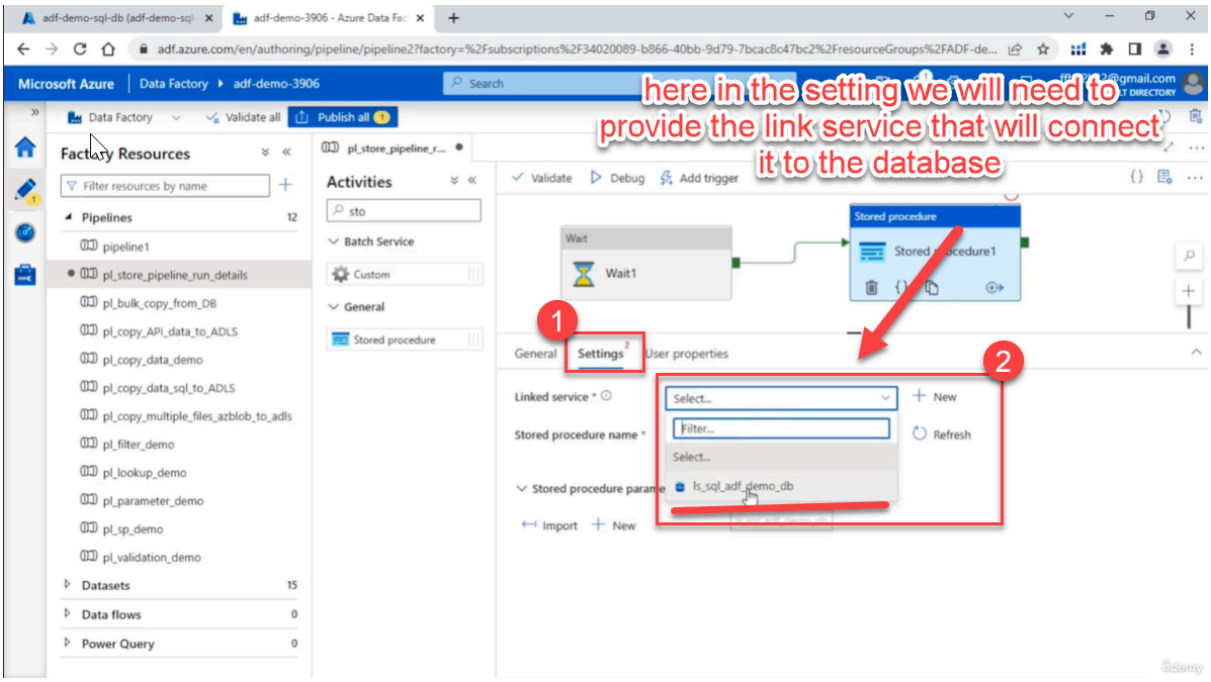

it is successful now
lets go to data factory
and see
Messages
18:41:00
Started executing query at Line 32
Commands completed successfully.
Total execution time: 00:00:00.554


1
2
3
Microsoft Azure
Data Factory
adf-demo-3906
Search
Factory Resources
Filter resources by name
Pipelines 11
Datasets
Data flows
Power Query
New pipeline
Pipeline from template
New folder
create new pipeline
Select an item
Use the resource explorer to select or create a new item

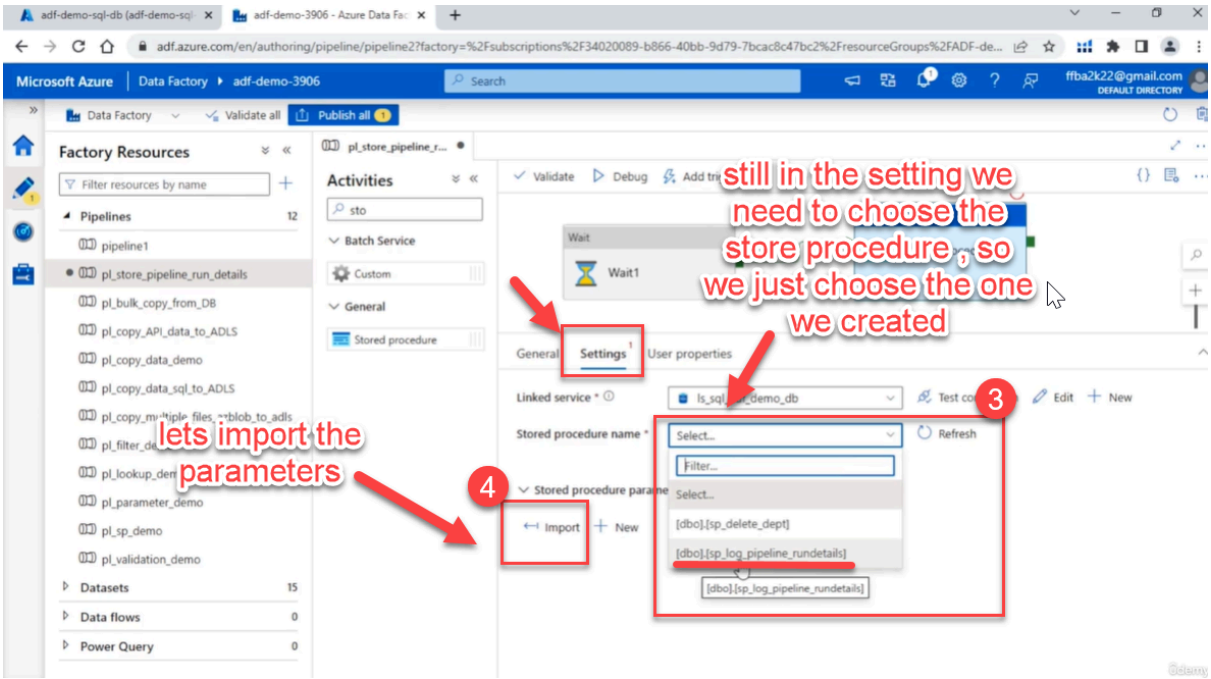

Microsoft Azure
Data Factory
adf-demo-3906
Search
Publish all
Factory Resources
Pipelines 12
pipeline1
pl_store_pipeline_run_details
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_validation_demo
Datasets 15
Data flows 0
Power Query 0
Activities
Move & transform
Azure Data Explorer
Azure Function
Batch Service
Databricks
Data Lake Analytics
General
HDInsight
Iteration & conditionals
Machine Learning
Power Query
Validate
Debug
Add trigger
Parameters
Variables
Settings
Output
New
Properties
General
Related
pl_store_pipeline_run_details
Description
Annotations
New
pipeline name

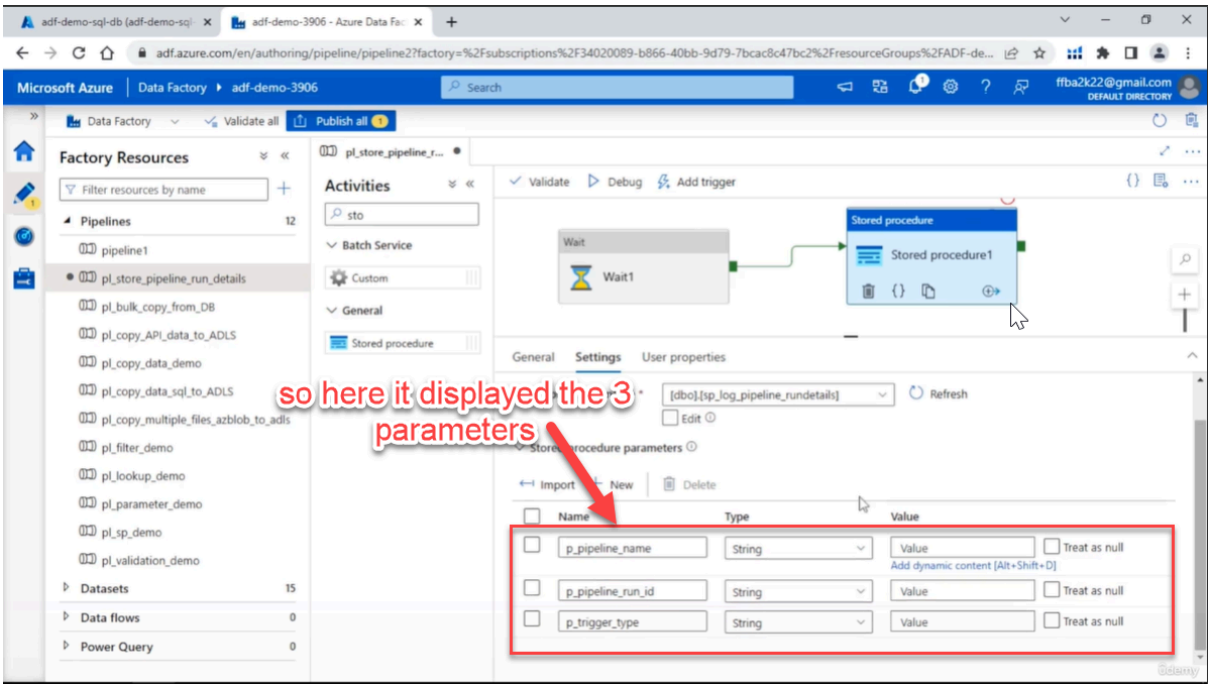

Microsoft Azure
Data Factory
adf-demo-3906
Factory Resources
Activities
wait
General
Wait
Wait1
Validate
Debug
Add trigger
General
Settings
User properties
Name *
Wait1
Description
now we can proceed with the store procedure but we need to make use of the wait activity to regulate the pipeline for a certain amount of time

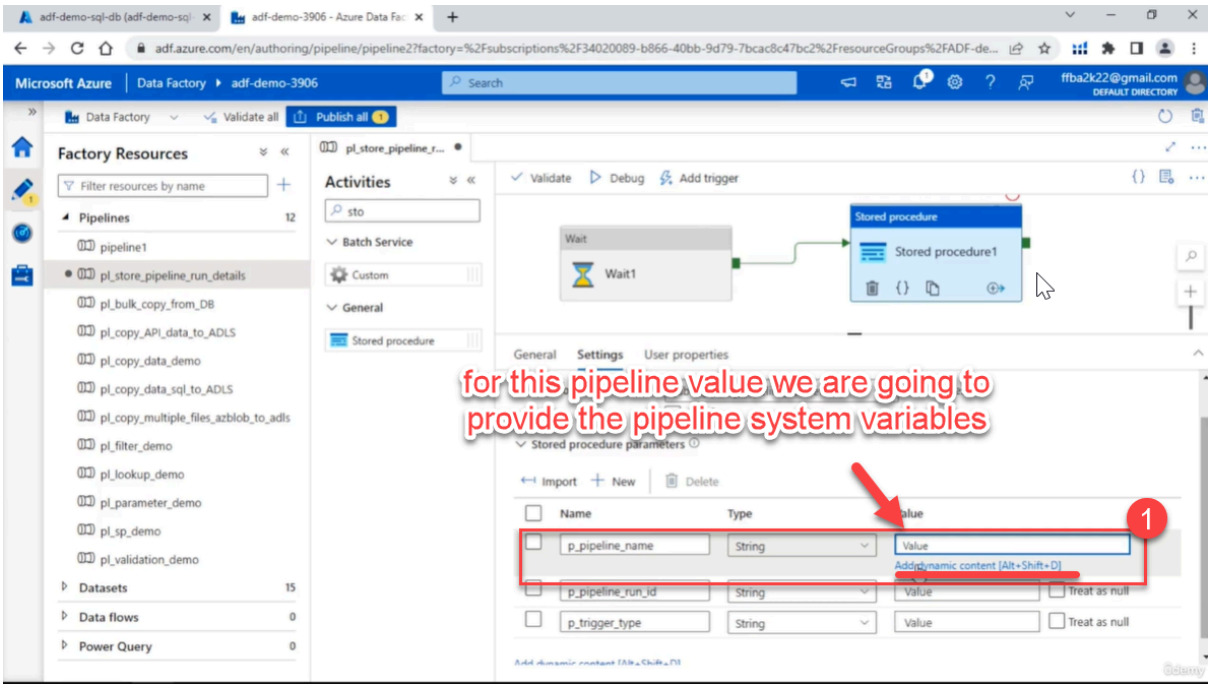

Microsoft Azure
Data Factory
adf-demo-3906
connect the to activities
Factory Resources
Activities
sto
Batch Service
Custom
General
Stored procedure
Wait
Wait1
Stored procedure
Stored procedure1
Output
New
search the store activity then you drag and drop and after you connect it to the wait activity

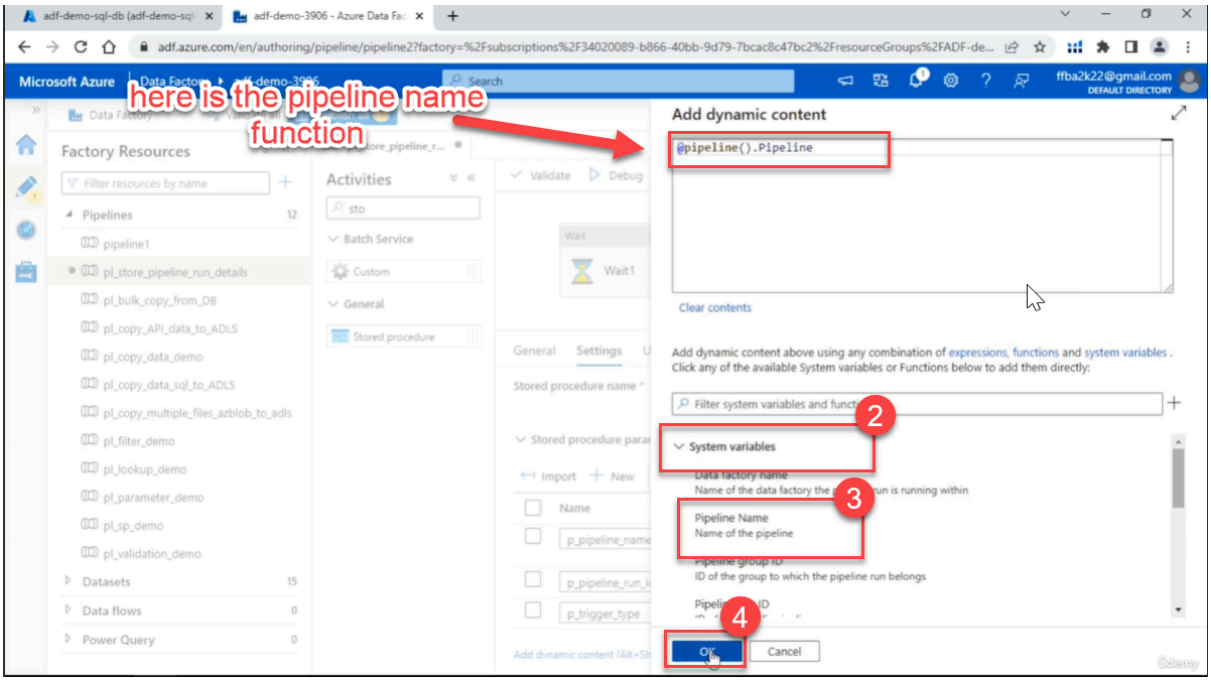


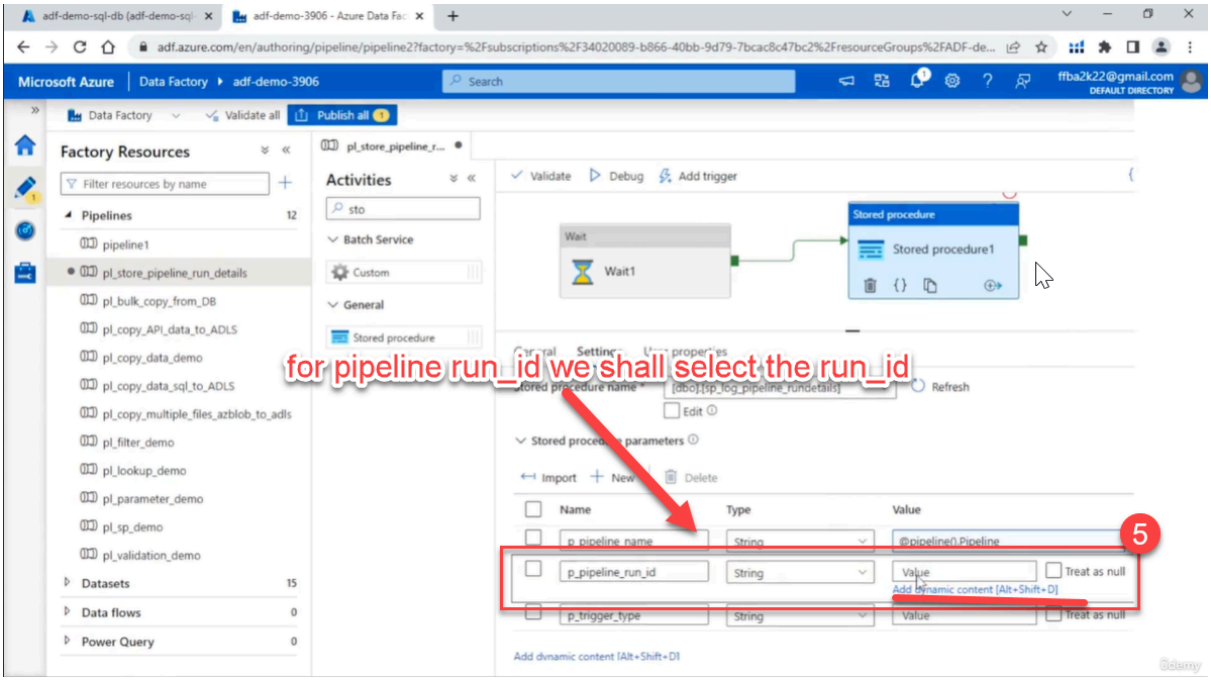
Vérifié le jeudi 28 Décembre 2023 à 20h39 par yvonne

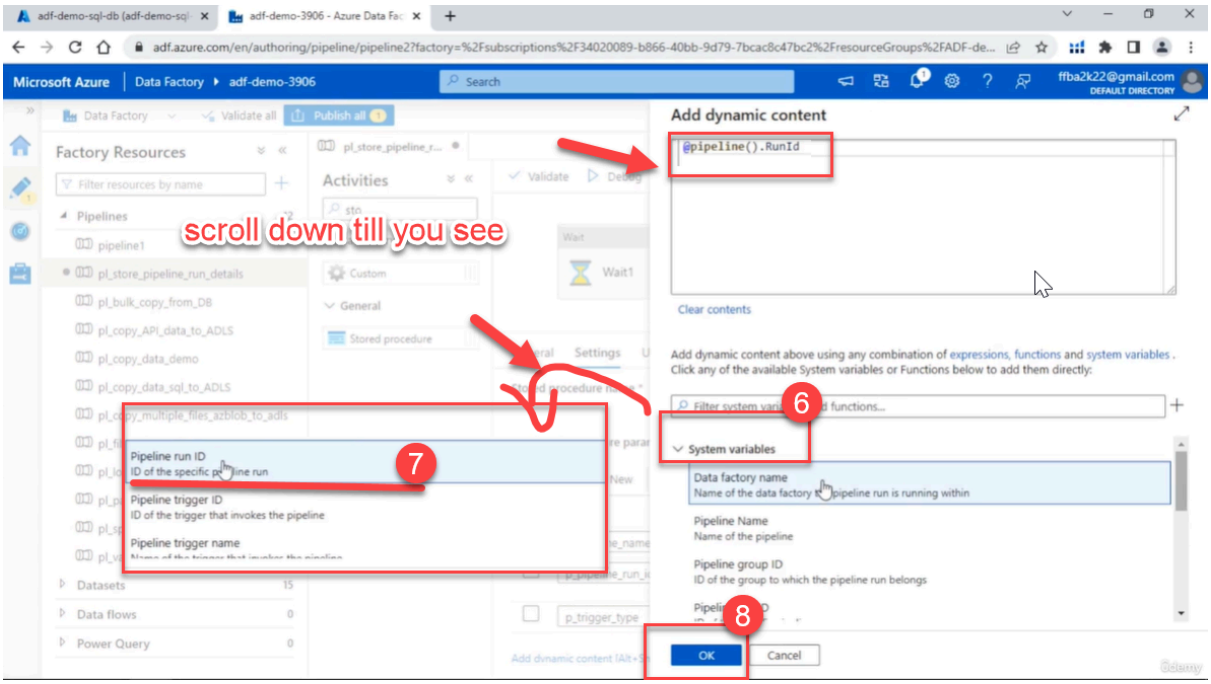


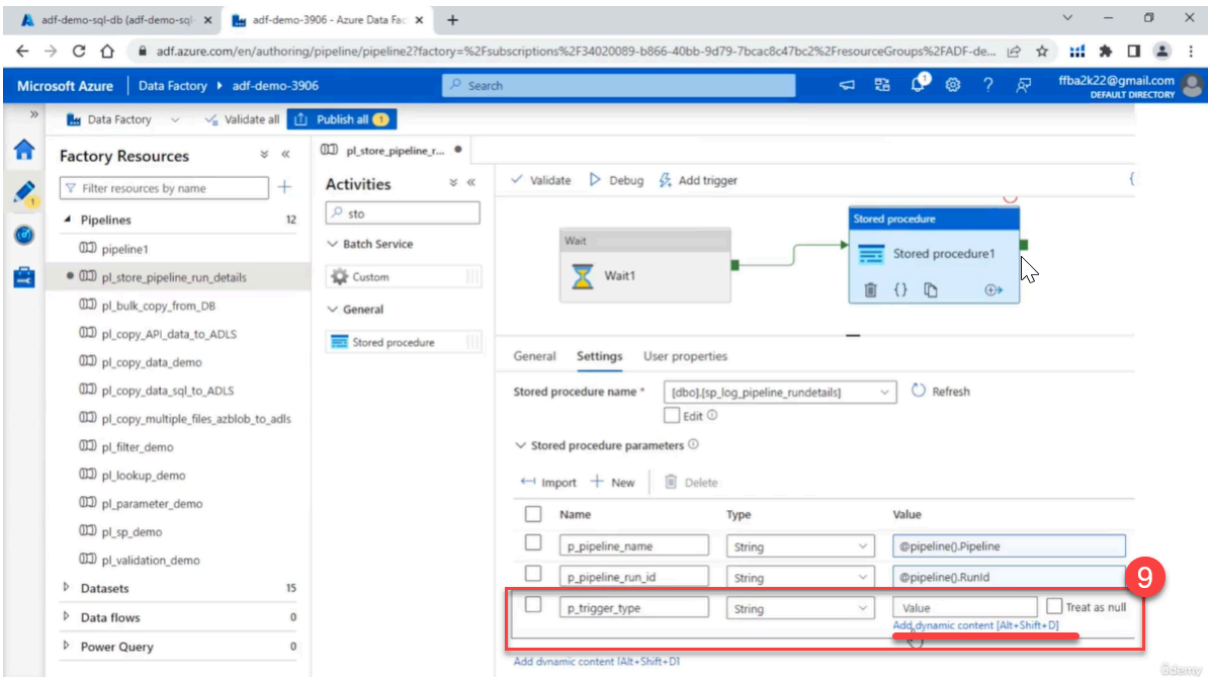

so here it displayed the 3 parameters
Microsoft Azure
Data Factory
adf-demo-3906
Factory Resources
Pipelines
pipeline1
pl_store_pipeline_run_details
Activities
Wait
Wait1
Stored procedure
Stored procedure1
General
Settings
User properties
Import
New
Delete
Name
Type
Value
p_pipeline_name
p_pipeline_run_id
p_trigger_type
String
Treat as null

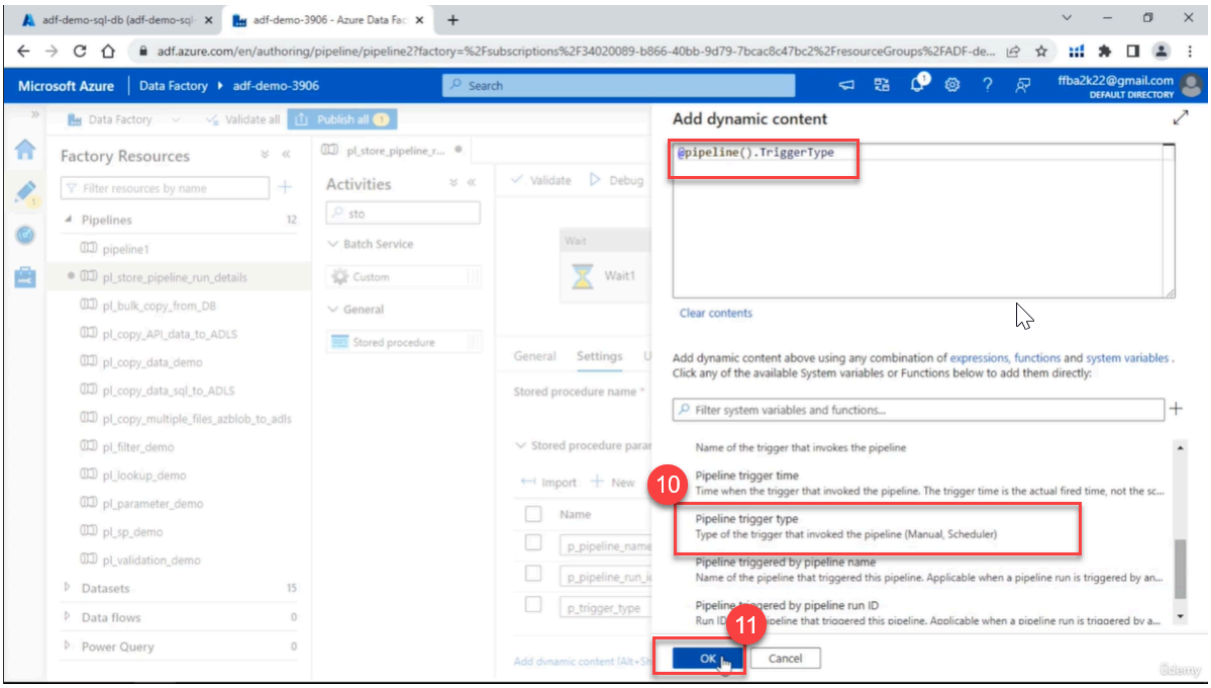

for this pipeline value we are going to provide the pipeline system variables
Microsoft Azure
Data Factory
adf-demo-3906
Factory Resources
Pipelines
pipeline1
pl_store_pipeline_run_details
Activities
Wait
Wait1
Stored procedure
Stored procedure1
General
Settings
User properties
Import
New
Delete
Name
Type
Value
p_pipeline_name
p_pipeline_run_id
p_trigger_type
String
Treat as null
1

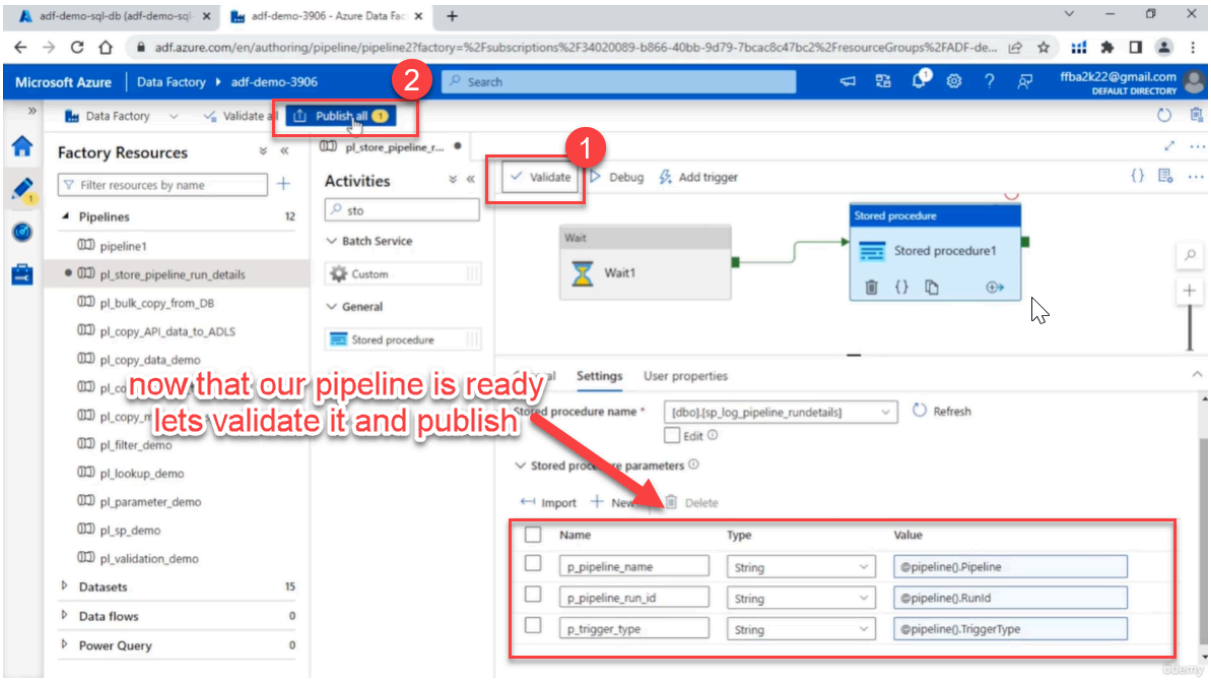

here is the pipeline name function
Add dynamic content
@pipeline().Pipeline
Clear contents
Add dynamic content above using any combination of expressions, functions and system variables.
Click any of the available System variables or Functions below to add them directly:
System variables
Pipeline Name
Name of the pipeline
ID of the group to which the pipeline run belongs
OK
Cancel
Factory Resources
Activities
Pipelines
pl_store_pipeline_run_details
Stored procedure

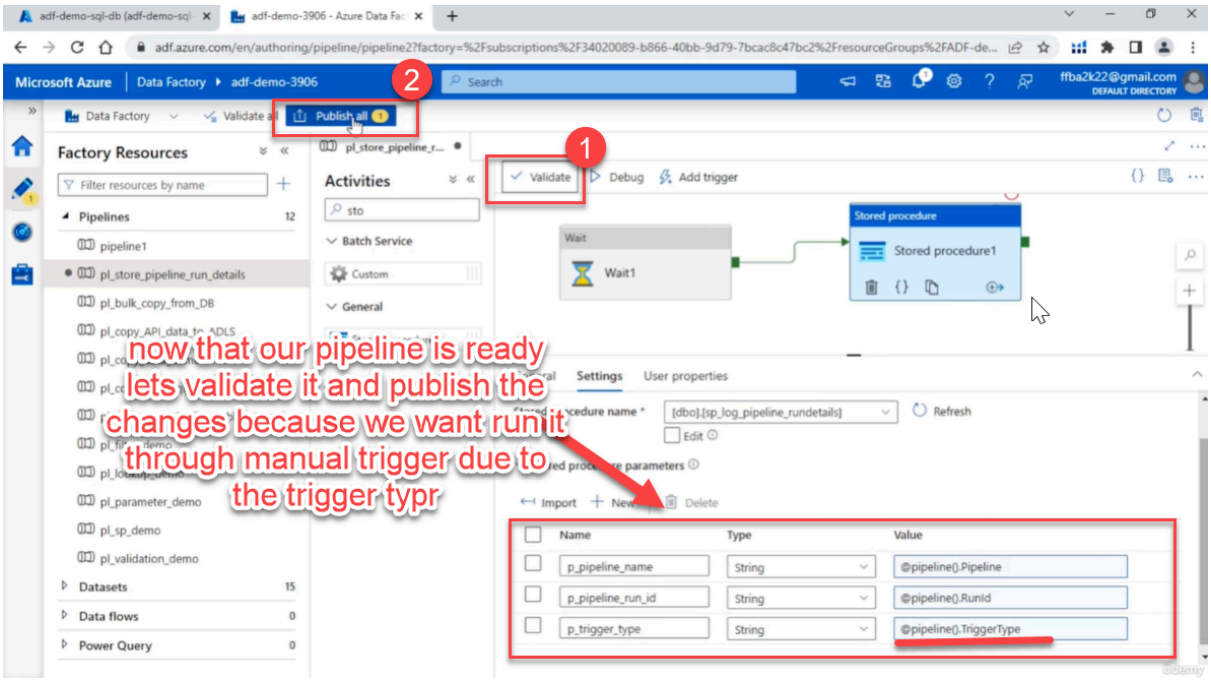

for pipeline run_id we shall select the run_id
Factory Resources
Activities
Wait1
Stored procedure1
Name
Type
Value
p_pipeline_name
p_pipeline_run_id
p_trigger_type
String
@pipeline().Pipeline
Treat as null
Add dynamic content [Alt+Shift+D]

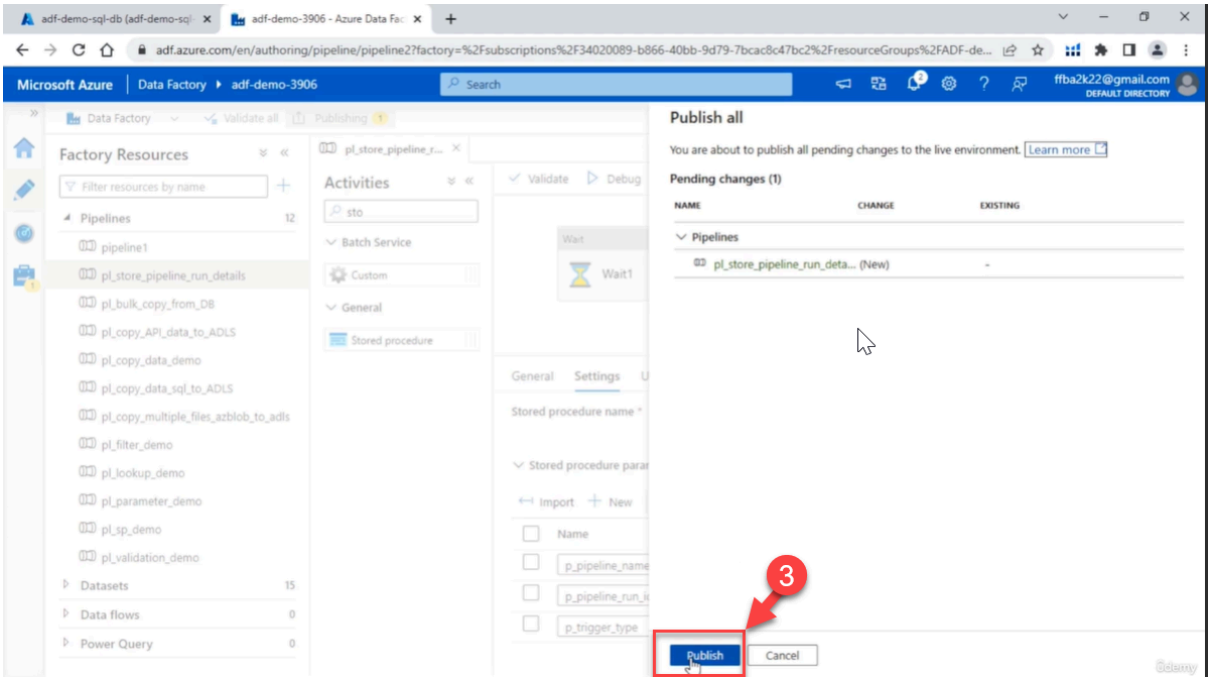

Add dynamic content
@pipeline().RunId
scroll down till you see
Clear contents
Add dynamic content above using any combination of expressions, functions and system variables.
Click any of the available System variables or Functions below to add them directly:
System variables
Data factory name
Pipeline Name
Name of the pipeline
Pipeline group ID
ID of the group to which the pipeline run belongs
Pipeline run ID
Pipeline trigger ID
ID of the trigger that invokes the pipeline
Pipeline trigger name
6
7
8
OK
Cancel

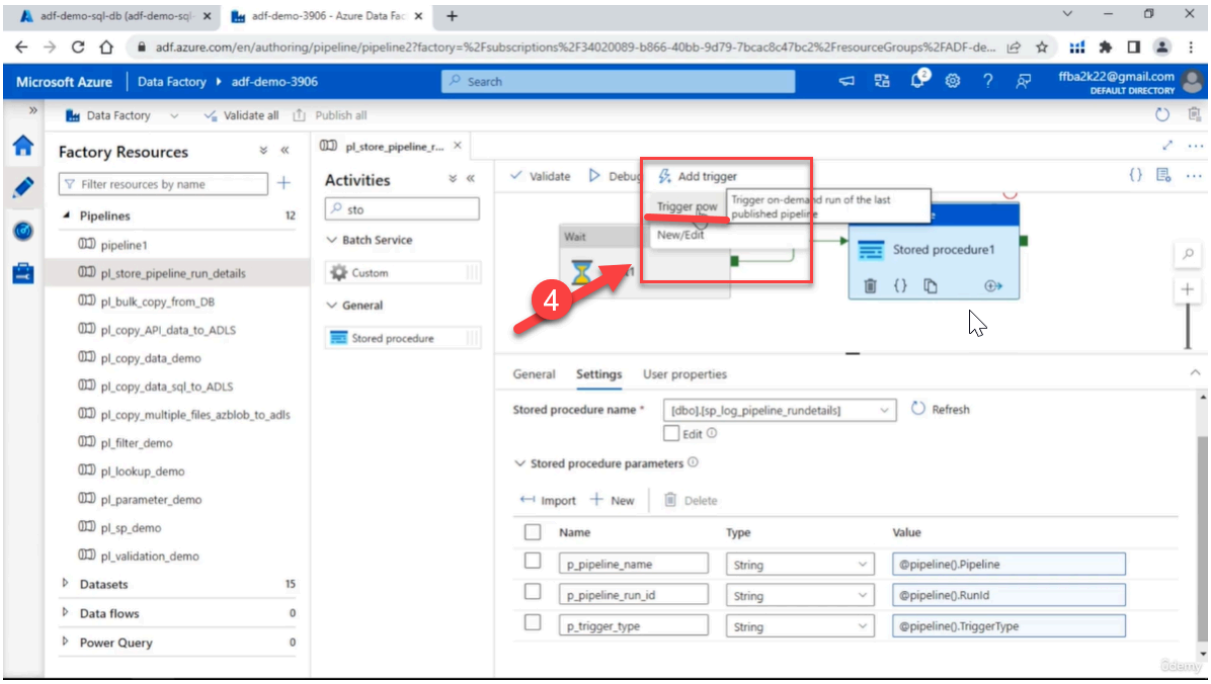

Factory Resources
Activities
Validate
Debug
Add trigger
Wait1
Stored procedure1
General
Settings
User properties
Stored procedure name *
[dbo].[sp_log_pipeline_rundetails]
Refresh
Edit
Stored procedure parameters
Import
New
Delete
Name
Type
Value
p_pipeline_name
String
@pipeline().Pipeline
p_pipeline_run_id
String
@pipeline().RunId
p_trigger_type
String
Value
Treat as null
Add dynamic content [Alt+Shift+D]
9

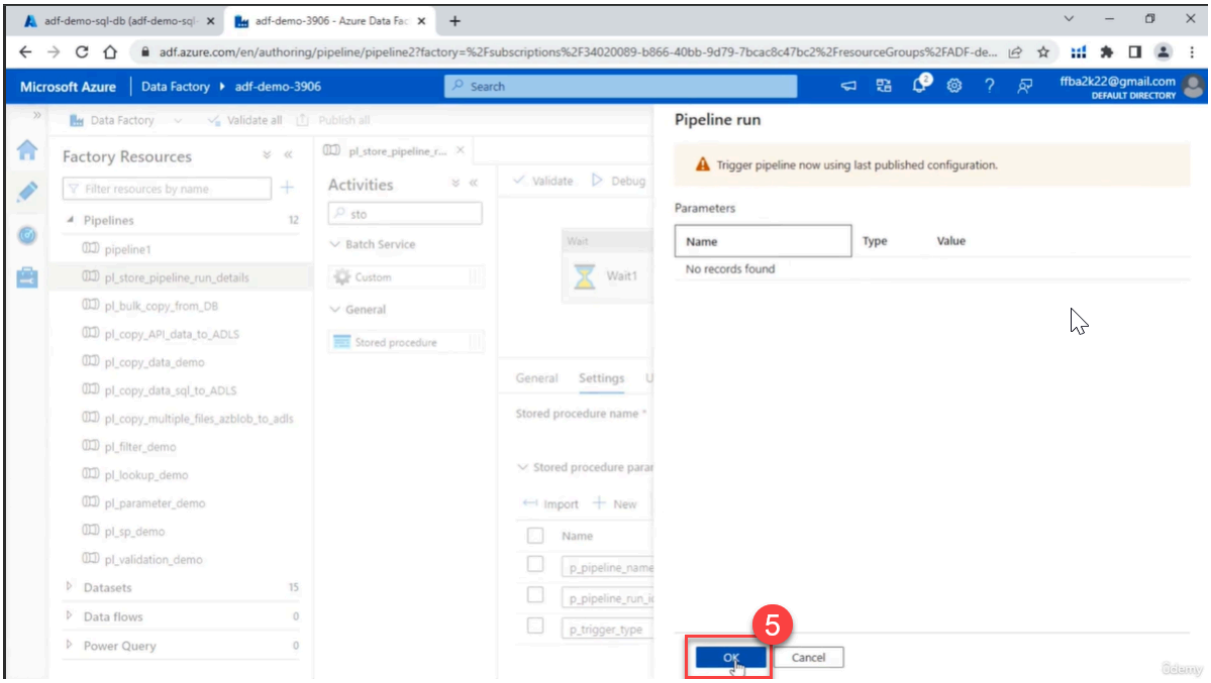

Add dynamic content
@pipeline().TriggerType
Clear contents
Add dynamic content above using any combination of expressions, functions and system variables.
Click any of the available System variables or Functions below to add them directly:
Filter system variables and functions...
Name of the trigger that invokes the pipeline
Pipeline trigger time
Time when the trigger that invoked the pipeline. The trigger time is the actual fired time, not the sc...
Pipeline trigger type
Type of the trigger that invoked the pipeline (Manual, Scheduler)
Pipeline triggered by pipeline name
Name of the pipeline that triggered this pipeline. Applicable when a pipeline run is triggered by an...
10
11
OK
Cancel

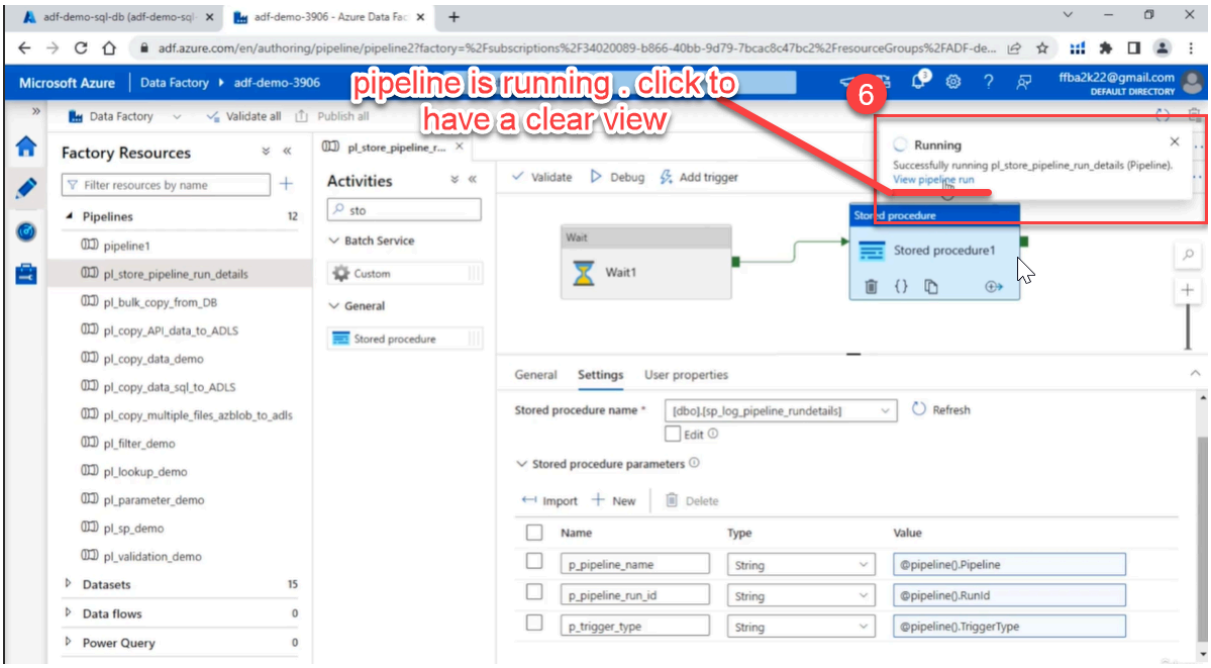

2
1
Publish all
Validate
Debug
Add trigger
now that our pipeline is ready
lets validate it and publish
Settings
User properties
[dbo].[sp_log_pipeline_rundetails]
Refresh
Edit
Import
Delete
Name
Type
Value
p_pipeline_name
String
@pipeline().Pipeline
p_pipeline_run_id
String
@pipeline().RunId
p_trigger_type
String
@pipeline().TriggerType

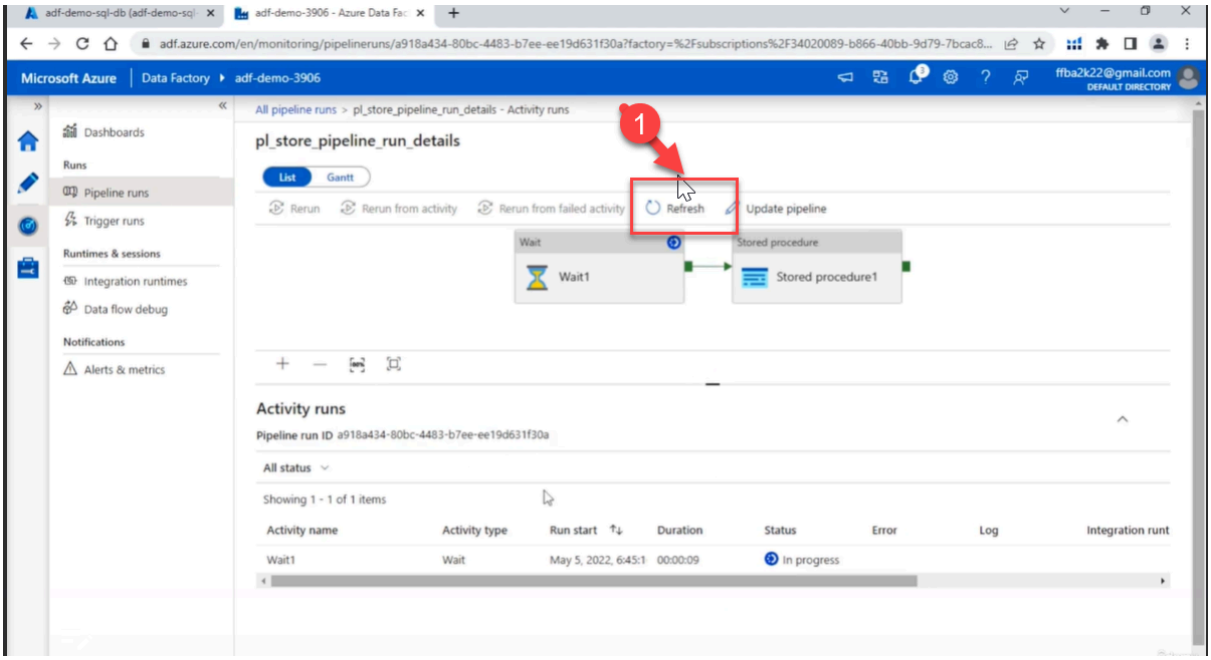

Microsoft Azure
Data Factory
adf-demo-3906
Publish all
Validate
Debug
Add trigger
Factory Resources
Activities
Pipelines
pl_store_pipeline_run_details
Wait
Wait1
Stored procedure
Stored procedure1
Settings
User properties
Import
Delete
Name
Type
Value
p_pipeline_name
String
@pipeline().Pipeline
p_pipeline_run_id
String
@pipeline().RunId
p_trigger_type
String
@pipeline().TriggerType
now that our pipeline is ready
lets validate it and publish the
changes because we want run it
through manual trigger due to
the trigger typr

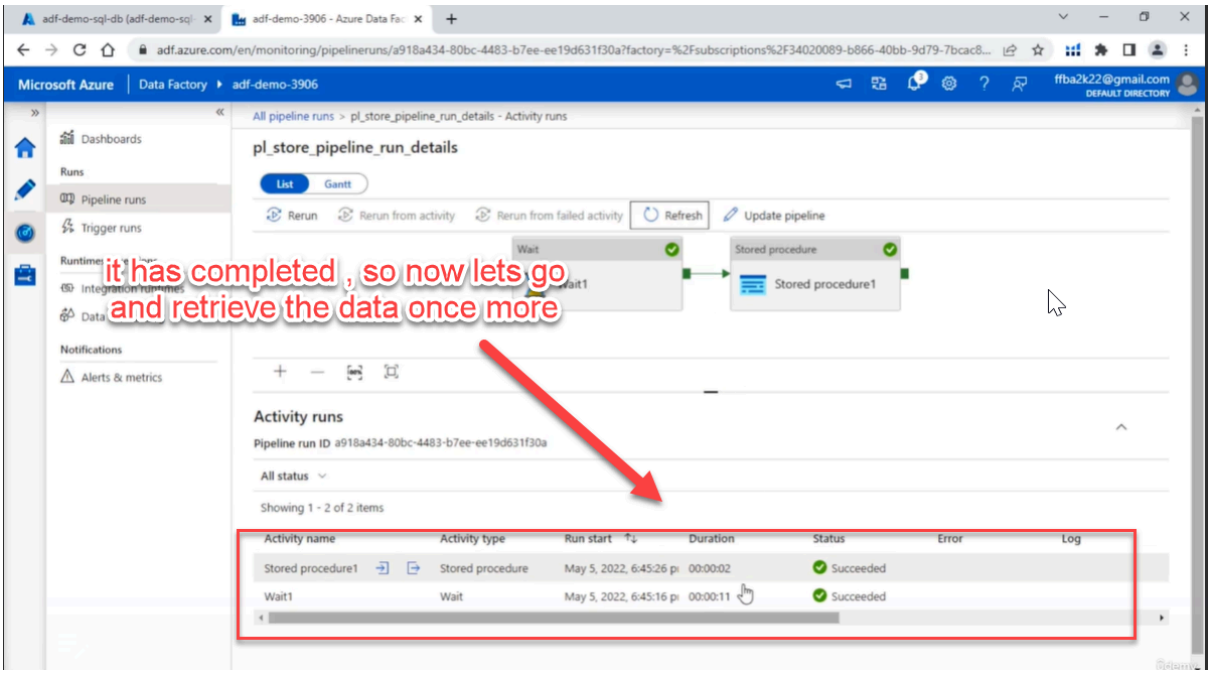

Microsoft Azure
Data Factory
adf-demo-3906
Publish all
You are about to publish all pending changes to the live environment.
Learn more
Pending changes (1)
NAME
CHANGE
EXISTING
Pipelines
pl_store_pipeline_run_deta... (New)
Publish
Cancel

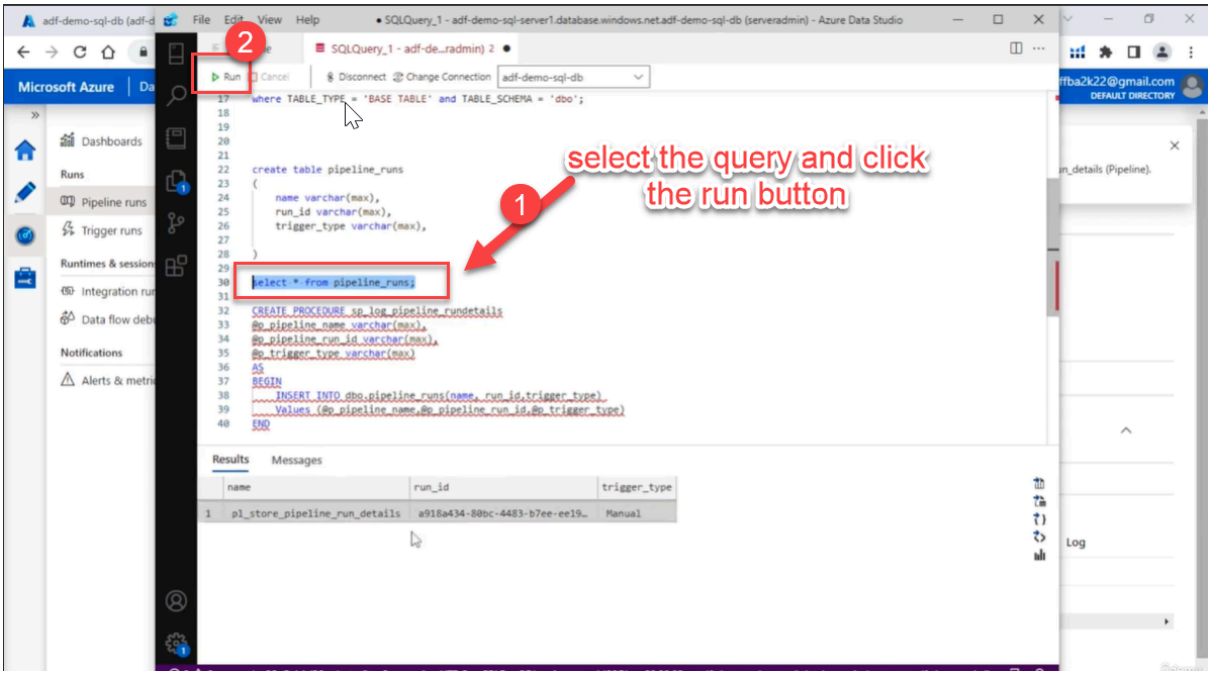

Microsoft Azure
Data Factory
adf-demo-3906
Factory Resources
Pipelines
pipeline1
pl_store_pipeline_run_details
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_validation_demo
Datasets
Data flows
Power Query
Activities
Batch Service
Custom
General
Stored procedure
Validate
Add trigger
Trigger now
Trigger on-demand run of the last published pipeline
New/Edit
Wait
Stored procedure1
4
General
Settings
User properties
Stored procedure name *
[dbo].[sp_log_pipeline_rundetails]
Refresh
Edit
Stored procedure parameters
Import
New
Delete
Name
Type
Value
p_pipeline_name
String
@pipeline().Pipeline
p_pipeline_run_id
String
@pipeline().RunId
p_trigger_type
String
@pipeline().TriggerType

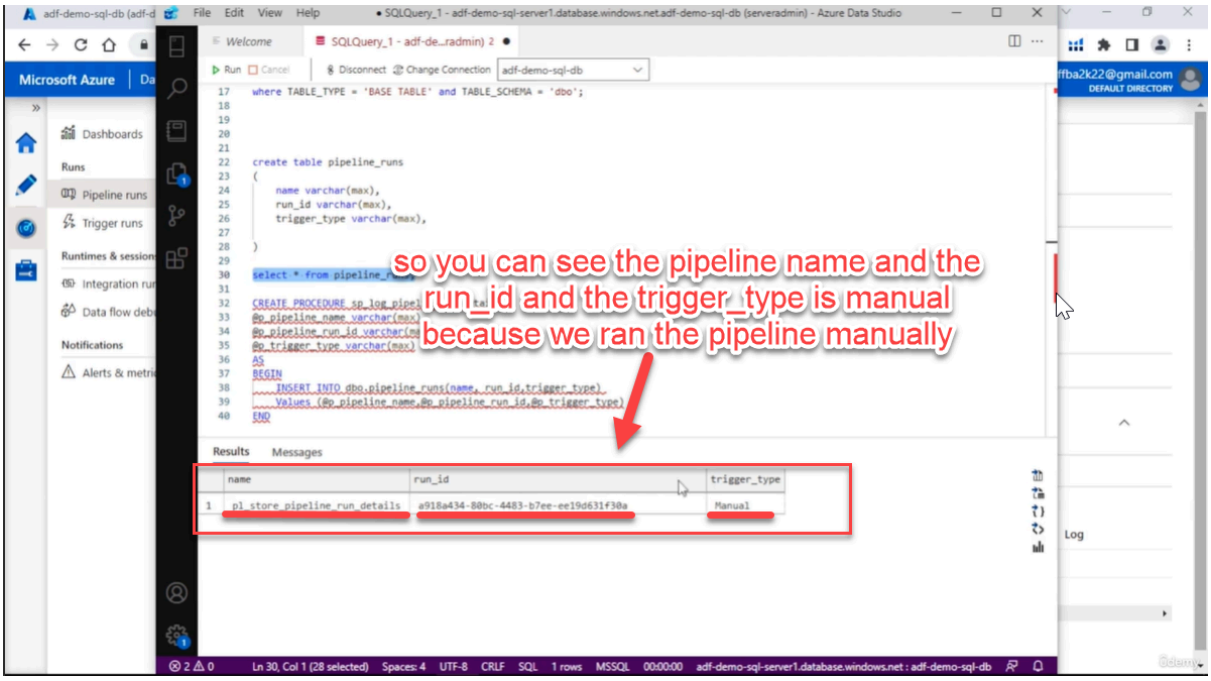

Microsoft Azure
Data Factory
adf-demo-3906
Pipeline run
Trigger pipeline now using last published configuration.
Parameters
Name
Type
Value
No records found
5
OK
Cancel

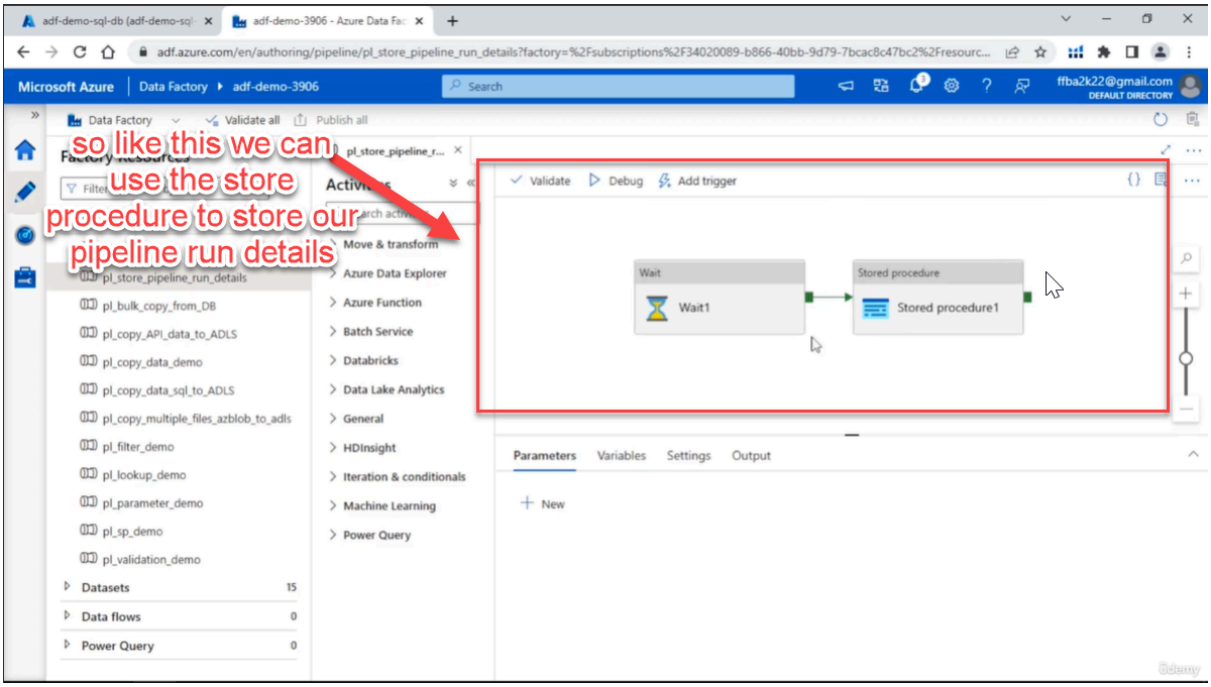

pipeline is running . click to have a clear view
6
Running
Successfully running pl_store_pipeline_run_details (Pipeline).
View pipeline run
Factory Resources
Pipelines
pipeline1
pl_store_pipeline_run_details
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_validation_demo
Datasets
Data flows
Power Query
Activities
Batch Service
Custom
General
Stored procedure
Validate
Debug
Add trigger
Wait
Wait1
Stored procedure1
General
Settings
User properties
Stored procedure name *
[dbo].[sp_log_pipeline_rundetails]
Refresh
Edit
Stored procedure parameters
Import
New
Delete
Name
Type
Value
p_pipeline_name
String
@pipeline().Pipeline
p_pipeline_run_id
String
@pipeline().RunId
p_trigger_type
String
@pipeline().TriggerType


1
Dashboards
Runs
Pipeline runs
Trigger runs
Runtimes & sessions
Integration runtimes
Data flow debug
Notifications
Alerts & metrics
All pipeline runs > pl_store_pipeline_run_details - Activity runs
pl_store_pipeline_run_details
List
Gantt
Rerun
Rerun from activity
Rerun from failed activity
Refresh
Update pipeline
Wait
Wait1
Stored procedure
Stored procedure1
Activity runs
Pipeline run ID a918a434-80bc-4483-b7ee-ee19d631f30a
All status
Showing 1 - 1 of 1 items
Activity name
Activity type
Run start
Duration
Status
Error
Log
Integration runt
Wait1
Wait
May 5, 2022, 6:45:1
00:00:09
In progress


it has completed , so now lets go
and retrieve the data once more
pl_store_pipeline_run_details
Activity runs
Stored procedure1
Wait1
Succeeded


select the query and click
the run button
1
2
Run
select * from pipeline_runs;
Results
Messages
pl_store_pipeline_run_details
Manual

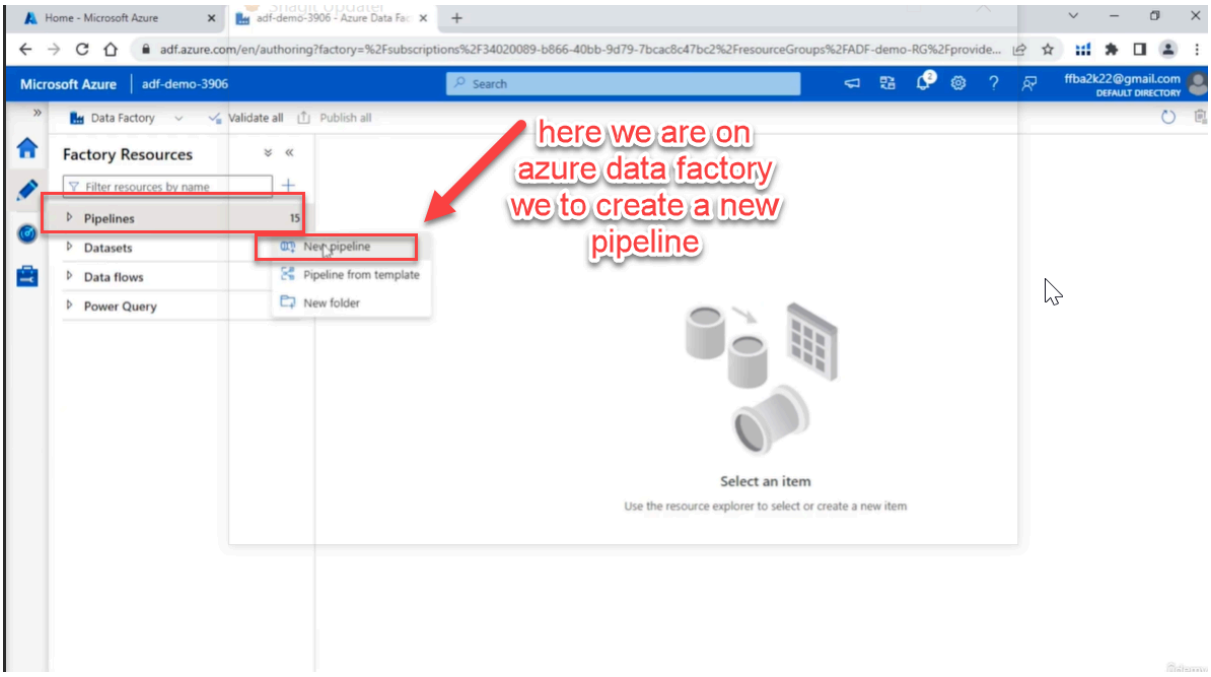

so you can see the pipeline name and the run_id and the trigger_type is manual because we ran the pipeline manually
Results
Messages
name
run_id
trigger_type
pl_store_pipeline_run_details
a918a434-80bc-4483-b7ee-ee19d631f30a
Manual

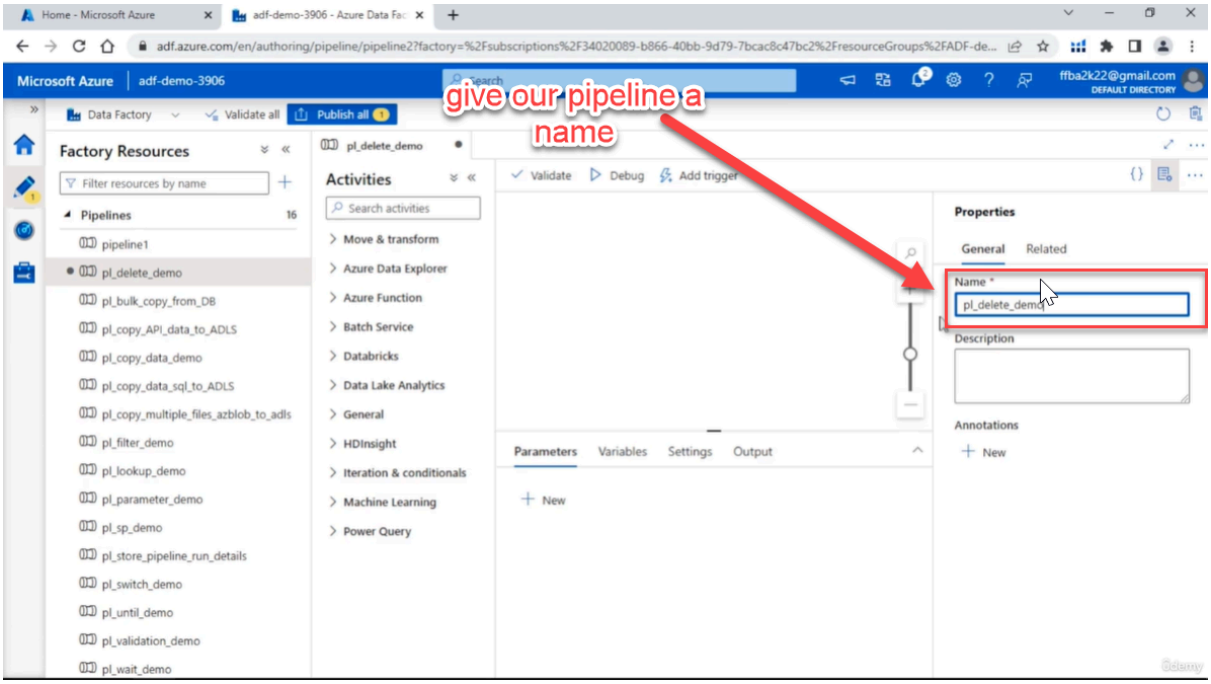

so like this we can use the store procedure to store our pipeline run details
Validate
Debug
Add trigger
Wait
Wait1
Stored procedure
Stored procedure1
Parameters
Variables
Settings
Output
New

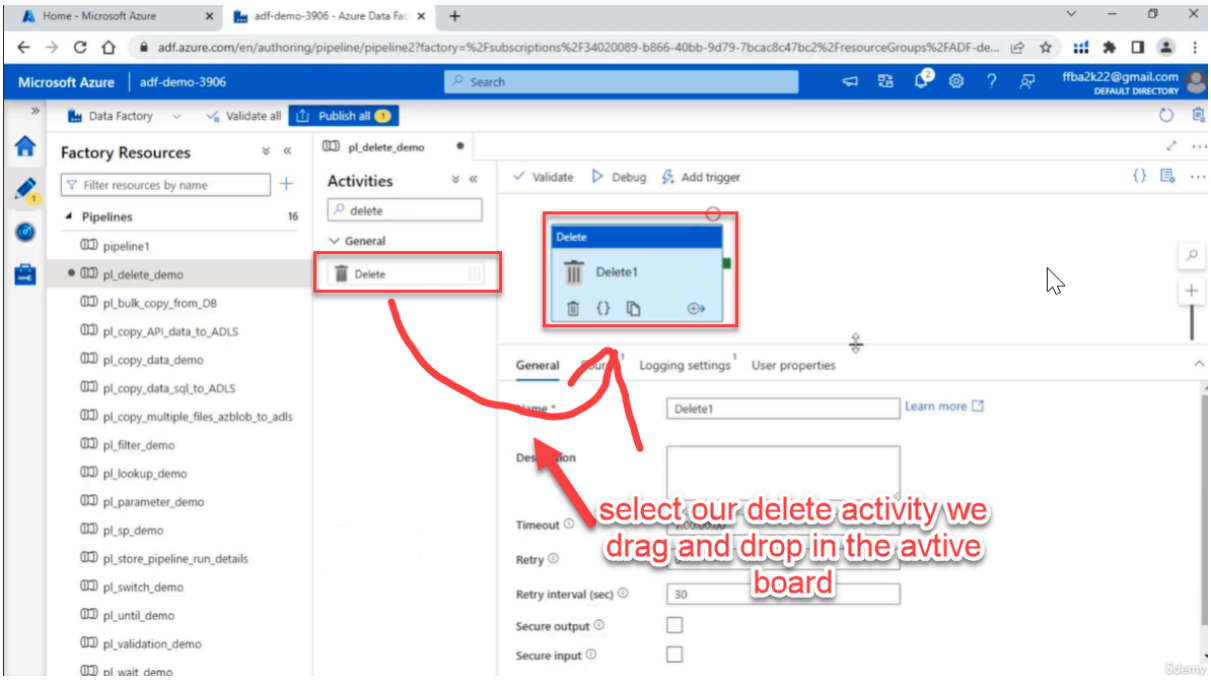
Vérifié le Vendredi 29 décembre 2023 à 20h25 par yvonne

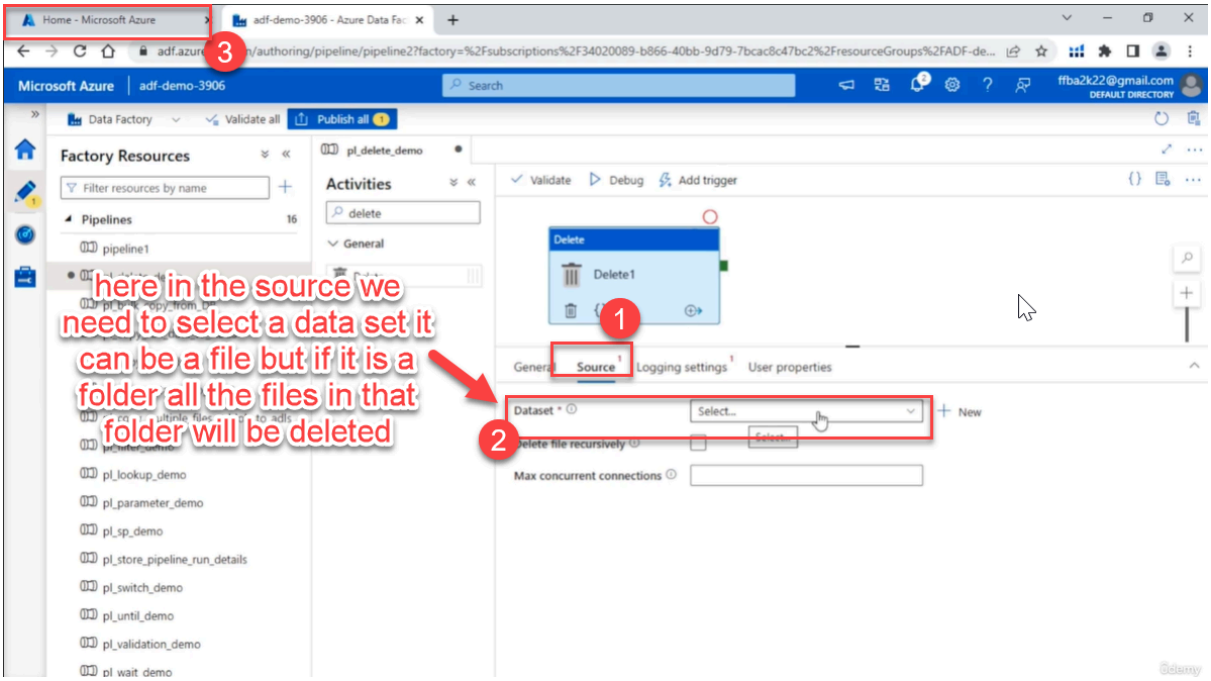
Vérifié le 30 décembre 2023 par André à 18h
Vérifié le 31 décembre 2023 par André à 18h
Vérifié le 01 Janvier 2023 par André à 10H lundi
vérifié mercredi 03 janvier 2024 à 09H par andré

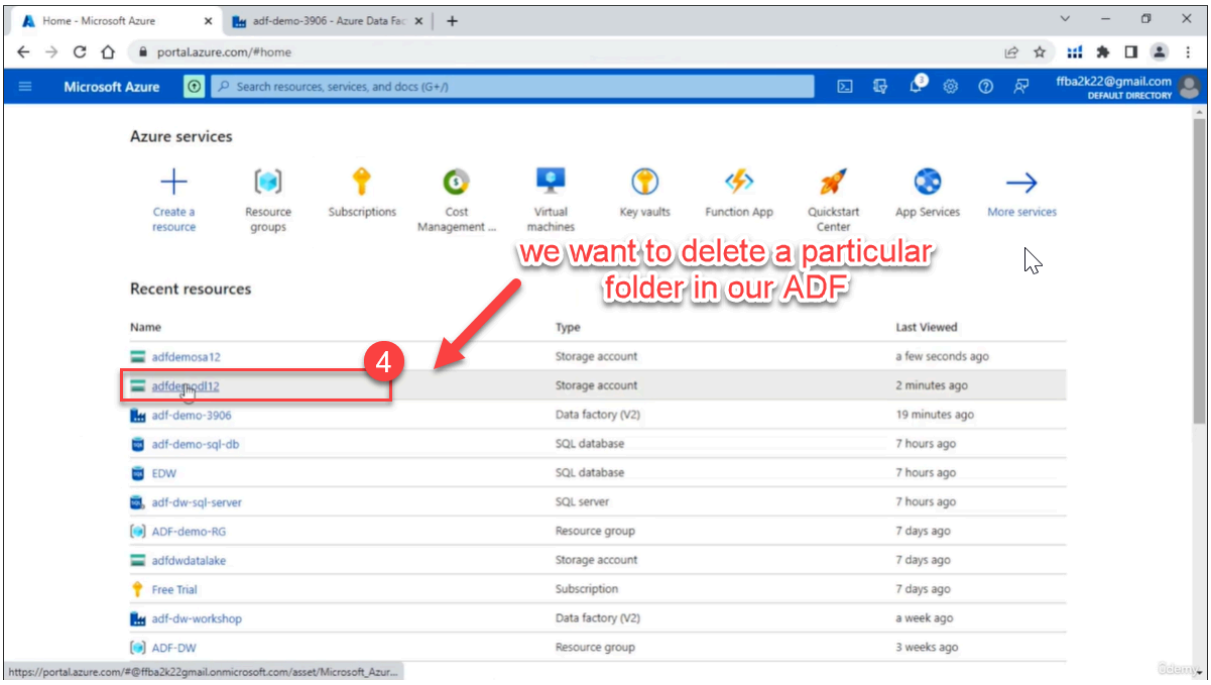
Vérifié jeudi 04 janvier 2024 à 22h43 par Yvonne

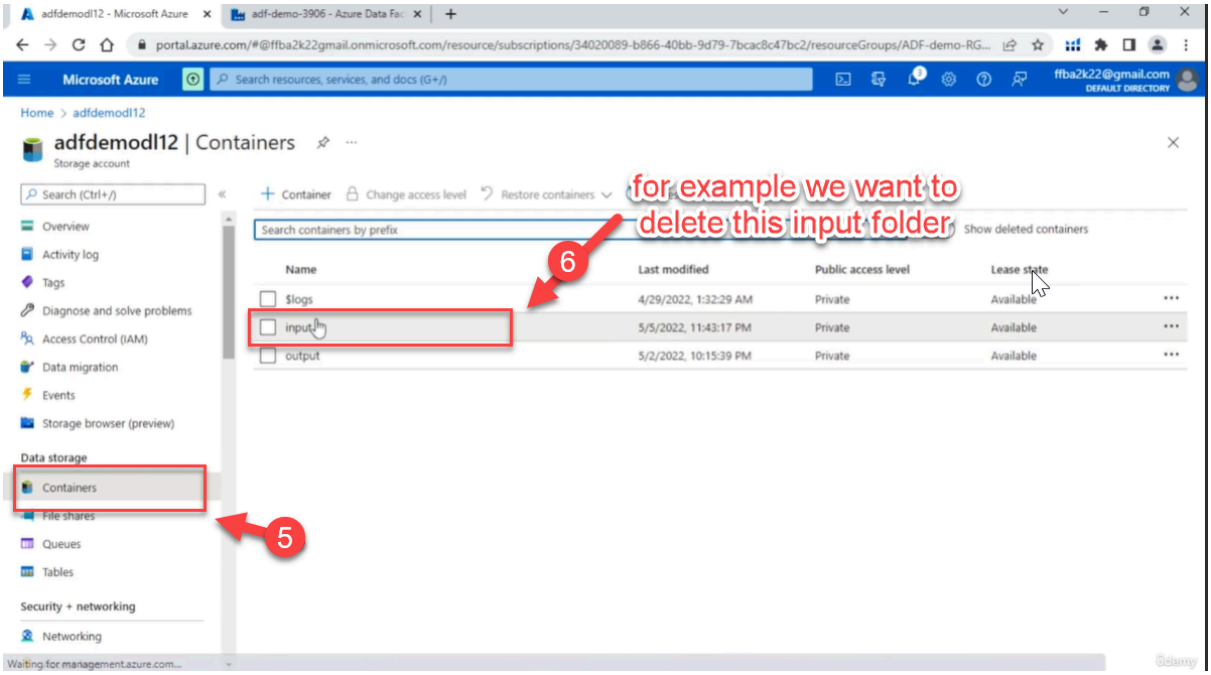

here we are on azure data factory we to create a new pipeline
Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines
Datasets
Data flows
Power Query
New pipeline
Pipeline from template
New folder
Select an item
Use the resource explorer to select or create a new item

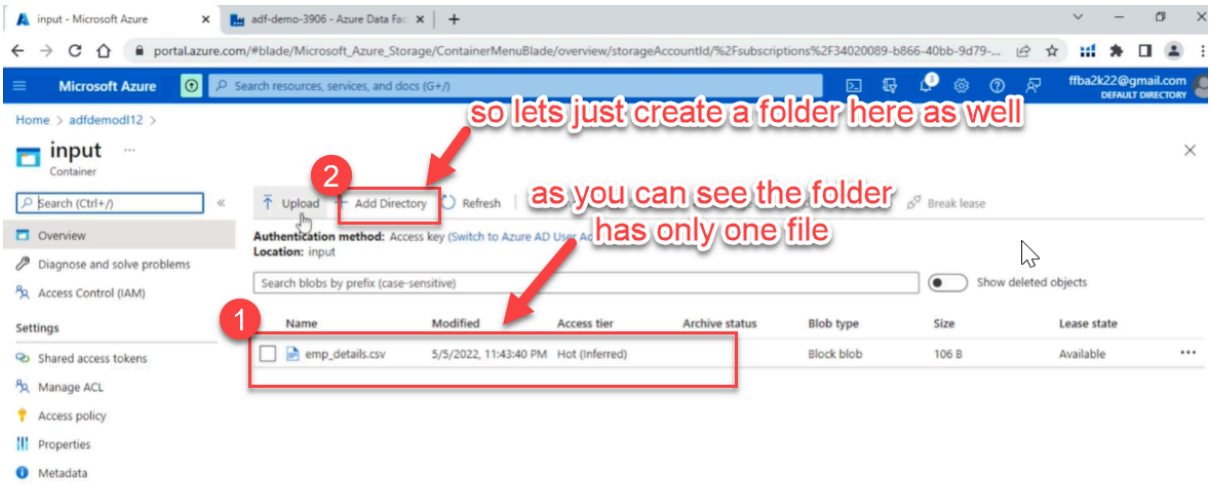

give our pipeline a name
Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines
pipeline1
pl_delete_demo
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
pl_until_demo
pl_validation_demo
pl_wait_demo
Activities
Move & transform
Azure Data Explorer
Azure Function
Batch Service
Databricks
Data Lake Analytics
General
HDInsight
Iteration & conditionals
Machine Learning
Power Query
Validate
Debug
Add trigger
Parameters
Variables
Settings
Output
New
Properties
General
Related
Name *
pl_delete_demo
Description
Annotations
New

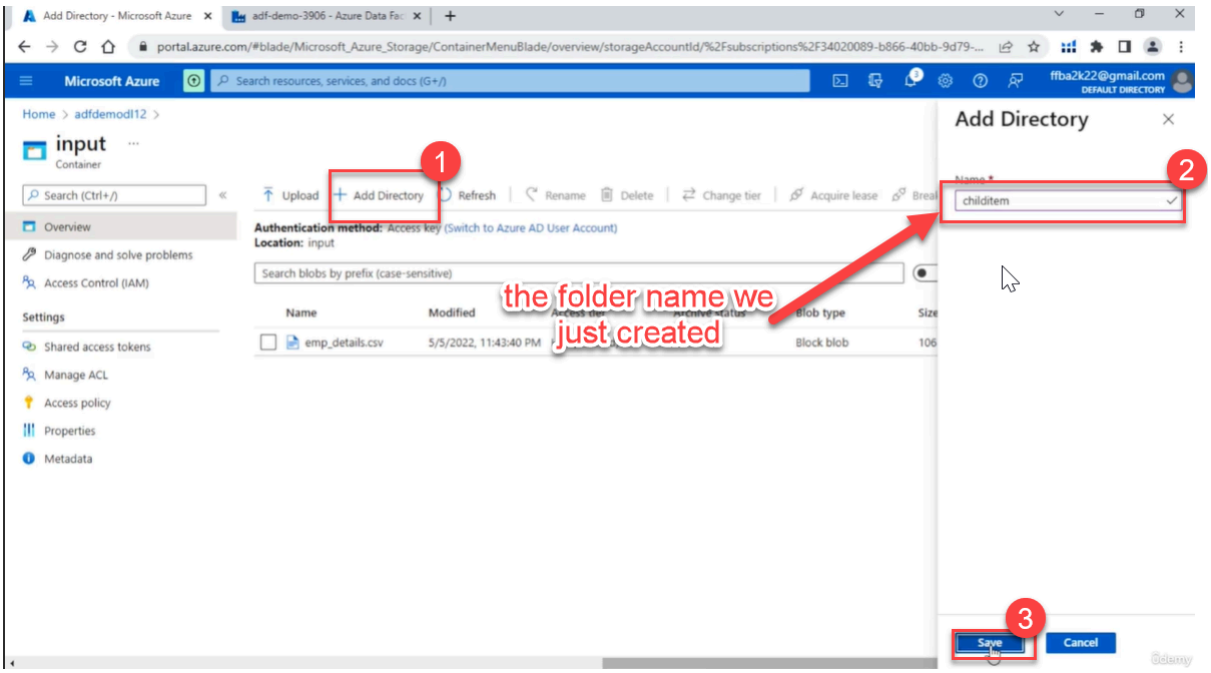

Microsoft Azure
adf-demo-3906
Factory Resources
Activities
delete
General
Delete
Delete1
General
Logging settings
User properties
Delete1
Learn more
Timeout
Retry
Retry interval (sec)
30
Secure output
Secure input
select our delete activity we drag and drop in the avtive board

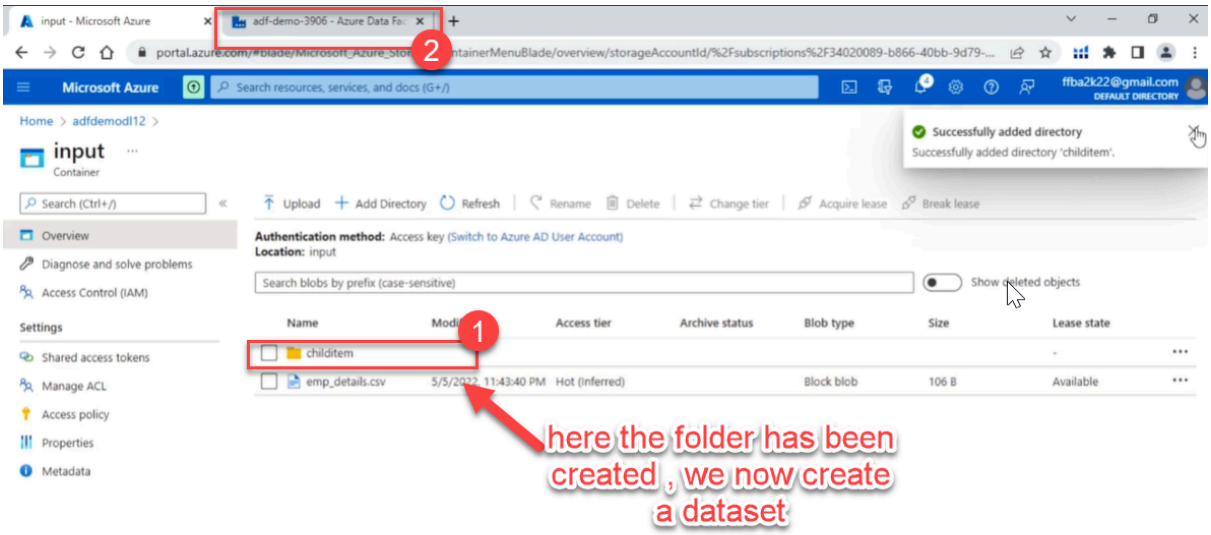

3
here in the source we need to select a data set it can be a file but if it is a folder all the files in that folder will be deleted
1
2
Source
Dataset *
Select...
New
Max concurrent connections

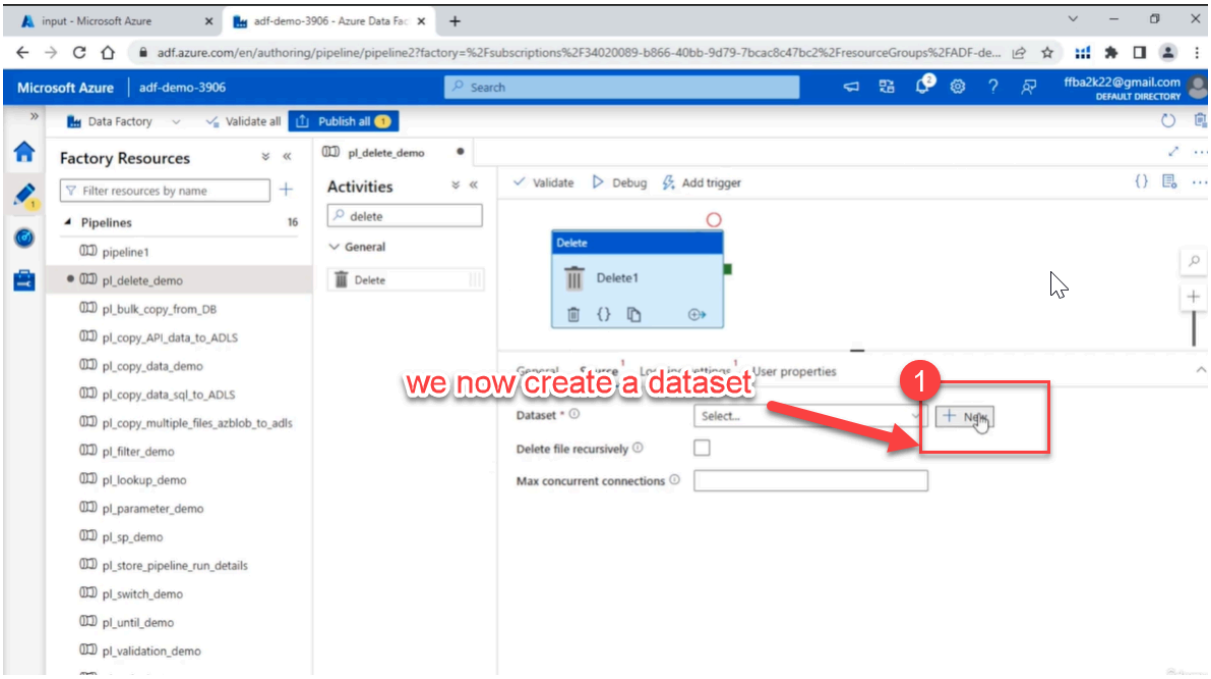

Home - Microsoft Azure
adf-demo-3906 - Azure Data Fac
portal.azure.com/#home
Microsoft Azure
Search resources, services, and docs (G+/)
ffba2k22@gmail.com
DEFAULT DIRECTORY
Azure services
Create a resource
Resource groups
Subscriptions
Cost Management ...
Virtual machines
Key vaults
Function App
Quickstart Center
App Services
More services
we want to delete a particular folder in our ADF
Recent resources
Name
Type
Last Viewed
adfdemosa12
Storage account
a few seconds ago
adfdemodl12
Storage account
2 minutes ago
adf-demo-3906
Data factory (V2)
19 minutes ago
adf-demo-sql-db
SQL database
7 hours ago
EDW
SQL database
7 hours ago
adf-dw-sql-server
SQL server
7 hours ago
ADF-demo-RG
Resource group
7 days ago
adfdwdatalake
Storage account
7 days ago
Free Trial
Subscription
7 days ago
adf-dw-workshop
Data factory (V2)
a week ago
ADF-DW
Resource group
3 weeks ago
4

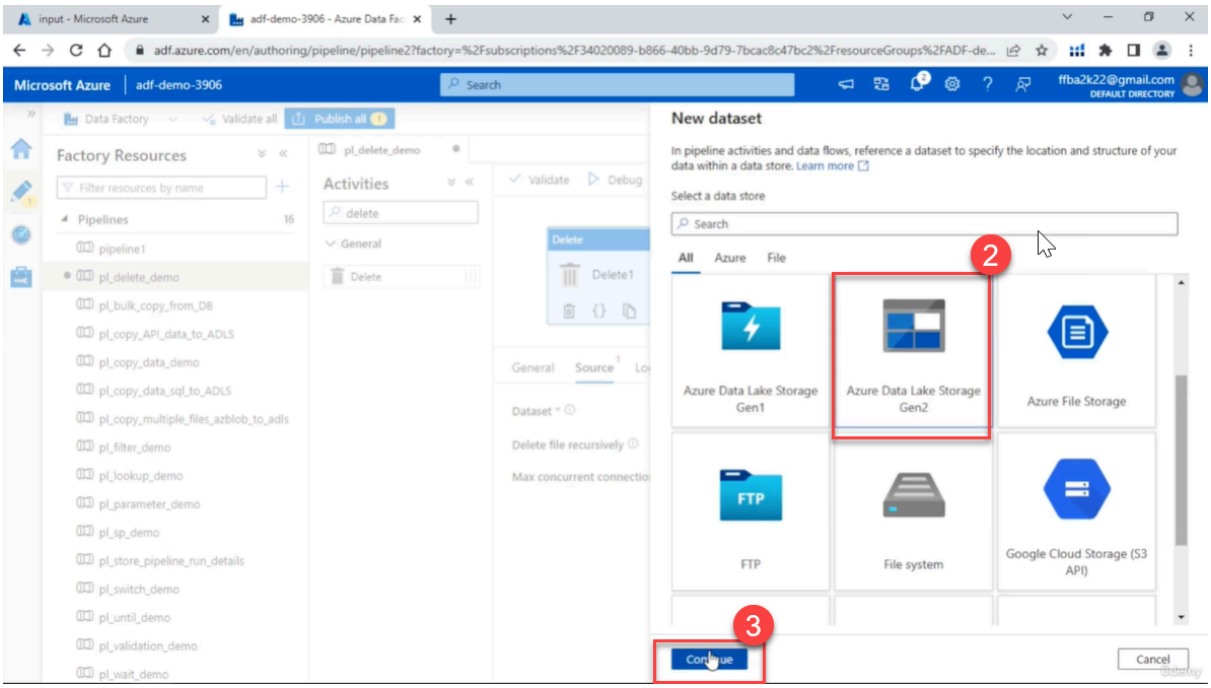

adfdemodl12 - Microsoft Azure
adf-demo-3906 - Azure Data Fac
portal.azure.com/#@ffba2k22gmail.onmicrosoft.com/resource/subscriptions/34020089-b866-40bb-9d79-7bcac8c47bc2/resourceGroups/ADF-demo-RG...
Microsoft Azure
Search resources, services, and docs (G+/)
ffba2k22@gmail.com
DEFAULT DIRECTORY
Home > adfdemodl12
adfdemodl12 | Containers
Storage account
Search (Ctrl+/)
Overview
Activity log
Tags
Diagnose and solve problems
Access Control (IAM)
Data migration
Events
Storage browser (preview)
Data storage
Containers
File shares
Queues
Tables
Security + networking
Networking
Container
Change access level
Restore containers
for example we want to delete this input folder
Search containers by prefix
Show deleted containers
Name
Last modified
Public access level
Lease state
$logs
4/29/2022, 1:32:29 AM
Private
Available
input
5/5/2022, 11:43:17 PM
Private
Available
output
5/2/2022, 10:15:39 PM
Private
Available
5
6

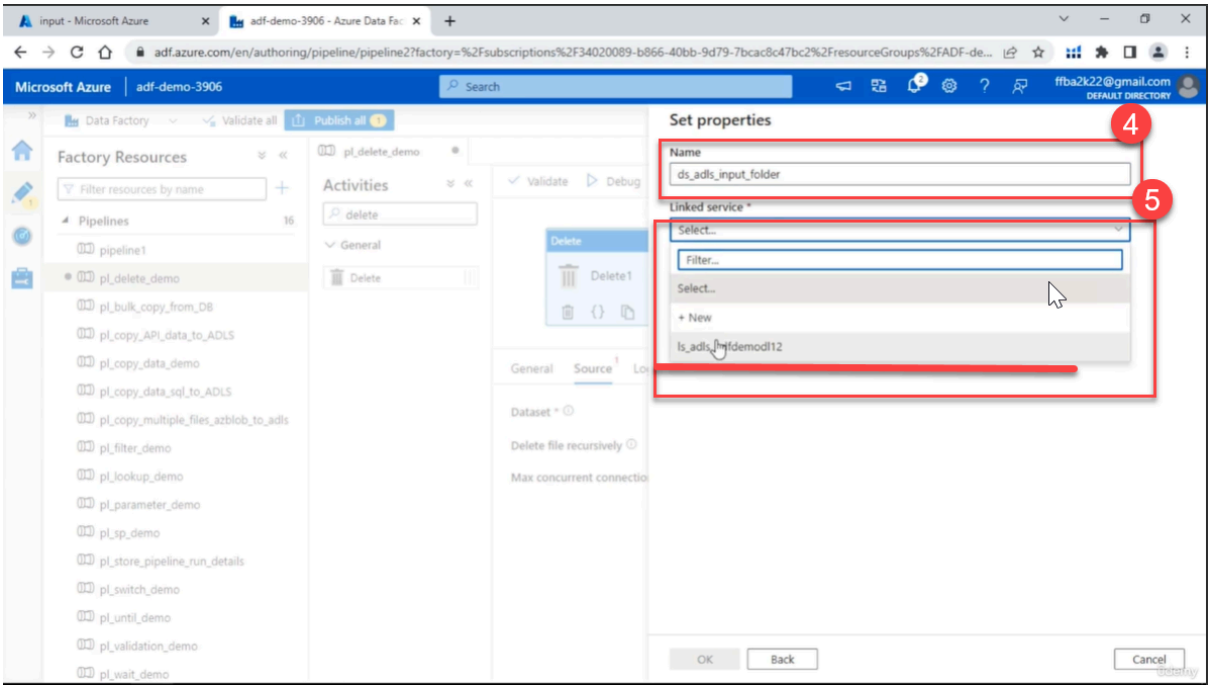

so lets just create a folder here as well
as you can see the folder has only one file
Upload
Add Directory
Refresh
Name
Modified
Access tier
Archive status
Blob type
Size
Lease state
emp_details.csv
5/5/2022, 11:43:40 PM
Hot (Inferred)
Block blob
106 B
Available

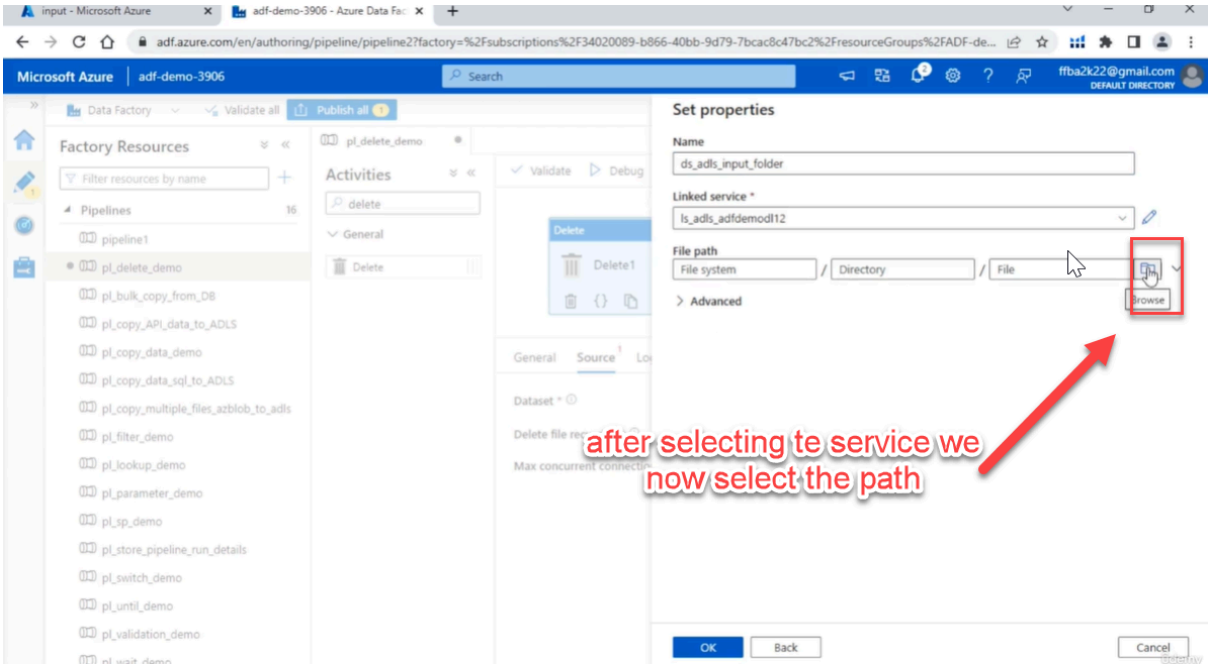

Add Directory
childitem
Save
Cancel
the folder name we just created
Upload
Add Directory
Refresh
Rename
Delete
Change tier
Acquire lease
emp_details.csv
5/5/2022, 11:43:40 PM
Block blob

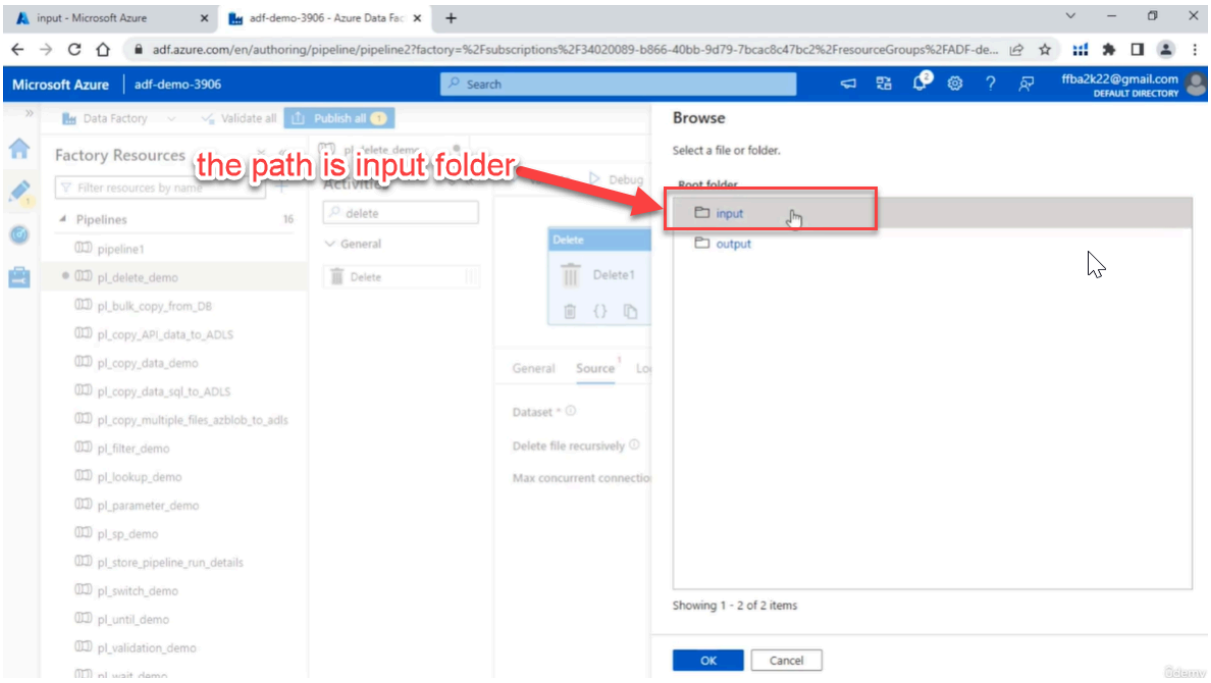

input - Microsoft Azure
adf-demo-3906 - Azure Data Fa
2
Microsoft Azure
Search resources, services, and docs (G+/)
ffba2k22@gmail.com
DEFAULT DIRECTORY
Home > adfdemodl12 >
input
Container
Successfully added directory
Successfully added directory 'childitem'.
Search (Ctrl+/)
Upload
Add Directory
Refresh
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 Azure AD User Account)
Location: input
Search blobs by prefix (case-sensitive)
Show deleted objects
Name
Access tier
Archive status
Blob type
Size
Lease state
1
childitem
emp_details.csv
5/5/2022 11:43:40 PM
Hot (Inferred)
Block blob
106 B
Available
here the folder has been created , we now create a dataset

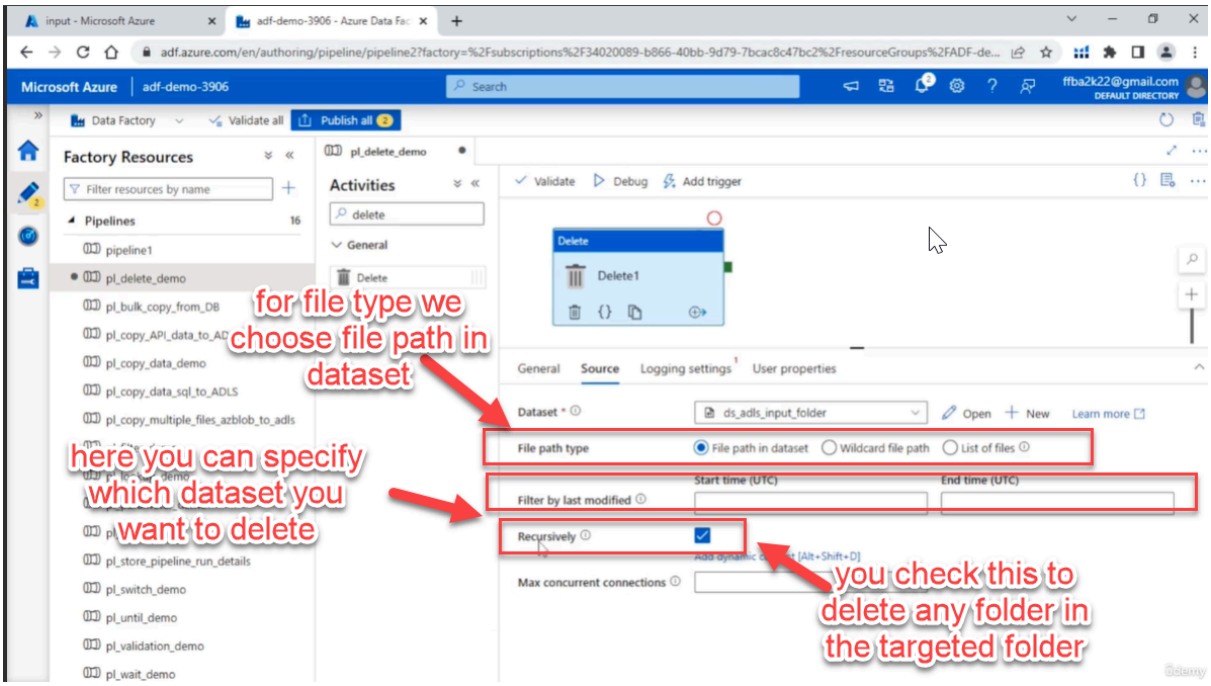

input - Microsoft Azure
adf-demo-3906 - Azure Data Fa
adf.azure.com/en/authoring/pipeline/pipeline2?factory=%2Fsubscriptions%2F34020089-b866-40bb-9d79-7bcac8c47bc2%2FresourceGroups%2FADF-de...
Microsoft Azure
adf-demo-3906
Search
ffba2k22@gmail.com
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines
16
pipeline1
pl_delete_demo
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
pl_until_demo
pl_validation_demo
pl_delete_demo
Activities
delete
General
Delete
Validate
Debug
Add trigger
Delete
Delete1
we now create a dataset
1
User properties
Dataset *
Select...
New
Delete file recursively
Max concurrent connections

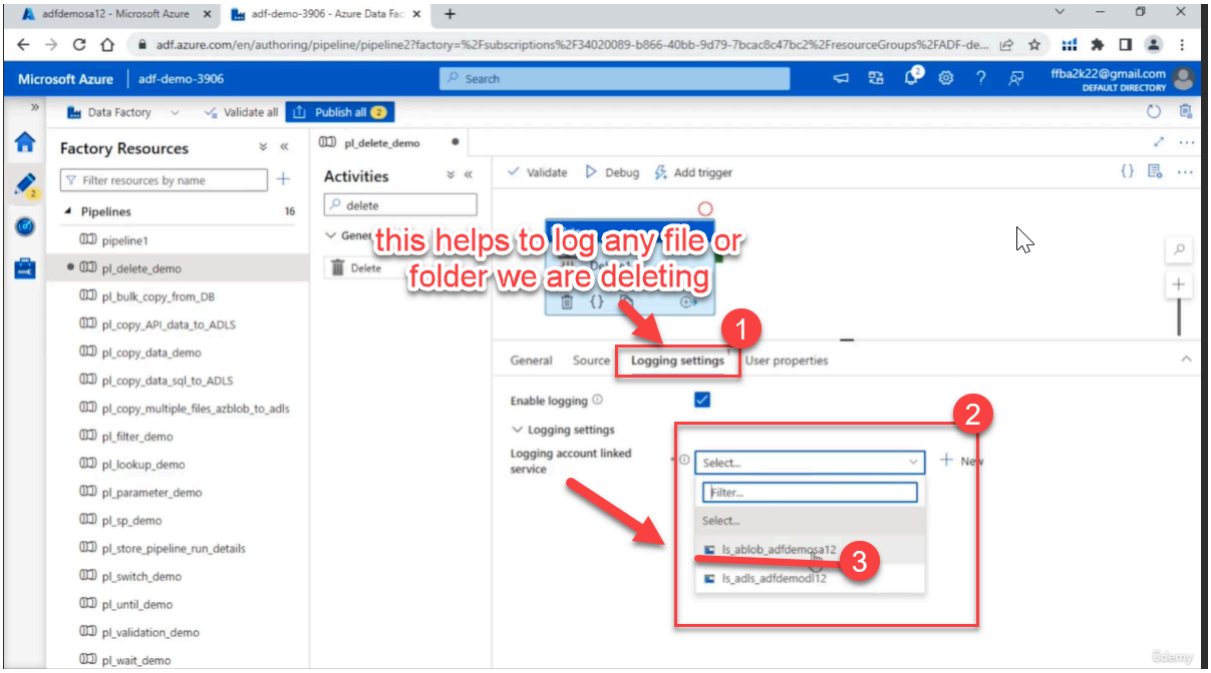

input - Microsoft Azure
adf-demo-3906 - Azure Data Fac
adf.azure.com/en/authoring/pipeline/pipeline2?factory=%2Fsubscriptions%2F34020089-b866-40bb-9d79-7bcac8c47bc2%2FresourceGroups%2FADF-de...
Microsoft Azure
adf-demo-3906
Search
ffba2k22@gmail.com
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines
16
pipeline1
pl_delete_demo
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
pl_until_demo
pl_validation_demo
pl_wait_demo
pl_delete_demo
Activities
delete
General
Delete
Delete1
Validate
Debug
General
Source
Dataset *
Delete file recursively
Max concurrent connectio
New dataset
In pipeline activities and data flows, reference a dataset to specify the location and structure of your data within a data store. Learn more
Select a data store
Search
All
Azure
File
2
Azure Data Lake Storage Gen1
Azure Data Lake Storage Gen2
Azure File Storage
FTP
FTP
File system
Google Cloud Storage (S3 API)
3
Continue
Cancel

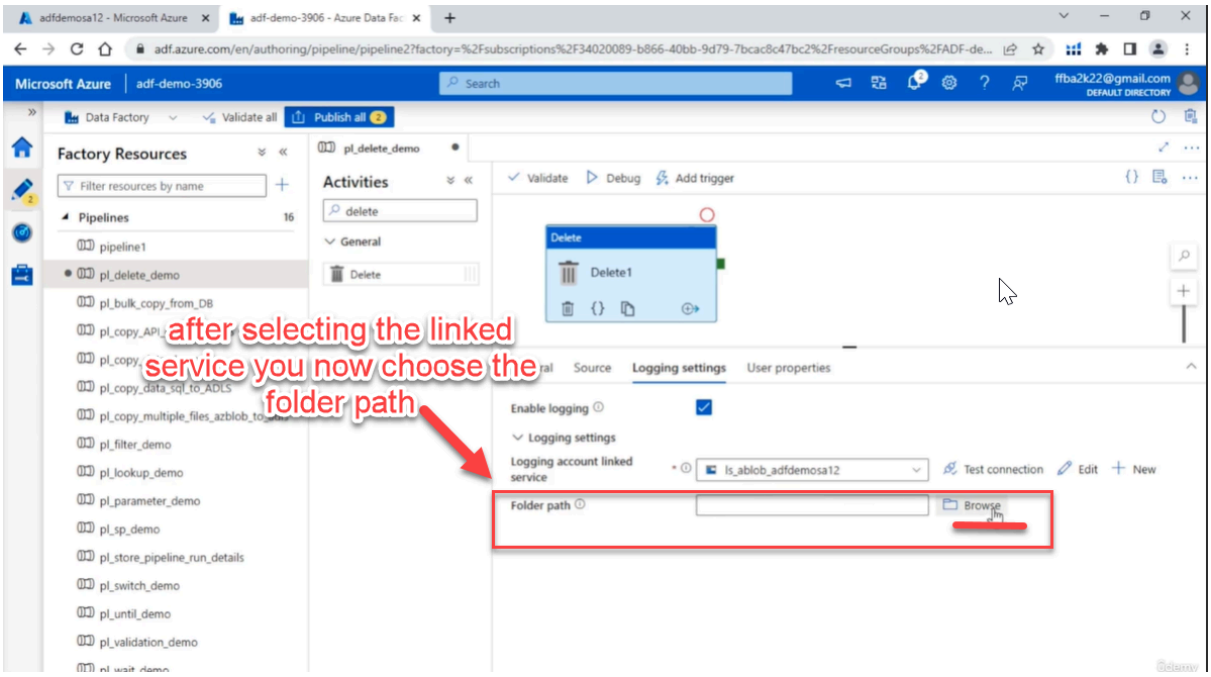

input - Microsoft Azure
adf-demo-3906 - Azure Data Fac
adf.azure.com/en/authoring/pipeline/pipeline2?factory=%2Fsubscriptions%2F34020089-b866-40bb-9d79-7bcac8c47bc2%2FresourceGroups%2FADF-de...
Microsoft Azure
adf-demo-3906
Search
ffba2k22@gmail.com
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines
16
pipeline1
pl_delete_demo
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
pl_until_demo
pl_validation_demo
pl_wait_demo
pl_delete_demo
Activities
delete
General
Delete
Delete1
Validate
Debug
General
Source
Dataset *
Delete file recursively
Max concurrent connectio
Set properties
4
Name
ds_adls_input_folder
5
Linked service *
Select...
Filter...
Select...
+ New
ls_adls_hrfdemodl12
OK
Back
Cancel

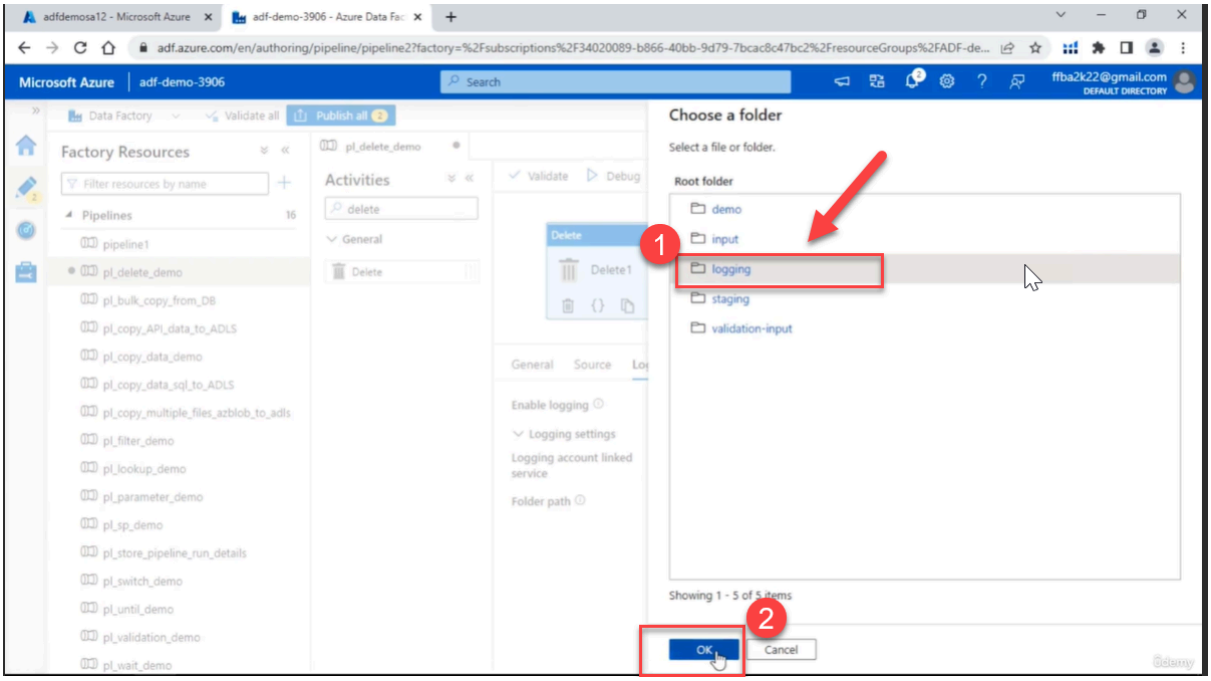

Microsoft Azure
adf-demo-3906
Set properties
Name
ds_adls_input_folder
Linked service *
ls_adls_adfdemodl12
File path
File system
Directory
File
Browse
Advanced
after selecting te service we
now select the path
OK
Back
Cancel

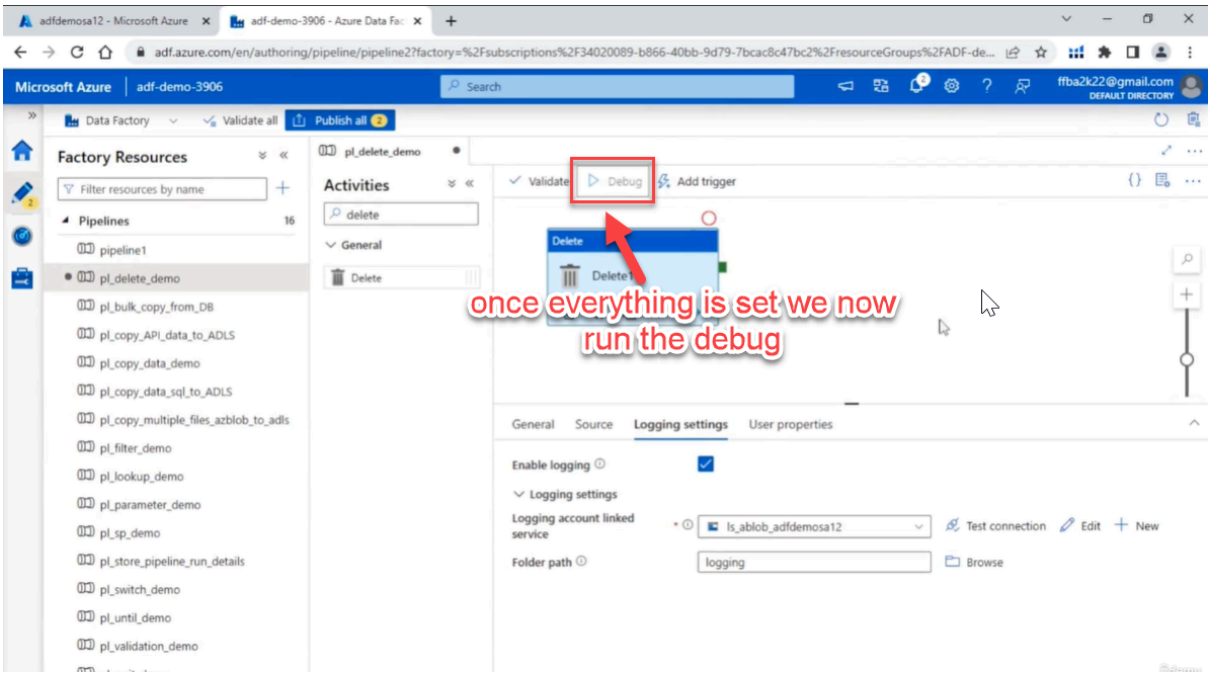

Microsoft Azure
adf-demo-3906
the path is input folder
Browse
Select a file or folder.
input
output
Showing 1 - 2 of 2 items
OK
Cancel

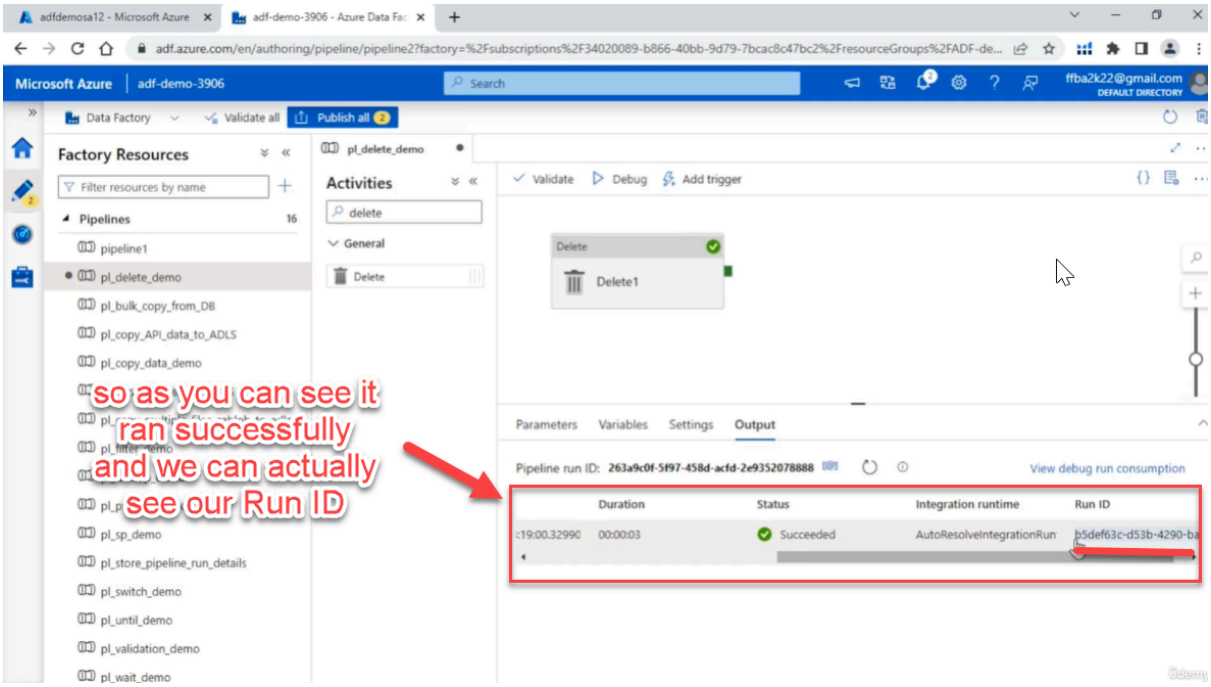

for file type we choose file path in dataset
here you can specify which dataset you want to delete
you check this to delete any folder in the targeted folder
Factory Resources
Activities
pl_delete_demo
Delete1
General
Source
Logging settings
User properties
Dataset
File path type
File path in dataset
Wildcard file path
List of files
Filter by last modified
Recursively
Max concurrent connections

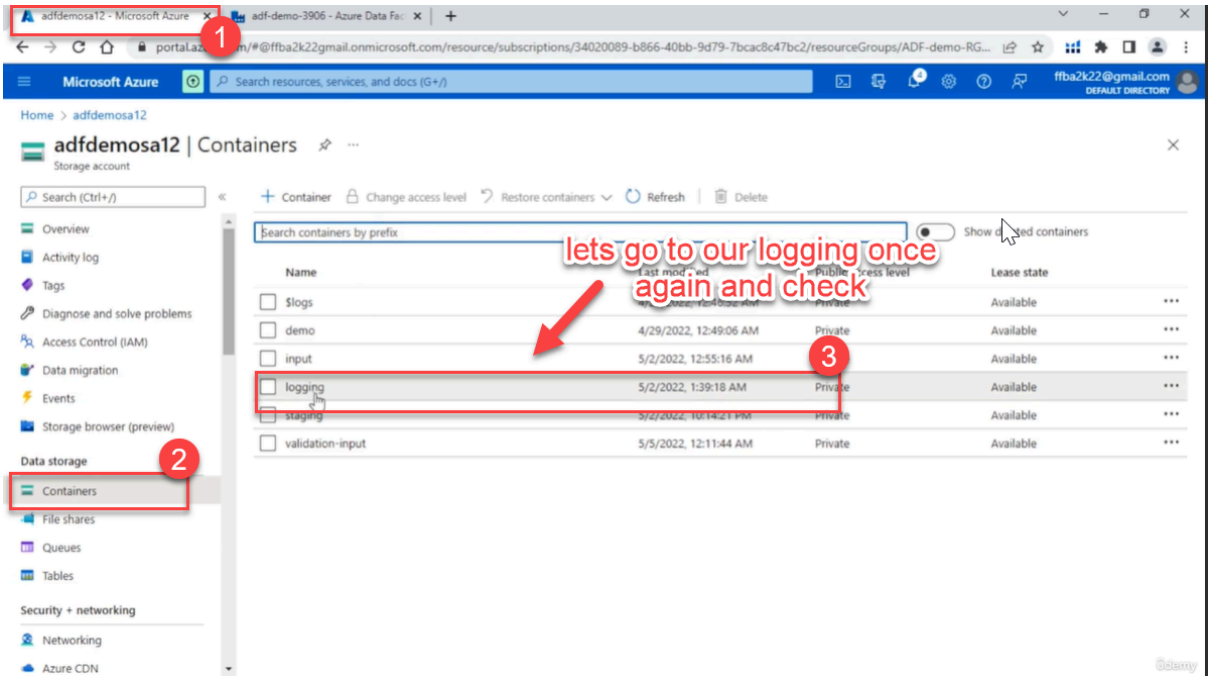

this helps to log any file or folder we are deleting
1
2
3
Logging settings
Enable logging
Logging account linked service
ls_ablob_adfdemosa12
ls_adls_adfdemodl12

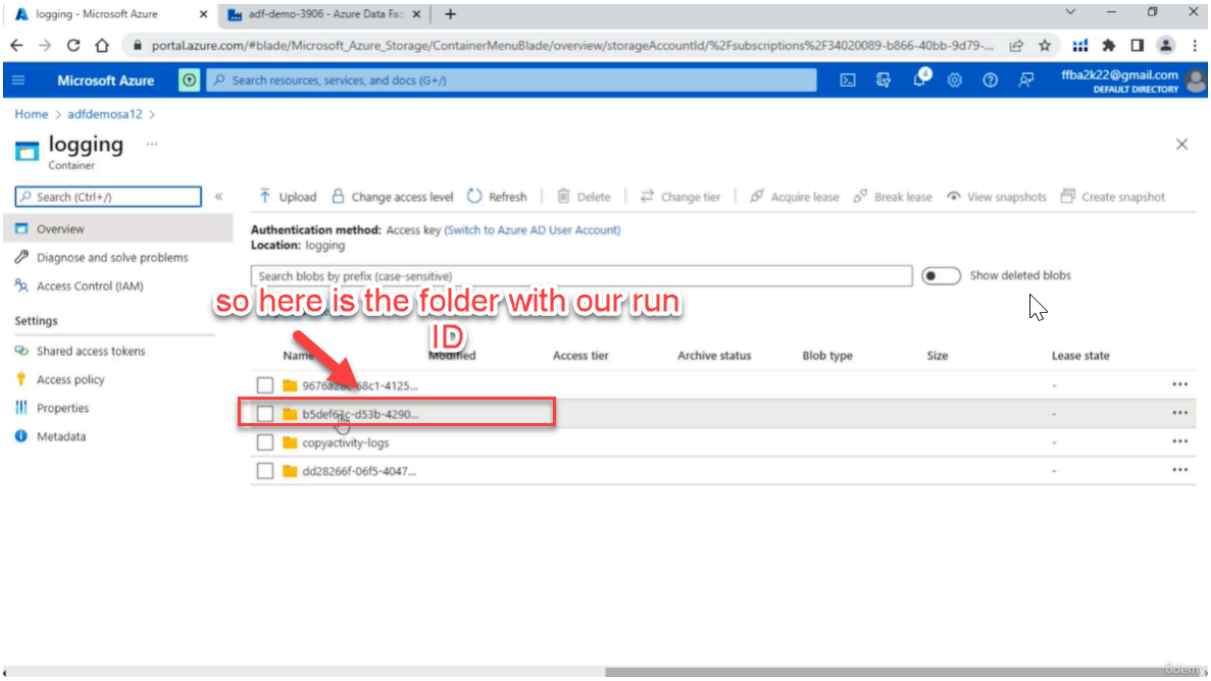

after selecting the linked service you now choose the folder path
Factory Resources
Activities
pl_delete_demo
Delete
Delete1
Source
Logging settings
User properties
Enable logging
Logging settings
Logging account linked service
ls_ablob_adfdemosa12
Test connection
Edit
New
Folder path
Browse

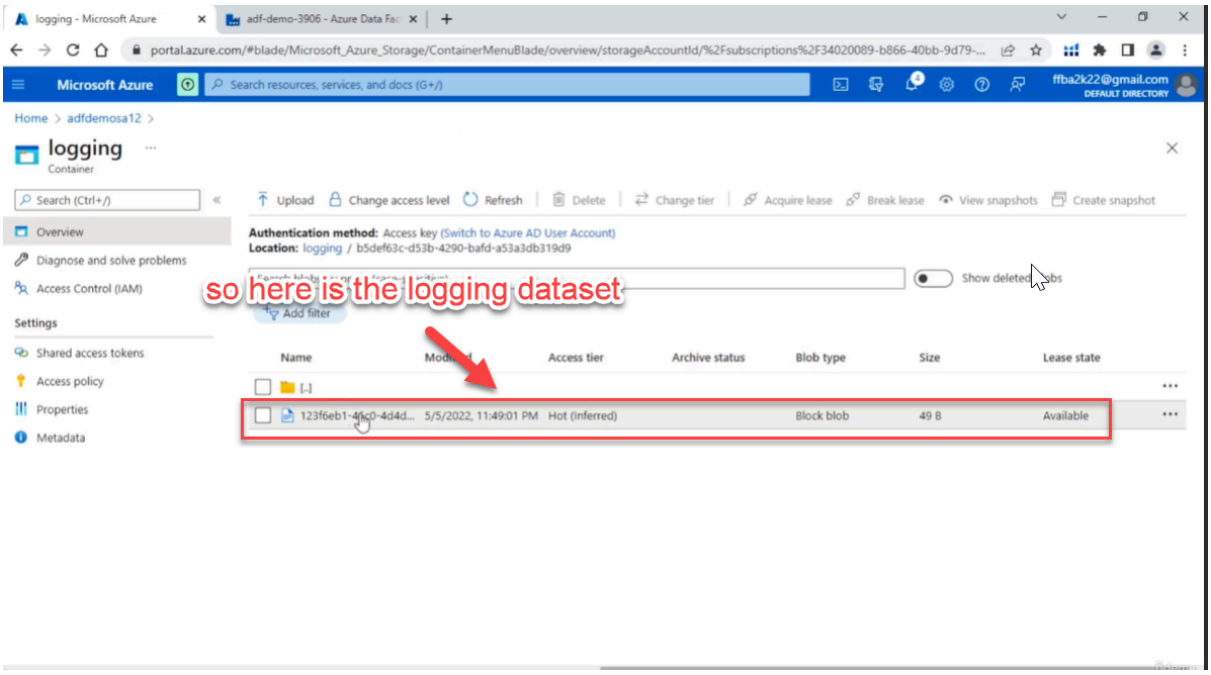

Choose a folder
Select a file or folder.
Root folder
demo
input
logging
staging
validation-input
1
2
OK
Cancel
Showing 1 - 5 of 5 items

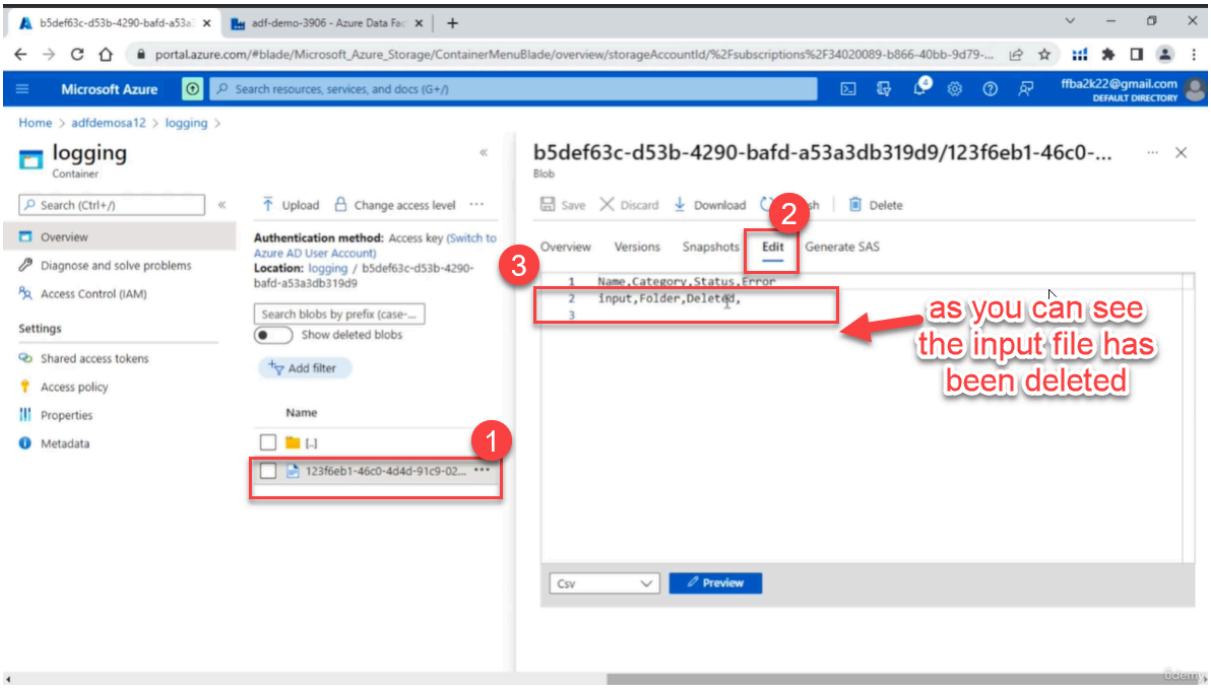

Microsoft Azure
adf-demo-3906
Search
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines
pipeline1
pl_delete_demo
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
pl_until_demo
pl_validation_demo
Activities
delete
General
Delete
Validate
Debug
Add trigger
Delete
Delete1
once everything is set we now run the debug
General
Source
Logging settings
User properties
Enable logging
Logging settings
Logging account linked service
ls_ablob_adfdemosa12
Test connection
Edit
New
Folder path
logging
Browse


Microsoft Azure
adf-demo-3906
Search
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines
pipeline1
pl_delete_demo
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
pl_until_demo
pl_validation_demo
pl_wait_demo
Activities
delete
General
Delete
Validate
Debug
Add trigger
Delete
Delete1
so as you can see it ran successfully and we can actually see our Run ID
Parameters
Variables
Settings
Output
Pipeline run ID: 263a9c0f-5f97-458d-acfd-2e9352078888
View debug run consumption
Duration
Status
Integration runtime
Run ID
00:00:03
Succeeded
AutoResolveIntegrationRun

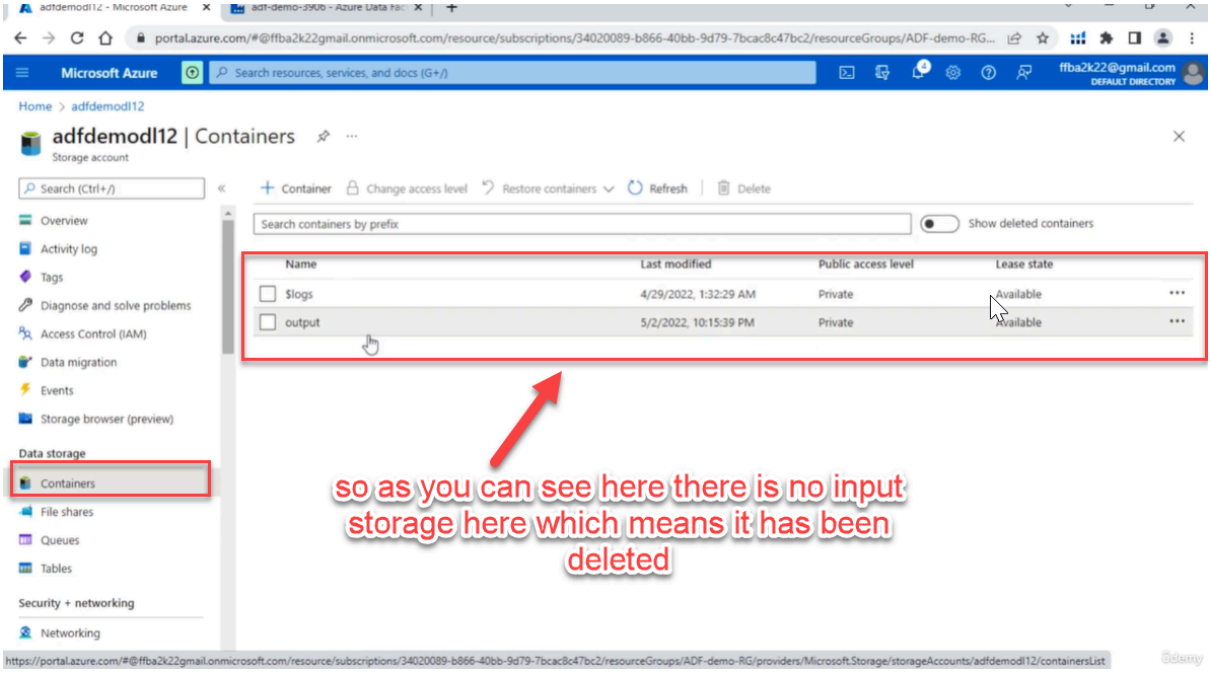

1
Microsoft Azure
Search resources, services, and docs (G+/)
ffba2k22@gmail.com
DEFAULT DIRECTORY
Home > adfdemosa12
adfdemosa12 | Containers
Storage account
Search (Ctrl+/)
Container
Change access level
Restore containers
Refresh
Delete
Overview
Activity log
Tags
Diagnose and solve problems
Access Control (IAM)
Data migration
Events
Storage browser (preview)
Data storage
2
Containers
File shares
Queues
Tables
Security + networking
Networking
Azure CDN
Search containers by prefix
Show deleted containers
lets go to our logging once again and check
Name
Last modified
Public access level
Lease state
$logs
Available
demo
4/29/2022, 12:49:06 AM
Private
Available
input
5/2/2022, 12:55:16 AM
Private
Available
3
logging
5/2/2022, 1:39:18 AM
Private
Available
staging
Private
Available
validation-input
5/5/2022, 12:11:44 AM
Private
Available

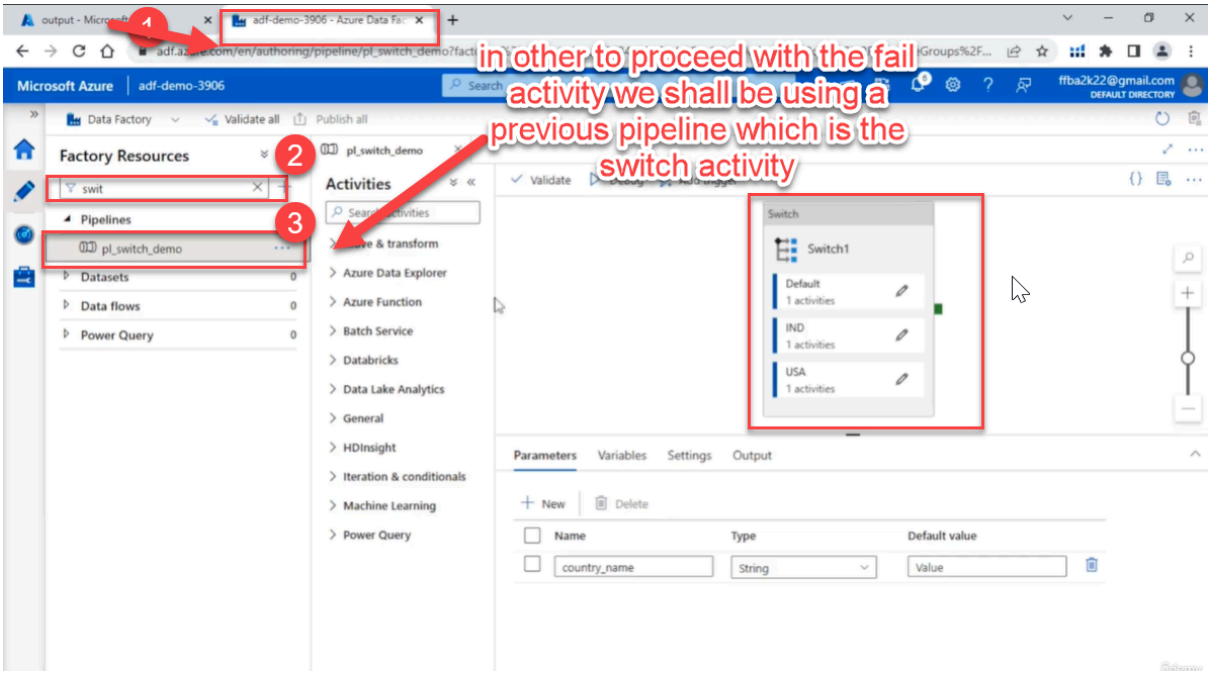

logging - Microsoft Azure
adf-demo-3906 - Azure Data Fac
portal.azure.com/#blade/Microsoft_Azure_Storage/ContainerMenuBlade/overview/storageAccountId/%2Fsubscriptions%2F34020089-b866-40bb-9d79-...
Microsoft Azure
Search resources, services, and docs (G+/)
ffba2k22@gmail.com
DEFAULT DIRECTORY
Home > adfdemosa12 >
logging
Container
Search (Ctrl+/)
Upload
Change access level
Refresh
Delete
Change tier
Acquire lease
Break lease
View snapshots
Create snapshot
Overview
Diagnose and solve problems
Access Control (IAM)
Settings
Shared access tokens
Access policy
Properties
Metadata
Authentication method: Access key (Switch to Azure AD User Account)
Location: logging
Search blobs by prefix (case-sensitive)
Show deleted blobs
so here is the folder with our run ID
Name
Modified
Access tier
Archive status
Blob type
Size
Lease state
9676a2bc-68c1-4125...
b5def62c-d53b-4290...
copyactivity-logs
dd28266f-06f5-4047...

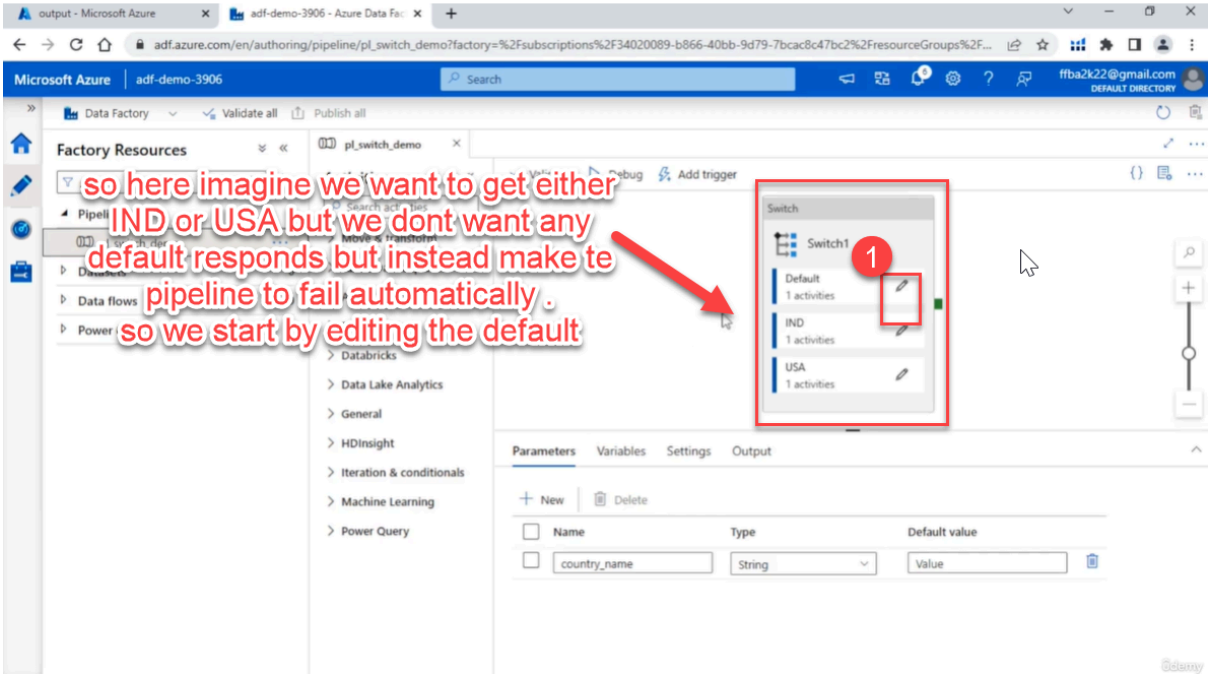


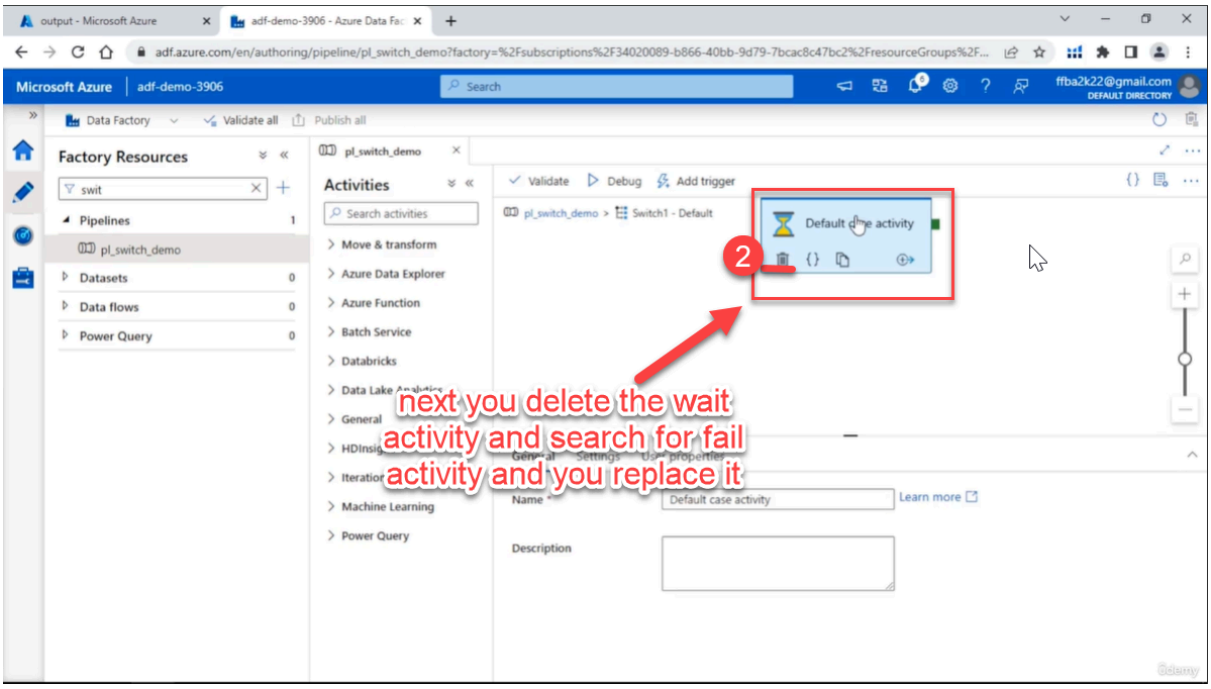


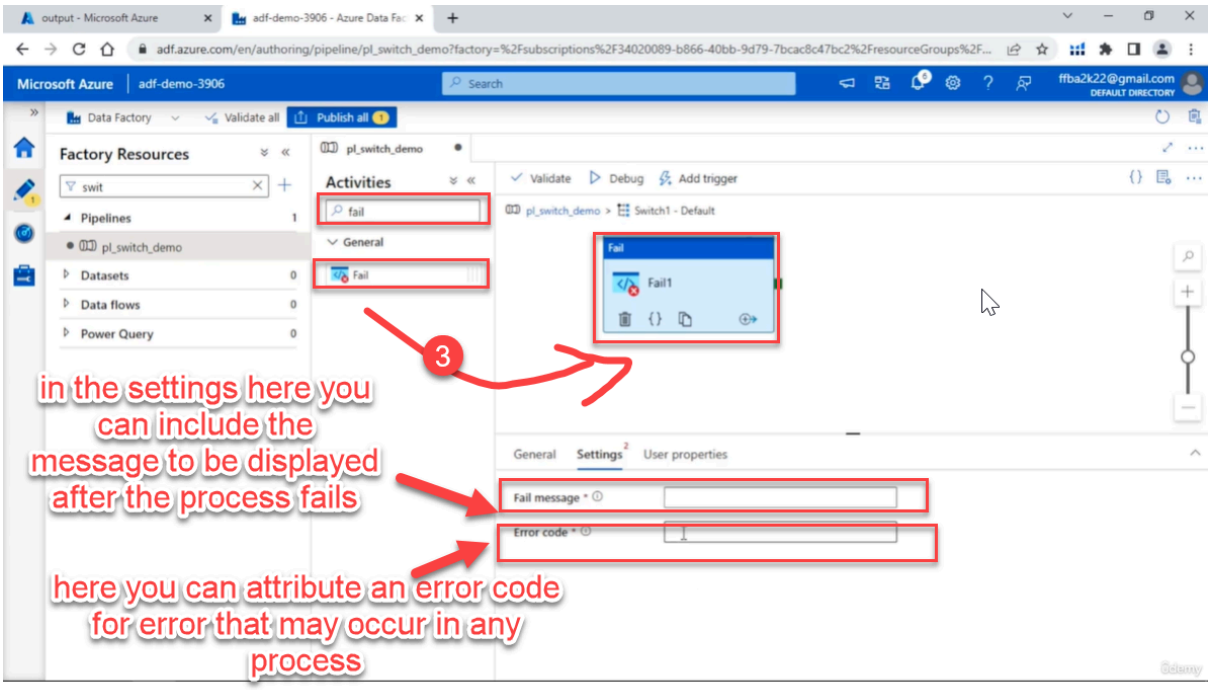
1/4/2024 jeudi

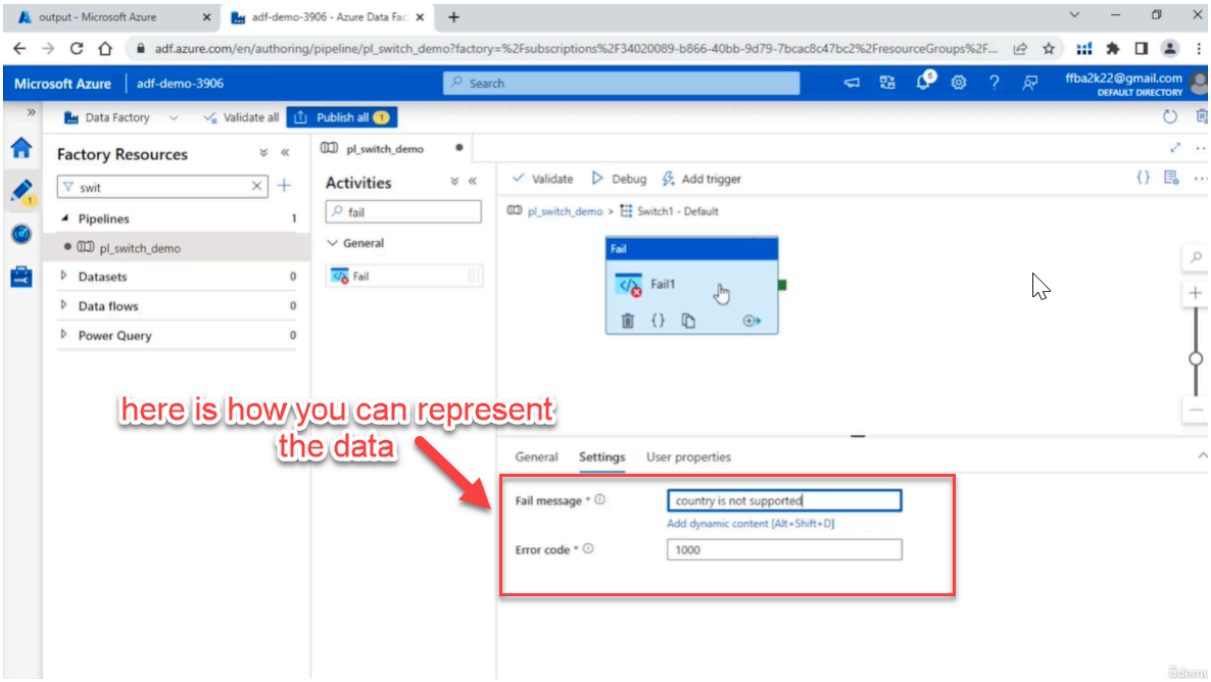

Microsoft Azure
Search resources, services, and docs (G+/)
ffba2k22@gmail.com
DEFAULT DIRECTORY
Home > adfdemodl12
adfdemodl12 | Containers
Storage account
Search (Ctrl+/)
Container
Change access level
Restore containers
Refresh
Delete
Overview
Activity log
Tags
Diagnose and solve problems
Access Control (IAM)
Data migration
Events
Storage browser (preview)
Data storage
Containers
File shares
Queues
Tables
Security + networking
Networking
Search containers by prefix
Show deleted containers
Name
Last modified
Public access level
Lease state
$logs
4/29/2022, 1:32:29 AM
Private
Available
output
5/2/2022, 10:15:39 PM
Private
Available
so as you can see here there is no input storage here which means it has been deleted

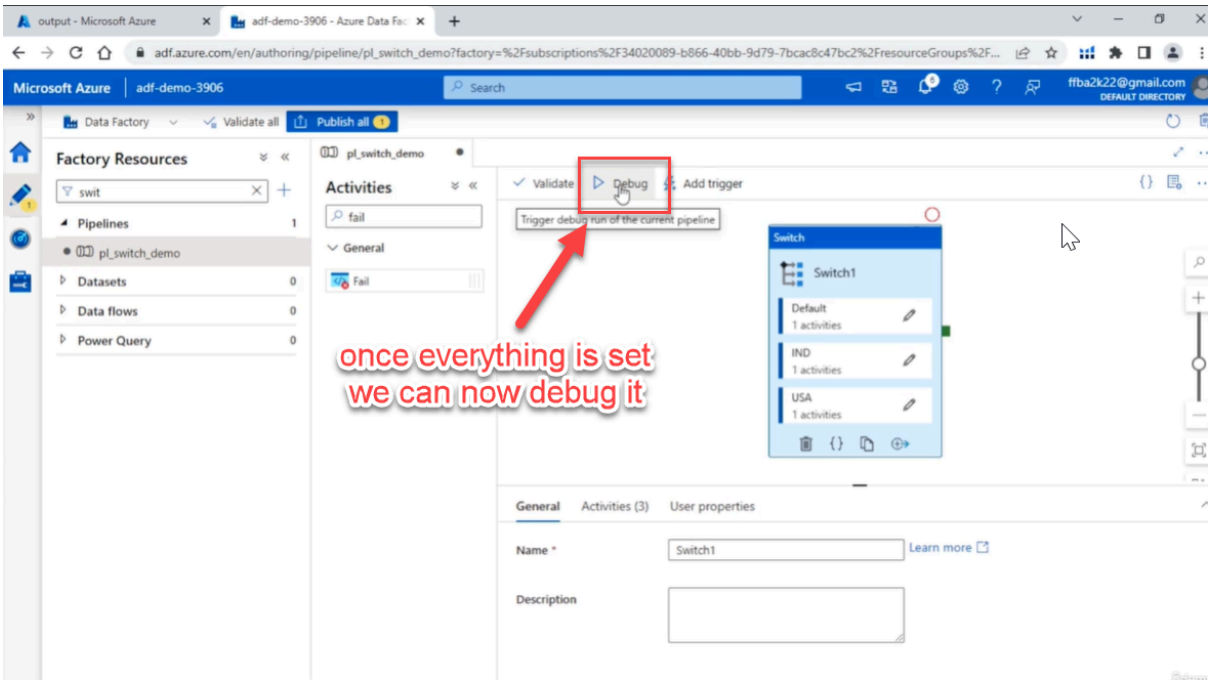

Microsoft Azure
adf-demo-3906
ffba2k22@gmail.com
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
Factory Resources
swit
Pipelines
pl_switch_demo
Datasets
Data flows
Power Query
pl_switch_demo
Activities
Azure Data Explorer
Azure Function
Batch Service
Databricks
Data Lake Analytics
General
HDInsight
Iteration & conditionals
Machine Learning
Power Query
Validate
Switch
Switch1
Default
1 activities
IND
1 activities
USA
1 activities
Parameters
Variables
Settings
Output
New
Delete
Name
Type
Default value
country_name
String
Value
in other to proceed with the fail activity we shall be using a previous pipeline which is the switch activity

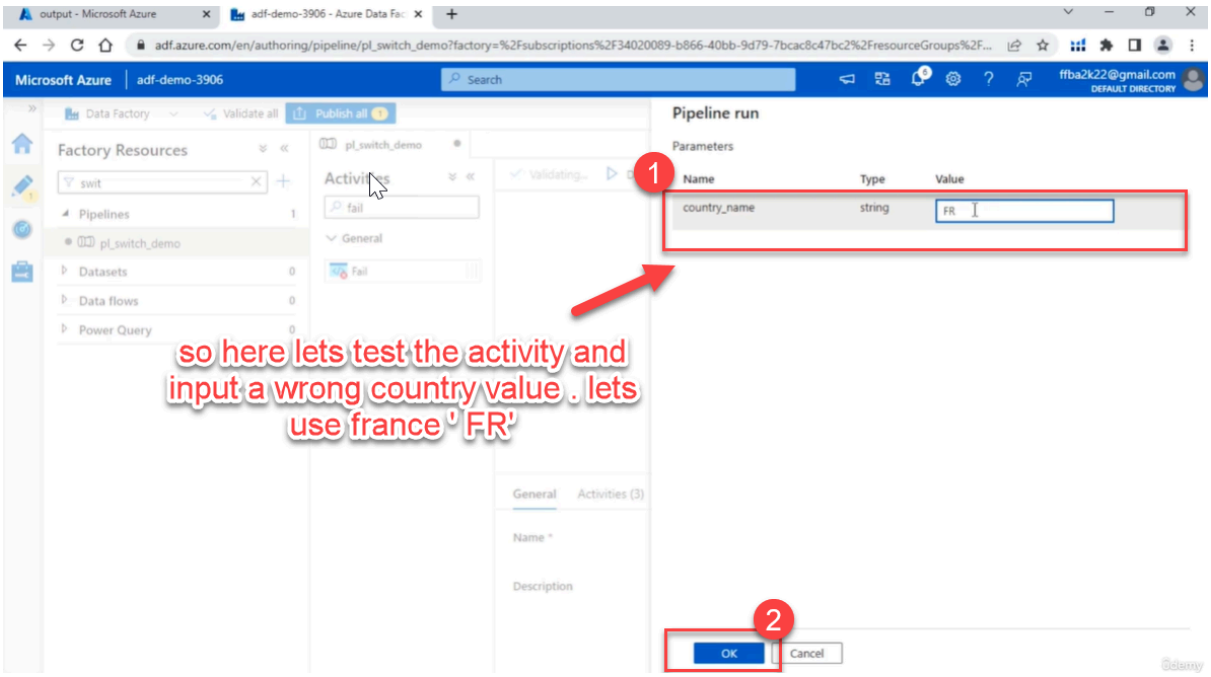

so here imagine we want to get either
IND or USA but we dont want any
default responds but instead make te
pipeline to fail automatically .
so we start by editing the default
Factory Resources
pl_switch_demo
Switch
Switch1
1
Default
1 activities
IND
1 activities
USA
1 activities
Parameters
Variables
Settings
Output
New
Delete
Name
Type
Default value
country_name
String
Value

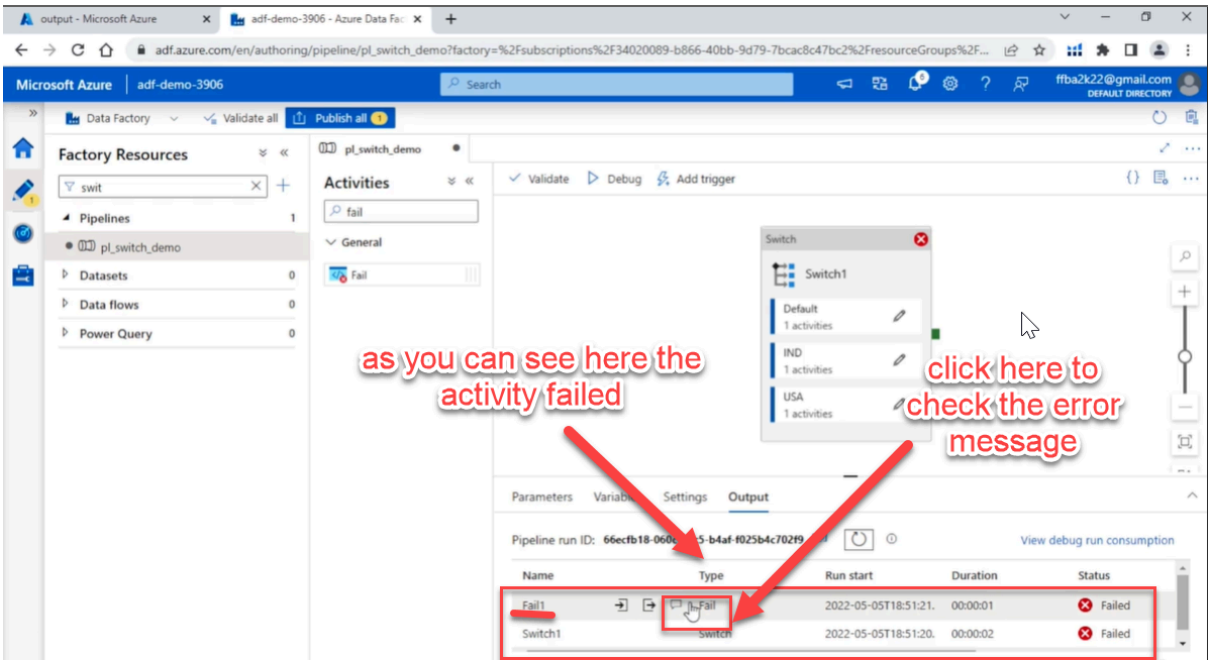

Factory Resources
Activities
Pipelines
pl_switch_demo
Datasets
Data flows
Power Query
Move & transform
Azure Data Explorer
Azure Function
Batch Service
Databricks
General
Machine Learning
Power Query
Validate
Debug
Add trigger
Switch1 - Default
2
next you delete the wait
activity and search for fail
activity and you replace it
Name
Default case activity
Learn more
Description

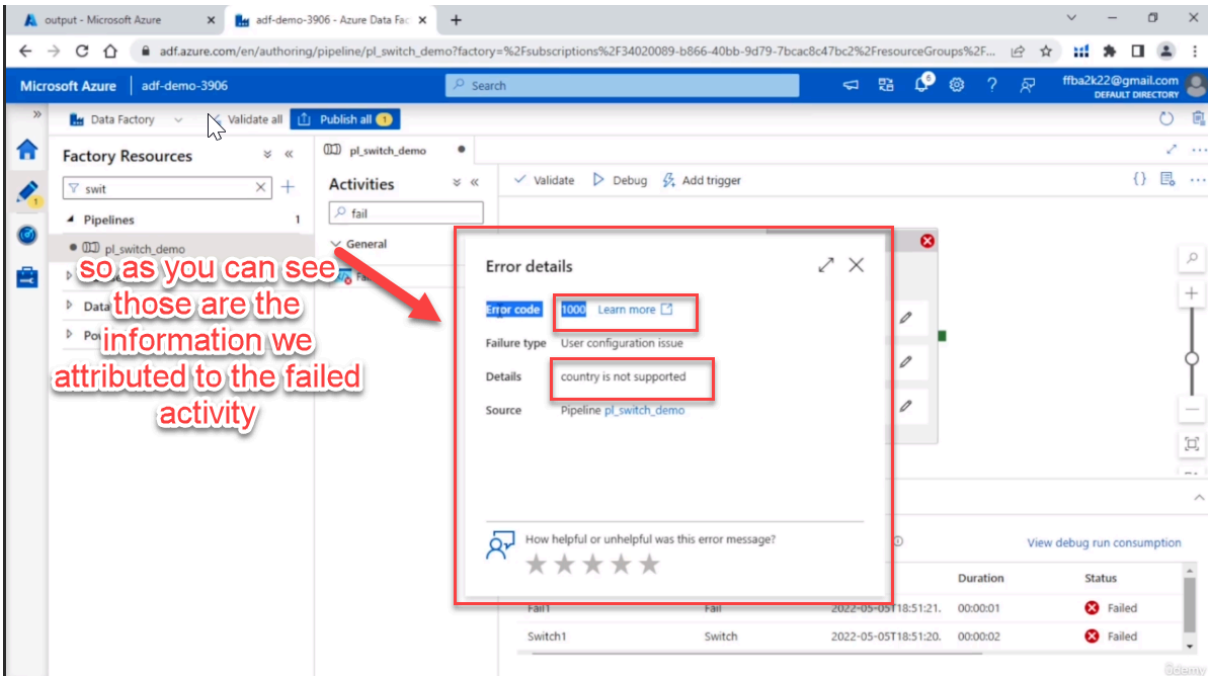

Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines
pl_switch_demo
Datasets
Data flows
Power Query
Activities
fail
General
Fail
Validate
Debug
Add trigger
Fail1
3
in the settings here you can include the message to be displayed after the process fails
here you can attribute an error code for error that may occur in any process
General
Settings
User properties
Fail message *
Error code *


Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines
pl_switch_demo
Datasets
Data flows
Power Query
Activities
fail
General
Fail
Validate
Debug
Add trigger
Fail1
here is how you can represent the data
General
Settings
User properties
Fail message *
country is not supported
Add dynamic content [Alt+Shift+D]
Error code *
1000


Microsoft Azure
adf-demo-3906
Search
Data Factory
Validate all
Publish all
Factory Resources
Pipelines
pl_switch_demo
Datasets
Data flows
Power Query
Activities
Validate
Debug
Add trigger
Trigger debug run of the current pipeline
Switch
Switch1
Default
1 activities
IND
1 activities
USA
1 activities
General
Activities (3)
User properties
Name *
Switch1
Learn more
Description
once everything is set
we can now debug it

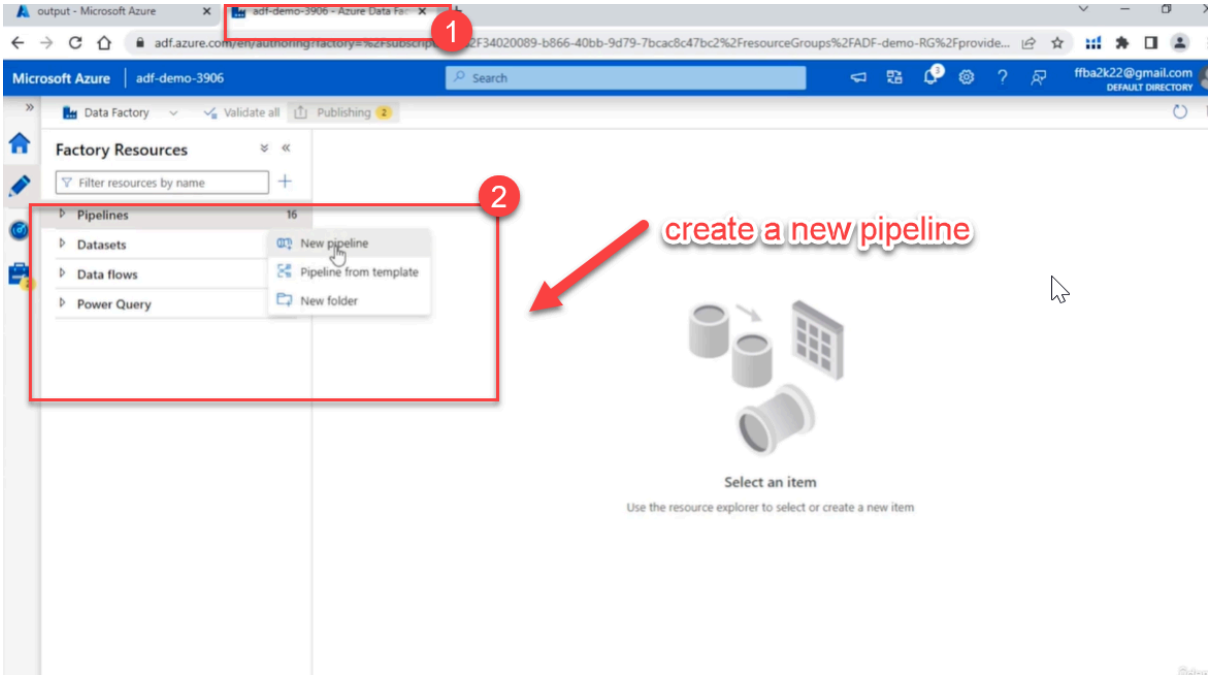

Microsoft Azure
adf-demo-3906
Search
Pipeline run
Parameters
Name
Type
Value
country_name
string
FR
1
2
OK
Cancel
so here lets test the activity and
input a wrong country value . lets
use france ' FR'

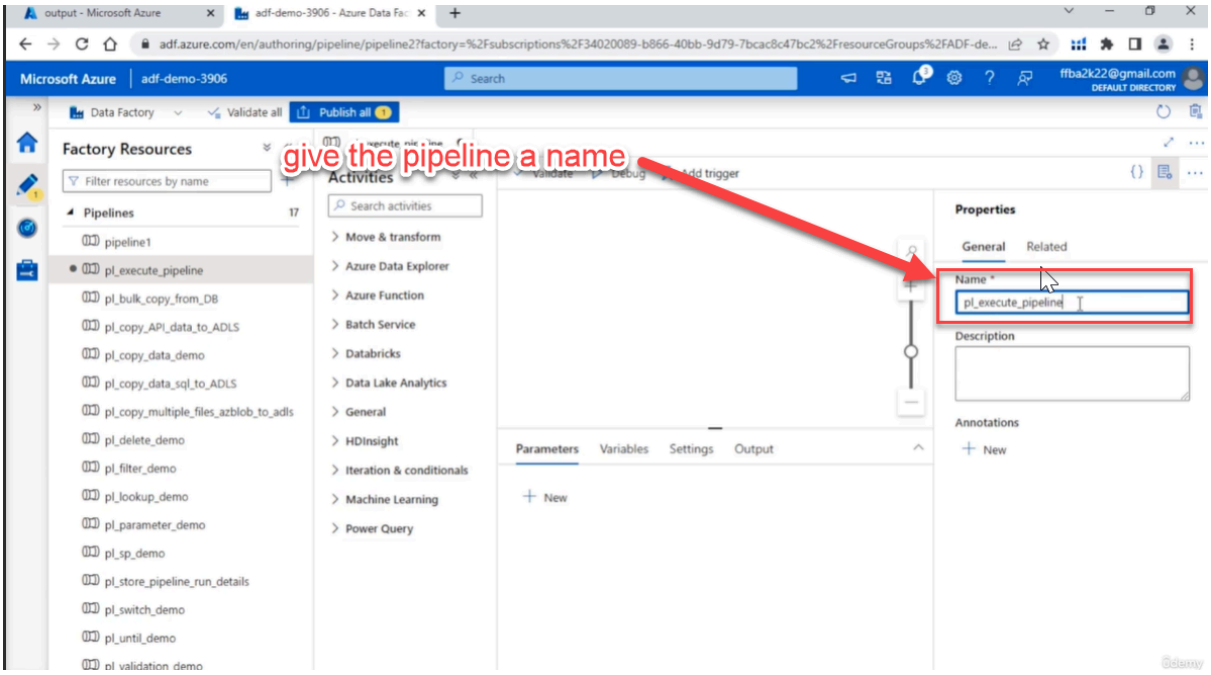

as you can see here the activity failed
click here to check the error message
Factory Resources
Activities
Validate
Debug
Add trigger
Parameters
Settings
Output
Name
Type
Run start
Duration
Status
Fail1
Switch1
Failed

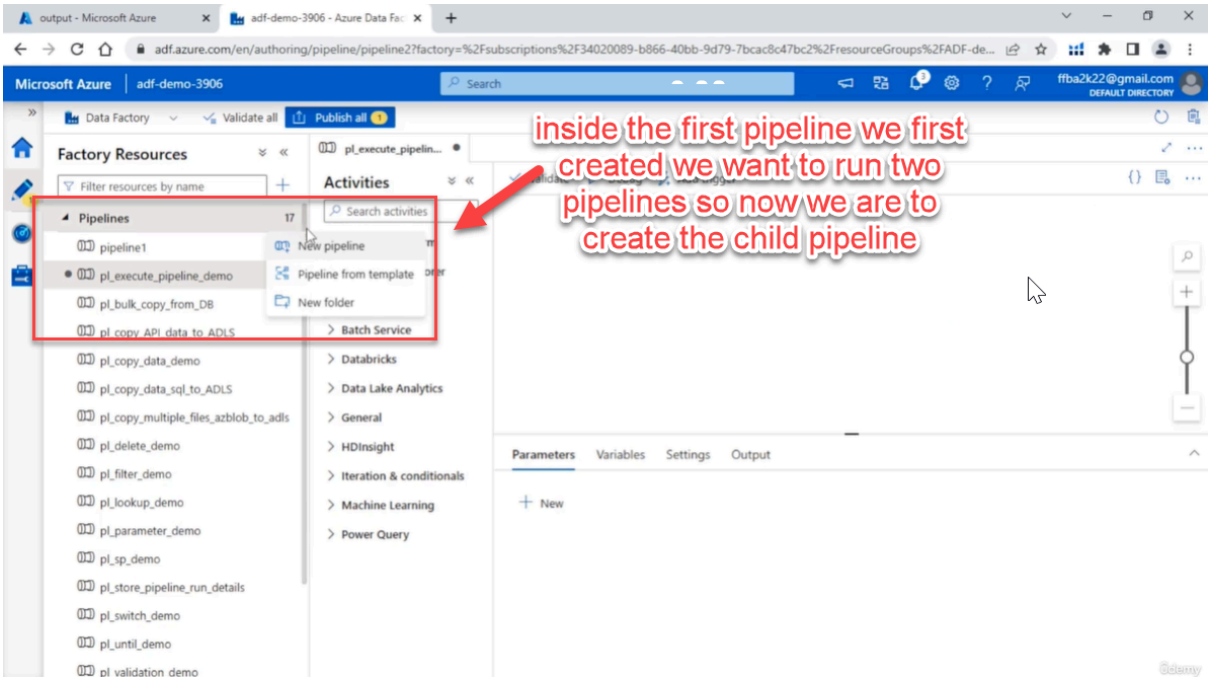

so as you can see those are the information we attributed to the failed activity
Error details
Error code
1000
Learn more
Failure type
User configuration issue
Details
country is not supported
Source
Pipeline pl_switch_demo
How helpful or unhelpful was this error message?
View debug run consumption
Duration
Status
Failed

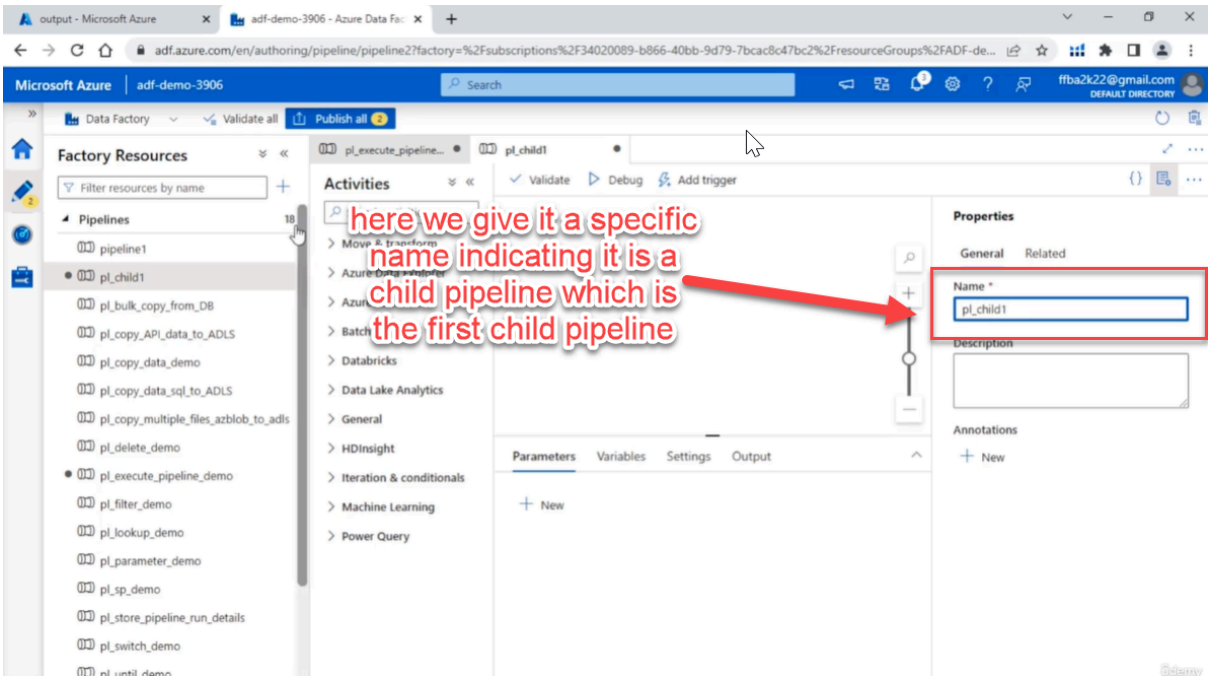
Execute Pipeline

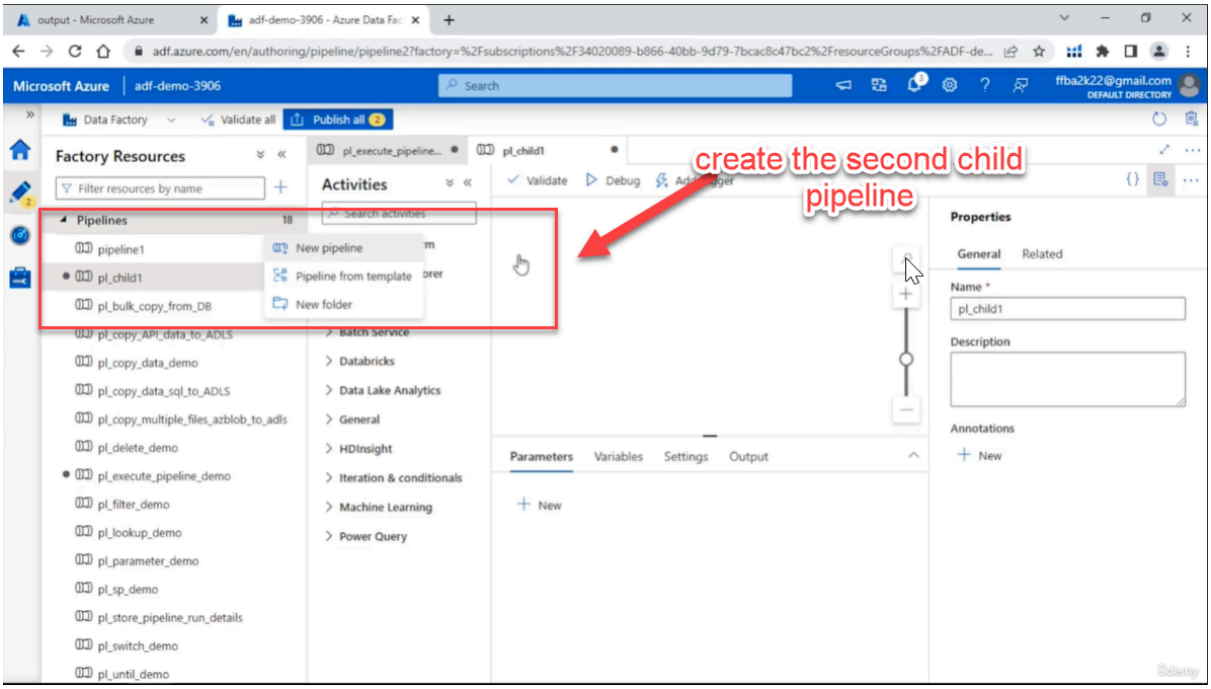
The Execute Pipeline activity allows a Data Factory pipeline to invoke another pipeline.

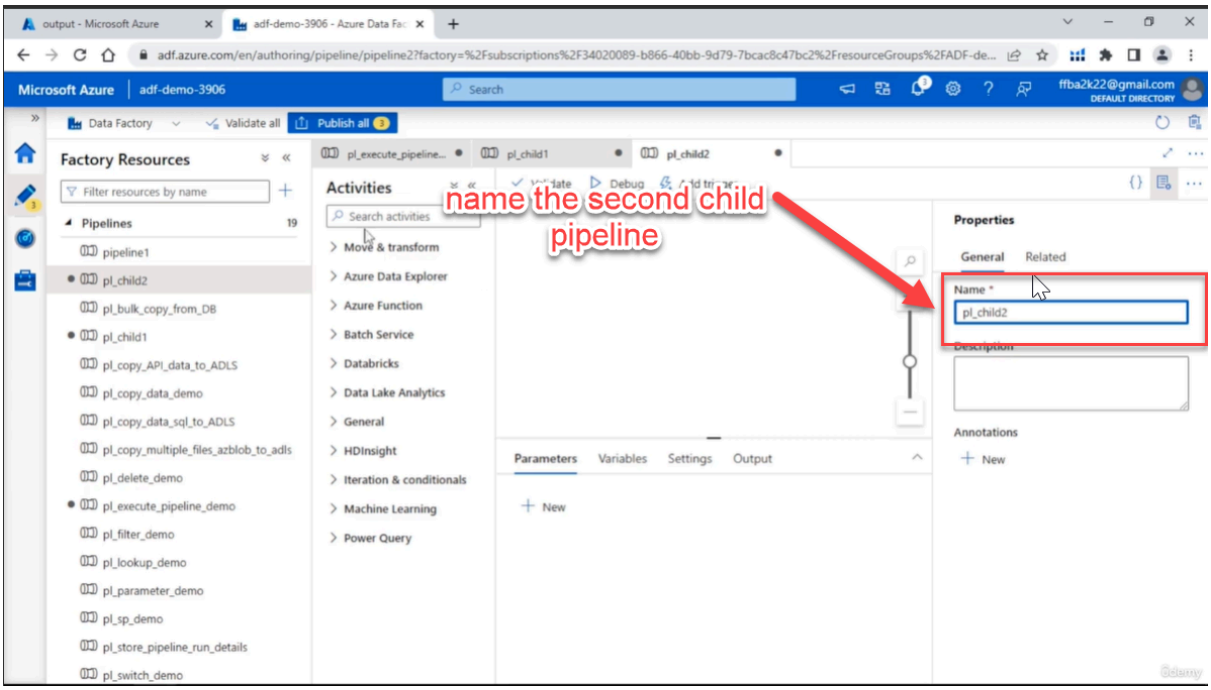


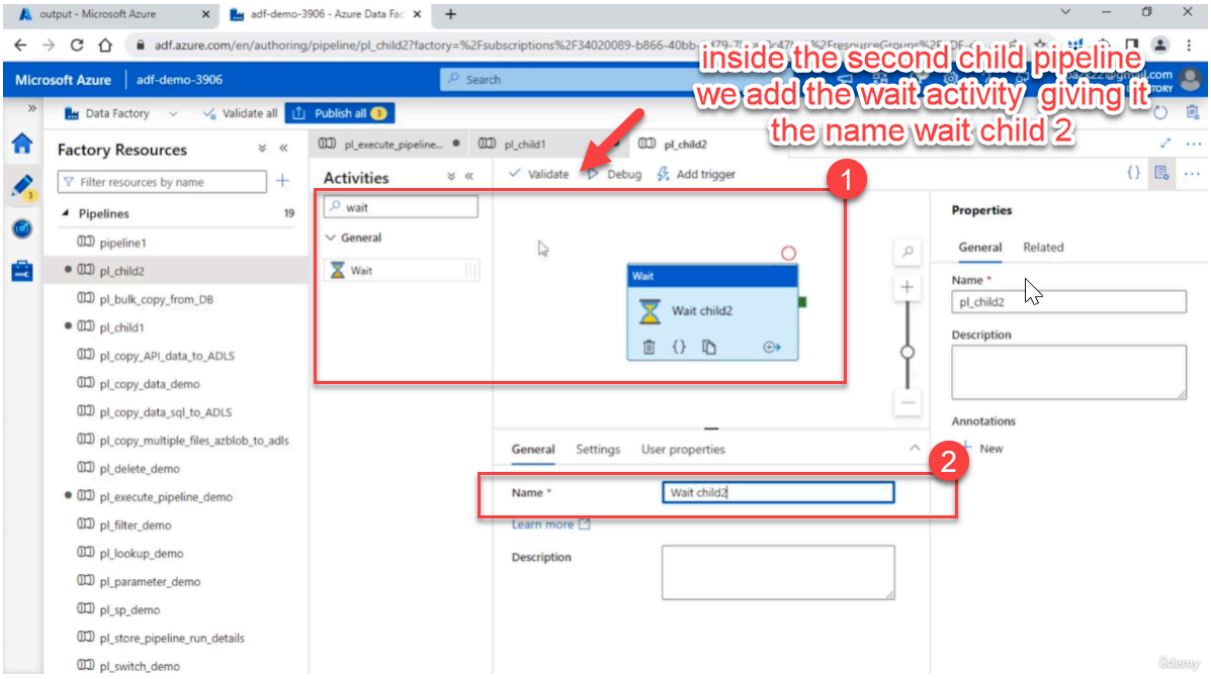

give the pipeline a name
Factory Resources
Pipelines
pipeline1
pl_execute_pipeline
Activities
Properties
General
Related
Name *
pl_execute_pipeline
Description
Annotations
Parameters
Variables
Settings
Output
New

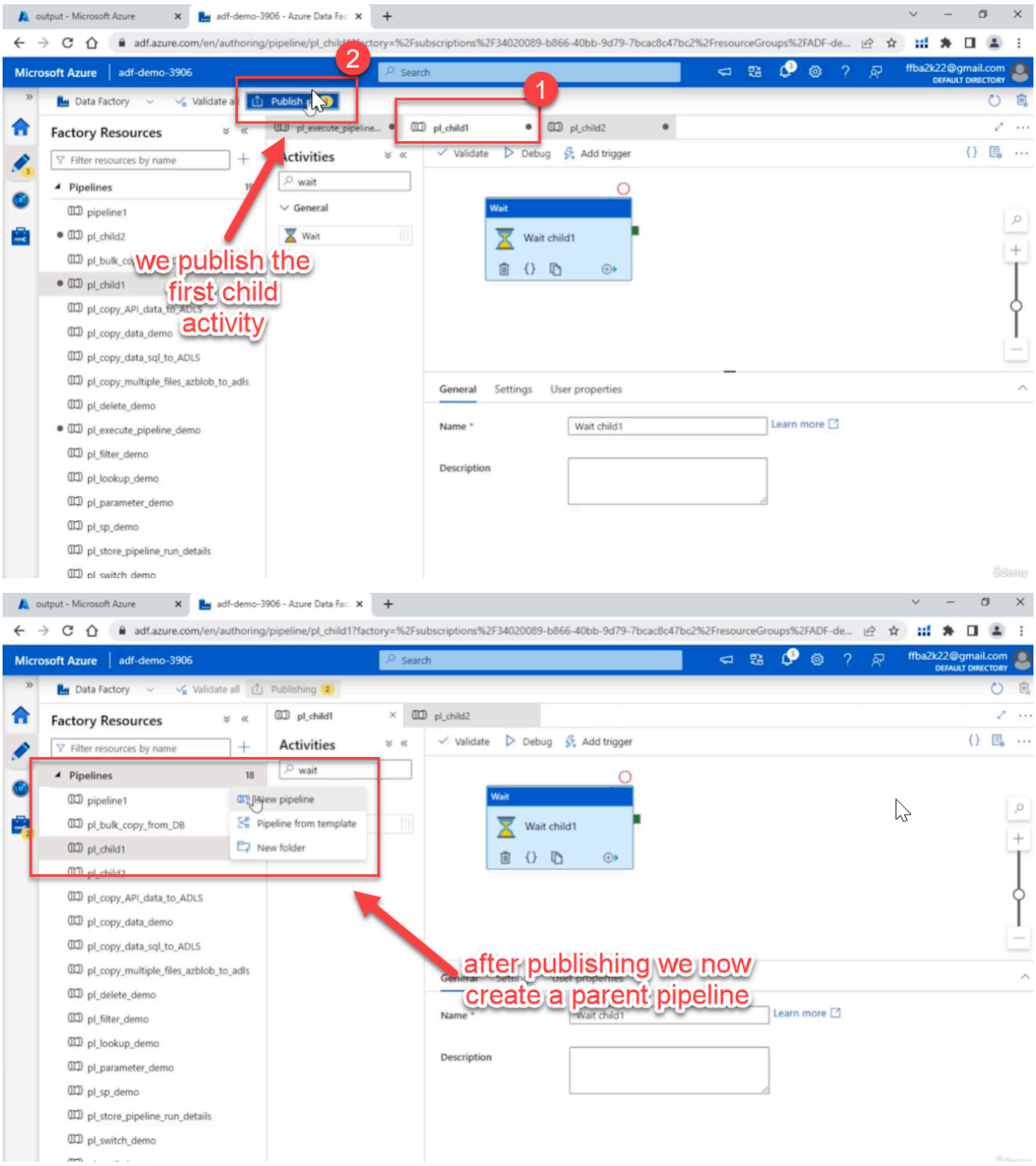

inside the first pipeline we first created we want to run two pipelines so now we are to create the child pipeline
Factory Resources
Pipelines
pipeline1
pl_execute_pipeline_demo
New pipeline
Pipeline from template
New folder
Activities
Parameters
Variables
Settings
Output
New


here we give it a specific name indicating it is a child pipeline which is the first child pipeline
Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines
pipeline1
pl_child1
pl_bulk_copy_from_DB
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_delete_demo
pl_execute_pipeline_demo
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
Activities
Databricks
Data Lake Analytics
General
HDInsight
Iteration & conditionals
Machine Learning
Power Query
Validate
Debug
Add trigger
Parameters
Variables
Settings
Output
New
Properties
General
Related
Name *
pl_child1
Description
Annotations

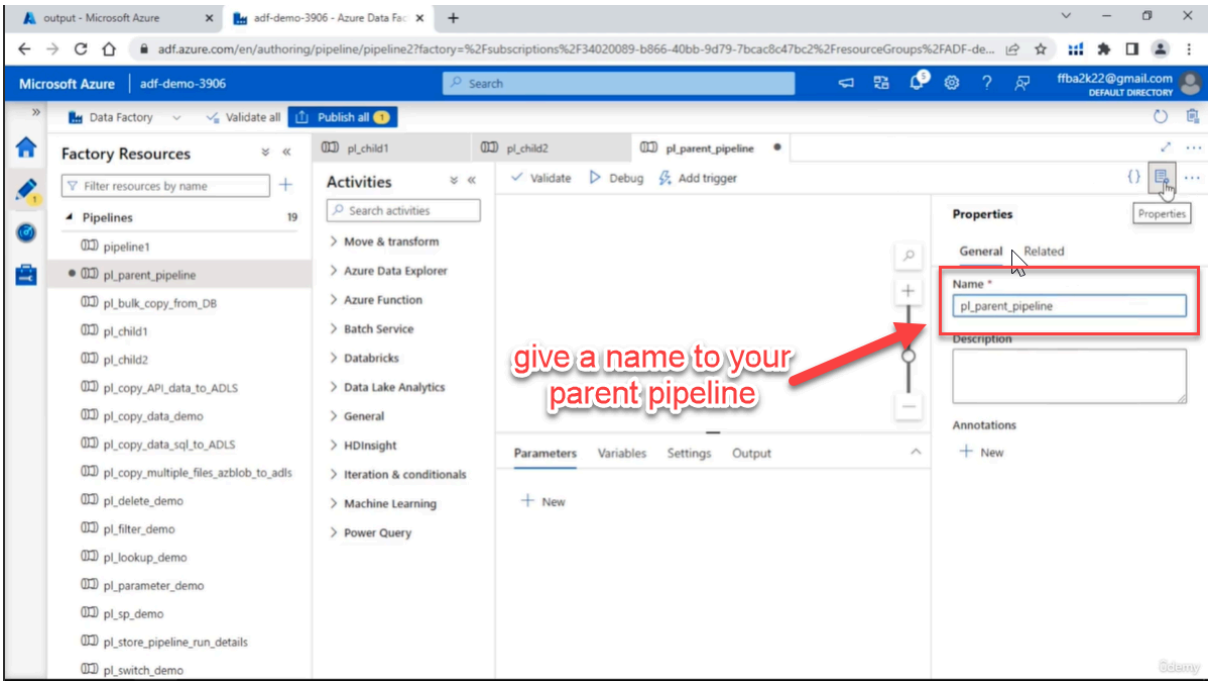

create the second child pipeline
Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines
New pipeline
Pipeline from template
New folder
Activities
Databricks
Data Lake Analytics
General
HDInsight
Iteration & conditionals
Machine Learning
Power Query
Parameters
Variables
Settings
Output
New
Properties
General
Related
Name *
pl_child1
Description
Annotations

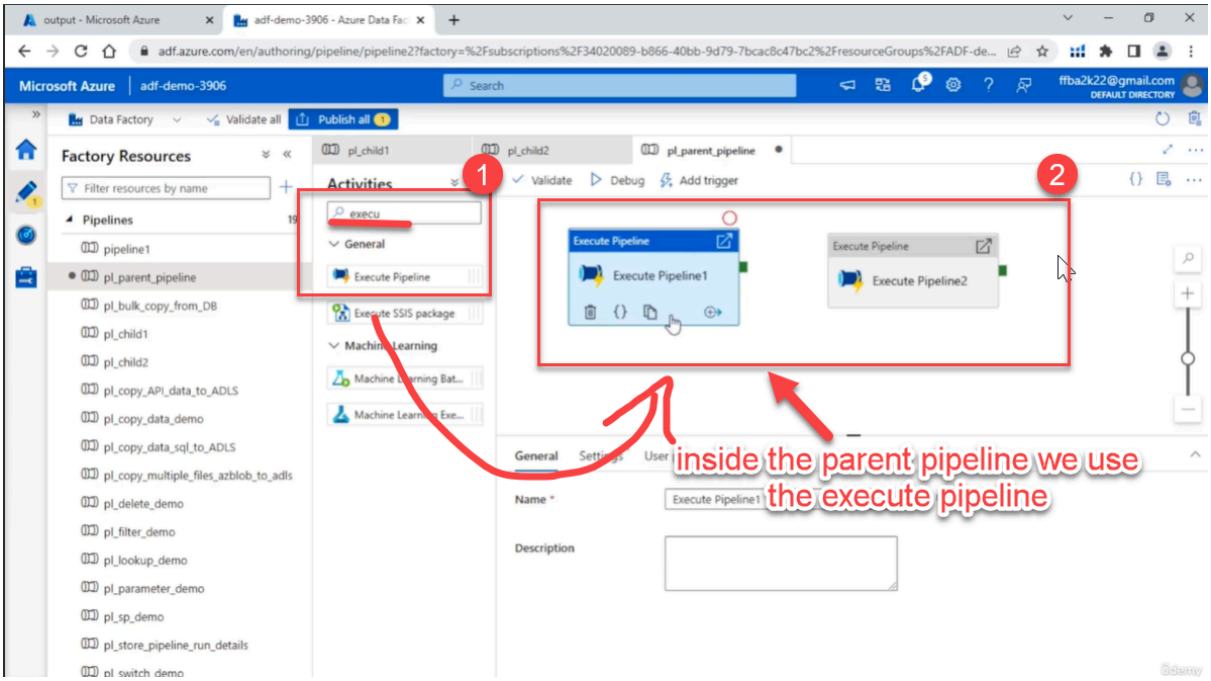

name the second child pipeline
Factory Resources
Activities
Properties
General
Related
Name *
pl_child2
Parameters
Variables
Settings
Output
Annotations
New

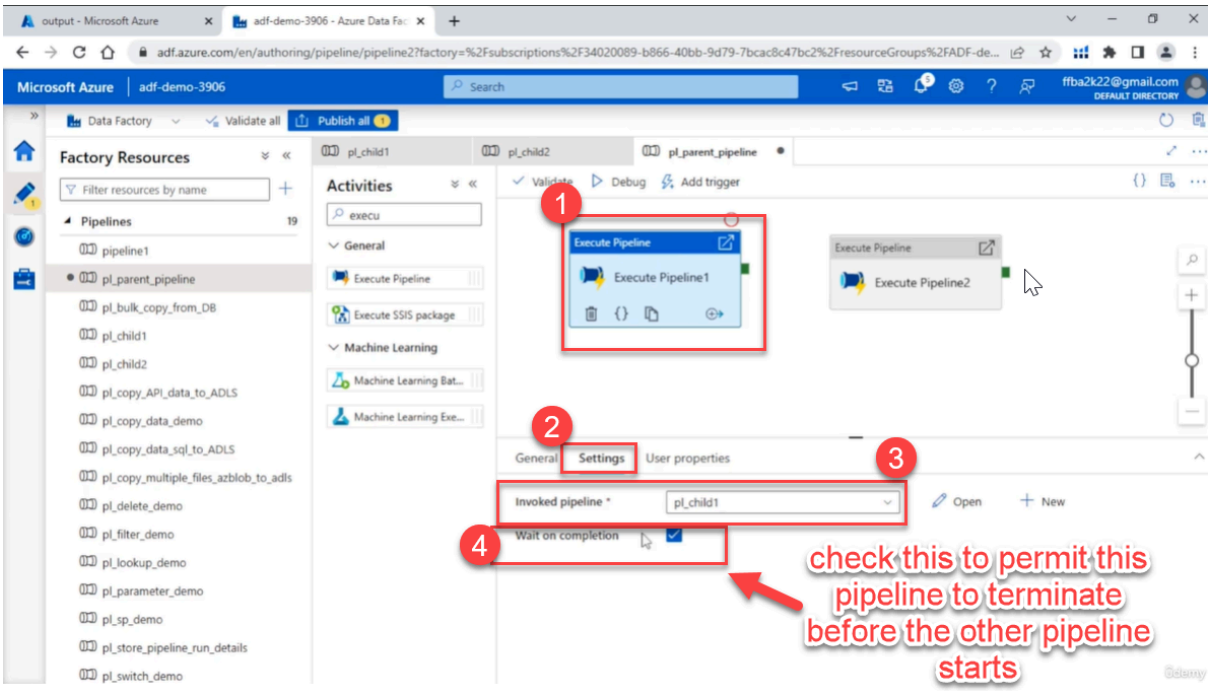

inside the second child pipeline we add the wait activity giving it the name wait child 2
Factory Resources
Activities
Validate
Debug
Add trigger
wait
General
Wait
Wait child2
Properties
General
Related
Name *
pl_child2
Description
Annotations
New
General
Settings
User properties
Name *
Wait child2
Learn more
Description
1
2

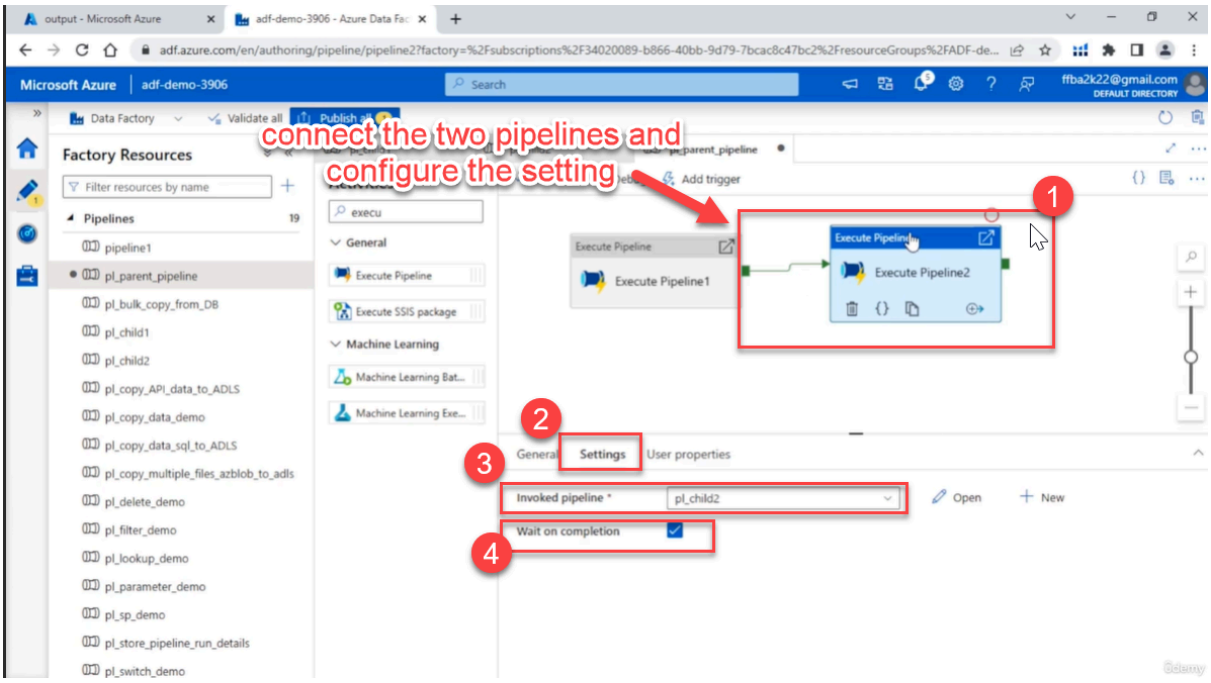


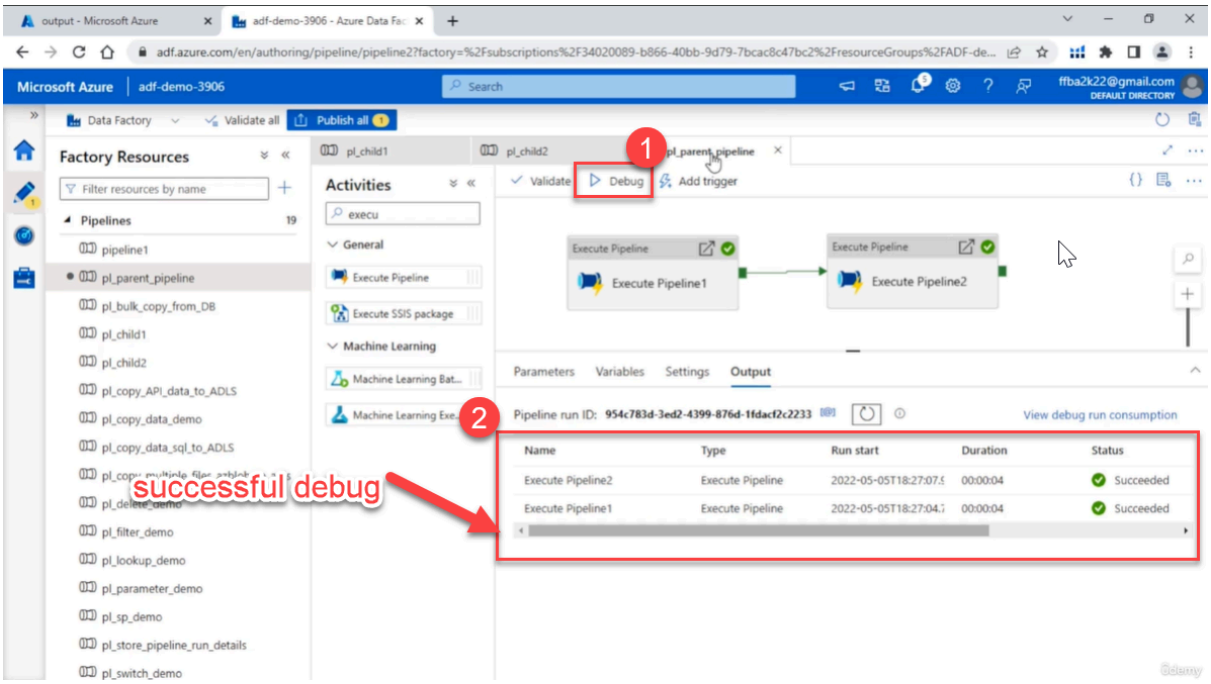
Vérifié le Samedi 6 janvier 2024 à 20h06 par yvonne

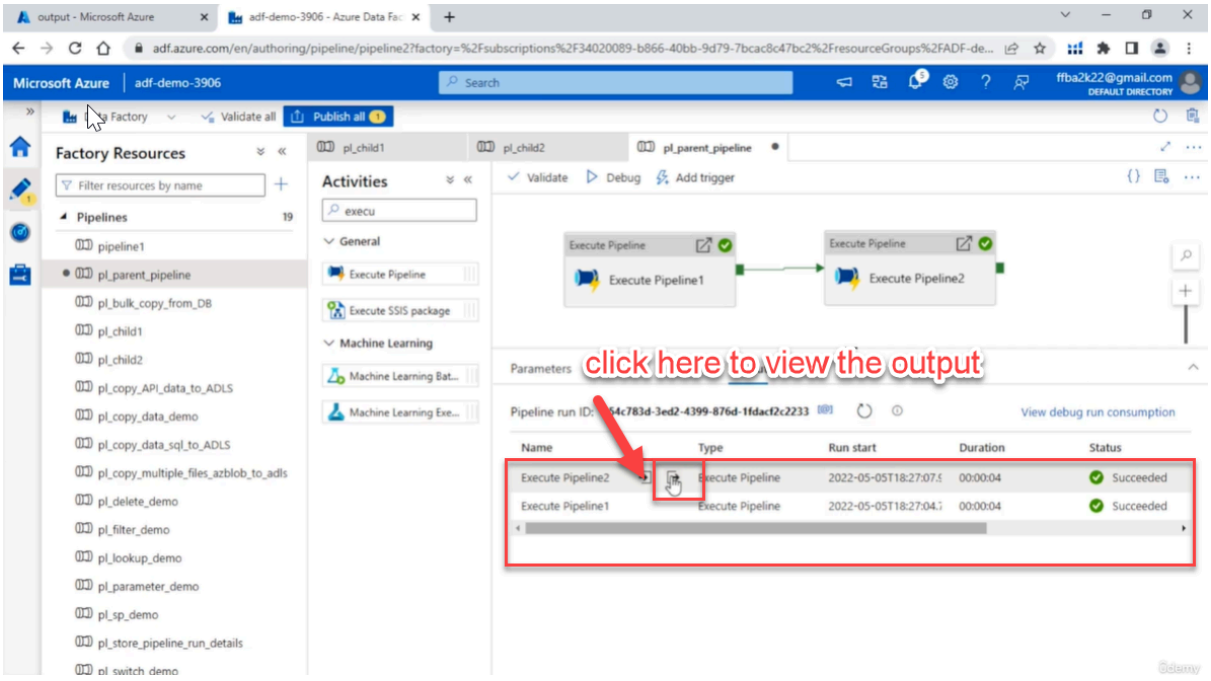

Microsoft Azure
adf-demo-3906
Data Factory
Validate all
Publish all
Factory Resources
Pipelines
pipeline1
pl_parent_pipeline
pl_bulk_copy_from_DB
pl_child1
pl_child2
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_delete_demo
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
Activities
Move & transform
Azure Data Explorer
Azure Function
Batch Service
Databricks
Data Lake Analytics
General
HDInsight
Iteration & conditionals
Machine Learning
Power Query
Validate
Debug
Add trigger
Properties
General
Related
Name *
pl_parent_pipeline
Description
Annotations
New
Parameters
Variables
Settings
Output
give a name to your parent pipeline

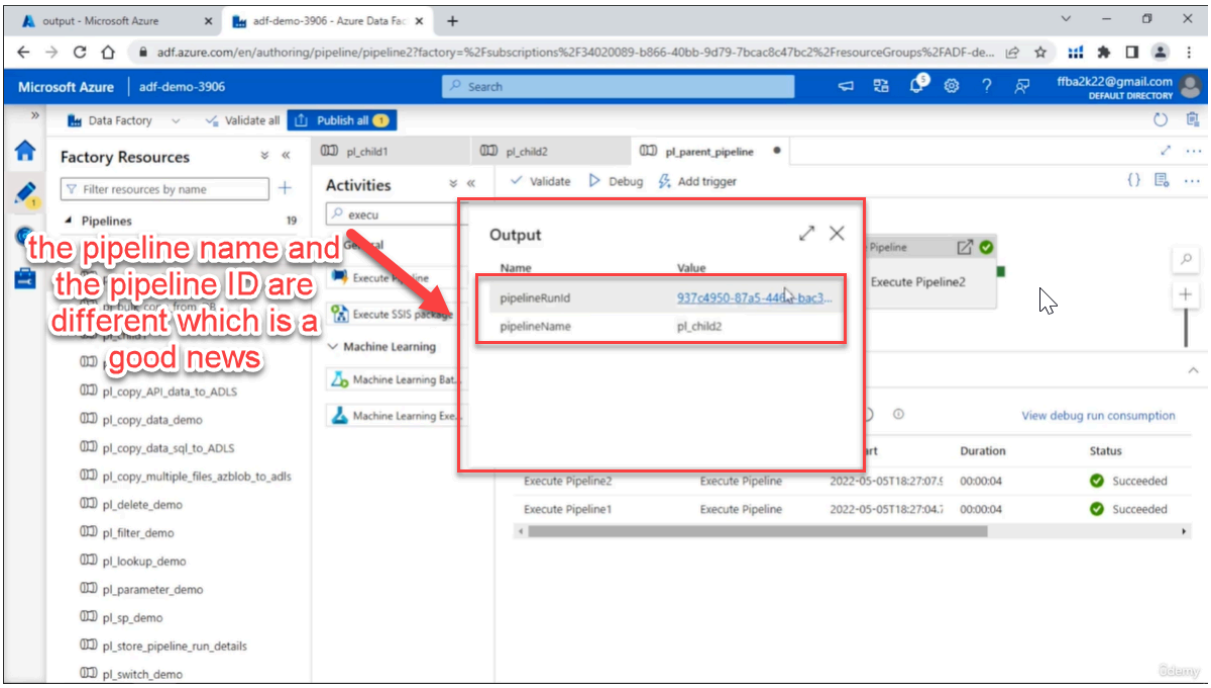

Microsoft Azure
adf-demo-3906
Data Factory
Validate all
Publish all
Factory Resources
Pipelines
pipeline1
pl_parent_pipeline
pl_bulk_copy_from_DB
pl_child1
pl_child2
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_copy_multiple_files_azblob_to_adls
pl_delete_demo
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
1
Activities
execu
General
Execute Pipeline
Execute SSIS package
Machine Learning
2
Validate
Debug
Add trigger
Execute Pipeline
Execute Pipeline1
Execute Pipeline
Execute Pipeline2
General
Name *
Execute Pipeline1
Description
inside the parent pipeline we use the execute pipeline


Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines
pl_parent_pipeline
Activities
Execute Pipeline
Execute Pipeline1
Execute Pipeline2
General
Settings
User properties
Invoked pipeline *
pl_child1
Wait on completion
Open
New
1
2
3
4
check this to permit this pipeline to terminate before the other pipeline starts


Microsoft Azure
adf-demo-3906
connect the two pipelines and configure the setting
Factory Resources
Pipelines
pl_parent_pipeline
Activities
Execute Pipeline
Execute Pipeline1
Execute Pipeline2
General
Settings
User properties
Invoked pipeline *
pl_child2
Wait on completion
Open
New
1
2
3
4


Microsoft Azure
adf-demo-3906
Search
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines
pipeline1
pl_parent_pipeline
pl_bulk_copy_from_DB
pl_child1
pl_child2
pl_copy_API_data_to_ADLS
pl_copy_data_demo
pl_copy_data_sql_to_ADLS
pl_filter_demo
pl_lookup_demo
pl_parameter_demo
pl_sp_demo
pl_store_pipeline_run_details
pl_switch_demo
Activities
General
Execute Pipeline
Execute SSIS package
Machine Learning
Validate
Debug
Add trigger
Execute Pipeline1
Execute Pipeline2
Parameters
Variables
Settings
Output
Pipeline run ID:
View debug run consumption
Name
Type
Run start
Duration
Status
Execute Pipeline2
Execute Pipeline1
Succeeded
1
2
successful debug


Microsoft Azure
adf-demo-3906
Search
Factory Resources
Pipelines
pl_parent_pipeline
Activities
Validate
Debug
Add trigger
Execute Pipeline1
Execute Pipeline2
Parameters
click here to view the output
Pipeline run ID:
View debug run consumption
Name
Type
Run start
Duration
Status
Execute Pipeline2
Execute Pipeline1
Succeeded



DataFlow activity

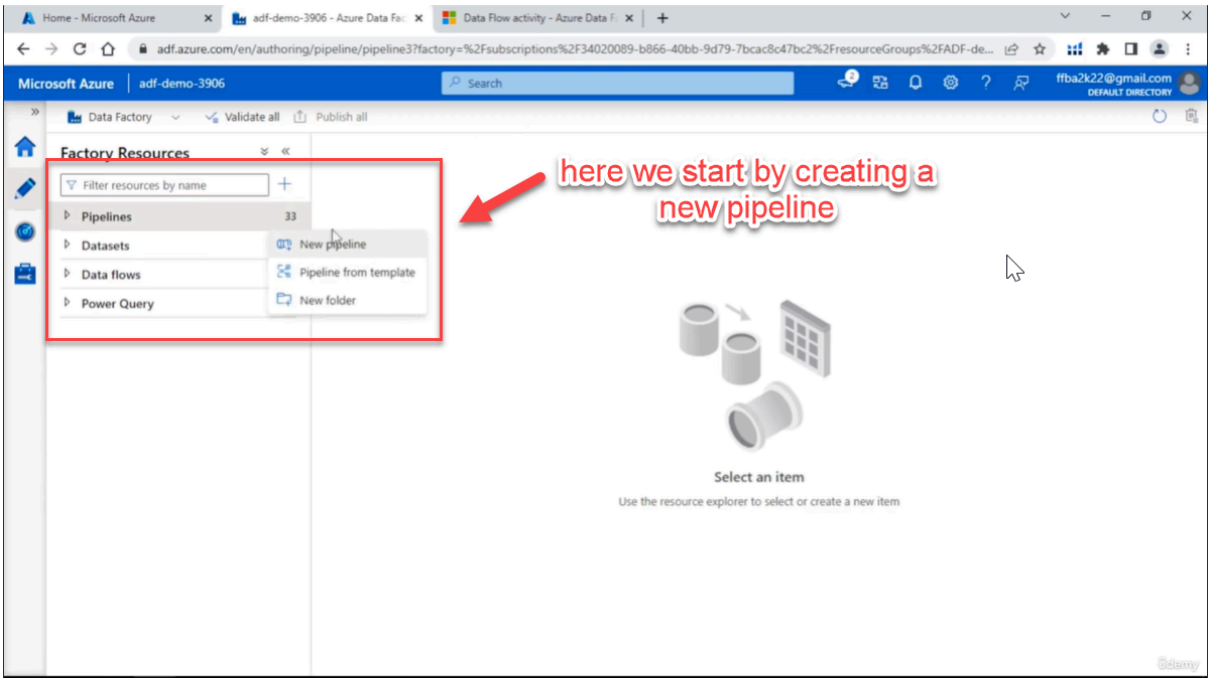
Use the Data Flow activity to transform and move data via mapping data flows.

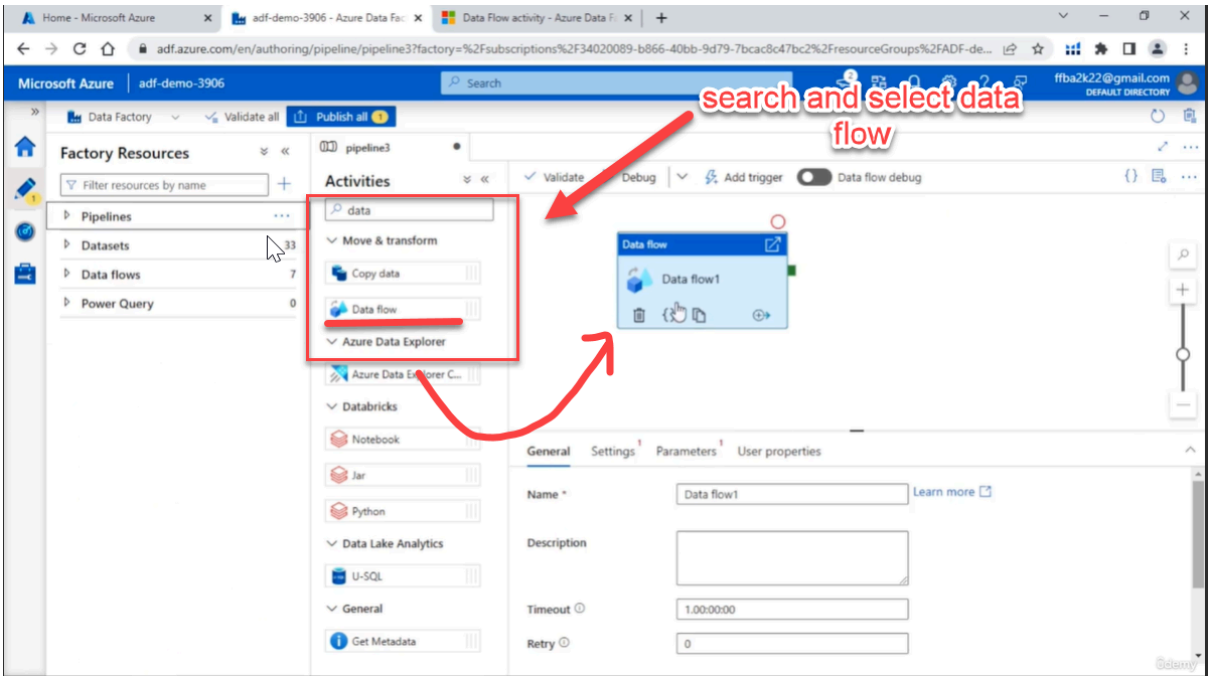
https://docs.microsoft.com/en-us/azure/data-factory/control-flow-execute-data-flow-activity

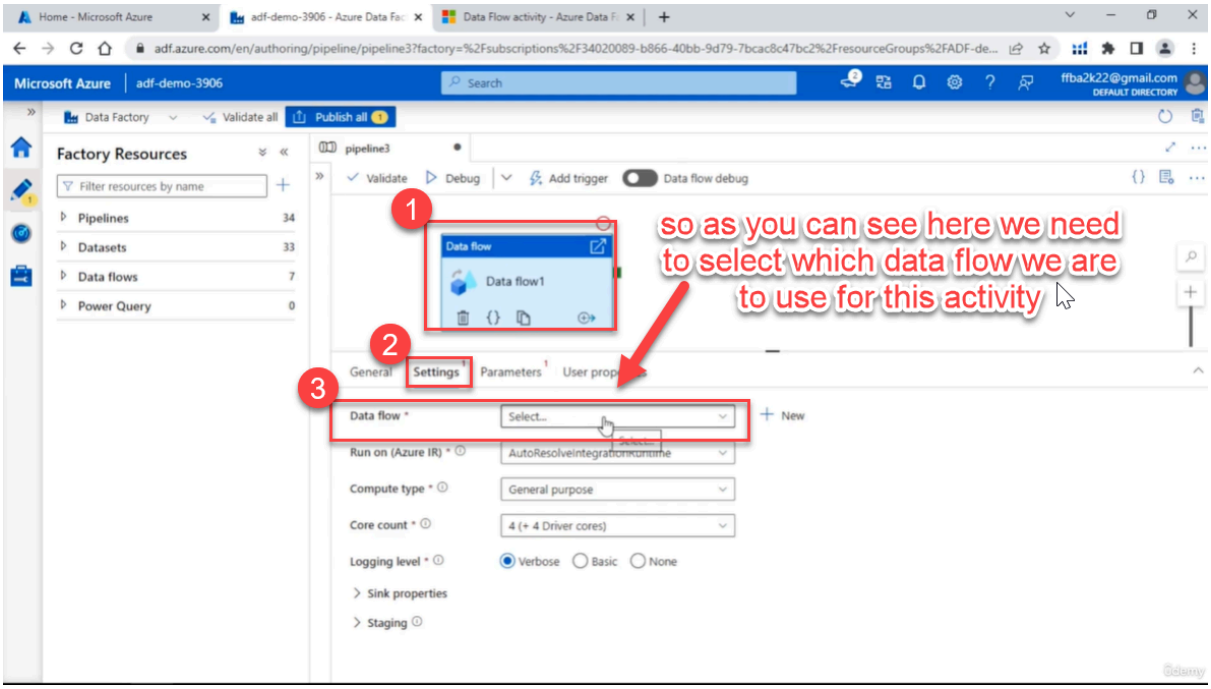
Use the Data Flow activity to transform and move data via mapping data flows.

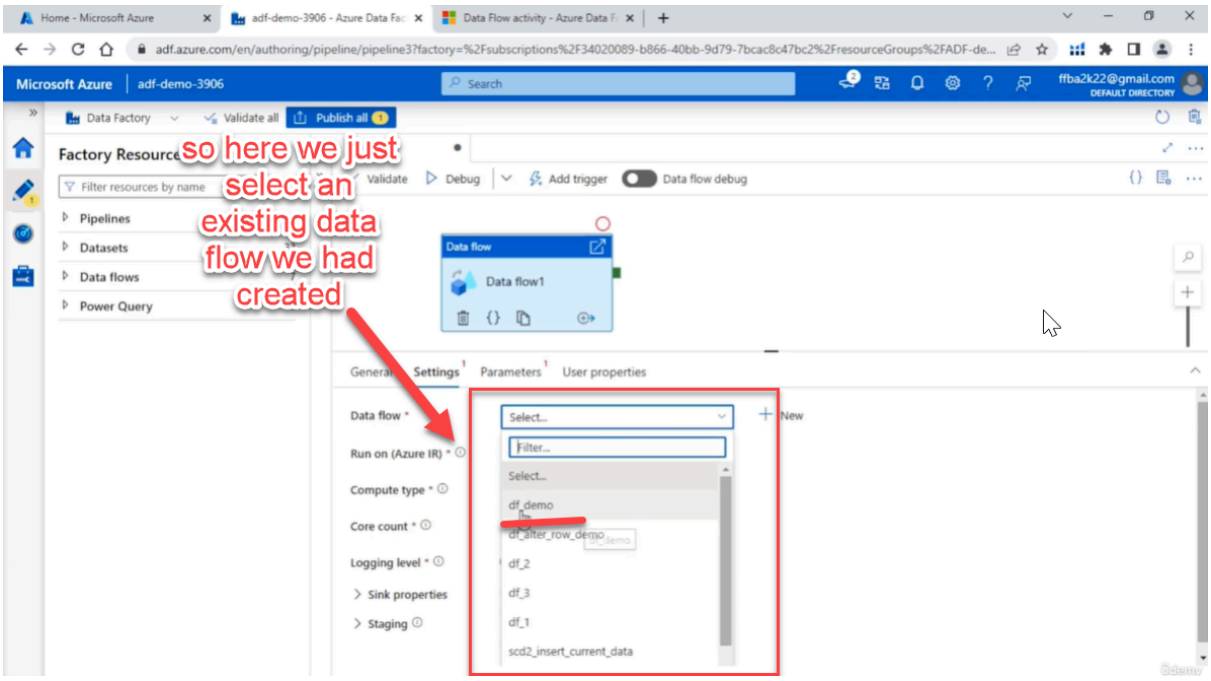
this is just a way to transform your data

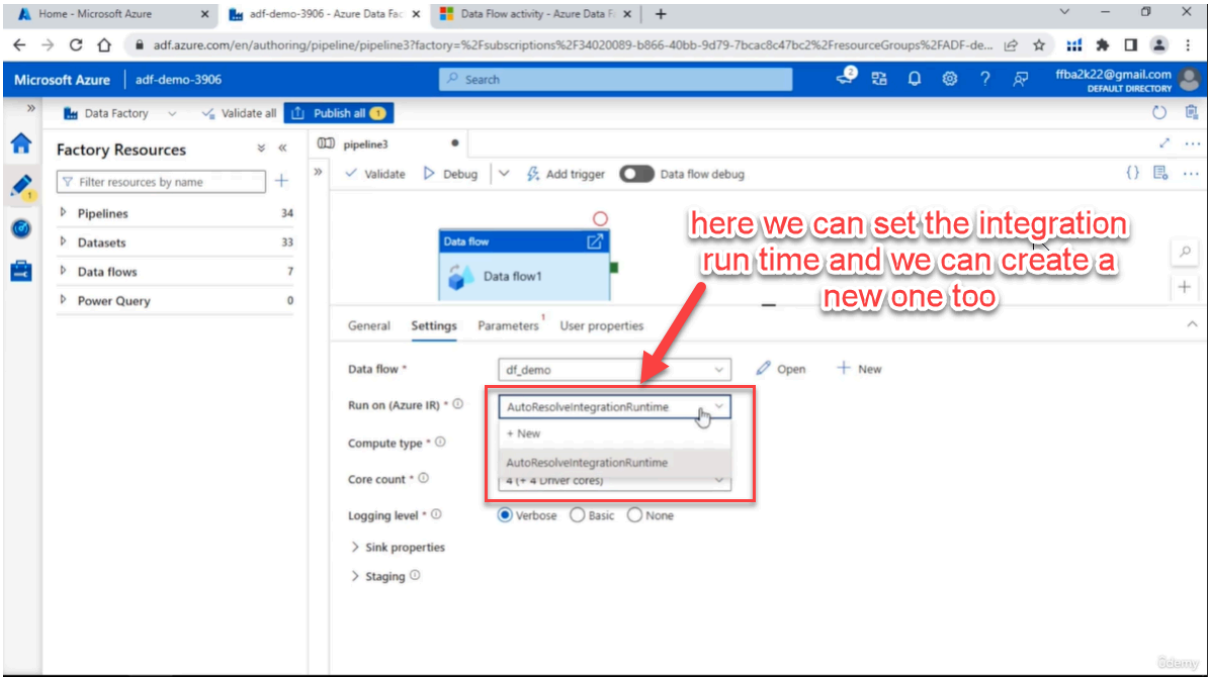
https://docs.microsoft.com/en-us/azure/data-factory/control-flow-execute-data-flow-activity

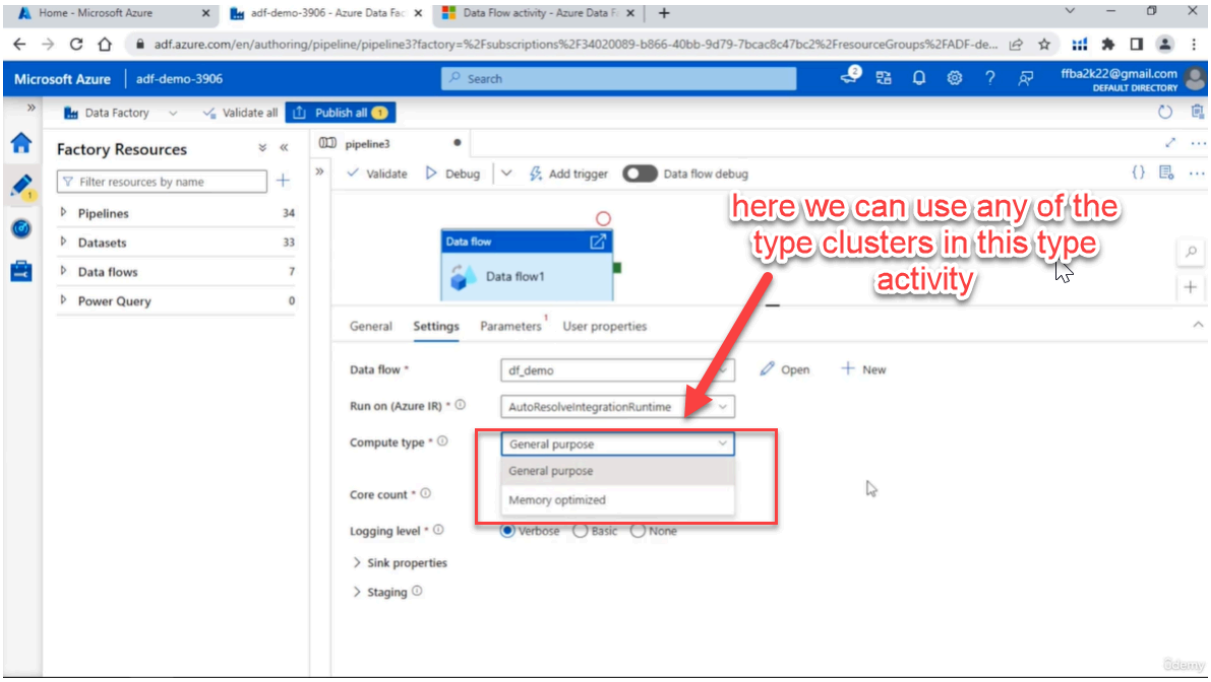


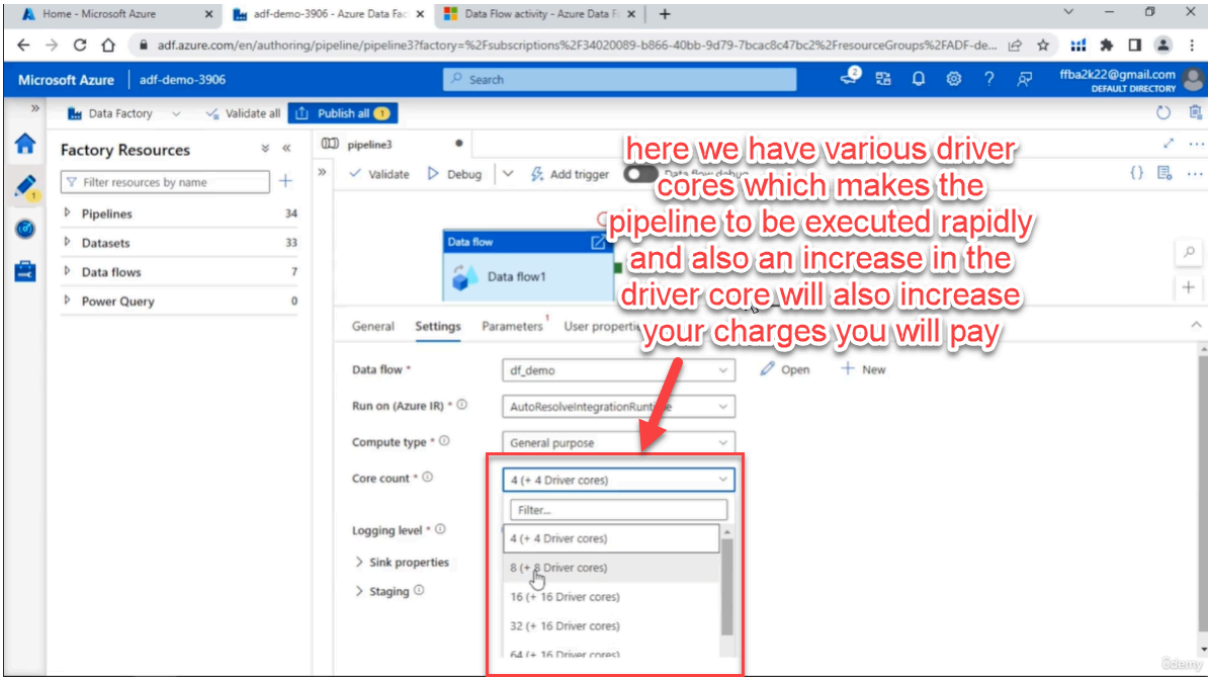

search and select data flow
Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines
Datasets
Data flows
Power Query
Activities
Move & transform
Copy data
Data flow
Azure Data Explorer
Databricks
Notebook
Jar
Python
Data Lake Analytics
U-SQL
General
Get Metadata
Data flow1
General
Settings
Parameters
User properties
Name *
Description
Timeout
Retry

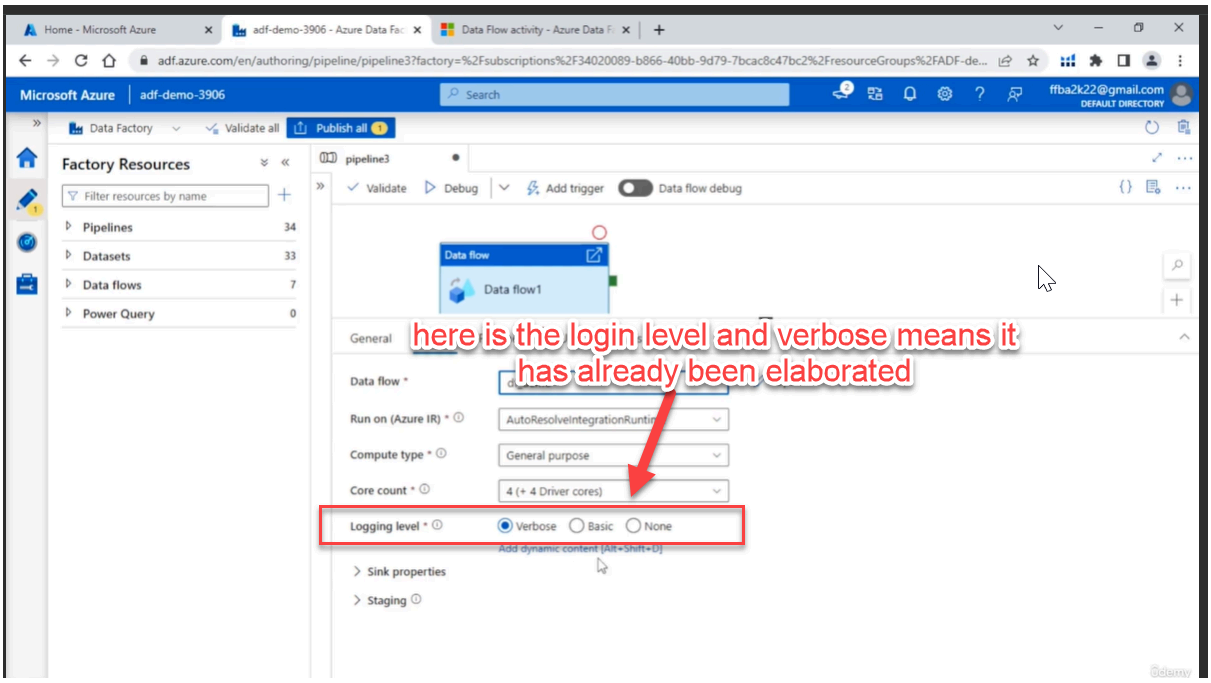

so as you can see here we need to select which data flow we are to use for this activity
1
2
3
Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines
Datasets
Data flows
Power Query
Data flow1
General
Settings
Parameters
Data flow *
Select...
New
Run on (Azure IR) *
Compute type *
General purpose
Core count *
4 (+ 4 Driver cores)
Logging level *
Verbose
Basic
None
Sink properties
Staging

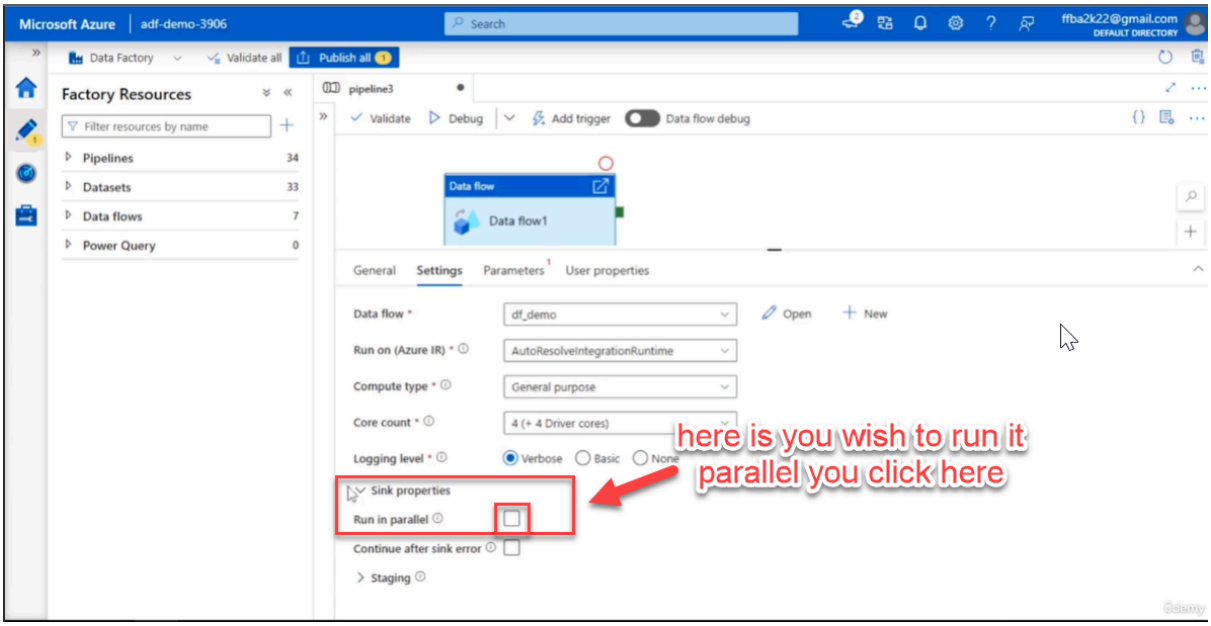

so here we just select an existing data flow we had created
Data flow
Data flow1
General
Settings
Parameters
User properties
Data flow *
Run on (Azure IR) *
Compute type *
Core count *
Logging level *
Sink properties
Staging
Select...
Filter...
df_demo
df_alter_row_demo
df_2
df_3
df_1
scd2_insert_current_data
New

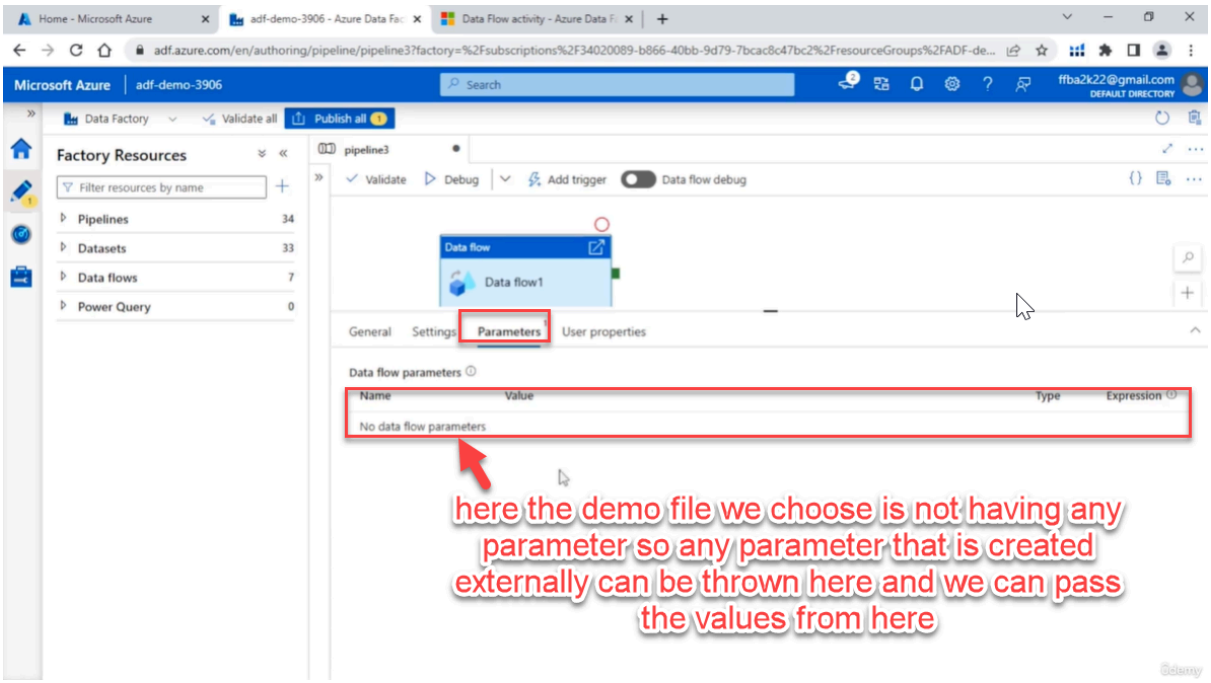

here we can set the integration run time and we can create a new one too
Factory Resources
pipeline3
Data flow
Data flow1
General
Settings
Parameters
User properties
Data flow *
df_demo
Open
New
Run on (Azure IR) *
AutoResolveIntegrationRuntime
+ New
Compute type *
Core count *
Logging level *
Verbose
Basic
None
Sink properties
Staging

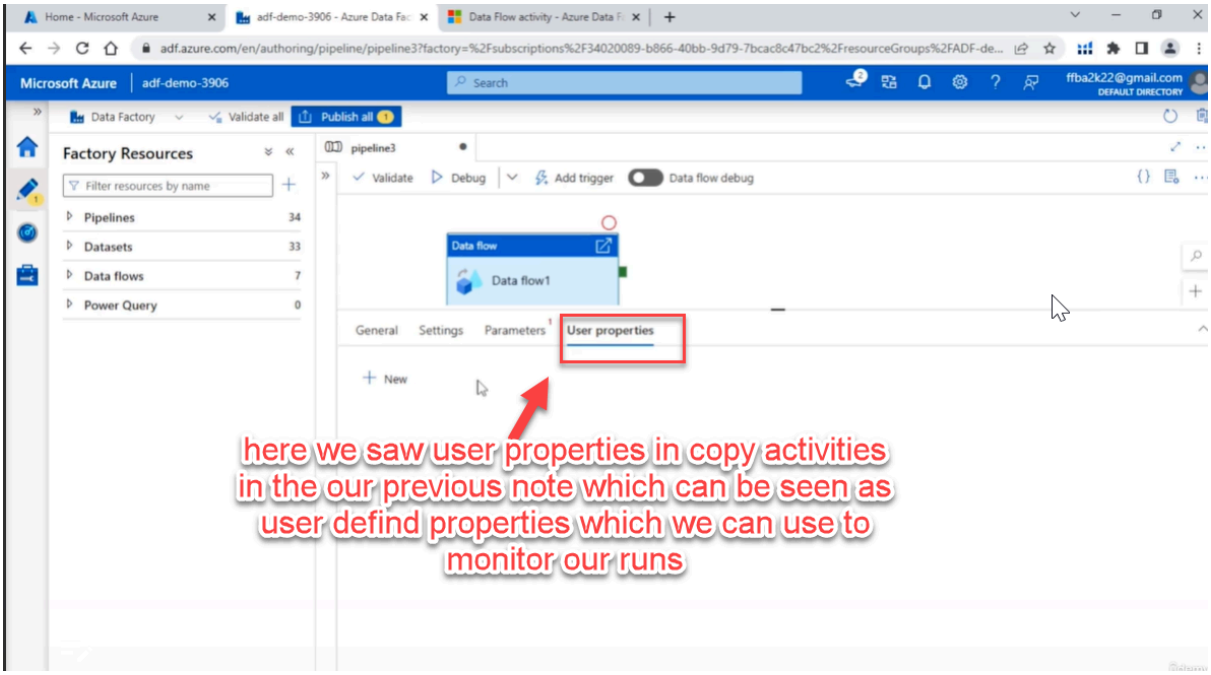

here we can use any of the type clusters in this type activity
Factory Resources
Pipelines 34
Datasets 33
Data flows 7
Power Query 0
Data flow1
General
Settings
Parameters
User properties
Data flow * df_demo
Run on (Azure IR) * AutoResolveIntegrationRuntime
Compute type * General purpose
General purpose
Memory optimized
Core count *
Logging level * Verbose Basic None
Sink properties
Staging


here we have various driver cores which makes the pipeline to be executed rapidly and also an increase in the driver core will also increase your charges you will pay
Factory Resources
Pipelines 34
Datasets 33
Data flows 7
Power Query 0
Data flow1
General
Settings
Data flow * df_demo
Compute type * General purpose
Core count *
4 (+ 4 Driver cores)
Filter...
8 (+ 8 Driver cores)
16 (+ 16 Driver cores)
32 (+ 16 Driver cores)
Logging level *
Sink properties
Staging


Microsoft Azure
adf-demo-3906
Search
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines 34
Datasets 33
Data flows 7
Power Query 0
pipeline3
Validate
Debug
Add trigger
Data flow debug
Data flow
Data flow1
here is the login level and verbose means it has already been elaborated
General
Data flow *
Run on (Azure IR) *
Compute type *
General purpose
Core count *
4 (+ 4 Driver cores)
Logging level *
Verbose
Basic
None
Sink properties
Staging


Microsoft Azure
adf-demo-3906
Search
Data Factory
Validate all
Publish all
Factory Resources
Filter resources by name
Pipelines 34
Datasets 33
Data flows 7
Power Query 0
pipeline3
Validate
Debug
Add trigger
Data flow debug
Data flow
Data flow1
General
Settings
Parameters
User properties
Data flow *
df_demo
Open
New
Run on (Azure IR) *
AutoResolveIntegrationRuntime
Compute type *
General purpose
Core count *
4 (+ 4 Driver cores)
Logging level *
Verbose
Basic
None
here is you wish to run it parallel you click here
Sink properties
Run in parallel
Continue after sink error
Staging


Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines 34
Datasets 33
Data flows 7
Power Query 0
pipeline3
Validate
Debug
Add trigger
Data flow debug
Data flow
Data flow1
General
Settings
Parameters
User properties
Data flow parameters
Name
Value
Type
Expression
No data flow parameters
here the demo file we choose is not having any parameter so any parameter that is created externally can be thrown here and we can pass the values from here


Microsoft Azure
adf-demo-3906
Factory Resources
Pipelines 34
Datasets 33
Data flows 7
Power Query 0
pipeline3
Validate
Debug
Add trigger
Data flow debug
Data flow
Data flow1
General
Settings
Parameters
User properties
New
here we saw user properties in copy activities in the our previous note which can be seen as user defind properties which we can use to monitor our runs