Oracle Communications Billing and Revenue Management Advanced Implementation Exam Study Guide

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Objective & Audience

Objective

Help you prepare to take Oracle Billing and Revenue Management Advanced Essentials (1Z0-509) exam by providing pointers to resources that you can use in your preparation.

Targeted Audience

- Senior technical consultants
- Experienced Implementers
- Technical architects

3+ year experience deploying BRM is highly recommended
Exam Topics & Objectives

Exam Topics
The Oracle Communications Billing and Revenue Management Advanced Implementation Essentials Exam consists of eight topics:

1. BRM & Pipeline Manager Architecture
2. BRM & Pipeline Installation and Configuration
3. Billing and Finance
4. Pipeline Pricing and Rating
5. Pricing Foundation
6. Pipeline Developer
7. API Developer
8. System administration

Exam Objectives
The exam objectives are defined by learner or practitioner level of knowledge:

• **Learner-level:** questions require the candidate to recall information to determine the correct answer.

  Example: Define the term network.

• **Practitioner-level:** questions require the candidate to derive the correct answer from the application of their knowledge, which can only be attained by extensive experience with the product.

  Example: The client requests xyz functionality, would you recommend a, b or c?
For each exam topic there have been identified alternative training options that are available at Oracle. The training options are divided into three categories:

• **Boot Camps**
  The Boot Camps are designed as a "jump start" training to enhance your skills by providing role-based training on industry-leading Oracle solutions and services. The boot camps are built as concise, intensive, and real-time training to give partners a competitive advantage as they prepare to build powerful solutions for their own customer base. Partners can choose to attend these boot camps in class or in a live virtual class format to maximize the effectiveness and the time allocated to training.

• **Instructor-Led Training (delivered by Oracle University)**
  Partners can take any publicly-scheduled Oracle University courses at steep discounts. Benefit from hands on experience to gain real working skill and work toward Oracle certifications.

• **Online Training**
  Oracle Partners are entitled free access to the Oracle Knowledge Center (OUKC), a vast library of recorded product courses. New courses are regularly added to the library, providing partners with the latest information and training to master new products or to increase proficiency on the new releases.
Topic 1: BRM & Pipeline Manager Architecture

Lesson 1: BRM 4-Tier architecture

Objectives

- Describe the processes in the Application Tier, Business Process Tier, and Object Tier

Level: Learner

Training Options

- **OU Courses**
  - Billing and Revenue Management Functional Overview 7.5

- **Online Training**
  - Oracle Communications Billing and Revenue Management Implementation Specialist

- **Online documentation**
  - Oracle Communications Billing and Revenue Management Concepts
Sample Questions:

In Reference to BRM 4 Tier Architecture as shown in the given figure, where does Facilities Modules fit in?

a) Application Tier  
b) Connection Management Tier*  
c) Data Management Tier  
d) Data Tier

Identify correct Discount pipeline?

A)  

B)  

C)  

D)
Lesson 1: BRM Installation

Objectives
• Install BRM

Level
Practitioner

Lesson 2: Pipeline Manager Installation

Objectives
• Install the Pipeline Manager
• Use Account Synchronization DM to send account data to Pipeline Manager

Level
Practitioner
Practitioner

Training Options

• Online Documentation
  – Oracle Communications Billing and Revenue Management Installation Guide

Sample Questions:

Identify the environment variable which is used to set the directory where the Pipeline Manager software is installed?

A. BRM_HOME
B. Pipeline_Manager_HOME
C. INTEGRATE_HOME *
D. PM_HOME
Lesson 1: Billing Process Overview
Objectives
• Describe flexible cycles
• Describe BRM billing scripts

Lesson 2: Bill Cycle Management
Objectives
• Configure Account Groups and Customer Segments
• Analyze Bill Run Management and the billing process

Lesson 3: Trial Billing
Objectives
• Describe the functionality of trial billing and trial invoice

Lesson 4: Billing Options and Process
Objectives
• Configure Bill Suppression
• Describe Concurrent Billing and Batch Rating

Lesson 5: A/R Account Activities
Objectives
• Configure BRM general ledger (G/L)
• Differentiate the three different BRM tax procedures
Lesson 6: BRM Payment Process

Objectives
- Describe payment incentives and payment fees
- Describe how payments enter and exit payment suspense

Lesson 7: BRM Collections

Objectives
- Configure a Collections Scenario (define roles of Collections Managers and Agents)

Lesson 8: Revenue Analysis

Objectives
- Collect audit data during billing and pipeline rating
- Use Suspense Management Center to analyze suspended data

Lesson 9: Making Corrections

Objectives
- Analyze the payment reversal process
Training Options

- **OU Courses**
  - Billing and Revenue Management Functional Overview 7.5
  - Billing and Revenue Management Billing and Finance 7.5

- **Online documentation**
  - Configuring and Running Billing
  - Designing and Generating Invoices
  - Collecting General Ledger Data
  - Calculating Taxes
  - Managing Accounts Receivable
  - Configuring and Collecting Payments
  - Collections Manager

Sample Questions:

At which level of *adjustment*, the amount of the adjustment is subtracted from the due of the bill item?

A. Subscription service level  
B. A/R and individual account level  
C. Item level*  
D. Event Level

Which is the order of rerating for the 'Usage Event type'?

A. Generated according to the time that the product is purchased  
B. Chronological, based on event time*  
C. Generated according to the time that the product is canceled  
D. Generated according to the time that the associated billing cycle starts
Topic 4: Pipeline Pricing and Rating

Lesson 1: Implementing Pipeline Rating
Objectives
• Explain promotions and supplementary services

Level
Learner

Lesson 2: Processing and Rating Delayed Events
Objectives
• Use EdrTrace to track EDR processing and to verify rating results

Level
Practitioner

Lesson 3: Roaming Scenario
Objectives
• Explain how BRM implements roaming
• Set up rating for a roaming scenario using the BRM Pricing Center

Level
Learner
Practitioner

Training Options

• OU Courses
  – Billing and Revenue Management Functional Overview 7.5
  – Billing and Revenue Management Pipeline Pricing and Rating 7.5

• Online Training
  – Oracle Communications Billing and Revenue Management Implementation Specialist

• Online documentation
  – Configuring Pipeline Rating and Discounting
Topic 5: Pricing Foundation

Lesson 1: Setting Up Free Usage
Objectives
- Configure rollovers
- Describe folds and how they are calculated and applied
Level
- Practitioner
- Learner

Lesson 2: Product Dependencies
Objectives
- Describe the features of product dependencies
- Configure product dependencies
- Implement Exclusions between Discounts and between Plans and Discounts
Level
- Learner
- Practitioner

Lesson 3: Flexible Cycles
Objectives
- Describe the concept of flexible cycles in BRM
Level
- Learner

Training Options
- OU Courses
  - Billing and Revenue Management Pricing Foundation 7.5
- Online Training
  - Oracle Communications Billing and Revenue Management Implementation Specialist
- Online documentation
  - Configuring Pipeline Rating and Discounting

Sample Questions:

Identify the product type which has a one-time purchase charge and no recurring charges?
A) Item *
B) Single service
C) Single rate plan
D) System

What is true about creating a new product?
A) Purchase levels applies to item products
B) Purchase levels don’t apply to item products *
C) A product cannot have both a monthly cycle forward event and a monthly cycle arrears event.
D) A product can have both a monthly cycle forward event and a monthly cycle arrears event.
Lesson 1: EDR – Input and Output

Objectives

Create an Input Stream description file for a given set of EDRs

Level
Practitioner

Lesson 2: Customizing Pipeline Using Function modules, IScript and Irule

Objectives

- Describe the following language elements of IScript: data types, operators, functions, control structures
- Insert IScript modules into Pipeline and use basic IScript functions to write a new IScript program
- Explain advanced functions: database connection functions, hash and array functions, EDR block and edrNumDatablocks function
- Define iRules & and methods for storing iRules
- Demonstrate the iRule implementation of a specific scenario and store data arguments to a description file

Level
Learner Practitioner

Lesson 3: Custom ERAs (Extended rating attributes)

Objectives

- Explain how ERAs are used

Level
Learner

Training Options

- **OU Courses**
  - Billing and Revenue Management Pipeline Developer 7.5

- **Online Documentation**
  - Developer’s Guide

Sample Questions:

Identify two preprocessing function modules used by EDR?

A) FCT_PresRating
B) FCT_UsageClassMap
C) FCT_Discard*
D) FCT_DuplicateCheck*

Using functional EDR, How will you have multiple phone numbers owned by one customer to be charged for on one bill?

A) FCT_PresRating
B) FCT_UsageClassMap
C) FCT_CliMapping*
D) FCT_DuplicateCheck

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### Lesson 1: BRM OpCodes

**Objectives**
- Determine input and output Flist for a specified Opcode

**Level**
- Practitioner

### Lesson 2: PIN and PCM Macros + Error handling

**Objectives**
- Explain the BRM programming flow
- Differentiate between the PCM and PIN Libraries
- Use the PIN macros to construct Flists and to manage memory for POIDs and Flists
- Understand the Syntax and use PCM Macros within the BRM program flow
- Use PIN Macros to manage the error buffer and pinlog files.
  - Parse the contents of BRM pinlog files

**Level**
- Learner
- Practitioner

### Lesson 3: Customizing the Registration Process (Modifying Policy OpCodes)

**Objectives**
- Describe the opcodes used in the customer registration process
- Describe the ways of changing the field validation rules

**Level**
- Learner

### Lesson 4: Extending Event Creation

**Objectives**
- Customize the event creation process by modifying sample act utility and generate events
- Enable and verify event notification

**Level**
- Practitioner

### Lesson 5: Custom Facility Modules and OpCodes

**Objectives**
- Create a Custom FM and Opcode
- Describe the opcode-to-function mapping

**Level**
- Practitioner
- Learner
Lesson 6: Creating a Custom Data Manager

Objectives

- Describe BRM’s DM API design
- Create a Custom DM

Lesson 7: Configurable Items

Objectives

- Set up and create configurable bill items
- Setup and display custom events on invoices

Training Options

- OU Courses
  - Billing and Revenue Management API Developer 7.5

- Online Documentation
  - Developer's Guide
  - Developer's Reference

Sample Questions:

Which of the following is not a BRM data type?

A) PIN_FLDT_DECIMAL
B) PIN_DD_TO_SCHEMA*
C) PIN_FLDT_ARRAY
D) PIN_FLDT_ERRBUF
Topic 8: System administration

Lesson 1: Monitor and Maintain the BRM System
Objectives
- Debug errors in the BRM System
- Identify common BRM problems, the causes and solutions

Level: Practitioner

Lesson 2: Optimizing BRM Performance
Objectives
- Improve Connection Manager, Data Manager and Billing performance
- Configure and use the CMMP
- Describe BRM’s Performance Manager

Level: Practitioner
Learner

Lesson 3: Partitioning and Purging BRM Data
Objectives
- Partition event tables for purging BRM data
- Purge BRM data

Level: Practitioner

Lesson 4: Upgrading BRM
Objectives
- Use best practices for upgrade planning and implementation

Level: Practitioner

Training Options
- OU Courses
  - Billing and Revenue Management System Administration 7.5

Sample Questions:
When upgrading BRM, if your system includes the Synchronization Queue Data Manager, then you must recreate your Oracle AQ database. After recreating it you need to

A) Restart DM_AQ services*
B) Update BRM_home/sys/dm_aq/aq_queue_names with the recreated Oracle AQ database queue name*
C) Run the load_pin_notify utility
D) Run the uninstaller.bin program

During your upgrade process, you start getting error message “PIN_ERR_STREAM_EOF”. What does this mean?

A) The application unexpectedly lost the connection to the BRM database*
B) The server might have stopped working.*
C) The application encountered an error while writing a logfile
D) BRM couldn’t create an object because of EOF limit.
Exam Registration

• How to register for the exam?
You can register for all Oracle certification exams with Pearson VUE. Before a registration can be submitted, a Pearson VUE profile must be created using your Company ID. Your Company ID can be obtained by contacting your local Oracle Partner Business Center or by signing in to your OPN account. Your Company ID is located in the section on the right under "Company information".

Please follow these instructions in order to properly set-up your Pearson VUE account for the first time.

• Have you completed an Oracle Certification Exam in the past?
Due to systems enhancements, each partner who has completed an Oracle Certification Exam will need to update their Pearson VUE profile in order to receive credit and for those records to appear in the OPN Competency Center.

• How to get full recognition as Certified Implementation Specialist?
To get full recognition as a Certified Implementation Specialist you need to:
A. Update your Pearson VUE profile with your Company ID
B. Activate your Certview Account

Please follow these instructions and your records will be properly recorded.
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