Microsoft Fabric and Snowflake – better together

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Power BI & Fabric SUMMIT 2025

Special thanks to Fabric and Power BI Team at

Microsoft

This Summit presented to you by

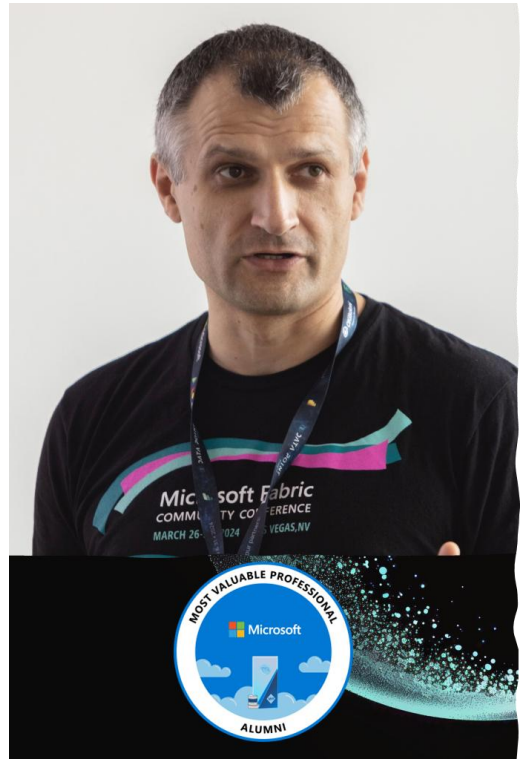
RADACAD

Michal

- Snowflake Evangelist at Ininite Services
- Specializes in designing and implementing data warehouse solutions and ETL/ELT processes
- Explorer and enthusiast of cloud solutions
- Speaker at conferences on data processing technologies
- Lecturer & trainer
- In love with the Snowflake platform from the first click
- Snowflake Community Data SuperHero

Pawel

- CTO at Ininite Services
- Specializes in building data strategies and designing solutions on modern data platforms for large organizations
- Founder of Data Community Poland
- Speaker at conferences, community meetings and meetups
- Former member of the Azure Data team at Microsoft
- 8x Microsoft Most Valuable Professional (MVP)
- Former lecturer



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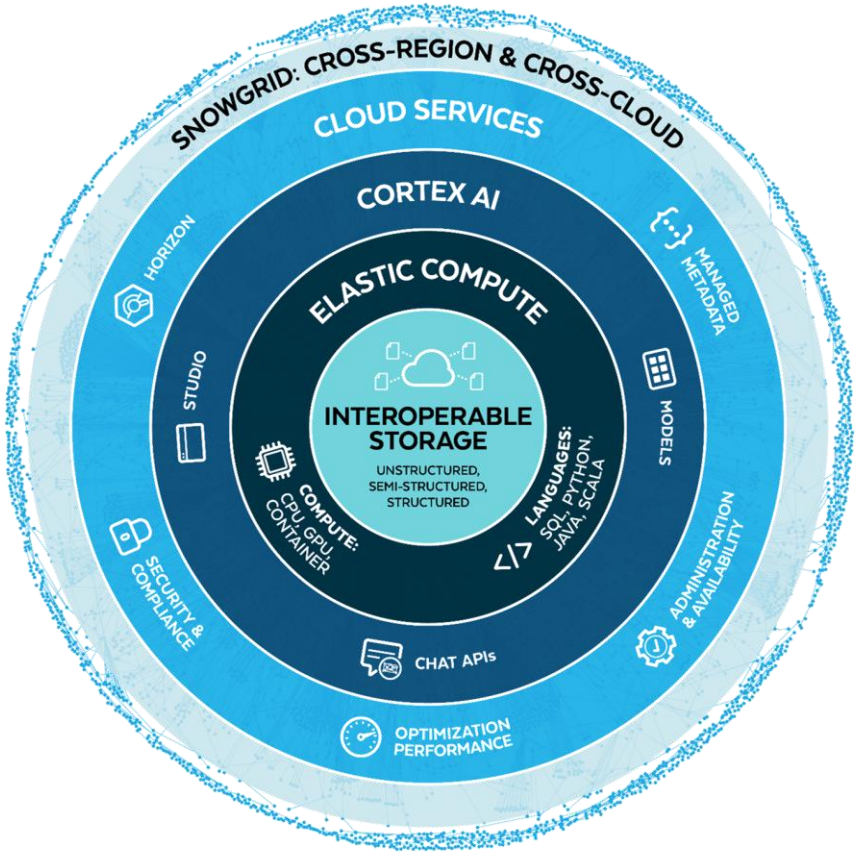
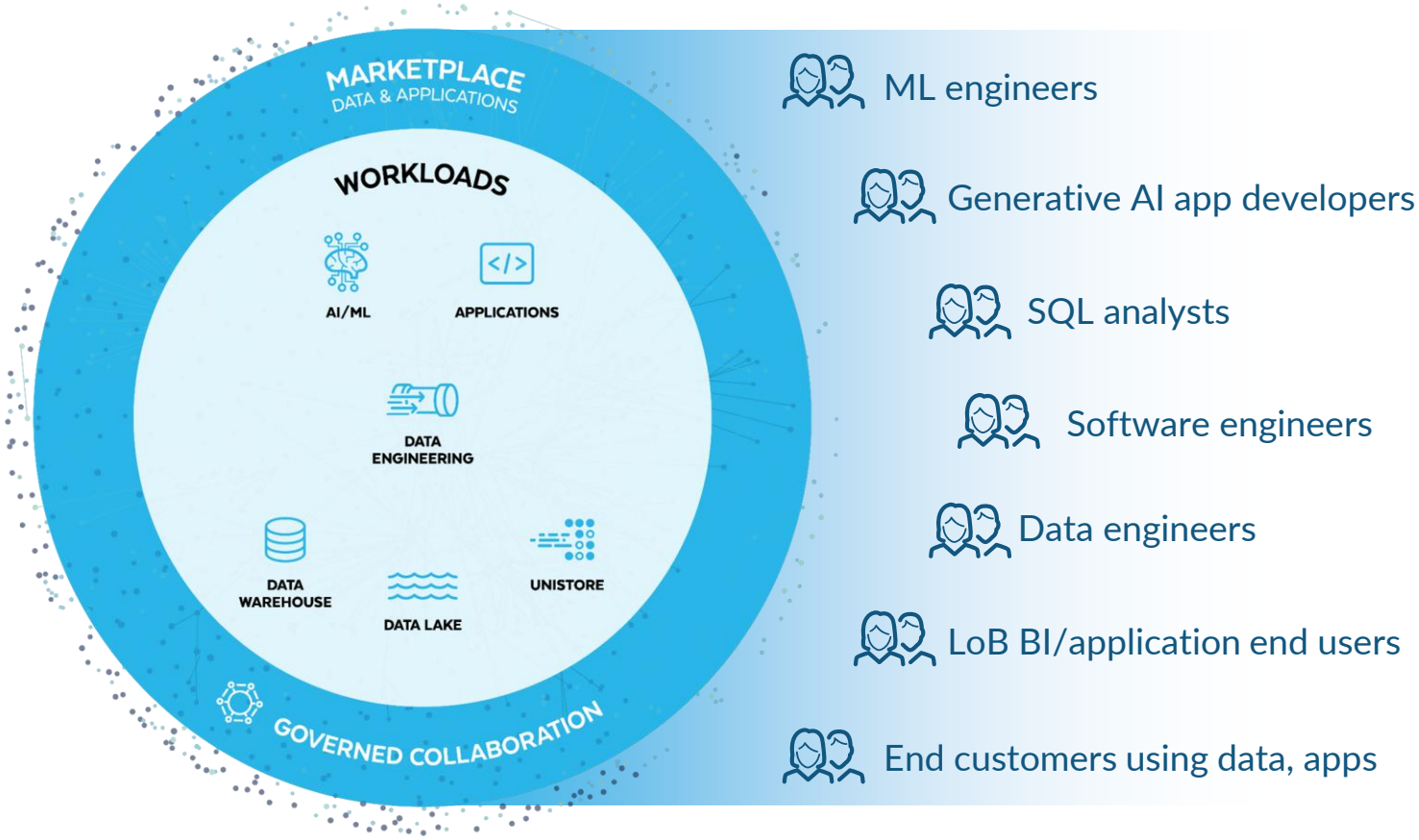
Agenda

- Quick intro to Snowflake and Fabric
- Problem and goal statement
- Possible solutions
- Summary and resources

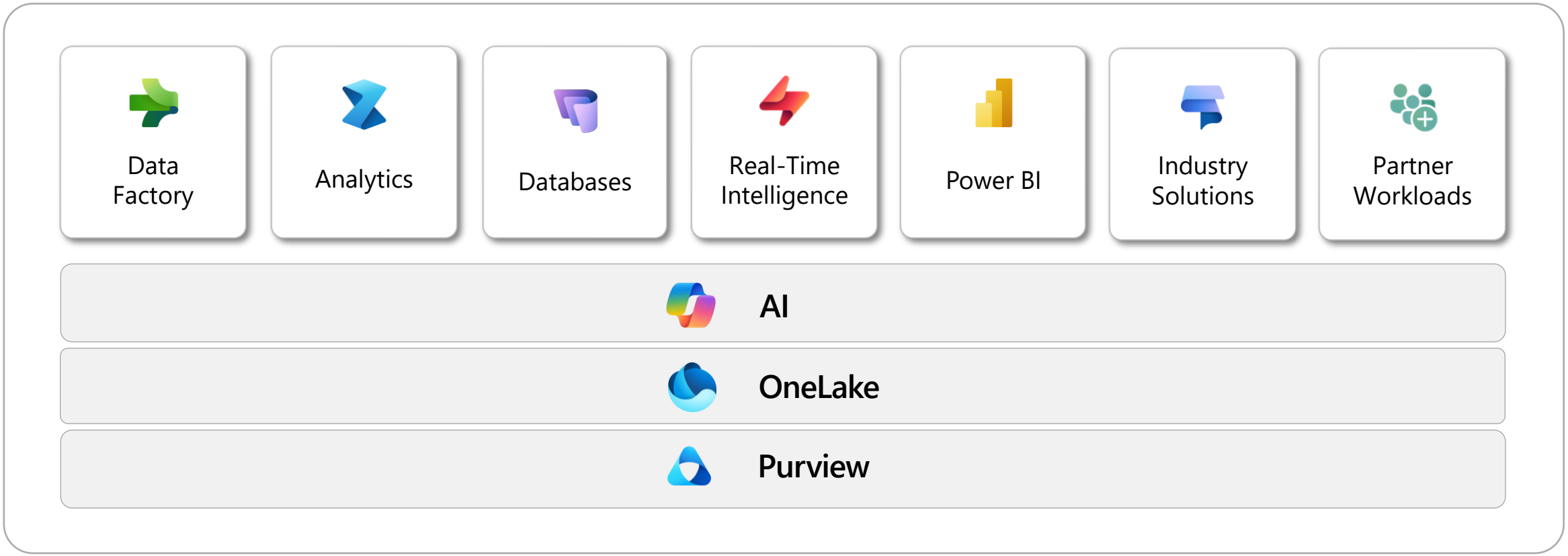
What is Snowflake



Snowflake AI Data Cloud



What is Fabric



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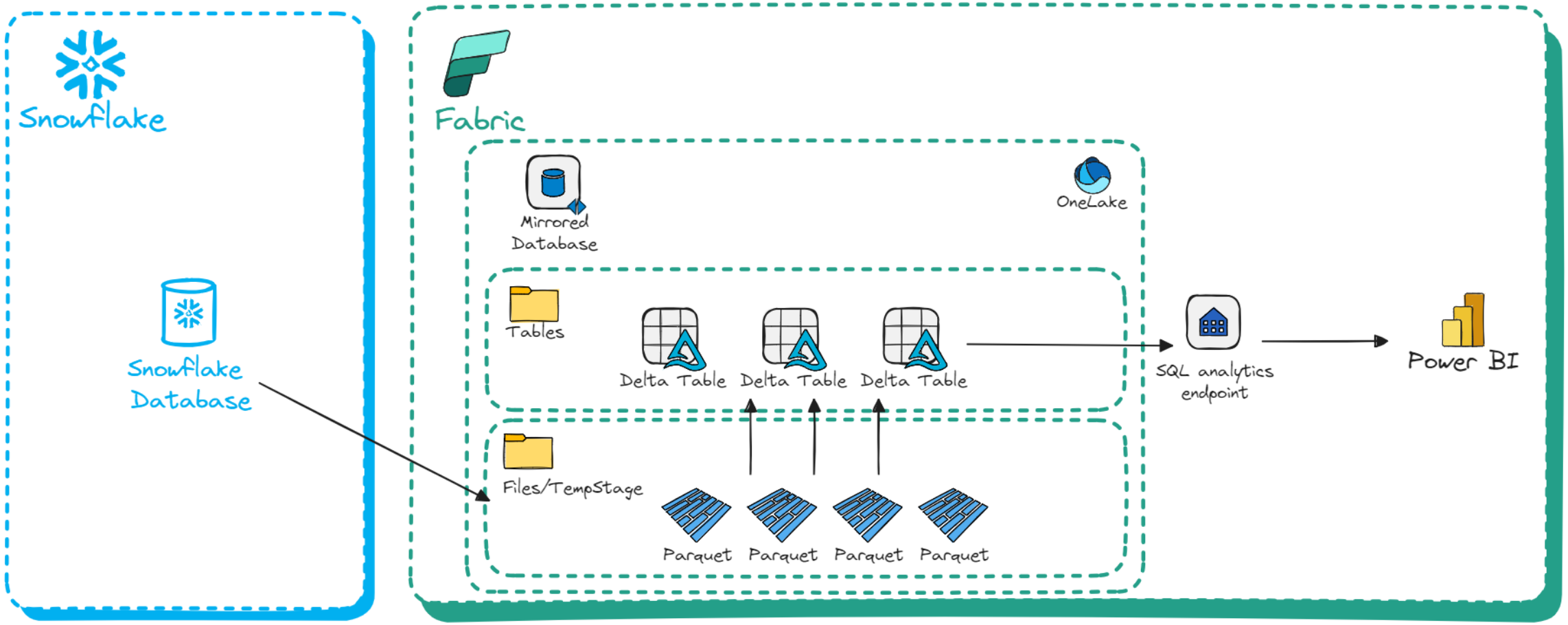
Problem and Goal Statement

- We want to make **data from Snowflake available for Fabric/Power BI**
  - Snowflake as a data hub, Fabric/Power BI as a BI/analytics tool
- We want to **share data products** between Snowflake and Fabric
  - Snowflake and Fabric used as full-blown data platforms
  - Useful in large distributed organizations
  - Useful for Data Mesh operating model
- We have Fabric and want to **optimize Snowflake compute cost**
  - Access data produced by Snowflake without virtual warehouse running

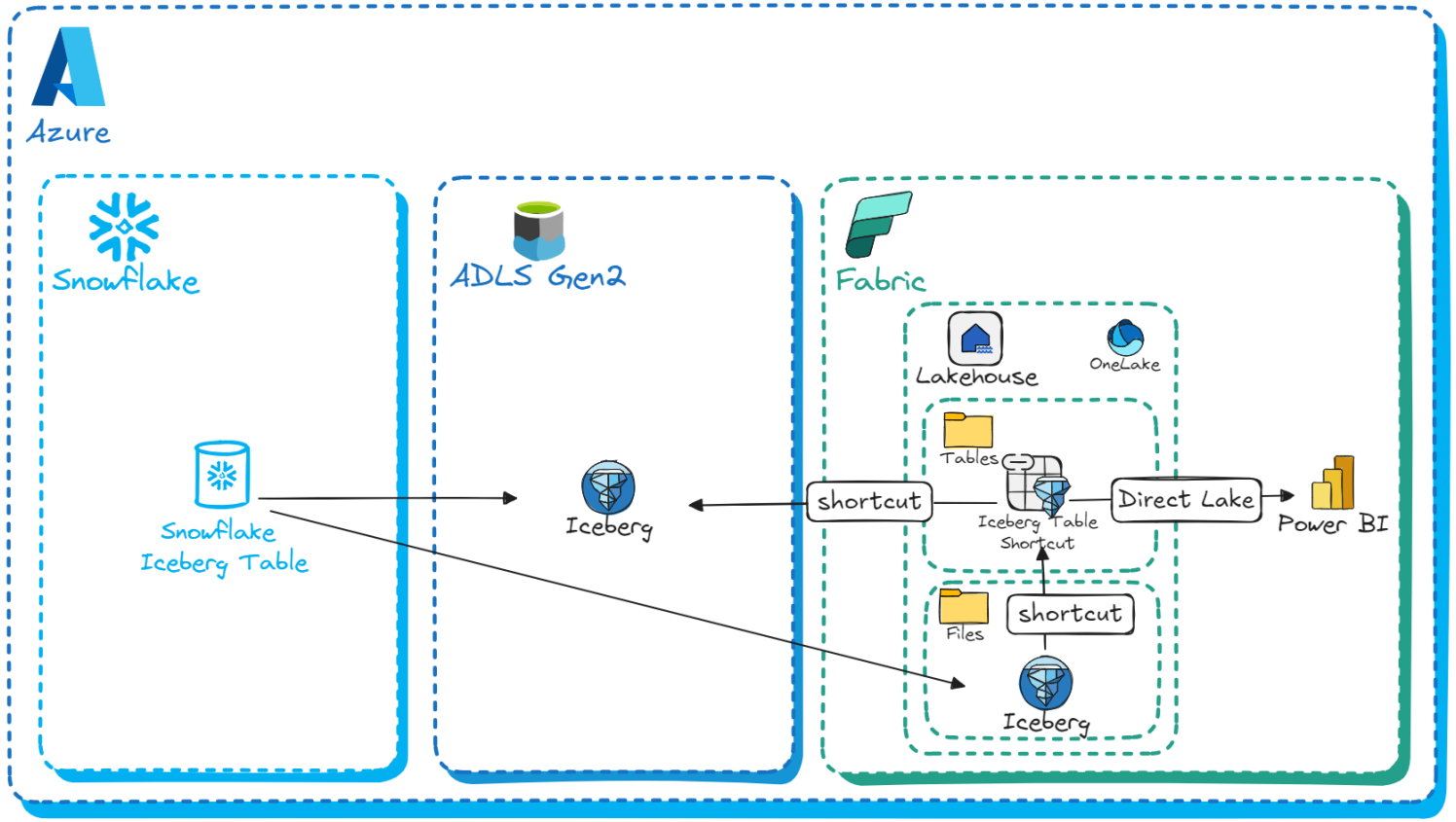
Snowflake Mirroring



Snowflake Mirroring Considerations

- ✗ Only native tables
  - ✗ External, Transient, Temporary, Dynamic, Iceberg tables not supported
- ✗ Up to 500 tables can be replicated
- ✗ No support for Snowflake accounts behind a private network
- ✗ Replication frequency falls down to 1 hour when no changes occur
- ✗ Some schema changes require a DML operation to be replicated
- ✗ Snowflake compute required

Snowflake to Fabric



DEMO

Snowflake to Fabric

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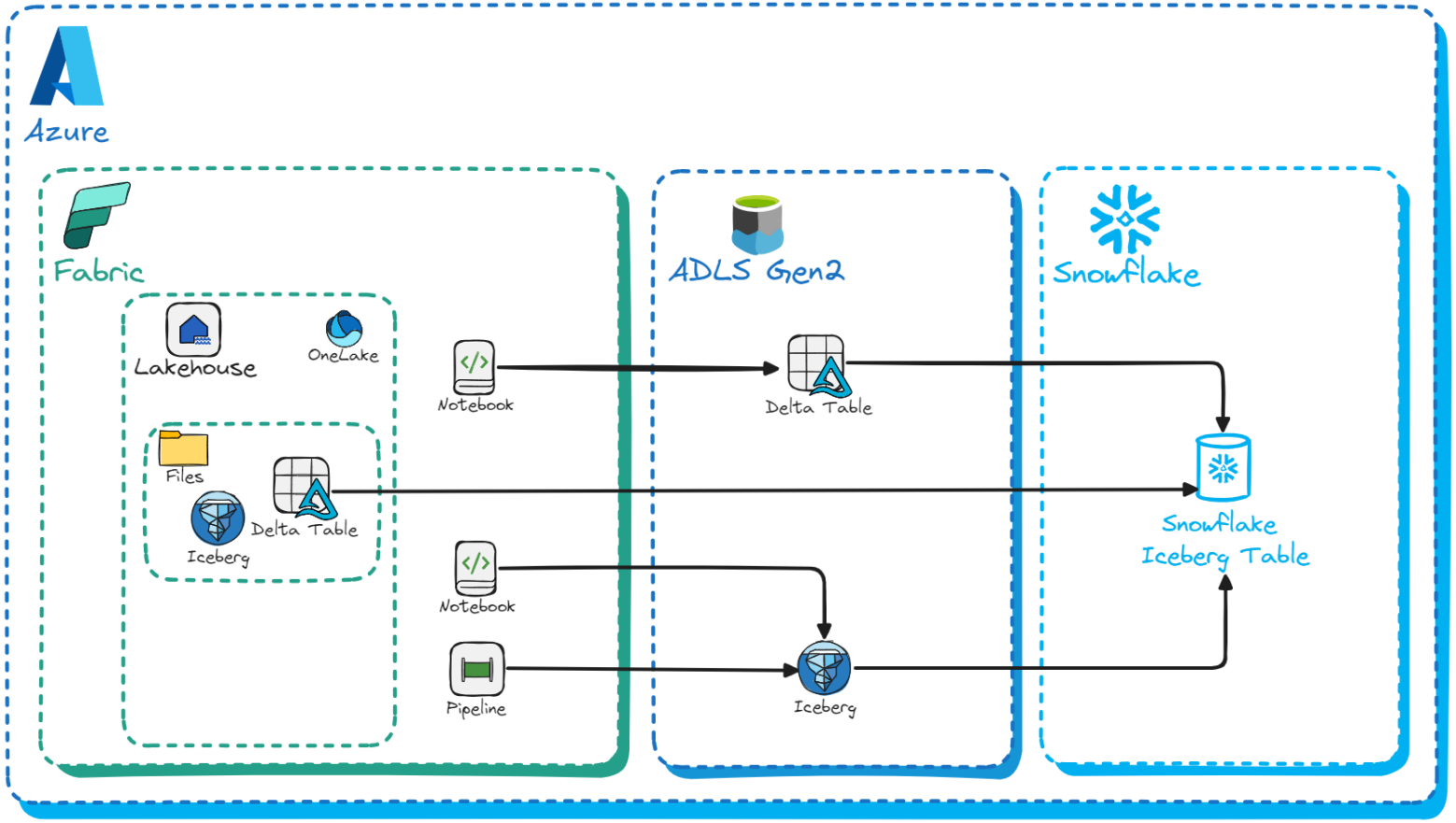
Shortcuts to Iceberg Tables Considerations

- ✗ Not all data types are supported
- ✗ Up to 5,000 data files or ~1B rows in a table
- ✗ Numeric columns with precision >= 10 may be not consumable
- ✗ One set of metadata files supported
  - ✗ UNDROP in Snowflake not supported
- ✗ Metadata is not portable
- ✗ Metadata changes may require a DML operation to show up in Fabric
- ✗ Schema enabled lakehouses not supported
- ✗ Private links not supported
- ✗ OneLake shortcuts must be in the same region
- ✗ Iceberg table must be copy-on-write (not merge-on-read)

- ✓ Time Travel supported (table versions correspond to Iceberg metadata)

Fabric to Snowflake



DEMO

Fabric to Snowflake

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Delta Direct Considerations

- ✗ Delta Lake 3.1 or earlier supported
- ✗ Snowflake streams not supported for partitioned tables
- ✗ Dynamic tables on Iceberg tables created from Delta files not supported
- ✗ Some data types in Delta files not supported
- ✗ Some Delta features not supported (e.g. row tracking, CDC, change metadata)

- ✓ Time Travel supported (table versions correspond to Delta log commit files)

Resources to study more

- Snowflake and Microsoft announce expansion of their partnership
- Simplifying Data Architecture and Security to Accelerate Value
- Microsoft Fabric Mirrored Databases From Snowflake
- Create shortcuts to Iceberg tables - Microsoft Fabric
- Getting Started with Iceberg in OneLake
- CREATE EXTERNAL VOLUME
- CREATE ICEBERG TABLE (Snowflake as the Iceberg catalog)
- CREATE ICEBERG TABLE (Delta files in object storage)

Thank you

- Connect to us at:

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- Stay online for our live Q&A sessions