

# Oracle 19c Database Administration II (Oracle 19c DBA II) (TTOR20619)

Explore Next-Level DBA Skills: Backup & Recovery, Working with Grid Infrastructure, Upgrading Oracle and More

#### **Course Snapshot**

- Course: Oracle 19c Database Administration II (Oracle 19c DBA II) (TTOR20619)
- Duration: 5 days
- Audience & Skill-Level: Intermediate Oracle 19C for participants experienced with Oracle 19c basics.
- **Skill-Level**: This foundation-level course assumes you are new to Oracle database, have a basic understanding of database principles, have experience with basic SQL scripting, and are comfortable with Linux and working from the command line.
- Format / Hands-on: This course combines engaging instructor-led presentations and practical demonstrations with handson machine-based exercises, challenge labs, use case exploration and engaging group activities. Student machines are required.
- Flexible Delivery Options: This course can be delivered for your team or organization online-live (virtual), onsite inperson, self-paced or across our immersive blended learning experience platform (LXP).
- **Public Schedule**: This course is currently available on our Public Open Enrollment Schedule.
- **Customizable**: We're flexible! This course agenda, topics, labs, hours and delivery modalities can be adjusted to target your specific training skills objectives, tools and learning goals. Please ask for details.

#### Overview

Geared for participants experienced with Oracle 19c DBA essentials Oracle 19c Database Administration II (Oracle DBA II) expands their understanding of Oracle database administration. Throughout the course students will explore coverage of Multitenant (CDB/PDB), database tuning, SQL tuning, and backup and recovery: the skills needed to keep a database running reliably and efficiently. The current release of the database is used for exercises and demonstrations, and the content backported as necessary for previous releases.

NOTE: This training is NOT Official Oracle University training. This is independent, adjustable content that aligns with current topics, skills and tools that participants need to excel in these areas. This course is for 19c.

#### **Learning Objectives**

This course combines expert lecture, real-world demonstrations and group discussions with machine-based practical labs and exercises. Working in a hands-on learning environment led by our expert facilitator, students will explore:

- Creating CDBs and Regular PDBs
- Managing CDBs and PDBs
- Backup and Duplicate
- Upgrading and Transporting CDBs and Regular PDBs
- Backup Strategies and Terminology
- Restore and Recovery Concepts
- Using Flashback Technologies
- Duplicating a Database
- Installing Grid Infrastructure and Oracle Database
- Patching Grid Infrastructure and Oracle Database
- Upgrading to Oracle Grid Infrastructure
- Using General Overall Database Enhancements
- Monitoring and Tuning Database Performance
- Managing Application PDBs

- Managing Security in Multitenant databases
- Recovery and Flashback
- Configuring and Using RMAN
- Diagnosing Failures
- Performing Recovery
- Transporting Data
- RMAN Troubleshooting and Tuning
- Creating an Oracle Database by using DBCA
- Oracle Restart
- Upgrading the Oracle Database
- Installing Grid Infrastructure for a Standalone server
- Using Availability Enhancements
- Tuning SQL Statements

**Need different skills or topics?** If your team requires different topics or tools, additional skills or custom approach, this course may be further adjusted to accommodate. We offer additional Oracle, database, scripting, administration and other related



topics that may be blended with this course for a track that best suits your needs.

#### Audience & Pre-Requisites

This hands-on course is geared for experienced DBAs with basic Oracle 19c skills.

Take Before: Attendees should have skills equivalent to or should have attended this course as a pre-requisite:

• TTOR20519: Oracle 19c Database Administration I (Oracle 19c DBA I)

**Take After**: We offer an extensive list of Oracle19c follow on courses for this database training, from DBAII to Tuning to Security and more. Please see our **Oracle Training Suite** for the latest titles and details.

#### Related Courses | Oracle Training Suite

Below is a subset of the related Oracle courses we offer. Please see our site or contact us for the full catalog and next-step recommendations.

- TTSQL002: Introduction to SQL Programming Basics
- TTSQL003: Introduction to Writing SQL Queries
- TTSQL005: Advanced SQL Programming
- TTOR12019: Oracle 19c PL/SQL Fundamentals
- TTOR20519: Oracle 19c Database Administration I (Oracle 19c DBA I)
- TTOR20619: Oracle 19c Database Administration II (Oracle 19c DBA II)
- TTOR20719: Oracle 19c Database Multitenant Architecture
- TTOR21519: Oracle 19c Database Tuning
- TTOR21619: Oracle Database 19c Backup and Recovery

#### **Course Topics / Agenda**

Please note that this list of topics is based on our standard course offering, evolved from typical industry uses and trends. We'll work with you to tune this course and level of coverage to target the skills you need most. Topics, agenda and labs are subject to change, and may adjust during live delivery based on audience interests, skill-level and participation.

- 1. Creating CDBs and Regular PDBs
- Configure and create a CDB
- Create a new PDB from the CDB seed
- Explore the structure of PDBs

#### 2. Manage CDBs and PDBs

- Manage PDB service names and connections
- Manage startup, shutdown and availability of CDBs and PDBs
- Change the different modes and settings of PDBs
- Evaluate the impact of parameter value changes
- Performance management in CDBs and PDBs
- Control CDB and PDB resource usage with the Oracle Resource Manager

- 3. Backup and Duplicate
- Perform Backup and Recover CDBs and PDBs
- Duplicate an active PDB
- Duplicate a Database
- 4. Upgrading and Transporting CDBs and Regular PDBs
- Upgrade an Oracle Database
- Transport Data
- 5. Backup Strategies and Terminology
- Perform Full and Incremental Backups and Recoveries
- Compress and Encrypt RMAN
  Backups
- Use a media manager
- Create multi-section backups of exceptionally large files
- Create duplexed backup sets
- Create archival backups

- Backup of recovery files
- Backup non database files
- Back up ASM meta data
- 6. Restore and Recovery Concepts
- Employ the best Oracle
  Database recovery technology for your failure situation
- Describe and use Recovery technology for Crash, Complete, and Point-in-time recovery
- 7. Using Flashback Technologies
- Configure your Database to support Flashback
- Perform flashback operations
- 8. Duplicating a Database
- Duplicate Databases
- 9. Install Grid Infrastructure and Oracle Database
- Install Grid Infrastructure for a



Standalone server

- Install Oracle Database software
- 10. Patching Grid Infrastructure and Oracle Database
- Patch Grid Infrastructure and Oracle Database
- 11. Upgrading to Oracle Grid Infrastructure
- Upgrade Oracle Grid Infrastructure
- 12. Using General Overall Database Enhancements
- Install Oracle Database software
- Create, Delete and Configure Databases using DBCA
- Creating CDBs and Regular PDBs
- Use Miscellaneous 19c New Features

# 13. Monitoring and Tuning Database Performance

- Managing Memory
  Components
- Understanding the Automatic Workload Repository (AWR)
- Understanding the Advisory Framework
- Monitoring Wait Events, Sessions, and Services
- Managing Metric Thresholds and Alerts
- Understanding and Using the Performance Tuning Methodology
- Performing Performance Planning
- Understanding the Automatic Database Diagnostic Monitor (ADDM)

#### 14. Manage Application PDBs

- Explain the purpose of application root and application seed
- Define and create application PDBs
- Install, upgrade and Patch applications
- Create and administer Application PDBS
- Clone PDBs and Application containers
- Plug and unplug operations with PDBs and application containers
- Comparing Local Undo Mode and Shared Undo Mode

# 15. Manage Security in Multitenant databases

- Manage Security in Multitenant databases
- Manage PDB lockdown profiles
- Audit Users in CDBs and PDBs
- Manage other types of policies in application containers

### 16. Recovery and Flashback

- Restore and Recovering Databases with RMAN
- Perform CDB and PDB flashback

### 17. Configuring and Using RMAN

- Configure RMAN and the Database for Recoverability
- Configure and Using an RMAN recovery catalog

### 18. Diagnosing Failures

- Detect and repair database and database block corruption
- Diagnosing Database Issues
- 19. Performing Recovery
- Restore and Recovering

Databases with RMAN

Perform Non RMAN database
 recovery

## 20. Transporting Data

• Transport Data

## 21. RMAN Troubleshooting and Tuning

- Interpret the RMAN message
  output
- Diagnose RMAN performance issues

# 22. Creating an Oracle Database by using DBCA

• Create, Delete and Configure Databases using DBCA

# 23. Oracle Restart

 Configure and use Oracle Restart to manage components

### 24. Upgrade the Oracle Database

- Plan for Upgrading an Oracle Database
- Upgrade an Oracle Database
- Perform Post-Upgrade tasks

# 25. Install Grid Infrastructure for a Standalone server

Rapid Home Provisioning

### 26. Using Availability Enhancements

- Use an RMAN recovery catalog
- Use Flashback Database

### 27. Tuning SQL Statements

- Understanding the Oracle Optimizer
- Using the SQL Tuning Advisor
- Managing Optimizer Statistics
- Using the SQL Access Advisor
- Understanding the SQL Tuning Process

For more information about our training services (instructor-led, self-paced or blended), collaborative coaching services, robust Learning Experience Platform (LXP), Career Experiences, public course schedule, partner programs, courseware licensing options or to see our complete list of course offerings, solutions and special offers, please visit us at **www.triveratech.com**, email **Info@triveratech.com** or call us toll free at **844-475-4559.** Our pricing and services are always satisfaction guaranteed.