Billing and Revenue Management: Technical Overview LVC

Oracle Communications

DURATION	MODULES	COURSE CODE
1 Days	8 Lectures	—

Course Overview

Oracle Communications Billing and Revenue Management (BRM) is a modern monetization solution that provides real time converged charging for any business model. Use BRM to configure product offerings, create customer accounts, charge for service usage, collect and analyze revenue, and manage customer relationships. In this course you will learn about the BRM data model, the different configuration files, the data flow for configuration, pricing and usage data and an overview of the BRM APIs.

What You Will Learn

Module 1: Architecture Overview

- Oracle Communications Billing and Revenue Management Functional Architecture
- Oracle Communications Billing and Revenue Management Technical Architecture
- BRM Server Overview
- Pricing Design Center (PDC)
- Billing Care (BC)
- Business Operations Center (BOC)
- Elastic Charging Engine (ECE)
- APIs Overview
- Offline Mediation Controller (OCOMC)
- Convergent Charging Controller (OC3C)

Module 2: BRM Overview

- Technical Architecture
- BRM Four-Tier Architecture
- BRM Processes Overview
- Application Tier
- Business Process Tier
- Business Process Tier Processes
- FM Functionality
- CM Processes – Dynamic Spawning

- Object Tier
- Object Tier Processes
- Object Tier Process Functionality
- Translation Manager Functionality
- Data Tier
- Database Functionality
- Real-time Pipeline Architecture
- Summary

Module 3: BRM Server Configuration

- Locating Configuration Files
- Configuring BRM Processes
- Syntax of pin.conf File Entries
- CM pin.conf File and Examples
- Syntax of Infranet.properties File Entries
- Example for eai_js
- DM pin.conf File and Example
- Starting and Stopping BRM Processes
- BRM Cloud Native Deployment Overview

Module 4: BRM Data Model

- Storable Class Definitions
- Naming Conventions
- Extensions
- Storable Objects
- Flist Concepts
- Flists and BRM Functions
- Flists and Storable Objects
- Flist Specification Syntax
- Permissions for New Storable Classes
- Field Names and Data Types
- Simple and Complex Data Types
- Timestamps
- Object ID (POID) Data Type
- Partial POIDs
- PIN_FLDT_SUBSTRUCT Data Type
- Example: Substruct Data Type
- PIN_FLDT_ARRAY Data Type
- Example: Array Data Type
- Substruct vs Array
- Example: Buffer Data Type
- Flist-to-Database Mapping Rules
- Database Storage Model
- Creating Class Definitions with pin_deploy
- Reading Storable Objects with testnap

Module 5: Elastic Charging Engine (ECE)

- Technical Architecture
- Detailed Architecture
- Coherence Overview
- Terminology, Cluster Node, Distributed Cache
- Distributed Cache Operations – get() / put()
- Node, Machine, Site, and Rack Safety
- Elastic Charging Server Components
- Kafka
- BRM Gateway
- EM Gateway
- Pricing Updater
- Customer Updater
- Persistence Options
- Rated Event Formatter
- Subscriber Caching
- Selective Loading of Subscribers
- Partial Loading of Subscribers
- Cache Management
- Initial Data Loading
- Data Reloading
- Lazy Loading – On-Demand

Module 6: Data Flow

- ECE Initial Start-up Flow
- ECE Subsequent Start-up Flow
- Integration Points Overview
- Pricing Objects
- Configuration Objects
- Mastered in PDC
- Mastered in BRM
- Subscriber Flow at Run-Time
- PDC to ECE
- PDC to BRM
- BRM to PDC

Module 7: Rating

- Rating Engines Overview
- Subscription Rating
- Entry Points
- Initial or Update Request
- Terminate Request
- Top-up Flow
- Persistence

- Persistence Database
- Summary

Module 8: Pricing Overview

- PDC Pricing Model
- Balance Elements
- Service-Event-RUM Map
- About Usage Metrics (RUMs)
- Configuring a RUM
- Creating Charge Offers
- Adding a New Charge
- Creating a Simple Charge
- Extended Pricing Features
- Multiple RUMs
- Discount Offers
- Creating Discounts
- Applying Multiple Discounts – Examples
- Bundles and Packages
- Bundle Dependencies
- Package Definition
- Adding Services and Bundles
- Managing Balances, Credit Limits, and Thresholds
- Package List