Oracle Comms Policy Implement and Design Ed 3

Oracle Communications

DURATION	MODULES	COURSE CODE
2 Days	**10 Lectures**	**—**

Course Overview

This course provides policy designers with foundational skills required to implement policy design plans in Oracle Communication Policy Management systems. Given well designed descriptions of use cases, students will select policy elements, verify semantics, and test and verify policy rules that satisfy business needs.

What You Will Learn

Plan To Use Policies

- Course Purpose
- Course Topics
- Course Objectives
- Course Logistics
- Oracle University Reporting
- Introduction to Plan Policies
- Lesson Objectives
- What Is Policy Management?
- What Is the Role of Policies in Supporting Policy Management?
- Three Areas Where Policy Has Proven to Be Strongest
- Policy Management Functions
- Policy Management Supports Many Access Methods
- Policy Targets
- Policy Decision Making
- Examples of Applications
- Service Examples: Peak/Off-Peak Plans
- Service Examples: Tiered plans
- Service Examples: Quota Plans
- Service Examples: Personalized Services
- Service Examples: Advanced Services
- PCC Components According to 3GPP

- Summary
- Quiz
- Practice

Plan Business Needs, Use Cases, and Policies

- Objectives
- Policy Design Process
- Business Needs
- Use Case
- Structure of a Policy
- Policies Make a Use Case
- Apply Use Cases to Network Conditions
- Apply Use Cases to Business Opportunities
- Summary
- Quiz
- Practice

Implement Conditions

- Objectives
- Introduction to Configure
- Basic Components of a Policy
- Condition Information Sources
- Conditions Groups
- Examples of Conditions Groups – Request and Application
- Examples of Conditions Groups – Network Device Identity and Network Device
- Usage
- Examples of Conditions Groups – Mobility and User
- Examples of Conditions Groups – User State and Time of Day
- Creating a New Policy
- Creating a New Policy – Start Step
- Creating a New Policy – Conditions
- Summary
- Quiz
- Practice 3

Implement Actions

- Objectives
- Actions
- Examples of Mandatory Actions
- Optional Actions and Parameters
- Accessibility: Graphic Descriptions
- Variables – Example
- Summary
- Quiz

- Practice 4

Implement Reference Data

- Objectives
- Quota Profiles
- Profile Plans
- Varieties of Quota Profile Plans
- Examples of Varieties of Plans
- How Quota Profile Plans Are Used
- Quota Plans for Subscribers and Pools
- Pool Quota Profile Subscriber Record
- Pool Quota
- Quota Conventions
- Referencing Quota Conventions
- Rollovers
- Top-ups
- Supporting Quota Use Cases – Types of Use Cases
- Policies for Quota Use Cases
- Summary
- Quiz
- Practice

Implement Structured Policies

- Objectives
- Tools for Structuring Policies
- Boolean Operations for Conditions
- Traditional Boolean and Postfix Notation
- Boolean Operators in Policies
- Nested Policies
- Introduction to Nested Policies
- Efficiency Through Child Policies
- An Example Using Nested Policies
- Summary
- Quiz
- Practice

Implement Policy Tables

- Objectives
- When Can Policy Tables Help?
- What Are Policy Tables?
- Elements of a Policy Table – Rows and Columns
- Example of a Use Case Without Policy Tables
- Example of a Policy Table
- Example of a Policy That Uses a Policy Table

- Create a Policy Table
- Name the Table
- Add a Key Field
- Review the Key Column
- Create One or More Indexed Columns
- Add Rows and Populate Fields
- Use a Policy Table
- Start the Policy Wizard
- Select the Table and Name an Alias
- Reference a Key Field
- Use the Indexed Fields
- The Final Policy
- Summary
- Quiz
- Practice

Determine Test Data

- Objectives
- Introduction to Test
- Policy Management Data to Verify
- Network Elements – Far End Peer Configuration
- Network Elements – Near End Peer Configuration
- MRA and MPE Configuration
- Reference Data
- Subscriber Record Data
- Interactions with Other Policies – Policy Order
- Interactions with Other Policies – Parameter Values
- Pre-check Logs
- Test Messages
- MRA/MPE IP Addresses
- Diameter Identities in the Tester
- Network Element Settings
- Connection Message
- Essential AVPs
- Test Policy AVPs
- Summary
- Quiz
- Practice

Verify Performance

- Objectives
- Designing the Test
- Choose the Test Target Policy
- Choose Components
- Choose Points to Analyse

- Check Dependencies
- Check Network Element Configuration
- Check MRA Match to Tester
- Check MPE
- Identify Environment Requirements
- Required Reference Data is Available
- Configuration of Reference Data is Correct – Quota
- Configuration of Reference Data is Correct – Traffic Profile
- Analyze Diameter Connection
- Reset Counters
- Send CER
- Verify CER Was Received at MRA
- Verify Session Was Recorded
- Analyze Performance
- Send and Check CCR
- Check MRA Binding
- Check CCR to MPE
- Check UDR Message from MPE to UDR
- Check UDA Message from UDR to MPE
- Check UDR Data in MPE Session Buffer
- Check That the Policy Was Evaluated
- Check That the Policy Evaluated as True
- Analyze Traffic Profiles – Expected
- Analyze Traffic Profiles
- Summary
- Quiz
- Practice

Post View

- Objectives
- Focus Policy Development
- Purpose of Analysis
- Evaluate Business Need
- Verify Use Cases Support the Business Need
- Verify That Policies Support the Use Case
- Analyze Policy Environment
- Purpose of Analysis
- Identify Message Requirements
- Identify and Verify Reference Data Requirements
- Identify and Verify Subscriber Record Requirements
- Identify and Verify Event and Internal Information Requirements
- Run the Test
- The Goal of the Test
- Create and Verify Connection
- Trace the Processing of the Message
- MRA Server

- UDR System
- MPE Server
- Policy Results and Statistics
- Summary
- Quiz
- Practice
- Course Summary
- End of Course
- Final Questions?
- End of Course Evaluation