

# **Database Replication**





#### **Database Replication**

Ref: 321447\_140076 Date: 02 - 06 Feb 2025 Location: Istanbul (Turkey) Fees: 3900 Euro

#### Introduction

In this training participants will learn the general and advanced aspects of database replication, performance turning, and advanced development. Replication is the process of copying data from a central database to one or more databases. The central database is called the publication database because it provides the data for users at other sites. The data in the publication database is copied replicated to subscription databases at other locations.

By having multiple copies of a database stored on different servers, it is possible for applications to spread the processing load across those servers. This can result in improved performance, as it allows more tasks to be processed at the same time, especially when everything is just on one network.

### **Course objectives of Database replication**

- Use advanced administration techniques to configure and manage a database server.
- Read and write to multiple replicated databases
- Optimize the database and queries for maximum performance.
- Replicate and scale a database server.
- Learn to Setup Data Capture Replication
- Learn to Monitor Data Capture Replication

### **Course Outline of Database replication**

#### **Day 1-2**

#### Overview of database Architecture and Advanced Features database Administration

- Connecting to the Database
- Configuring the Server
- Setting up and Managing Users
- Overview of Database Object Types
- Setting Permissions & Security
- Querying the Database
- Monitoring the Database
- Ensuring Atomicity and Isolation
- Backing up and Restoring the database

UK Traininig
PARTNER

Head Office: +44 7480 775 526 | 0 7401 177 335

Email: training@blackbird-training.com Website: www.blackbird-training.com



- Migrating Data to Another System
- Working with database Logs

#### Day 3

#### **Performance Optimization**

- Reducing I/O with HOT
- Locking & Concurrency
- Evaluating the Design of the Database
- · Inspecting the Workload
- Benchmarking and Profiling
- Using Indexes Efficiently

#### Read and write to multiple replicated databases

#### **Day 4-5**

#### **Database Replication**

- Overview of Replication
- High Availability
- Streaming Replication
- Managing Clusters
- Running Queries on Database in Hot Standby
- Synchronous Replication
- File-based Log Shipping
- Trigger-based Logical Replication
- Connection Pooling
- Upgrading
- Sharding and Scaling



Head Office: +44 7480 775 526 | 0 7401 177 335 Email: training@blackbird-training.com Website: www.blackbird-training.com



## Blackbird training cities

Accra1 (Ghana) Amman (Jordan) Amsterdam (Netherlands) Annecy (France) Baku (Azerbaijan) Bali (Indonesia) Bangkok (Thailand) Bangkok (Thailand) Barcelona (Spain) Batumi (Georgia) Beijing (China) Beirut (Lebanon) Berlin (Germany) Birmingham (UK) Bordeax (France) Boston, Massachusetts (USA) Brussels (Belgium) Cairo (Egypt) Cape Town (South Africa) Casablanca (Morocco)

Doha (Qatar)

Düsseldorf (Germany)

Cascais (Portugal)

Head Office: +44 7480 775 526 | 0 7401 177 335

Copenhagen (Denmark)

Email: training@blackbird-training.com Website: www.blackbird-training.com



Dubai (UAE)



## **Blackbird Training Category**



**Human Resources** 



Audit & Quality Assurance



Finance, Accounting, Budgeting



Marketing, Sales, Customer Service



Secretary & Admin



Law and Contract Management



**Project Management** 



IT & IT Engineering



Supply Chain & Logistics



Management & Leadership



Professional Skills



Oil & Gas Engineering



Health & Safety



Telecom Engineering



Hospital Management



Customs & Safety



Aviation



C-Suite Training



Agile and Refinement



Head Office: +44 7480 775 526 | 0 7401 177 335 Email: training@blackbird-training.com

Website: www.blackbird-training.com



# **Blackbird training Clients**



MANNAI Trading Company WLL,



Alumina Corporation **Guinea** 



Netherlands



Oxfam GB International Organization, Yemen



Capital Markets Authority, Kuwait



Nigeria





Oatar Foundation, **Qatar** 



AFRICAN UNION ADVISORY BOARD ON CORRUPTION, Tanzania



Kuwait



Reserve Bank of Malawi, **Malawi** 



Central Bank of Nigeria
Nigeria



Ministry of Interior, KSA



Mabruk Oil Company **Libya** 



Saudi Electricity Company,



BADAN PENGELOLA KEUANGAN Haji, Indonesia



NATO **Italy** 



ENI CORPORATE UNIVERSITY, Italy



Kuwait



General Organization for Social Insurance KSA



Defence Space Administration **Nigeria** 



National Industries Group (Holding), Kuwait



Hamad Medical Corporation, **Qatar** 



USAID **Pakistan** 



STC Solutions, KSA



North Oil company,



EKO Electricity



Oman Broadband



UN.



Head Office: +44 7480 775 526 | 0 7401 177 335

Email: training@blackbird-training.com Website: www.blackbird-training.com





LONDON TRAINING PROVIDER

