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Lake Database
Database Template
Map Data

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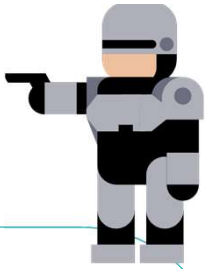

Resource Group Development

Azure Synapse Analytics

Azure Synapse Studio

Database Template | Design Lake Database | Lake Database | Map Data

Lake Database

Analytics runtimes

Integration runtimes

SQL Pools | Spark | Data Explorer | IR

Azure Data Lake Storage

Resource Group Production

Azure Synapse Analytics

Azure Synapse Studio

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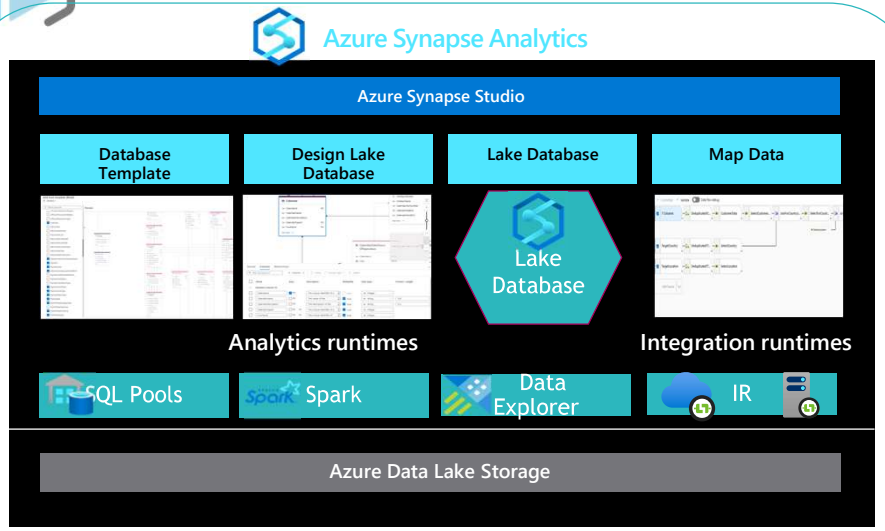
Resource Group Development



Lake Database

Why

- Accelerate time to insights based on a standardized business area schemas for different industries
- Identify gaps and opportunities in your existing enterprise data model
- Consolidate data silos and query from a single pane of glass
- Create a well-formed data lake ready for the analytics at scale
- Enrich your data with Azure Cognitive Services and Azure Machine Learning
- Develop reports easily using Power BI

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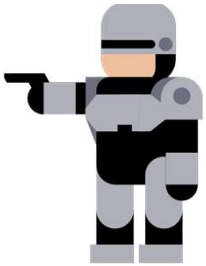
Lake Database

Database Templates

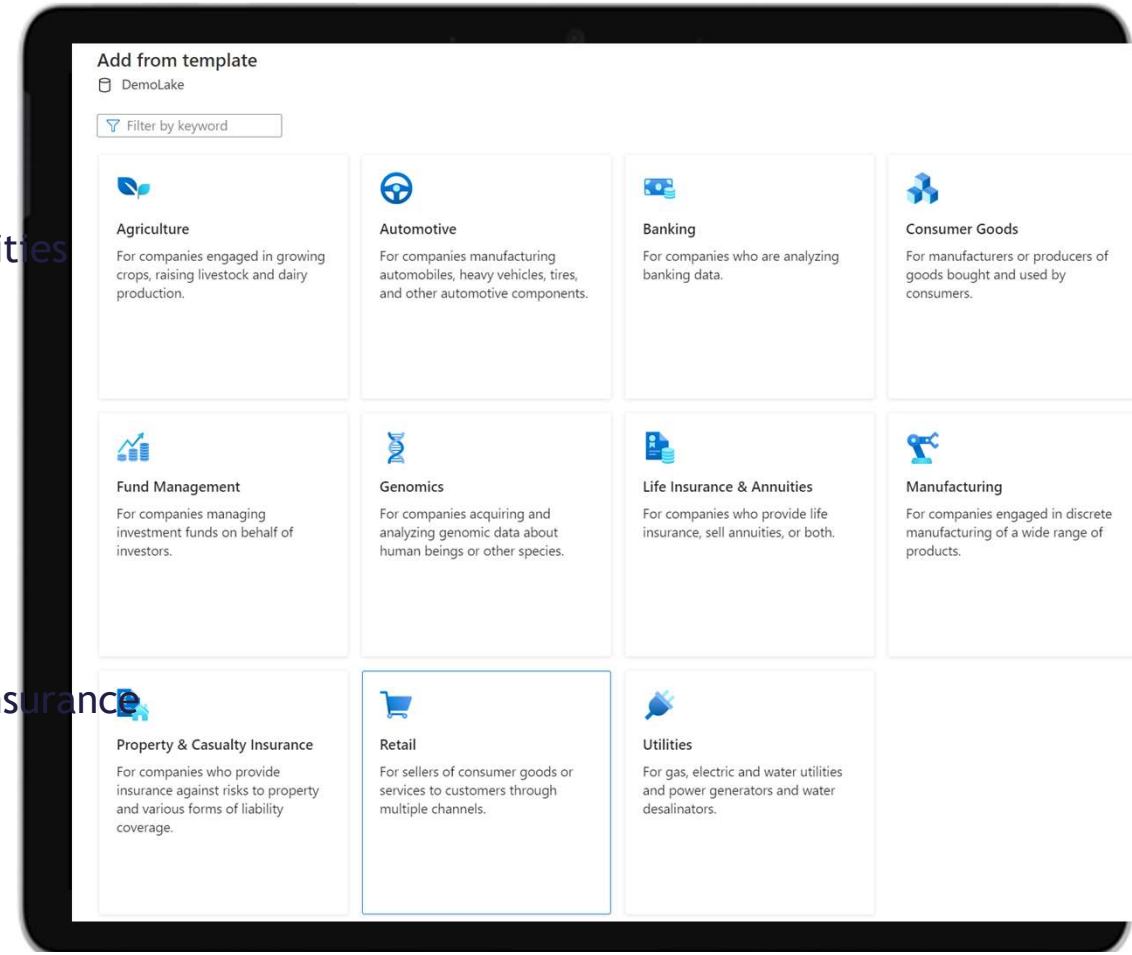
- Industry specific schema definitions

Lake Database

Database Templates



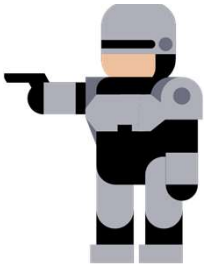
- Industry specific schema definitions
- **15 different Templates available**
  - Agriculture
  - Automotive
  - Banking
  - Consumer Goods
  - Energy & Commodity Trading
  - Freight & Logistics
  - Fund Management
  - Genomics
  - Life Insurance & Annuities
  - Manufacturing
  - Oil & Gas
  - Pharmaceuticals
  - Property & Casualty Insurance
  - Retail
  - Utilities

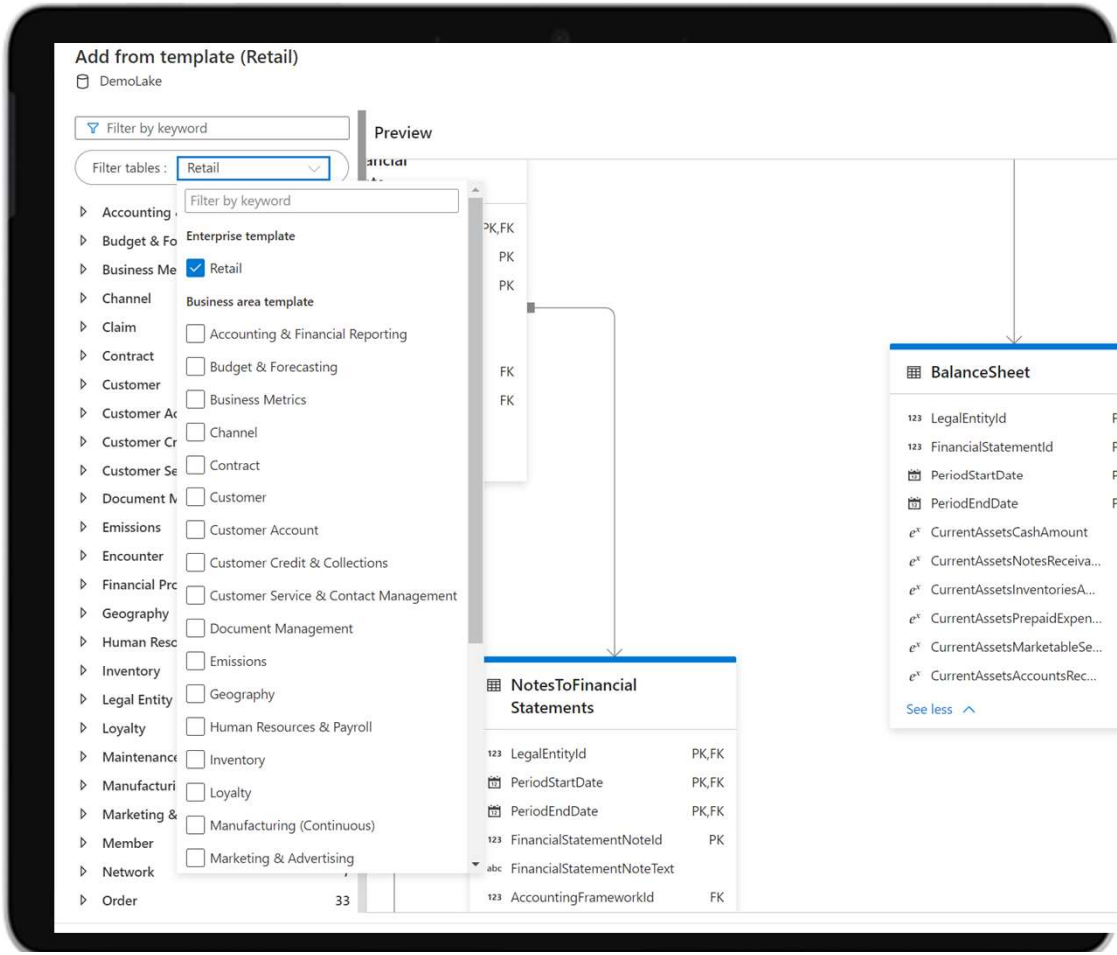


Lake Database

Database Templates

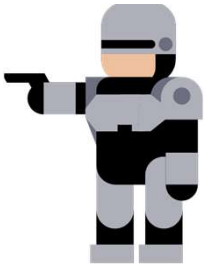
- Industry specific schema definitions
  - Enterprise Templates



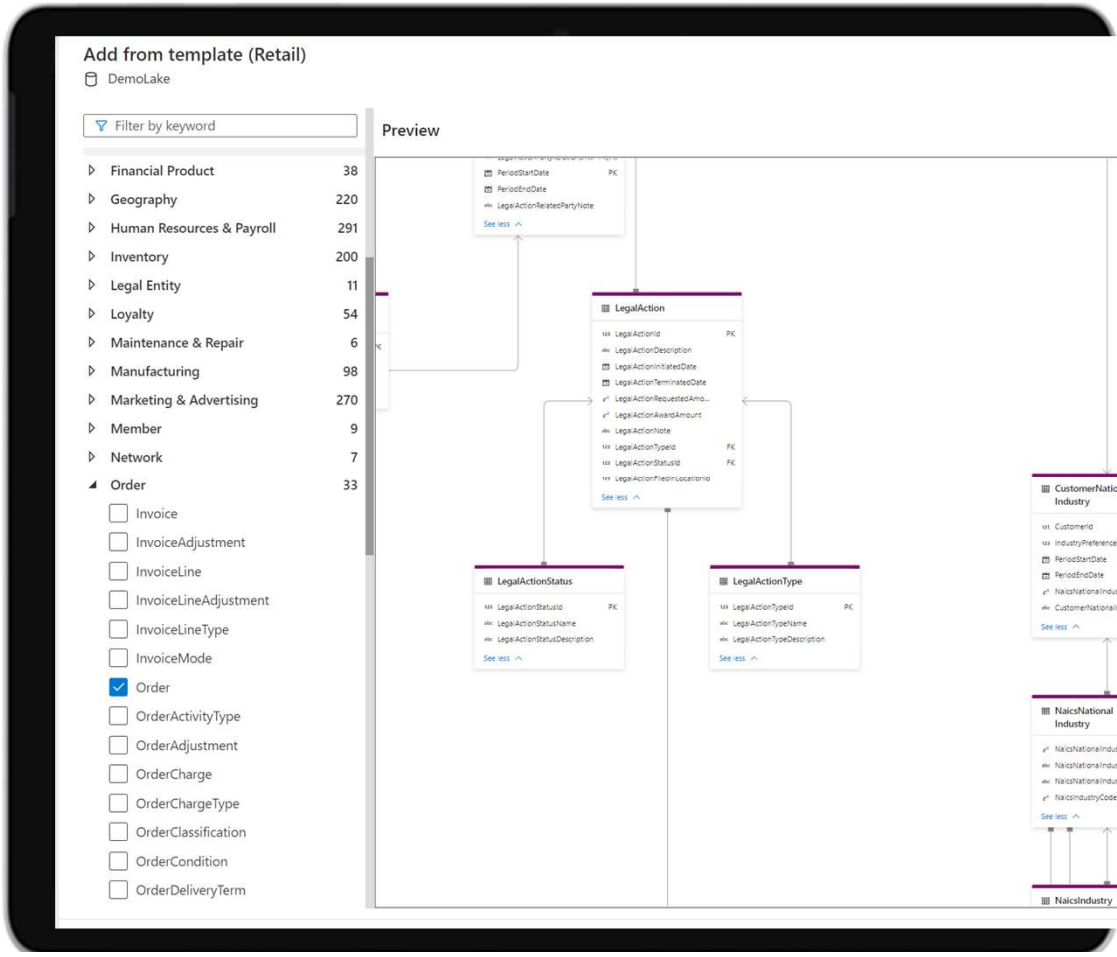


Lake Database

Database Templates



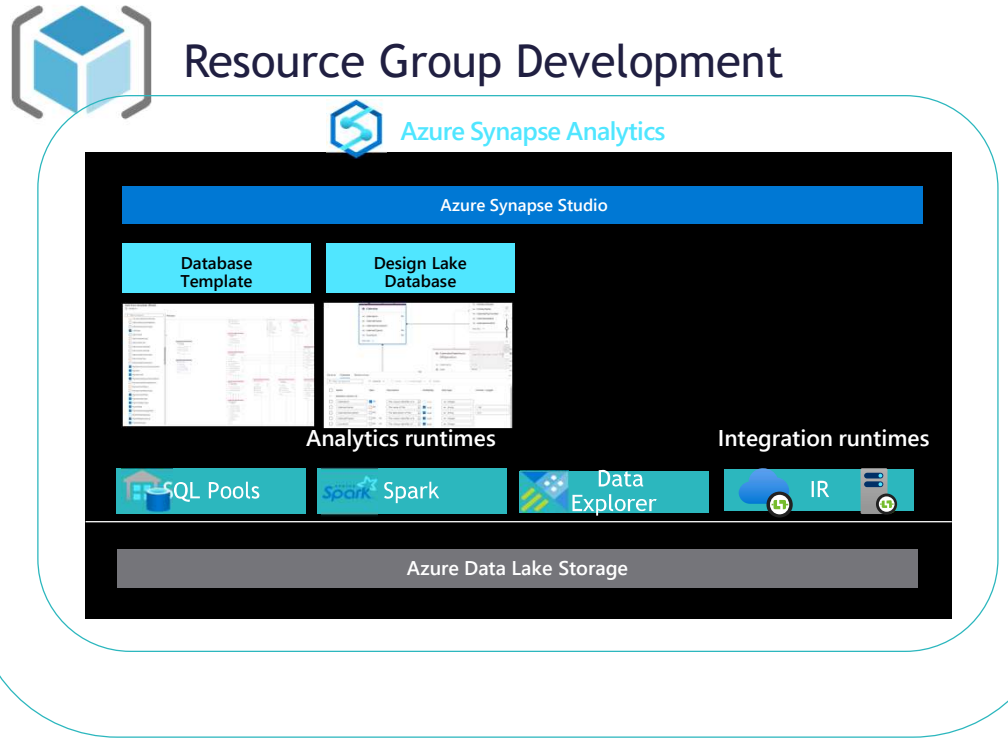
- Industry specific schema definitions
  - Enterprise Templates
  - Business Area Templates



Lake Database

Design Lake Database

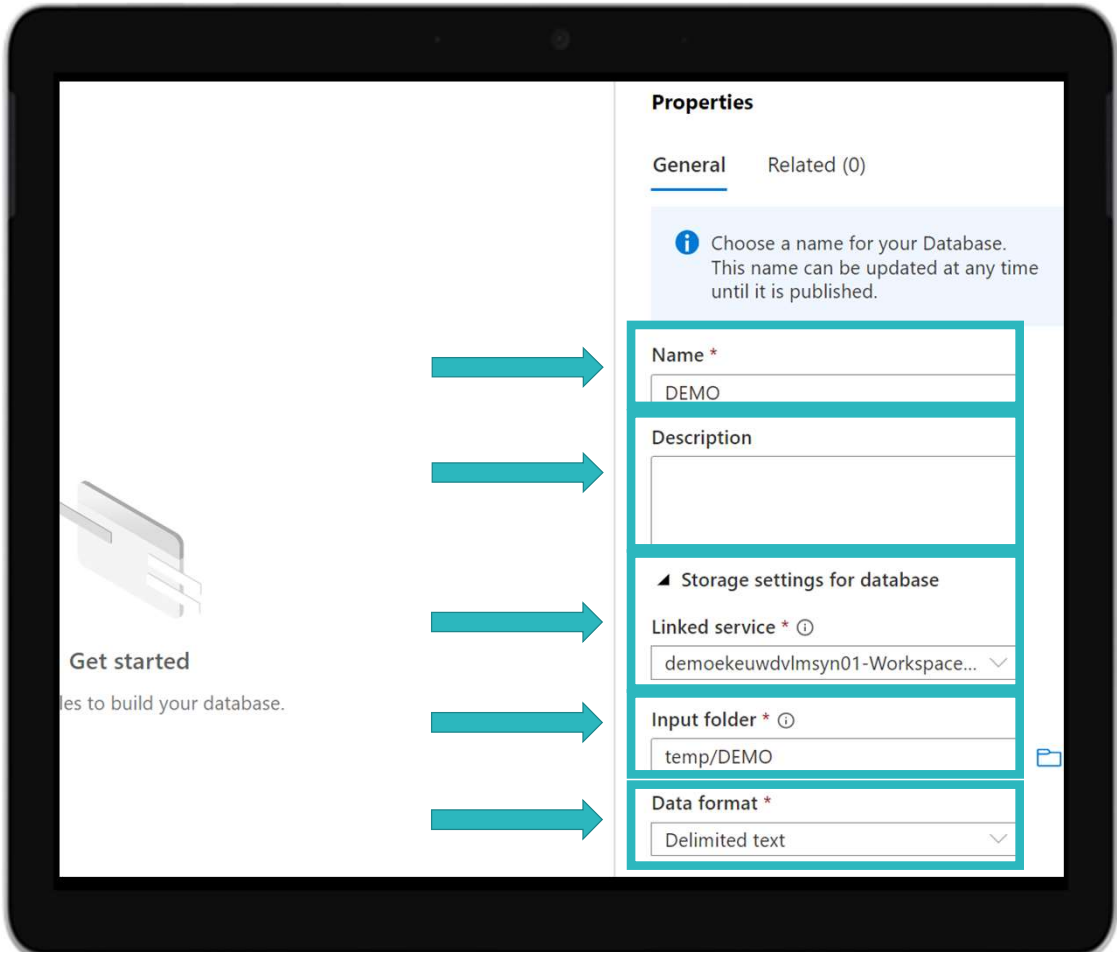
- **Create database**
  - Synapse Permissions
    - Synapse Administrator
    - Synapse Contributor
    - Synapse Artifact
  - Azure Permissions
    - Storage Blob Data Contributor
- **Explore Database**
  - Synapse Permissions
    - Synapse User



Lake Database

Design Lake Database

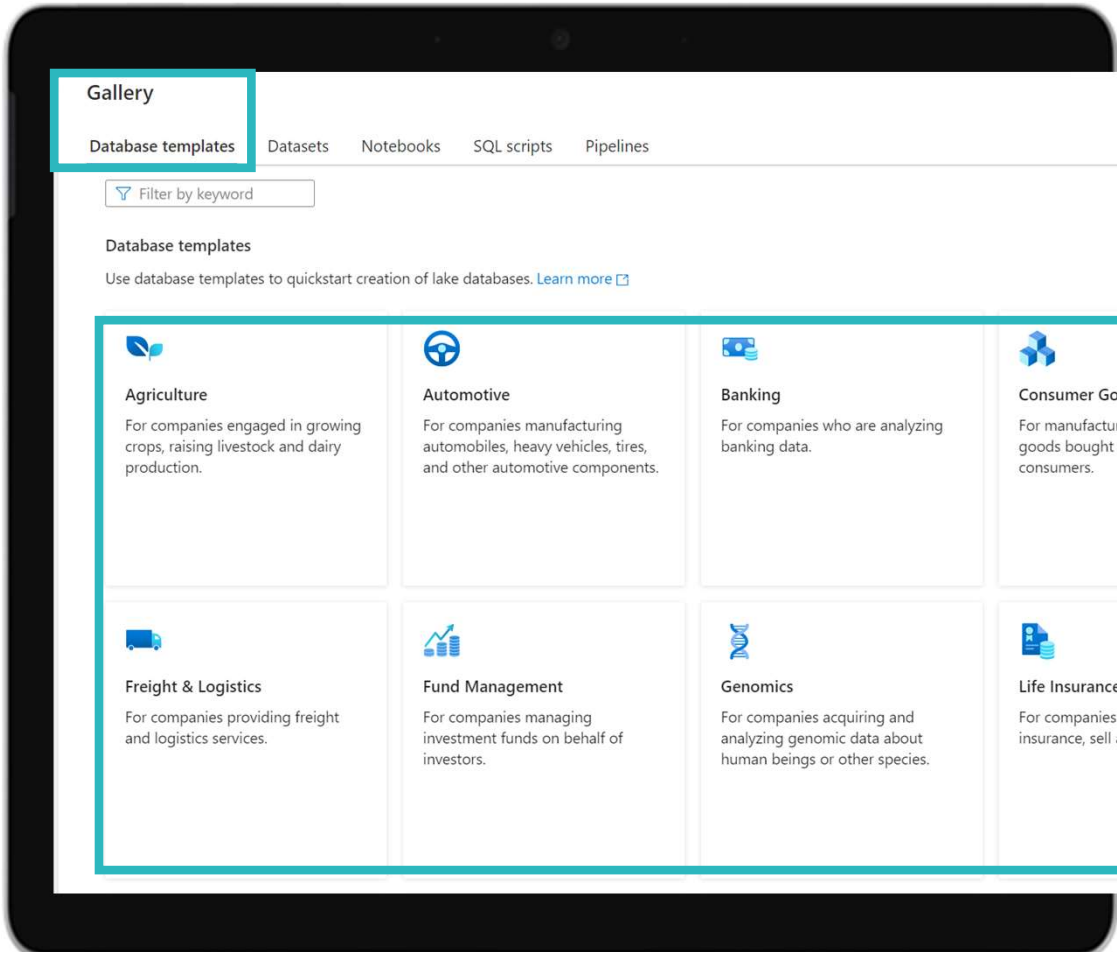
- Create database
  - Empty
    - Name
    - Description
    - Storage Settings
    - Input Folder
    - Data Format
      - Delimited text or Parquet



Lake Database

Design Lake Database

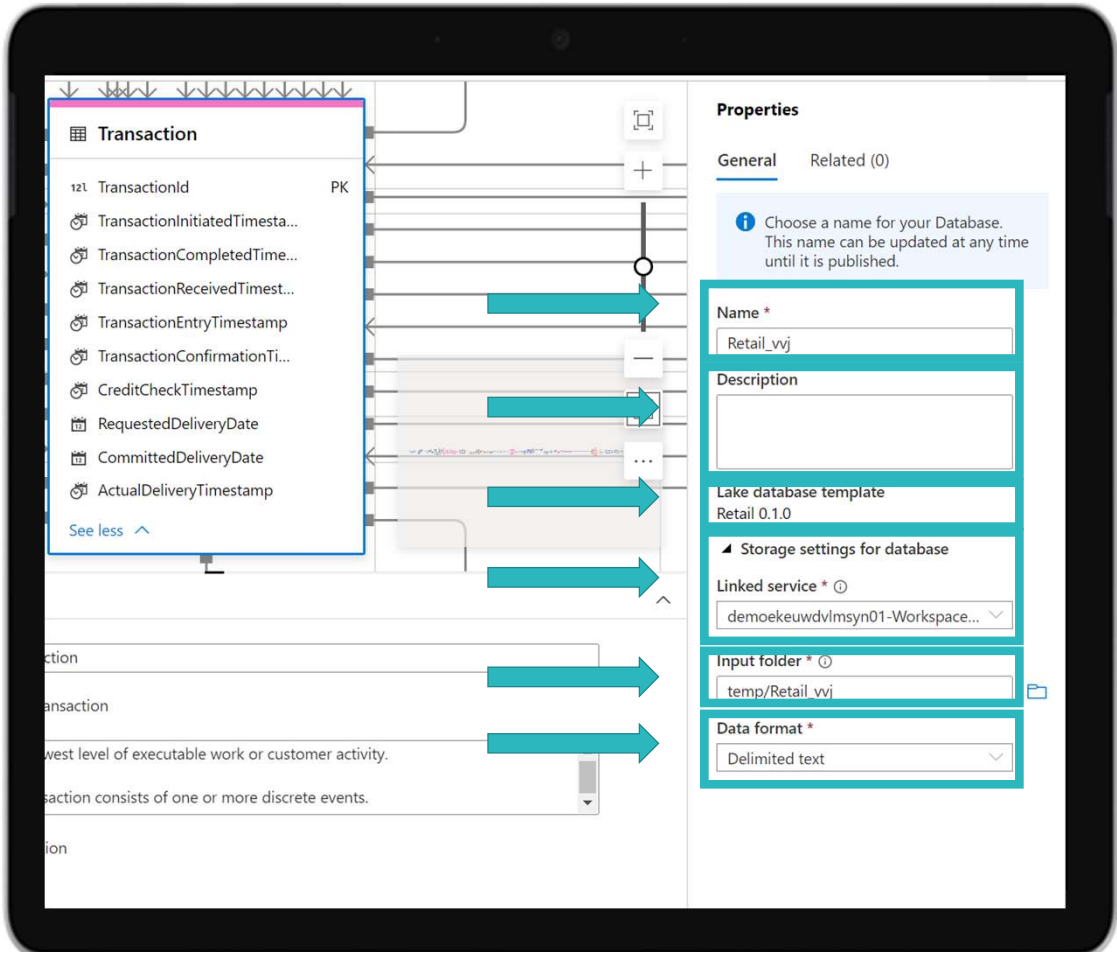
- **Create database**
  - From Database Template
    - Gallery
    - Template



Lake Database

Design Lake Database

- Create database
  - From Database Template
    - Name
    - Description
    - **Template version**
    - Storage Settings
    - Input Folder
    - Data Format
      - Delimited text or Parquet



Lake Database

Lake Database

- **Database Designer**
- Data Storage
  - CSV Format
  - Parquet
- **Database Compute**
  - Synapse SQL serverless SQL pool
  - Synapse Apache Spark
- Folder Structure
  - Files

Resource Group Development

Azure Synapse Analytics

Name
ChannelType
Country
Customer
IndividualCustomer
Item
Location
Product
ProductCategoryDim
Territory
Transaction
TransactionLineItem

Name
_SUCCESS
part-00000-7e1d5778-8c97-4ed3-aaf4-f56a48e1f3fc-c000.snappy.parquet
part-00000-a4df07be-51b5-4004-93be-a75f8f6ec44b-c000.snappy.parquet
part-00069-7e1d5778-8c97-4ed3-aaf4-f56a48e1f3fc-c000.snappy.parquet
part-00069-a4df07be-51b5-4004-93be-a75f8f6ec44b-c000.snappy.parquet
part-00107-7e1d5778-8c97-4ed3-aaf4-f56a48e1f3fc-c000.snappy.parquet
part-00107-a4df07be-51b5-4004-93be-a75f8f6ec44b-c000.snappy.parquet
part-00128-7e1d5778-8c97-4ed3-aaf4-f56a48e1f3fc-c000.snappy.parquet
part-00128-a4df07be-51b5-4004-93be-a75f8f6ec44b-c000.snappy.parquet
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part-00140-a4df07be-51b5-4004-93be-a75f8f6ec44b-c000.snappy.parquet

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Lake Database

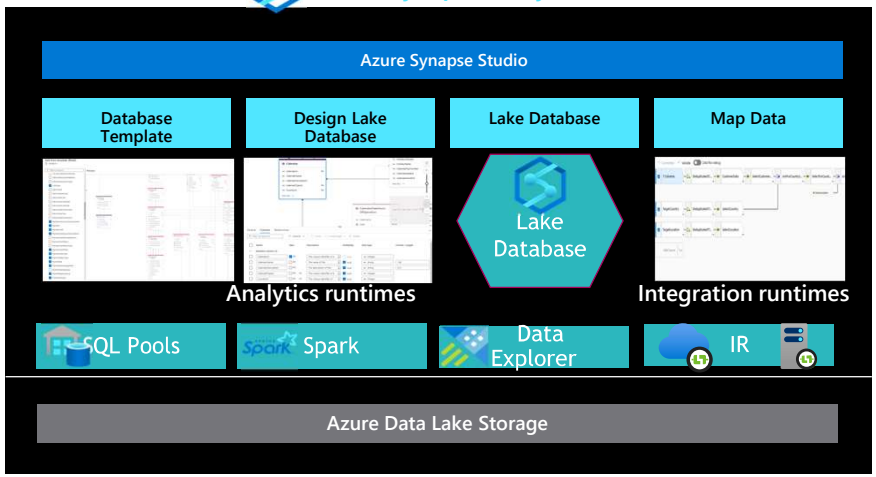
Map Data

Currently in Preview!

- ❑ Create ETL mapping

Resource Group Development

Azure Synapse Analytics



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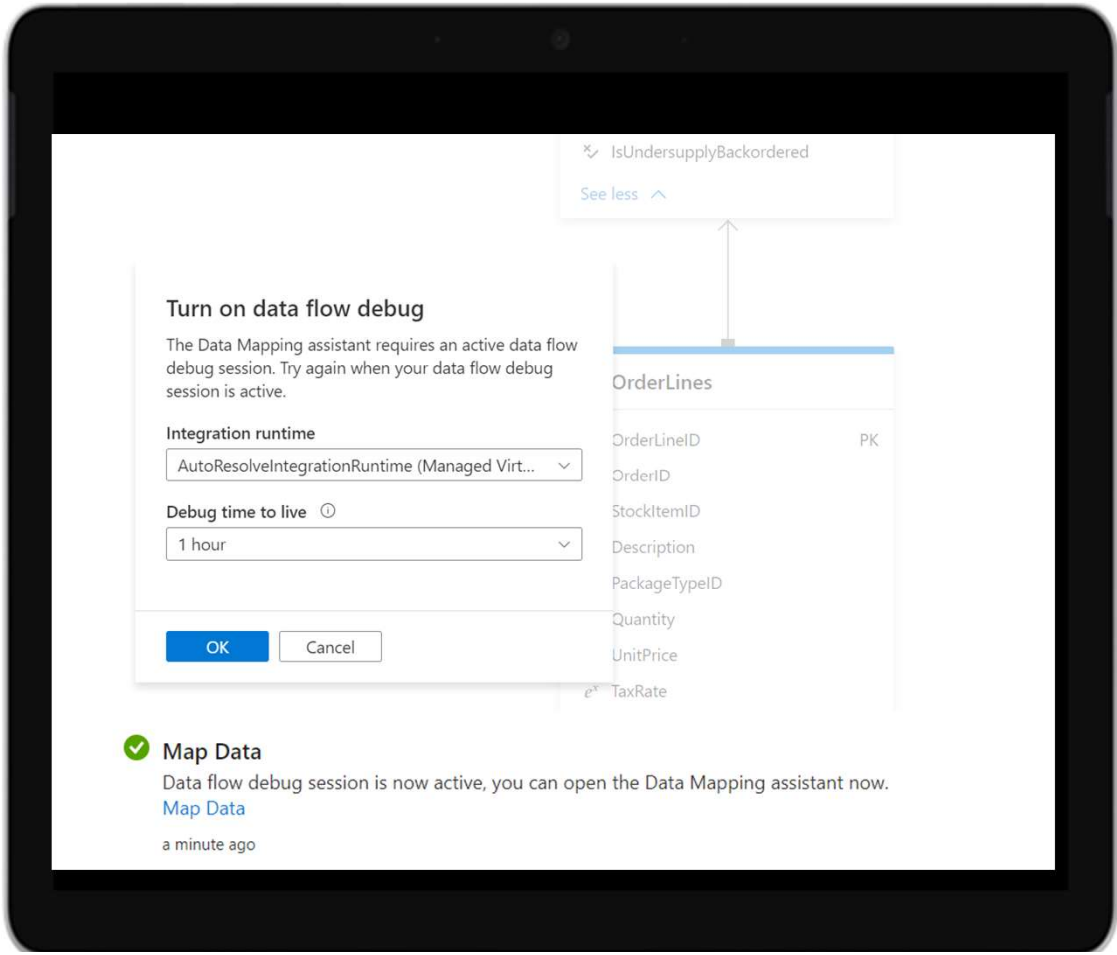
Lake Database

Map Data

Currently in Preview!

- ❑ Create ETL mapping
- ❑ Data Flow debug

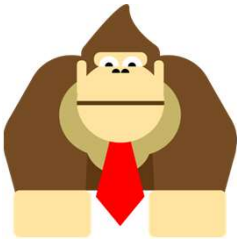


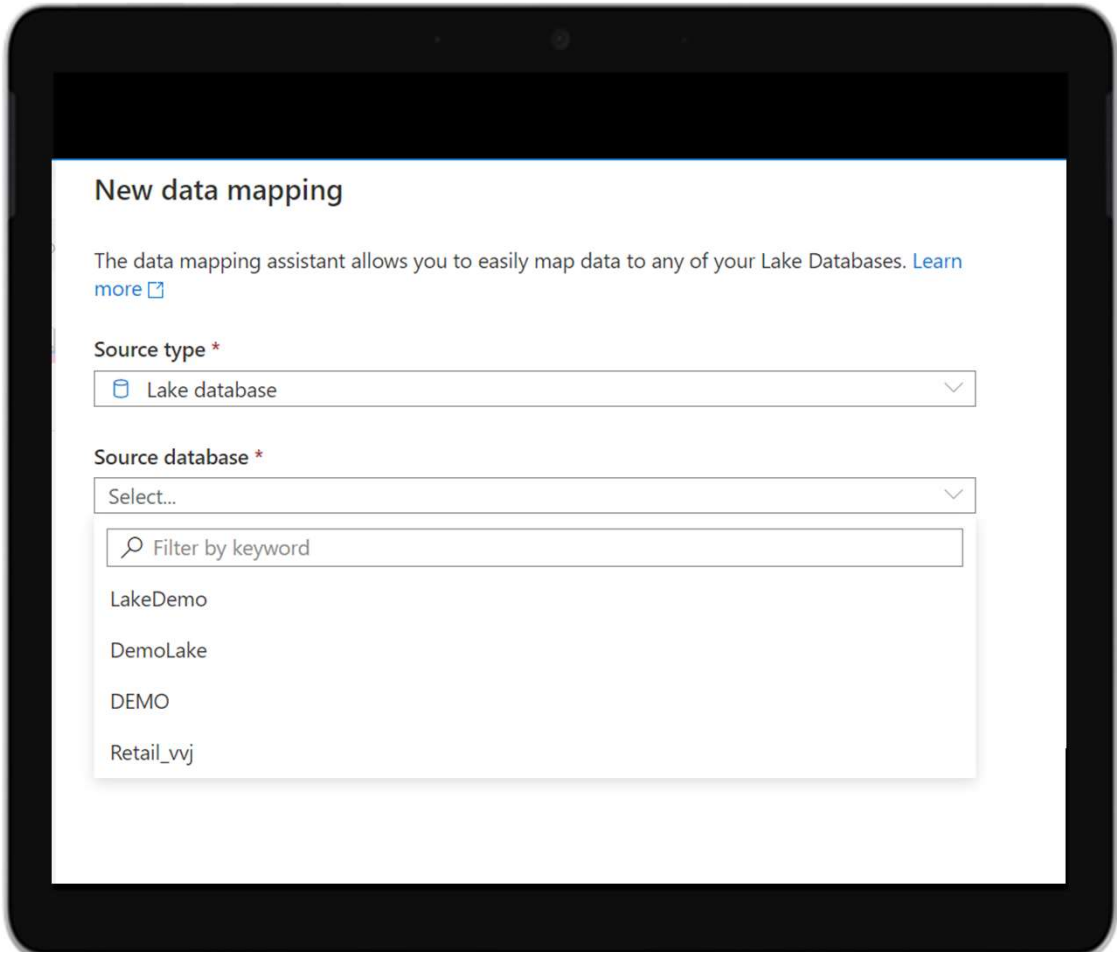
Lake Database

Map Data

Currently in Preview!

- Create ETL mapping
- Data Flow debug
- Source Type
  - **Lake Database**



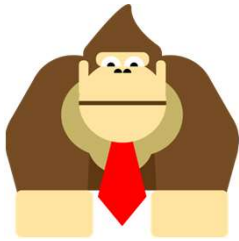


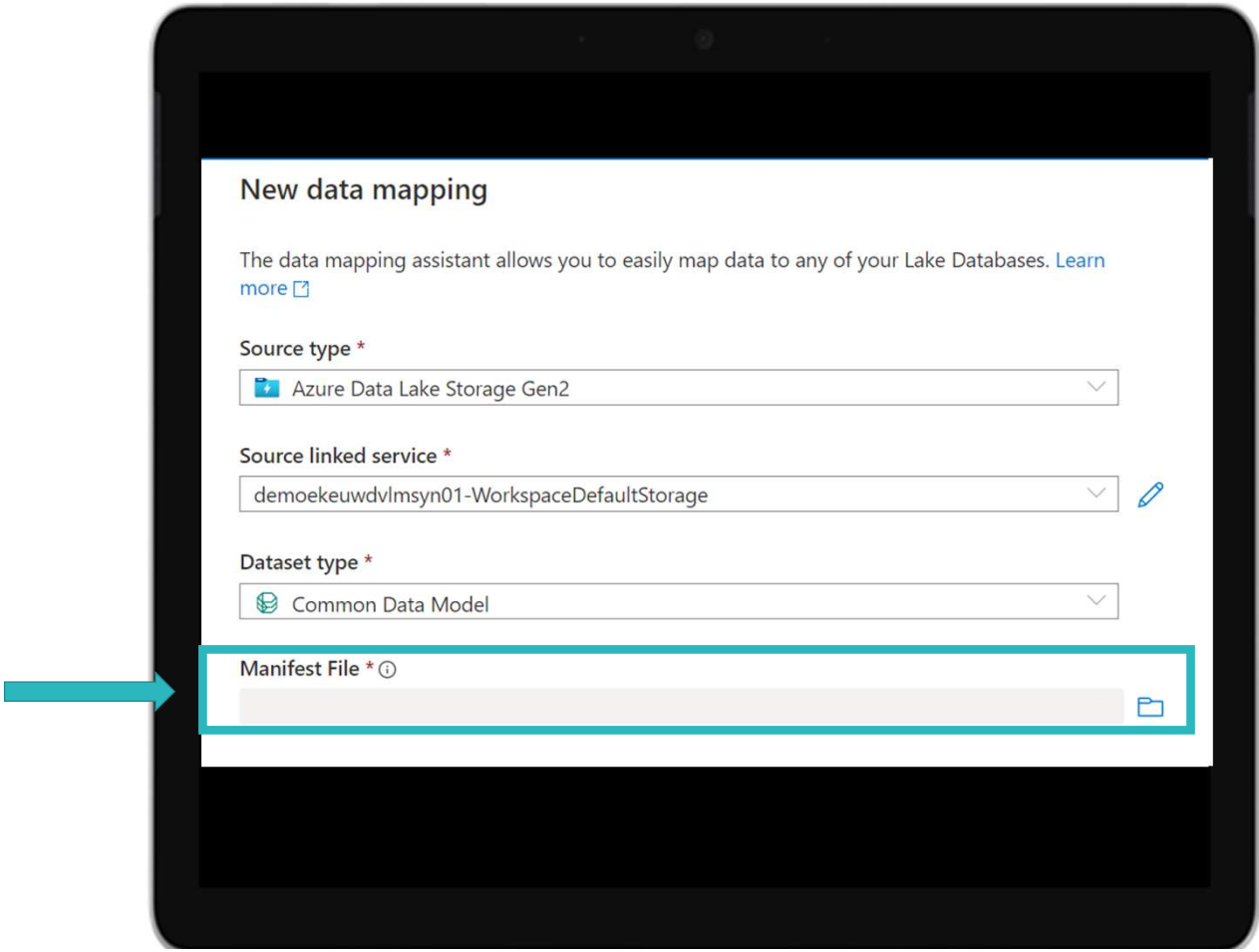
Lake Database

Map Data

Currently in Preview!

- Create ETL mapping
- Data Flow debug
- Source Type
  - Lake Database
  - **Data Lake Storage**
    - **Common Data Model**



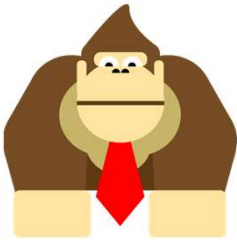


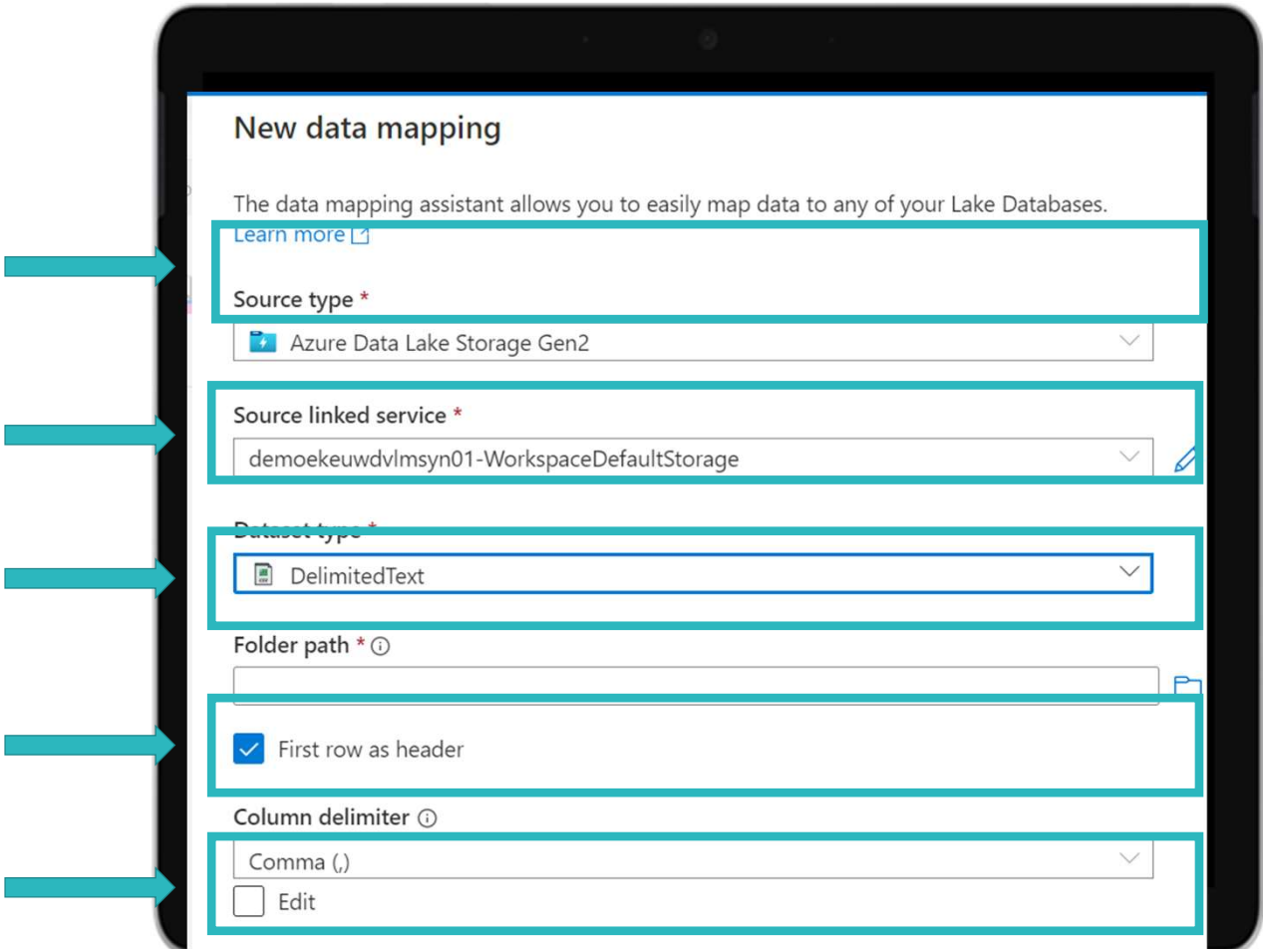
Lake Database

Map Data

Currently in Preview!

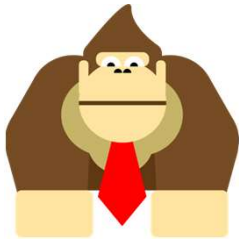
- Create ETL mapping
- Data Flow debug
- Source Type
  - Lake Database
  - **Data Lake Storage**
    - Common Data Model
    - **Delimited Text**





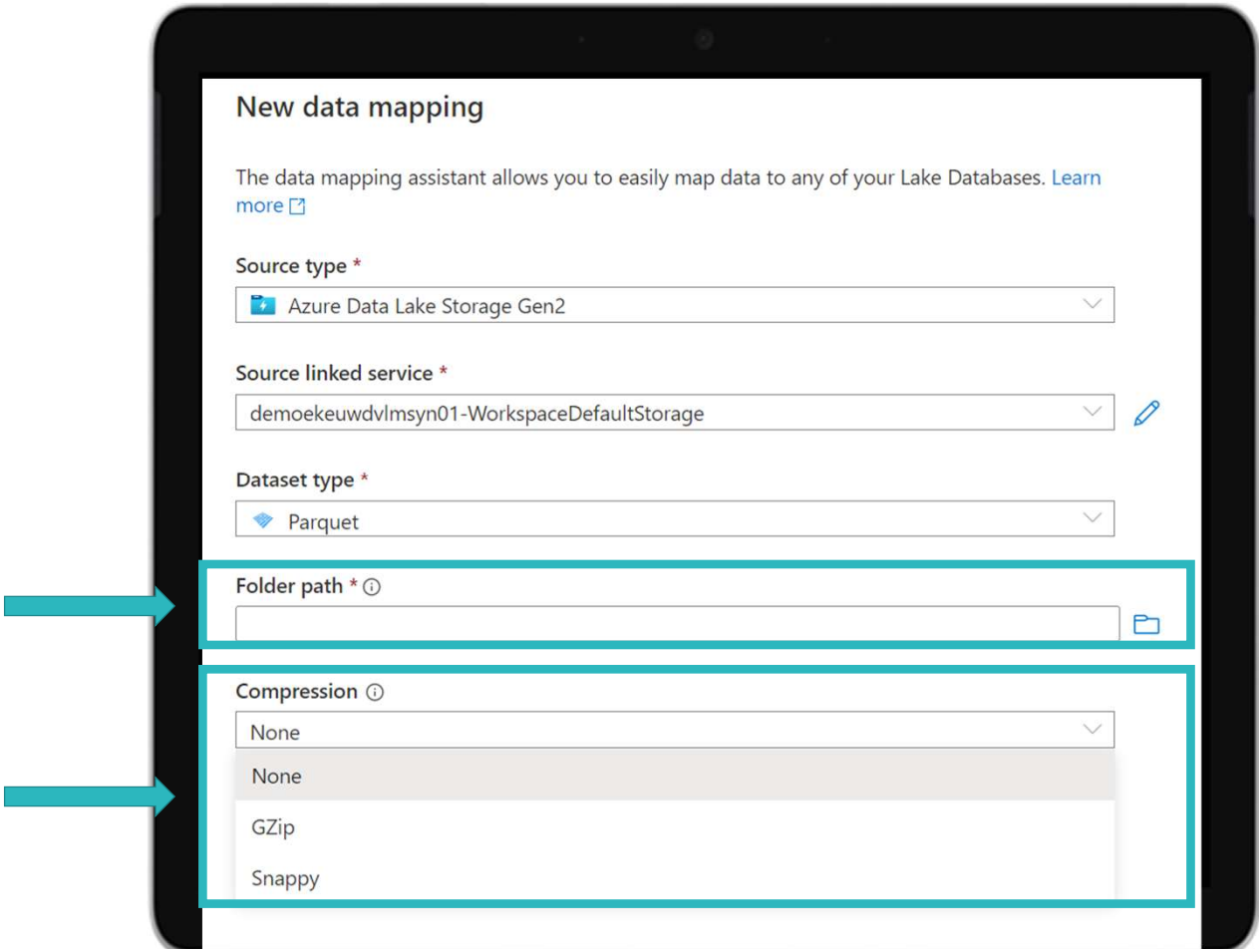
Lake Database

Map Data



Currently in Preview!

- Create ETL mapping
- Data Flow debug
- Source Type
  - Lake Database
  - **Data Lake Storage**
    - Common Data Model
    - Delimited Text
    - **Parquet**



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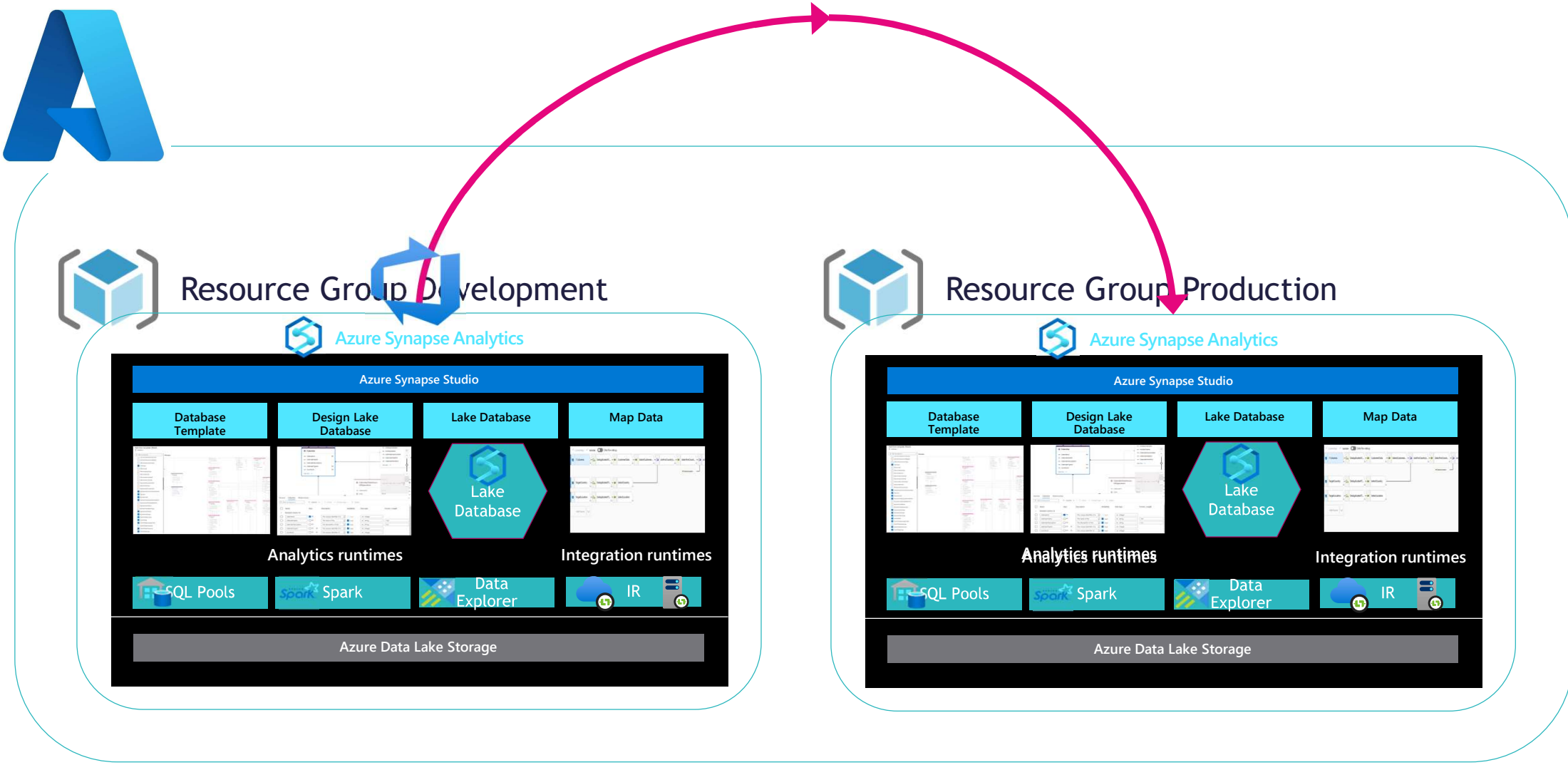
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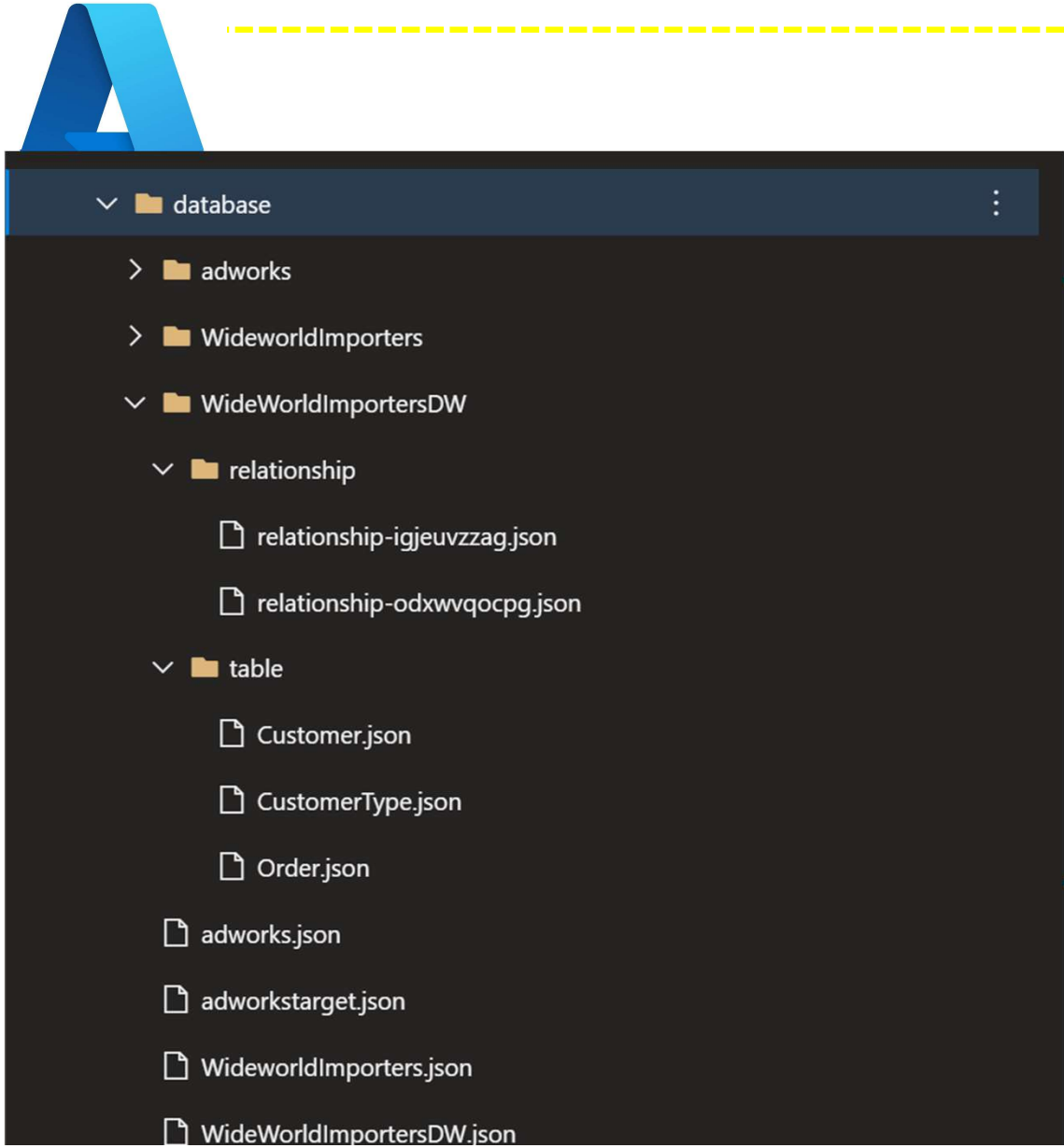
Lake Database

Azure Dev Ops

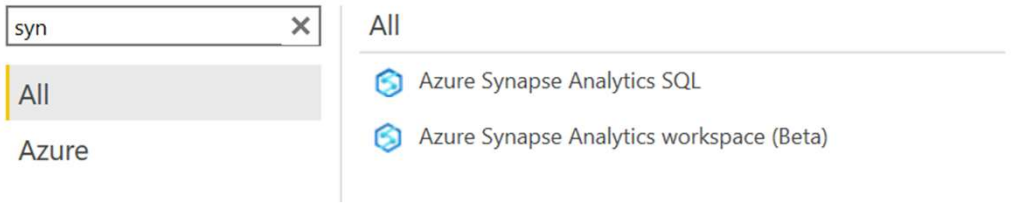
- Connect to Dev Ops
- Lake Database Entity’s
- Linked Service will automatically change



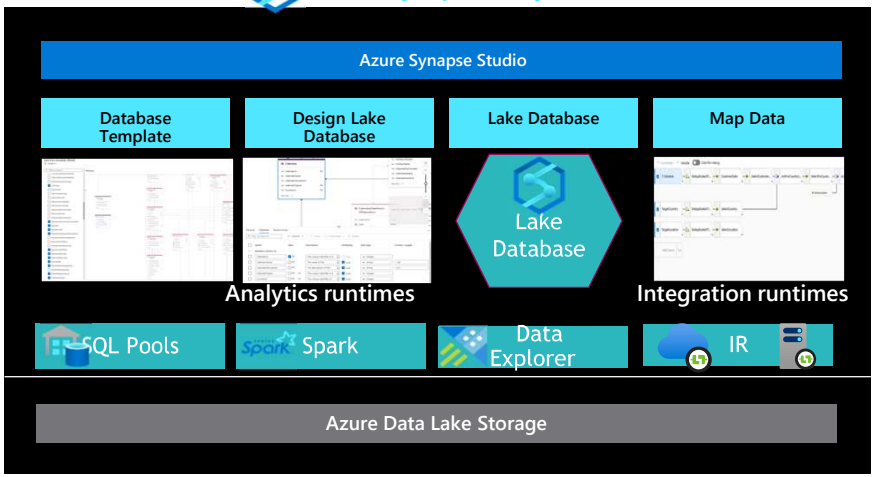
Lake Database

Power BI

- Connect to Power BI
- New connector
- **Azure Synapse Analytics Workspace (beta)**
- Relationship from template will be taken over



Resource Group Development



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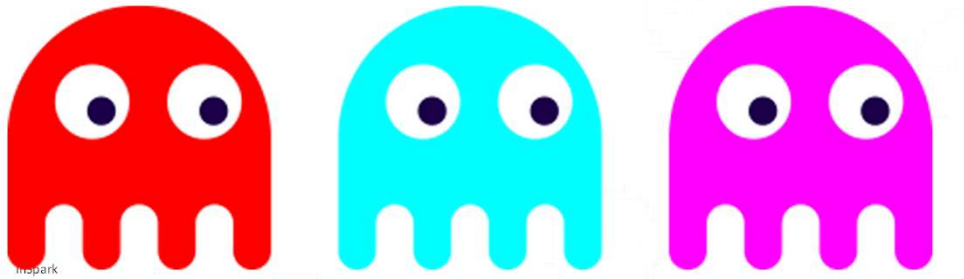
Lake Database

Remarks

- Azure Purview will scan your Lake Database
- Publish before you connect
- Lake Database as source is not working (Yet)
- Map Data is in Preview



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* Nigel Frank Microsoft Azure Salary Survey (June 2020) https://www.nigelfrank.com/microsoft-azure-salary-survey/

Lake Database

Feedback

- https://sqlb.it/?7314

Questions?

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Slides will be available on my blog and SQLBITS

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