Szkolenie: Oracle
Oracle Database 12c: RAC Administration

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* (+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:

This **Oracle Database 12c: RAC Administration** training will teach you about Oracle RAC database architecture. Expert Oracle University instructors will deep dive into Global Resources and Cache Fusion.

**Learn To:**

- Install Oracle RAC software.
- Create cluster databases.
- Administer both administrator and policy-managed Oracle RAC databases.
- Monitor and address performance issues.
- Learn about services in a RAC environment as well as highly available connection features including Application Continuity and Transaction Guard.
- Create and administer a RAC One Node Database.
- Create and manage multitenant RAC databases.

Plan szkolenia:

- Grid Infrastructure Overview and Review
  - What is a Cluster?
  - What is a Flex Cluster
  - Clusterware Characteristics
Oracle Clusterware
- Hardware and Software Concepts (High level)

- RAC Databases Overview & Architecture
  - Overview of Oracle RAC
  - RAC One Node
  - Cluster-Aware Storage Solutions
  - Benefits of Using RAC
  - Scaleup and Speedup
  - I/O Throughput Balanced
  - Global Resources
  - RAC and Flex ASM

- Installing and Configuring Oracle RAC
  - Installing the Oracle Database Software
  - Installation options
  - Creating the Cluster Database
  - Post-installation Tasks
  - Single Instance to RAC Conversion
  - Cleaning Up Unsuccessful Installs

- Oracle RAC Administration
  - Parameters and RAC - SPFILE, Identical and Unique Parameters
  - Instance Startup, Shutdown and Quiesce
  - Undo Tablespaces
  - Use Enterprise Manager Cluster Database Pages
  - RAC Alerts
  - RAC Metrics
  - Session management on RAC instances

- RAC Backup and Recovery
  - Instance Failure And Recovery In RAC - LMON and SMON
  - Redo Threads and Archive Log Configurations and Admin
  - Parameter Settings Affecting Parallel Recovery and MTTR
  - Instance Failure And Recovery In RAC - LMON and SMON
  - RAC and the Fast Recovery Area
  - RMAN Configuration
  - RMAN Admin For RAC: Channels, Instances, Backup Distribution
  - RMAN Restore And Recovery RAC Considerations

- RAC Global Resource Management and Cache Fusion
- Globally Managed Resources and Management
- Library Cache Management
- Row cache management
- Buffer cache fusion
- Buffer Cache Management Requirements
- Accessing single blocks in RAC
- Multi-block read considerations in RAC
- Undo and read consistency considerations in RAC

- RAC Monitoring and Tuning
  - OCPU and Wait Time Latencies
  - Wait Events for RAC
  - Common RAC Tuning
  - Session and System Statistics
  - RAC specific V$ Views
  - Automatic Database Diagnostic Monitor for RAC

- Managing High Availability of Services in a RAC Environment
  - Oracle Services
  - Services for Policy - and Administrator-Managed Databases
  - Creating Services
  - Managing Services
  - Use Services with Client Applications
  - Services and Connection Load Balancing
  - Services and Transparent Application Failover
  - Services and the Resource Manager

- Managing High Availability of Connections
  - Types of Workload Distribution
  - Client-Side Load Balancing
  - Server-Side Load Balancing
  - Runtime Connection Load Balancing and Connection Pools
  - Fast Application Notification
  - The Load Balancing Advisory FAN Event
  - Server-Side Callouts
  - Configuring the Server-Side ONS

- Upgrading and Patching RAC
  - Overview of Upgrades and Patching
  - Release and Patch Set Upgrades
○ PSU, CPU and Interim Patches
○ Merge Patches
○ Performing Out Of Place Database Upgrades
○ Planning and Preparing for Upgrade
○ Performing Out of Place Release Install or Upgrade
○ Post Upgrade Tasks
  ○ Application Continuity
    ○ What is AC?
    ○ What problem does it solve?
    ○ Benefits of AC
    ○ How AC works
    ○ AC Architecture
    ○ Side Effects
    ○ Restrictions
    ○ Application requirements
  ○ Quality of Service Management
    ○ QOS Management concepts
    ○ Describe the benefits of using QoS Management
    ○ QoS Management components
    ○ QoS Management functionality
  ○ RAC One Node
    ○ RAC One Node Concepts
    ○ Online database migration
    ○ Adding Oracle RAC One Node Database to an Existing Cluster
    ○ Convert an Oracle RAC One Node database to a RAC database
    ○ Convert an Oracle RAC database to a RAC One Node database
    ○ Use DBCA to convert a single instance database to a RAC One Node database
  ○ Design for High Availability
    ○ Causes of Planned and Unplanned Down Time
    ○ Oracle’s Solution to Down Time
    ○ RAC and Data Guard
    ○ Maximum Availability Architecture
    ○ Fast-Start Failover
    ○ Hardware Assisted Resilient Data
    ○ Database High Availability Best Practices
    ○ RAID Configuration for High Availability
Wymagania:

Recommended Related Training Courses:

- Oracle Database 12c: Global Data Services
- Oracle Database 12c: Backup and Recovery Workshop
- Oracle Database 12c: Backup and Recovery Workshop Ed 2 NEW
- Oracle Database 12c: Data Guard Administration
- Oracle Database 12c: Performance Management and Tuning NEW
- Oracle Database 12c: Security

Poziom trudności

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Certyfikaty:

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

Prowadzący:

Autorizowany wykładowca Oracle.