

Oracle Database 12c Performance Tuning y Real Application Cluster

Código: OCL-P-001

Propuesta de Valor: OTROS CURSOS DE CAPACITACIÓN TECNOLÓGICA

Duración: 50 Horas



El Curso Oracle Database 12c Performance Tuning y Real Application Cluster le enseñará sobre la arquitectura de Oracle Database. Descubrirá cómo gestionar eficazmente una instancia de Oracle Database, realizar ajustes de rendimiento y configurar el entorno de red de Oracle y realizar el mantenimiento de la base de datos. En este curso, se le presentará a Oracle Database Real Application Cluster.



AUDIENCIA

Este curso está dirigido a:

- Administradores de Data Warehouse
- Administradores de Bases de Datos
- Diseñadores de Bases de Datos
- Ingenieros de Soporte
- Administradores Técnicos



PRE REQUISITOS

No hay requisitos previos.



OBJETIVOS

Este curso pretende lograr los siguientes objetivos:

- Configurar la base de datos para las operaciones de copia de seguridad y recuperación.
- Describir la arquitectura de la base de datos Oracle

- Administrar la instancia de la base de datos Oracle
- Administrar estructuras de almacenamiento de base de datos Oracle
- Describir Oracle 12c Data Guard
- Implementar Oracle Real Application Cluster - RAC



CERTIFICACIÓN DISPONIBLE

Certificación emitida por COGNOS.



CONTENIDO

1. UNIT 1 EXPLORING THE ORACLE DATABASE ARCHITECTURE

- 1.1. ORACLE DATABASE ARCHITECTURE: OVERVIEW
- 1.2. ORACLE DATABASE INSTANCE CONFIGURATIONS
- 1.3. CONNECTING TO THE ORACLE DATABASE INSTANCE
- 1.4. ORACLE DATABASE MEMORY STRUCTURES
- 1.5. PROCESS ARCHITECTURE
- 1.6. PROCESS STRUCTURES
- 1.7. PROCESS STARTUP SEQUENCE
- 1.8. DATABASE STORAGE ARCHITECTURE

2. UNIT 2 PERFORMING DATABASE MAINTENANCE

- 2.1. DATABASE MAINTENANCE
- 2.2. VIEWING THE ALERT HISTORY
- 2.3. TERMINOLOGY
- 2.4. AUTOMATIC WORKLOAD REPOSITORY (AWR)
- 2.5. STATISTIC LEVELS
- 2.6. AUTOMATIC DATABASE DIAGNOSTIC MONITOR (ADDM)
- 2.7. ADVISORY FRAMEWORK
- 2.8. ENTERPRISE MANAGER AND ADVISORS

3. UNIT 3 MANAGING PERFORMANCE

- 3.1. PERFORMANCE MONITORING
- 3.2. TUNING ACTIVITIES
- 3.3. PERFORMANCE PLANNING
- 3.4. INSTANCE TUNING
- 3.5. PERFORMANCE TUNING METHODOLOGY
- 3.6. PERFORMANCE TUNING DATA
- 3.7. MONITORING PERFORMANCE
- 3.8. MANAGING MEMORY

4. UNIT 4 MANAGING PERFORMANCE: SQL TUNING

- 4.1. SQL TUNING
- 4.2. ORACLE OPTIMIZER
- 4.3. SQL PLAN DIRECTIVES
- 4.4. ADAPTIVE EXECUTION PLANS
- 4.5. SQL ADVISORS
- 4.6. AUTOMATIC SQL TUNING RESULTS
- 4.7. IMPLEMENT AUTOMATIC TUNING RECOMMENDATIONS
- 4.8. SQL TUNING ADVISOR

5. UNIT 5 MANAGING RESOURCES BY USING DATABASE RESOURCE MANAGER

- 5.1. DATABASE RESOURCE MANAGER OVERVIEW
- 5.2. DATABASE RESOURCE MANAGER CONCEPTS
- 5.3. USING THE RESOURCE MANAGER
- 5.4. DEFAULT MAINTENANCE RESOURCE MANAGER PLAN
- 5.5. DEFAULT PLAN EXAMPLE
- 5.6. RESOURCE MANAGER WORKFLOW
- 5.7. SPECIFYING RESOURCE PLAN DIRECTIVES
- 5.8. RESOURCE ALLOCATION METHODS FOR RESOURCE PLANS

6. UNIT 6 INTRODUCTION TO ORACLE DATA GUARD

- 6.1. STANDBY DATABASE TYPES
- 6.2. USER INTERFACES FOR ADMINISTERING ORACLE DATA GUARD CONFIGURATIONS
- 6.3. ORACLE DATA GUARD OPERATIONAL PREREQUISITES
- 6.4. STANDBY DATABASE DIRECTORY STRUCTURE CONSIDERATIONS
- 6.5. MOVING THE LOCATION OF ONLINE DATA FILES

7. UNIT 7 CREATING A PHYSICAL STANDBY DATABASE

- 7.1. PREPARING THE PRIMARY DATABASE FOR STANDBY DATABASE CREATION
- 7.2. STEP-BY-STEP INSTRUCTIONS FOR CREATING A PHYSICAL STANDBY DATABASE
- 7.3. POST-CREATION STEPS
- 7.4. CREATING A PHYSICAL STANDBY OF A CDB
- 7.5. CREATING A PDB IN A PRIMARY DATABASE

8. UNIT 8 CREATING A LOGICAL STANDBY DATABASE

- 8.1. PREREQUISITE CONDITIONS FOR CREATING A LOGICAL STANDBY DATABASE
- 8.2. STEP-BY-STEP INSTRUCTIONS FOR CREATING A LOGICAL STANDBY DATABASE
- 8.3. POST-CREATION STEPS
- 8.4. CREATING A LOGICAL STANDBY OF A CDB

9. UNIT 9 INSTALLING AND CONFIGURING ORACLE RAC

- 9.1. INSTALLING THE ORACLE DATABASE SOFTWARE
- 9.2. INSTALLATION OPTIONS
- 9.3. CREATING THE CLUSTER DATABASE

- 9.4. POST-INSTALLATION TASKS
- 9.5. SINGLE INSTANCE TO RAC CONVERSION
- 9.6. CLEANING UP UNSUCCESSFUL INSTALLS

10. UNIT 10 ORACLE RAC ADMINISTRATION

- 10.1. PARAMETERS AND RAC - SPFILE, IDENTICAL AND UNIQUE PARAMETERS
- 10.2. INSTANCE STARTUP, SHUTDOWN AND QUIESCE
- 10.3. UNDO TABLESPACES
- 10.4. REDO THREADS
- 10.5. USE ENTERPRISE MANAGER CLUSTER DATABASE PAGES
- 10.6. RAC ALERTS
- 10.7. RAC METRICS

11. UNIT 11 RAC DATABASE MONITORING AND TUNING

- 11.1. OCPU AND WAIT TIME LATENCIES
- 11.2. WAIT EVENTS FOR RAC
- 11.3. COMMON RAC TUNING
- 11.4. SESSION AND SYSTEM STATISTICS
- 11.5. RAC SPECIFIC V\$ VIEWS
- 11.6. AUTOMATIC DATABASE DIAGNOSTIC MONITOR FOR RAC

12. UNIT 12 MANAGING HIGH AVAILABILITY OF SERVICES IN A RAC ENVIRONMENT

- 12.1. ORACLE SERVICES
- 12.2. SERVICES FOR POLICY - AND ADMINISTRATOR-MANAGED DATABASES
- 12.3. CREATING SERVICES
- 12.4. MANAGING SERVICES
- 12.5. SERVICES AND CONNECTION LOAD BALANCING
- 12.6. USE SERVICES WITH CLIENT APPLICATIONS
- 12.7. SERVICES AND TRANSPARENT APPLICATION FAILOVER
- 12.8. SERVICES AND THE RESOURCE MANAGER

BENEFICIOS

Al finalizar el curso los estudiantes tendra conocimiento sobre la arquitectura de Oracle Database. Descubrirá cómo gestionar eficazmente una instancia de Oracle Database, realizar ajustes de rendimiento y configurar el entorno de red de Oracle y realizar el mantenimiento de la base de datos.