

# Dynamics data in Synapse Link for Dataverse

## - Transitioning from Export to Data Lake to Synapse Link

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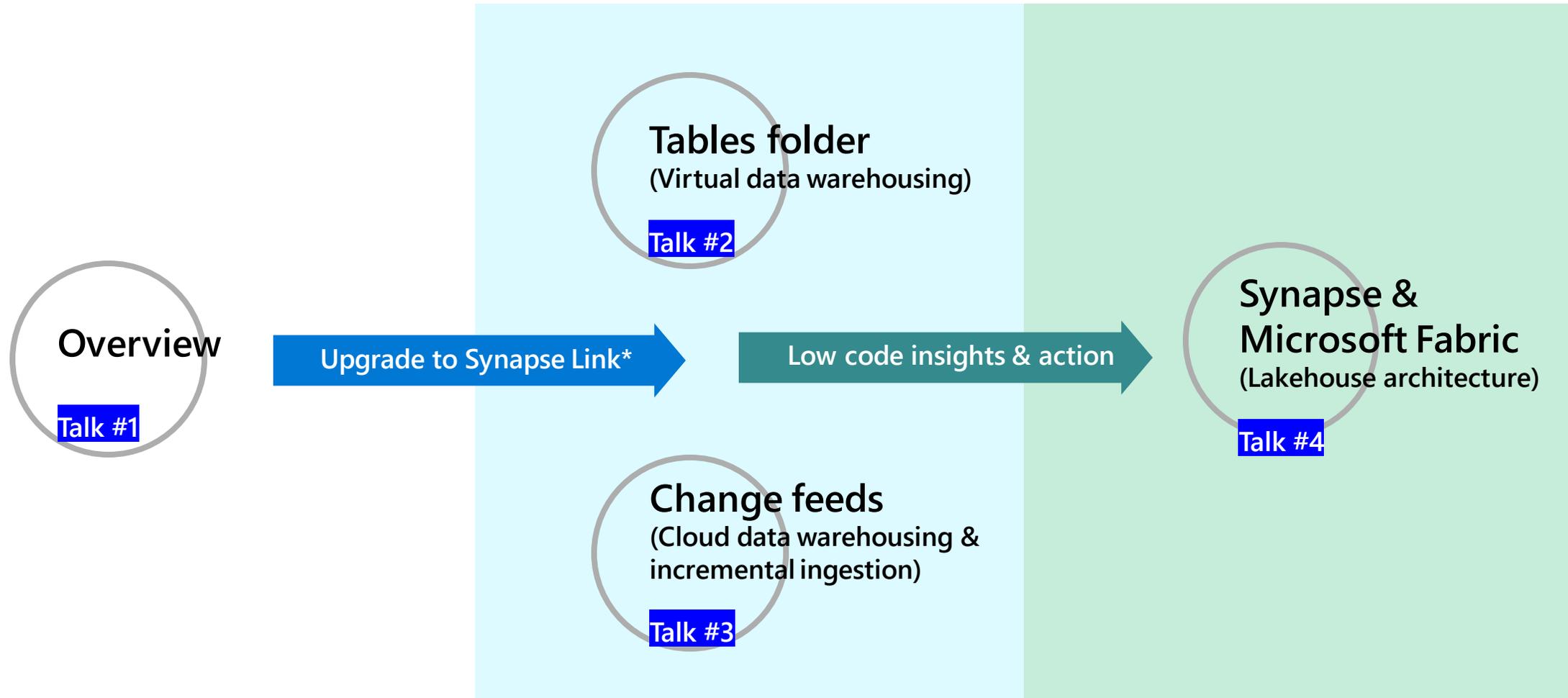
# This is a series of TechTalks...

28-Nov

- 
1. Synapse Link for Dataverse overview
  2. **Architecture patterns and virtual data warehousing**  
Explore patterns and get started with virtual data warehousing using Synapse Link.
  3. **Explore Cloud Data Warehousing** and ingesting data from lake to cloud MPP warehouse, transforming data using TSQL, and incremental data ingestion.
  4. **Explore Lakehouse architecture**, reading and transforming data using spark notebooks.

<https://aka.ms/TransitiontoSynapseLinkVideos>

# If you are using Export to Data lake today...



<https://aka.ms/TransitiontoSynapseLinkVideos>

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# Agenda

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1. Upgrade to Synapse Link (Recap from previous)
  2. Architecture pattern & transition guidance
  3. Explore Lakehouse architecture with Synapse link
  4. Explore Link to Microsoft Fabric
  5. Step by Step demo
  6. Q&A

# 1

## Transition

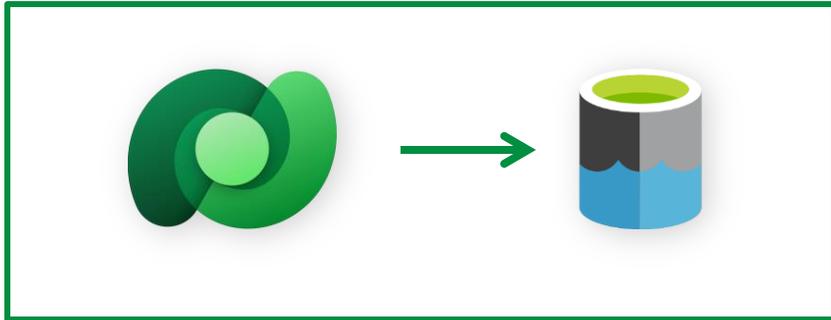
Upgrade to Synapse Link

Business benefits

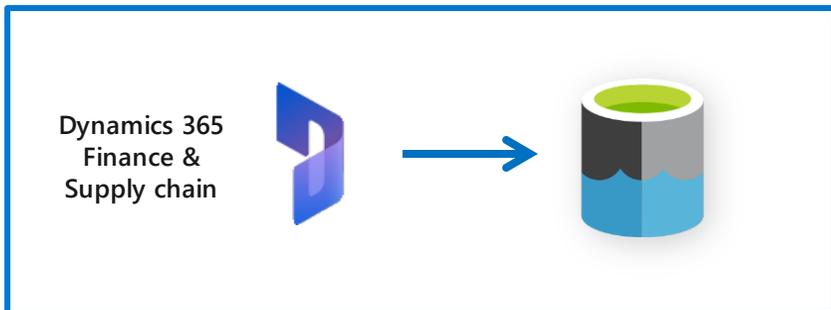
Expected effort and timelines

# Previously : Synapse Link & Export to Data Lake

## Synapse Link for Dataverse



## Export to Data lake



Synapse Analytics helps working with data using SQL and other tools



Power BI for data visualization and story telling

# One experience to integrate all Dynamics data for Analytics

## Synapse Link for Dataverse



One experience to integrate all your data for Analytics



Synapse Analytics helps working with data using SQL and other tools



Power BI for data visualization and story telling

This is an evolution and unification of our approach across Dynamics products

# Unlock AI driven insights and action with Link to Fabric

## Dataverse Link to Fabric



One experience to integrate all your data for Analytics



Microsoft Fabric combines Synapse Analytics, Power BI and more into a single, unified experience on the cloud

Upgrading to Synapse Link provides a path to innovations in Microsoft Fabric

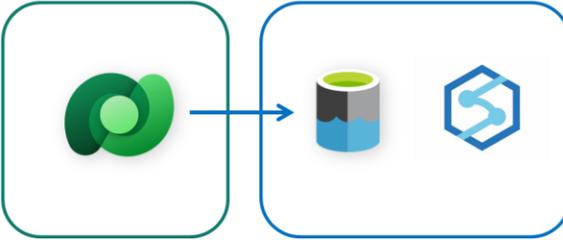
# Extend your investments to AI driven insights & action

This is an evolution and unification of our approach across all Dynamics products

Legacy data integration services

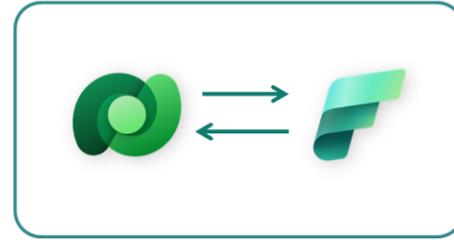
- Data Export Service (DES)
- Bring your own DB (BYOD)
- Export to Data Lake

Synapse Link for Dataverse



Generally available

Link to Microsoft Fabric



Generally available

Upgrade to Synapse Link\*

Low code insights & action

Simplify data integration &  
Reduce total cost of ownership

Data shapes remain the same –  
no need to re-build

No-ETL, no-copy, two-way  
integration enables Low code makers

AI driven insights & action with built-  
in Copilots

\* Existing customers have until 1-Nov-2024 to transition from Export to Data lake to Synapse Link. We advise new customers to use Synapse Link

# 2

## Architecture patterns and transition

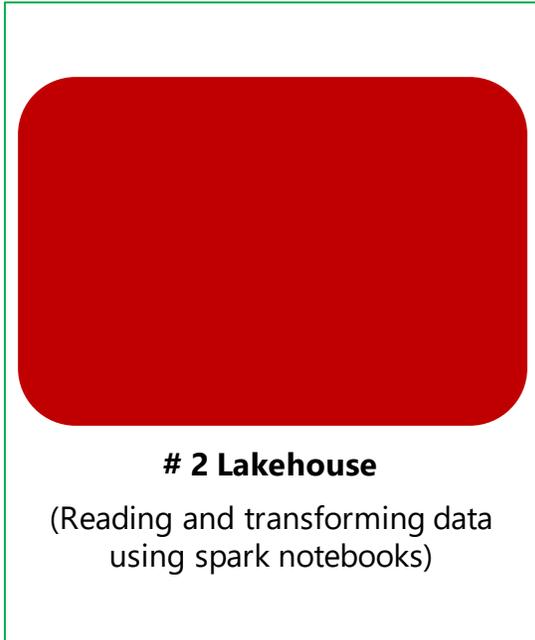
Common analytics architecture patterns and transition strategy from export to data lake to Synapse link and Microsoft Fabric

# Overview of common analytics architecture patterns



## #1 Virtual data warehousing

(Reading data from data lake using TSQL views and SPs)



## # 2 Lakehouse

(Reading and transforming data using spark notebooks)



## # 3 Cloud Data warehousing

(Ingesting data from lake to cloud MPP data warehouse, transform data using TSQL)



## # 4 Integration using TSQL

(Incremental ingestion of data to relational DB (SQL Server) or third party DW)

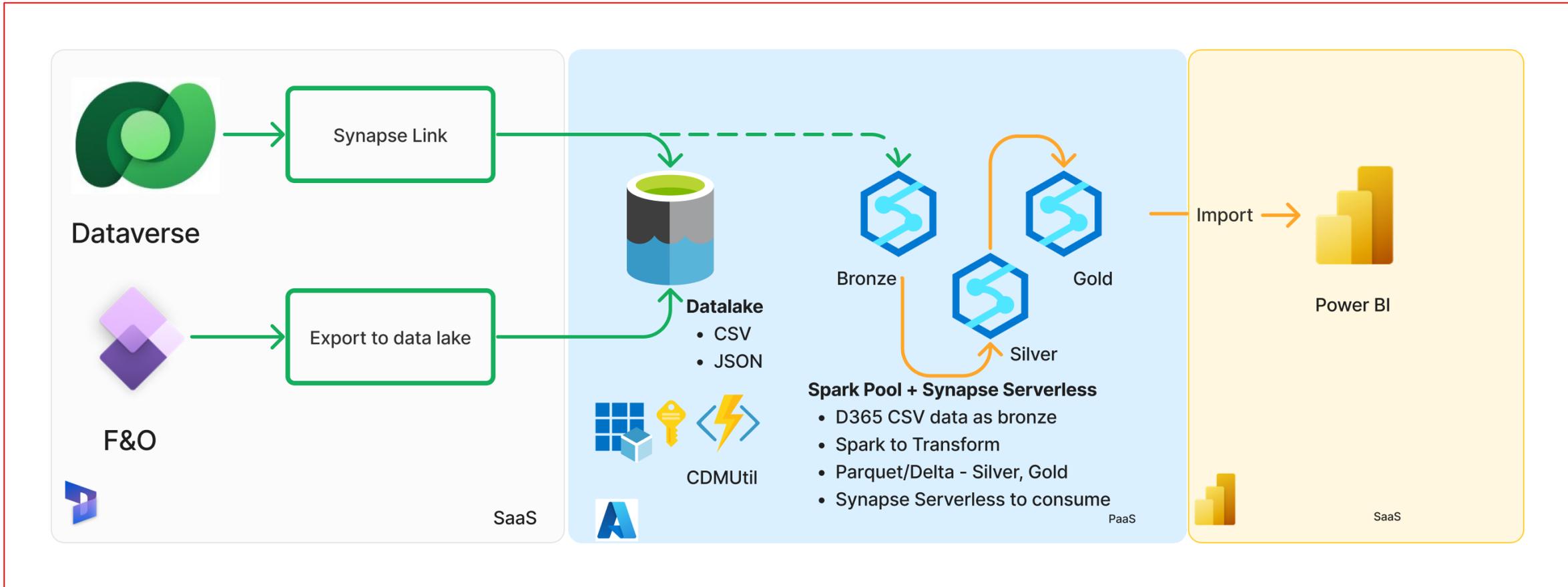
Click on the links above to go to the relevant section.

# 3

## Lakehouse architecture with Synapse Link

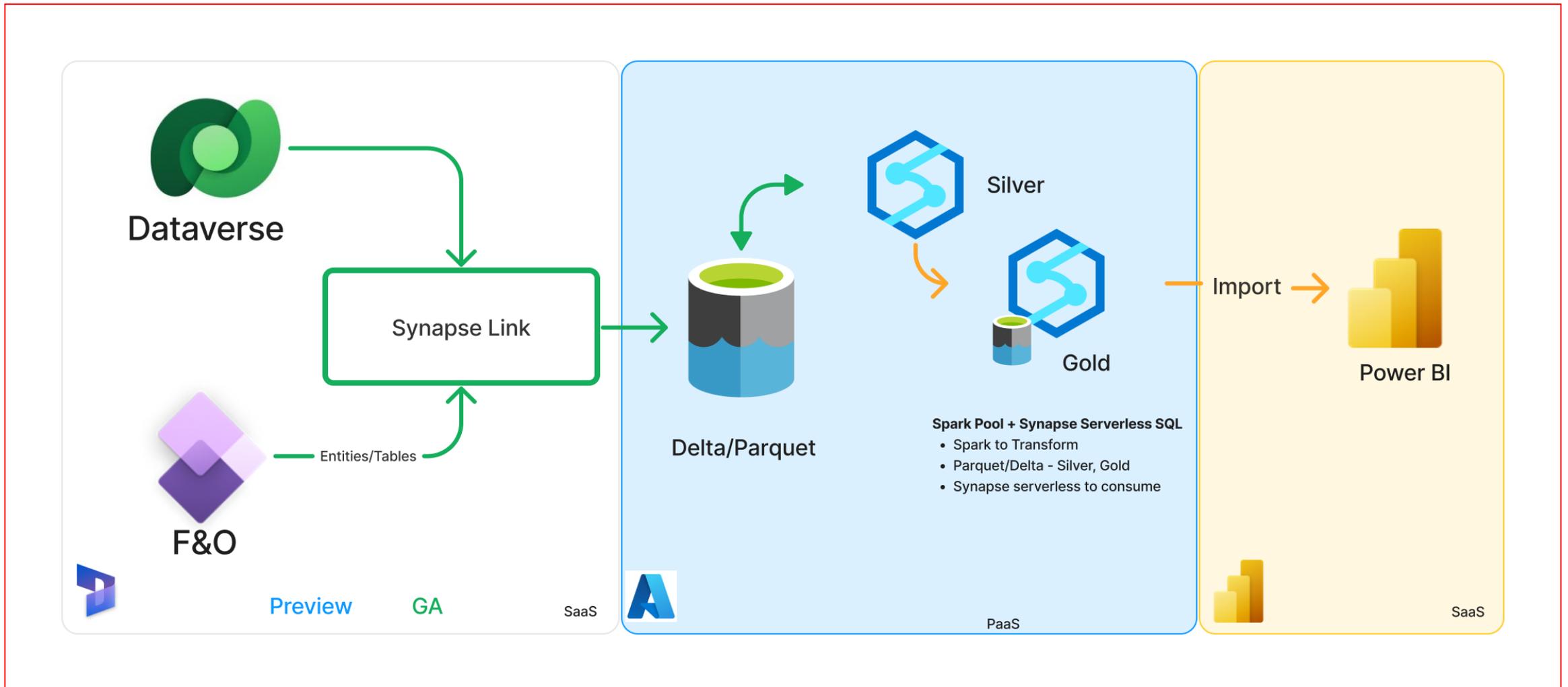
Build Lakehouse architecture with Synapse Link

## #2 Lakehouse : Synapse Link/Export to Data lake, with Synapse Spark & Serverless



**Previous pattern**

## #2 Lakehouse : Synapse Link (BYOL), with Synapse Spark and Serverless



**New pattern**

# Demo: Lakehouse with Synapse

# What are the benefits – deep dive

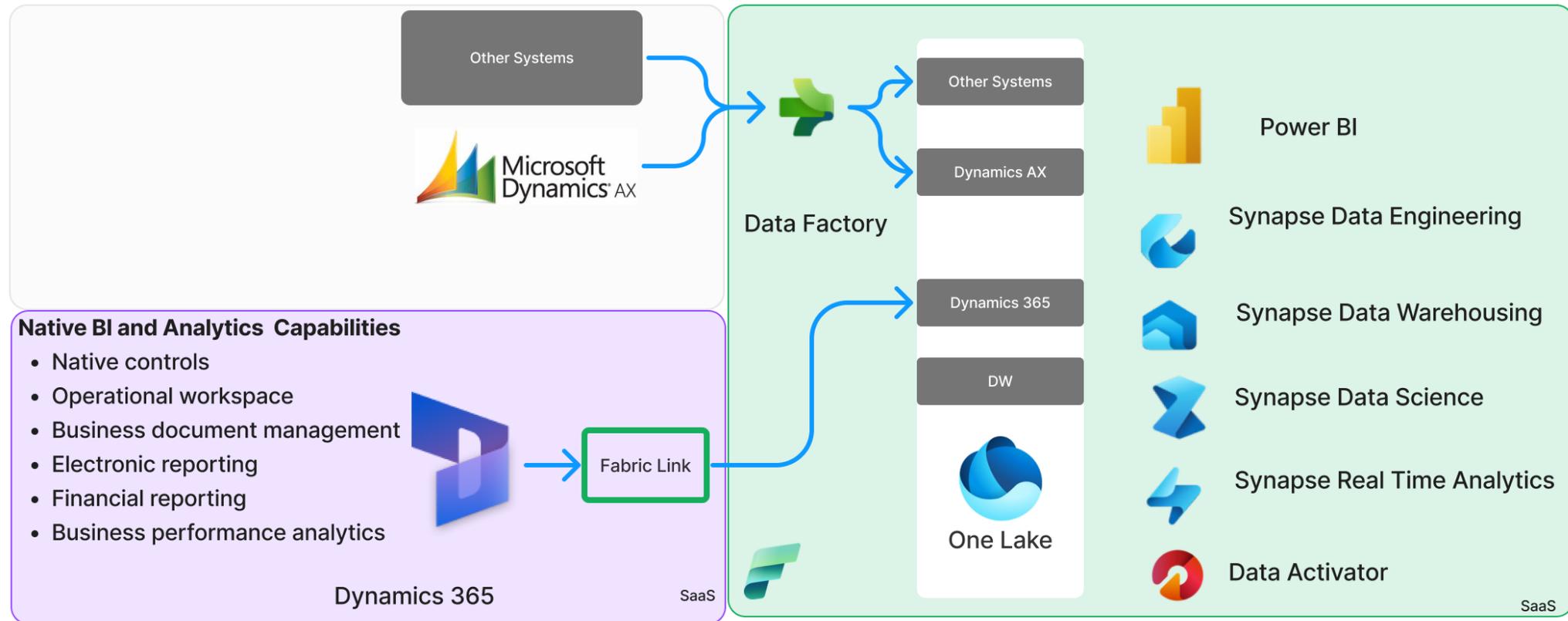
Area	What is changing	Effort	Value add
Admin and setup experience	LCS to Power platform maker portal for setup and add tables	Admin user training	Data from <u>all Dynamics apps</u> available in a simple experience
Tables available to use	Tables must have row version change tracking enabled Common OOB already enabled	One-time small X++ effort to extend missing OOB or custom tables	# of table limit is not applicable Default support for large memo fields
Change tracking mechanisms	CDC to Row version change tracking	No effort	Lower impact on operational database Full refresh is not needed to recover from failure/Database failovers/ movements
Integration with Synapse and Microsoft Fabric	No need of CDMUtil	Saved effort	Configures & connects Synapse workspace and Microsoft Fabric
Data format	Data format changes from CSV to delta lake BYOL – Customer Synapse Spark for delta conversion	No effort	Faster queries, smaller files, no update conflicts Integrated with Microsoft Fabric data platform for the age of AI
Data transformation/ETL	Adapt to any small audit field changes in ETL and data locations as applicable	Low effort to adapt	
Incremental data Integration	Adapt to Synapse link folder structure and audit fields and incremental logic	Low effort – adjusting the incremental pipelines to new New Pipeline available on Github	Failover does not require full push Simpler logic to process full and incremental data with single pipeline
Lakehouse architecture	No need to convert CSV to Parquet or Delta		OOB delta conversion Metadata available in Synapse Lake database
BI & Reporting	No change expected		

# 4

## **Link to Microsoft Fabric**

Overview of Dataverse Link to Microsoft Fabric

# Unlock AI driven insights and action with Link to Fabric



**Demo: [Link to Microsoft Fabric](#)**



# 4

## Call to Action

Plan to transition

Learn more from community and Microsoft Team

Frequently Asked Questions

# Call to Action

## 1. Learning

- a. Learn about the upgrade and improvements (overview + session)
- b. Configure a test environment and give it a try
- c. Review patterns and transition guidance <https://aka.ms/TransitionToSynapseLink>
- d. Join the community <https://aka.ms/SynapseLinkforDynamics>

## 2. Plan transition

- a. If you are using Export to data lake – plan for transition
- b. If you are planning to go live soon – adopt Synapse Link from start

## 3. Realize benefits of transition

- a. Simplify reporting with Delta
- b. Simplify the data integration
- c. Optimize your architecture with Microsoft Fabric

# Resources

## Documentation

- Synapse Link
  - [Azure Synapse Link - Power Apps | Microsoft Learn](#)
  - [Create an Azure Synapse Link for Dataverse with your Azure Synapse Workspace - Power Apps | Microsoft Learn](#)
  - [Export Microsoft Dataverse data in Delta Lake format - Power Apps | Microsoft Learn](#)
  - [Choose finance and operations data in Azure Synapse Link for Dataverse - Power Apps | Microsoft Learn](#)
  - [Use managed identities for Azure with your Azure data lake storage - Power Apps | Microsoft Learn](#)
- Microsoft Fabric
  - [Dataverse direct integration with Microsoft Fabric - Power Apps | Microsoft Learn](#)
  - [Microsoft Fabric documentation - Microsoft Fabric | Microsoft Learn](#)
- **Yammer group**
  - [Viva Engage- Synapse Link for Dynamics](#)

## **Video**

- Dataverse
  - [Dynamics 365 Bites - Synapse Link for finance and operations apps - Getting started \(preview\) | August 2023](#)
  - [\(2747\) Build 2023: Dataverse integration for Microsoft Fabric - YouTube](#)
- Microsoft Fabric
  - [\(2747\) Microsoft Fabric: Satya Nadella at Microsoft Build 2023 – YouTube](#)
  - [Microsoft Fabric Launch Digital Event \(Day 1\) – YouTube](#)



Thank you!