

Microsoft Azure Big Data Analytics Solutions

Course outline

Module 1: Design big data batch processing and interactive solutions (552241A)

This module explains how to load data into Microsoft Azure for batch processing.

Lessons

- Module Objectives
- Lesson 1: Ingest data for batch processing
- Lesson 2: Design for batch processing
- Lesson 3: Design interactive queries
- Review

Lab : Design big data batch processing and interactive solutions

- Exercise 1: Load data into Microsoft Azure
- Exercise 2: Prepare data for batch processing
- Exercise 3: Query the data

After completing this module, students will be able to use PowerShell to:

- Load data into Microsoft Azure
- Prepare data for batch processing
- Query the data

Module 2: Design Big Data Real-Time Processing Solutions (552241A)

This module explains how to load data into Microsoft Azure for real-time processing.

Lessons

- Module Objectives
- Lesson 1: Ingest data for Real-Time Processing
- Lesson 2: Designing for Real-Time Processing
- Lesson 3: Design interactive queries for Big Data
- Review

Lab : Design Big Data Real-Time Processing Solutions

- Exercise 1: Load data into Microsoft Azure
- Exercise 2: Prepare data for Real-Time Event Processing

- Exercise 3: Visualize the Data

After completing this module, students will be able to use PowerShell to:

- Load data into Microsoft Azure
- Prepare data for real-time event processing
- Visualize the data

Module 3: Operationalize end-to-end cloud analytics solutions (552242A)

This module explains how to Azure Data Factory to centrally manage data from different sources.

Lessons

- Module Objectives
- Lesson 1: Create a data factory
- Lesson 2: Create a data-driven workflow
- Lesson 3: Monitor and Manage the data factory
- Lesson 4: Move, Transform and Analyze Data
- Lesson 5: Design a deployment strategy for an end-to-end solution
- Review

Lab : Operationalize end-to-end cloud analytics solutions

- Exercise 1: Create a data factory
- Exercise 2: Create a data-driven workflow
- Exercise 3: Monitor and Manage the data factory
- Exercise 4: Move, Transform and Analyze Data
- Exercise 5: Design a deployment strategy for an end-to-end solution

After completing this module, students will be able to use PowerShell to:

- Create, Manage & Monitor a data factory
- Create a data driven workflow
- Move, Transform and Analyze Data
- Create a deployment strategy using PowerShell

Module 4: PowerShell for Technology Professionals (552241A Optional)

This module explains how to use PowerShell to administer computer, network, application and Azure resources.

Lessons

- Introduction

- Compared to Other Scripting Languages
- Configuring and Using PowerShell
- Creating and Running Scripts
- Administering Local Resources
- Administering Network Resources
- Resolve PowerShell Scripting Problems

Lab : Operationalize end-to-end cloud analytics solutions

- Exercise 1: Use PowerShell to get Computer Information
- Exercise 2: Use PowerShell documentation to understand and use cmdlets
- Exercise 3: Create and execute scripts
- Exercise 4: Configure and test Remote Management
- Exercise 5: Create and Azure VM with Azure PowerShell

After completing this module, students will be able to use PowerShell to:

- Use PowerShell to get Computer Information
- Use PowerShell documentation to understand and use cmdlets
- Create and execute scripts
- Configure and test Remote Management
- Create and Azure VM with Azure PowerShell