Global Horizon
TRAINING CENTER

Training Course:
Database Fundamentals for Infrastructure Professionals

18 - 22 October 2026
Dubai (UAE)

Training Course:
Database Fundamentals for Infrastructure Professionals

Training Course code: IT236560 From: 18 - 22 October 2026 Venue: Dubai (UAE) - Training Course Fees: 5390 Euro

Introduction

The Database Fundamentals for Infrastructure Professionals training program is designed by Global Horizon Training Center to provide system administrators, infrastructure specialists, data center teams, and IT operations professionals with a practical understanding of database environments from an infrastructure perspective.

This program does not aim to turn participants into database administrators. Instead, it helps them understand how databases operate, how they interact with servers, storage, backup systems, clusters, virtualization platforms, and monitoring tools. The course focuses on the key concepts required to support database-dependent systems, coordinate effectively with DBA teams, and ensure better reliability, availability, and recoverability of critical business applications.

Objectives

By the end of this training program, participants will be able to:

- Understand the core concepts of relational and non-relational databases.
- Explain how databases interact with servers, storage, networks, and operating systems.
- Identify key database components such as data files, log files, indexes, schemas, and transactions.
- Understand database backup, restore, recovery, and retention concepts.
- Recognize the role of infrastructure in database performance, availability, and resilience.
- Support database environments without performing advanced DBA tasks.
- Communicate more effectively with DBA, application, and infrastructure teams.
- Understand high availability, clustering, replication, and disaster recovery concepts related to databases.
- Identify common infrastructure-related causes of database issues.
- Apply best practices for monitoring, capacity planning, and operational support.

Course Methodology

This program uses a practical and discussion-based methodology designed for infrastructure professionals. The training combines instructor-led explanations, real-world examples, infrastructure diagrams, case studies, guided exercises, group discussions, and operational scenarios.

The course focuses on co
preparation. Participants will explore database environments through examples related to servers, storage, backup, virtualization, and data center operations.

Organizational Impact

Organizations will benefit from this program by developing infrastructure teams that can better support database-dependent systems. The training helps reduce communication gaps between infrastructure and DBA teams, improves incident response, supports better backup and recovery planning, and enhances operational reliability.

The program also contributes to improved service continuity, stronger disaster recovery readiness, better infrastructure planning, and more effective support for business-critical applications.

Target Audience

This program is suitable for:

- System Administrators
- Infrastructure Engineers
- IT Operations Teams
- Data Center Operations Staff
- Backup and Recovery Administrators
- Storage Administrators
- Network Administrators supporting database environments
- Cloud and Virtualization Administrators
- Technical Support Engineers
- IT professionals who interact with database systems but are not DBAs

Course Outline

Day 1: Database Concepts for Infrastructure Professionals

- Introduction to databases and their role in enterprise systems
- Difference between databases, applications, servers, and storage
- Relational databases vs. non-relational databases
- Common database platforms: SQL Server, Oracle, MySQL, PostgreSQL
- Understanding database instances, services, and engines

- Key components: tables, rows, columns, schemas, indexes, views
- Basic understanding of SQL and database queries
- Database users, roles, permissions, and access concepts
- How infrastructure teams interact with database environments
- Common responsibilities and boundaries between System Admins and DBAs

Day 2: Database Architecture, Servers, Storage, and Operating Systems

- How databases use CPU, memory, disk, and network resources
- Database files: data files, log files, temp files, control files
- Understanding transaction logs and why they are critical
- Storage concepts for databases: IOPS, latency, throughput, capacity
- SAN, NAS, DAS, and cloud storage considerations
- File systems and volume management for database workloads
- Impact of operating system configuration on database performance
- Virtualized database environments: benefits and risks
- Infrastructure requirements for production database systems
- Common infrastructure mistakes affecting databases

Day 3: Backup, Restore, and Recovery Concepts

- Difference between backup, restore, and recovery
- Full, differential, incremental, and transaction log backups
- Backup scheduling and retention planning
- Recovery Point Objective RPO and Recovery Time Objective RTO
- Database consistency and backup verification
- Snapshots vs. database-aware backups
- Storage-level backups and application-consistent backups
- Restore testing and recovery validation

- Common backup failures and operational risks
- Infrastructure team role in database backup and recovery

Day 4: High Availability, Clustering, Replication, and Disaster Recovery

- Introduction to high availability for database systems
- Clustering concepts for infrastructure teams
- Failover, redundancy, and service continuity
- Replication concepts and use cases
- Primary and secondary database environments
- Disaster recovery design principles
- Local availability vs. remote disaster recovery
- Database dependencies: DNS, network, storage, authentication, applications
- Monitoring failover readiness
- Incident response scenarios for database infrastructure failures

Day 5: Monitoring, Troubleshooting, Capacity Planning, and Best Practices

- Key database infrastructure monitoring indicators
- CPU, memory, disk, network, storage, and service monitoring
- Understanding database performance symptoms from infrastructure perspective
- Capacity planning for database growth
- Log management and operational documentation
- Patch management and change management considerations
- Security basics for database infrastructure support
- Coordination between DBA, system admin, backup, storage, and application teams
- Practical operational checklist for supporting database environments
- Final case study: supporting a business-critical database environment
- Action plan for applying the course concepts in the workplace

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Registration form on the Training Course: Database Fundamentals for Infrastructure Professionals

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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: .....
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Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
- ☐ Please invoice me
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Easy Ways To Register

Telephone: +201095004484 to provisionally reserve your place.	Fax your completed registration form to: +20233379764	E-mail to us : info@gh4t.com or training@gh4t.com	Complete & return the booking form with cheque to:Global Horizon 3 Oudai street, Aldouki, Giza, Giza Governorate, Egypt.