

Glossary of Microsoft Azure Data Fundamentals Terminology

Here is a glossary of commonly used terminology related to Microsoft Azure Data Fundamentals:

1. Azure: Microsoft's cloud computing platform and services that offer solutions for building, deploying, and managing applications and services.
2. Azure SQL Database: A fully managed relational database service that runs on Azure.
3. Azure SQL Data Warehouse: A cloud-based enterprise data warehousing service designed to handle large amounts of data.
4. Blob Storage: A scalable object storage service for unstructured data in Azure.
5. Cosmos DB: A globally distributed, multi-model database service designed for high availability, consistency, and low latency.
6. Data Lake: A scalable and secure data repository for big data analytics workloads.
7. Data Lake Analytics: A cloud-based analytics service that allows you to analyze data stored in Azure Data Lake Store.
8. Data Warehouse: A centralized repository that allows organizations to store, manage, and analyze large amounts of data.
9. HDInsight: A fully managed cloud-based service for running Hadoop, Spark, and other big data frameworks.
10. SQL Server: A relational database management system (RDBMS) developed by Microsoft.

Exam preparation resources for Microsoft Azure Data Fundamentals: DP-900 Exam

Here is a list of official exam preparation resources for the Microsoft Azure Data Fundamentals (DP-900) exam:

1. Microsoft Learning Paths: Microsoft provides free online learning paths to prepare for the DP-900 certification exam. The learning path includes modules, hands-on labs, and assessments. You can access the learning path here: <https://docs.microsoft.com/en-us/learn/certifications/exams/dp-900>
2. Official Microsoft DP-900 Certification Exam page: The official Microsoft DP-900 Certification Exam page provides an overview of the exam, skills measured, and registration details. You can access the page here: <https://docs.microsoft.com/en-us/learn/certifications/exams/dp-900>
3. Microsoft DP-900 Exam Study Guide: The Microsoft DP-900 Exam Study Guide provides an overview of the exam structure, skills measured, and preparation tips. You can access the guide here: <https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE4thcj>
4. Microsoft DP-900 Certification Exam Practice Test: Microsoft offers a practice test for DP-900 Certification Exam. The practice test contains 40 questions to help you prepare for the exam. You can access the practice test here: <https://www.microsoft.com/en-us/learning/certification-exams/dp-900>

5. Microsoft DP-900 Certification Exam Training Course: Microsoft offers instructor-led training courses for DP-900 Certification Exam. The course covers the exam objectives and provides hands-on labs. You can access the training course here: <https://www.microsoft.com/en-us/training/course.aspx?cid=DP-900T00>

Please note that these resources are subject to change. Checking for the latest updates and resources on the official Microsoft Learning website is always a good idea.

Microsoft DP-900: Exam Overview

[Microsoft Azure Data Fundamentals DP-900 exam](#) is designed for candidates having good foundational knowledge of core data concepts. The Azure Data Fundamentals exam can be used for preparing for other Azure role-based certifications that includes Azure Database Administrator Associate or Azure Data Engineer Associate.

Knowledge required for the exam

- Firstly, Candidates applying for the Microsoft Azure Fundamentals DP-900 exam must know how to implement core data concepts using Microsoft Azure data services.
- Secondly, They must have familiarity with the concepts of relational and non-relational data as well as different types of data workloads such as transactional or analytical.
- Thirdly, Candidates for this exam should begin to work with data in the cloud.

Cheat Sheet for Microsoft Exam DP-900

The **Microsoft DP-900 Exam Cheat Sheet** is designed to help you get ready for the exams. It will walk you through all the learning resources. Moreover, the resources covered in this Cheat Sheet will help you refresh your skills and concepts related to the exam while providing you with all the important insights.

Have Detailed Knowledge of the DP-900 Exam Objectives

Firstly, you must have clarity about the exam details and policies. It is very important to have such information handy before beginning your revision journey. Moreover, familiarising yourself with the exam course is yet again very essential to grasp the exam concepts. Given the wide syllabus this exam covers, it is suggested that you refer to the [Official DP-900 Exam Guide](#) and learn more about the exam course. This exam covers 4 domains which are further subdivided into various topics. Each topic is essential for you to ace the exam.

Microsoft DP-900 Exam has updates in the course outline as on August 4, 2022.

The updated Microsoft DP-900 exam topics include:

1. Describe core data concepts (25—30%)

Describe ways to represent data

- Describe features of structured data (**Microsoft Documentation:** [Understand data store models](#))

- Describe features of semi-structured (**Microsoft Documentation:** [Query semi-structured data in SQL](#))
- Describe features of unstructured data (**Microsoft Documentation:** [Understand data store models](#))

Identify options for data storage

- Describe common formats for data files (**Microsoft Documentation:** [Data formats supported by Azure Data Explorer for ingestion](#))
- Describe types of databases (**Microsoft Documentation:** [System Databases](#))

Describe common data workloads

- Describe features of transactional workloads (**Microsoft Documentation:** [Online transaction processing \(OLTP\)](#))
- Describe features of analytical workloads (**Microsoft Documentation:** [Azure Cosmos DB analytical store](#))

Identify roles and responsibilities for data workloads

- Describe responsibilities for database administrators
- Describe responsibilities for data engineers (**Microsoft Documentation:** [Data engineer](#))
- Describe responsibilities for data analysts

2. Identify considerations for relational data on Azure (20—25%)

Describe relational concepts

- Identify features of relational data (**Microsoft Documentation:** [Describe concepts of relational data](#))
- Describe normalization and why it is used (**Microsoft Documentation:** [Description of the database normalization basics](#))
- Identify common structured query language (SQL) statements (**Microsoft Documentation:** [Structured Query Language \(SQL\)](#))
- Identify common database objects (**Microsoft Documentation:** [Database Identifiers](#))

Describe relational Azure data services

- Describe the Azure SQL family of products including Azure SQL Database, Azure SQL (**Microsoft Documentation:** [Azure SQL](#), [Azure SQL Database](#))
- Managed Instance, and SQL Server on Azure Virtual Machines (**Microsoft Documentation:** [SQL Server on Windows Azure Virtual Machines](#))
- Identify Azure database services for open-source database systems (**Microsoft Documentation:** [Azure SQL Database](#))

3. Describe considerations for working with non-relational data on Azure (15—20%)

Describing capabilities of Azure storage

- Describe Azure Blob storage (**Microsoft Documentation:** [Azure Blob storage](#))
- Describe Azure File storage (**Microsoft Documentation:** [Azure Files](#))
- Describe Azure Table storage (**Microsoft Documentation:** [Azure Table storage](#))

Describe capabilities and features of Azure Cosmos DB

- Identify use cases for Azure Cosmos DB (**Microsoft Documentation:** [Common Azure Cosmos DB use cases](#))
- Describe Azure Cosmos DB APIs (**Microsoft Documentation:** [Azure Cosmos DB: REST API Reference](#))

4. Describe an analytics workload on Azure (25—30%)

Describing common elements of large-scale analytics

- Describe considerations for data ingestion and processing (**Microsoft Documentation:** [Azure Data Explorer data ingestion overview](#))
- Describe options for analytical data stores (**Microsoft Documentation:** [Choose an analytical data store in Azure](#))
- Describe Azure services for data warehousing, including Azure Synapse Analytics, Azure Databricks, Azure HDInsight, and Azure Data Factory (**Microsoft Documentation:** [Data warehousing in Microsoft Azure](#), [Azure Synapse Analytics](#))

Describe consideration for real-time data analytics

- Describe the difference between batch and streaming data (**Microsoft Documentation:** [Explore fundamentals of real-time analytics](#))
- Describe technologies for real-time analytics including Azure Stream Analytics, Azure Synapse Data Explorer, and Spark structured streaming (**Microsoft Documentation:** [Real-time processing](#))

Describe data visualization in Microsoft Power BI

- Identify capabilities of Power BI (**Microsoft Documentation:** [Power BI](#))
- Describe features of data models in Power BI (**Microsoft Documentation:** [Model data in Power BI](#))
- Identify appropriate visualizations for data (**Microsoft Documentation:** [Visualization types in Power BI](#))

Quick Links to your Study Resources

To ace the exam, you need to choose the best set of resources suited to your type and your level of understanding. There are numerous resources that can be used to have a good DP-900 study guide. As

you have probably been preparing for the exam and are on the revision journey, we provide you a list of some highly suggested resources to amplify your preparations:

Microsoft Learning Platform

The learning resource that will be beneficial during the exam preparation is the Microsoft learning platform. It helps you to deeply understand the exam concepts. These are available on the Microsoft Learning Platform as follows:

- Firstly, [Azure Data Fundamentals: Explore modern data warehouse analytics in Azure](#)
- Secondly, [Azure Data Fundamentals: Explore non-relational data in Azure](#)
- Thirdly, [Azure Data Fundamentals: Explore relational data in Azure](#)
- Also, [Azure Data Fundamentals: Explore core data concepts](#)

Microsoft Documentations

After that, you can move on to Microsoft documentation where you can easily understand about the Microsoft Azure Data Fundamentals exam concepts using the learning concepts that cover various modules. These Microsoft Docs modules will help you gain a lot of knowledge about Azure data concepts and the different services in the same. The learning concepts include:

- To begin with, [Exploring core data concepts](#)
- Then, [Studying about relational data in Azure](#)
- Also, [Studying about non-relational data in Azure](#)
- Moreover, [Exploring modern data warehouse analytics in Azure](#)