

Szkolenie: Oracle Oracle R Enterprise Essentials



Cel szkolenia:

This Oracle R Enterprise Essentials training will teach you how to leverage the Oracle Database as a high performance computing platform from the powerful R statistical programming language and environment. Overcome the memory limitations of the open source client R engine. Prepare data, perform statistical analysis, and build predictive models on Big Data data sets that are generally impossible with open source R. Generate graphics and invoke R scripts from SQL for integration with the Oracle stack!

Learn To:

- Start up R, load ORE, and connect to Oracle Database.
- Use common constructs of the R language.
- Use the ORE Transparency Layer.
- Use ORE for embedded R execution.
- Use ORE predictive analytics packages.
- Use ROracle.

Benefits To You:

By taking this course, you will get a chance to manipulate database data using the R language. You will develop the knowledge and skills to use Oracle Database for predictive analysis using R. Leverage the database server machine for executing R scripts from SQL and R, both individually and in a data-parallel and task-parallel manner.

More Information:

Oracle has adopted R as a language and environment to support statisticians, data analysts, and data scientists in performing statistical data analysis and advanced analytics, as well as generating sophisticated graphics. Oracle R Enterprise (ORE) is a component of the Oracle Database Advanced Analytics Option. ORE makes the open source R statistical programming language and environment ready for the enterprise and big data.

Objectives:

- Start up R, load ORE, and connect to Oracle Database
- Apply R Language Basics

- Use the ORE Transparency Layer
- Use ORE for embedded R execution
- Use ORE predictive analytics packages
- Interact directly with Oracle Database objects using ROracle

Plan szkolenia:

- Introducing Oracle R Enterprise
 - Using R: What, Who, and Why?
 - R User Interfaces
 - Oracle's Strategy for R
- Getting Started with ORE
 - Prerequisites for Using ORE
 - Starting R and Loading ORE
 - Basic Database Interaction with ORE
- Introducing the R Language and Environment
 - Accessing R Help
 - R language basics
 - Debugging with R
- Producing Graphs in R and ORE
 - R Graph Types
 - R Graphics Packages
 - Overloaded Functions for ORE
- Using the ORE Transparency Layer - Part 1
 - Introducing the Transparency Layer
 - Working with Oracle Database
 - ORE Packages, Classes, and Functions
 - Common Data Transformations and Data Type Mapping
- Using the ORE Transparency Layer - Part 2
 - Object Persistence
 - Ordering Framework
 - In-database Sampling and Random Partitioning
 - Case Study Examination
- ORE Embedded R Execution - R Interface
 - Rationale for Embedded R Execution
 - Embedded R Execution

- Connecting to Databases from an Embedded R Function
- Generating Graphs within an Embedded R Function
- ORE Embedded R Execution - SQL Interface
 - Embedded R Execution
 - Using R Scripts in the Database Repository
 - Generating Output Using rq*Eval Functions
 - Parallel Execution for Embedded R Scripts
- Using ORE Predictive Analytics - Part 1
 - Using Functions in the OREdm Package
 - Using Functions in the OREmodels Package
- Using ORE Predictive Analytics - Part 2
 - Scoring data within R models in the database
 - Preparing Time Series Data
 - Exponential Smoothing for Time Series Data Predictions
- Using ROracle for Direct Database Access
 - What is ROracle?
 - Authentication
 - Table Access Methods
 - Query Execution
 - Rollback

Wymagania:

Suggested Prerequisite

- Oracle Database 11g: Data Mining Techniques Ed 1

Required Prerequisite

- Experience with statistics or R programming experience

Poziom trudności



Certyfikaty:

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

Prowadzący:

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