Azure Synapse Analytics Learning Pathway

www.aka.ms/pathways

Getting started

Azure Synapse Analytics is a limitless analytics service that brings together data integration, enterprise data warehousing and big data analytics.

Microsoft Learn & Docs:

Azure Synapse Documentation

- New to the Cloud or Azure? Start with Azure Fundamentals
- New to data solutions on Azure? Build your knowledge with Data Fundamentals
- Azure Synapse Analytics Introduction
- What is Azure Synapse Analytics?
- Azure Synapse Analytics Terminology
- Azure Synapse Analytics FAQs
- Azure Synapse Analytics Blog
- Quickly get started with samples in Azure Synapse Analytics
- Azure Synapse Pathway: Turbocharge your data warehouse migration
- Azure Synapse Pathway
- Introducing Azure Synapse Link for Dataverse

Microsoft Playbooks

- Azure Synapse Proof of Concept Playbook

Microsoft Quick Start Tutorials

1. Create and setup a Synapse workspace
2. Analyse using a serverless SQL pool
3. Analyse using Apache Spark
4. Analyse using a dedicated SQL pool
5. Analyse data in a storage account
6. Orchestrate with pipelines
7. Visualize with Power BI
8. Monitor activities
9. Explore the Knowledge centre
10. Add an administrator

▶ YouTube   Azure Synapse Analytics

Going Further

- Azure Synapse SQL architecture
- Maintenance schedules for Synapse SQL pool
- Shared metadata tables
- Work with Hybrid Transactional and Analytical Processing Solutions using Synapse Analytics
- Populate slowly changing dimensions in Azure Synapse Analytics pipelines
- Integrate Azure Synapse Analytics with Azure Data and AI services

Dedicated SQL pool (formerly SQL DW)

- What is dedicated SQL pool
- Cheat sheet for dedicated SQL pool
- Analyse using a dedicated SQL pool
- Best practices for dedicated SQL pools
- Dedicated SQL pool architecture
- Capacity limits for dedicated SQL pool
- Load Data with dedicated SQL pools using COPY

Serverless SQL pool

- Analyse using a serverless SQL pool
- Quick start: Use serverless SQL pool
- Best practices for serverless SQL pool
- Tutorial: Explore and Analyse data lakes with serverless SQL pool
- Tutorial: Use serverless SQL pool with Power BI Desktop & create a report

Microsoft Cloud Workshop

- GitHub - Microsoft Cloud Workshop Azure Synapse Analytics and AI

Introduction to Data Analytics on Azure

Microsoft Learn & Docs

- Explore Azure data services for modern analytics
- Understand concepts of data analytics
- Explore data analytics at scale

Microsoft Learn

Data Integration at Scale

- Integrate data
- Petabyte-scale ingestion
- Perform code-free transformation at scale
- Populate slowly changing dimensions
- Orchestrate data movement and transformation
- Execute existing SSIS packages
- Operationalize your Azure Data Factory or Azure Synapse Pipeline

Realise Integrated Analytical Solutions

- Introduction to Azure Synapse Analytics
- Survey the Components of Azure Synapse Analytics
- Explore Azure Synapse Studio
- Design a Modern Data Warehouse using Azure Synapse Analytics

Work with Data Warehouses using Azure Synapse Analytics

- Design a Modern Data Warehouse using Azure Synapse Analytics
- Analyze data in a relational data warehouse
- Use data loading best practices in Azure Synapse Analytics
- Optimize data warehouse query performance in Azure Synapse Analytics
- Integrate SQL and Apache Spark pools in Azure Synapse Analytics
- Understand data warehouse developer features of Azure Synapse Analytics
- Manage and monitor data warehouse activities
- Analyze and optimize data warehouse storage
- Secure a data warehouse in Synapse

Perform Data Engineering with Azure Synapse Apache Spark Pools
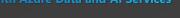
- Analyze data with Apache Spark in Azure Synapse Analytics
- Use Delta Lake in Azure Synapse Analytics
- Integrate SQL and Apache Spark pools
- Monitor and manage data engineering workloads with Apache Spark

Model, query & explore data

- Introduction to Azure Synapse Analytics
- Use Azure Synapse serverless SQL pool to query files in a data lake
- Analyze data with Apache Spark in Azure Synapse Analytics
- Analyze data in a relational data warehouse

Integrate Synapse Analytics with Azure Data and AI Services

- Build reports using Power BI
- Integrate machine learning

Build Data Analytics Solutions using Synapse serverless SQL pools

- Use Azure Synapse serverless SQL pool to query files in a data lake
- Create a lake database
- Use Azure Synapse serverless SQL pools for transforming the data in the lake
- Serve the data from Azure Synapse serverless SQL pool
- Secure data and manage users in Azure Synapse serverless SQL pools

Microsoft Learn Cloud Games Data and AI

Data Feeds Trailer

Play

Stop the Waste

Crisis Response