

# Billing and Revenue Management: Functional Overview LVC

Oracle Communications

DURATION

**1 Days**

MODULES

**10 Lectures**

COURSE CODE

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## 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 features and functions of the component products which comprise the overall BRM charging solution, including Billing and Revenue Management (BRM), Elastic Charge Engine (ECE), Pricing Design Center (PDC), Offline Mediation Controller (OCOMC) and Convergent Charging Controller (OC3C). You will also hear how the BRM solution now supports a cloud native deployment option, supporting Kubernetes-orchestrated containerized components to facilitate continuous integration/continuous delivery and DevOps practices

## What You Will Learn

### Module 1: Introduction to Oracle Communications BRM 12

- Safe Harbor Statement
- Program Agenda
- Challenges and Opportunities for Service Providers in the 5G Era
- Oracle Communications Billing and Revenue Management 12 Overview
- Cloud Native Deployment Concepts
- Multi-Service Cloud Native Architecture
- Simpler Updates and Configuration Changes
- Efficient Scaling
- CI/CD Workflow Integration for Automated Deployment
- Integration with EFK (Elasticsearch, Fluentd, Kibana)
- Logs in Kibana Dashboard
- BRM Cloud Native Deployment Overview

### Module 2: Communications Core Network Integration

- Cloud Native, Network-Grade Diameter Gateway
- 4G Diameter Integration

- Cloud Native HTTP/2 Gateway
- Example 5G Call Flow - Charging and Policy Interaction
- SS7 IN Charging Control
- Offline Mediation

### Module 3: Pricing Design Center (PDC)

- TM Forum Certified Pricing Design
- Pricing Model Overview
- Navigating PDC
- Typical PDC Tasks and "Used By" Search
- Support for Dynamic Bandwidth Based Offers

### Module 4: Elastic Charging Engine (ECE)

- ECE Monitoring Enablers
- Grafana ECE Dashboard
- Latency and Throughput Graphs
- ECE Deployment Architectures
- Cache Persistence Configurations
- Secured Deployments with Oracle Wallet
- Disaster Recovery Architectures
- Active Warm-Standby
- Active Hot-Standby
- Segmented Active-Active
- Multi-Service Cloud Native Architecture - ECE PODs

### Module 5: Diameter & RADIUS Gateways

- Diameter Gateway
- Architecture
- High Availability
- Overload Protection
- Degraded Mode Operation
- Notifications
- RADIUS Gateway
- HTTP/2 Gateway
- 5G Charging Function
- High Availability Architecture
- TM Forum APIs
- 4G and 5G Co-existence
- 5GC CHF Services - Converged Charging and Policy Integration
- 5GC CHF Registration with Network Repository Function
- 5G Call Flows - Charging and Policy Functions

### Module 6: Monitoring & Operational Insights

- ECE Monitoring Overview

- Latency, Memory, and CPU Usage Graphs
- From Slice to Commerce Channel

## Module 7: BRM Functional Overview

- Pricing Design Center
- Pricing Profiles
- Authorization and Authentication
- SyncPDC Process
- Service and Event Definitions for ECE
- Ratable Usage Metrics (RUMs) Configuration
- Balance Elements and Zone Model
- Special Day Calendar
- Item Type Selectors and Policy Specification
- Changesets
- Validating Changesets
- Changeset Lifecycle
- Creating Charge Offers
- Simple and Extended Pricing
- Multi-RUM
- Discount Offers
- Quantity Ranges, Triggers, Filters
- Bundles and Packages
- Manage Balances and Package Views
- Charge Selectors
- USC Selector, Generic Selector, Custom Rule
- Profile Specifications
- Dynamic Pricing Overview

## Module 8: Offline Mediation Controller (OCOMC)

- Safe Harbor Statement
- Architecture Overview
- Cartridges and Extensibility
- Intuitive GUI and Ease of Configuration
- Rapid Customization
- Data Storage and Reporting Framework
- Billing and Reporting in Parallel
- Mediation with Service Convergence
- RADIUS and IMS Charging Gateway
- Record Editor and Security
- Integration with ECE and BRM Suspense Manager
- Mediation Shell for Automation
- Reliability, Scalability, and Performance
- Distributed Mediation Architecture
- High Availability with OS Cluster
- Cloud Native Deployment Option

- CI/CD Based Deployment
- Integration with EFK
- Logs in Kibana Dashboard
- OCOMC PODs Overview

## Module 9: Convergent Charging Controller (OC3C)

- Safe Harbor Statement
- Introduction and Program Agenda
- OC3C Architecture and Deployment
- Core Functionalities Overview
- High Availability Considerations
- Integration with BRM and ECE
- Monitoring and Operational Insights

## Module 10: Cloud Native Deployment

- Safe Harbor Statement
- Program Agenda
- Docker, Kubernetes, and Helm Overview
- BRM Cloud Native Deployment
- Deployment Architecture
- High-Level Architecture
- Multi-Service Cloud Native Architecture
- Common Services
- Deployment Advantages
- Simpler Updates and Configuration Changes
- Efficient Scaling
- BRM Cloud Native Deployment Artifacts
- CI/CD Workflow Integration
- Customization of Facilities Modules (FMs) and Data Managers (DMs)
- Billing Care Extensions
- Deployment Profiles and Rolling Updates
- Interim Patch/Patchset Deployment
- Moving to Cloud Native BRM
- Deploy Billing Care with WebLogic Operator
- Configurator Job Utilities and Applications
- Integration with EFK and Kibana Dashboards
- Database Schema Upgrade from PS2 to PS3
- CNBRM Upgrade from PS2 to PS3
- Summary