

These are a few screenshots;

Entire code can be found in the databricks-notebooks section of the repo.

Microsoft Azure

Upgrade

Search resources, services, and docs (G+)

Copilot

navneethramachandran...
DEFAULT DIRECTORY (NAVNEET...)

Home

Resource groups

Default Directory (navneethramachandranoutlook.onmicrosoft.com)

Create

Manage view

Refresh

Export to CSV

Open query

Assign tags

Group by none

You are viewing a new version of Browse experience. Some features may be missing. Click here to access the old experience.

Filter for any field...

Subscription equals all

Location equals all

Add filter

Name	Subscription	Location
databricks-rg-ikea_energy_consumption-hhsowvzhhsse	Azure subscription 1	West Europe
databricks-rg-NaruWeatherDataWorkspace-mjdt7xssagey	Azure subscription 1	Sweden Central
EnergyOptimizationRG	Azure subscription 1	West Europe
NavneethPOCDE	Azure subscription 1	Sweden Central
NetworkWatcherRG	Azure subscription 1	Sweden Central

Notifications

More events in the activity log

Dismiss all

Deployment succeeded

Deployment 'EnergyOptimizationRG_ikea_energy_consumption' to resource group 'EnergyOptimizationRG' was successful.

Go to resource

Pin to dashboard

2 hours ago

EnergyOptimizationRG

Resource group

Search

Create

Manage view

Delete resource group

Refresh

Export to CSV

Group by none

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Deployments

Security

Deployment stacks

Policies

Essentials

Resources

Recommendations

JSON View

Filter for any field...

Type equals all

Location equals all

Add filter

Name	Type	Location
energyoptstor	Storage account	West Europe
ikea_energy_consumption	Azure Databricks Service	West Europe

Energy Consumption Analysis

Python

File

Edit

View

Run

Help

Last edit was now

Run all

Terminated

Schedule

Share

01:59 PM (14s)

1

Python

```
# Setting the parameters
storage_account_name = "energyoptstor" # storage account name
container_name = "raw-data" # container name
storage_account_key = "MASKED" # storage account key

# Define the URI for the Blob Storage
blob_url = f"wasbs://{container_name}@{storage_account_name}.blob.core.windows.net/"

# Mount the storage to Databricks
dbutils.fs.mount(
    source = blob_url,
    mount_point = "/mnt/rawdata", # Mount point
    extra_configs = {
        f"fs.azure.account.key.{storage_account_name}.blob.core.windows.net": storage_account_key
    }
)

# Mount verification
display(dbutils.fs.ls("/mnt/rawdata"))
```

(2) Spark Jobs

Table

+

dbfs path

name

size

modificationTime

1

dbfs/mnt/rawdata/ikea_energy_consumption.csv

ikea_energy_consumption.csv

5704

1733141570000

Energy Consumption Analysis

Python



File Edit View Run Help Last edit was 3 minutes ago



02:04 PM (1s)

5

```
%python
# Group by date and sum energy consumption
df_grouped = df.groupBy("date").agg({"EnergyConsumption(kWh)": "sum"})
display(df_grouped)
```

(3) Spark Jobs

df_grouped: pyspark.sql.dataframe.DataFrame = [date: date, sum(EnergyConsumption(kWh)): double]

Table

	date	1.2 sum(EnergyConsumption(kWh))
16	2024-11-11	1344.110106803457
17	2024-11-13	1921.272561450258
18	2024-11-26	1592.4034702777687
19	2024-11-16	1276.2425579112892
20	2024-11-17	1467.6636047436255
21	2024-11-24	1406.3750512626452
22	2024-11-01	1104.6169709631272