

Oracle Utilities: ODM v2.2.0.2 Advanced Implementation Ed 2

Oracle Utilities

DURATION

4 Days

MODULES

14 Lectures

COURSE CODE

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Course Overview

This Oracle Utilities: ODM Advanced Implementation training is designed to educate technical implementers. Explore maintenance objects, business objects, zones, and business processes related to Operational Device Management (ODM) functional areas.

What You Will Learn

Overview

- The Five-Minute Overview
- Prerequisites
- The Product Stack Depends on What Is Installed
- This Class Describes All Products
- Format of This Class
- Practice: 1-1: ODM Login

User Interface Standards

- Anatomy of All Pages
- Portals Versus Fixed Pages
- Portals Have Zones
- Portal Configuration
- Portals May Appear on Portal Preferences
- If Users Can Override a Portal's Default Configuration
- Dictating Portal Preferences
- The Dashboard Is a Portal Too
- Zone Patterns
- Layout of Explorer Zones
- Broadcasting
- Work Lists
- Working the List
- Starting Business Processes

- Practice 2-1
- Map Zones
- Section and Element Help
- Explorer Zones Are Configured, Not Programmed
- Configuring Map Zones
- Special Zones: Feature Configuration
- You've Seen Several BPA Scripts
- BPA Scripts Are Everywhere
- BPA Scripts Reflect an Organization
- Scripts Are Configured
- Menu Bar
- Menu Items
- Context Menus
- Practice 2-2
- Review Questions

Metadata and Framework Review

- Agenda
- 4 Tiers and Supported Platforms
- Location of Business Rules
- A Quick Word About the UI Tier
- Entity Relationship Diagramming (ERD)
- Information Is Stored in Tables; Each Box in an ERD Is a Table
- Color-Coding Highlights the "Subsystem" Where the Table's Rows Are Typically Maintained
- We Use ERDs to Highlight Important Business Relationships
- Relationships Between Entities Are Highlighted with Arrows Between Boxes
- Dashed Lines Represent Columns on Entities with Predefined "Lookup"
- Values
- Table and Field Metadata
- Application Viewer Is Your Primary Documentation of Tables and Fields
- Application Viewer Is Generated from Metadata
- Practice 3-1
- No Recurring Groups
- Primary Keys
- Prime and Foreign Keys in the Application Viewer
- Language Tables
- XML Extensions
- MO Definition
- Why MOs?
- MO, Table, Field Metadata
- MOs Are Also in the App Viewer
- MOs Encapsulate Core Business Rules
- Maintenance Objects Versus Business Objects
- A Maintenance Object Has Fields; a Business Object Has Elements
- Every BO Element Must Physically Reside Somewhere in Its MO's Tables

- BOs Encapsulate Core Business Rules
- BOs and SOA
- All Business Objects Can Be Extended
- Product Parent BO Versus Customer Child BO
- Extended BO References Parent BO
- Extension Simplified by UI Rendered Schemas
- UI Hint Namespace
- Schema Designer
- UI Hints Are Powerful
- Practice 3-2
- Extension Made Easy by XML Area
- Format of Data when Mapped to XML
- Lookup Requires Field
- Lookup Creation
- Many MOs Support Characteristics
- There Are Four Types of Char Types
- Predefined Char Types
- Ad Hoc Characteristic Types
- Foreign Key Reference Characteristic Types
- File Location Characteristic Types
- A Char Type Can Be Used on Multiple Entities
- Owning Metadata
- Owner Flag ERD
- Owner Flag Is Ubiquitous
- The System Stamps Owner Flag on New Metadata Rows
- Don't Even Think About It
- Database and Operating System Security
- Application Services Are Secured
- Application Services Have Valid Actions
- Field-Level Security
- Field-Level Security: Overview
- Security Rights Are Cached
- Audit Trails
- Localization Support
- Isolating Implementation-Specific Business Rules
- Review Questions

Common Extension Patterns

- Business Object Extension Is a Design Intension
- Parent Business Objects Remain Untouched
- Product Parent BO Versus Customer Child BO
- BO Extension Is a Design Intension
- BO Data Element Mapping Choices
- Generic Child Table ERD
- Common Child Tables

- Generic Identifier Child Table ERD
- When to Map to an Identifier
- How to Map to an Identifier
- Practice 4-1
- Generic Characteristic Child Table ERD
- When to Map to a Characteristic
- How to Map to a Characteristic
- Practice 4-2
- Generic XML ERD
- When to Map to XML
- How to Map to XML
- Practice 4-3
- Generic Attachment Child Table ERD
- When to Map to an Attachment
- How to Map to an Attachment
- Practice 4-4
- What to Map To?
- When Not to Map to XML
- Extension Helper Documentation
- Review Questions

Locations

- Locations Describe the Asset Life Cycle
- Asset Location is Where Assets are Installed
- Location Definition
- Single Node Table, Three Different Objects
- Asset Location, Out of Service Location, and Organization
- Why a Single Node Table
- The Asset's Location Relation
- Loc/Org Type, Node, and BO
- Asset Location, Out of Service Location, and Organization
- Detailed Location / Organization Type ERD
- Basic Node Configuration
- More Node Configuration
- Practice 5-1
- Contact Type, Contact, and BO
- Location Contacts ERD
- Practice 5-2
- Asset Location, Out of Service Location, and Organization
- Detailed Location ERD
- Parent Location
- Peer Location
- More Location Information
- Location and Organization BOs
- Practice 5-3
- Review Questions

Specifications

- Asset Definition
- The Relationship of the Four Asset Objects
- Specification ERD
- Specification Business Objects
- Child Specification Business Objects
- Three Types of Specification
- Practice 6-1
- Practice 6-2

Asset

- Asset Definition
- The Relationship of the Four Asset Objects
- Asset Type, Asset, and BO
- Asset Type ERD
- More Asset Type Configuration
- More Component Type Configuration
- Practice 7-1
- Asset ERD
- An Asset Must Have Location
- Asset Disposition
- Why Extendable Lookup
- Asset Lifecycle and Asset Disposition
- Another Class Of Asset
- Component Disposition
- Look At Asset Disposition Again
- Asset Disposition
- Notes on Asset
- Asset Condition
- Asset MO Rules
- Overview
- Status Transition Map and Scripts
- Tracked Asset Business Object Lifecycle
- In/Out of Service Asset Business Object Lifecycle
- Tracked Component Business Object Lifecycle
- In/Out of Service Component Asset Business Object Lifecycle
- Practice 7-2
- New State May Require New Disposition
- Existing Asset Dispositions

Service History

- Asset Definition
- Relationship of the Four Asset Objects
- The Purpose of Service History

- Service History Belongs to Asset
- Service History Types Defined for Asset Types
- Practice 8-1

Asset Replication

- Purpose of Asset Replication
- Replication Activity Objects
- Replication Mechanism
- Fixing Problems
- Practice 9-1
- Asset Disposition Update
- Asset Disposition Update: Technical
- Practice 9-2
- Extending Replication Functionality
- Extending Mass Update Functionality

Activity Generator

- Purpose of an Activity Generator
- An Activity Generator Has Many Activities
- Activity Generator
- How to “Work” an Activity Generator
- Activity Generator BO Lifecycle (W1)
- Practice 10-1
- Generation Capability
- Location-Only Generation Capability
- Location and Asset Generation Capability
- Location and Asset (Component) Generation Capability
- Asset List Generation Capability
- Asset (Component) List Generation Capability
- Generation Capability
- Generation Criteria
- Selection Criteria Defined on Business Object
- Selection Criteria Defined as Business Object XML
- Activity Generator Location Generator BO Criteria
- Activity Generator Asset Generator BO
- Activity Generator Component Generator BO
- Activity Generator Asset List BO Criteria
- Activity Generator Component List BO
- Practice 10-2
- Criteria Extension
- Generation Driving Tables
- Generation Criteria
- Criteria Extension
- Commit Every n Activities
- Practice 10-3

- Activity Generation Events
- Service Schedules
- How to Create a Template Activity Generator
- Practice 10-4

Configuration Report

- Overview
- Functionality: Overview
- What Is a Configuration?
- What Is Configuration Class?
- “Communicate To” Location-To-Location Relationship
- Why Location-To-Location Relationship
- Valid “Communicate To” Location Types
- Base Configuration Classes
- Configuration ERD
- Configuration Business Objects
- Configuration Lifecycle
- Practice 11-1
- Configuration Report: Overview
- Configuration Report Example: Criteria
- Configuration Report Example: Result
- Report Criteria
- Configuration Report ERD
- Configuration Report Business Objects
- Assets/Components in Report Criteria and Results
- Configuration Report Life Cycle
- Enter Algorithm For ‘Generate Report’
- Back To Configuration Class
- Configuration Class Is Extendable Lookup
- Enter Algorithm Parameters
- Practice 11-2
- Configuration Criteria Activity Generator: Overview
- Activity Generator Refresher
- A New Way to Create Activity Generator
- Configuration Criteria Activity Generator Business Objects
- Asset Detail Data Area
- Activity Generator Lifecycle Refresher
- Enter Algorithm for ‘Generate Activities’
- Target Asset
- Target Asset Lookup Naming Convention
- Additional Activity Generator Criteria
- Practice 11-3
- Extension
- Support New Configuration Class
- Support New Configuration Class – Cont

- Quiz
- Quiz: Answer

Activity

- Purpose of an Activity
- Activities Manage Diverse Business
- ODM Activity Goals: Automate Updates
- Three Components of an Activity
- Detailed Activity ERD
- Activity Type and Completion Event Type ERD
- Detailed Activity Type ERD
- The Parts of the Completion Event Type
- Completion Event Execution Information ERD
- Practice 12-1
- Activity Type Business Objects
- Activity Business Objects
- Key Ad-hoc Activity Lifecycle Events
- Detailed Ad Hoc Activity BO Lifecycle
- Key Local Activity Lifecycle Events
- Detailed Local Activity BO Lifecycle
- Key Outbound Activity Lifecycle Events
- Outbound Activity BO Lifecycle
- Practice 12-2
- Completion Event Type BO and the Completion Event BO
- Completion Event Type BOs
- Practice 12-3
- Completion Event ERD and Life Cycle
- Completion Event Business
- Completion Event Business Objects
- How Does It Work? Payload
- Many Assets, Single Completion Event
- An Editing Problem
- Editing the Payload
- Completion Event Subclass
- Practice 12-4

Activity Messaging

- Outbound Activity Business
- Sending an Outbound Activity
- Outbound Message Configuration
- Outbound Message Business Objects
- Outbound Information
- Practice 13-1
- Inbound Communication
- Inbound Communication ERD

- Inbound Communication Business Objects
- Inbound Communication Life Cycle
- Practice 13-2
- Raw Message Becomes Completion Event List
- Practice 13-3
- Three Different Business Problems to Solve
- Creating an Outbound Activity
- Creating and Completing an Activity
- Completing an Outbound Activity
- Practice 13-4

Integration

- Entities Being Synchronized
- PKs Are Different in Each System: Target System Keeps Source System ID in the Identifier Table
- Outbound and Inbound Sync BOs Lie Between
- "Day 1 Conversion" Versus "Ongoing Sync"
- Generic Batch Job to Create Outbound Syncs for Initial Sync
- Data Synchronization Architecture
- Outbound Sync MO
- Outbound Sync Schema
- Outbound Sync BO Life Cycle
- How the Outbound Sync BO Is Determined
- The Inbound Sync Seeder BO (W1-SyncRequestSeeder) Life Cycle
- Inbound Sync MO
- Inbound Sync Schema
- Day 1 Conversion Versus Ongoing Sync BOs
- Day 1 Conversion (Initial Sync) Life Cycle
- Key Transformation Is Sophisticated
- Batch Job Execution Sequence
- Ongoing Sync Request Life Cycle
- Overview
- Asset-Node Ongoing Sync Request Life Cycle
- Install Events Outbound Sync in MDM
- Background: Faceplates
- Background: Removals
- Background: Office Exchanges
- Installation Events Are Added / Updated for Asset Location Changes (and for things ODM does not care about)
- Background: Retroactive Changes