Oracle Database 12c: Database Administration (DBA) - Day

Length: 15 days

Format: Bootcamp

Time: Day

About This Course

Oracle Database 12c: Database Administration (DBA) training program covers the following courses:

Oracle 12c: Introduction to SQLOracle 12c: Administration WorkshopOracle 12c; Backup and Recovery Workshop

You will learn to:

 * Understand the basic concepts of relational databases ensure refined code by developers.
 * Create reports of sorted and restricted data.
 * Run data manipulation statements (DML).
 * Control database access to specific objects.
 * Manage schema objects.
 * Manage objects with data dictionary views.
 * Retrieve row and column data from tables.
 * Control privileges at the object and system level.
 * Create indexes and constraints; alter existing schema objects.
 * Create and manage an Oracle Database Instance.
 * Create and manage Storage Structures.
 * Configure the Oracle Network Environment.
 * Create and manage users.
 * Monitor the database and manage performance.
 * Learn basic information on backup and recovery techniques.
 * Use the Oracle Support Workbench and My Oracle Support to update your Oracle Database software.
 * Develop backup and recovery procedures to address your business needs.
 * Implement backup and recovery settings and perform backup operations to disk and tape.
 * Employ Oracle Database recovery procedures to recover from media and other failures.
 * Diagnose and repair data failures.
 * Use Flashback Technologies and data duplication to complement backup and recovery procedures.
 * Secure the availability of your database by appropriate backup and recovery strategies.
 * Gain an understanding of the Oracle Database Cloud Service.

Required Exams

1Z0-051: Introduction to SQL/

1Z0-052: Oracle Database 11G Administration Workshop I/

1Z0-053: Oracle Database 11G Administration Workshop II/

Audience Profile

This course is designed for the following audiences:

  * Database Administrators
  * Technical Administrator
  * Support Engineer
  * Technical Consultant

Course Objectives

After completing this course students will be able to:

  * Identify the major structural components of the Oracle Database 12c
  * Create reports of aggregated data
  * Write SELECT statements that include queries
  * Retrieve row and column data from tables
  * Run data manipulation statements (DML) in Oracle Database 12c
  * Create tables to store data
  * Utilize views to display data
  * Control database access to specific objects
  * Manage schema objects
  * Display data from multiple tables using the ANSI SQL 99 JOIN syntax
  * Manage objects with data dictionary views
  * Write multiple-column sub-queries
  * Employ SQL functions to retrieve customized data
  * Use scalar and correlated sub-queries
  * Create reports of sorted and restricted data
  * Back up, restore, and patch DBCS database deployments
  * Describe the DBaaS and on-premises Oracle Database architectures
  * Manage database instances
  * Manage UNDO data
  * Move data between databases
  * Implement basic backup and recovery procedures
  * Monitor and tune database performance
  * Tune SQL to improve performance
  * Manage resources with Oracle Database Resource Manager
  * Create pluggable databases (PDBs)
  * Configure the Oracle network environment

* Administer user security and implement auditing
* Create and manage tablespaces
* Manage storage space
* Create and manage Database as a Cloud Service (DBCS) database deployments
* Register databases and manage performance with Enterprise Manager Cloud Control
* Use the Data Recovery Advisor to diagnose and repair failures.
* Use Oracle Flashback Technologies to recover from human error.
* Use Oracle Flashback Technologies to recover from human error.
* Perform an encrypted database backup and restore.
* Perform tablespace point-in-time recovery.
* Describe additional high availability features such as Oracle Data Guard.
* Gain an understanding of the Oracle Database Cloud Service
* Describe Oracle Database backup methods and recovery operations that can be used to resolve database failure.
* Describe the Oracle Database architecture components related to backup and recovery operations.
* Plan effective backup and recovery procedures.
* Configure the database for recoverability.
* Use Recovery Manager (RMAN) to create backups and perform recovery operations.

Outline

* Introduction
* Retrieving Data using the SQL SELECT Statement
* Restricting and Sorting Data
* Using Single-Row Functions to Customize Output
* Using Conversion Functions and Conditional Expressions
* Reporting Aggregated Data Using the Group Functions
* Displaying Data from Multiple Tables Using Joins
* Using Subqueries to Solve Queries
* Using the SET Operators
* Managing Tables using DML statements
* Introduction to Data Definition Language
* Introduction to Data Dictionary Views
* Creating Sequences, Synonyms, Indexes
* Creating Views
* Managing Schema Objects
* Retrieving Data by Using Subqueries
* Manipulating Data by Using Subqueries
* Controlling User Access
* Managing Data in Different Time Zones
* Exploring Oracle Database Architecture
* Managing Database Instances
* Creating PDBs
* Configuring the Oracle Network Environment
* Administering User Security
* Creating and Managing Tablespaces

* Managing Storage Space
* Managing UNDO Data
* Moving Data
* Backup and Recovery Concepts
* Monitoring and Tuning Database Performance
* SQL Tuning
* Oracle Database Resource Manager
* Enterprise Manager Cloud Control
* Introduction to Oracle Database Cloud Service
* Creating DBCS Database Deployments
* Managing DBCS Database Deployments
* Backing Up and Restoring DBCS Database Deployments
* Patching DBCS Database Deployments
* Creating Master Encryption Keys for PDBs
* Tablespace Encryption by Default
* Configuring for Recoverability
* Using the RMAN Recovery Catalog
* Backup Strategies and Terminology
* Performing Backups
* Improving Your Backups
* Using RMAN-Encrypted Backups
* Diagnosing Database Failures
* Restore and Recovery Concepts
* Performing Recovery, Part 1
* Performing Recovery, Part 2
* RMAN and Oracle Secure Backup
* Performing Tape Backups and Restores
* Using Flashback Technologies
* Using Flashback Database
* Managing Backup Space or Transporting Data
* Duplicating a Database
* RMAN Performance and Tuning
* Backup and Recovery Workshop
* Oracle Database Cloud Service: Overview