

Szkolenie: Oracle
Oracle Database 12c: Performance Management and Tuning

FORMA SZKOLENIA	MATERIAŁY SZKOLENIOWE	CENA	CZAS TRWANIA
Stacjonarne	Cyfrowe	7450 PLN NETTO*	5 dni
Stacjonarne	Tablet CTAB	8050 PLN NETTO*	5 dni
Metoda dlearning	Cyfrowe	7450 PLN NETTO*	5 dni
Metoda dlearning	Tablet CTAB	7450 PLN NETTO*	5 dni

* (+VAT zgodnie z obowiązującą stawką w dniu wystawienia faktury)

LOKALIZACJE

Kraków - ul. Tatarska 5, II piętro, godz. 9:00 - 16:00

Warszawa - ul. Bielska 17, godz. 9:00 - 16:00

Cel szkolenia:

In the Oracle Database 12c: Performance Management and Tuning course, learn about the performance analysis and tuning tasks expected of a DBA: proactive management through built-in performance analysis features and tools, diagnosis and tuning of the Oracle Database instance components, and diagnosis and tuning of SQL-related performance issues.

Plan szkolenia:

- Introduction
 - Course Objectives
 - Course Organization
 - Course Agenda
 - Topics Not Included in the Course
 - Who Tunes?
 - What Does the DBA Tune?
 - How to Tune
 - Tuning Methodology
- Basic Tuning Diagnostics
 - Performance Tuning Diagnostics
 - Performance Tuning Tools
 - Tuning Objectives

- Top Timed Events
- DB Time
- CPU and Wait Time Tuning Dimensions
- Time Model
- Dynamic Performance Views
- Using Automatic Workload Repository
 - Automatic Workload Repository Overview
 - Automatic Workload Repository Data
 - Enterprise Manager Cloud Control and AWR
 - Snapshots
 - Reports
 - Compare Periods
- Defining the Scope of Performance Issues
 - Defining the Problem
 - Limiting the Scope
 - Setting the Priority
 - Top SQL Reports
 - Common Tuning Problems
 - Tuning During the Life Cycle
 - ADDM Tuning Session
 - Performance Versus Business Requirements
- Using Metrics and Alerts
 - Metrics and Alerts Overview
 - Limitation of Base Statistics
 - Benefits of Metrics
 - Viewing Metric History Information
 - Viewing Histograms
 - Server-Generated Alerts
 - Setting Thresholds
 - Metrics and Alerts Views
- Using Baselines
 - Comparative Performance Analysis with AWR Baselines
 - Automatic Workload Repository Baselines
 - Moving Window Baseline
 - Baselines in Performance Page Settings
 - Baseline Templates

- AWR Baseslines
- Creating AWR Baseslines
- Managing Baseslines with PL/SQL
- Using AWR-Based Tools
 - Automatic Maintenance Tasks
 - ADDM Performance Monitoring
 - Using Compare Periods ADDM
 - Active Session History
 - New or Enhanced Automatic Workload Repository Views
 - Emergency Monitoring
 - Real-time ADDM
- Real-Time Database Operation Monitoring
 - Overview
 - Use Cases
 - Defining a Database Operation
 - Scope of a Composite Database Operation
 - Database Operation Concepts
 - Identifying a Database Operation
 - Enabling Monitoring of Database Operations
 - Identifying, Starting, and Completing a Database Operation
- Monitoring Applications
 - What is a Service?
 - Service Attributes
 - Service Types
 - Creating Services
 - Managing Services in a Single-Instance Environment
 - Where are Services Used?
 - Using Services with Client Applications
 - Services and Pluggable Databases
- Identifying Problem SQL Statements
 - SQL Statement Processing Phases
 - Role of the Oracle Optimizer
 - Identifying Bad SQL
 - Top SQL Reports
 - SQL Monitoring
 - What is an Execution Plan?

- Methods for Viewing Execution Plans
- Uses of Execution Plans
- Influencing the Optimizer
 - Functions of the Query Optimizer
 - Selectivity
 - Cardinality and Cost
 - Changing Optimizer Behavior
 - Optimizer Statistics
 - Extended Statistics
 - Controlling the Behavior of the Optimizer with Parameters
 - Enabling Query Optimizer Features
- Reducing the Cost of SQL Operations
 - Reducing the Cost
 - Index Maintenance
 - SQL Access Advisor
 - Table Maintenance for Performance
 - Table Reorganization Methods
 - Space Management
 - Extent Management
 - Data Storage
- Using SQL Performance Analyzer
 - Real Application Testing: Overview
 - Real Application Testing: Use Cases
 - SQL Performance Analyzer: Process
 - Capturing the SQL Workload
 - Creating a SQL Performance Analyzer Task
 - SQL Performance Analyzer: Tasks
 - Parameter Change
 - SQL Performance Analyzer Task Page
- SQL Performance Management
 - Maintaining SQL Performance
 - Maintaining Optimizer Statistics
 - Automated Maintenance Tasks
 - Statistic Gathering Options
 - Setting Statistic Preferences
 - Restore Statistics

- Deferred Statistics Publishing
- Automatic SQL Tuning
- Using Database Replay
 - Using Database Replay
 - The Big Picture
 - System Architecture
 - Capture Considerations
 - Replay Considerations: Preparation
 - Replay Considerations
 - Replay Options
 - Replay Analysis
- Tuning the Shared Pool
 - Shared Pool Architecture
 - Shared Pool Operation
 - The Library Cache
 - Latch and Mutex
 - Diagnostic Tools for Tuning the Shared Pool
 - Avoiding Hard Parses
 - Reducing the Cost of Soft Parses
 - Sizing the Shared Pool
- Tuning the Buffer Cache
 - Oracle Database Architecture: Buffer Cache
 - Buffer Cache: Highlights
 - Database Buffers
 - Buffer Hash Table for Lookups
 - Working Sets
 - Buffer Cache Tuning Goals and Techniques
 - Buffer Cache Performance Symptoms
 - Buffer Cache Performance Solutions
- Tuning PGA and Temporary Space
 - SQL Memory Usage
 - Performance Impact
 - Automatic PGA Memory
 - SQL Memory Manager
 - Configuring Automatic PGA Memory
 - Setting PGA_AGGREGATE_TARGET Initially

- Limiting the size of the Program Global Area (PGA)
- SQL Memory Usage
- Automatic Memory
 - Oracle Database Architecture
 - Dynamic SGA
 - Granule
 - Memory Advisories
 - Manually Adding Granules to Components
 - Increasing the Size of an SGA Component
 - Automatic Shared Memory Management: Overview
 - SGA Sizing Parameters: Overview
- Performance Tuning Summary with Waits
 - Commonly Observed Wait Events
 - Additional Statistics
 - Top 10 Mistakes Found in Customer Systems
 - Symptoms

Wymagania:

Wymagane prerekwizyty:

- [Oracle Database 12c: Administration Workshop](#)

Sugerowane prerekwizyty:

- [Oracle Database 12c: Install and Upgrade Workshop](#)

Poziom trudności



Certyfikaty:

Uczestnicy szkoleń otrzymają zaświadczenia o ukończeniu kursu sygnowane przez firmę Oracle.

Prowadzący:

Autoryzowany wykładowca Oracle.