AzBDA

Microsoft Azure and Big Data Analytics

Microsoft Azure and Big Data Analytics

AzBDA - Version: 1

🕐 **5 days Course**

Description:

Microsoft Azure is a cloud platform that includes everything you need for handling massive amounts of data. In this course we will learn how to work with big data from the ingestion phase to the phase where the data is represented in dashboards. We will deeply explore all Microsoft Azure tools which help dealing with large amounts of data.

Intended audience:

Developers, data scientist, DBA, architects, managers

Prerequisites:

Basic programming skills

Objectives:

Learn how to use Microsoft big data tools

Topics:

Azure And Big Data

- Big Data Fundamentals
    - º What is Big Data?

- º The Hadoop Eco-system
- º The Big Data Process
- º Design Patterns in Big Data
- Microsoft Azure Big Data Services
    - º Data Ingestion
    - º Processing Data
    - º Storing and Fetching Data
    - º More Tools
- Use Cases
    - º E-commerce
    - º Cyber
    - º IoT

Working with azure storage

- Azure blob storage
- Azure Table storage
- Azure Queue storage
- Azure file storage

Ingesting Data in Microsoft Azure

- Collecting Data
    - º Flume
    - º Sqoop
- Working with Queues
    - º Event Hub
    - º IoTHub
- Managing workflows
    - º Azure automation

- º Data factory

- º Azure cognitive services

Processing Data

- Batch Processing
    - º Hadoop and Map Reduce
    - º Spark
    - º Data lake
- Stream Processing
    - º Storm
    - º Spark Streaming
    - º Stream Analytics
- Working with Data Lake Analytics

NoSQL Databases

- Key-value Store
    - º Table Storage
    - º Redis Cache
- Columnar Database
    - º Hbase
- Document Database
    - º Cosmos DB
- The CAP Theorem

Getting Value from Your Data

- Machine learning and BI
- Azure ML studio
- Visualize Your Data with Power BI

Extend your capabilities with azure VM

- Working with azure VM
- Working with azure SQL

Putting it All Together

- Big Data Orchestration
- Cortana intelligence suite
- Building Architecture on Microsoft Azure for The Use Cases