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How to flow your data from Business Central to MS Fabric

Speaker's Intro

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- Blog: bertverbeek.nl

What to expect

- Why analytics
- What is Microsoft Fabric?
- How to get your BC data in?
- Data movement inside and alerts MS Fabric
- Real Life Case

Why analytics

Typical **ways to consume data**

Data aggregation

Performance data

Leadership

Trends, summaries

Management

Detailed data

Staff

Organizarional hierachy

KPIs
Dashboards
Financial reports

Managerial reports
Ad-hoc analysis

Operational reports
On-screen task data

The world is changing

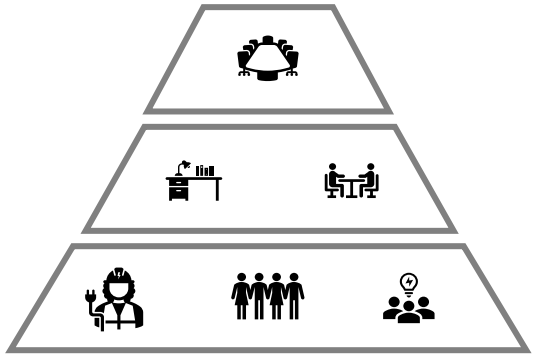
- If customer asks, “Can you build me a report?”
- **STOP** asking “Sure. How should it be formatted?”
- **INSTEAD** ask “What do you need to analyze and for what?”

- **THEN** choose the tool of choice

Power BI (and embed), or

Query/List page with Data Analysis, or

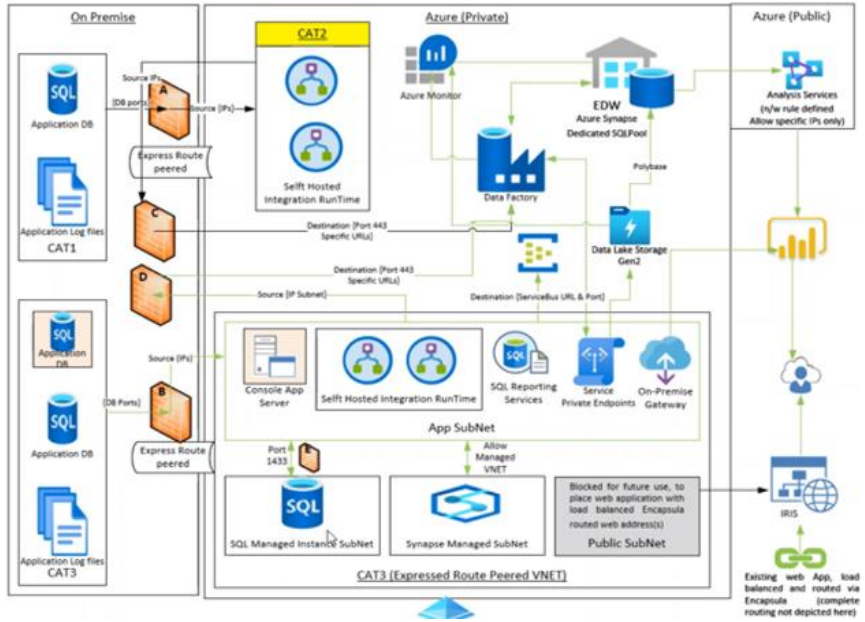
AL report with Excel layout



What is MS Fabric?

What is MS Fabric

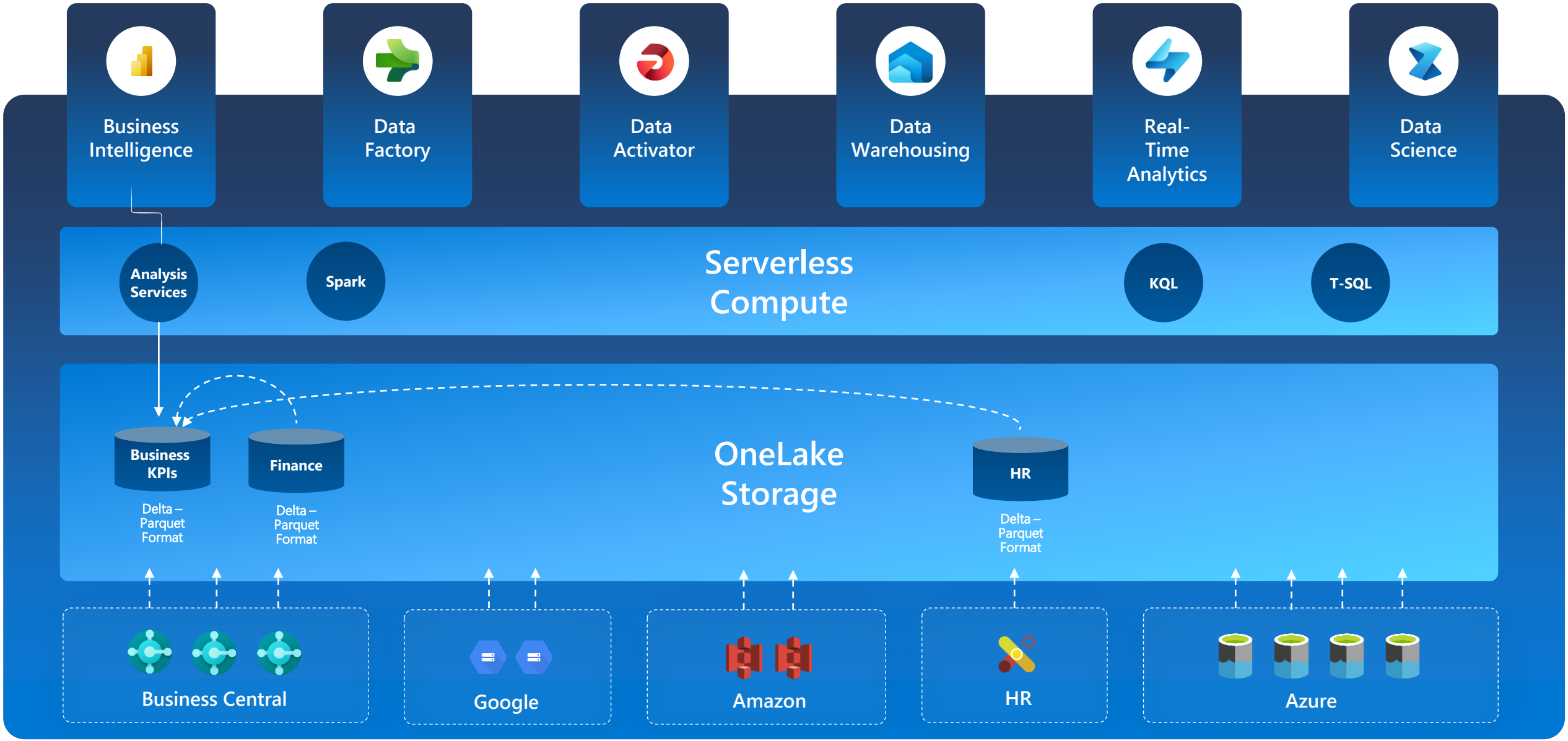
- Many different apps
- Many vendors
- Integrations mostly complex and fragile



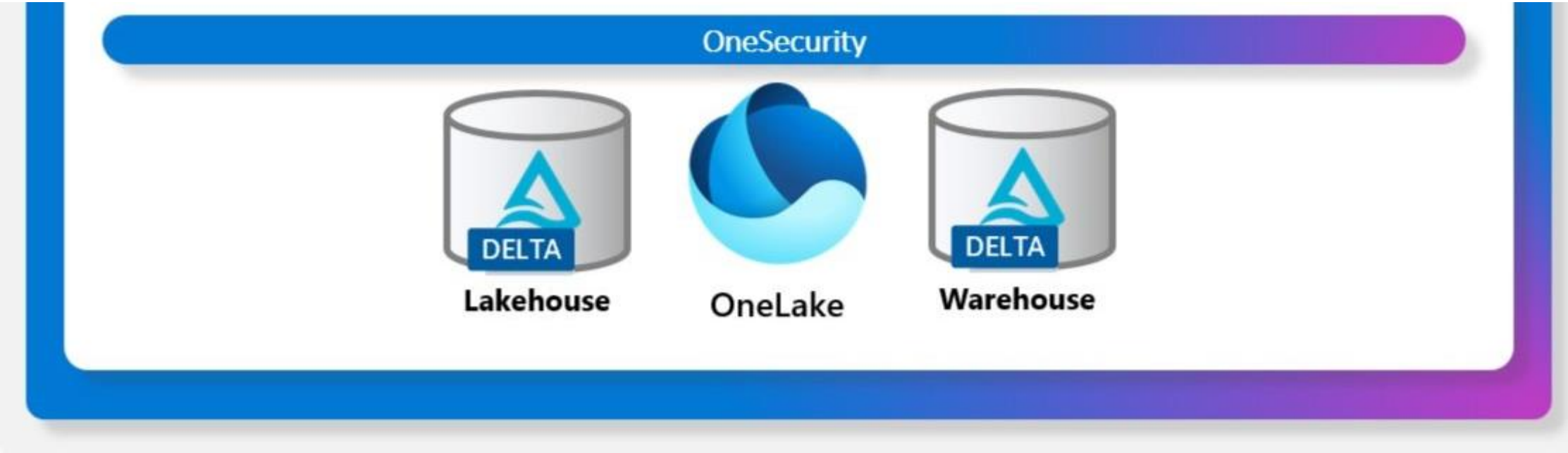
What is MS Fabric

> **Simplify,**
> I am the Chief Data Officer and don’t want to be the Chief Integration Officer.”
>
> Every CDO, Every Enterprise

What is MS Fabric



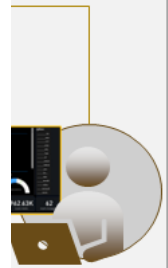
What is MS Fabric



Some considerations

- New product
- Fast integration because of Direct Lake
- License guide:

SKU	CAPACITY UNITS (CU)	POWER BI SKU	POWER BI V-CORES	HOURLY $	MONTHLY $
F2	2	–	0.25	$0.36	$262.80
F4	4	–	0.5	$0.72	$525.60
F8	8	EM/A1	1	$1.44	$1,051.20
F16	16	EM2/A2	2	$2.88	$2,102.40
F32	32	EM3/A3	4	$5.76	$4,204.80
F64	64	P1/A4	8	$11.52	$8,409.60
F128	128	P2/A5	16	$23.04	$16,819.20
F256	256	P3/A6	32	$46.08	$33,638.40
F512	512	P4/A7	64	$92.16	$67,276.80
F1024	1024	P5/A8	128	$184.32	$134,553.60
F2048	2048	–	256	$368.64	$269,107.20



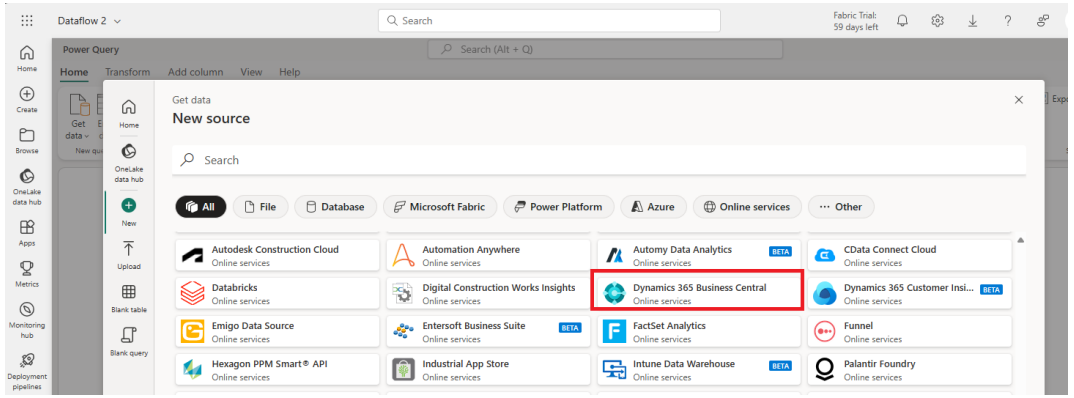
OneLake

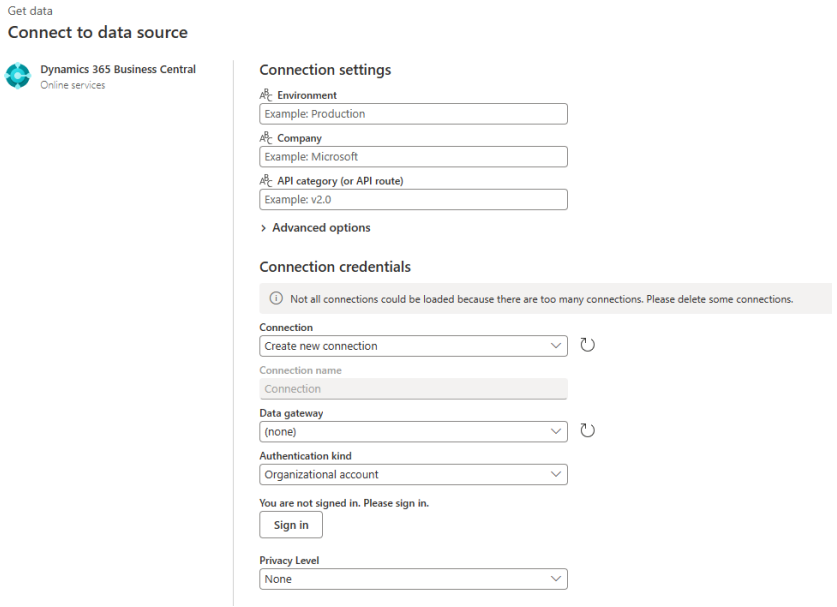
Power BI

How to get your BC data in?

Through API’s

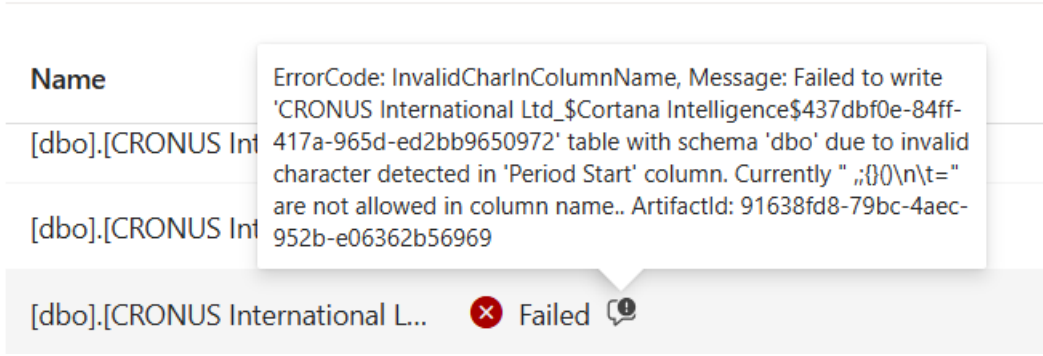
- With Dataflow
- From ReadOnly Replica
- Affects your NST’s
- Incremental not yet possible (In MS Fabric)
- Takes some time

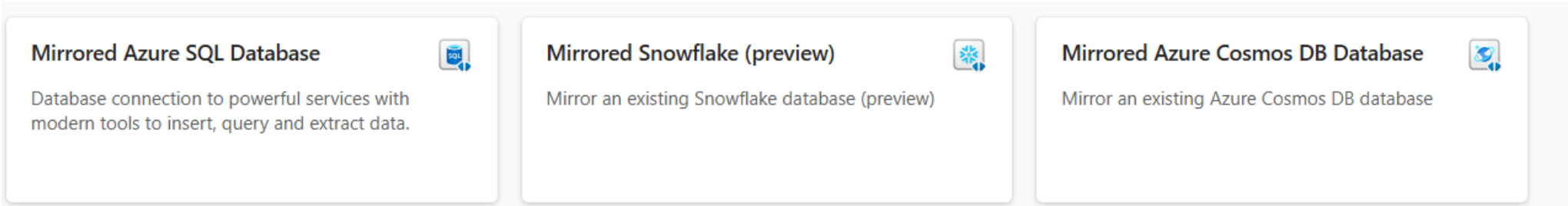




Mirroring database

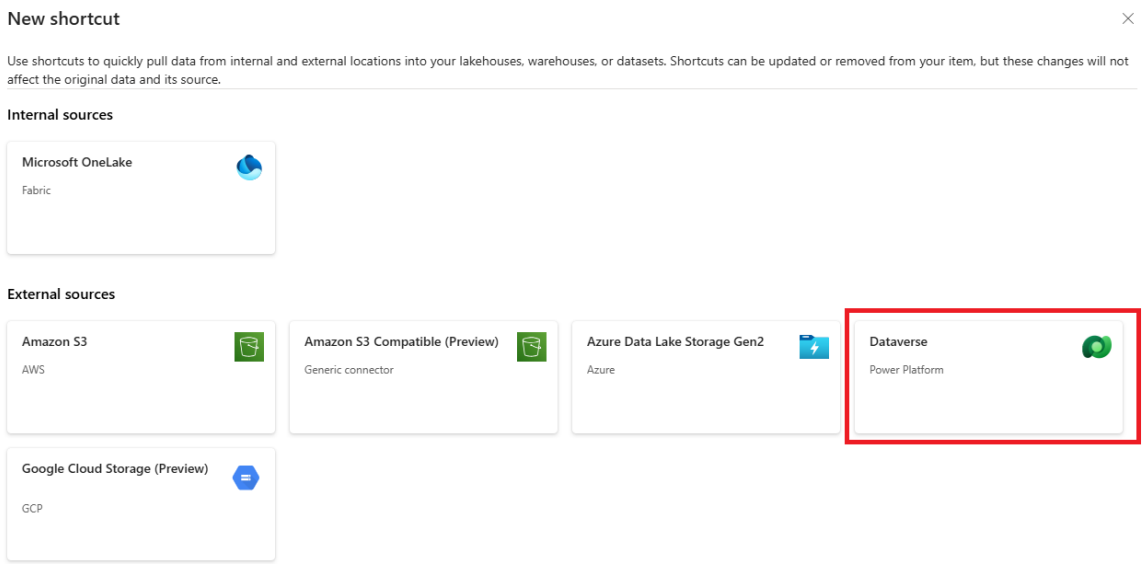
- In public preview
- Only BC Onprem
- For now only 500 tables replicated
- Doesn't work with BC databases yet
  - space, _ (underscore), - (hyphen), ((Bracket),) (Bracket)





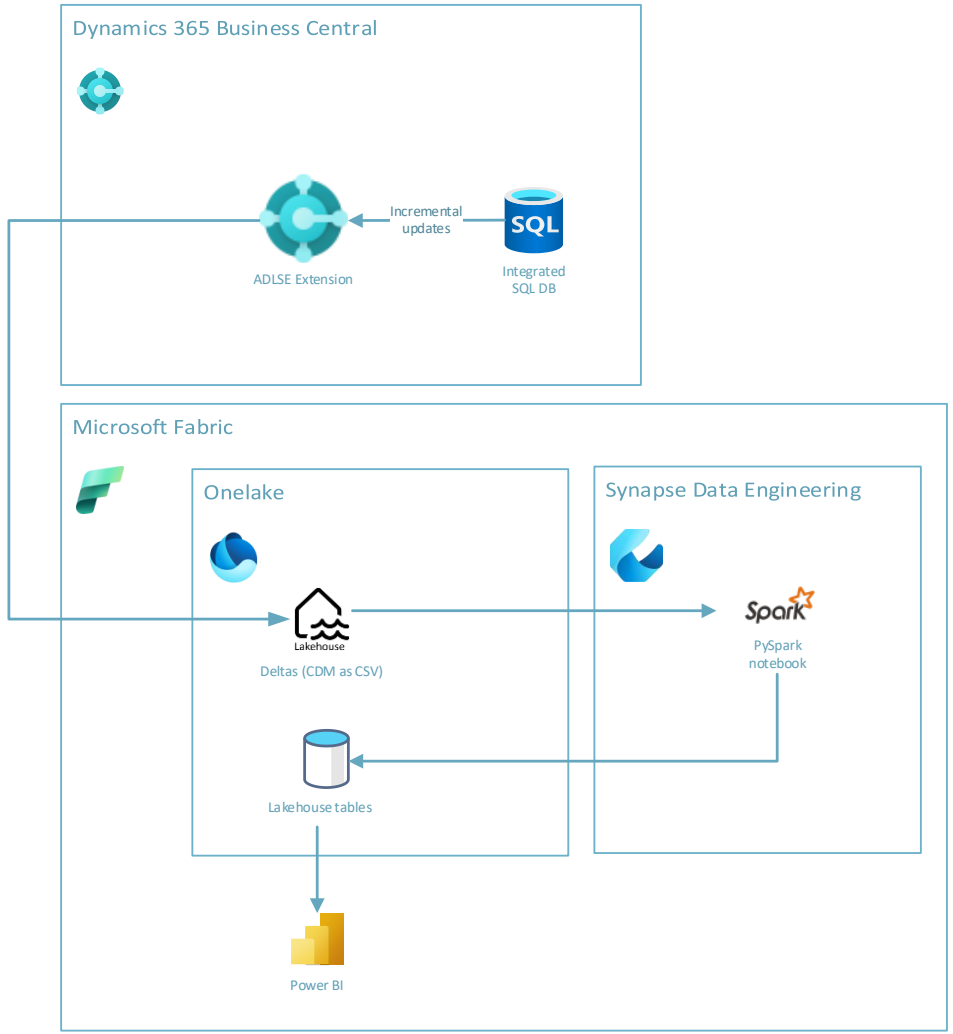
BC -> Dataverse -> Fabric

- BC -> Dataverse with Direct Sync
- Dataverse -> Fabric with Shortcut
  - Creates a delta parquet replica in Dataverse

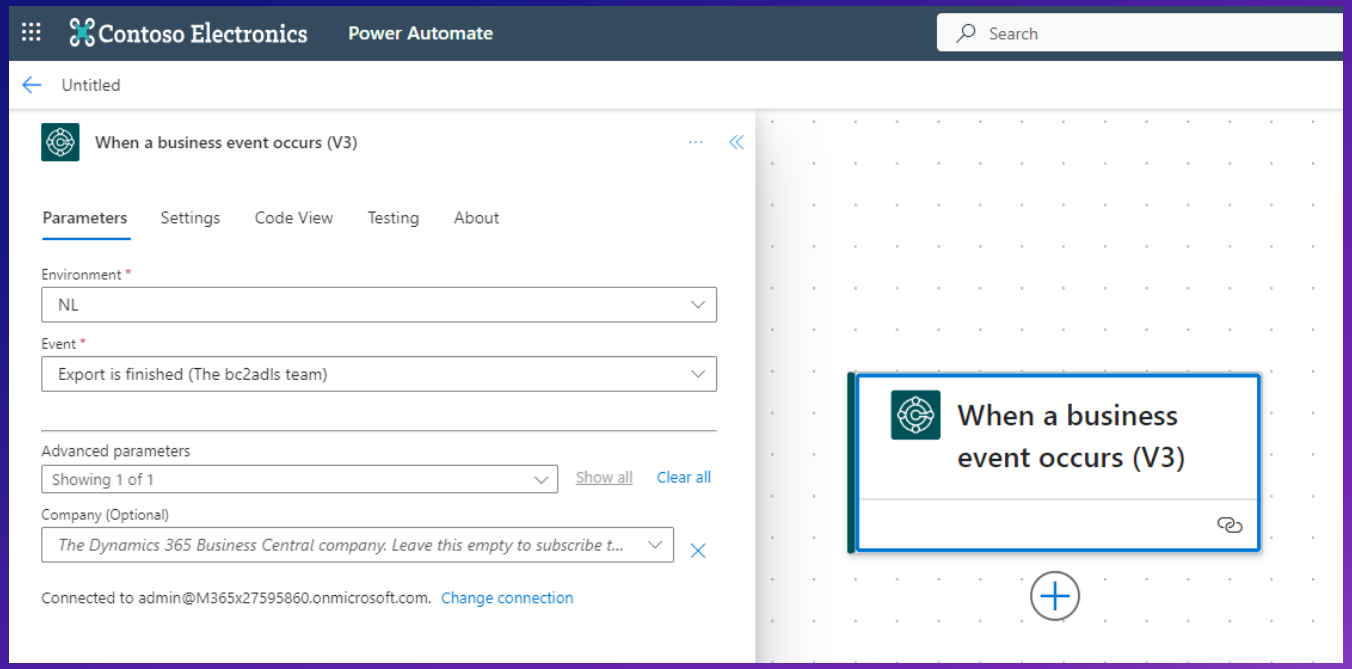


With bc2adls

- Open source app
- Export to Azure Data Lake / MS Fabric
- Choose your tables / fields




DEMO



Trigger notebook

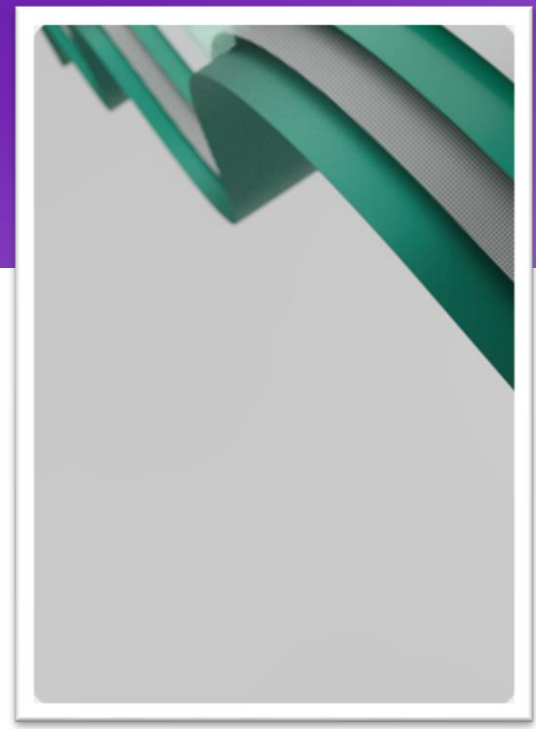
- Api call
  - Manage and execute Fabric notebooks with public APIs - Microsoft Fabric | Microsoft Learn

Data movement and alerts inside MS Fabric

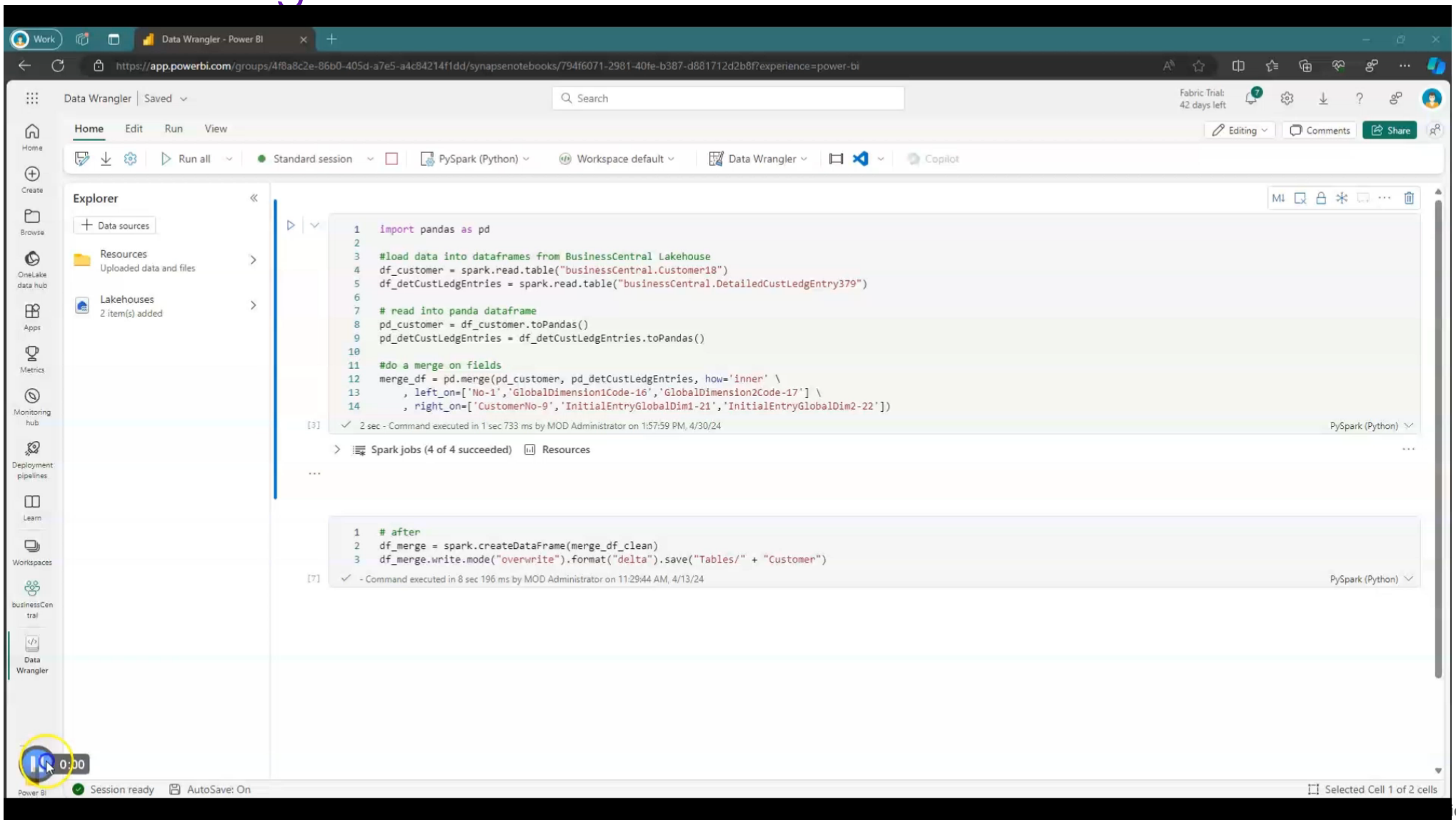
Data movement inside MS Fabric

Power Query

Data Wrangler



Data Wrangler



Alerts inside MS Fabric

- Data Activator
- Get Notifications on data

Real life case

The 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

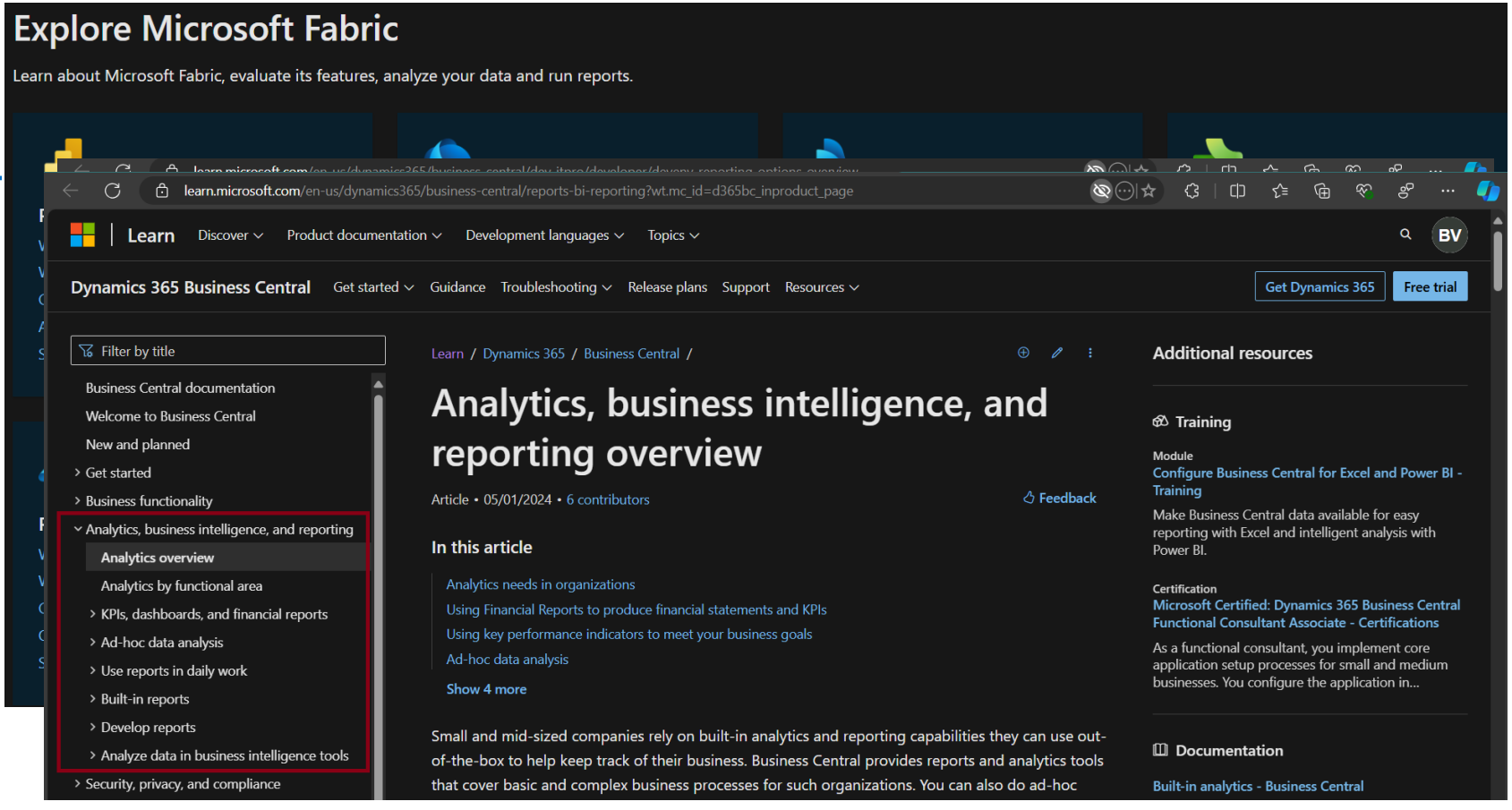
- Deleted data in Sales Orders
- API limits (bc23 – less problems)
- Refresh rate was only 2 hours
- Synapse pipelines were expensive
- Starting of the spark pool
- Allot of data in transaction tables

The solution

- 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
- Acceptance / development on trial

Call to action

- Github - bc2adls
- Microsoft Fabric documentation | Microsoft Learn
- aka.ms/bcReporting
- aka.ms/bcDeveloper



Thank you!