

Managing a Data Mesh with Dataplex

Training to learn how to create and manage your data mesh with Dataplex

2 jours / 14h

Learning outcomes

- Identify the importance of a modern data platform
- Configure and set up Dataplex
- Secure data lakes, zones, and assets
- Implement tagging for resources and use tags to search for assets
- Process data using Dataplex tasks · Design, execute and report on data quality processes

Who this course is for

Customers interested in managing, monitoring and governing data and AI assets in data lakes, warehouses and databases with Dataplex

Prerequisites

Have completed the [Data Engineering on Google Cloud](#) course (Day 1 and 2) of the Data Engineer learning path or have equivalent experience with Google Cloud.

Course Outline

Module 01 : Introduction to Dataplex

Topics

- Modern Data Platforms and Data-Oriented Design
- Pillars of Data Governance
- What is Dataplex?
- Dataplex Capabilities
- Dataplex compared with other products on Google Cloud

Objectives

- Identify the importance of a modern data platform
- Explain the role of Dataplex on Google Cloud

Module 02 : Creating a Data Mesh on Dataplex

Topics

- What is a data mesh?
- Dataplex concepts
- Creating data lakes and zones
- Assets in Dataplex

Objectives

- Define key Dataplex concepts
- Configure and set up Dataplex

Activities

- Lab: Provision a Data Mesh using Dataplex

Module 03 : Processing Data on Dataplex

Topics

- Processing data on Dataplex
- Data preparation tasks
- Ingestion jobs
- Dataflow and Spark tasks

Objectives

- Understand different data processing options in Dataplex
- Configure and run data preparation tasks on Dataplex

Activities

- Lab: Standardize Data using Dataplex Tasks

Module 04 : Managing Data Security through Dataplex

Topics

- IAM permissions and roles
- Securing your data lake
- Policy management
- Metadata security

Objectives

- Secure data lakes, zones, and assets in Dataplex

Activities

- Lab: Manage Data Security using Dataplex

Module 05 : Data Tagging and Data Catalog

Topics

- Introduction to Data Catalog
- Technical metadata vs. business metadata
- Tags and tag templates
- Entries and entry groups
- Data lineage

Objectives

- Implement tagging for resources and use tags to search for assets

Activities

- Lab: Data Catalog and Data Lineage

Module 06 : Data Quality and Profiling

Topics

- Data quality tasks and AutoDQ
- Reporting on data quality
- Data profiling

Objectives

- Design, execute and report on data quality processes

Activities

- Lab: Data Quality and Profiling your Data in BigQuery

Module 07 : Dataplex Best Practices

Topics

- Best practices
- End-to-end demo

Objectives

- Implement best practices for Dataplex

Activités

- Challenge Lab: Managing a Data Mesh with Dataplex