

# Power BI Gateway Monitoring



# Rui Romano (he/him)

Sr Program Manager | Power BI CAT

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## *Professional:*

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Open Source - <https://github.com/RuiRomano>

Former Microsoft MVP

Co-Founder of [Power BI Portugal User Group](#)

## *Personal:*

Snowboarding, Swimming, Sports

Cats, Cinema & Popcorn, Xbox

Sun, Beach





## Objective:

Talk about a solution to efficiently monitor & troubleshoot your on-prem gateways.

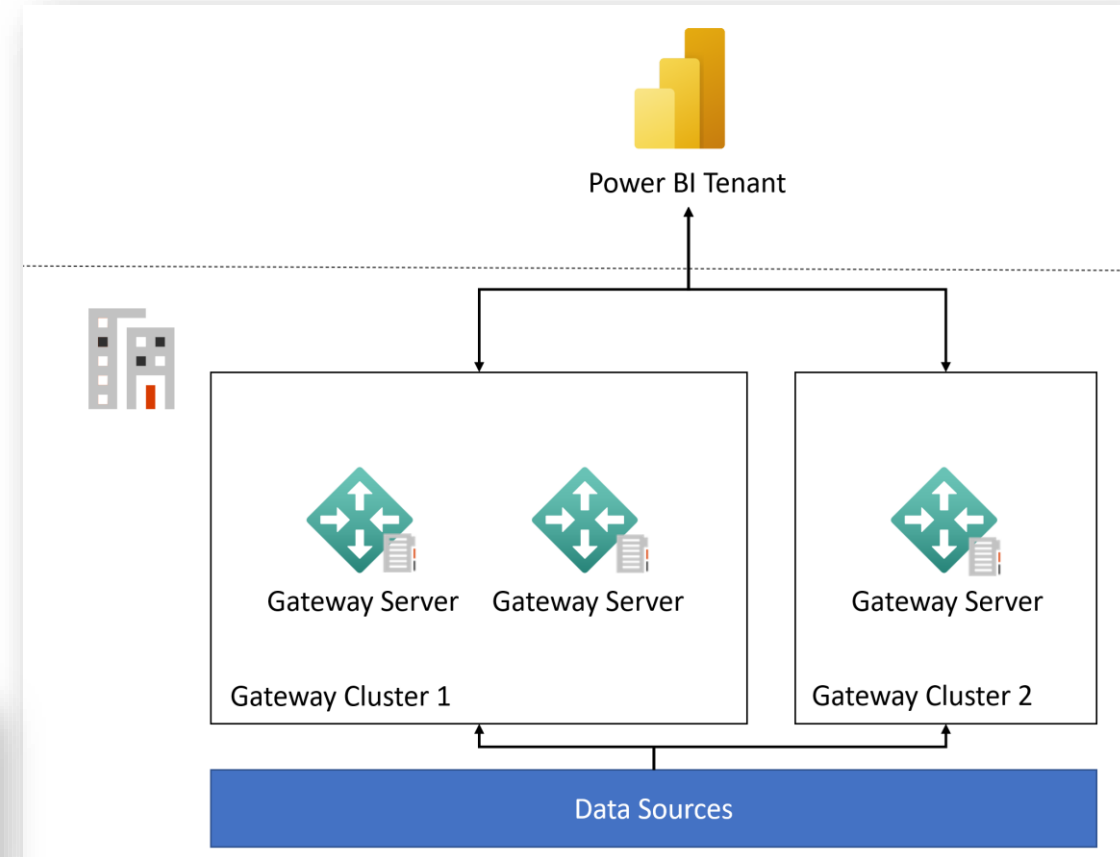


# “The Pain”

- Access gateway logs is challenging
  - Power BI Admins may not have access the Gateway Servers
  - Gateway servers might be in a DMZ or different network
- Digging through the logs is hard
  - [msdocs1](#), [msdocs2](#)
- More Gateways => More Pain ☹️

Windows > ServiceProfiles > PBIEgwService > AppData > Local > Microsoft > On-premises data gateway >

Name	Date modified	Type	Size
Report	15/11/2022 19:13	File folder	
Spooler	02/02/2023 16:17	File folder	
Gateway.bin	14/09/2022 11:07	BIN File	3 KB
GatewayClusters.txt	14/11/2022 15:06	Text Document	8 KB
GatewayErrors20220914.0000000000.log	14/09/2022 12:41	Text Document	570 KB
GatewayErrors20220916.0000000000.log	16/09/2022 16:05	Text Document	207 KB
GatewayErrors20220919.0000000000.log	19/09/2022 16:46	Text Document	1 KB
GatewayErrors20220929.0000000000.log	29/09/2022 17:30	Text Document	90 KB
GatewayErrors20220930.0000000000.log	04/10/2022 16:31	Text Document	908 KB
GatewayErrors20221026.0000000000.log	26/10/2022 12:05	Text Document	1 KB
GatewayErrors20221028.0000000000.log	28/10/2022 12:37	Text Document	1 KB
GatewayErrors20221031.0000000000.log	31/10/2022 11:28	Text Document	1 KB
GatewayErrors20221107.0000000000.log	07/11/2022 16:07	Text Document	64 KB



# The Logs

- By default, located here (for the gateway user):
  - %LOCALAPPDATA%\Microsoft\On-premises data gateway
- Most of them are rotating logs
  - If you don't save them, they will be deleted
  - There are [configurations](#) to change this behavior
- Trace Logs
  - GatewayErrors\*.log
  - GatewayInfo\*.log
  - GatewayNetwork\*.log
  - Mashup\*.log
  - MashupContainerProfiles.log
- Report Logs
  - Query Execution (start, execution, aggregation)
  - System Counters

Windows > ServiceProfiles > PBIEgwService > AppData > Local > Microsoft > On-premises data gateway >

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GatewayInfo20230131.0000000000.log - Notepad

File Edit View

```
Starting trace on 31/01/2023 15:08:36 UTC
UserDomainName: NT SERVICE
UserName: PBIEgwService
MachineName: DESKTOP-LS84U6N
Log File Count: 20
Log File Set Total Size: 52428800

DM.EnterpriseGateway Information: 0 : 2023-01-31T15:08:37.0415541Z DM.EnterpriseGateway
DM.EnterpriseGateway Information: 0 : 2023-01-31T15:08:39.3227211Z DM.EnterpriseGateway
DM.EnterpriseGateway Information: 0 : 2023-01-31T15:08:39.4444430Z DM.EnterpriseGateway
DM.EnterpriseGateway Information: 0 : 2023-01-31T15:08:39.5193655Z DM.EnterpriseGateway
```

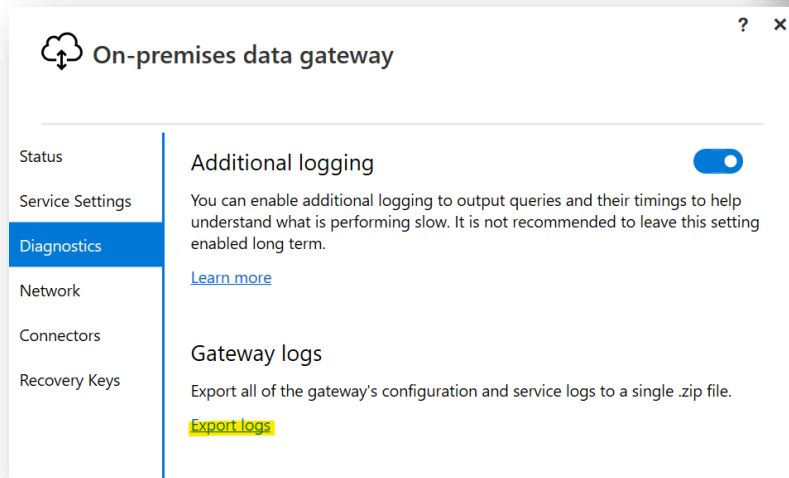
QueryExecutionReport\_DESKTOP-LS84U6N\_20220914T110528.log - Notepad

File Edit View

```
[GatewayObjectId,RequestId,DataSource,QueryTrackingId,QueryExecutionEndTimeUTC,QueryExecutionDuration(ms),QueryTy
0380ed77-237f-42ec-8f1a-05f2c6cd4a33,9006b718-e9b6-4161-9d51-e855f6a279eb,"["{"kind":"","path":"","
n parameters, String resultTransform, Boolean forColumnInfo, Boolean executeAction) at Microsoft.Data.Mashup.M
elemetry.PipelineTelemetryService.<ExecuteInActivity>d__7`1.MoveNext()--- End of stack trace from previous locat
0380ed77-237f-42ec-8f1a-05f2c6cd4a33,9006b718-e9b6-4161-9d51-e855f6a279eb,"["{"kind":"","path":"","
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```

# Get Insights directly from Logs

- Export logs from gateways
- Run the [PBI Template](#) directly over the data
- Support for multiple gateways

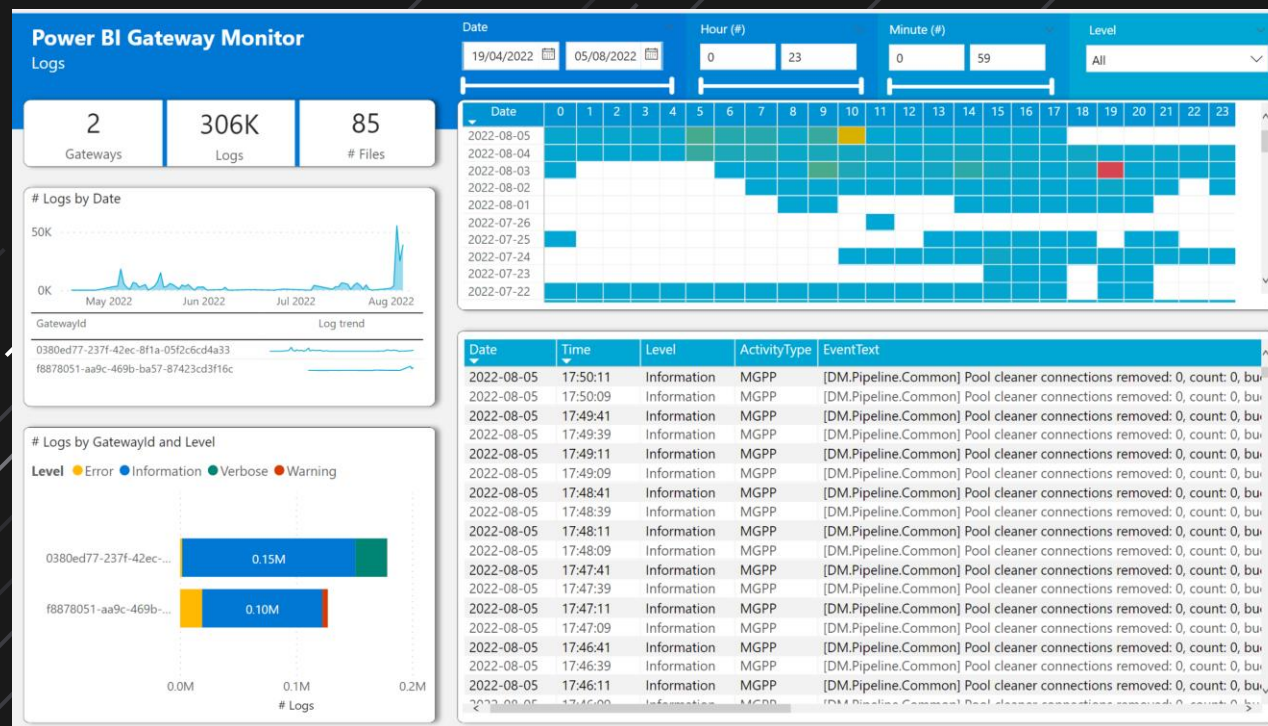
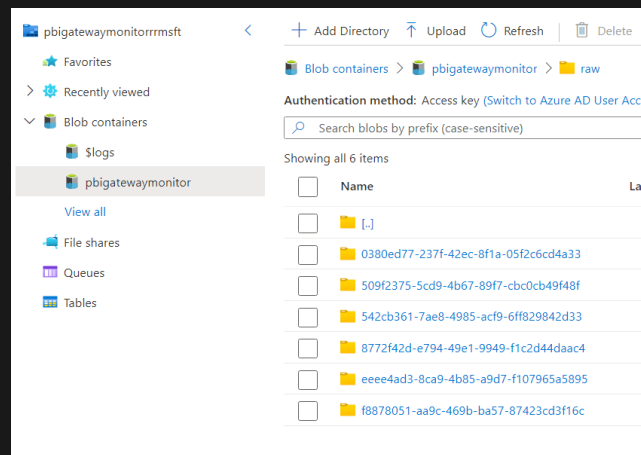




# DEMO - Report

Power BI Template – Lake or Local Folder  
Data Exploration on Azure Storage Explorer  
Report - Logs, Queries, Counters, Profile...  
Troubleshooting

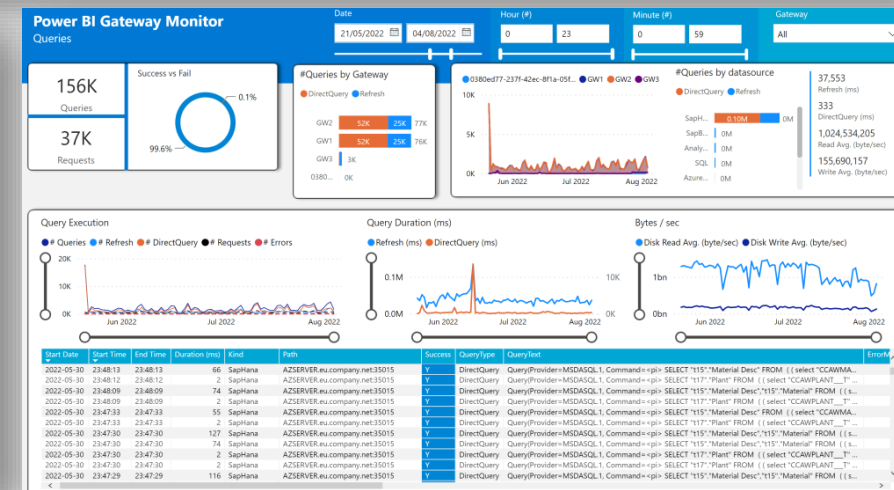
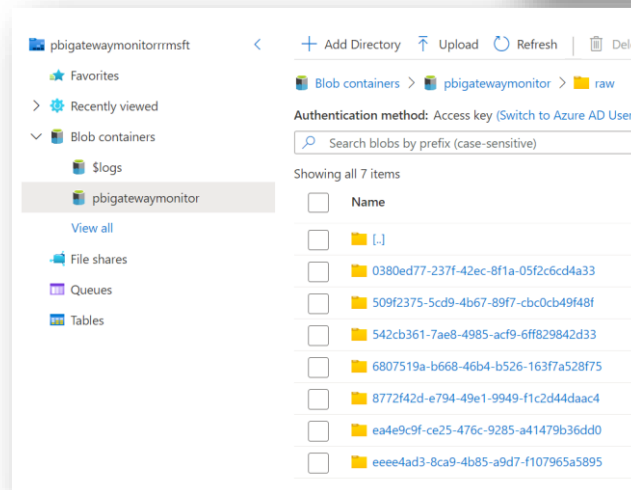
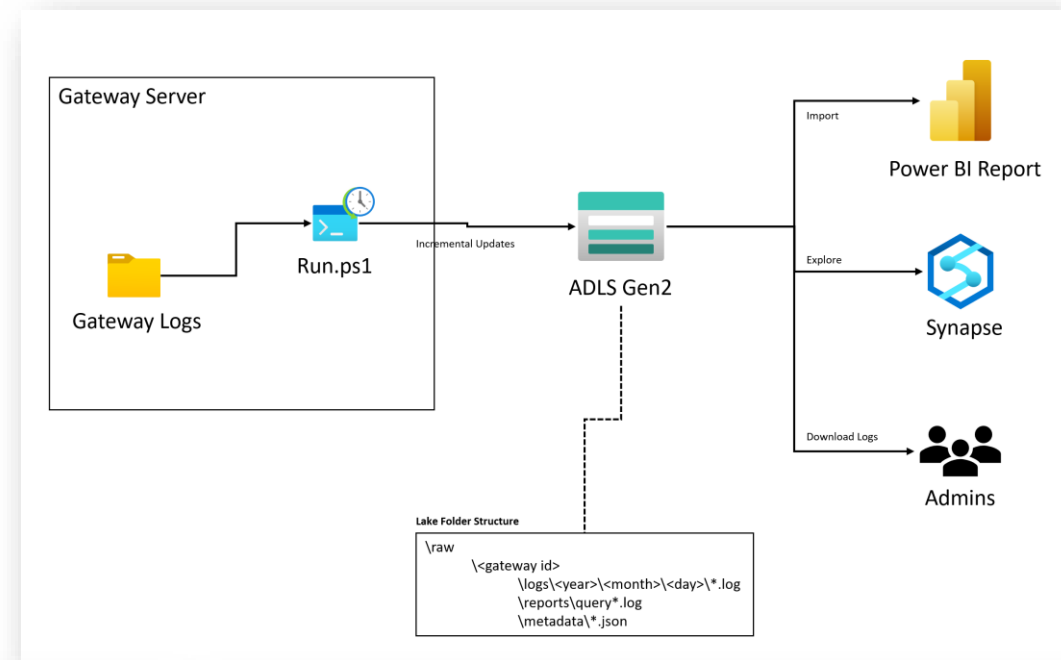
[GitHub Repo](#)



# End to End Solution

- Centralize/move logs on easy & secure location
- Explore log data with Power BI
- Explore with other tools: SPARK, ADX,...

Download the accelerator solution here: [GitHub Repo](#)

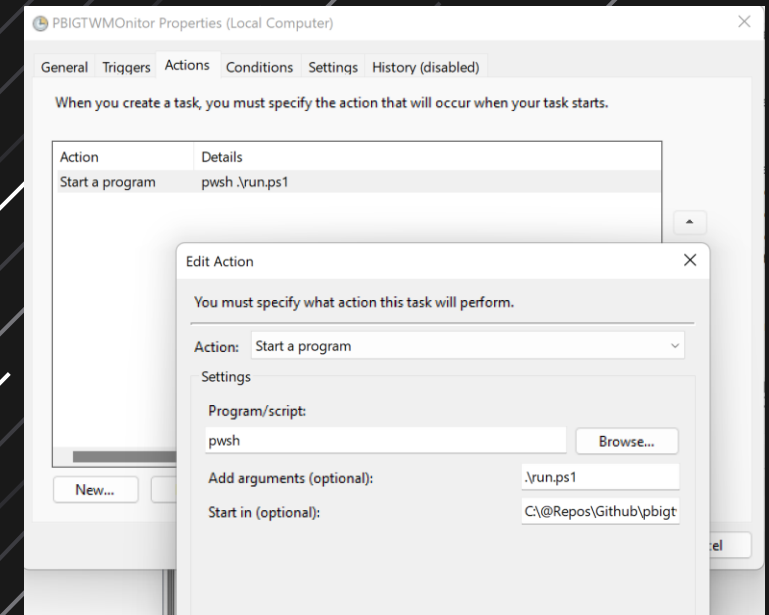
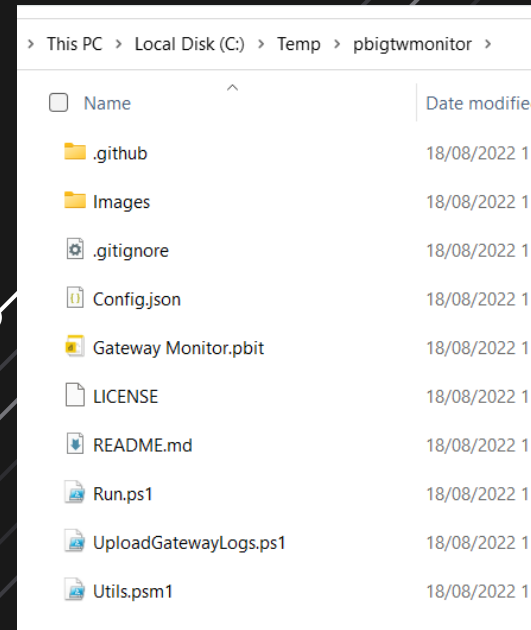
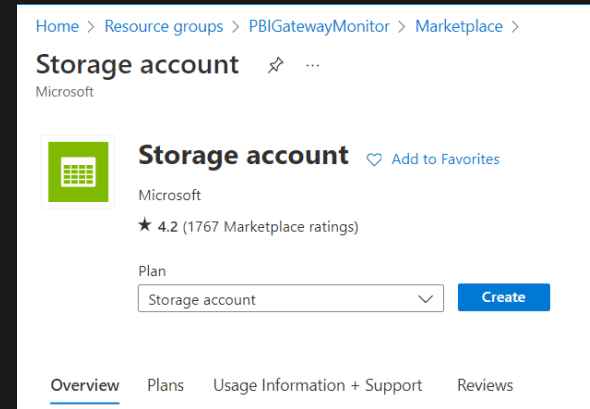




# DEMO - Setup

Create Azure Storage Account  
Deploy Scripts to Gateway  
Create a Schedule Task

[GitHub Repo](#)



# CLOSING REMARKS

IT'S NOT ABOUT WHAT YOU KNOW.

IT'S ABOUT WHAT YOU KNOW IS POSSIBLE.

# Thank You

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/in/ruiromano

