

DP-600 Exam Prep

Learn to plan, implement and manage Azure data analytics solutions, from data preparation to semantic models and SQL querying.

1 Day

8 HOURS

4

MODULES

57

TOPICS

COURSE OVERVIEW

The DP-600 Exam Prep course is designed to equip learners with the necessary skills to plan, implement, manage, and maintain a data analytics solution on Microsoft Azure. In Module 1, participants will learn to strategize a Data analytics environment, execute and oversee it effectively, and manage the Analytics development lifecycle. Module 2 focuses on the technical skills required to build Data structures, transfer data, carry out transformations, and enhance performance for data processing. Module 3 delves into creating and optimizing Semantic models essential for complex data analysis. Finally, Module 4 provides insights on conducting Exploratory analytics and Querying data using SQL. This comprehensive course prepares learners to ace the DP-600 exam and to become proficient in Azure data solutions, thus empowering them to meet industry demands for robust data analytics expertise.

WHO THIS COURSE IS FOR

The DP-600 Exam Prep course equips professionals with skills in data analytics planning, management, and optimization. Target audience for the DP-600 Exam Prep course includes:

Data Analysts

Business Intelligence Professionals

Data Engineers

Data Architects

Database Administrators

IT Professionals with a focus on data management

Data Scientists interested in infrastructure and analytics lifecycle management

Solution Architects designing data analytics environments

Professionals preparing for the DP-600 certification exam

What You Will Learn

- Plan a data analytics environment and required components
- Implement workspace access controls and data sharing
- Manage the analytics development lifecycle and version control
- Ingest and copy data using pipelines, dataflows or notebooks
- Transform data through cleansing, schema design and joins
- Optimize performance of dataflows, notebooks and SQL queries
- Design and build semantic models with DAX calculations
- Query lakehouses and warehouses using SQL and XMLA endpoints

COURSE SYLLABUS

4 Modules, 57 Topics

01

10-15%

Plan, Implement, and Manage a Solution for Data Analytics

PLAN A DATA ANALYTICS ENVIRONMENT

- Identify requirements for a solution, including components, features, performance, and capacity stock-keeping units (SKUs)
- Recommend settings in the Fabric admin portal
- Choose a data gateway type
- Create a custom Power BI report theme

IMPLEMENT AND MANAGE A DATA ANALYTICS ENVIRONMENT

- Implement workspace and item-level access controls for Fabric items
- Implement data sharing for workspaces, warehouses, and lake houses
- Manage sensitivity labels in semantic models and lake houses
- Configure Fabric-enabled workspace settings
- Manage Fabric capacity

MANAGE THE ANALYTICS DEVELOPMENT LIFECYCLE

- Implement version control for a workspace
- Create and manage a Power BI Desktop project (.pbip)
- Plan and implement deployment solutions
- Perform impact analysis of downstream dependencies from lake houses, data warehouses, dataflows, and semantic models
- Deploy and manage semantic models by using the XMLA endpoint
- Create and update reusable assets, including Power BI template (.pbit) files, Power BI data source (.pbids) files, and shared semantic models

Prepare and Serve Data

CREATE OBJECTS IN A LAKEHOUSE OR WAREHOUSE

- Ingest data by using a data pipeline, dataflow, or notebook
- Create and manage shortcuts
- Implement file partitioning for analytics workloads in a lakehouse
- Create views, functions, and stored procedures
- Enrich data by adding new columns or tables

COPY DATA

- Choose an appropriate method for copying data from a Fabric data source to a lakehouse or warehouse
- Copy data by using a data pipeline, dataflow, or notebook
- Add stored procedures, notebooks, and dataflows to a data pipeline
- Schedule data pipelines
- Schedule dataflows and notebooks

TRANSFORM DATA

- Implement a data cleansing process
- Implement a star schema for a Lakehouse or warehouse, including Type 1 and Type 2 slowly changing dimensions
- Implement bridge tables for a Lakehouse or a warehouse
- DE normalize data
- Aggregate or de-aggregate data
- Merge or join data
- Identify and resolve duplicate data, missing data, or null values
- Convert data types by using SQL or PySpark
- Filter data

OPTIMIZE PERFORMANCE

- Identify and resolve data loading performance bottlenecks in dataflows, notebooks, and SQL queries
- Implement performance improvements in dataflows, notebooks, and SQL queries
- Identify and resolve issues with Delta table file sizes

Implement and Manage Semantic Models

DESIGN AND BUILD SEMANTIC MODELS

- Choose a storage mode, including Direct Lake
- Identify use cases for DAX Studio and Tabular Editor 2
- Implement a star schema for a semantic model
- Implement relationships, such as bridge tables and many-to-many relationships
- Write calculations that use DAX variables and functions, such as iterators, table filtering, windowing, and information functions
- Implement calculation groups, dynamic strings, and field parameters
- Design and build a large format dataset
- Design and build composite models that include aggregations
- Implement dynamic row-level security and object-level security
- Validate row-level security and object-level security

OPTIMIZE ENTERPRISE-SCALE SEMANTIC MODELS

- Implement performance improvements in queries and report visuals
- Improve DAX performance by using DAX Studio
- Optimize a semantic model by using Tabular Editor 2
- Implement incremental refresh

Explore and Analyse Data

PERFORM EXPLORATORY ANALYTICS

- Implement descriptive and diagnostic analytics
- Integrate prescriptive and predictive analytics into a visual or report
- Profile data

QUERY DATA BY USING SQL

- Query a Lakehouse in Fabric by using SQL queries or the visual query editor
- Query a warehouse in Fabric by using SQL queries or the visual query editor
- Connect to and query datasets by using the XMLA endpoint

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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