Course : Oracle, migrating to 19c

Practical course - 3d - 21h00 - Ref. ORJ
Price : 2040 CHF E.T.

Oracle's 19c includes new features needed for better administration. With 11g and 12c support due to expire in 2022, it's time to migrate to 19c. This course covers the migration of the Database Management System (DBMS) and presents the new features.

Teaching objectives

At the end of the training, the participant will be able to:

- Get to know the new versions of Oracle 19c architecture and practice configuring them
- Installing Oracle 19c software
- Maîtriser les évolutions d'administration des bases Oracle 19c
- Maîtriser les techniques d'upgrade des bases Oracle de 12c vers 19c

Intended audience
Oracle DBAs or Oracle Database project managers working in production environments.

Prerequisites
Knowledge of Oracle 11g or 12c database administration.

Practical details

Hands-on work
Theoretical input is followed by numerous practical exercises to ensure that knowledge is firmly anchored.

Teaching methods
An active teaching approach, with feedback from our expert trainers.

Course schedule

PARTICIPANTS
Oracle DBAs or Oracle Database project managers working in production environments.

PREREQUISITES
Knowledge of Oracle 11g or 12c database administration.

TRAINER QUALIFICATIONS
The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS
The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

1   Introduction

- New features, evolutions and variations.
- New standards.
- Supported OS.
- Administration tools.
- Versions and editions.
- Options.

Storyboarding workshops
Performance - security - storage - indexing - automatic tuning.

2   Multitenant architectures 12c to 19c

- A reminder of classical architecture and its variations.
- Principles of 12c to 19c multitenant architectures.
- Shared resources.
- Choice of configuration. Different containers. Associated system tables.
- Multitenant connections.
- Specific administration and developments 18c-19c.
- What's new in 18c - 19c - snapshots - application container - sharding.
- Flashbacks.

Hands-on work
Creation of a standard 19c database and a multi-tenant 19c database.

3   Installations

- Evolution 19c installation mode.
- Administrative privileges 12c-19c.
- DBA rights restrictions.
- Automate root system scripts under Unix/Linux.
- Checking prerequisites.
- Patch.
- Silent mode.

Hands-on work
Installation of the 19c software under Linux.

4   Configurations - evolutions

- New parameters.
- Memory sizing restriction in 19c.
- Pluggable database instance parameters and management.
- New container configurations 19c.
- Read-only configuration.

Hands-on work
Parameter manipulation 19c.

5 Current administration

- Evolution of listener administration.
- Configuration file locations in Read Only mode.
- Management of administration consoles.
- Security - user administration - only users schema.
- Container creation and transfer methods 19c.

Hands-on work

Create multi-tenant databases - create users - manipulate PDBs.

6 Backups

- Administrative privileges 12c - 19c associated with backups.
- RMAN backups and upgrades.
- Transport between platforms.
- Data Pump evolutions.
- Flashback evolutions.

Hands-on work

Sauvegarde et restauration RMAN d'une base et d'un container. Export et import Data Pump avec les nouvelles options. Dupliquer une base de données.

7 Upgrades to 19c

- Upgrade contexts.
- Upgrade techniques from 12c to 19c.
- Restrictions and error cases.
- Upgrade with wizards and configuration choices.
- Upgrade with Data Pump and choice of configuration.

Hands-on work

Upgrade from 12c to 19c using basic wizards in standard and multi-tenant architecture. Data Pump upgrade from 12c to 19c. Upgrade of a pdb container from 12c to 19c.