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

Certyfikaty:

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

Prowadzący:

Autorzyzowany wykładowca Oracle.