Macrosoft

Vzdelávanie s trvalým efektom

DOCUMENT

Course syllabus

CATEGORY

SQL, Oracle, Access courses

TRAINING FORMAT

In Bratislava or online with a lecturer

PRICE EXCL. VAT

350,00 €

PRICE INCL. VAT

430,50 €

including 23 % VAT

Macrosoft školiace centrum

Aktuálne informácie na Macrosoft.sk

PDF SYLLABUS

Oracle Database Administration

Clear overview of course topics, training scope and key information.

Course participants will learn to install and administer databases in the Oracle environment.

COURSE CONTENT

01 **Basic Oracle Terminology**

database, instance, Oracle software

02 **Database Administration Tools**

Oracle Enterprise Manager, SQLPlus) use of OFA (optimal flexible architecture) architecture software installation using Oracle Universal Installer (OUI)

03 **Creating an Oracle Database**

using Database Configuration Assistant (DBCA) creating a database design template using DBCA generating scripts for creating a database using DBCA

04 **Starting and Stopping the Oracle Database and Components**

description of an instance (the most important memory structures and processes, description of their operation) database initialization parameters Alert log working with Data Dictionary (most frequently used views) description of data structures tablespace and data files OMF (Oracle Managed Files) basic concept of automatic storage management (ASM)

05 **Creating and Managing Database User Accounts**

user authentication granting and revoking system and object privileges, roles and profiles controlling user resource usage managing data using SQL identification and administration of PL/SQL objects description of triggers and triggering events (in more detail in the PL/SQL module) monitoring and resolving locking conflicts explanation of DML and generation of undo data

06

Monitoring and Administration of Undo

description of the difference between undo data and redo data configuration of the undo retention period (retention guarantee, resolving related errors)

07

Database Administrator Security Privileges

use of the principle of lowest-level access rights use of Enterprise Manager to configure the Oracle network environment creating additional listeners

08

Creating Network Service Aliases

management of Oracle Net Listener (lsnrctl utility) testing Oracle Net connectivity (tnsping utility) use of shared or dedicated servers

09

Proactive Administration

use of statistics managing AWR (Automatic Workload Repository) use of Automatic Database Diagnostic Monitor (ADDM) description of the Advisory Framework setting alert thresholds use of alerts generated by the server use of automated tasks

10

Performance Management

use of Enterprise Manager pages to monitor performance use of SQL Access Advisor use of SQL Tuning Advisor use of automatic memory management and Memory Advisor use of dynamic views related to performance troubleshooting invalid or unusable objects

11

Oracle Database Backup and Recovery

identification of types of failure that can occur in an Oracle database description of methods for setting instance recovery meaning of checkpoints, redo log files and archived log files configuration of ARCHIVELOG mode creating consistent database backups backing up the database without shutting it down creating incremental backups automating database backup monitoring Flash Recovery Area recovery after loss of controlfile recovery after loss of redo log performing complete recovery after loss of a data file

12

Database Flashback

restoring table contents at a specific point in the past using the Flashback Table function restoring a dropped table displaying database contents at any point in time using the Flashback Query function displaying row versions for a certain time period using Flashback Version Query displaying row transaction history using Flashback Transaction Query description of available methods for moving data creating and using directory objects use of SQL*Loader loading data from a database other than Oracle (or from user files)

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Oracle Database Export, Import

use of export and import for fast data transfer to move data between Oracle databases use of external tables to move data using files that do not depend on the platform

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This document serves as an informational overview of the course syllabus. Current dates, venue and availability are listed at Macrosoft.sk.

https://www.macrosoft.sk/en/courses/oracle-database-administration