

Course : Migration from Oracle to PostgreSQL

Practical course - 2d - 14h00 - Ref. OPL

Price : 1600 CHF E.T.

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This course shows you how to migrate from Oracle databases to PostgreSQL. It saves you time, as it presents an approach and methodology that works. You'll learn about the similarities and differences between the two DBMSs, such as data types and implementations, SQL, PL/SQL and PL/pgSQL languages.

Teaching objectives

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

- ✓ Discover the main equivalences and differences between an Oracle DBB and a PostgreSQL DBB
- ✓ Define a methodology for migrating from an Oracle DB to a PostgreSQL DB
- ✓ Evaluate implementation differences: instances, databases, schemas and users
- ✓ Define the main differences between Oracle's PL/SQL and PostgreSQL's PL/pgSQL

Intended audience

Project managers and database developers.

Prerequisites

Good knowledge of SQL and PL/SQL. Knowledge of Oracle administration and PostgreSQL administration or have taken the associated courses (Ref. ORC and POS).

Practical details

Hands-on work

Starting with an Oracle database, the practical exercises enable you to master PostgreSQL migration. Migration methods are presented for Linux.

Course schedule

PARTICIPANTS

Project managers and database developers.

PREREQUISITES

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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 and reminders

- Oracle database architecture and administration.
- Reminder of PostgreSQL database architecture.
- Review of SQL and PL/SQL languages.
- Comparison of Oracle and PostgreSQL architectures.
- Basics and diagrams.
- Storage and tablespaces.
- Backups and restores.

Hands-on work

Create a PostgreSQL database. Create a role with an associated schema.

2 Preparing for migration

- Migrating to PostgreSQL? The right questions to ask. Migration checklist.
- Application study and compatibility with PostgreSQL.
- Migration test procedures.
- Test procedure for the migrated environment.

Hands-on work

Creation of a checklist of important points to consider during a migration.

3 Migration of different types and objects

- Oracle DB types vs. PostgreSQL DB types.
- Tables and charts.
- The use of sequences and views.
- Table partitioning.
- Materialized views.

Hands-on work

Types. Tables. Updating views.

4 SQL migration

- Update instructions.
- SQL functions.
- Pseudo columns.
- Syntax specificities (operators, explicit conversion, etc.).
- Hierarchical queries and use of the recursive WITH clause.
- Using analytical functions.

Hands-on work

SQL functions. Pseudo columns. Using recursion with WITH. Analytical functions

5 PL/SQL to PL/pgSQL migration

- Connections and loops.
- Cursors and cursor variables.
- Stored procedures and functions.
- Error handling.
- Triggers.

Hands-on work

FOR loops. "Procedures" stored in PostgreSQL. Error handling. Triggers.

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.

6 Post-migration tasks

- Script adaptation.
- Statistics and backup management.
- Post-migration application analysis.
- Optional tasks.

Dates and locations

REMOTE CLASS

2026: 30 Mar., 22 June, 5 Nov.