



*Training Course:  
Administering a SQL Database*

*15 - 19 July 2024  
Cape Town (South Africa)  
DoubleTree by Hilton Cape Town - Upper Eastside*

# Training Course: Administering a SQL Database

Training Course code: IT235176 From: 15 - 19 July 2024 Venue: Cape Town (South Africa) - DoubleTree by Hilton Cape Town - Upper Eastside Training Course Fees: 6545 € Euro

## Introduction

Welcome to the "Database Administration Training Program." Databases are at the heart of many modern applications and play a crucial role in managing and organizing data efficiently. This training program is designed to provide you with the fundamental knowledge and skills needed to administer a SQL database effectively. Whether you are an IT professional looking to enhance your skills or a beginner interested in database management, this program will help you build a strong foundation in database administration.

## Objectives

Upon completion of this 5-day training program, participants will:

- Understand the fundamentals of database management systems DBMS and the role of SQL databases in modern applications.
- Learn how to install, configure, and secure a database server.
- Gain knowledge of database design principles, normalization, and data modeling.
- Explore techniques for database backup, recovery, and maintenance.
- Discover best practices for database security, access control, and auditing.
- Learn performance tuning strategies and troubleshooting techniques.
- Understand high availability and disaster recovery options for databases.

## Target Audience

This training program is designed for:

- IT Professionals: Database administrators, system administrators, and IT managers who want to enhance their skills in managing and maintaining SQL databases.
- Developers: Software developers and programmers who want to gain a deeper understanding of database administration to improve the performance and reliability of their applications.
- Beginners: Individuals who are new to database administration and want to start a career in this field or those who want to understand the basics of managing databases for personal or small business use.

## Training Program Outline

Day 1: Introduction to Database Administration

- Overview of Database Management Systems DBMS

- Types of SQL Databases e.g., MySQL, SQL Server, PostgreSQL
- Installation and Configuration of Database Server
- Database Security Basics

#### Day 2: Database Design and Modeling

- Entity-Relationship Diagrams ERDs
- Normalization and Data Integrity
- Creating Database Tables
- Indexing and Performance Optimization

#### Day 3: Backup and Recovery

- Importance of Database Backups
- Full, Differential, and Transaction Log Backups
- Backup Strategies and Best Practices
- Database Restore Procedures

#### Day 4: Security and Access Control

- User Management and Authentication
- Authorization, Roles, and Permissions
- Auditing and Monitoring
- Data Encryption and Security Best Practices

#### Day 5: Performance Tuning and Maintenance

- Database Maintenance Tasks e.g., Reindexing, Statistics Update
- Query Optimization Techniques
- Monitoring and Troubleshooting
- High Availability and Disaster Recovery Options

## Registration form on the Training Course: Administering a SQL Database

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

### Delegate Information

Full Name (Mr / Ms / Dr / Eng): .....

Position: .....

Telephone / Mobile: .....

Personal E-Mail: .....

Official E-Mail: .....

### Company Information

Company Name: .....

Address: .....

City / Country: .....

### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....

Position: .....

Telephone / Mobile: .....

Personal E-Mail: .....

Official E-Mail: .....

### Payment Method

- Please find enclosed a cheque made payable to Global Horizon
- Please invoice me
- Please invoice my company

### Easy Ways To Register

Telephone:  
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place.

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E-mail to us :  
info@gh4t.com  
or training@gh4t.com

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