

SQL Server 2014: AlwaysOn Availability Groups

WorkshopPLUS

Target Audience

This workshop is targeted at SQL Server Architects, Database Administrators, IT professionals, and SQL Server support staff.

This is not a beginner's workshop or training targeted at SQL Server developers.

Overview

The **SQL Server 2014: AlwaysOn Availability Groups** is a three-day WorkshopPLUS course that provides in-depth technical and architecture details of SQL Server 2014 AlwaysOn Technologies. This workshop will help you learn how to reduce downtime, maximize application availability, and provide data protection using SQL Server 2014 AlwaysOn High Availability (HA) and Disaster Recovery (DR) solutions using Availability Groups.

Key Features and Benefits

This workshop combines presentations with hands-on labs to build practical end-to-end HA and DR solutions for mission critical applications using SQL Server 2014 AlwaysOn Availability Groups and Windows Server 2012 R2 Failover Clustering.

Technical Highlights

After attending this workshop, students will be able to:

- Understand HA and DR concepts.
- Gain the practical experience and confidence required to manage SQL Server 2014 AlwaysOn Availability Groups.
- Learn the tips, tricks and best practices for deploying SQL Server 2014 AlwaysOn Availability Groups.
- Administer, maintain and troubleshoot SQL Server 2014 AlwaysOn HA and DR solutions using Availability Groups.

Syllabus

Prerequisites

At least 1-2 years of experience working with SQL Server.

Suggested Skills

Basic understanding and hands-on experience with Windows Server Failover Cluster.

This workshop runs for **3** full days. Participants should anticipate consistent start and end times for each day. Early departure on any day is not recommended.

Module 1: Overview of High Availability and Disaster Recovery

- High Availability and Disaster Recovery Concepts

Module 2: AlwaysOn Availability Groups

- Introduction
- Planning Availability Groups
- Deploying Availability Groups
- Post Installation Tasks
- Data Synchronization Internals

Module 3: Availability Group Active Secondary Replicas

- Readable Secondary Replicas
- Database Maintenance using Active Secondary Replicas
- AlwaysOn Integration with Windows Azure

Module 4: Management and Monitoring of Availability Groups

- Managing Availability Groups
- Monitoring Availability Groups

Module 5: Troubleshooting Availability Groups

- Troubleshooting Setup and Configuration
- Common Troubleshooting Scenarios