

Oracle 12c, tuning

**SII-370** **4 Days (28 Hours)**

Description

This training will teach you to identify performance problems with your Oracle12c databases and to implement the appropriate solutions to deal with them. You will learn in particular how to size the different areas of memory (PGA, buffer cache, Shared Pool) and how to optimize logging and I/O.

Who is this training for ?

For whom

Experienced administrators on Oracle12c.

Prerequisites

Aucune

Training objectives

Training program

Introduction

- The optimization approach.
- The possible gains.
- The objectives.
- Creation of a monitoring service.
- Network compression.

Statistiques et événements Wait

- Dynamic performance views.
- EM Cloud Control or BD Express.
- Alert file, user trace and Wait events.
- AWR and Statspack repository, snapshots and reports.
- Exercise: Find Wait events.
- Modify the snapshot collection periodicity.
- Generate reports.

L'optimiseur et le SQL Plan Management

- Manage statistics and execution plans.
- Identify access to database objects.
- SQL Plan Management.
- Automatic management of maintenance tasks.
- Using SQL Profile to optimize queries.
- Managing adaptive SQL plans.
- Exercise: Calculate statistics for a database.
- Generate execution plans.
- Use SQL Plan Management in the case of application developments.

Gestionnaire des ressources

- Configuring BD Resource Manager.
- Create a plan and manage consumers.
- Manage resources between PDB databases.

Gérer les mesures de référence

- Adaptive thresholds and reference measurements.
- Define adaptive alert thresholds.
- Configure normalization measurements.
- Operations and ADDM diagnosis in real time.
- Exercise: Monitor the processing of a service.

Diagnostic et réglages

- Issues related to SGA, PGA and automatic memory management.
- The dedicated, shared server and connection pools.
- Activity of the Library Cache.
- The Buffer Cache, Flash Cache and block size.
- Segment optimization, automatic movement and compression.
- Tablespace, checkpoints, I/O, Striping And Mirroring Everywhere.
- Exercise: Library Cache, Buffer Cache optimization and automatic memory management.

La journalisation

- Checkpoint settings.
- Buffer Redo Log and log files.
- Impact of archiving.
- Exercise: Optimize file size.

Database Replay

- Capture, processing of the global load, re-execution.
- Production system before modifying or cloning the PDB.