

ONLINE



31 de Mayo 2025

<https://www.youtube.com/watch?v=fQVKU-Udq1I>



FABRIC USER GROUP ESP (FUGE)

# AGENDA

## Global Fabric Community Day ES

### Sábado 31 de Mayo 2025



#### Track 1

10.00 am	Encuentra los secretos escondidos en tus datos en Fabric <b>Ana Maria Bisbe York</b>	
11:05 am	¿Quieres gobernar en Microsoft Fabric? Empieza por FUAM <b>Mónica Mesa</b>	
12:05 pm	Del pasado al futuro: Reinventando el almacenamiento de datos <b>Raul Sao</b>	

#### Track 2

Sistemas de diseño: mejora y estandariza tus cuadros de mando en minutos <b>Paula García Esteban</b>	
Fabric CLI, simplifica tu gestión al máximo <b>Toni Ferrà Arbós</b>	
How to Seamlessly Integrate Your SQL Server/Azure SQL into Microsoft Fabric <b>Gonzalo Bissio</b>	



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**#FUGE**

# Mónica Mesa

Consultora senior de **Business Intelligence** en una empresa con nombre de cantante de OT 🎤  
(aunque, por ahora, nos dedicamos más a los datos que a los conciertos).

Híbrida entre **Data Analyst** y **Data Scientist**, siempre intentando que los números cuenten historias y no sean cifras aburridas 📊. **Solo sé que no sé nada**, pero me apasiona aprenderlo todo 🌟. Y entre tanto aprendizaje y **datos**, me encanta hacer pausas para viajar ✈️ y montar rankings sobre las mejores croquetas 🥔.



**Power BI & Fabric Barcelona**  
Eat, Sleep, Power Bi, Fabric, Repeat



W4TT



Data4Minds



<https://www.linkedin.com/in/monicamesa/>  
[www.monicamesa.es](http://www.monicamesa.es)



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# ANTES DE EMPEZAR



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🧙 Para poder contarte qué es FUAM, he tenido que sufrir un poco..

Monté mi propio tenant desde cero.

Sí, sí: me di de alta, activé todo, me convertí en administradora del universo...y sobreviví para contarla (bueno de eso no estoy tan segura..)

✖️ Aprendí a:

Crear Service Principals sin que se rebelaran

Configurar permisos que solo se activan si haces el paso de la grulla

Encontrar como asignar “Fabric Administrator” tras 2 cafés y poca fe

Pero hay que confiar, porque si no confías no hay confianza

😢 Hubo lágrimas. Hubo pantallazos.

🧩 Y más de una conexión decidió no funcionar “porque sí”. 🎭

**Lo que vas a ver hoy no es solo una charla...**

es la historia de una consultora contra los elementos



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**¿Quieres gobernar en Microsoft Fabric?  
Empieza por FUAM**



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# ¿por donde empiezo?



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# ¿QUÉ HERRAMIENTA USO PARA..?

¿Qué está pasando ahora mismo?

## MONITORING HUB

- ⌚ Visión en tiempo real del entorno
- 📌 Útil para equipos de operaciones o soporte
- 📍 Muestra cargas activas, estado general y alertas

Activity name	Status	Item type	Start time	Submitted by	Location
01_Transfer_CapacityMetricData_Timepoints_Unit...	Succeeded	Notebook	05/30/2025, 8:15 PM	Mónica Mesa	FUAM Monitor
01_Transfer_Incremental_Inventory_Unit_0c9da0...	Succeeded	Notebook	05/30/2025, 7:58 PM	Mónica Mesa	FUAM Monitor
01_Transfer_CapacityMetricData_Timepoints_Unit...	Failed	Notebook	05/30/2025, 7:57 PM	Mónica Mesa	FUAM Monitor
Generate_Calendar_Table_28072f07-8798-498a...	Succeeded	Notebook	05/30/2025, 7:55 PM	Mónica Mesa	FUAM Monitor
Load_FUAM_Data_E2E	Failed	Data pipeline	05/30/2025, 7:54 PM	Mónica Mesa	FUAM Monitor
Load_Capacity_Refreshables_E2E	Failed	Data pipeline	05/30/2025, 7:51 PM	Mónica Mesa	FUAM Monitor
Purview Hub	Succeeded	Semantic model	05/30/2025, 7:51 PM	Admin Monitoring	Admin monitoring
Content Sharing	Succeeded	Semantic model	05/30/2025, 7:51 PM	Admin Monitoring	Admin monitoring
Feature Usage and Adoption	Succeeded	Semantic model	05/30/2025, 7:51 PM	Admin Monitoring	Admin monitoring

 Ideal para los que no pueden dormir si no saben qué está haciendo el tenant ahora mismo



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# ¿QUÉ HERRAMIENTA USO PARA..?

**¿Qué está pasando en todo mi tenant?**

## ADMIN MONITORING WORKSPACE

Espacio exclusivo para administradores de Fabric

Informes preconstruidos sobre:

- Actividad de usuarios
- Inventario de objetos
- Compartición de contenidos
- Uso de capacidades

Se instala solo al acceder por primera vez y se actualiza a diario.

A screenshot of the "Workspaces" interface in the Fabric User Group ESP (FUGE) application. The title bar says "Workspaces". Below it is a search bar with the placeholder "Search". Underneath the search bar is a section titled "Admin monitoring". A list of items follows, each with a small icon and a name:

- Name
- Content Sharing
- Content Sharing
- Feature Usage and Adoption
- Feature Usage and Adoption
- Purview Hub
- Purview Hub



Una herramienta silenciosa... pero con mucha chicha si sabes mirar

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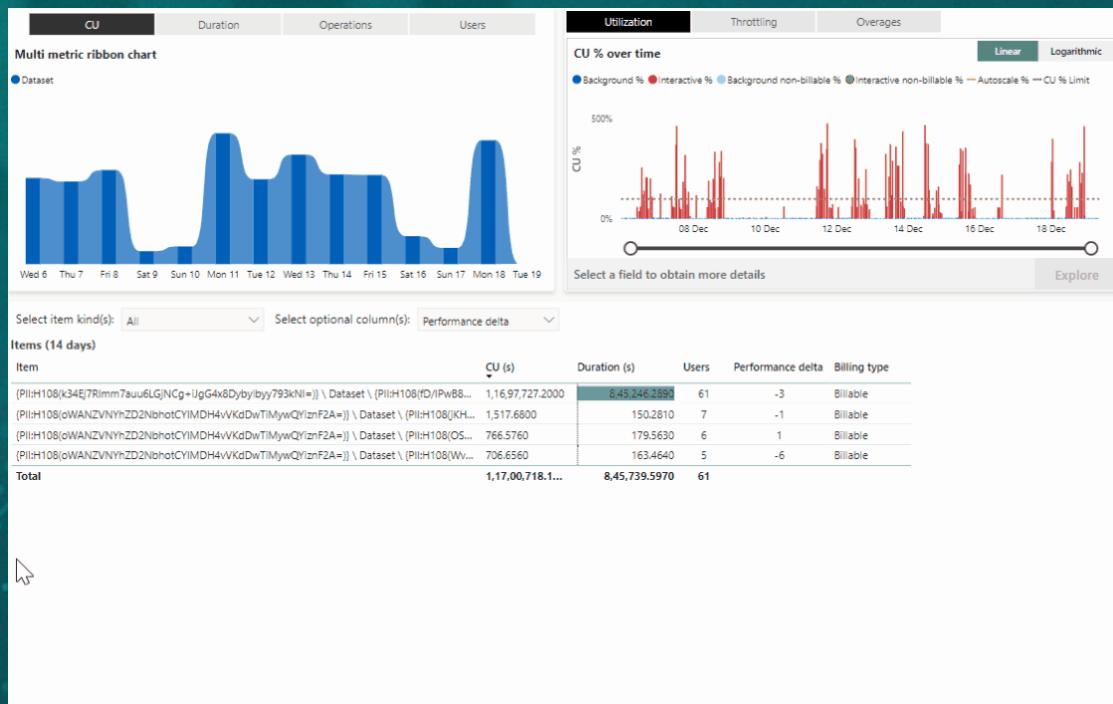


# ¿QUÉ HERRAMIENTA USO PARA..?

¿Estamos quedándonos sin recursos?

## CAPACITY METRICS APP

- Analiza uso de recursos a lo largo del tiempo
- Mide CU usados, throttling, picos de consumo
- Datos clave para planificar escalado de capacidad



➤ Te dice cuándo la máquina empieza a sudar... antes de que reviente



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# ¿QUÉ HERRAMIENTA USO PARA..?

¿Por qué este workspace está fallando?

## WORKSPACE MONITORING

- 🔍 Diagnóstico específico por workspace
- ⚠️ Permite identificar cuellos de botella
- 📌 Ideal para troubleshooting y soporte técnico

The screenshot shows the 'Workspace settings' page in the Azure DevOps interface. On the left, there's a sidebar with icons for General, License info, Azure connections, System storage, Git integration, OneLake, Workspace identity, and Network security. The 'Monitoring' icon is highlighted with a red box. To the right, under the heading 'Monitoring', it says: 'Monitor workspace activity to gain insights into workspace performance.' Below that is a section titled 'Add a monitoring Eventhouse' with the sub-instruction: 'To monitor workspace activity, add a read-only monitoring Eventhouse that includes a KQL database to store data collected in logs. When you add a monitoring Eventhouse, workspace logging is automatically turned on. You can pause logging whenever you need to.' At the bottom right of this section is a green button labeled '+ Eventhouse'.

➤ Lo usas cuando todo parece ir bien... pero no lo está



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# ¿QUÉ HERRAMIENTA USO PARA..?

Lo quiero todo, a mi manera

# FUAM



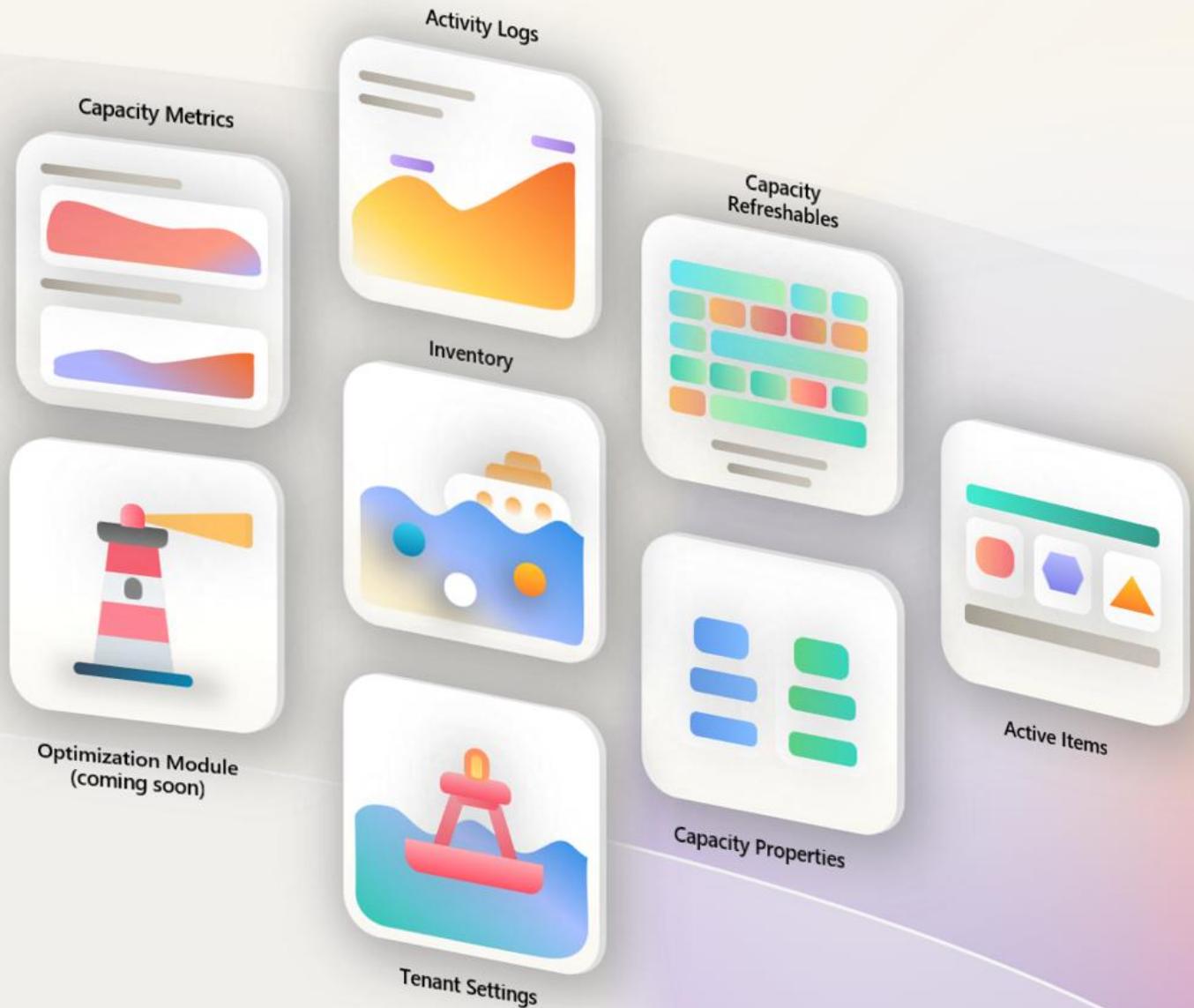
👉 *No es oficial, pero es como tener una navaja suiza para gobernar Fabric*

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# FUAM

**Fabric Unified Admin Monitoring**  
Take your tenant monitoring to the next level.



# Fabric monitoring map

The monitoring stack, what we know.

We all know the current monitoring stack of Power BI/Fabric, which we love. However, there are different scenarios, where we need more data, relations and insights to our environment telemetry and inventory data.

## Fabric tenant



### Admin Monitoring

tenant level



Feature Usage & Adoption  
**Artifact Inventory**

Purview Hub  
**Endorsements**

### OneLake Hub

tenant level

### Capacities

capacity level



Capacity Metric App  
**Capacity Utilization**

### Workspaces

workspace level

Workspace Monitoring  
**Trace logs in Fabric Eventhouse**

### Items (e.g Semantic Model)

engine level



Semantic Model Logs  
**Reports, other tools**

INFO.VIEW()  
**DAX Formulas**

Possible focus areas of your crew in Fabric monitoring



The Crew

„Captain, how can we deep dive without interruptions?“

„Captain, we need more insights!“

Platform Owners

Capacity Owners

Workspace Owners

Report Owners

Pro Developers



FUAM monitoring stack

Fabric Unified Admin Monitoring **enables a holistic monitoring** on top of Power BI/Fabric environment and follows a seamless breakdown analysis approach.

## Fabric tenant

### Environment

tenant level

Tenant overview  
with enriched info

Item & User activities  
with anomaly detection

“What is happened on my tenant?” - Analysis  
Comprehensive insights of the entire tenant by days

### Capacities

capacity level

Historical Capacity Metrics  
with refresh metrics

Intelligent Outlier Analysis  
Top N items with high CU usage

### Domains

domain level

Domain Overview  
with related capacity, activity and inventory data

### Workspaces

workspace level

Workspace characteristics + Workspace Monitoring (if needed)  
With enriched info about items, capacity metrics activities, etc.

### Items

engine level

e.g. Semantic Model Meta Data Analyzer  
Advanced analysis of item meta data

Semantic model Insights  
enriched with CU utilizations, refresh history and more

Seamless breakdown analysis between levels



**Gellért Gintli** · 3rd

Cloud Solution Architect - Data & AI @ Microsoft

Germany · [Contact info](#)



**Kevin Thomas** · 3rd

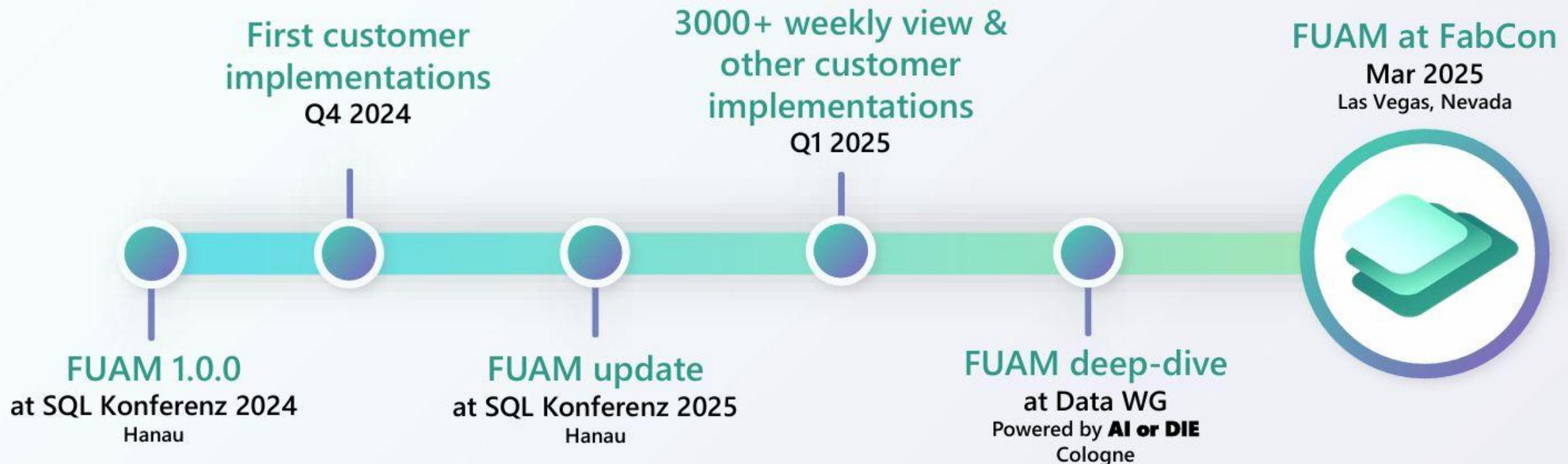
Cloud Solution Architect for Data & Analytics at Microsoft

Saarbrücken, Saarland, Germany · [Contact info](#)



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# FUAM's journey



Fabric Unified Admin Monitoring  
Take your tenant monitoring to the next level.



# QUÉ SIGNIFICA “FUAM”

El FUA que necesitabas (pero con M al final)



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# QUÉ SIGNIFICA “FUAM”



Fabric Unified Admin Monitoring (FUAM)

Take your tenant monitoring to the next level.



Solución de monitorización completa para Microsoft Fabric y Power BI

Pensada para darte visibilidad, control y paz mental

OPENSOURCE

FREE



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# PARA QUÉ SIRVE

**FUAM** te ayuda a responder preguntas como:

- ¿Quién está accediendo a qué?
- ¿Cuánto me está costando cada workspace?
- ¿Qué objetos tengo creados y en qué estado están?
- ¿Estoy usando bien mis recursos?

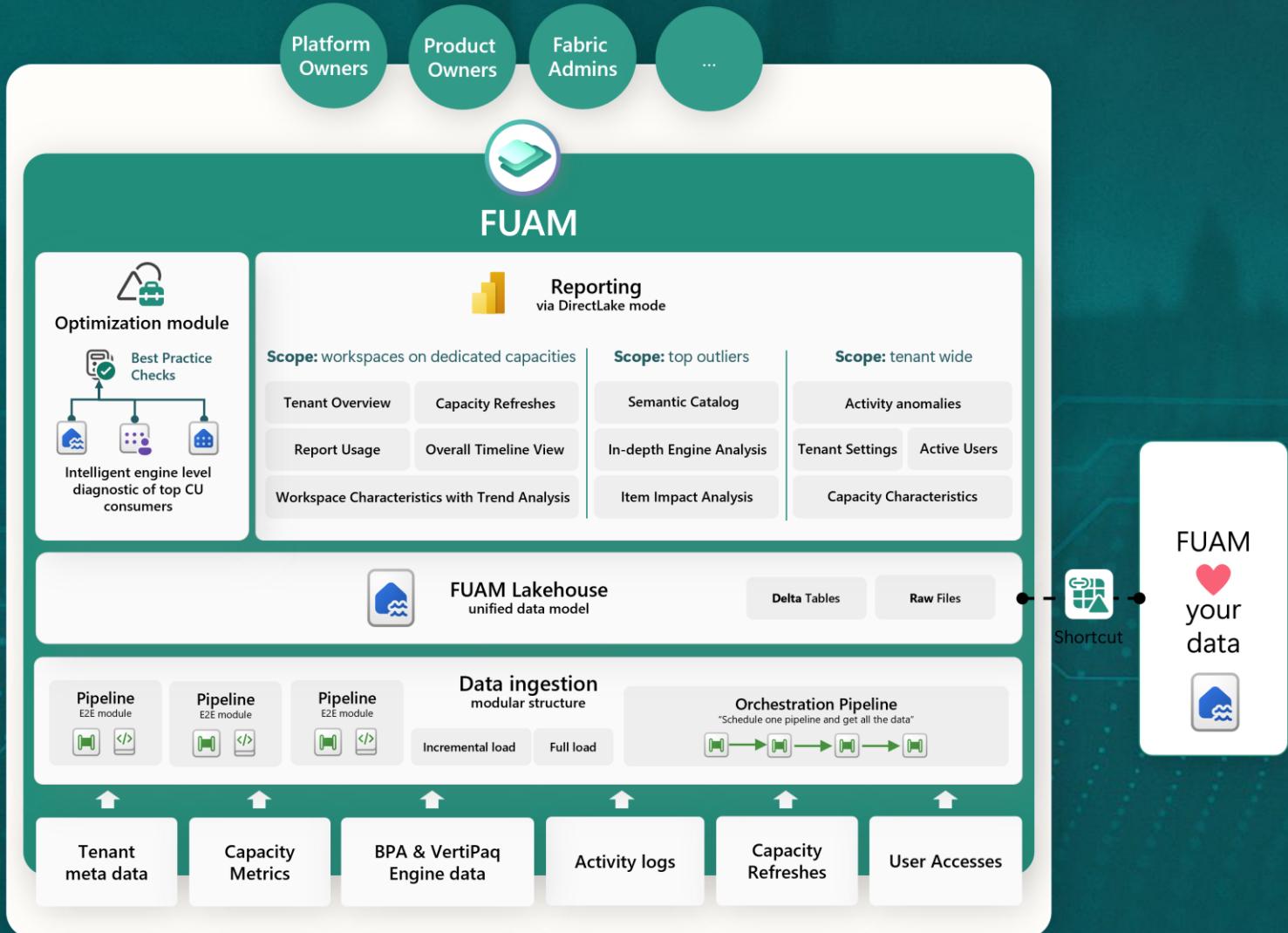


Todo lo que siempre quisiste saber sobre tu entorno... y nadie te supo contestar

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# SU ARQUITECTURA



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# ¿QUÉ GANO SI LO INSTALO?

- ✓ Fácil de desplegar (y gratuito)
- ✓ Funciona desde el primer minuto
- ✓ Compatible con Direct Lake y SQL
- ✓ Te ahorra tiempo, errores y disgustos
- ✓ Puedes tunearlo como un dashboard de Fast & Furious



Todo lo que siempre quisiste saber sobre tu entorno... y nadie te supo contestar

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# ¿Y CÓMO LO INSTALO?

## Requisitos previos para instalar FUAM

- Una capacidad de Power BI o Microsoft Fabric (PPU y workspaces compartidos no son compatibles)
- Permiso para crear un **Service Principal** en tu tenant
- Permiso para crear un **Workspace** en Fabric
- Una cuenta de usuario con rol **Fabric Administrator** en Entra ID
  - (Opcional) Acceso a un **Azure Key Vault** en tu tenant



↗ Más info: [Autenticación y autorización en FUAM](#)



<https://github.com/microsoft/fabric-toolbox/tree/main/monitoring/fabric-unified-admin-monitoring>

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# ¿Y CÓMO LO INSTALO?

- **Configuraciones de administrador que deben estar activadas**
  - Permitir que los usuarios creen elementos de Fabric en el workspace de FUAM
  - Activar los **XMLA endpoints** y la opción "Analizar en Excel con modelos semánticos locales"
- Tener habilitada la **Fabric Capacity Metrics App**, con una capacidad tipo P o F con XMLA endpoint activado (al menos en modo de lectura)

A screenshot of the Microsoft Fabric settings interface. It shows two main sections: "Microsoft Fabric" and "Integration settings".

- Microsoft Fabric:**
  - Users can create **Fabric** items  
Enabled for the entire organization
- Integration settings:**
  - Allow **XMLA** endpoints and Analyze in Excel with on-premises semantic models  
Enabled for a subset of the organization

📌 Más info: [Autenticación y autorización en FUAM](#)



<https://github.com/microsoft/fabric-toolbox/tree/main/monitoring/fabric-unified-admin-monitoring>

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# ¿Y CÓMO LO INSTALO?



## Getting Started with FUAM

- 1<sup>st</sup>  
Download Notebook  
from Github
- 2<sup>nd</sup>  
Prepare your  
environment
- 3<sup>rd</sup>  
Import & Run  
Notebook
- 4<sup>th</sup>  
Add credentials to  
new connections
- 5<sup>th</sup>  
Configure Capacity  
Metrics app
- 6<sup>th</sup>  
Run orchestration  
Pipeline
- 7<sup>th</sup>  
Open FUAM  
report
- 8<sup>th</sup>  
Schedule daily run of  
orchestration Pipeline



<https://github.com/microsoft/fabric-toolbox/tree/main/monitoring/fabric-unified-admin-monitoring>

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# PASITO A PASITO

## ① Descarga el notebook

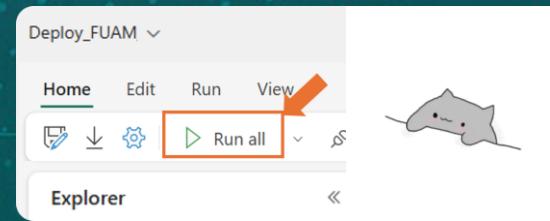
- Descárgate el notebook **Deploy\_FUAM.ipynb** del repositorio oficial a tu equipo.

## ② Prepara el entorno

- Crea un Service Principal (SPN)
- Asegúrate de que esté en un grupo con permisos para usar APIs de Fabric
- Crea un workspace nuevo (mejor si se llama "FUAM") y que esté en capacidad P o F

## ③ Importa y ejecuta el notebook

- Sube el notebook al workspace
- Haz clic en "Run All" Se crearán automáticamente **dos conexiones web** (sin credenciales aún)



<https://github.com/microsoft/fabric-toolbox/tree/main/monitoring/fabric-unified-admin-monitoring>





# PASITO A PASITO

4 Configura las credenciales en las 2 nuevas conexiones  
fuam fabric-service-api admin

- Ve a Configuración > Recursos y extensiones > Administrar conexiones y puertas de enlace
- Configúralas añadiendo como método de autenticación los datos del SPN

5 Prepara la Capacity Metrics App

- Despliega una nueva App de Capacity Metrics
- Asegúrate de que esté en una capacidad P o F
- Copia el nombre del workspace y del modelo semántico

fuam pbi-service-api adim

Administrar conexiones y puertas de enlace		
Conexiones	Puertas de enlace de datos locales	Puertas de enlace de datos
Conexiones de la puerta de enlace de datos y de la nube para artefactos. <a href="#">Obtenga más información</a>		
Nombre ↑	Tipo de conexión	
C:\Windows\ServiceProfiles\PBEgw...	Carpeta	
CapacityMetricsCES	Métricas de capacidad	
fuam fabric-service-api admin	Web V2	
fuam pbi-service-api admin	Web V2	

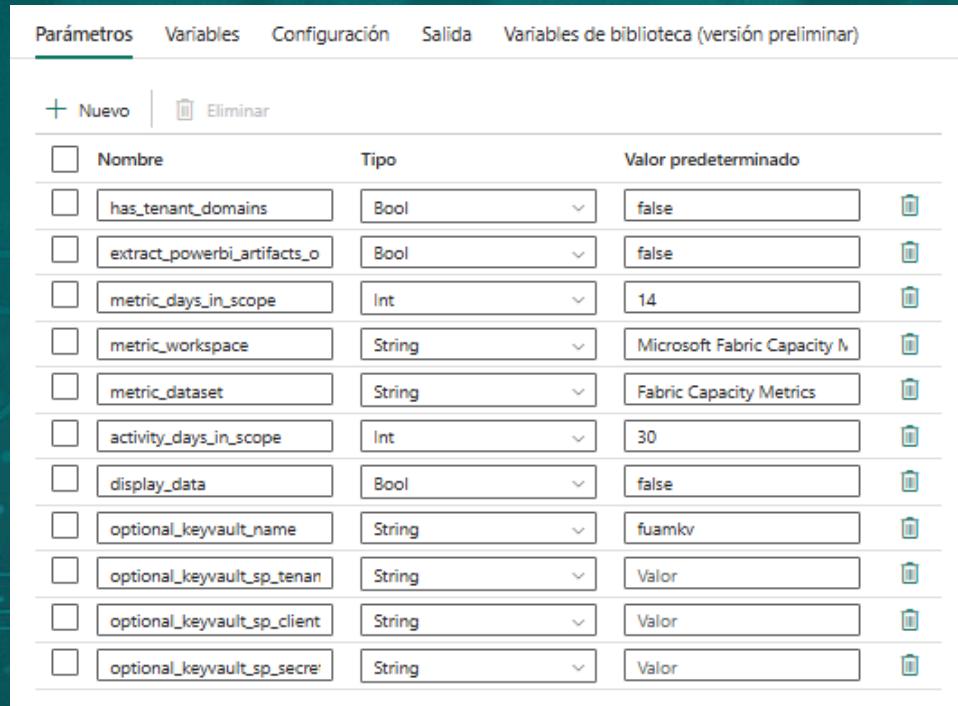
<https://github.com/microsoft/fabric-toolbox/tree/main/monitoring/fabric-unified-admin-monitoring>



# PASITO A PASITO

## 6 Ejecuta el pipeline de orquestación

- Busca la pipeline **Load\_FUAM\_Data\_E2E**
- Ajusta los parámetros (días, nombres, KeyVault si lo usas...) y lanza la carga inicial.



The screenshot shows the 'Parameters' tab of the Microsoft Fabric Toolbox interface. It displays a table of parameters with columns: Nombre (Name), Tipo (Type), and Valor predeterminado (Default Value). The parameters listed are:

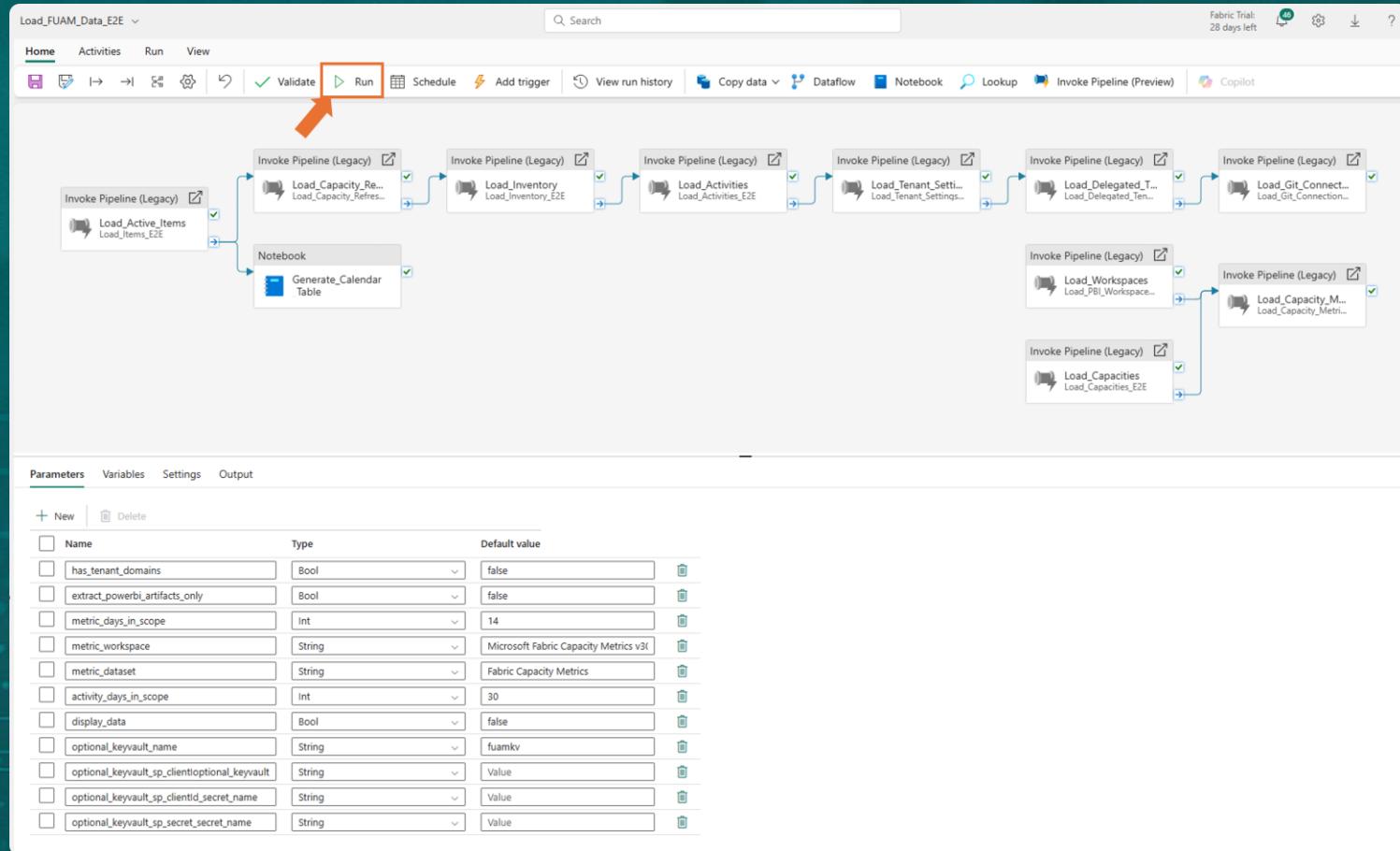
Nombre	Tipo	Valor predeterminado
has_tenant_domains	Bool	false
extract_powerbi_artifacts_o	Bool	false
metric_days_in_scope	Int	14
metric_workspace	String	Microsoft Fabric Capacity M
metric_dataset	String	Fabric Capacity Metrics
activity_days_in_scope	Int	30
display_data	Bool	false
optional_keyvault_name	String	fuamkv
optional_keyvault_sp_tenant	String	Valor
optional_keyvault_sp_client	String	Valor
optional_keyvault_sp_secret	String	Valor

<https://github.com/microsoft/fabric-toolbox/tree/main/monitoring/fabric-unified-admin-monitoring>





# PASITO A PASITO



<https://github.com/microsoft/fabric-toolbox/tree/main/monitoring/fabric-unified-admin-monitoring>



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# PASITO A PASITO

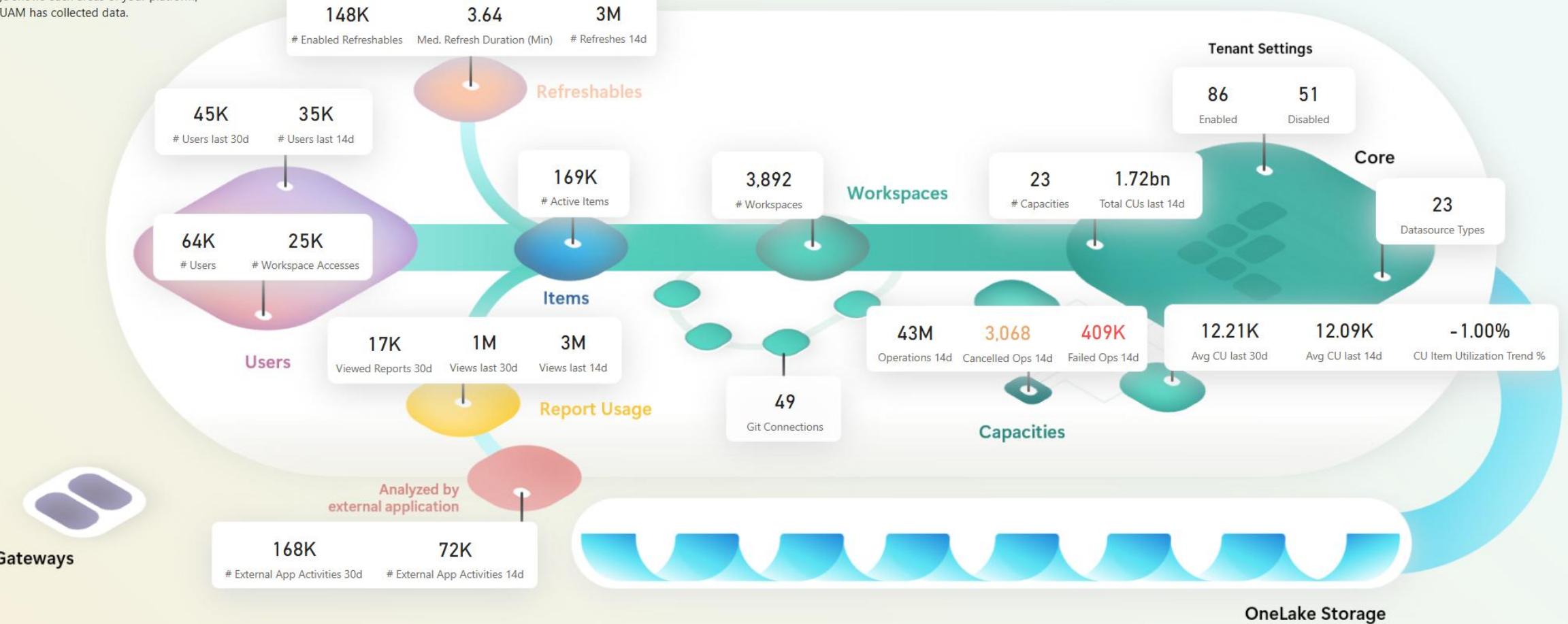


<https://github.com/microsoft/fabric-toolbox/tree/main/monitoring/fabric-unified-admin-monitoring>

**FABRIC USER GROUP ESP (FUGE)**

**Description:**

This page shows each areas of your platform, where FUAM has collected data.

**Your Fabric environment****Description:**

Experience the real power of FUAM with help of the analytical paths.

**Analytical paths****Capacity Characteristics**

Get a comprehensive overview of your capacity utilization based on workload.

**Start**

**Item Outliers based on CU usage**

Identify and analyze items of your capacity that have led to overutilization of your capacity.

**Start**

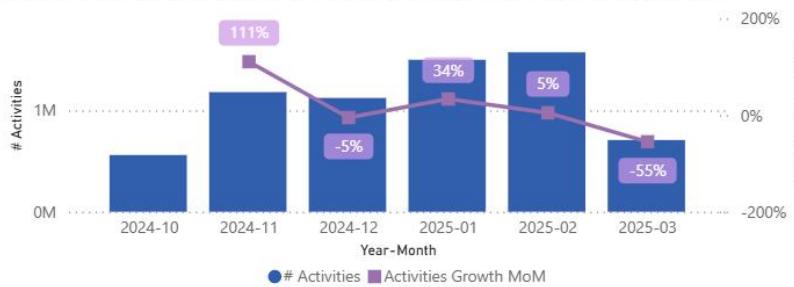
**Unused workspaces & items**

Identify unused workspaces and reports that cause daily/weekly CU usage without report views.

**Coming soon**

## MCG | Monthly Consumption Growth (on dedicated Capacities)

X-Axis hierarchy: Year-Month | Filtered for: ViewReport, ViewDashboard, AnalyzeInExcel, ExportReport



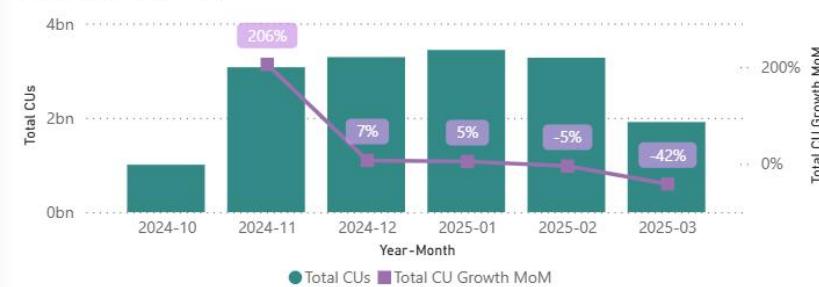
## MAUG | Monthly Active Users Growth (on dedicated Capacities)

X-Axis hierarchy: Year-Month



## CUG | Monthly CU Growth of dedicated Capacities

X-Axis hierarchy: Year-Month



## Your Fabric/Power BI Capacity regions



## Description:

This page provides an overview of your current tenant state. The three bar charts with metrics 'MCG', 'MAUG' and 'CUG' are platform adoption growth metrics, which help you to track the usage on your platform.

On the bottom, the cards visualize the deployed capacities, workspaces (attached to capacities) and different items on your tenant based on the last scan.

23

# Capacities

4K

# Workspaces on capacities

169K

# Active Items

--

# AI Skills

3K

# Apps

8K

# Dashboards

3K

# Dataflows

42

# Datamarts

4

# Eventhouses

8

# Eventstreams

--

# GraphQL APIs

--

# Healthcare Data Solutions

4

# KQL Databases

3

# KQL Querysets

72

# Lakehouses

--

# Mirrored Warehouses

44

# ML Experiments

30

# ML Models

--

# Mounted Databases

241

# Notebooks

87

# Pipelines

21

# Reflex

75K

# Reports

79K

# Semantic Models

1

# Spark Job Definitions

50

# SQL Endpoints

31

# Warehouses

17 # Capacities      3,226 # Workspaces      143K # Active Items

**Capacities based on last scan**

Capacity Name	SKU	Region	State
capacity_3	P2	Brazil South	Active
capacity_1	P3	North Europe	Active
capacity_10	PP3	North Europe	Active
capacity_11	P2	North Europe	Active
capacity_12	F64	North Europe	Active
capacity_13	P1	North Europe	Active
capacity_14	P1	North Europe	Active
capacity_16	P3	North Europe	Active
capacity_18	P1	North Europe	Active

**Description:**

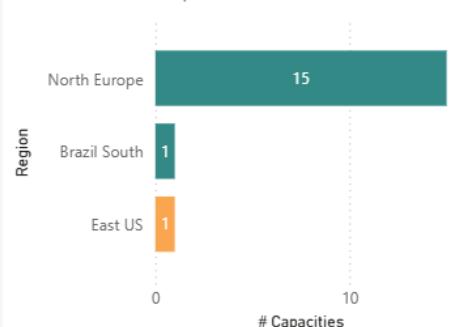
This page provides high level information about the scanned PBI/Fabric capacities on your tenant.

**Capacity SKUs & States:**

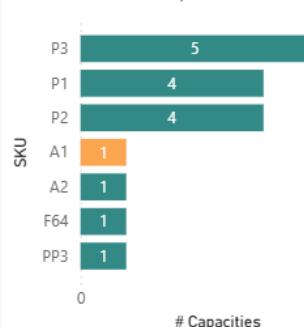
Please note that the SKU and the State are based on the last inventory scan result.  
**When you up-/ or downscale capacities, you won't see the changes in this report.**

**Capacities by Region**

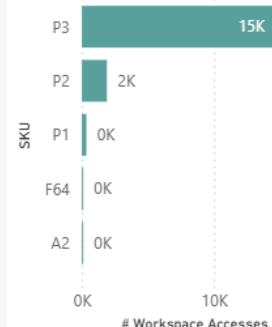
State ● Active ● Suspended

**Capacities by SKU**

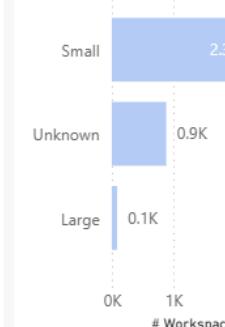
state ● Active ● Suspended

**Workspace Users by SKU**

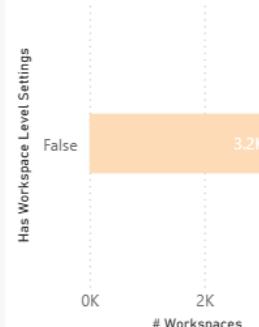
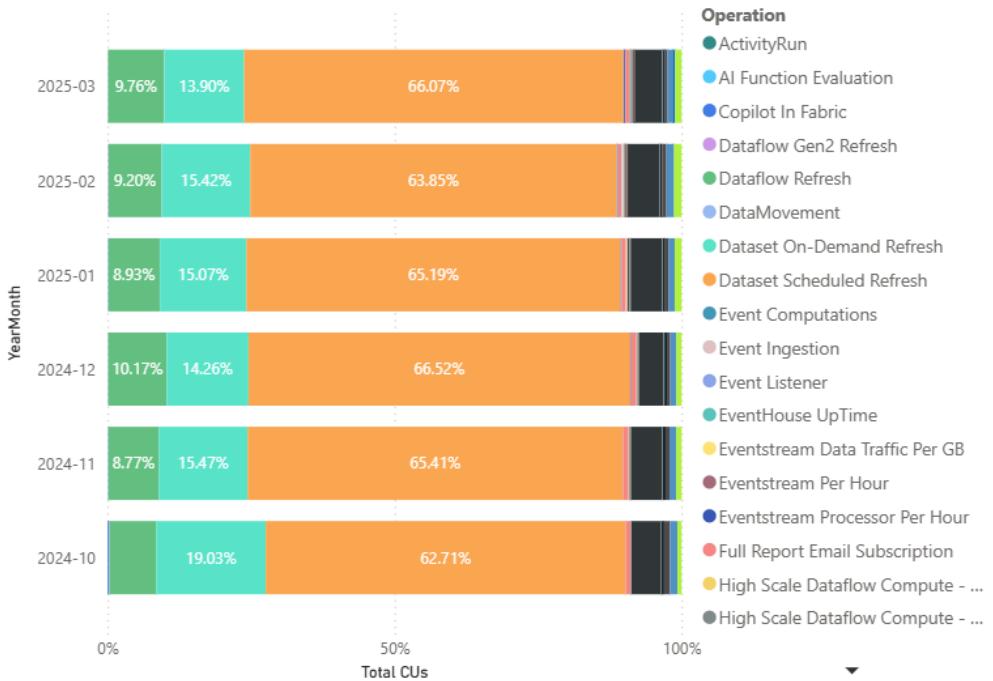
state ● Active ● Suspended

**Workspaces by Storage Format**

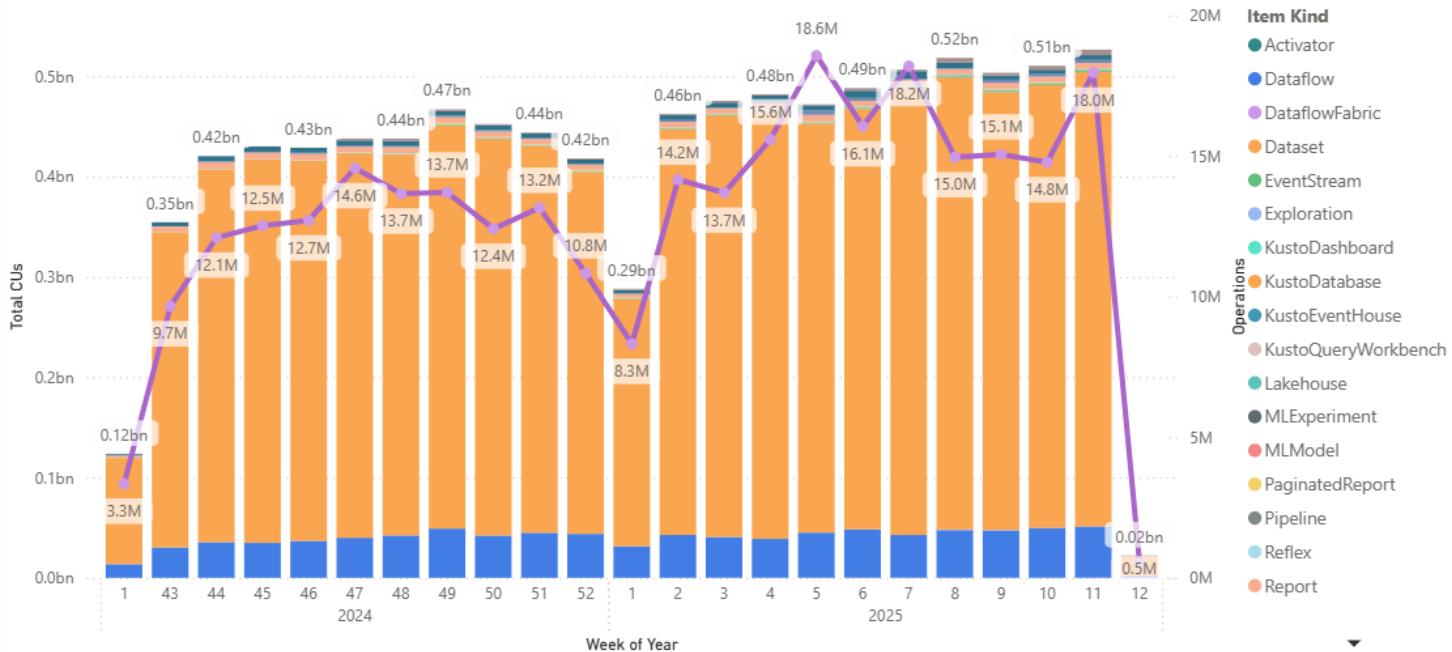
state ● Active ● Suspended

**Workspaces by Workspace level settings (True/False)**

state ● Active ● Suspended

**100% split of Total CUs by Operation****Total CUs by Date by Item Kind**

X-Axis Hierarchy: Year -> Week of Year



Pages < File Export Share Edit ... Copilot ⚙️ 🔍

FUAM Plus | Timeline

Consolidates important metrics on tenant/capacity level and brings it on the same day level.

Description: This page helps you answer the question: "What happened to the tenant on a specific day?" FUAM Release 2025.4.1

Date: 1/1/2024 - 12/31/2030

Activities | Anomaly detection | Tenant level

Total CUs by Item Kind over time

ItemKind: Activator, DataExplorati..., Dataflow, Dataflowi..., Dataset, EventStream, Exploration, KustoDashb..., KustoData..., KustoElve..., KustoQuer..., Lakehouse, MLExperi..., MLModel, Paginate..., Pipeline, Reflex, Report, Semantic..., SynapseN..., VNet Data ..., Warehouse

Total CUs

0M, 50M, 100M

0M, 50K, 100K

0K, 1K, 2K, 3K, 4K, 5K

Nov 2024, Dec 2024, Jan 2025, Feb 2025, Mar 2025

Timeline Selected

Timeline

Refresh Activities (filtered activities for 'RefreshDataset', 'RequestDataflowRefresh', 'RefreshFromExternalApplication')

# Activities

50K, 30K, 20K, 10K, 0K

OK, 419, 1,318, 1,736, 1,287,47, 4, 27, 1,262, 3, 351, 1,656,444, 54, 3, 1,332, 35,039, 31,074, 34,572, 35,411, 31,823, 1,338, 1,924, 1,313, 22, 1,948, 1,375, 4, 1,356,30, 1,366,17, 1,831, 2, 171, 23, 1, 338, 34,739, 33,825, 30,431, 32,711, 39,589, 39,186, 28,801, 33,978, 31,750, 28,226, 28,402, 9,067

Nov 2024, Dec 2024, Jan 2025, Feb 2025, Mar 2025

Activities on Dedicated Capacities

Unique Users from Activities

Pages Home Tenant Overview Capacities Capacity Overview Capacity Characteristic Capacity Details Capacity Utilization Capacity Timeline Workspaces Workspace Accesses Item Overview Item Catalog Item Catalog+ Item Operations | Daily Item Operations | WS



3,892

87,768

19,232

# Workspaces

# Active Items

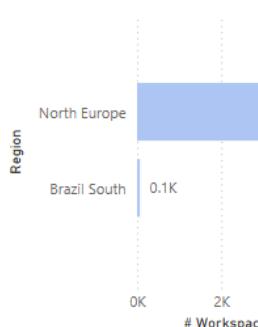
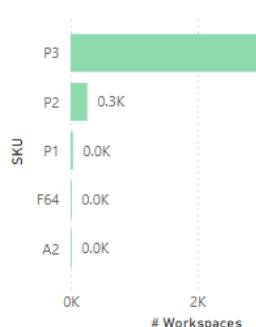
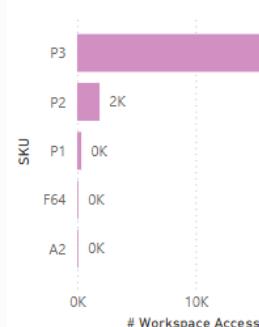
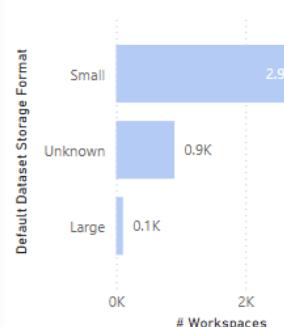
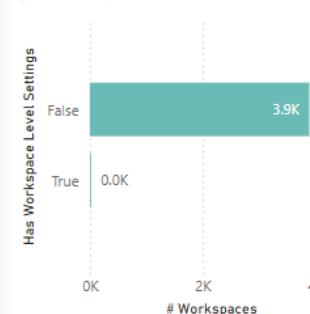
# Workspace Accesses

**Description:**

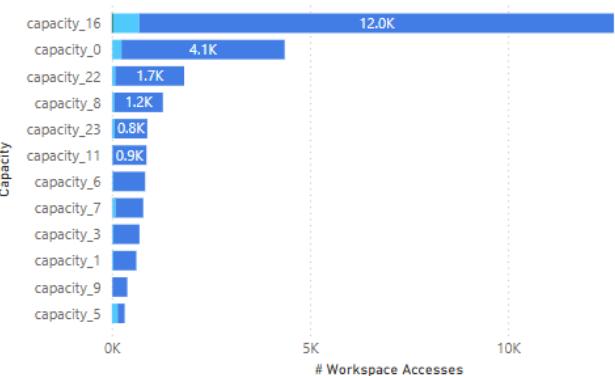
This page provides high level information to the scanned You can easily track, what and how is deployed in the capacities and workspaces.

**Capacity SKUs & States:**

Please note that the SKU and Names are based on the last inventory scan result. When you up- or downscale capacities, you won't see the changes in this report.

**Workspaces by Capacity Region****Workspaces by Capacity SKU****Workspace Users by SKU****Workspaces by Storage Format****Workspaces by Workspace level settings (True/False)****Scanned Workspace Users by Capacity by Workspace Principal Type**

PrincipalType ● App ○ Group ● User

**Heatmap based on Number of Artifacts by Workspace**

Capacity -> Workspace	# Active Artifacts	# AI Skills	# Apps	# Dashboards	# Dataflows	# Datamarts	# Semantic Models	# Reports	# Eventhouses	# Eventstreams	# GraphQL APIs	# Healthcare Data Solutions	# KQL Databases	# KQL Querysets	# Lakehouses	# Warehouses	# Mounted Databases	# Mirrored Warehouses	# SQL Endpoints	# ML Experiments	# ML Models	# Notebooks	# Pipelines	# Reflex		
capacity_16	34,908		1,021	1,219	636	9	15,647	16,300			1												2			
capacity_0	14,196		262	506	465	12	6,350	6,587																		
capacity_22	6,348		102	135	148	6	2,957	2,998																		
capacity_7	5,679		34	138	34	1	2,574	2,898																		
capacity_23	5,385		94	192	254	6	2,409	2,409														2	4	6	3	
capacity_6	3,991		84	85	752	2	1,511	1,547																		
capacity_5	3,201		265	546	141	1	916	1,331																		
capacity_1	2,857		43	70	206	1	1,247	1,278	1						1	1	1	1			1	3	2			
capacity_3	2,629		32	35	23	2	1,189	1,347																		
capacity_8	2,204		49	74	168		916	958									5			1		11	12			
capacity_9	1,539		62	67	152		615	643																		
capacity_11	1,495		26	22	56	2	679	709																		
capacity_14	1,210		25	31	45		524	585																		
capacity_12	893		4	3	97		165	84	2	6					2	2	64	28		46	44	30	223	69	13	
capacity_20	544		41	7			245	250																		
capacity_21	210		2	1	22		92	93																		
capacity_13	180				15	3		77	85																	
capacity_2	147				7	6	9				66	59														
capacity_15	62							28	24																	
Total	87,768		2,155	3,152	3,211	42	38,247	40,239	4	8					4	3	72	31		50	44	30	241	87	21	

## FUAM | Item Kind Overview

Transient level Capacity level Domain level Workspace level Item level

Description: This page provides insights into the deployed item kinds on capacity and workspace level.

FUAM Release  
2025A.1

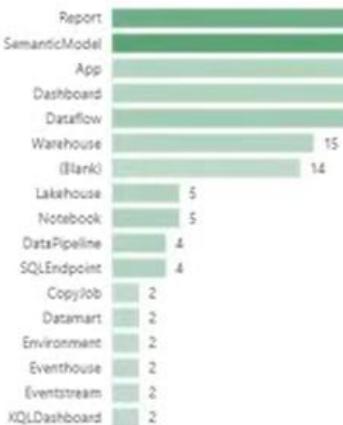
## Capacity Overview

## Capacity Characteristic

13 # Capacities    86 # Workspaces    1,384 # Active Items

## Capacity Details

## # Scanned Workspace Users by Types



## Capacity Utilization

## Capacity Compute

## Timeline

## Workspaces

## Workspace Accesses

## Item Overview

## Item Catalog

## Item Catalog +

## Item Operation

## Daily

## Item Operations | WS

## Item Operations | Ops

## Item Operations | Kind

## Tenant Settings

## Delegated Tenant Setti...

## Refreshables

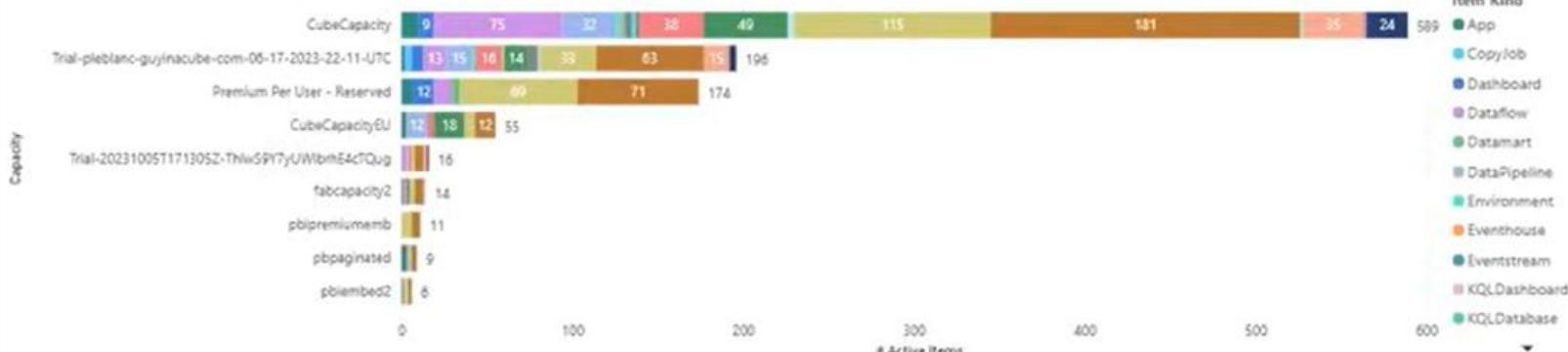
## Refreshable Summary

## Refreshable Details

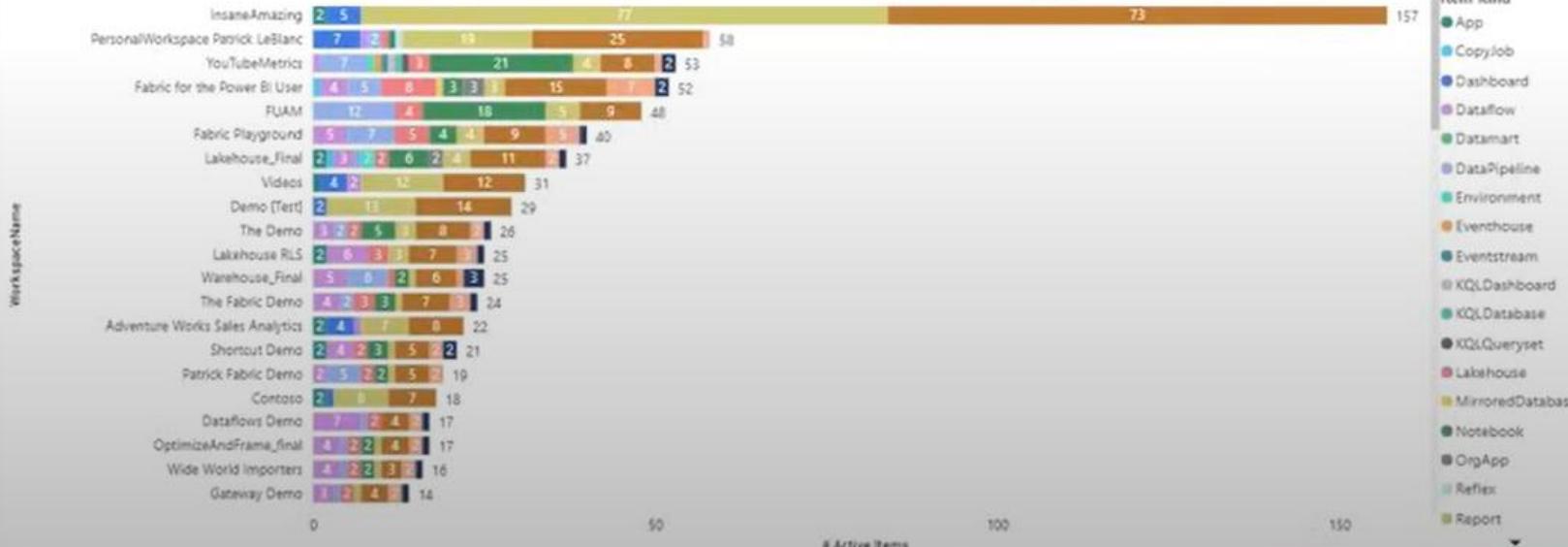
## Description:

This page provides high level information to the scanned items on your tenant. Please note that the items will be filtered on Capacity and Workspace level.

## # Items by Kind by Capacity



## # Items by Kind by Workspace (on dedicated capacities)



Pages < File Export Share 88 Edit ... Copilot ⌂ Capacity Compute Timeline Workspaces Workspace Accesses Item Overview Item Catalog Item Catalog+ Item Operations | Daily Item Operations | WS Item Operations | Ops Item Operations | Kind Tenant Settings Delegated Tenant Setti... Refreshables Refreshable Summary Refreshable Details

## FUAM | Tenant Settings | Snapshots

Tenant Setting Changes (based on Activity Logs)

Switch State: ▲ False ● False/True ■ True

Setting Group	Setting	Nov 2024	Dec 2024	Jan 2025		
Admin API settings	Enhance admin APIs responses with DAX and mashup expressions	■	■	■		
	Enhance admin APIs responses with detailed metadata	■	■	■		
	Service principals can access admin APIs used for updates					
	Service principals can access read-only admin APIs	■	■	■		
	Advanced networking	Azure Private Link	▲	▲	▲	
		Block Public Internet Access	▲	▲	▲	
		App settings	Create template organizational apps	▲	▲	▲
			Publish apps to the entire organization	■	■	■
			Push apps to end users	■	■	■
			Audit and usage settings	Azure Log Analytics connections for workspace administrators	■	■
Microsoft can store query text to aid in support investigations				■	■	■
Per-user data in usage metrics for content creators	■			■	■	
Show user data in the Fabric Capacity Metrics app and reports	■	■		■		
Usage metrics for content creators	■	■		■		
Copilot and Azure OpenAI Service	Workplace admins can turn on monitoring for their workspaces (preview)			■	■	
	Capacities can be designated as Fabric Copilot capacities					
	Data sent to Azure OpenAI can be processed outside your capacity's geographic region, compliance boundary, or national cloud instance					
	Data sent to Azure OpenAI can be stored outside your capacity's geographic region, compliance boundary, or national cloud instance					

Description: FUAM takes snapshots of your tenant settings. You can track tenant setting states and changes.

FUAM Release 2025.4.1

Pages < File Export Share 88 Edit ... Copilot ⌂ ⌂ ⌂ FUAM Release 2025.4.1

## Item Operations | Ops

## Item Operations | Kind

## Tenant Settings

## Delegated Tenant Setti...

## Refreshables

## Refreshable Summary

## Refreshable Details

## Activities

### Activity Explorer

### Report Usage

### Report Activity Trends

### Report & SM Usage

### Users

### Optimization Module

### Semantic Model BPA

### FUAM | Activity Overview

Description: This page provides you insights into activities based on the collected activity logs.

# Activities	# Users	# Viewed Reports	# Activities last 14d	# Activities last 30d	# Activities CM	# Activities CY	# Activities PM	# Activities PY
44M	65K	34K	3M	7M	20M	20M	7M	24M

**Activity | by Operation**

Operation	# Activities
ConnectFromExternalApplication	9,660,351
DeleteDatasetRows	7,343,923
ViewReport	7,123,142
GenerateDataflowSasToken	6,651,048
RefreshDataset	5,464,079
GetWorkspaces	1,972,866
AnalyzedByExternalApplication	1,220,729
GenerateScreenshot	605,577
GetSnapshots	402,399
GenerateCustomVisualAADAccessTo...	278,686
RequestDataflowRefresh	257,941
ExportReport	255,046
ReadArtifact	206,277
CopilotInteraction	163,441
RequestCopilot	163,440
RunEmailSubscription	150,625
DeleteFileOrBlob	138,204
RenameFileOrDirectory	122,709
ExportArtifact	121,316
ViewSparkAppLog	116,114
Import	98,246
ExportArtifactDownload	95,154
CreateFile	91,192
EditDataset	86,702
ViewDashboard	85,224
GetCloudSupportedDataSources	57,621
GetTaskFlow	53,405
GetDatastoreDetailsWithCredential...	50,695
UpdateArtifact	50,564
ExportDataflow	43,366
ConnectWarehouseAndSqlAnalytics...	35,225
ViewTile	29,038
ReadDataflow	28,872
ViewDataflow	28,753
EditReport	27,720
ShareReport	26,316
ExportActivityEvents	23,952
CreateReport	20,888

**Activities | Anomaly detection | Tenant level**

**Activities on dedicated Capacities**

YearMonth	# Activities	Growth MoM
2024-10	~8M	-
2024-11	~9M	+14%
2024-12	~8.5M	-6%
2025-01	~7.5M	+1%
2025-02	~6.5M	-17%
2025-03	~4.5M	-48%
2025-04	0	-100%

**Activity | Create Items on dedicated Capacities**

YearMonth	CreateAimPipeline	CreateApp	CreateArtifact	CreateBranchInGit	CreateCheckpoint	CreateCloudDataSource
2024-10	6K	0	0	0	0	0
2024-11	7K	0	0	0	0	0
2024-12	10K	0	0	0	0	0
2025-01	32K	0	0	0	0	0
2025-02	30K	0	0	0	0	0
2025-03	13K	0	0	0	0	0

**Activity | Refresh related Activities on dedicated Capacities**

YearMonth	# Refresh Activities	Growth MoM
2024-10	~0.8M	-
2024-11	~0.9M	+19%
2024-12	~0.8M	-1%
2025-01	~0.8M	+6%
2025-02	~0.6M	-10%
2025-03	0	-100%

**Activity | Copilot & OpenAI requests**

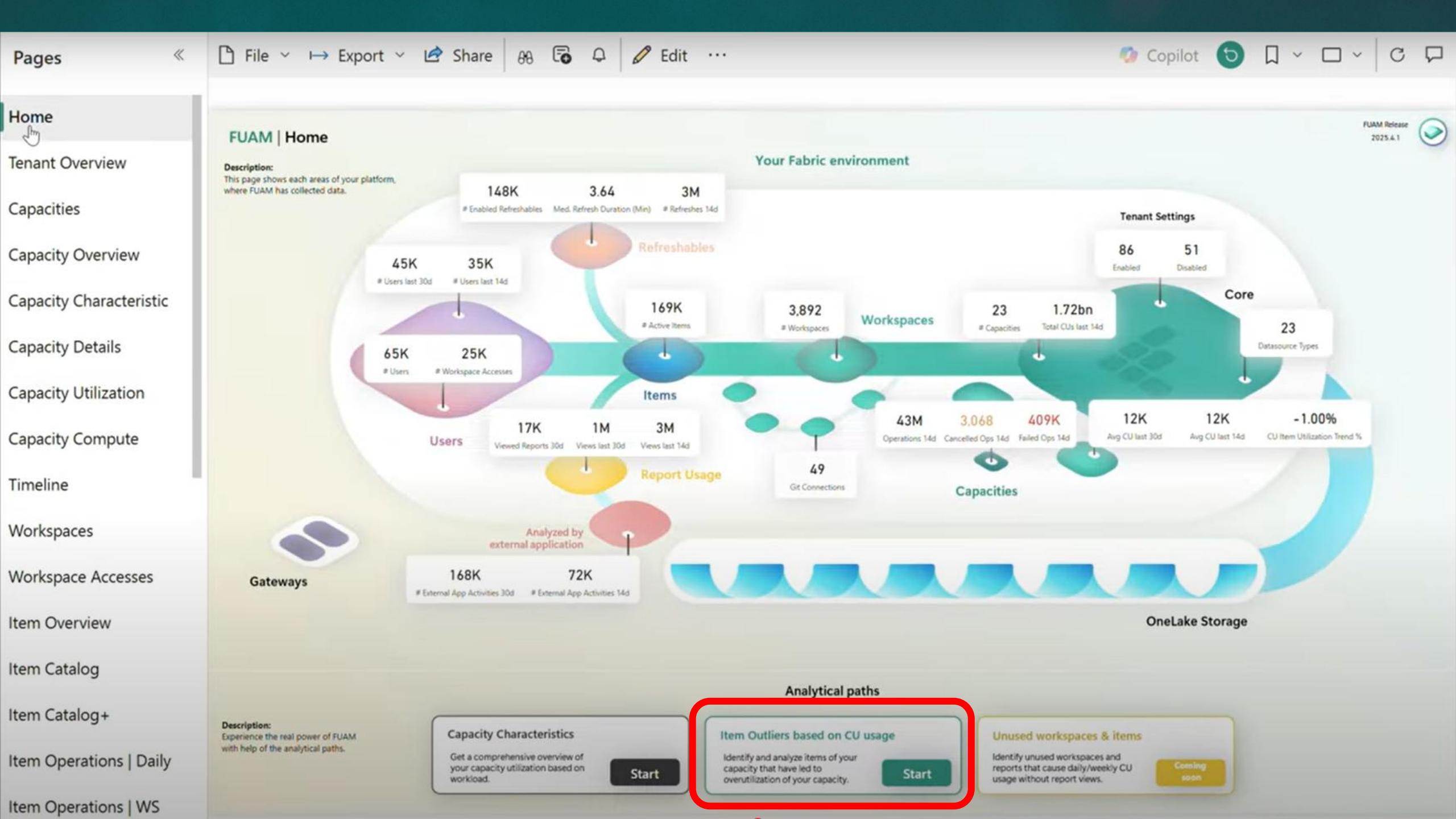
YearMonth	# Activities
2024-10	23K
2024-11	37K
2024-12	16K
2025-01	30K
2025-02	36K
2025-03	21K

**Collected Activities (unfiltered)**

YearMonth	# Activities
2024	24,231,615
2025	19,543,248

**Collected Activities (unfiltered)**

YearMonth	# Activities
2024-10	7,209,631
2024-11	8,252,376
2024-12	8,769,608
2025-01	8,672,517
2025-02	7,168,387
2025-03	3,702,344



**Step 1) Highlight a day on one of your capacities**

To find outliers over time, it is great to start with a single day on a given capacity.  
The daily tooltip helps you to understand what is happened on that day on your capacity based on all the key CU metrics, what you know from Capacity Metrics App.

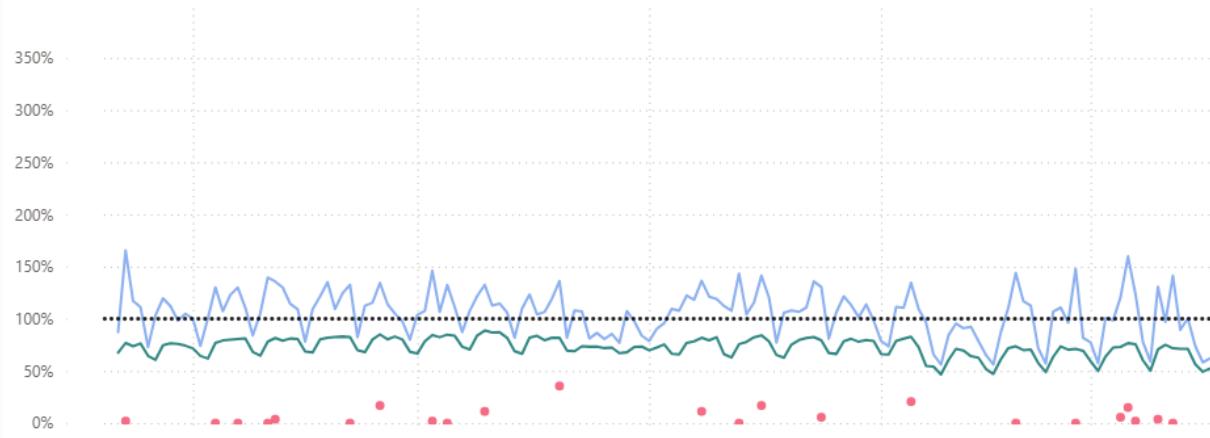
TimePoint (Day)

10/22/2024  3/17/2025 

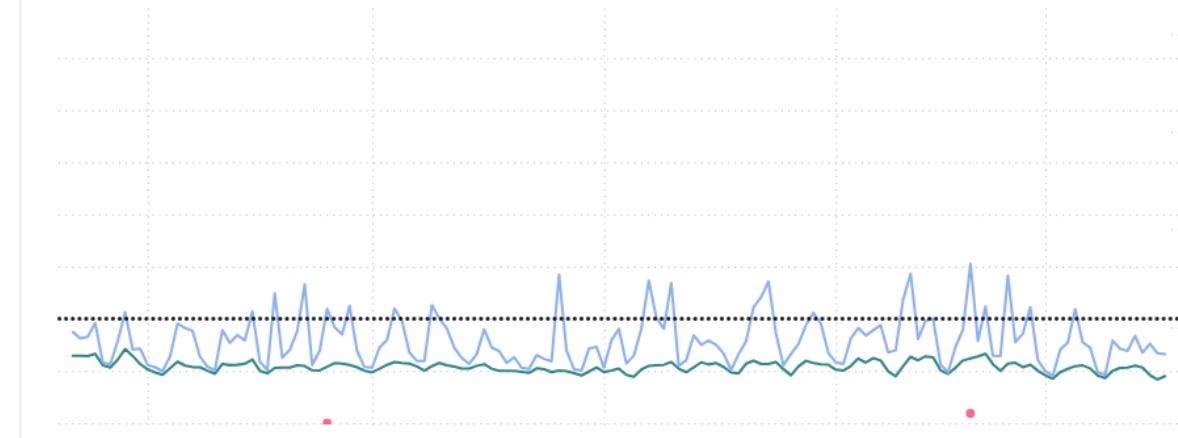
Avg TimePoint CU %, Max TimePoint CU % and Throttling Count by Date and Capacity Name

● Avg TimePoint CU % ● Max TimePoint CU % ● Throttling Count

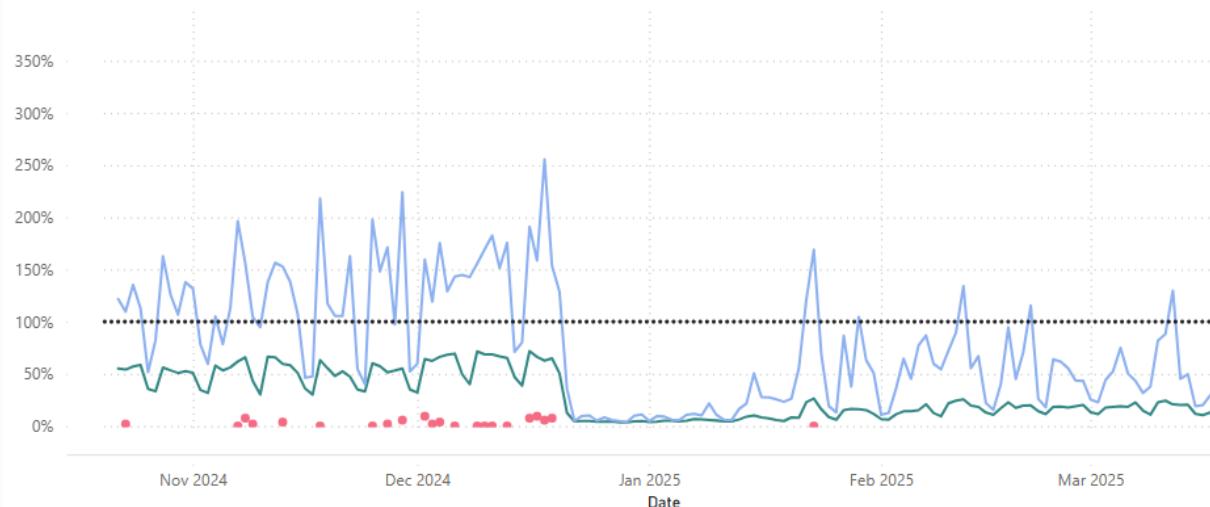
capacity\_0



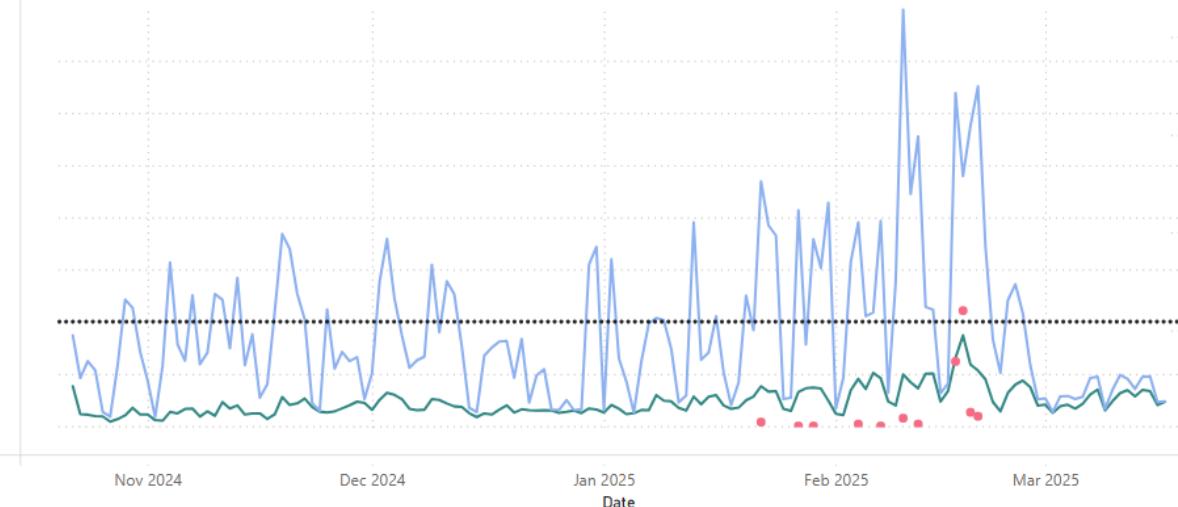
capacity\_1



capacity\_11



capacity\_12



Nov 2024

Dec 2024

Jan 2025

Feb 2025

Mar 2025

Nov 2024

Dec 2024

Jan 2025

Feb 2025

Mar 2025

**Step 2) Find recurring outlier items**

To find outliers over time, it is great to start with a single day on a given capacity.

[Go to Outlier Analysis](#)

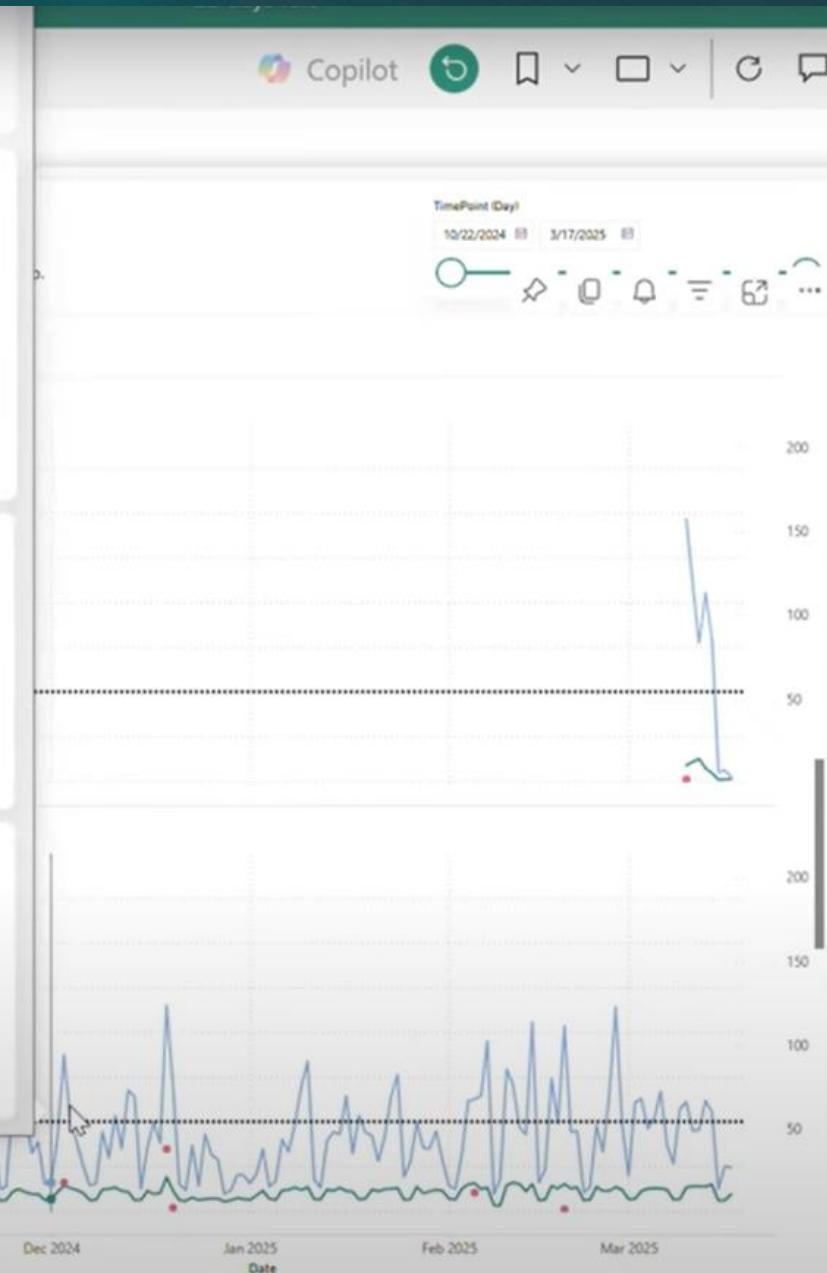
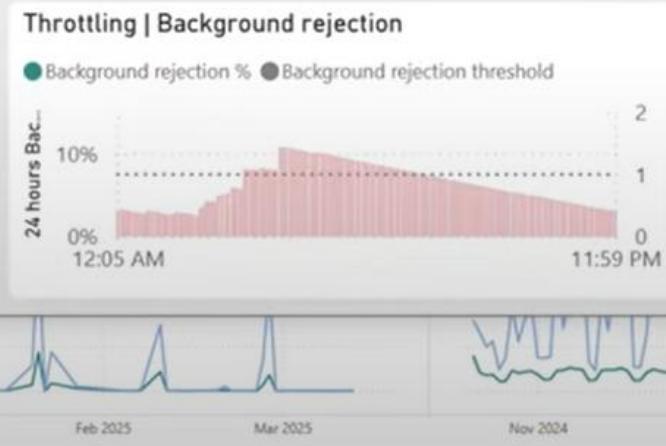
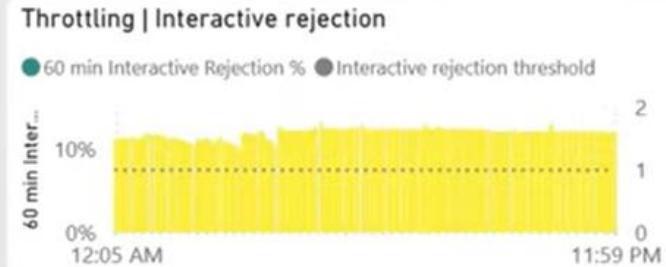
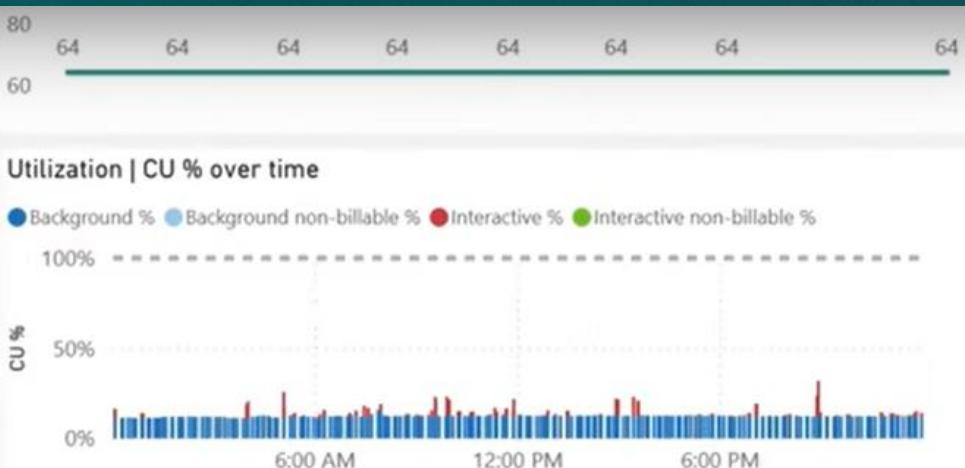
2024-12-01

Date

**31.79%**  
Max TimePoint CU %

**13.48%**  
Avg TimePoint CU %

**(Blank)**  
Throttling Count



**Step 2) Find recurring outlier items**  
To find outliers over time, it is great to start with a single day on a given capacity.

Go to Outlier Analysis

[Navigate to page Home](#)

Home

Tenant Overview

Capacities

Capacity Overview

Capacity Characteristic

Capacity Details

Capacity Utilization

Capacity Compute

Timeline

Workspaces

Workspace Accesses

Item Overview

Item Catalog

Item Catalog+

Item Operations | Daily

Item Operations | WS

## FUAM | Item Outlier Analysis



Tenant level Capacity level Domain level Workspace level Item level

capacity\_21

Selected Capacity

2024-12-19

Selected Date

229.85%

Max TimePoint CU %

37.95%

Avg

38

Max

## Item Outlier Analysis

Date	Workspace Name	Item Kind	Item Name	Total CUs	Daily CU vs 14d Avg CU	Outlier Factor
2024-12-19	workspace_252	Dataset	SemanticModel_857	1,162,106	958,053.27	
2024-12-19	workspace_252	Dataset	SemanticModel_51	216,625	2,070.67	
2024-12-19	workspace_252	Dataset	SemanticModel_858	110,616	-44,488.46	
2024-12-19	workspace_247	Dataset	SemanticModel_311	45,909	31,319.27	
2024-12-19	workspace_252	Dataset	SemanticModel_48	42,202	-905.41	
2024-12-19	workspace_252	Dataset	SemanticModel_52	30,700	-4,789.90	
2024-12-19	workspace_252	Dataset	SemanticModel_49	28,490	-173.10	
2024-12-19	workspace_252	Dataset	SemanticModel_306	21,823	4,477.18	
2024-12-19	workspace_252	Dataset	SemanticModel_304	21,198	-1,784.19	
2024-12-19	workspace_252	Dataflow	dataflow_1237	20,964	1,276.11	
2024-12-19	workspace_252	Report	report_34359743855	17,600	-2,576.37	
2024-12-19	workspace_252	Dataset	SemanticModel_308	16,606	-3,837.05	
2024-12-19	workspace_252	Dataset	SemanticModel_53	13,537	-2,718.44	
2024-12-19	workspace_252	Dataset	SemanticModel_804	8,577	190.40	
2024-12-19	workspace_250	Dataset	SemanticModel_811	8,546	-26,618.55	
2024-12-19	workspace_252	Dataset	SemanticModel_54	8,525	-1,595.29	
2024-12-19	workspace_252	Dataflow	dataflow_558	6,889	-514.02	
2024-12-19	workspace_252	Dataset	SemanticModel_50	5,056	-732.85	

## Step 3) Check recurring outlier items

In this step, take a look on the table. Red marked items are items which have a 'bad-actor' behavior in the last 14 days.

## Daily CU vs 14d Avg CU

This metric matches the total daily Average CU with the daily average CU for the last 14 days of the given item. FUAM uses it to visualize whenever the item is using more CU in the last 14 days as its entire lifecycle.

## Outlier Factor

Every F-SKU and every workload has its own character. The Total CU and the percentage of the capacity utilization, are key metrics, however it doesn't represent if an item is an outlier. For that reason, FUAM calculates an Outlier Factor based on standard variance.

The more filled the dice symbol is, the higher the outlier factor. We recommend analyzing such items in the next steps.

## Step 4) Select an item and continue with in-depth analysis

FUAM's item analyzer provides you a unique holistic view about the selected item.

[Go to Item Analyzer](#)

Home

Tenant Overview

Capacities

Capacity Overview

**FUAM | Item Outlier Analysis**


Tenant level Capacity level Domain level Workspace level Item level

capacity\_21

Selected Capacity

2024-12-19

Selected Date

229.85%

Max TimePoint CU %

37.95%

Avg

38

Sum

## Item Outlier Analysis

Date      Workspace Name      Item Kind      Item Name

2024-12-19    workspace\_252

Dataset    SemanticModel\_857

Total CUs      Daily CU vs 14d Avg CU      Outlier Factor

1,162,106    958,053.27

116,625    2,070.67

110,616    -44,488.46

45,909    31,319.27

42,202    -905.41

30,700    -4,789.90

28,490    -173.10

21,823    4,477.18

21,198    -1,784.19

20,964    1,276.11

17,600    -2,576.37

16,606    -3,837.05

13,537    -2,718.44

8,577    190.40

8,546    -26,618.55

8,525    -1,595.29

6,889    -514.02

5,056    -732.85

**Step 3) Check recurring outlier items**

In this step, take a look on the table.  
Red marked items are items which have a 'bad-actor' behavior in the last 14 days.

**Daily CU vs 14d Avg CU**

This metric matches the total daily Average CU with the daily average CU for the last 14 days of the given item.  
FUAM uses it to visualize whenever the item is using more CU in the last 14 days as in its entire lifecycle.

**Outlier Factor**

Every F-SKU and every workload has its own character. The Total CU and the percentage of the capacity utilization, are key metrics, however it doesn't represent if an item is an outlier. For that reason, FUAM calculates a Outlier Factor based on standard variance.

The more filled the dice symbol is, the higher the outlier factor. We recommend analyzing such items in the next steps.

**Step 4) Select an item and continue with in-depth analysis**

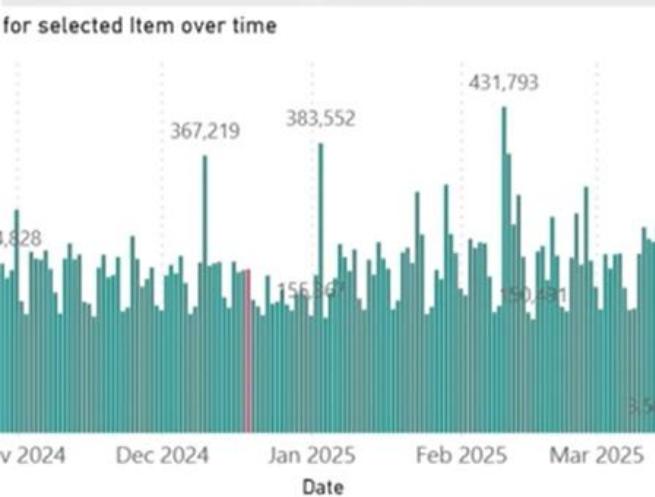
FUAM's item analyzer provides you a unique holistic view about the selected item.

[Go to Item Analyzer](#)

 workspace\_252  
 Selected Workspace

2024-12-19    Selected Date    216,625    CU (sec) Consumption

 Dataset    SemanticModel  
 Consumption Item Kind    Inventory Item Kind

 SemanticModel\_51  
 Selected Item


## CU (sec) Consumption for selected Item by Operation



2024-12-19    workspace\_252

Dataset    SemanticModel\_50

Item Operations | WS

## Item Analyzer

## Semantic Model Analyzer



Workspace Storage Format

Large

Workspace

workspace\_0

Item Name

SemanticModel\_857

Creator User Principal

## Description

This page provides holistic overview about the selected item's lifecycle.

Capacity based on last scan

capacity\_0

SKU based on last scan

A1

Item Id

CCF8C284-E1E0-5BDE-CF62-DF85680FD098

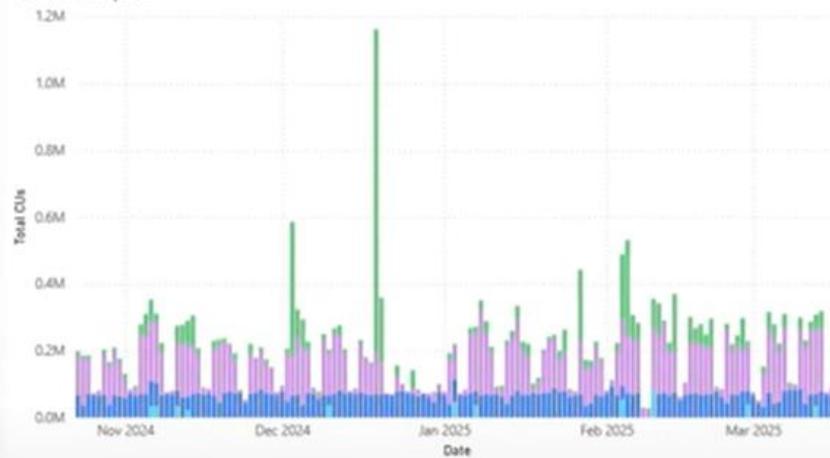
Item Kind

SemanticModel

## Usage

We recommend to filter for one item. There are two main areas: CU utilization and activities.

## CU Utilization | Item



## Item Activities | Heatmap



## Activities | direct Item

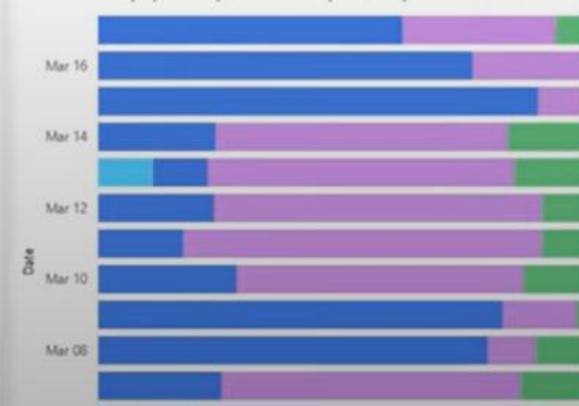


## Query

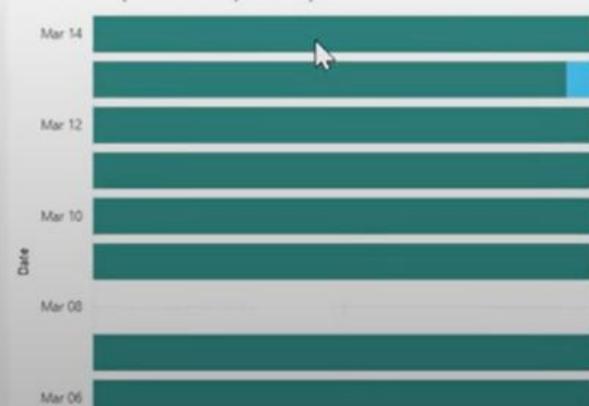
AI Function Evaluation

Dataset Scheduled Re...

## CU Utilization by Operation | 100% Stacked | last 30day



## Item Activities | 100% Stacked | last 30day





## Fabric Unified Admin Monitoring (FUAM)

Take your tenant monitoring to the next level.

Tenant level → Capacity level → Domain level → Workspace level → Item level



### Insights

"Seamless tenant monitoring experience for Fabric Admins."

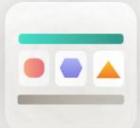
"Unified data store for your platform logs"



### FUAM Lakehouse

„Enrich FUAM Lakehouse with your data via Shortcut“

Data collection via Fabric Pipelines & Notebooks



Active Items



Activity Logs



Capacity Properties



Capacity Refreshables



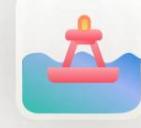
Capacity Metrics



Inventory (meta) data



Optimization Module  
Coming soon



Tenant settings

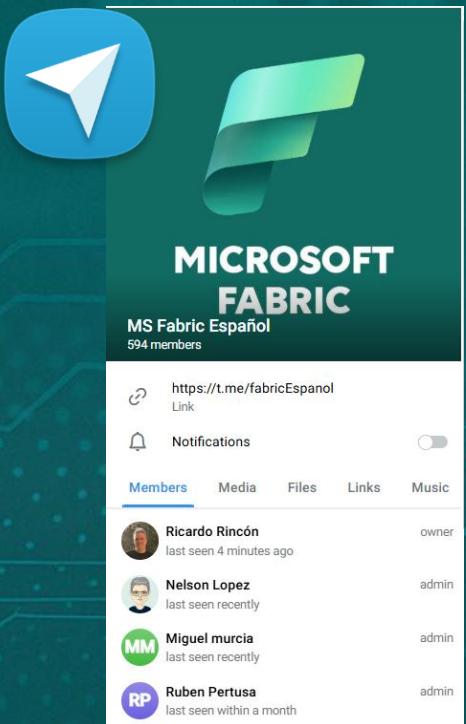


**FABRIC USER GROUP ESP (FUGE)**



# NO ESTAS SOLO

Recuerda que #somoscomunidad  
Echa un vistazo a las issues abiertas y cerradas  
¡Colabora y comparte!



The screenshot shows the GitHub Issues page for the `microsoft / fabric-toolbox` repository. The search bar contains the query `is:issue state:open`. There are 34 open issues listed:

- Item Run Duration is not accurate (#146 - shubham184 opened 2 days ago)
- Best\_Practice\_Analyzer\_configuration (#139 - Maester16 opened 2 weeks ago)
- Shortcuts Report (#135 - sagarbathe opened 2 weeks ago)
- Workspace Accesses (#134 - Maciej-Suszczewicz opened 2 weeks ago)
- Session State Error on FUAM set up (#133 - timothy-mcalliley opened 2 weeks ago)
- FUAM - Duplicate Item IDs in 01\_Transfer\_Active\_Items\_Unit (#132 - fdnavaropecci opened 2 weeks ago)
- Load\_Capacity\_Metrics Fails every time with table not found error. (#131 - aftabmasood25 opened 2 weeks ago)

<https://github.com/microsoft/fabric-toolbox/issues>



FABRIC USER GROUP ESP (FUGE)



# ¡GRACIAS!



FABRIC USER GROUP ESP (FUGE)