Oracle Utilities: C2M v2.9.0.0 Functionality for Implementers Ed 1 LVC

Oracle Utilities

DURATION	MODULES	COURSE CODE
10 Days	**13 Lectures**	**—**

Course Overview

This Customer To Meter: Functionality for Implementers training provides in-depth information about the customer management product’s configuration. You'll examine each C2M subsystem and discuss the configuration options and how they affect the system’s operation.

What You Will Learn

Oracle Utilities Customer to Meter Overview

- Learning Objectives
- Solution Overview
- Customer to Meter: Application Components
- Functional Areas
- Preview of Course Topics
- The Format of This Course
- Before We Start
- The Documentation
- Additional Resources
- Caveats
- 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

Control Central, 360° Search, and Entity Relationship Diagrams

- Learning Objectives
- Practice 3-1: Log On to Customer to Meter
- Control Central
- Find a Customer and Premise
- The Dashboard
- Dashboard + Account Information = Complete View of the Customer
- Practice 3-2: Use Control Central, Portals, and Zones
- Customer 360 Portal
- Customer 360 Portal Zones
- Customer 360 – Program Enrollment Zone
- Customer 360 Portal Zones: Customer Insights Zone
- Customer 360 Portal Zones: Customer Activity History
- Customer 360 Portal Zones: Financial Details
- 360°Search and View
- 360°Search
- 360°View Has Separate Portals For Each Object
- Practice 3-3: Use the 360 Search and View a Device
- Practice 3-4: Use Page and Portal Maintenance Dialogs
- Entity Relationship Diagramming Standards
- Entity Relationship Diagramming (ERD)
- ERDs Represent Tables and Relationships
- Color-Coding Highlights Subsystem Where Table’s Rows Are Typically Maintained or Type of Data
- Color-Coding Used to Group Tables into Logical Subsystems
- ERDs Highlight Important Business Relationships
- Relationships Between Entities Are Highlighted
- Dashed Lines Represent Columns on Entities with Predefined “Lookup”
- Values
- Review Questions
- Summary

Customer Information – Part 1

- Learning Objectives
- Customer Information Overview
- Customer Information
- The ‘V’
- Customer = Person and Account
- Practice 4-1: Find a Customer in Control Central
- Person Concepts
- Important Person Concepts
- Person ERD
- Practice 4-2: Add a Person and Account from Control Central
- Person Contacts
- Practice 4-3: Add a Person Contact

- Account Concepts
- Important Account Concepts
- Account ERD
- Customer Contacts
- Customer Contact: Overview
- Customer Contact ERD
- Customer Contacts Trigger To-Do Entries
- Customer Contacts Trigger Letters
- Letter Images
- Practice 4-4: Add a Customer Contact
- Premise and Service Point
- The ‘V’
- Important Premise Concepts
- Premise ERD
- Practice 4-5: View and Add a Premise
- Service Point Basics
- Devices Are Installed at Service Points
- Service Points Have Installation Events
- Installation Events Reference Device Configurations
- Device Exchanges
- Device Exchanges and AMI Transitions
- Service Point Type
- Service Points Behave Like Other Master Data Objects
- Service Point Type – Service Point Category
- Practice 4-6: View a Service Point Type and Add a Service Point
- Service Points and Meters
- Metered Service Points
- Service Points and Items
- Single Item Service Points
- Multi-Item Service Points
- Service Point Hierarchy
- Measurement Cycles
- Measurement Cycles and Manually Read Meters
- A Measurement Cycle Has Routes and a Schedule
- Measurement Cycle Batch Processes
- Process D1-CMCS: Create Pending Measurement Cycle Schedule Routes
- Process D1-CSPSR: Create Pending SP Measurement Cycle
- Schedule Routes
- Process D1-PSPSR: Process Pending SP / Measurement Cycle Schedule
- Route Records
- Measurement Cycle Route Management
- Route Management
- Route Management: Searching for Service Points
- Route Management: Assigning Sequence Numbers to Service Points
- and Renumbering
- Route Management: Renumbering Service Points

- Route Management Transferring Service Points Between Routes
- Deregulated Markets
- Different Relationship Types In Different Markets
- Network Locations
- Network Locations Overview
- Facilities
- Network Locations
- Switching Network Locations
- Service Points and Facilities
- Account Security
- Account Security: Overview
- Securing Persons
- Securing Premises and Service Points
- Data Access Groups and Roles
- An Account’s Access Group
- More Account Security Information
- Starting Service
- The ‘V’
- Accounts and Service Agreements
- Creating Service Agreements Through Start Service
- Start Options Control Default Values
- Practice 4-7: Start Service at Your Premise
- Important Service-Oriented Concepts Still to Come
- Review Questions
- Summary

Assets

- Learning Objectives
- Asset Locations
- Overview: What Are Locations?
- Organizations
- Organization Attributes
- Out of Service Locations
- Assets and Out of Service Locations
- Out of Service Location Attributes
- Organizations and Out of Service Locations
- Asset Locations
- Asset Location: Electric Residential Service Point
- Asset Location: Non-Service Point Locations
- Asset Locations and Service Points
- Assets and Asset Locations: Installed vs. Attached
- Asset and Asset Locations
- Assets
- What Are Assets?
- About Specifications

- Asset Specifications
- Specification Attributes
- Peer Specifications
- Manufacturers
- About Assets
- Assets and Devices
- Asset Attributes
- Admin Data: Asset Types
- Assets and Devices
- Asset and Device Configuration Synchronization
- Asset and Device Configuration Synchronization – Items
- Practice 5-1: View an Asset
- Practice 5-2: Create an Asset
- Components
- About Components
- Sample Component: Gas Meter Faceplate
- Component Attributes
- Admin Data: Asset Type
- Asset Disposition
- About Asset Disposition
- Asset Disposition and Location
- Asset Disposition and Lifecycle Status
- Asset Disposition: Examples
- Asset Disposition and Install Events
- Shipping Memo
- Shipping Memo Category
- Service History
- About Service History
- Creating Service History Records
- Service History Attributes
- Admin Data: Service History Types
- Example: Asset Inspections
- Service History Questionnaire
- Asset Activities
- Overview: Asset Activities
- About Activities
- Types of Activities
- Activity Attributes
- Admin Data: Activity Type
- About Completion Events
- Completion Event Attributes
- Admin Data: Completion Event Type
- Activities and Completion Events: Ad-Hoc and Local/Scheduled Activities
- Outbound Activities
- Outbound Messages
- Admin Data: Outbound Message Types

- Inbound Communications
- Inbound Communication Attributes
- Inbound Communication Attributes: Completion Events
- Admin Data: Communication Type
- Outbound Activity Processing Overview
- Asset Activity Generators
- Overview: What are Activity Generators
- Activity Generators
- Types of Activity Generators
- Activity Generators
- Activity Generators and Activities: Ad-Hoc and Local or Scheduled Activities
- Activity Generator Attributes
- Activity Generator Templates
- Asset Receipt Inspection
- Overview
- Overview: What is Asset Receipt Inspection
- Asset Replication
- Asset Replication Activity Attributes
- Replicating Assets
- Asset Inspection
- Mass Asset Disposition Update
- Using Mass Asset Disposition Update
- Configuration Report
- Configuration Report – Overview
- Configuration Report – Functionality Overview
- What Is a Configuration
- What Is a Configuration Class
- “Communicate To” Location-To-Location Relationship
- Valid “Communicate To” Location Types
- Base Configuration Classes
- Configuration Report Overview
- Configuration Report Example: Criteria
- Configuration Report Example: Result
- Configuration Report Example: Notes
- Configuration Criteria Activity Generator Overview
- Activity Generator Refresher
- A New Way To Create an Activity Generator
- Additional Activity Generator Criteria
- Summary

Devices and Measuring Components

- Learning Objectives
- Device and Measuring Component Basics
- Device and Measuring Components
- Device versus Measuring Component Attributes

- What A Measuring Component Measures
- Scalar versus Interval Measuring Components
- Practice 6-1: View Existing Device and Measuring Components
- Changing Measuring Component Attributes over Time
- Reconfiguring Devices
- Measuring Components And Measurements
- Measuring Components and Measurements
- Subtractive versus Consumptive Measuring Components
- Interval Measuring Components
- Scalar Measuring Components
- Interval and Scalar Measuring Components 0n a Single Device
- A Note About Initial Measurements (IMDs)
- Admin versus Master Data
- Master Data versus Admin Data
- Practice 6-2: View Device and Measuring Component Admin Data
- Device-Oriented Tables and Maintenance Objects
- Types Of Measuring Components
- Setting Up Admin Data
- Practice 6-3: Create a “Manual Read” Traditional Scalar Meter
- Items
- Items Overview
- Items Overview: Badged vs. Unbadged Items
- Device – Item
- Admin Data – Item Types
- Device Type – Item Type
- Device Type Service Quantity
- Item (Device) Configurations and Configuration Types
- Measuring Component Level Communication Modules
- Measuring Component Level Communication Modules – Example
- Review Questions
- Summary

Field Work and Service Order Management

- Learning Objectives
- Overview
- Service Order Management
- Field Activities
- Field Activities – Overview
- Field Task Types
- Example Field Task Type
- Limit Field Work by Service Point Type
- How do Field Activities Work?
- How Do Field Activities Work?
- Example Field Activity
- Field Activity Processing

- Manually Completing Field Activities
- Pass-Through Field Activities
- Field Activity Communications
- Communications and Communication Types
- Outbound Communications
- Outbound Communications and External Applications
- Outbound Communications and Processing Methods
- Sample Outbound Communication
- Outbound Communications: Passing Additional Data
- Inbound Communications
- Inbound Communications and Inbound Web Services
- OUAF Components
- OUAF Components Outbound – External Systems
- OUAF Components Outbound – Message Senders
- OUAF Components Outbound – Outbound Message Types
- OUAF Components Inbound – Inbound Web Services
- Completion Events
- Sample Completion Event
- Service Order
- What is a Service Order?
- Purpose of a Service Order (Orchestration)
- Understanding Service Orders
- Service Orders – Child Activities
- Example Service Order
- Service Order Activity Types
- Service Order Activity Processing
- Evaluating Service Point and Device
- Creating Specific Activities – Evaluating the Service Point’s State
- Creating Specific Activities – Creating the Activity
- Updating Devices
- Update Device Algorithms
- Canceling or Updating Service Order Activities
- A Closer Look: Enable Service
- Enable Service – Functional Overview
- Enable Service – “Are SP and Device Ready?” State Algorithms
- Customer Processes and Service Orders
- Field Activity Requests
- Field Activity Request Types and Service Order Activity Types
- Mapping Field Activity Request Types to Service Order Activity Types
- Practice 7-1: Examine the Field Activity Request
- Practice 7-2: View Enable Service Activity
- Practice 7-3: Create an Inbound Communication
- Practice 7-4: Re-Examine the Field Activity Request that was Created Earlier
- Appointment Booking Process Overview
- Appointment Booking Process
- Summary

- Appendix
- Enable Service: “Are SP and Device Ready?” Algorithms
- Enable Service: Customer-Device Compatibility Check – Algorithm Logic
- Enable Service: Connect SP and/or Install Device – Algorithm Logic
- Enable Service: Connect SP and/or Install Device – Algorithm Soft Parameters
- Enable Service: Connect Device – Algorithm Logic
- Enable Service: Connect Device – Algorithm Soft Parameters
- Enable Service: Check for Measurement – Algorithm Logic
- Enable Service: Update US/SP’s Override Start Date Time for Enable
- Service – Algorithm Logic

Customer Information – Part 2

- Learning Objectives
- Service Agreements
- The ‘V’
- 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 through SPs
- Some SAs Are Not Linked to Premises
- Service Agreement ERD
- Activating Pending Start Service Agreements
- Service Agreement States
- Activating Pending Start Service Agreements
- Practice 8-1: Activate Your Service Agreement
- Practice 8-2: Explore a Service Agreement
- Usage Subscriptions
- The ‘V’
- Subscribing To Usage (Bill Determinants)
- Multiple Service Points and Measuring Components
- Usage Subscription Types
- Usage Subscriptions Behave Like the Other Master Data Objects
- Practice 8-3: View Your Usage Subscriptions
- Alerts
- The Alerts Zone
- The Control Central Alert Plug-In Spot
- Jurisdictions
- Jurisdictional Rules
- Division = Jurisdiction
- Multiple Jurisdictions
- Other Features
- Account/Person Replicator
- 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
- Message-Based vs. Template-Based Notifications There are two
- notification formats:
- Push vs. Subscription Notification Types There are two notification types:
- 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
- Practice 8-4: Investigate a Notification Preference
- Master Configuration
- 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
- 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
- Review Questions
- Summary

Measurements and Scalar VEE

- Learning Objectives
- Examples: Interval vs. Scalar Measurements
- Measurement Basics
- Initial Measurements vs. Final Measurements vs. Usage
- VEE Is Discussed Later
- Interval Initial Measurements Create Final Measurements
- Pre-VEE and Post-VEE Quantities
- Measurement Conditions
- Updating Final Measurements
- Final Measurements and Derived Values

- Deriving Other Values
- Derived Values
- Scalar/Interval Measurements, Initial Measurements, and Final Measurements
- Interval versus Scalar Measuring Components
- Scalar Measuring Components
- IMDs for Subtractive Measuring Components
- Practice 9-1: Examine Scalar Measurement Data
- The Source of Initial Measurements
- IMDs Interfaced from External Systems
- IMDs Loaded Real-Time By Supplying an XML Document
- IMDs Created by Functions
- Estimations
- IMDs Created To Estimate Consumption
- Estimating for at Billing Time for Traditionally Read Scalar MCs
- Estimation Parameters for Daily Scalar MC Types
- Detecting Missing Final Measurements
- Scalar Measurements – User Interface
- Scalar Measurements – User Interface Screens
- User Interface to Create and Update Scalar Readings
- Creating and Updating Scalar Readings
- Creating Scalar Readings
- Updating Scalar Readings
- Creating Scalar Readings – Multiple Registers
- Creating and Updating Scalar Readings – New Initial Measurements
- Reader Remarks
- Meter Reader Remarks – Overview
- Meter Reader Remarks – Process Overview
- Creating Meter Reader Remarks – Scalar Initial Measurements
- Creating Meter Reader Remarks
- Creating Reader Remarks – Reader Remark Types
- Reader Remark Processing
- Reader Remark Processing – Execute
- Reader Remark Processing – Complete
- Searching and Viewing Reader Remarks
- Measurement Tables and Maintenance Objects
- Validation, Editing, and Estimation (VEE) Overview
- The VEE Process
- Critical Validations Occur Before VEE
- Reprocessing Critical Validation Failures
- Applying Multipliers
- And One Last Phase Before VEE
- A VEE Group Contains VEE Rules
- Eligibility Criteria
- Base Package VEE Rules
- VEE Rules – Decision Making Rules
- VEE Rules – Validation Rules

- VEE Rules – Estimation Rules
- Practice 9-2: Examine a VEE Group
- VEE Tables and Maintenance Objects
- Practice 9-3: Create Initial Measurement Data and Final Measurements
- Review Questions
- Summary

Integrations

- Learning Objectives
- Business Flags
- Business Flags: Analytics Insights Integration
- Business Flags
- Business Flags: Business Flag Types
- Business Flags: Standard Names
- Business Flags: Lifecycle Processing
- Business Flags: Example
- Business Flags and the 360°View
- Service Investigative Orders
- Service Investigative Orders: Overview
- Service Investigative Orders: Process Overview
- Creating Service Issue Monitors
- Creating Service Issue Monitors: Triggering Events
- Service Issue Monitor Triggering Events: Device Events and Device
- Event Type
- Service Issue Monitor Triggering Events: VEE Exceptions and
- Exception Type
- Service Issue Monitor Triggering Events: Failed Commands and
- Activity Type
- Creating Service Issue Monitors: Service Issue Monitor Types
- Service Issue Monitor Types: Evaluation Criteria
- Service Issue Monitor Types: Evaluation Criteria – Multiple Criteria
- Service Issue Monitor Types: Completion Criteria
- Service Issue Monitor Types: Discard Rules
- Service Issue Monitor Types: Service Investigative Orders
- Service Issue Monitor Processing
- Service Issue Monitor Processing: Pending
- Service Issue Monitor Processing: Analyzing Service Points
- Service Issue Monitor Processing: Processed
- Searching and Viewing Service Issue Monitors
- Service Investigative Order Activities
- Searching and Viewing Service Investigative Orders
- Configuring Service Investigative Orders
- DataConnect
- Overview
- DataConnect Overview

- DataConnect Data Extracts
- Master Data Extracts
- Billing Data Extracts
- Billing Data Extracts: Business Objects
- Billing Data Extracts: Pre-Processing Algorithms
- Consumption Extracts
- Initial Load Extracts
- Incremental and Ongoing Extracts
- Historical Correction Extracts
- Consumption Extract Requests
- Admin Data: Request Types
- Admin Data: Consumption Extract Types
- Consumption Extract Request Query Portal
- Consumption Extract Request Portal
- Consumption Extract Request Portal: Attachments
- Extract Files
- Sample Extract Files
- Data Extracts and Export
- Overview
- Types of Extracts and Exports
- Configurable Consumption Extract
- Configurable Consumption Extract – Interval Snapshot Mapping Records
- Configurable Consumption Extract – Consumption Extract Type
- Configurable Consumption Extract – Consumption Extract Requests
- Generalized Data Export
- Specialized Data Export
- Measurement Data Export
- Measurement Data– Data Export Control Records
- Measurement Data Export – Batch Controls
- Initial Measurement Data (IMD) Header Export
- IMD Header Export – Data Export Control Records
- IMD Header Export – Batch Controls
- Customer Self Service
- Rate Compare Overview
- Rate Compare: Process Overview
- Self-Service Master Configuration: Rate Compare Configuration
- Usage Adjustment Factors
- Usage Adjustment Factors: Profile Measuring Components
- Rate Comparisons and Usage Subscriptions
- Rate Comparisons and Usage Subscription Types
- Usage Transaction: Calculation Mode and Usage Adjustment Profiles
- Profile Accumulation Usage Rules
- Creating Usage Adjustment Profiles: Summary
- Rate Comparison Example: Existing Usage Transaction
- Rate Comparison Example
- Summary

- 10b C2M Consolidated Maintenance
- Customer to Meter Consolidated Maintenance and Data Mapping 10b-2
- Oracle Utilities Customer to Meter Application Components 10b-3
- Deployment Options 10b-4
- Main Interactions Between Application Components 10b-6
- Master Data Model 10b-8
- Oracle Utilities Customer to Meter Specific Functionality 10b-9
- Oracle Utilities Customer to Meter Master Configuration Summary of Internal
- Interaction Configuration 10b-10
- Multiple Merged Maintenance Types 10b-11
- Merged Maintenance: Combined User Interfaces 10b-12
- Internal Synchronization 10b-13
- External Synchronization 10b-15
- Data Audit Maintenance 10b-16
- Lookup Value Mapping 10b-17
- Transactional Data Mapping 10b-19
- Usage Requests and Usage Transactions 10b-20
- Field Activity Requests and Service Order Activities 10b-21
- Summary 10b-22

Payload Processing – Native Implementations

- Objectives
- Standard Payload Format Processing
- Native Implementations Payload Processing Overview
- Cloud Service Payload Processing Configuration
- Key Rings and Key Pairs
- Creating Key Rings and Key Pairs
- Object Storage Locations
- File Storage Configuration Extendable Lookup Values
- Head End Systems
- Adapter Extendable Lookups
- SGG Payload Processing Configuration
- Payload Processing Batch Controls
- Payload Processing Batch Control Parameters
- Itron OpenWay Payload Processing
- Upload Statistics Activities
- What are Upload Statistics Activities
- How Upload Statistics Activities are Created
- Suppressing Upload Statistics Activities
- Searching and Viewing Upload Statistics Activities
- Filtering Usage and Device Events
- Custom Payload Format Processing Using the Adapter Development Kit
- Adapter Development Kit Custom Payload Processing
- Custom Payload Processing Overview
- Oracle Utilities Meter Data Framework Processing

- Payload Parser Processing
- Payload Transformer Processing
- Payload Processing User Exit Interceptor Scripts
- Payload Processing User Exit Interceptor Scripts – Parser Script
- Payload Processing User Exit Interceptor Scripts – Transformer Script
- Configuration Steps
- Sample Implementation
- Summary

Financial Transactions

- Objectives
- Financial Transaction Basics
- Determining an Account’s Balance
- Source of Financial Transactions
- Bill Segments
- Payment Segments
- Adjustments
- Practice 12-1: Mark Brazil's Financial Transactions
- Current Balance Versus Payoff Balance
- Current Amount and Payoff Amount
- When Current Balance Does Not Equal Payoff Balance
- The General Ledger (GL)
- General Ledger Details
- Examples of Financial Transactions Without GL Details
- Debt Age
- How Old is the Debt?
- Specific Days Shown on Several Transactions
- Arrears Date
- Arrears Date Typically Populated by Billing
- Practice 12-2: Mark Brazil's Aged Debt
- Financial Transaction Creation Algorithms
- Financial Transaction Algorithms
- Financial Transaction Status
- Important Peripheral Effects
- Financial Transactions Affect More Than Balances
- Practice 12-3: View a Financial Transaction
- The GL Interface
- Updating the General Ledger
- The GL Download Processes
- Process GLASSIGN
- Process GLS: Prepare Financial Transactions for Download
- Process GLDL: Create Download Flat File
- Practice 12-3: View a Financial Transaction
- Balance Control
- Overview of Balance Control

- 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
- Summary

Usage and Billing

- Objectives
- Billing Basics
- A Bill Contains Charges for Services
- A Service Agreement for Every Service That Is Billed
- Service Agreement Types
- What’s a Bill?
- Definitions
- Bill ERD
- Bill Lifecycle
- Bill Cycles Control Batch Billing
- Batch Bill Creation Process
- Bill Cycles
- Window Billing
- Other Bill Cycle Schedule Functions
- How an Account Gets Its Bill Cycle
- If the Service Point’s Meter-Read Cycle Changes
- Practice 13-1: View Your Account's Bill Cycle
- Billing and Usage Requests
- Usage Requests
- Bill Segments are Created by Calling Plug-Ins
- Bill Segment Creation Algorithms
- SA Type Attributes
- Get Consumption is First
- Get Consumption
- Scalar Processing Details
- Interval Processing Details
- Usage Request Example
- Bill Segment Creation is Next
- Bill Segment Creation
- Rated Bill Segment ERD
- An Aside: Bill Segments are Snapshots
- Controlling Bill Segment Creation Order
- Control Processing Sequence
- Processing Sequence on Service Agreement Type
- Review: Bill Segment Financial Transactions
- Review: Bill Segments’ Financial Transactions
- Practice 13-2: Examine the SA Type Configuration for Bill Determinant-Oriented

- Service Agreements
- Usage Business Objects
- Usage ERD
- Usage Request Business Object Lifecycle
- Usage User Interface
- Usage Request Portal (Request)
- Usage Request Portal (Response)
- Usage Request Portal (Exceptions)
- Usage Request Log
- Standard Bill Segment Page
- Usage Request Query Portal
- Practice 13-3: Review the Usage Business Objects
- Practice 13-4: Create a Bill for Your Account
- Practice 13-5: View a Usage Request
- Bill Segment Start and End Dates
- Metered Service Agreements
- Time Period Derivation for Non-Metered Service
- Use a Bill Period to Derive the End Date
- Anniversary Date
- The Default – Current Business Date
- Preventing Short Bill Segments
- More to Come
- Bill Segment Lifecycle
- Freeze at Bill Completion
- Errors
- Classic Errors
- Bill Segment Errors
- Bill Segment Remarks
- Bill Errors
- Errors After The Window Closes
- Bill Completion
- Bill Lifecycle
- Bill Completion Is Intensive
- Customer Class Pre-Completion Algorithms
- Service Agreement Type Pre-Completion Algorithms
- Bill Due-Date Calculation ERD
- Late Payment Charge Computation – Levying The Charge
- Late Payment Charge – Manual Intervention
- Bill Routings
- Bill Routing ERD
- Route Method
- Four Potential Mailing Addresses ERD
- An Aside: Reprints
- Customer Class Bill-Completion Algorithms
- Service Agreement Type Bill-Completion Algorithms
- Messages Linked to a Bill or Bill Segments

- Messages with Variables
- A Bill Summarizes Financial Transactions
- All New Financial Transactions Swept onto the Bill
- Customer Class Post-Completion Algorithms
- Bill Download
- Review: Bill Routing ERD
- Postal Routing
- Marking a Routing Record with a Batch Control and Run
- Process POSTROUT: Create Download Flat File for Postal Routing
- Configurable Bill Print Extract
- Bill Print Extract Record Types
- How is the XML Extract Constructed?
- Extending the XML Extract
- Bill-Print Intercept
- Online Bill and Bill Segment Disp