

# Course : Oracle Database, backup and restore

Versions 23ai to 12c

**Practical course - 5d - 35h00 - Ref. ORK**

**Price : 3220 CHF E.T.**

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This course is aimed at Oracle DBAs wishing to establish an effective backup strategy for Oracle database versions 18 to 23ai. It will cover ARCHIVELOG mode, RMAN, special backup/restore scenarios, LogMiner and the use of Flashback Database.

## Teaching objectives

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

- Establish a management strategy for Oracle Database backup and recovery
- Apply RMAN tool functionalities
- Restore an Oracle database following file loss
- Duplicating an Oracle database
- Moving an Oracle database

## Intended audience

Oracle database administrators (from 18c to 23ai), application administrators, system administrators, consultants.

## Prerequisites

Basic knowledge of Oracle DBMS administration. Or knowledge equivalent to that provided by the course "Oracle, DBMS administration" (ref. ORC).

## Practical details

### Exercise

Numerous exercises enable you to put theory into practice.

### Teaching methods

Active teaching methods that encourage discussion. An alternation of conceptual presentations and practical exercises to anchor what you've learned, whatever your Oracle Database version (18c to 23ai).

## Course schedule

### PARTICIPANTS

Oracle database administrators (from 18c to 23ai), application administrators, system administrators, consultants.

### PREREQUISITES

Basic knowledge of Oracle DBMS administration. Or knowledge equivalent to that provided by the course "Oracle, DBMS administration" (ref. ORC).

### 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 Oracle DBMS administration reminder

- Redo log, control and data files.
- ARCHIVELOG mode.
- The DBNEWID utility.

### Exercise

Save the control file and change the DB name.

## 2 RMAN: components and functions

- Configuration and controls.
- Automatic backup of the control file.
- Compression, encryption and parallelism of backups.
- Save a CDB and PDB database.
- Incremental backup. Multi-section backups.

### Exercise

Compressed, parallelized DB backup.

## 3 RMAN maintenance

- Catalog and virtual catalog creation.
- Catalog entry.
- Add or remove backups from the catalog.
- Stored scripts and catalog backup.

### Exercise

Catalog creation and DB registration.

## 4 File loss and recovery

- Loss of control files. Restart with missing files.
- Loss of files in UNDO tablespace or read-only tablespace.
- Using RMAN. RESTORE and RECOVER commands.
- Backup and database validation.
- Checks and failure list.

### Exercise

DB restoration after file loss.

## 5 Duplicating an Oracle database

- Duplicate a PDB. Select PDBs.
- Duplicate a DB without stopping it.

### Exercise

Clone a hot DB.

## 6 Incomplete recovery

- Configure and use LogMiner.
- Incomplete recovery of a tablespace or PDB inserted database.
- Restore a base in a previous incarnation.

### Exercise

Find the deletion SCN of a deleted object and recover the object.

## TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

## TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

## ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) to review your request and its feasibility.

## 7 Flashback Database

- Flashback Database and fast recovery zone backup.
- Flashback to a table deleted in PDB.

### Exercise

Recovering a user with Flashback Database and a tablespace with RMAN.

## 8 Moving data

- Data Pump and transport of a tablespace or database.
- Use external tables.
- Transport a database to another OS.

### Exercise

Transport a tablespace from one DB to another.

## Dates and locations

### REMOTE CLASS

2026: 23 Mar., 15 June, 26 Oct.