Course : Oracle Database, introduction

Versions 23ai to 12c
Synthesis course - 2d - 14h00 - Ref. OID
Price : 1720 € E.T.

★★★★ 3,8 / 5

An overview of the technical features of Oracle's data server offering and its future developments. Aimed at anyone wishing to understand the principles and operating mechanisms of the Oracle Database DBMS, whatever its version, from 18c to 23ai.

Teaching objectives

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

- ✔ Understand the key elements of an Oracle database
- ✔ Discover the relational model
- ✔ Evaluate SQL and PL/SQL data manipulation languages
- ✔ Analyze the components of an Oracle database architecture

Intended audience
This course is aimed at all project managers and design engineers who have to manage projects or develop applications integrating Oracle.

Prerequisites
No special knowledge required.

Course schedule

1 Data server overview

- The relational model. Integrity constraints.
- Data types. The object-relational model.
- Data manipulation.

2 Database access languages

- SQL language: ANSI. The structure of SQL.
- PL/SQL language. Procedural features.
- Oracle and XML. Embedded SQL. ODBC. Oracle Objects for OLE.
- Java, JDBC and SQLJ drivers. Other drivers.

PARTICIPANTS
This course is aimed at all project managers and design engineers who have to manage projects or develop applications integrating Oracle.

PREREQUISITES
No special knowledge required.

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.

3) Oracle server features

- Safety features.
- User identification and privileges. Data dictionary.
- Query optimization. Event management and alerts.
- Transaction management. Globalization (NLS).
- Real Application Cluster. Symmetric Replication.
- Advanced Security. Standby Database and Oracle Data Guard.
- Virtual Private Database. Recovery Manager tool.

4) Database architecture

- Database composition.
- Instance architecture.
- Database structure.
- Tablespaces. Data partitioning.

5) Net Services

- Connectivity and safety.
- Supporting strong activity.
- Connection Manager and Multiplexing.
- Extended security services.
- Net Configuration Assistant. Native Hostname Adapter.

6) Data versioning

- Oracle Flashback Query.
- Restore data deleted by mistake.
- Workspace Manager. Workspace creation.
- Declaration of versioned tables.
- Visualization of data differences.

7) The Objects extension

- Object support. Use of LOBs.
- The BFILE type.
- Collections: nested tables and VARRAY. Operators and methods on objects.
- Object Type Translator.

8) Other Oracle features

- Performance. Simplified maintenance.
- Security. Tools and Oracle Grid Infrastructure.
- Oracle Restart. Database migration.

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 to review your request and its feasibility.