Course T517 Outline

Oracle Database Administration
Subtitle

IT ACADEMY TRAINING

Who should attend (Audience)

This course is designed for Database Administrators, Server Administrators, and other IT Professionals who have foundational Oracle experience and are administering Oracle databases.

What is this course about?

In this course, you gain the fundamental knowledge and skills to configure Oracle Databases, manage memory and storage effectively, as well as deploy essential procedures to maintain data, user accounts and privileges. You also learn to ensure availability of data by deploying backup, recovery and flashback operations. During this course, you gain experience with a variety of Oracle tools including Oracle Enterprise Manager (OEM) Cloud Control, Data Pump and SQL*Plus.

Recommended prerequisites

- T511 - Oracle Database Introduction

Previous knowledge & experience needed

- Foundational experience with Oracle databases is assumed.

Duration
5 Days
8 AM-4 PM Central Daily

Course skill level
- Foundation
- ✓ **Intermediate**
- Advanced

This course qualifies for
3.0 CEUs
29 NASBA CPEs

Technology used during course
- AnyWare Classes use Zoom
- LogMeIn Virtual Machines
- Course exercises are conducted using Oracle 12c

Course Details

Chapter 1: Introduction to Oracle Databases
- Examine the role of the Database Administrator (DBA)
- Explore Oracle's memory and process architecture
- Discuss the use of memory and physical structures on disk
- Learn how Oracle carries out typical database requests

Chapter 2: Starting Up and Shutting Down the Database
- Start up an Oracle instance and open a database
- Manage passwords for DBA access
- Perform a shutdown

Chapter 3: Creating Databases
- Walk through the procedures involved in database creation
- Set up an instance and create operating-system services
- Specify the important startup parameters and use server parameter files
- Create a database

Chapter 4: Oracle Data Dictionary and DBA Tools
- Explore the data dictionary features and facilities
- Perform database administration using the available tools
- Gather information on the configuration of a database using graphical tools

Chapter 5: Managing Tablespaces and Datafiles
- Build tablespaces to organize the data storage
- Govern the storage of database objects within tablespaces
- Manipulate tablespaces to govern how they are used
- Control how free space is organized and allocated
- Configure database file structure, including Oracle-managed files
- Examine redo log and control files

Chapter 6: Managing Undo Tablespaces
- Investigate how transactions use rollback segments within undo tablespaces
- Manage rollback data with undo tablespaces
- Monitor and control the use of undo tablespaces

Chapter 7: Managing Users and Their Resources
- Authenticate database users
- Create and manage users with profiles
- Grant privileges to users
- Define roles and grant them to users
- Capture and analyze the use of privileges

Chapter 8: Space Management
- Examine storage structures in the Oracle database
- Control the allocation of storage to database objects
- Monitor space usage
- Compress table data
- Allocate space for Large OBjects (LOBs)

Chapter 9: Partitioning Tables
- Describe the administrative and performance benefits of partitioning
- Define the commands and options used to create partitioned tables
- Evaluate the additional complexities and options available with partitioned indexes
- Manage and administer partitioned tables and indexes

Chapter 10: Protecting the Database from Failure
- Discuss the possible points of failure and protection mechanisms
- Archive redo log files
- Manage control files and redo log files

Chapter 11: Oracle Backup and Recovery
- Evaluate a selection of backup strategies
- Perform appropriate recovery operations
- Use Data Pump Export and Import as part of a backup strategy
- Evaluate the Pluggable Database feature

Chapter 12: Managing Flashback Operations
- Observe data at previous points in time using Flashback Query
- Analyze recent changes to data using row version history
- Trace transaction history and automatically backout errant transactions
- Flashback whole Oracle tables
- Perform recovery on dropped tables using flashback table

Chapter 13: Course Summary

Common Questions – Attendance Policy, Contacts

What is the Attendance Policy for IT Academy Classes?
IT Academy attendees are expected to adjust their work schedule to match the IT Academy class hours of 8:00am – 4:00pm. 100% attendance is expected in each IT Academy class. Missing time in class may result in the following:

- No Show=Employees who do not show up for class or arrive more than one (1) hour after the start of class will be advised to reschedule for the next available course.
- Incomplete=Employees missing a half day or more of class-any day of class-will be advised to reschedule for the next available course. Employees not available to sit for the post-test will be considered incomplete.

AnyWare Technical Support contact?
AnyWare@LearningTree.com, 1-877-653-8733

IT Academy Classroom Point of Contact?
Christopher Marsh, Christopher.marsh@tn.gov, 615-532-5517

How do I access the new My IT Academy Portal?
1. Log into Edison
2. ELM Learning Home Page
3. Quick Links
4. My IT Academy (last link under Quick Link)

For more FAQs visit the IT Academy AEM Site
https://www.teamtn.gov/sts/sts-employee-engagement/itacademytn/it-academy-toolkit/faqs.html