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Course Outline for Microsoft SQl 2019

FA-0468

DevOps, Cloud & Infrastructure · Data & Analytics

Introduction

This course will teach you how to use the SQL language within Microsoft SQL Server along with integration of MS SQL Server 2019 with a lot of high demand enterprise solutions such as Kafka and Kubernetes . At the end of the course, you'll be able to:

1. Install MS SQL.
2. Use Microsoft SQL Server and T-SQL (Microsoft SQL) variant of the SQL language.
3. Normalize, Clean, Adapt and Parse data.
4. Select, Filter, Aggregate, Condition and Group.
5. Perform advanced joining commands and in-depth understanding of conjoining databases.
6. Creation of combined data on the fly.
7. Use real world data into MS SQL.
8. UNION and UNION ALL.
9. Modify constraints.
10. Functions
11. Sub-queries
12. Recovery model and backup methodologies.
13. Virtual system integration
14. Kafka integration
15. Kubernetes integration
16. Microsoft SQL Server 2019

Training outline

1. Day 1:

1. Installation
2. Connection
3. Various forms of the Select statement (very deep and detailed)
4. Filtering queries.
5. Data Cleaning
6. Normalization
7. Normal Forms (NF)
8. Data Sorting
9. Aggregating tables and databases
10. Assessment

2. Day 2:

1. Advanced Aggregation
2. Grouping data
3. Combining filtered data with aggregated data on the fly
4. Functions
5. Sub-queries
6. Unions and Intersections
7. Managing Constraints
8. Assessment

3. Day 3:

1. Case Functions
2. Recovery Model And Types
3. Backup Strategy
4. Differential Backup
5. Restore Full Backup with .bak File
6. Restore Differential Backup with .bak File
7. Restore Transaction Log Backup With .bak File
8. Assessment

4. Day 4:

1. Create NAT Network
2. AD-SRV Network Setting
3. SQL-SRV1 Network Setting
4. SQL-SRV2 Network Setting
5. Create Active Directory, SQL Server OU, Admin User
6. Add SQL-SRV1&SQL-SRV2 Active Directory
7. Create Shared Disk System
8. SQL-SRV1 Share Disk Connections
9. SQL-SRV2 Share Disk Connections

5. Day 5:

1. MS SQL in Linux deployment
2. Streaming Data from Microsoft SQL Server into Apache Kafka
3. SQL Server - Connectors
4. Deploying SQL Server 2019 in Kubernetes

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