Oracle Utilities: CC&B v2.9.0.0 Functionality for Implementers Ed 1

Oracle Utilities

DURATION	MODULES	COURSE CODE
10 Days	**9 Lectures**	**—**

Course Overview

Oracle Utilities: CC&B v2.9.0.0 Functionality for Implementers Ed 1 - 99900540724

What You Will Learn

Overview

- Learning Objectives
- Functional Areas
- Customer Information
- Sales & Marketing
- Device Management
- Field Work
- Meter Reading
- Billing
- Statements
- Rates
- Payments
- Adjustments
- Credit & Collection
- Budgets
- Deposits
- SA Relationships
- Service Credits
- Contract Management
- Loans
- Conservation Programs
- Framework Utilities
- Integration Tools
- Summary

- The Format of This Class
- A Few Ancillary Topics Before We Start
- The Documentation
- Caveat
- Review
- Summary

User Interface Standards and Common Processes

- Learning Objectives
- Anatomy of All Pages
- The Anatomy of All Pages
- Redwood Look and Feel
- User Dashboard Controls
- Domain Name Support
- Unified Search
- Portals
- Portal Overview
- Portals Versus Fixed Pages
- Portals Have Zones
- Portal Configuration
- Portals May Appear on Portal Preferences
- Portal Preferences
- Dictating Portal Preferences
- The Dashboard Is a Portal Too
- Portal Page
- Maintenance Portal
- Search Portal
- Help Portal
- Zones
- Zone Patterns
- Explorer Zone Layout
- Explorer Zones May Have End-User Filters
- Map Zones
- Special-Purpose Zones
- Special Feature Zone – Tree
- Section and Element Help
- Standard User Interface Functions
- Menu and Navigation
- Menu and Admin
- Context Menus – Quick View
- Context Menus – Search and Portal Pages
- User Profile Definitions
- Scrolls (Go To Button)
- Standard Actions
- Logs

- Searches – The Fine Points
- Saved Searches
- Bookmarks
- Go To Button
- Work List
- Broadcasting
- Explorer Zone – Dragging and Dropping
- Scroll Bars with Dynamic Height
- Accordion Windows
- Pagination
- BPA Scripts
- The BPA Menu
- BPA Scripts Are Everywhere
- BPA Scripts Reflect An Organization’s Business Practices
- Batch Processing
- Batch Processes
- Batch Concepts
- Batch Submission Concepts
- Types of Processing
- Online Submission
- Tracking Batch Processes
- Plug-in Driven Batch
- To Do Processing
- To Do Entry
- To Do Summary
- To Do List
- To Do Summary Zone
- To Do Type and To Do Role
- Message
- Special Message Handling
- Entry Priority
- How Entries Are Created
- Batch Process
- The Creator Supplies Other Attributes
- Filling In The Blanks
- Related To Do Entries
- To Do Entry Lifecycle
- Forwarding
- Manual Completion
- Batch Processes Can Complete Entries
- To Do Management
- To Do Search
- Work Distribution
- Pick and Choose
- Supervisor To Do Summary
- Supervisor Assignment

- Supervisor User Summary
- On Demand Assignment
- On Demand – How It Works
- The Benefits
- Multi-Use Pages
- Introducing a New Type of Entry Involves the Following Steps
- Security
- Database and Operating System Security
- Application Services
- Application Services and Access Modes
- Linking an Application Service to a User Group
- Field-Level Security
- Security Rights Are Cached
- Summary
- 2b Control Central and Customer 360
- Learning Objectives 2b-2
- Practice 2b-1: Log On to Customer Care and Billing 2b-3
- Control Central 2b-4
- Find a Customer and Premise 2b-6
- The Dashboard 2b-7
- Dashboard + Account Information = Complete View of the Customer 2b-8
- Practice 2b-2: Find a Customer and Portal/Zone Introduction 2b-9
- Practice 2b-3: Use Page and Portal Maintenance Dialogs 2b-10
- Customer 360 Portal 2b-11
- Customer 360 Portal Zones 2b-13
- Customer 360 – Program Enrollment Zone 2b-14
- Customer 360 Portal Zones: Customer Insights Zone 2b-15
- Customer 360 Portal Zones: Customer Activity History 2b-16
- Customer 360 Portal Zones: Financial Details 2b-17
- Review Questions 2b-20
- Summary 2b-21

Metadata and Framework Overview

- Learning Objectives
- Agenda
- Architecture Overview
- Oracle Utilities Application Framework: Overview
- Browser User Interface (UI) Activities
- Web Server Activities
- Web Application Server Breakdown
- Application Server Activities
- Database Server Activities
- Entity Relationship Diagramming Standards
- 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
- The PowerPoints Use Color-Coding to Group Tables into Logical Subsystems
- 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
- Common Data Design Patterns
- No Recurring Groups
- Prime Keys
- Very Little (Almost No) Redundant Data
- Language Tables
- XML Extensions
- Maintenance Objects
- Maintenance Object: Definition
- Why Maintenance Objects?
- Maintenance Object, Table, and Field Metadata
- Maintenance Objects
- Maintenance Objects Encapsulate Core Business Rules
- Maintenance Objects Versus Business Objects
- Maintenance Object Has Fields, Business Object Has Elements
- Business Object Elements Must Physically Reside Somewhere
- in its Maintenance Object's Tables
- Business Objects Encapsulate Core Business Rules
- Business Objects and Service-Oriented Architecture (SOA)
- Older Maintenance Objects = Object Maintenance Newer
- Maintenance Objects = Portal Maintenance
- Plugin Component = Algorithm = Subroutine
- Plugin = Algorithm
- An Algorithm Example
- Use a Base Package Plugin or Write Your Own
- Creating a New Plugin
- Some Objects Are Preconfigured
- Practice 3-1: Examine an Algorithm
- Characteristic = User-Defined Field
- User-Defined Fields Extend…
- Many Maintenance Objects Support Characteristics
- There Are Four Types of Characteristic Types
- Predefined Characteristic Types
- Ad Hoc Characteristic Types
- Foreign Key (FK) Reference Characteristic Types
- File Location Characteristic Types
- Characteristic Values Are Effective-Dated on Some Entities
- A Characteristic Type Can be Used on Multiple Entities
- Practice 3-2: Examine a Char Type
- Data Ownership
- Owning Metadata

- Owner Flag ERD
- Owner Flag Is Ubiquitous
- The System Stamps Owner Flag on New Metadata Rows
- Don’t Even Think About It
- Practice 3-3: Data Ownership
- Web Services
- Web Services Architecture
- Web Services
- More Web Services Information
- Security
- Database and Operating System Security
- Application Services Are Secured
- Application Services Have Valid Actions
- Field-Level Security
- Security Rights Are Cached
- Practice 3-4: Application Security
- Odd and Ends
- Plugin Driven Batch
- Audit Trails
- Localization Support
- Isolating Implementation-Specific Business Rules
- The Conversion Tool
- Review Questions
- Summary

Batch Processing

- Learning Objectives
- Batch Processes
- Batch Processes Are Documented In the Application Viewer
- What You Can Count On
- Errors
- Parallel Processing
- Optimal Number of Threads
- Parameters
- Plugin Driven Batch
- Batch Processing ERD
- Practice 4-1: View Results of a Batch Run
- Executing Batch Jobs
- Separate Application Servers
- Submitting Ad Hoc Requests
- Practice – Instructor-Led
- Dependencies Between Batch Jobs
- Batch Process Dependencies
- Sample and Submit
- Classic Batch Job Versus Sample and Submit

- Step 1: Identify the Batch Job
- Step 2: Enter the Criteria
- Step 3 (optional): See the Sample
- The Request
- How To
- Some Batch Jobs Can Be Thought of as Plugins
- Some Processes Can Be Viewed as Plugins
- Review Questions
- Summary

Maintaining Customer Information

- Learning Objectives
- Customer Information
- Customer = Person and Account
- Practice 5-1: Find a Customer on Control Central
- Person Concepts
- Important Person Concepts
- Person ERD
- Person Contacts
- Practice 5-2: Add a Person Contact
- Account Concepts
- Important Account Concepts
- Account ERD
- Practice 5-3: Add a Person and Account from Control Central
- Customer Contacts
- Customer Contact: Overview
- Customer Contact ERD
- Practice 5-4: Create a Customer Contact
- Customer Contacts Trigger To-Do Entries
- Customer Contacts Trigger Letters
- Letter Images
- Premise and Service Point
- Important Premise Concepts
- Premise ERD
- Important Service Point Concepts
- Types of Service Points
- Metered Service Points
- Badged Item-Based Service Points
- Unbadged Item-Based Service Points
- Two Ways to Handle Area Lights: Badged or Unbadged
- Service Point ERD
- Practice 5-5: View a Premise and Add a Premise
- Service Agreements
- Review: Bills Are Sent to Customers
- A Bill Contains Charges for Services

- An Account Must Have a Service Agreement for Every Service That Is Billed
- Some SAs Are Linked to Premises via SPs
- Some SAs Are Not Linked to Premises
- Service Agreement ERD
- Account Security
- Account Security: Overview
- Persons Can Also Be Secured
- Premises Can Also Be Secured
- Data Access Groups and Roles
- An Account’s Access Group
- More Account Security Information
- The Flexibility of the V
- The V Diagram
- Two SAs, Each Linked to a Single SP
- Two SAs Linked to the Same SP
- One SA linked to Two SPs (To Consolidate Consumption Charges)
- Typical Family Moves
- Non-Utility Customer
- Customers Share One Line, Usage Goes Through One Meter on the Way to Another Customer
- Corporate Pays for Usage, Operating Units Pay for Transport, and Metering
- SA Type and SP Type Control the Valid Relationships
- Starting Service
- Most SAs Are Created Via Start Service
- Start Options Control Default Values
- Practice 5-6: Start Service at Your Premise
- Activating Pending Start SAs
- Service Agreement States
- Activating Pending Start SAs
- Important Service-Oriented Concepts: Still to Come
- Alerts
- The Alert Zone
- The Control Central Alert Plugin Spot
- Jurisdictions
- Jurisdictional Rules
- Division = Jurisdiction
- Other Features
- Replicators
- Alternate Names and Addresses
- Address Validation
- Configuring Address Validation
- Address Validation BPA
- Introducing Custom Address Validation Logic
- Account Management
- Account Management Portal – Account Update
- Supported Account Updates
- Supported Service Agreement Updates

- Notification Preferences
- Notification Preferences: Key Relationships
- Notification Preferences: Management Process Overview – Enabling Customer Choice
- Push Versus Subscription Notification Types There are two Notification Types: Push and Subscription.
- Push-Based Notifications
- Account – Account Portal: Push Communications Preferences Zone
- Subscription-Based Notifications
- Account – Account Portal: Subscription Communication Preferences Zone
- Setting Notification Preferences
- Account – Persons: Notification Preferences
- Account – Account Portal: Maintaining Contact Details
- Master Configuration
- Practice 5-7: Investigate a Notification Preference
- Review Questions
- Summary

Maintaining Meters and Items

- Learning Objectives
- Checkpoint
- Review: Service Points Define Services at a Premise
- Review: There are Three Types of Service Points
- Review: Metered Service Points
- A Meter’s Registers Measure How Much Was Used
- Every Register Has Many Attributes
- A Register’s Attributes Can Change Over Time
- Meter ERD
- There Are Many Ways to Identify a Meter
- Service Types Must Be in Sync ERD
- Practice 6-1: Add Meters Using the Meter Replicator
- Meter Reading – Part 1
- A Configuration’s Registers Are Read
- Subtractive Versus Consumptive Registers
- Meter Read ERD
- Meter Installation
- Important SP and Meter Installation Concepts
- Meter Installation ERD
- Practice 6-2: Install the New Meters at Your Premise
- Meter Exchange
- How to Exchange the Meter at an SP
- Item Management
- Remember That There Are Two Types of Item-Oriented SPs
- This Discussion Concerns Badged Items
- When to Use a Badged Item
- Badged Item ERD
- There Are Two Ways to Identify a Badged Item

- Item Replicator
- Item Installation
- Important SP and Item Installation Concepts
- Item Installation ERD
- Important Item Exchange Concepts
- Unbadged Items Are Alternatives
- Meter and Item Search
- Meter/Item Search Page
- Practice 6-3: Find Your Meters Using Meter/Item Search
- Review Questions
- Summary
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- Learning Objectives 7a-3
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Meter Reading

- Learning Objectives
- There are Many Sources of Meter Reads
- Meter Read ERD
- Meter Read Remarks Can Trigger Other Events
- Trends and Estimated Consumption
- Consumption Estimation Is in a Plugin
- Important Estimation Concepts
- How Does MR EST TREND Work?
- An Example: Estimating Consumption for February
- An Example: Estimating Non-Peak Consumption
- An Example: Estimating Peak Consumption
- Trend ERD
- Ensuring a Statistically Significant Sample
- Trend Is Updated in Batch
- Read Type and High or Low
- High and Low Limits Are Calculated in a Plugin
- High and Low Check Plugin
- High and Low Factor ERD
- Failing High and Low, and Use on Bill
- Reviewing Readings That Failed High and Low Checks
- Practice 9-1: Add a Meter Read
- Review Questions
- Summary

Route Management, Meter Read Upload, and Field Activity Upload

- Learning Objectives
- Important Service Cycle Concepts
- SP Type Controls the Number of Cycles on a Service Point
- Single Service Cycle SPs
- Single Service Cycle ERD
- SPs Also Need a Route and Sequence
- Renumbering Service Points in a Route
- Transferring a Route
- Practice 10-1: Examine the Service Cycle and Route on Your SPs
- Downloading Meter Read Routes
- Downloading Meter Read Requests

- When Cycle and Route Frequency Differ
- The Three Download Batch Processes
- Process MSR: Create MR Schedule Routes
- Process MDS: Create Download Staging
- Process MDL: Create Download Flat File
- The Source of the Batch Control
- Summary: Meter Read Download ERD
- The Service Cycle Schedule Is Also Used by Billing
- Practice 10-2: Examine Schedule Read Dates
- Meter-Read Upload Process
- The Upload Processes
- Process X: Populate Upload Staging
- Process MUP1: Populate Meter Config
- Process MUP2: Create Meter Reads
- The MR Upload Has Other Uses
- Purging Upload Records
- Practice 10-3: Examine a Meter Read Upload Record
- Another Way to Add Reads
- Demo Database Contains a Sample Transaction
- Find a Scheduled Date for a Route Zone
- See Service Points in a Route for a Scheduled Selection Date Zone
- See Register Reads in a Route for a Scheduled Selection Date Zone
- Multi-Cycle Service Points
- Multiple Service Cycles
- Waste Collection Background Information
- Multi-Service Cycle ERD
- Waste Collection Scenario 1
- Waste Collection Scenario 2
- The Three Download Batch Processes
- Service Route Download ERD
- Field Order Upload and Completion
- Field Order Completion Details Can Be Uploaded
- Step Types Supported by the Batch Completion Process
- The Upload Processes
- Process X: Populate Upload Staging
- Processes MUP1 and MUP2: Create Reads
- Process FACOMPL: Complete Field Activities
- Process FACOMPL: Complete Field Activities – Errors
- Purging Upload Records
- Uploading “Generic” Step Types
- Review Questions
- Summary

Financial Transactions

- Learning Objectives
- FTs Determine an Account’s Balance

- Source of FTs
- Bill Segments Create FTs
- Payment Segments Create FTs
- Adjustments Create FTs
- Practice 13-1: Explore Mark Brazil’s Financial Transactions
- Current Balance Versus Payoff Balance
- Every FT Contains Current Amt and Payoff Amt
- Practice 13-2: Financial Balances
- Examples When Current Balance Does Not Equal Payoff Balance
- The General Ledger (GL)
- GL Details
- Examples of FTs Without GL Details
- Debt Age
- How Old is the Debt?
- Specific Days are Shown on Several Transactions
- Arrears Date
- Arrears Date is Typically Populated by Billing
- Practice 13-3: Aged Debt
- FT Creation Algorithms
- FT Algorithms Control how FTs are Created
- FT Status
- Important Peripheral Effects
- FTs Affect More Than Balances
- The GL Interface
- Updating the General Ledger
- The GL Download Processes
- Process GLASSIGN
- Process GLS: Prepare FTs for Download
- Process GLDL: Create Download Flat File
- Practice 13-4: View a Financial Transaction
- Balance Control
- Overview of Balance Control
- The Balance Control Batch Processes
- Process BCGNEW: Create a New Balance Control Group
- Process BCASSIGN: Assign New FTs a Balance Control Group
- Process BCGSNAP: Insert Balance Control Members and Check
- Financial Integrity
- Review Questions
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