

5 Days

## Oracle Database 12c Security Training Course

Oracle Database 12c Security training has been designed for network administrators and system engineers that will explore the new features of Oracle Database feature that help to meet the security, privacy and compliance requirements of an enterprise. Through a perfect blend of instruction and hands-on exercises, the instructors will help the participants in reinforcing the conceptual knowledge to real time scenarios.

Completion of this training course will enable candidates in:

- Understanding Oracle security solutions and their deployment in security requirements.
- Configuring strong authentication for database users using PKI and Kerberos.
- Controlling data access using virtual private database and Oracle Label Security.
- Analyzing application privileges and reducing the attack surface using Oracle Database Vault Privilege Analysis.
- Auditing activities inside the database using policy and condition based unified auditing.
- Reducing risk of data exposure deploying Oracle Advanced Security Data Redaction, Transparent Data Encryption, and Oracle Data Masking and Subsetting.
- Configuring network encryption to protect information in transit.
- Auditing activity inside the database using policy and condition based unified auditing.
- Protecting against application bypass using Oracle Database Vault Realms.

### Course Benefits:

Attaining certification of Oracle Database 12c Security course will help participants to build and manage secure access to your databases and use database features that improve data access and confidentiality. This training course will also provide suggested Oracle solutions for common problems.

## Course Details

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### Course Outline

#### 1. Introduction

- Course Schedule
- Course Objectives and Appendices

#### 2. Understanding Security Requirements

- Fundamental Data Security Requirements
- Techniques to Enforce Security
- Security Risks

#### 3. Choosing Security Solutions

- Database Access Control

- Network Access Control
- Data Access Control
- Data Integrity
- Data Confidentiality
- Audit & Compliance

#### **4. Implementing Basic Database Security**

- Database Security Checklist
- Reducing Administrative Effort
- Protection of Objects
- Principle of Least Privilege

#### **5. Securing Data on the Network**

- Network Access Control
- Listener Security & Usage Control

#### **6. Using Basic and Strong User Authentication**

- Exploring Basic Authentication
- Exploring Strong Authentication
- Database Link Passwords Protection

#### **7. Configuring Global User Authentication**

- Exploring Enterprise User Management (EUS)
- Describing the EUS and Oracle Internet Directory Integration

#### **8. Use Proxy Authentication**

- Proxy Authentication Solutions
- Security Challenges of Three-Tier Computing

#### **9. Using Privileges and Roles**

- Roles Management
- Separation of Duties
- Manage Security for Definer's Rights and Invoker's Rights
- Manage RMAN Virtual Private Catalogs

#### **10. Using Privilege Analysis**

- Analysing Privilege Analysis Flow

- [Analysing Privilege Analysis Implementation](#)

## **11. Using Application Contexts**

- [Describing Application Context](#)
- [Implementing Application Context](#)

## **12. Implementing Virtual Private Database**

- [Fine-Grained Access Control and VPD](#)
- [VPD Policies Management](#)
- [FGAC Policies Management](#)

## **13. Implementing Oracle Label Security**

- [Access Control Overview](#)
- [Oracle Label Security Policies Management](#)
- [Oracle Label Security Registration](#)

## **14. Redacting Data**

- [How to Redact Data?](#)
- [Masking Policies Implementation](#)

## **15. Use Oracle Data Masking and Subsetting**

- [Data Masking Definition & Implementation](#)
- [Process of Data Masking](#)
- [Process of Data Subsetting](#)

## **16. Using Transparent Sensitive Data Protection**

- [TDPS Implementation](#)

## **17. Encryption Concepts and Solutions**

- [Oracle Solutions](#)
- [Concepts & Solutions](#)

## **18. Encrypting with DBMS\_CRYPT Package**

- [Usage](#)

## **19. Use Transparent Data Encryption**

- [Hardware Keystore](#)

- The Master Keys and the Keystore
- Encryption

## 20. Database Storage Security

- RMAN Encryption Modes
- RMAN and OSB Backups
- Data Pump Export and Import of Encrypted Data

## 21. Using Unified Audit

- Overview of Auditing
- Specific Audit Situations
- Unified Audit Management

## 22. Using Fine-Grained Audit

- Comparison with Unified Auditing
- Implementation of FGA

# Who Should Attend

The Oracle Database 12C Security Course is ideal for those working with the profiles of:

- Database Administrators
- Network Administrator
- Support Engineer
- System Analysts
- Security Compliance Auditors
- Security Administrators

# Pre Requisite

### Required:

- Good knowledge of Oracle Database

### Suggested Prerequisites:

- Should be able to perform RMAN backup and recovery

- Should be able to deploy Oracle Data Pump export and import
- Creating and managing users, roles, and privileges
- Administering listeners

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Date - May 03, 2025