

## Oracle Database 19c Install & Upgrade

**Duration: 2 Days    Course Code: O19CIU    Delivery Method: Virtual Learning**

---

### Overview:

#### Oracle Database 19c Install & Upgrade Course Overview

This Oracle Database 19c Install & Upgrade course is designed to give the Oracle database administrator practical experience in installing Oracle Database 19c Grid Infrastructure and Database software. Delegates will also learn the various methods that can be used to upgrade an earlier release of the Oracle database software to 19c.

Similarly, the course is targeted to closely follow the official Oracle Database curriculum for certification.

Exercises and examples are used throughout the course to give practical hands-on experience with the techniques covered.

Versions supported 12cR2, 18c, 19c.

#### Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

---

### Target Audience:

#### Who will the Course Benefit?

This Oracle Database 19c Install & Upgrade course is for anyone who needs to install and configure an Oracle 19c, 18c database or 12cR2 database or upgrade an earlier database to Oracle 19c or 18c database.

---

### Objectives:

#### ■ Course Objectives

- This Oracle Database 19c Install & Upgrade course is designed to give database administrators the knowledge and skills needed to install and configure an Oracle 18c or 19c database. The Oracle Database administrator will gain practical experience in upgrading a database to an Oracle 19c or 18c database.
- 

### Prerequisites:

■ Delegates who wish to attend the Oracle Database 19c Install & Upgrade course should have practical knowledge of administering an Oracle database. They should have attended either the Oracle Database 19c Administration, Oracle Database 18c Administration or the Oracle Database 12cR2 Administration course or have a good working knowledge of Oracle administration.

This course is run on a Linux operating system, a basic knowledge of Linux/UNIX is recommended but is not essential.

Where Oracle 19c or 18c courses are listed in the Pre-requisite Courses section equivalent Oracle 12c courses would also suffice.

---

## Follow-on-Courses:

### Further Learning

- Oracle Database 19c Backup and Recovery with RMAN
  - Oracle Database 19c DBA Performance Tuning & Management
  - Oracle Database 19c Data Guard
  - Oracle Database 12cR2, 18c and 19c New Features for Administrators
  - Oracle Multitenant Administration
-

## Content:

### Oracle Database 19c Install ; Upgrade Training Course Course Contents - DAY 1

#### Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

#### Session 1: OVERVIEW OF ORACLE DATABASE 12cR2

- Overview of the Oracle Database 12cR2
- Overview of Oracle Database 12cR2 architecture
- Oracle Database instance configuration
- Oracle Background processes
- Database storage architecture
- Database logical and physical structures
- Overview of container and pluggable database

#### Session 2: ORACLE DATABASE 12c MULTITENANT ARCHITECTURE

- Overview of Container and Pluggable databases
- The benefits of Multitenant Architecture
- Files in a multitenant database
- The structure of the root container
- The structure of a pluggable container
- CDB\_ and DBA\_ views

#### Session 3: INSTALL ORACLE GRID INFRASTRUCTURE ON A STANDALONE SERVER

- Overview of Grid Infrastructure for a standalone server
- System requirements and prerequisites
- Create directories and groups for a Grid Infrastructure installation
- Configure Grid Infrastructure for a standalone server
- Overview of ASM storage
- Install Grid Infrastructure for a standalone server
- Upgrade Grid Infrastructure for a standalone server

#### Session 4: INSTALL THE ORACLE DATABASE SOFTWARE

- Plan an installation
- System requirements and operating system prerequisites
- Oracle Flexible Architecture and directory structures
- Carry out pre-installation tasks and checks
- Set environment variables
- Interactive Oracle Database Software Installation with the OUI
- The Oracle Inventory
- Silent mode installation in 18c/19c
- Use Response Files
- Oracle Database 19c RPM Installation
- Image based client installation
- Database Software De-install

#### Session 5: CREATE A DATABASE WITH THE DATABASE CONFIGURATION ASSISTANT (DBCA)

- Selecting a database storage method
- Select a CDB or non-CDB database
- Select a database type based on workload
- Select a character set for the database
- Set the NLS\_LANG initialization parameter
- Create a database with the DBCA
- Create a Database using a response file with DBCA silent mode
- Create a Database with DBCA silent mode
- Create a Duplicate database using silent mode from 19c
- Delete a database with DBCA silent mode
- Create a database design template
- Carry out post database creation tasks
- Read-Only homes from Oracle 18c

#### Session 6: ORACLE RESTART

#### Session 7: PREPARATION FOR UPGRADE

- Upgrade process overview
- Methods used to perform upgrade
- Methods of data migration
- Direct upgrade supported releases
- Methods used to perform indirect upgrades
- The Database Upgrade Assistant
- Manual Upgrade Methods
- Rolling Upgrade for Oracle Grid Infrastructure
- Create an upgrade test plan
- Carry out performance testing
- Prepare to Upgrade a Database
- Run the Pre-Upgrade Information tool
- Check for compatibility issues
- Use the ORAchk Utility
- Backup the database
- Create the new Oracle home
- Install the Oracle Database 18c/19c software
- Oracle 19c Upgrade of Expired Password Accounts

#### Session 8: PERFORM AN UPGRADE

- Perform an upgrade of an Oracle Database to 12.2.0.n
- Perform Post upgrade actions
- Upgrade a database with the DBUA
- Manually start a failed upgrade
- Common installation errors
- Run the DBUA in silent mode
- Oracle Database Autoupgrade
- Carry out post upgrade tasks
- Migrate to Unified Auditing
- Deprecated database features and parameters
- De-supported database features and parameters

#### Session 9: MIGRATE DATA WITH DATA PUMP

- Migrate data with Data Pump
- Transport a database
- Import data using a Data Pump network link

- The Benefits of Grid Infrastructure for a standalone server
  - Overview of using Oracle Restart
  - The ohasd daemon
  - Use commands to manage the Oracle Restart Stack
  - Add components to Oracle Restart
  - Use the srvctl utility to manage, start and stop and manage components
  - Upgrade and patch the 18c or 19c home
- Oracle Database 19c Install ; Upgrade  
Training Course Course Contents - DAY  
2

---

### Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

[info@globalknowledge.co.uk](mailto:info@globalknowledge.co.uk)

[www.globalknowledge.com/en-gb/](http://www.globalknowledge.com/en-gb/)

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK