

Advanced Analytics with Oracle's R Technologies

Course Overview

Oracle has made significant investments in the R language with Oracle R, Roracle, and Oracle R Enterprise. Along with these contributions, Oracle has also joined the R Consortium — a group of businesses organized under an open source governance and foundation model to provide support to the R community. The R language and its ecosystem of technologies is the clear leader in advanced analytics and will remain so for the foreseeable future.

Who Should Attend?

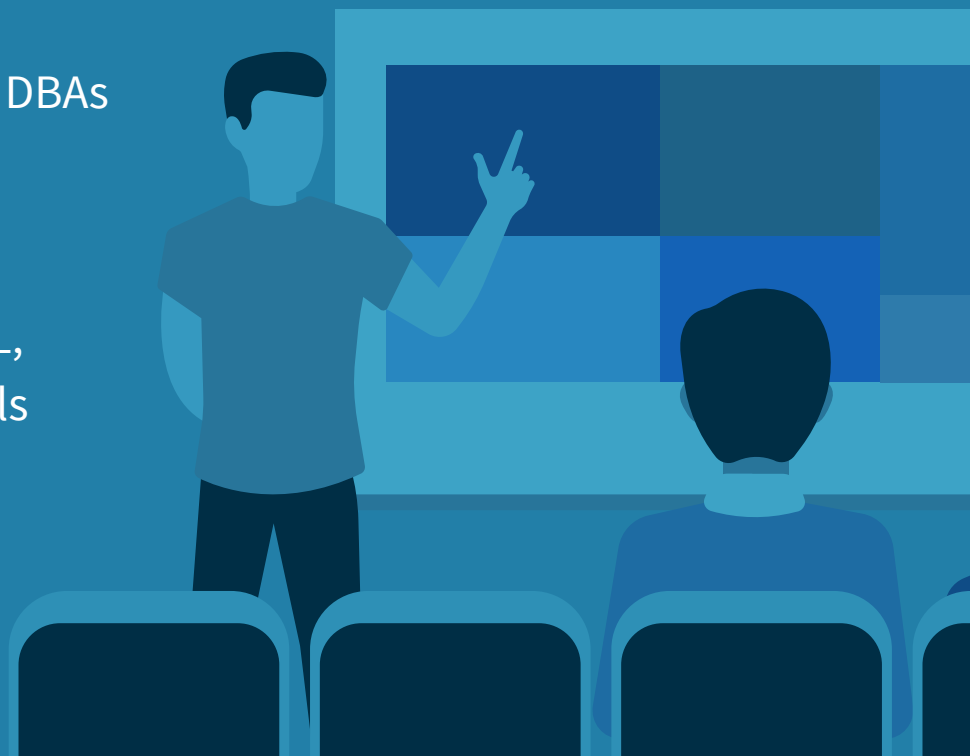
Developers, Report Authors, DBAs

Previous Knowledge

Previous experience with SQL, and Oracle's data and BI tools

Duration

3 Days



5280 1st Street
Alpharetta, GA 30009
214.630.0081
training@us-analytics.com

Course Agenda

Day 1

A Brief Tour of Oracle R

- History
- Examples

Types in R and their analogs in Oracle

- Numerics, characters, logicals, factors, and dates
- Lab — Types in R and oracle

Functions & the apply family

- Writing Functions
- Lapply, sapply, and mclapply
- Lab — Functions & the apply family

The R Environment

- Rstudio
- Lab — Types in R and oracle

Conditions and Loops

- If — Else If — Else
- Vectorized conditionals — ifelse
- While loops & For loops
- Lab — Conditions & Loops

Day 2

Acquire Data

- From flat files (readr)
- From Oracle (ROracle)
- From APIs (twitter)

Transform Data

- Single-table transformations
- Multi-table transformations
- Dplyr vs. sql — syntax showdown
- Lab — transform data

Tidy Data

- Theory of tidy data
- Tidy data and star schemas
- The tidyR package & its functions
- Lab — Acquire & tidy data

Visualize Data

- The Grammar of Graphics
- Ggplot2 — Static graphics with R
- Lab — Visualize Data

Course Agenda

Day 3

Linear Models

- Introduction to linear models
- Pitfalls of linear models
- Outliners and the stories they tell
- Lab — Linear Models

The Predictive Modeling Pipeline

- Feature selection & feature engineering
- Preprocessing data for models
- Training & tuning models
- Cross validation
- Interpreting the results
- Lab — The predictive modeling pipeline



5280 1st Street
Alpharetta, GA 30009
214.630.0081
training@us-analytics.com