

# Building and Managing High Availability Solutions With SQL Server

*Berlin (Germany)*

*26 - 30 May 2025*

UK Training

# PARTNER



## Building and Managing High Availability Solutions With SQL Server

Code: IT28 From: 26 - 30 May 2025 City: Berlin (Germany) Fees: 4700 Pound

### Introduction

In this course you will learn basic aspects of High Availability as a Recovery Point Objective, Recovery Time Objective, measuring HA in percentage of time etc. Then you will get a brief overview of HA features introduced in Windows Server 2012 R2/2016, which are relevant for SQL Server solutions - domain/domainless WFCS, cluster shared volumes, scale-out file services, storage spaces, storage replica, Hyper-V, etc. From the SQL Server perspective, the course will focus on the most popular HA/DR features - Failover Clustering and Availability Groups. Details on how to design highly available SQL Server solution from the perspective of storage; Quorum and Failover Cluster Instance. From a practical point of view, you will learn how to maintain and troubleshoot an FCI solution

In the Availability Group part, you will learn details on how to design AG solution with custom requirements; quorum configurations and AG configuration sync/async, read only routing, read only load balancing, direct seeding, hybrid AG, etc.. Similar to Failover Cluster Instances, in the practical part you will learn how to monitor an AG solution. In addition, along the course you will also learn on interoperability of another SQL Server technologies with SQL Server HA - Integration Services, Analysis Services and Reporting Services.

### Course Objectives of Building and Managing High Availability Solutions With SQL Server

- Build a reliable High Availability solution with Windows Server 2012 R2/2016 and SQL Server 2014/2016
- Manage a High Availability solution with Windows Server 2012 R2/2016 and SQL Server 2014/2016
- Build Disaster Recovery Solutions
- Troubleshoot problems with High Availability in SQL Server 2016 and 2014

### Building and Managing High Availability Solutions With SQL Server Course Outlines

Day 1:

Introduction to High Availability

- Basic aspects of High Availability
- Windows Server 2016 High Availability Features Overview
- Overview of HA features in Windows Server 2016
- SQL Server 2016 High Availability Features Overview
- Failover Cluster Instances
- Availability Group



- Log Shipping

#### Day 2:

##### Windows Server 2016 Failover Clustering

- Installation
- Storage configuration
- The configuration of which
- Maintenance
- Patching/Upgrading
- Adding/Removing nodes to/from cluster
- Monitoring
- Troubleshooting

#### Day 3:

##### SQL Server 2016 Failover Clustering Instance

- SQL Server FCI configuration
- Active/Active
- Active/Passive
- MS DTC
- Maintenance
- Patching/Upgrading
- o Adding/Removing SQL Server to/from cluster
- Monitoring
- Troubleshooting

#### Day 4:

##### SQL Server 2016 Availability Groups

- SQL Server AG configuration
- Sync/Async
- Read Only Routing and Load Balancing
- Direct seeding
- Distributed AG
- Maintenance
- Patching/Upgrading
- Adding/Removing files to/from database in AG
- Adding/Removing database to/from AG
- Monitoring
- Troubleshooting

#### Day 5:

##### SQL Server Interoperability

- Interoperability
- with Integration Services
- with Analysis Services
- with Reporting Services



## Blackbird Training Cities

### Europe



Copenhagen (Denmark)



Malaga (Spain)



Sarajevo (Bosnia and Herzegovina)



Glasgow (Scotland)



Edinburgh (UK)



Oslo (Norway)



Annecy (France)  
(Montenegro)



Bordeaux (France)



Birmingham (UK)



Lyon (France)



Stockholm (Sweden)



Podgorica



Batumi (Georgia)



London (UK)



Istanbul (Turkey)



Amsterdam (Netherlands)



Düsseldorf (Germany)



Paris (France)



Barcelona (Spain)



Munich (Germany)



Geneva (Switzerland)



Prague (Czech)



Vienna (Austria)



Rome (Italy)



Brussels (Belgium)



Madrid (Spain)



Berlin (Germany)



Lisbon (Portugal)



Manchester (UK)



Milan (Italy)

### USA & Canada



Los Angeles (USA)



Florida (USA)



Online



Boston (USA)



Washington (USA)



Miami (USA)



New York (USA)



Toronto (Canada)



## Blackbird Training Cities

### Asia



Baku (Azerbaijan)



Maldives (Maldives)



Manila (Philippines)



Bali (Indonesia )



Bangkok (Thailand)



Beijing (China)



Moscow (Russia )  
(Malaysia)



Singapore (Singapore )



Sydney (Australia)



Tokyo (Japan)



Dubai (UAE)



Kuala Lumpur



Jakarta (Indonesia)

### Africa



Kigali (Rwanda)



Cape Town (South Africa)



Accra (Ghana)



Lagos (Nigeria)



Marrakesh (Morocco)



Nairobi (Kenya)



Zanzibar (Tanzania)



Cairo (Egypt)



Sharm El-Sheikh (Egypt)



Casablanca (Morocco)



Tunis (Tunisia)



## Blackbird Training Clients



UK Training  
**PARTNER**



## Blackbird Training Categories

### Management & Admin

Professional Skills  
Finance, Accounting, Budgeting  
Media & Public Relations  
Project Management  
Human Resources  
Audit & Quality Assurance  
Marketing, Sales, Customer Service  
Secretary & Admin  
Supply Chain & Logistics  
Management & Leadership  
Agile and Refinement

### Technical Courses

Hospital Management  
Public Sector  
Special Workshops  
Oil & Gas Engineering  
Telecom Engineering  
IT & IT Engineering  
Health & Safety  
Law and Contract Management  
Customs & Safety  
Aviation  
C-Suite Training



International House 185 Tower Bridge  
Road London SE1 2UF United Kingdom



+44 7401 1773 35  
+44 7480 775526



Sales@blackbird-training.com



www.blackbird-training.com

UK Training

**PARTNER**

