

DP-500

Designing and Implementing Enterprise-Scale Analytics Solutions Using Microsoft Azure and Microsoft Power BI

In diesem Kurs werden Methoden und Praktiken zur Durchführung erweiterter Datenanalysen im großen Stil behandelt. Die Kursteilnehmer bauen auf vorhandenen Analyseerfahrungen auf und lernen, eine Datenanalyseumgebung zu implementieren und zu verwalten, Daten abzufragen und zu transformieren, Datenmodelle zu implementieren und zu verwalten sowie Daten zu untersuchen und zu visualisieren. In diesem Kurs verwenden die Kursteilnehmer Microsoft Purview, Azure Synapse Analytics und Power BI, um Analyselösungen zu erstellen.

Kursinhalt

- Introduction to data analytics on Azure
- Govern data across an enterprise
- Model, query, and explore data in Azure Synapse
- Prepare data for tabular models in Power BI
- Design and build scalable tabular models
- Optimize enterprise-scale tabular models
- Implement advanced data visualization techniques by using Power BI
- Implement and manage an analytics environment
- Manage the analytics development lifecycle
- Integrate an analytics platform into an existing IT infrastructure

E-Book Die originalen Microsoft-Kursunterlagen werden Ihnen online zur Verfügung gestellt.

Zielgruppe

Die Kandidaten für diesen Kurs sollten über Fachkenntnisse im Entwerfen sowie in der Erstellung und Bereitstellung von Datenanalyselösungen auf Unternehmensebene verfügen. Kandidaten für diese Prüfung sollten insbesondere über fortgeschrittene Power BI-Kenntnisse verfügen, einschließlich der Verwaltung von Datenrepositorys und Datenverarbeitung in der Cloud und lokal, sowie mit der Verwendung von Power Query und Data Analysis Expressions (DAX) vertraut sein. Sie sollten auch mit der Nutzung von Daten aus Azure Synapse Analytics vertraut sein und Erfahrung mit der Abfrage relationaler Datenbanken, der Analyse von Daten mithilfe von Transact-SQL (T-SQL) und der Visualisierung von Daten besitzen.

Voraussetzungen

Es wird empfohlen, dass die Kursteilnehmer vor der Teilnahme an diesem Kurs über folgende Kenntnisse verfügen:

- Grundlegende Kenntnisse der wichtigsten Datenkonzepte und deren Umsetzung mithilfe von Azure-Datendiensten, wie sie der Kurs DP-900 - Azure Data Fundamentals vermittelt.
- Erfahrung im Entwerfen und Erstellen skalierbarer Datenmodelle, mit dem Bereinigen und Transformieren von Daten sowie dem Ermöglichen erweiterter Analysefunktionen, die einen aussagekräftigen Geschäftswert bieten, mit Microsoft Power BI. Kenntnisse dazu können im Kurs PL-300 - Microsoft Power BI Data Analyst erworben werden.

Kursziel

Die Absolvierung des Examen führt zur Zertifizierung Microsoft Certified: Azure Enterprise Data Analyst Associate.

Dieser Kurs im Web



Alle tagesaktuellen Informationen und Möglichkeiten zur Bestellung finden Sie unter dem folgenden Link:
www.experteach.de/go/MP50

Vormerkung

Sie können auf unserer Website einen Platz kostenlos und unverbindlich für 7 Tage reservieren. Dies geht auch telefonisch unter 06074 4868-0.

Garantierte Kurstermine

Für Ihre Planungssicherheit bieten wir stets eine große Auswahl garantierter Kurstermine an.

Ihr Kurs maßgeschneidert

Diesen Kurs können wir für Ihr Projekt exakt an Ihre Anforderungen anpassen.

Training

Preise zzgl. MwSt.

Termine in Deutschland 4 Tage € 2.595,-

Online Training 4 Tage € 2.595,-

Termin/Kursort Kurssprache Deutsch

01.07.-04.07.24 Online 09.12.-12.12.24 Online

23.09.-26.09.24 Online

Stand 05.03.2024



EXPERTeach



Inhaltsverzeichnis

DP-500 – Designing and Implementing Enterprise-Scale Analytics Solutions Using Microsoft Azure and Microsoft Power BI

Module 1: Introduction to data analytics on Azure	Query data with Spark.	Customize core data models
This module explores key concepts of data analytics, including types of analytics, data, and storage. Students will explore the analytics process and tools used to discover insights and learn about the responsibilities of an enterprise data analyst and what tools are available to build scalable solutions.		Monitor data in real-time with Power BI
Lessons		Create and distribute paginated reports in Power BI report builder
Explore Azure data services for modern analytics		Lab : Monitor data in real-time with Power BI
Understand concepts of data analytics		Lab : Create and distribute paginated reports in Power BI Report Builder
Explore data analytics at scale		After completing this module, students will be able to:
After completing this module, students will be able to:		
Describe types of data analytics	Module 4: Prepare data for tabular models in Power BI	Module 8: Implement and manage an analytics environment
Understand the data analytics process	This module explores the fundamental elements of preparing data for scalable analytics solutions using Power BI. Students will explore model frameworks, considerations for building data models that will scale, Power Query optimization techniques, and the implementation of Power BI dataflows.	This module explores key considerations for implementing and managing Power BI. Students will understand key recommendations for administration and monitoring of Power BI, including configuration and management of Power BI capacity.
Define data job roles in analytics	Lessons	Lessons
Understand tools for scaling analytics solutions	Choose a Power BI model framework	Recommend Power BI administration settings
	Understand scalability in Power BI	Recommend a monitoring and auditing solution for a data analytics environment
	Optimize Power Query for scalable solutions	Configure and manage Power BI capacity
	Create and manage scalable Power BI dataflows	Establish a data access infrastructure in Power BI
	Lab : Create a dataflow	After completing this module, students will be able to:
	After completing this module, students will be able to:	
	Choose an appropriate Power BI model framework.	
Module 2: Govern data across an enterprise	Module 5: Design and build scalable tabular models	Module 9: Manage the analytics development lifecycle
This module explores the role of an enterprise data analyst in organizational data governance. Students will explore the use of Microsoft Purview to register and catalog data assets, to discover trusted assets for reporting, and to scan a Power BI environment.	This module explores the critical underlying aspects of tabular modeling for building Power BI models that can scale. Students will learn about model relationships and model security, working with direct query, and using calculation groups.	This module explores considerations for deployment, source control, and application lifecycle management of analytics solutions. Students will understand what to recommend and will be able to deploy and manage automated and reusable Power BI assets.
Lessons	Lessons	Lessons
Introduction to Microsoft Purview	Create Power BI model relationships	Recommend a deployment strategy for Power BI assets
Discover trusted data using Microsoft Purview	Enforce model security	Recommend a source control strategy for Power BI assets
Catalog data artifacts by using Microsoft Purview	Implement DirectQuery	Perform impact analysis of downstream dependencies from dataflows and datasets
Manage Power BI artifacts by using Microsoft Purview	Create calculation groups	Recommend automation solutions for the analytics development lifecycle, including Power BI REST API
After completing this module, students will be able to:	Lab : Create model relationships	Deploy and manage datasets by using the XMLA endpoint
Browse, search, and manage data catalog assets.	Lab : Enforce model security	Deploy reusable assets
Use data catalog assets with Power BI.	Lab : Design and build tabular models	Lab : Create reusable Power BI assets
Use Microsoft Purview in Azure Synapse Studio.	Lab : Create calculation groups	After completing this module, students will be able to:
Register and scan a Power BI environment using Microsoft Purview.	After completing this module, students will be able to:	
Module 3: Model, query, and explore data in Azure Synapse	Module 6: Optimize enterprise-scale tabular models	Module 10: Integrate an analytics platform into an existing IT infrastructure
This module explores the use of Azure Synapse Analytics for exploratory data analysis. Students will explore the capabilities of Azure Synapse Analytics including the basics of data warehouse design, querying data using T-SQL, and exploring data using Spark notebooks.	This module covers key aspects of performance optimization using large-format data. Students will explore optimization using Synapse, Power BI, and external tools.	This module explores the integration of a Power BI analytics solution into existing Azure infrastructure. Students will understand Power BI tenant and workspace configurations, along with considerations for Power BI deployment in an organization.
Lessons	Lessons	Lessons
Introduction to Azure Synapse Analytics	Optimize performance using Synapse and Power BI	Recommend and configure a Power BI tenant or workspace
Implement star schema design and query relational data in Azure	Improve query performance with hybrid tables, dual storage mode, and aggregations	Identify requirements for a solution, including features, performance, and licensing strategy
Analyze data with a serverless SQL pool in Azure Synapse Analytics	Use tools to optimize Power BI performance	Integrate an existing Power BI workspace into Azure Synapse Analytics
Optimize data warehouse query design	Lab : Use tools to optimize Power BI performance	
Analyze data with a Spark Pool in Azure Synapse Analytics	Lab : Improve query performance using aggregations	
Lab : Query data in Azure	Lab : Improve query performance with dual storage mode	
Lab : Explore data in Spark notebooks	Lab : Improve performance with hybrid tables	
Lab : Create a star schema model	After completing this module, students will be able to:	
After completing this module, students will be able to:		
Understand when to use Azure Synapse Analytics in reporting solutions.		
Query data with SQL.	Module 7: Implement advanced data visualization techniques by using Power BI	
	This module explores data visualization concepts including accessibility, customization of core data models, real-time data visualization, and paginated reporting.	
	Lessons	
	Understand advanced data visualization concepts	

