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How to export data from BC to MS Fabric and Azure Data Lake

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Microsoft MVP | Technical Solution Architect

03 November 2023

Speakers intro

- Bert Verbeek
- Working with NAV/BC for 16 year in several roles
- Technical Solution Architect @ 4PS Groups
- Microsoft MVP – Business Applications
- Twitter and LinkedIn: bertverbeek
- Blog: bertverbeek.nl



Agenda

- The problem
- Export to Azure Data Lake
- What is Microsoft Fabric
- Export to Microsoft Fabric
- Real life case
- Future

The problem

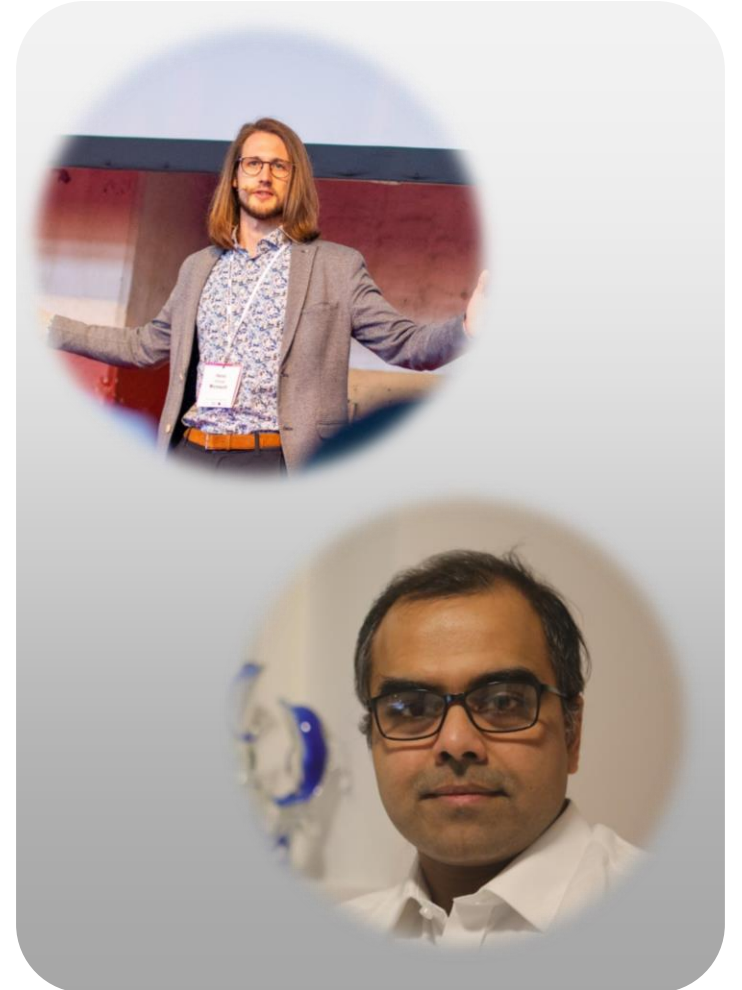


bc2adls

Exporting data from
Dynamics 365 Business Central
to Azure Data Lake Storage

The problem

- How to export large amounts of data
- APIs are OK but have some limitations
 - Doesn't work with big datasets
 - How manage deleted data
- Bc2adls extension
 - Created by Soumya Dutta (MS) and Henri Schulte (MS)



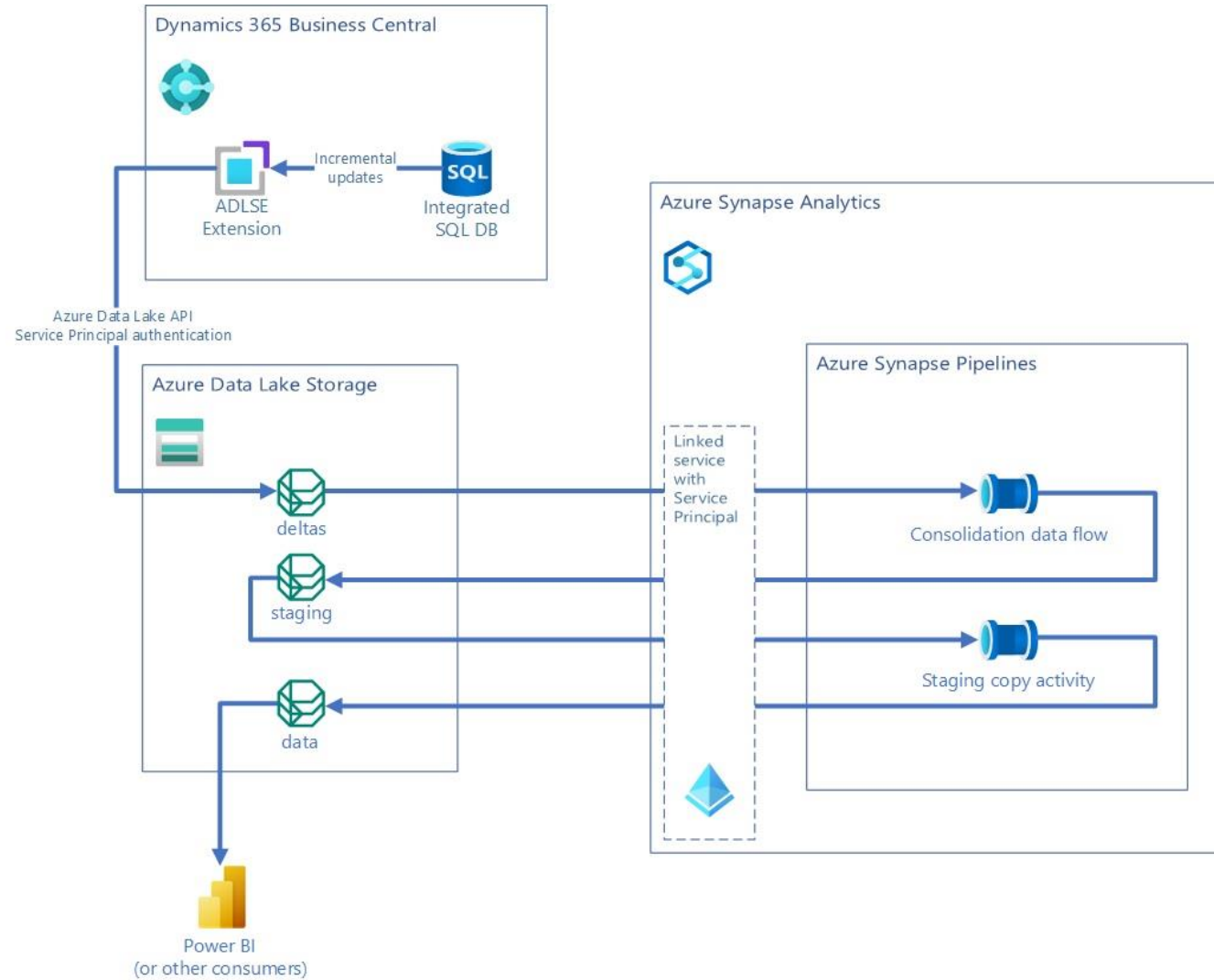


Export to Azure Data Lake

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Structure

Export to Azure Data Lake



Demo

Export to Azure Data Lake

DEMO

Some considerations

Export to Azure Data Lake

- Azure Data Lake low on costs

Azure data lake gen 2 (hot):

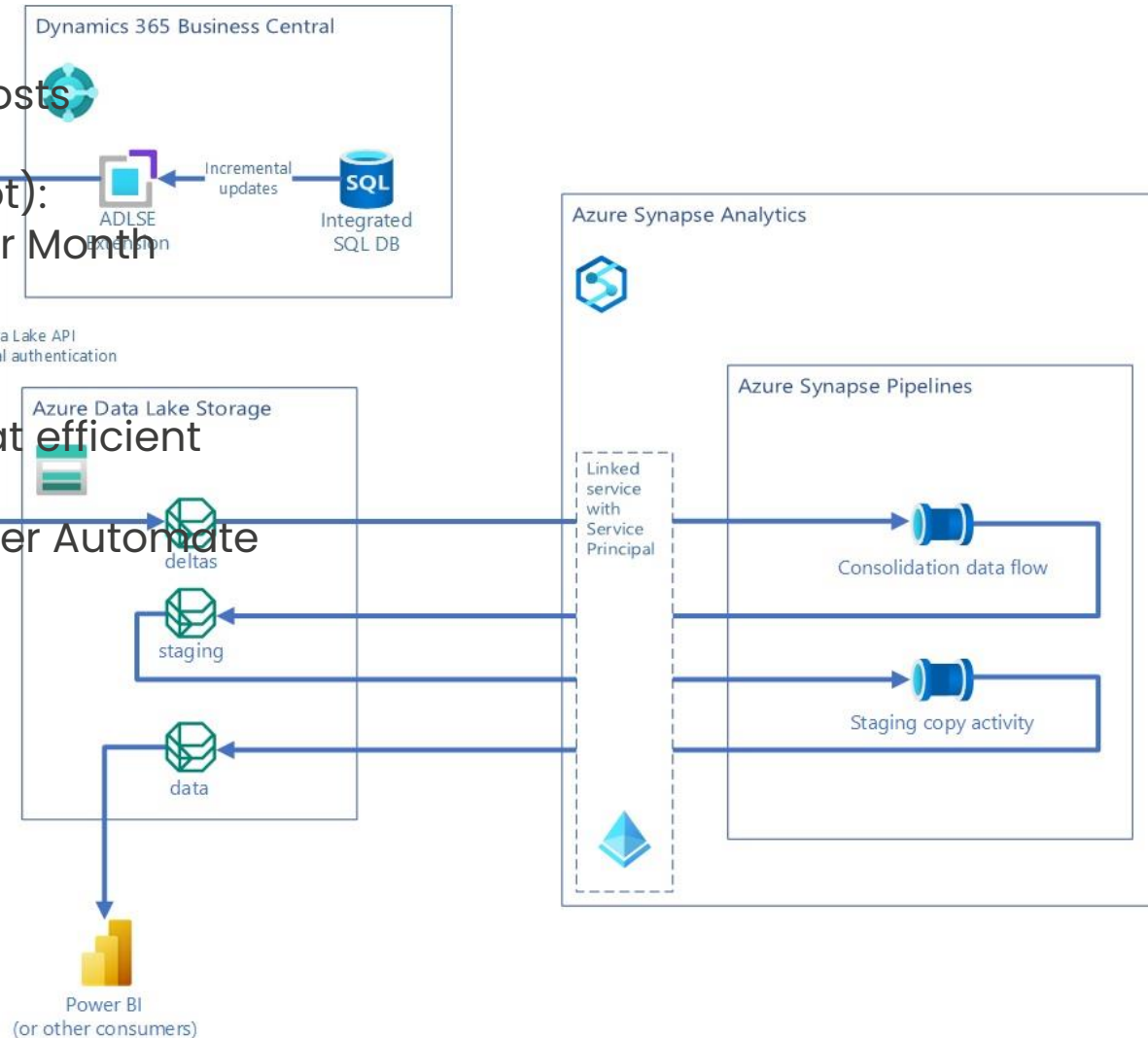
Storage: € 0,02 per GB per Month

10.000 Write: € 0,0600

10.000 Reads: € 0,0048

- Synapse pipelines not that efficient

- Trigger pipeline from Power Automate



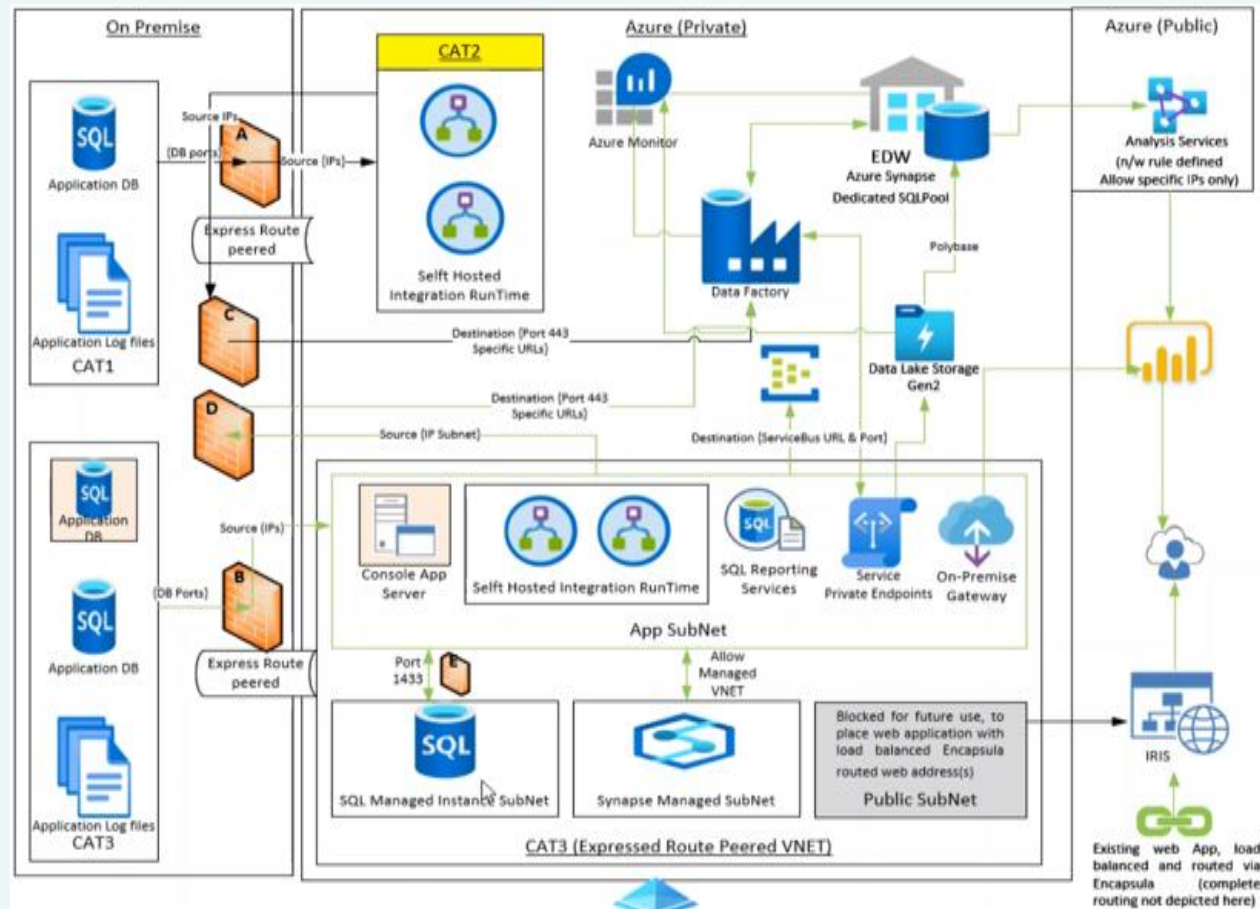


What is Microsoft Fabric?

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What is MS Fabric?

- Many different apps
- Many vendors
- Integrations mostly complex and fragile



//

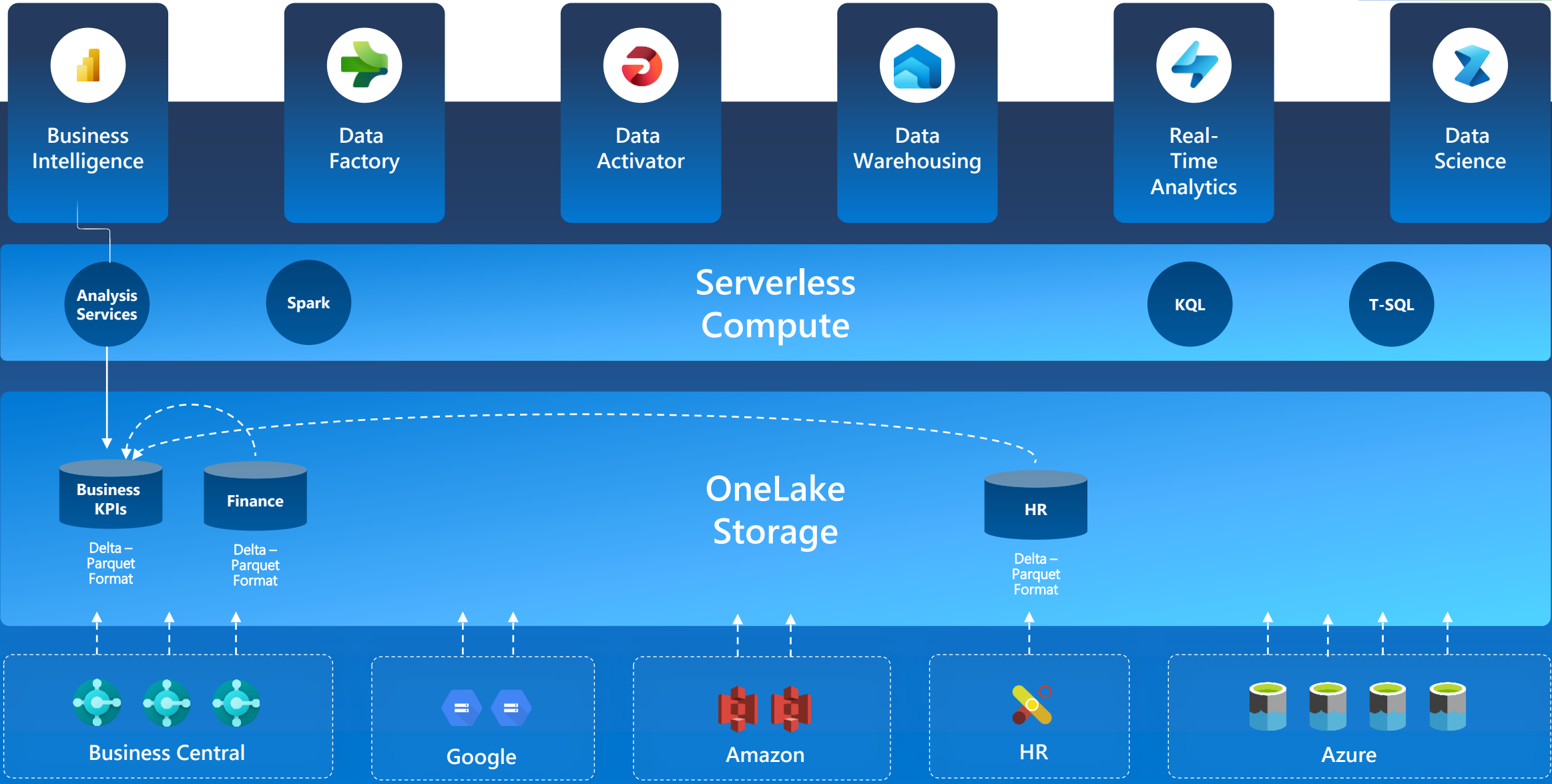
Simplify,

I am the Chief Data
Officer and don't want to
be the Chief Integration
Officer."

Every CDO, Every Enterprise

What is Microsoft Fabric?

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What is Microsoft Fabric?

- Lakehouse
- Warehouse



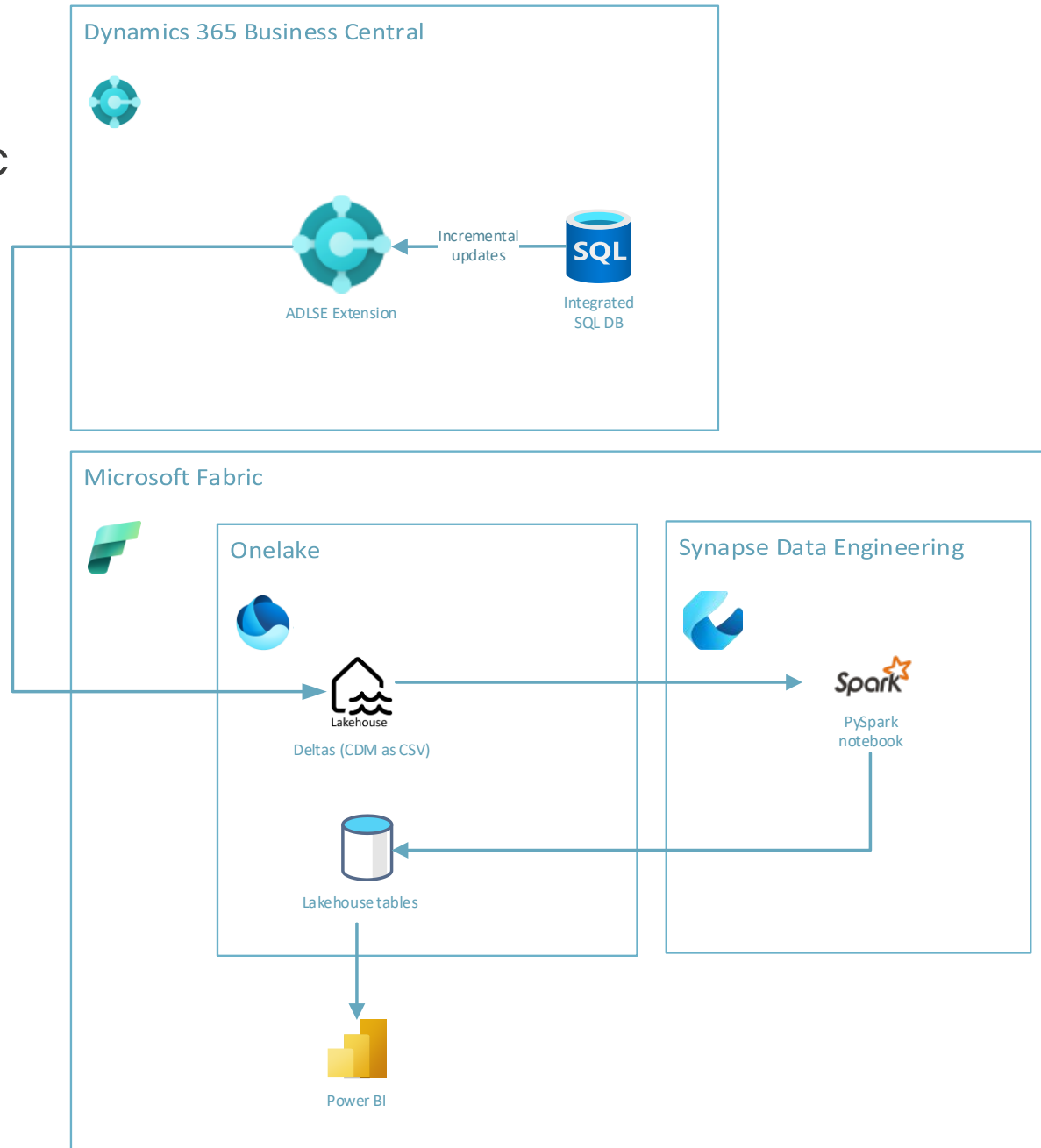


Export to Microsoft Fabric

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Structure

Export to Microsoft Fabric



Demo

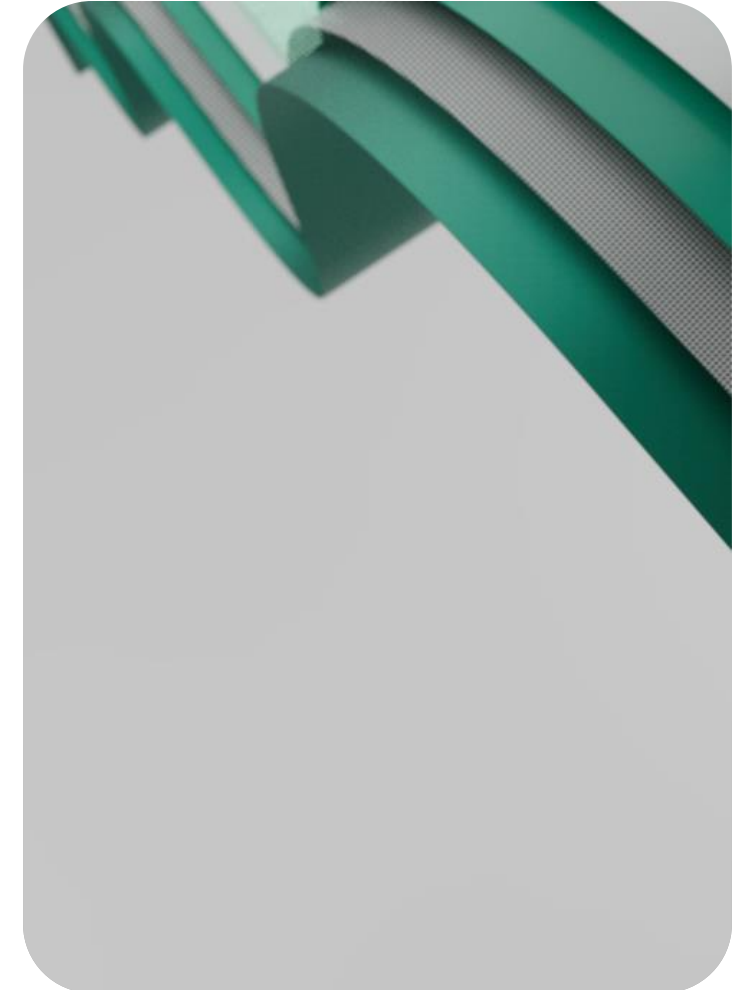
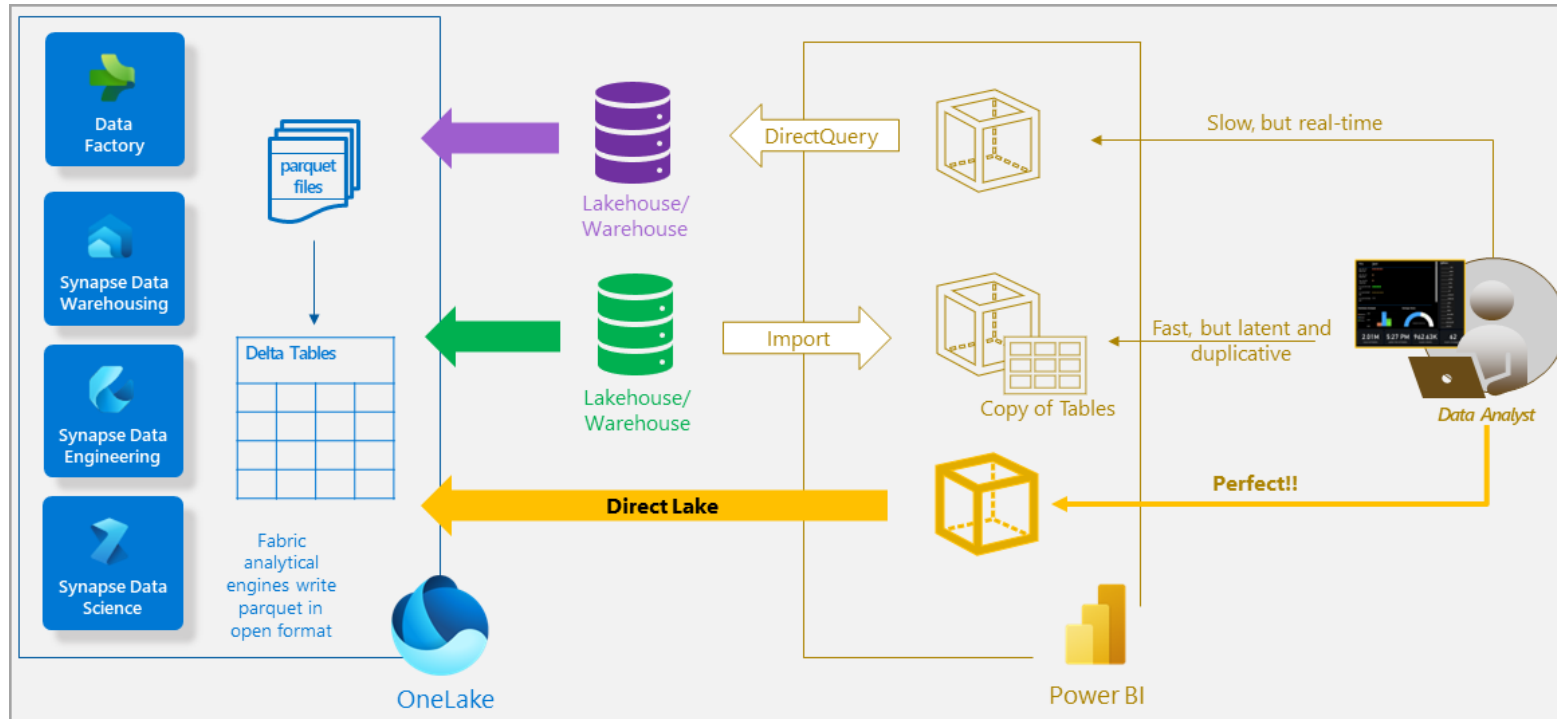
Export to Microsoft Fabric

DEMO

Some considerations

Export to Microsoft Fabric

- New product
- Notebook is very fast
- Fast integration with Direct Lake





Real life case

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The case

Real life case

- Moving from onprem to SaaS (3/4 year life in SaaS)
- Using JetReports, Excel, Direct access SQL
- Customer has also a Webshop
- 200 orders a day with 50 – 200 lines
- Big amount of G/L Entries and Item Ledger Entries
- Refresh every 15 minutes

Table ID	Table	# Fields selected	No. of Database Records	# Avg Records a Day
17	G/L Entry	17	9.748.931	35.195
21	Cust. Ledger Entry	12	70.653	255
25	Vendor Ledger Entry	9	21.943	79
32	Item Ledger Entry	15	2.781.124	10.040
112	Sales Invoice Header	25	19.718	71
113	Sales Invoice Line	24	2.195.072	7.924
114	Sales Cr.Memo Header	23	18.324	66
115	Sales Cr.Memo Line	23	152.382	550
120	Purch. Rcpt. Header	26	14.293	52
121	Purch. Rcpt. Line	14	124.176	448
5107	Sales Header Archive	31	81.326	294
5108	Sales Line Archive	25	2.374.826	8.573
5109	Purchase Header Archive	27	15.241	55
5110	Purchase Line Archive	25	123.058	444
5802	Value Entry	4	7.210.292	26.030
5823	G/L - Item Ledger Relation	2	19.137.868	69.090
6650	Return Shipment Header	24	927	3
6651	Return Shipment Line	11	2.076	7
54323	Packaging Ledger Entry	15	258.723	934

The issue

Real life case

- Deleted data in Sales Orders
- API limits (q4 – less problems)
- Refresh rate was only 2 hours
- Synapse pipelines were expensive.
 - Starting of the spark pool
- Allot of data in transaction tables



Issues and Resolutions



The solution

Real life case

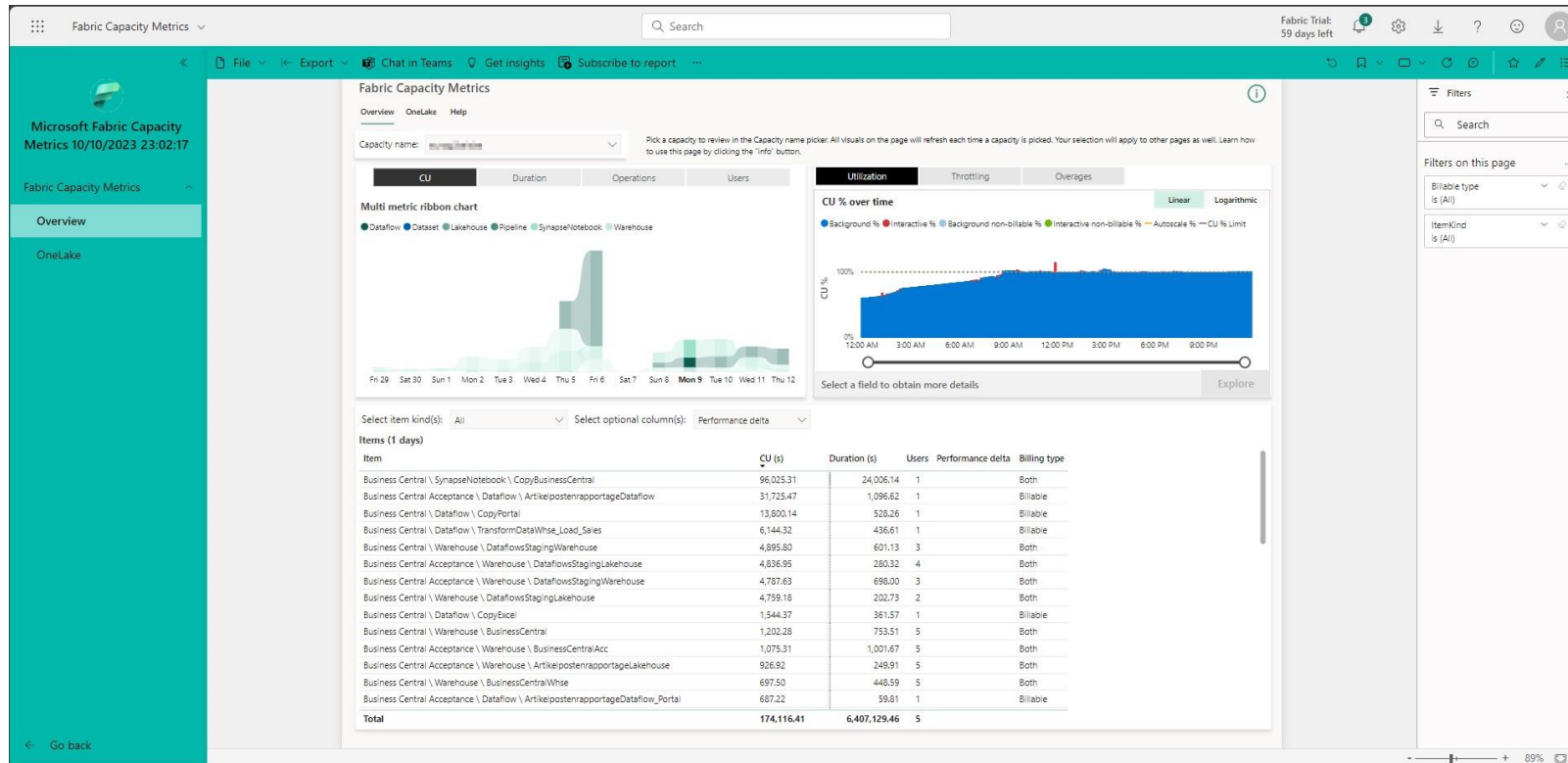
- MS Fabric F2 (cu)
- Export every 15 min
 - Finished in 5 minutes
- Notebook every 15 minutes
- End users doesn't complain
- Attach other sources in lakehouse and combine in warehouse



Some findings

Real life case

- Fabric F2 = $2 * 24 * 3600 = 172.800$ CU (s)
- [Install the Microsoft Fabric capacity metrics app - Microsoft Fabric | Microsoft Learn](#)





Future

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Future

- Microsoft repro on archive
- Going as an open source project
 - [Bertverbeek4PS/bc2adls \(github.com\)](https://github.com/Bertverbeek4PS/bc2adls)
- Please contribute
 - Issues
 - Features
- Going to appsource ??
- Temporary solution:
 - [Introduction to Microsoft Fabric and Business Central – Business Central | Microsoft Learn](#)



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Give us Feedback!

and help us improve!

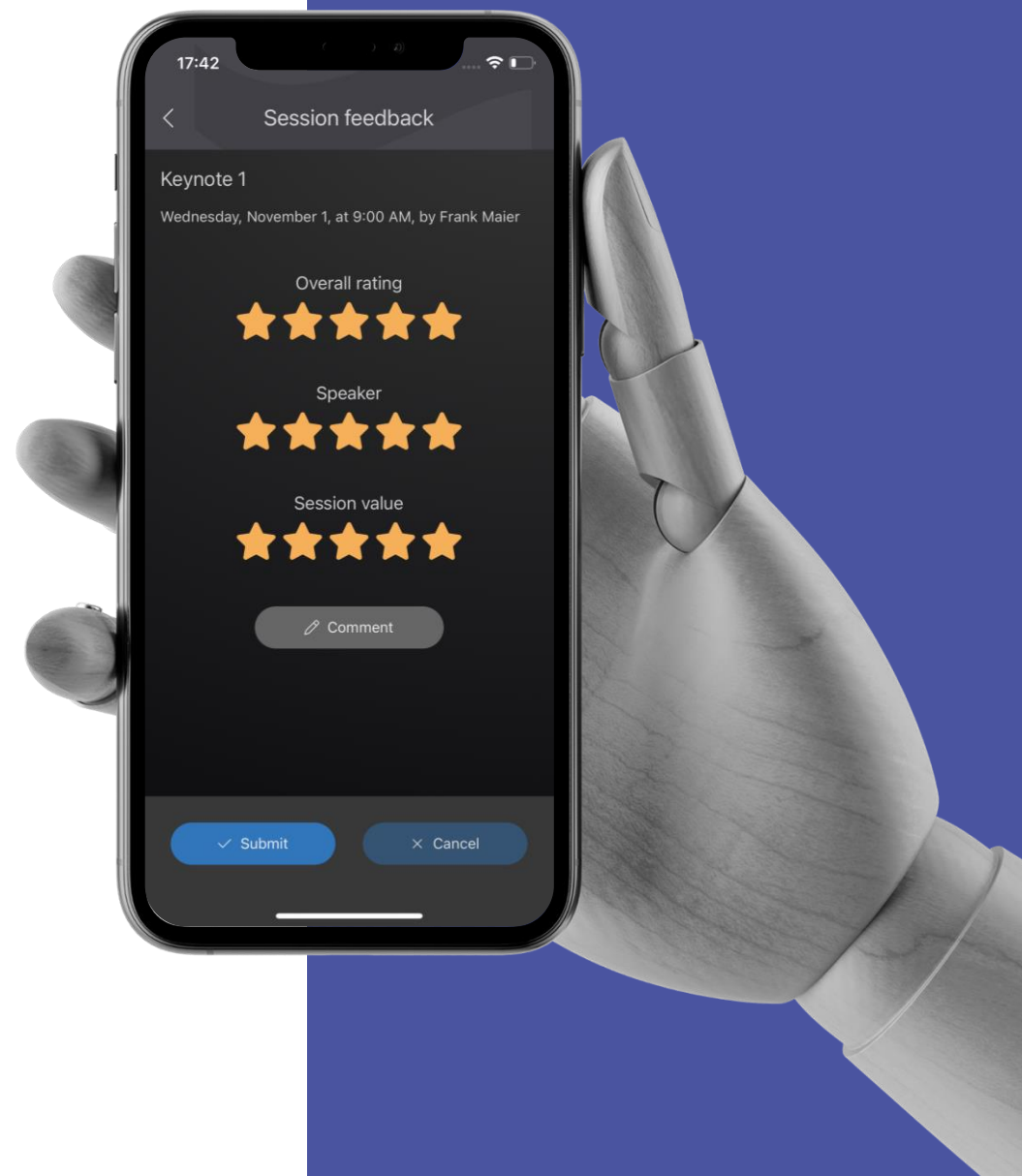
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one ticket for every session feedback!

Thank you !



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Thanks all!

 Netherlands



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