![orsys TRAINING 50 YEARS]

Course : Oracle's SQL and PL/SQL contributions from 12c to 26ai

Discover Oracle's database evolutions
Practical course - 2d - 14h00 - Ref. NSA
Price : 1600 CHF E.T.

NEW

Alors que la version 19c restera supportée jusqu'en 2027, avant d'entrer en support étendu jusqu'en 2032, Oracle 26ai deviendra la prochaine version "long terme", à compter de sa sortie fin 2025. Les développeurs, bien qu'étant en alerte des nouveautés, manquent de temps pour les mettre en pratique. Cette formation condense les techniques de SQL et de PL/SQL qui n'ont cessé d'évoluer depuis la version 12c. Elle offre un tour d'horizon, avec la description des fonctions et packages récents, ainsi que la manipulation de données JSON et les aspects d'IA inclus dans la base.

🎯 Teaching objectives

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

- ✓ Identify the benefits of different Oracle versions
- ✓ SQL and PL/SQL contributions from 12c to 19c
- ✓ Discover what's new in version 26ai
- ✓ Management of semi-structured data and AI in the database

Intended audience
All those involved in SQL and PL/SQL development (developers, DBAs, data analysts, project managers, etc.).

Prerequisites
Good knowledge of SQL and PL/SQL or those brought by the training courses "Oracle SQL", "Oracle SQL Perfectionnement" (ref. OSL, OSP) and "Oracle PL/SQL" (ref. ORD). Experience required.

Course schedule

1 Introduction

- Oracle version evolution.
- Support for Database product versions and editions.
- New features in the optimizer.
- Documentation, webography.

Storyboarding workshops
Oracle Database versions since 12c.

2 SQL and PL/SQL contributions from 12c to 19c

- New column properties.
- ANSI joints with LATERAL, CROSS APPLY and OUTER APPLY.
- Temporal validity.
- Pattern recognition with MATCH_RECOGNIZE.
- Qualified expressions.
- PL/SQL call restrictions (white lists).
- PL calls with WITH.
- Polymorphic PL/SQL functions.
- SQL macros.

Hands-on work
Practical application of detailed points.

3 Discover what's new in version 26ai

- Annotations on objects.
- New SQL types and domains.
- What's new for SELECT.
- New functions for intervals and dates.
- New options for analytical functions.
- Table builders.
- New updates (direct joins, lock free).
- Automatic translation and compilation (SQL Transpiler).

Hands-on work
Practical application of the new 26c features covered in this chapter.

4 Management of semi-structured data and AI in the database

- JSON management (SQL functions, indexing, data guide).
- Use of JSON (mapping with types and duality with relations).
- Graph manipulation with PGQL (Property Graph Query Language).
- Special tables (external online, blockchain and immutable).
- Vector searches (type and index).
- Remote functions and ONNX support.

Storyboarding workshops
New features and benefits of version 26ai.

(5) **Supplements**

- Temporary private tables.
- New in DDL.
- New roles and privileges.
- Roles for program units.

Storyboarding workshops
What are the benefits of these supplements?

Dates and locations

REMOTE CLASS
2026 : 26 Mar., 18 June, 17 Sep., 10 Dec.

Storyboarding workshops
What are the benefits of these supplements?