Oracle Database 19c/21c/23ai Administration Workshop I

Course information
Days : 5
Total lessons : 18
Suggested Prerequisites :
- Oracle Database : SQL Fundamentals I

Training includes :
- Experienced trainer(s)
- Pre-test and Post-test
- Practices and solutions

Public price :
- 25,000 baht(THB) : 1 person

In-house price for 5 days:
- 75,000 baht(THB) : Economic Class : 1 - 5 people
- 80,000 baht(THB) : Small Class : 6 - 10 people
- 90,000 baht(THB) : Medium Class : 11 - 20 people
- 100,000 baht(THB) : Large Class : 21 - 30 people

All prices exclude VAT 7 %

Course details

Day 1
- Lesson 1 : Introduction
- Lesson 2 : Exploring the Oracle Database Architecture
- Lesson 3 : Managing the Database Instance
- Lesson 4 : Configuring the Oracle Network Environment

Day 2
- Lesson 5 : Managing Database Storage Structures
- Lesson 6 : Administering User Security
- Lesson 7 : Managing Data Concurrency
- Lesson 8 : Managing Undo Data

Day 3
- Lesson 9 : Implementing Oracle Database Auditing
- Lesson 10 : Performing Database Maintenance
- Lesson 11 : Managing Performance

Day 4
- Lesson 12 : Managing Performance: SQL Tuning
- Lesson 13 : Managing Resources by Using Database Resource Manager
- Lesson 14 : Automating Tasks by Using Oracle Scheduler

Day 5
- Lesson 15 : Managing Space
- Lesson 16: Backup and Recovery Concepts
- Lesson 17: Moving Data
- Lesson 18 : Working with Oracle Support

Lesson details

Lesson 1 : Introduction
- Course Objectives
- Course Schedule
- Overview of Oracle Database 12c
- Overview of Oracle Cloud
- Overview of the HR Schema

Lesson 2 : Exploring the Oracle Database Architecture
- Oracle Database Architecture: Overview
- Oracle Database Instance Configurations
- Connecting to the Oracle Database Instance
- Oracle Database Memory Structures
- Process Architecture
- Process Structures
- Process Startup Sequence
- Database Storage Architecture

Lesson 3 : Managing the Database Instance
- Introducing Oracle Database Management Tools
- Understanding the Enterprise Manager Management Framework
- Logging in to Oracle Enterprise Manager Database Express
- Using the Enterprise Manager Database Express Home Page
- Using Enterprise Manager Cloud Control
- Using SQL*Plus
- Using SQL Developer
- Initialization Parameter Files

Lesson 4 : Configuring the Oracle Network Environment
- Oracle Net Services Overview
- Oracle Net Listener Overview
- Establishing Oracle Network Connections
- Tools for Configuring and Managing the Oracle Network
- Using the Listener Control Utility
- Using Oracle Net Configuration Assistant
- Using Oracle Net Manager
- Using Enterprise Manager Cloud Control

Lesson 5 : Managing Database Storage Structures
- Understanding Storage of Data
- Database Block Contents
- Exploring the Storage Structure
- Creating a New Tablespace
- Overview of Tablespaces Created by Default
- Managing Tablespaces
- Viewing Tablespace Information
- Using Oracle Managed Files

Lesson 6 : Administering User Security
- Database User Accounts
- Predefined Administrative Accounts
- Creating a User
- Authentication
- Unlocking a User Account and Resetting the Password
- Privileges
- Roles
- Profiles

Lesson 7 : Managing Data Concurrency
- Overview of Locks
- Locking Mechanism
- Data Concurrency
- DML Locks
- Enqueue Mechanism
- Lock Conflicts

Lesson 8 : Managing Undo Data
- Undo Data Overview
- Transactions and Undo Data
- Storing Undo Information
- Comparing Undo Data and Redo Data
- Managing Undo
- Configuring Undo Retention
- Guaranteeing Undo Retention
- Changing an Undo Tablespace to a Fixed Size

Lesson 9 : Implementing Oracle Database Auditing
- Separation of Responsibilities
- Database Security
- Monitoring for Compliance
- Standard Database Auditing
- Unified Audit Data Trail
- Separation for Duties for Audit Administration (AUDIT_ADMIN and AUDIT_VIEWER roles)
- Configuring the Audit trail
- Specifying Audit Options

Lesson 10 : Performing Database Maintenance
- Database Maintenance
- Viewing the Alert History
- Terminology
- Automatic Workload Repository (AWR)
- Statistic Levels
- Automatic Database Diagnostic Monitor (ADDM)
- Advisory Framework
- Enterprise Manager and Advisors

Lesson 11 : Managing Performance
- Performance Monitoring
- Tuning Activities
- Performance Planning
- Instance Tuning
- Performance Tuning Methodology
- Performance Tuning Data
- Monitoring Performance
- Managing Memory

Lesson 12 : Managing Performance: SQL Tuning
- SQL Tuning
- Oracle Optimizer
- SQL Plan Directives
- Adaptive Execution Plans
- SQL Advisors
- Automatic SQL Tuning Results
- Implement Automatic Tuning Recommendations
- SQL Tuning Advisor

Lesson 13 : Managing Resources by Using Database Resource Manager
- Database Resource Manager Overview
- Database Resource Manager Concepts
- Using the Resource Manager
- Default Maintenance Resource Manager Plan
- Default Plan Example
- Resource Manager Workflow
- Specifying Resource Plan Directives
- Resource Allocation Methods for Resource Plans

Lesson 14 : Automating Tasks by Using Oracle Scheduler
- Simplifying Management Tasks
- Understanding a Simple Job
- Core Components
- Basic Work Flow
- Persistent Lightweight Jobs
- Using a Time-Based or Event-Based Schedule
- Creating a Time-Based Job
- Creating an Event-Based Schedule

Lesson 15 : Managing Space
- Space Management Overview
- Block Space Management
- Row Chaining and Migration
- Free Space Management Within Segments
- Types of Segments
- Allocating Extents
- Allocating Space
- Creating Tables Without Segments

Lesson 16: Backup and Recovery Concepts
- Categories of Failures
- Flashback Technology
- Understanding Instance Recovery
- Phases of Instance Recovery
- Tuning Instance Recovery
- Using the MTTR Advisor
- Media Failure
- Configuring for Recoverability

Lesson 17: Moving Data
- Moving Data: General Architecture
- Oracle Data Pump
- SQL*Loader
- External Tables

Lesson 18 : Working with Oracle Support
- Using the Support Workbench
- Using Enterprise Manager
- Working with Oracle Support
- My Oracle Support Integration
- Researching an Issue
- Logging Service Requests
- Managing Patches
- Applying a Patch Release

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For more information please contact :
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