

Course Outline

Oracle 10G Reports Developer: Build Reports

Duration: 5 days (30 hours)

Learning Objectives:

- Create reports by accessing data from various data sources
- Add dynamic data to an existing HTML page
- Use report parameters and customize a runtime parameter form
- Enhance reports using graphs and PL/SQL trigger code
- Maximize report performance using OracleAS Reports Services and tune reports
- Publish a report on the Web and build reports to run in various languages
- Manage report templates, create mailing labels and letters
- Identify the main components in a report document and how they are related
- Identify the differences between Web and paper reports
- Identify standard report design styles and run existing reports to various output destinations
- Create and modify basic tabular reports and high quality Web reports
- Create other report styles such as break reports and matrix reports

Target Audience:

- Reports Developer
- Database Administrators
- Technical Consultant

Prerequisites:

- Suggested Prerequisites: XML or equivalent familiarity with basic XML

Topics Covered:

- Introducing to Oracle Reports Developer
 - Business Intelligence
 - Enterprise Reporting
 - Oracle Reports Developer
 - Oracle Database 10g
 - Oracle Developer Suite 10g
 - Oracle Application Server 10g
 - OracleAS Reports Services
 - OracleAS Reports Services Architecture for the Web
- Designing and Running Reports
 - Understanding User Requirements
 - Designing Reports

- Tabular
- Master-Detail
- Master with Two Details
- Matrix
- Retrieving and Sharing Data
- Running a Report
- Working in Oracle Reports Developer
 - Reports Developer Executables
 - Invoking Reports Builder
 - Reports Builder Modules
 - Report Data and Layout
 - Reports Builder Components
 - Object Navigator
 - Report-Level Objects
 - Data Model Objects
- Creating a Paper Report
 - Report Module Components
 - Building a Paper Report
 - Viewing the Paper Report Output
 - Saving the Report Definition
 - Reentering the Wizard
 - Creating Break Reports
 - Break Report Labels
 - Creating Mailing Labels and Letters
- Enhancing a Basic Paper Report
 - What Is the Paper Design?
 - The Paper Design Window
 - Modifying a Report
 - Aligning Columns
 - Setting a Format Mask
 - Manipulating Objects
 - Modifying Visual Attributes
 - Applying Conditional Formatting
- Managing Report Templates
 - Using Report Templates
 - Modifying a Template
 - Customizing the Template Margin
 - Customizing the Template Body
 - Adding Web Links to a Template for Report HTML Output
 - Predefining Your Own Templates
 - Adding a Template Preview Image
- Creating a Web Report
 - What Is JSP Technology?
 - JSP Advantages
 - Simple JSP Example
 - Building a Web Report

- Using the Report Wizard
- Report Editor: Web Source View
- JSP Tags
- Web Source Example
- Enhancing Reports using the Data Model: Queries and Groups
 - The Data Model Objects
 - Modifying Properties of a Query
 - Applying Changes
 - Changing the Group Structure
 - Group Hierarchy
 - Ordering Data in a Group
 - Query Modifications
 - Filtering Data in a Group
- Enhancing Reports using the Data Model: Data Sources
 - Data Model Columns
 - Maintaining Data Source Columns
 - Producing File Content Output
 - Creating a Column
 - Creating Summary Columns
 - Displaying Subtotals
 - Displaying Percentages
 - Creating a Formula Column
- Enhancing Reports using the Paper Layout
 - Viewing the Paper Layout
 - Designing Multipanel Reports
 - Printing Multipanel Reports
 - Different Objects in the Paper Layout
 - The Paper Layout Layers
 - Report Processing
 - Paper Layout Tools
 - Report Bursting
- Controlling the Paper Layout: Common Properties
 - Modifying Paper Layout Object Properties
 - Common Layout Properties
 - Sizing Objects
 - Anchors
 - Layout Object Relationships
 - Pagination Icons in the Paper Layout
 - Controlling Print Frequency
 - Using Format Triggers
- Controlling the Paper Layout: Specific Properties
 - Properties of a Repeating Frame
 - Specifying Print Direction
 - Controlling the Number of Records per Page
 - Controlling Spacing Between Records
 - Minimum Widow Records

- System Variables
- Valid Source Columns
- Displaying File Contents
- Web Reporting
 - Comparing Static and Dynamic Reporting
 - Adding Dynamic Content
 - Creating a Report Block
 - Invoking the Report Block Wizard
 - Examining the Web Source Code
 - `rw:foreach` Tag
 - `rw:field` Tag
 - Customizing Reports JSPs
- Extending Functionality using XML
 - Why Use XML Report Definitions?
 - Creating XML Report Definitions
 - Partial Report Definitions: Format Modification Example
 - Partial Report Definitions: Format Exception Example
 - Full Report Definition: Data Model Modification Example
 - Running XML Report Definitions
 - Debugging XML Report Definitions
- Creating and using Report Parameters
 - Creating User Parameters
 - Referencing Parameters in a Report Query
 - Using Bind References
 - Using Lexical References
 - Hints and Tips When Referencing Parameters
 - Creating a List of Values
 - Referencing System Parameters
 - Building a Paper Parameter Form
- Embedding a Graph in a Report
 - Adding a Graph to a Paper Report
 - Adding a Graph to a Web Report
 - Selecting the Graph Type
 - Selecting the Graph Data
 - Adding Options to the Graph
 - Customizing Web Graphs
 - The `rw:graph` Tag
 - Customizing Graphs Using the Graph.XML File
- Enhancing Matrix Reports
 - The Matrix Data Model
 - The Matrix Paper Layout
 - Creating Matrix Summaries
 - Creating the Matrix Manually
 - The Matrix with Group Data Model
 - The Matrix with Group Layout
 - Building a Nested Matrix

- Nested Matrix Paper Layout
- Coding PL/SQL Triggers
 - Types of Triggers in Reports
 - Trigger Code
 - Using Report Triggers
 - Using Data Model Triggers: PL/SQL Group Filter
 - Using Data Model Triggers: Parameter Validation
 - Using Layout Triggers
 - Using Format Triggers
 - Event-Based Reporting
- Extending Functionality using the SRW Package
 - Contents of the SRW Package
 - Outputting Messages
 - Executing a Nested Report
 - Restricting Data
 - Initializing Fields
 - Creating a Table of Contents
 - Performing DDL Statements
 - Setting Format Attributes
- Maximizing Performance using OracleAS Reports Services
 - Running Reports Using OracleAS Reports Services
 - Report Request Methods
 - Oracle Application Server Components
 - Enabling Single Sign-On Access
 - Running the Web Layout: JSP Run-time Architecture
 - Running the Paper Layout: Servlet Run-time Architecture
 - Running a Paper Report on the Web
 - Queue Manager
- Building Reports: Efficiency Guidelines
 - Tuning Reports
 - Performance Measurement
 - Non SQL Data Sources
 - Investigating the Data Model
 - Investigating the Paper Layout
 - Running the Report
 - Different Development and Run-Time Environments
 - Developing Reports to Run in Different GUIs