Oracle Utilities Testing Accelerator

Reference Guide for Oracle Utilities Customer To Meter v2.6.0.1

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Preface

Welcome to the Oracle Utilities Testing Accelerator Reference Guide for Oracle Utilities Customer To Meter v2.6.0.1.

This guide describes the Oracle Utilities Customer To Meter v2.6.0.1 components and function libraries used to create those components in Oracle Utilities Testing Accelerator (OUTA) 6.0.0. These components are used to build test flows in Oracle Utilities Testing Accelerator Workbench.

The preface includes the following sections:

- Audience
- Related Documents
- Conventions
- Abbreviations

Audience

This guide is intended for QA/Test Engineers and Automation Developers to understand the various components and libraries available for them to automate the business test flows for Oracle Utilities Customer To Meter using Oracle Utilities Testing Accelerator (OUTA) for Oracle Utilities Customer To Meter .

Related Documents

For more information, refer to the following Oracle resources.

Release Notes

- *Oracle Utilities Testing Accelerator Release Notes*

Installation and Administration Guide

- *Oracle Utilities Testing Accelerator Installation and Administration Guide*
- *Oracle Utilities Testing Accelerator Upgrade Guide*

User and Reference Guides

- *Oracle Utilities Testing Accelerator User's Guide*
- *Oracle Utilities Testing Accelerator Licensing Information User Manual*
- *Oracle Utilities Testing Accelerator Reference Guide for Core*
- *Oracle Utilities Testing Accelerator Reference Guide for Oracle Utilities Mobile Workforce Management/ Oracle Real-Time Scheduler v2.3.0.0*
- *Oracle Utilities Testing Accelerator Reference Guide for Oracle Utilities Customer Care and Billing v2.6.0.0*
- *Oracle Utilities Testing Accelerator Reference Guide for Oracle Utilities Customer Care and Billing v2.6.0.1*
- *Oracle Utilities Testing Accelerator Reference Guide for Oracle Utilities Work and Asset Management/ Oracle Utilities Operational Device Management v2.2.0.1*
- *Oracle Utilities Testing Accelerator Reference Guide for Oracle Utilities Meter Data Management / Oracle Utilities Smart Grid Gateway v2.2.0.1*
- *Oracle Utilities Testing Accelerator Reference Guide for Oracle Utilities Meter Data Management / Oracle Utilities Smart Grid Gateway v2.2.0.2*

See also:

- Oracle Utilities Customer To Meter Documentation Library
- Oracle Utilities Customer Care and Billing Documentation Library
- Oracle Utilities Meter Data Management Library

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Meaning
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Abbreviations

The following terms are used in this document:

Term	Expanded Form
MDM	Oracle Utilities Meter Data Management
CCB	Oracle Utilities Customer Care and Billing
OFT	Oracle Functional Tester
C2M	Oracle Utilities Customer To Meter
UTA	Oracle Utilities Testing Accelerator

Chapter 1

Component Reference

This chapter lists the Oracle Utilities Customer To Meter starter components available to create flows in Oracle Utilities Testing Accelerator Workbench for testing the Oracle Utilities Customer To Meter applications. It includes the following sections:

- Overview
- Components

Overview

Oracle Utilities Testing Accelerator for Oracle Utilities Customer To Meter is a test starter pack built on top of Oracle Utilities Testing Accelerator that generates test automation scripts using Oracle Utilities Testing Accelerator Workbench.

Oracle Utilities Testing Accelerator for Oracle Utilities Customer To Meter contains out-of-the-box product-specific components used to build new test flows in Oracle Utilities Testing Accelerator Workbench to test the Customer To Meter applications. These out-of-the-box components correspond to specific business entities, such as business objects, service scripts, or business services used for interfacing with the application. Users can use these components as available or can extend them. Users can also create new components to be used to create flows. This starter pack also contains a set of function libraries that can be used for creating custom components.

For more information about using these function libraries, refer to Chapter 2: Function Library Reference.

Consider this pack to be a starter kit which can be expanded and built upon. A few sample flows are included as an example.

For more information about creating components and flows, refer to the *Oracle Utilities Testing Accelerator User's Guide*.

> **Note**: For component details related to Oracle Utilities Customer Care and Billing and Oracle Utilities Meter Data Management refer to *Oracle Utilities Testing Accelerator Reference Guide for Oracle Utilities Customer Care and Billing v2.6.0.1* and *Oracle Utilities Testing Accelerator Reference Guide for Oracle Utilities Meter Data Management / Oracle Utilities Smart Grid Gateway v2.2.0.2*.

Components

This section lists the starter components available for Oracle Utilities Customer To Meter.

> **Pre-requisites:** The Inbound Web Service using the respective business object should be available in the application.
>
> **Additional Notes:** Failure while creating, reading, or updating the component is logged in the test execution report, thus facilitating debugging/analysis of the problem.

The components are categorized under the following functional areas:

- Admin
- Credit and Collection
- Customer Information
- Data Synchronization
- Extendable Lookup
- Financial
- General
- Master Configuration
- Service Order Management
- Usage

Admin

Component	Description
C1-ServiceTypeAdd	Used to create a Service Type record. This component invokes the ATC1ServiceType Inbound Web Service using the C1-ServiceTypePhysicalBO Business Object.
C1-ServiceTypeUpdate	Used to update an existing Service Type record. This component invokes the Inbound Web Service ATC1ServiceType using the C1-ServiceTypePhysicalBO Business Object.
C1-ServiceTypeDelete	Used to delete an existing Service Type record. This component invokes the ATC1ServiceType Inbound Web Service using the C1-ServiceTypePhysicalBO Business Object.
C1-ServiceTypeRead	Used to query an existing Service Type record. This component invokes the ATC1ServiceType Inbound Web Service using the C1-ServiceTypePhysicalBO Business Object.
C1-IdentifierTypeAdd	Used to create a Identifier Type record. This component invokes the ATC1IdentifierType Inbound Web Service using the C1-IdentifierTypePhysicalBO Business Object.
C1-IdentifierTypeDelete	Used to delete an existing Identifier Type record. This component invokes the ATC1IdentifierType Inbound Web Service using the C1-IdentifierTypePhysicalBO Business Object.
C1-IdentifierTypeRead	Used to query an existing Identifier Type record. This component invokes the ATC1IdentifierType Inbound Web Service using the C1-IdentifierTypePhysicalBO Business Object.
C1-IdentifierTypeUpdate	Used to update an existing Identifier Type record. This component invokes the ATC1IdentifierType Inbound Web Service using the C1-IdentifierTypePhysicalBO Business Object.

Credit and Collection

Component	Description
C1-CollectionProcessAdd	Used to add a collection process record. This component invokes the Inbound Web Service ATC1CollectionProcess using the C1CollectionProcAdd Business Service.
C1-CollectionProcessRead	Used to read a collection process record. This component invokes the Inbound Web Service ATC1CollectionProcess using the C1CollectionProcRead Business Service.
C1-CollectionProcessUpdate	Used to update a collection process record. This component invokes the Inbound Web Service ATC1CollectionProcess using the C1CollectionProcUpdate Business Service.
C1-CutProcessRead	Used to read a cut process record. This component invokes the ATC1CutProcess Inbound Web Service using the C1CutProcRead Business Service.
C1-CutProcessUpdate	Used to update a cut process record. This component invokes the Inbound Web Service ATC1CutProcess using the C1CutProcUpdate Business Service.
C1-OverdueProcessRead	Used to read an overdue process record. This component invokes the Inbound Web Service ATC1OverdueProcess using the C1OverdueProcessRead Business Service.
C1-OverdueProcessUpdate	Used to update an overdue process record. This component invokes the Inbound Web Service ATC1OverdueProcess using the C1OverdueProcessUpdate Business Service.
C1-PayPlanAdd	Used to add a pay plan record. This component invokes the Inbound Web Service ATC1PayPlan using the C1PayPlanAdd Business Service.
C1-PayPlanRead	Used to read a pay plan record. This component invokes the Inbound Web Service ATC1PayPlan using the C1PayPlanRead Business Service.

Component	Description
C1-PayPlanUpdate	Used to update a pay plan record. This component invokes the Inbound Web Service ATC1PayPlan using the C1PayPlanUpdate Business Service.
C1-SeveranceProcessRead	Used to read a severance process record. This component invokes the Inbound Web Service ATC1SeveranceProcess using the C1SeveranceProcessRead Business Service.
C1-SeveranceProcessUpdate	Used to update a severance process record. This component invokes the Inbound Web Service ATC1SeveranceProcess using the C1SeveranceProcessUpdate Business Service.
C1-WriteOffRead	Used to read a write off record. This component invokes the Inbound Web Service ATC1WriteOff using the C1WriteOffRead Business Service.
C1-WriteOffUpdate	Used to update a write off record. This component invokes the Inbound Web Service ATC1WriteOff using the C1WriteOffUpdate Business Service.
C1-WriteOffProcessAdd	Used to add a write off process record. This component invokes the Inbound Web Service ATC1WriteOffProcess using the C1WriteOffProcessAdd Business Service.
C1-WriteOffProcessRead	Used to read a write off process record. This component invokes the Inbound Web Service ATC1WriteOffProcess using the C1WriteOffProcessRead Business Service.
C1-WriteOffProcessUpdate	Used to update a write off process record. This component invokes the Inbound Web Service ATC1WriteOffProcess using the C1WriteOffProcessUpdate Business Service.
C1-CollAgencyReferralAdd	Used to create a Collection Agency Referral record. This component invokes the Inbound Web Service ATC1CollectionAgencyReferral using the C1CollAgencyRefAdd Business Service.

Component	Description
C1-CollAgencyReferralDelete	Used to update a Collection Agency Referral record. This component invokes the Inbound Web Service ATC1CollectionAgencyReferral using the C1CollAgencyRefDelete Business Service.
C1-CollAgencyReferralRead	Used to read a Collection Agency Referral record. This component invokes the Inbound Web Service ATC1CollectionAgencyReferral using the C1CollAgencyRefRead Business Service.
C1-CollAgencyReferralUpdate	Used to update a Collection Agency Referral record. This component invokes the Inbound Web Service ATC1CollectionAgencyReferral using the C1CollAgencyRefUpdate Business Service.
C1-PayArrangementByBillAdd	Used add a payment arrangement by bill record. This component invokes the Inbound Web Service ATC1PaymentArrangementByBill using the C1PayArrangeByBillAdd Business Service.
C1-PayArrangementByBillRead	Used to read a payment arrangement by bill record. This component invokes the Inbound Web Service ATC1PayArrangeByBill using the C1PayArrangeByBillRead Business Service.
C1-PayArrangementByBillUpdate	Used to update a payment arrangement by bill record. This component invokes the Inbound Web Service ATC1PayArrangeByBill using the C1PayArrangeByBillUpdate Business Service.
C1-PaymentArrangementAdd	Used to add a payment arrangement record. This component invokes the Inbound Web Service ATC1PayArrangement using the C1PayArrangementAdd Business Service.
C1-PaymentArrangementRead	Used to read a payment arrangement record. This component invokes the Inbound Web Service ATC1PayArrangement using the C1PayArrangementRead Business Service.
C1-PaymentArrangementUpdate	Used to update a payment arrangement record. This component invokes the Inbound Web Service ATC1PayArrangement using the C1PayArrangementUpdate Business Service.

Customer Information

Component	Description
C1-AccountAdd	Used to create an Account record. This component invokes the ATC1Account Inbound Web Service using the C1AccountPhysical Business Object.
C1-AccountUpdate	Used to update an existing Account record. This component invokes the ATC1Account Inbound Web Service using the C1AccountPhysical Business Object.
C1-AccountDelete	Used to delete an existing Account record. This component invokes the ATC1Account Inbound Web Service using the C1AccountPhysical Business Object.
C1-AccountRead	Used to read an existing Account record. This component invokes the ATC1Account Inbound Web Service using the C1AccountPhysical Business Object.
C1-AccountBSRead	Used to read an existing Account record. This component invokes the ATC1AccountBS Inbound Web Service using the C1-AccountRead Business Service.
C1-AccountBSUpdate	Used to update an existing Account record. This component invokes the ATC1AccountBS Inbound Web Service using the C1-AccountUpdate Business Service.
C1-ContractOptionAdd	Used to create a Contract Option record. This component invokes the ATC1ContractOption Inbound Web Service using the C1ContractOptionPhysical Business Object.
C1-ContractOptionDelete	Used to delete an existing Contract Option record. This component invokes the ATC1ContractOption Inbound Web Service using the C1ContractOptionPhysical Business Object.
C1-ContractOptionUpdate	Used to update (Update, Freeze and Cancel) an existing Contract Option record. This component invokes the ATC1ContractOption Inbound Web Service using the C1ContractOptionPhysical Business Object.

Component	Description
C1-ContractOptionRead	Used to read an existing Contract Option record. This component invokes the ATC1ContractOption Inbound Web Service using the C1ContractOptionPhysical Business Object.
C1-ContractOptEventAdd	Used to create a Contract Option Event record. This component invokes the ATC1ContractOptEvent Inbound Web Service using the C1-ContractOptEventAdd Business Service.
C1-ContractOptEventDelete	Used to delete an existing Contract Option Event record. This component invokes the ATC1ContractOptEvent Inbound Web Service using the C1-ContractOptEventDelete Business Service.
C1-ContractOptEventRead	Used to query an existing Contract Option Event record. This component invokes the ATC1ContractOptEvent Inbound Web Service using the C1-ContractOptEventRead Business Service.
C1-ContractOptEventUpdate	Used to update an existing Contract Option Event record. This component invokes the ATC1ContractOptEvent Inbound Web Service using the C1-ContractOptEventUpdate Business Service.
C1-PersonAdd	Used to create a Person record. This component invokes the ATC1Person Inbound Web Service using the C1PersonPhysical Business Object.
C1-PersonUpdate	Used to update an existing Person record. This component invokes the ATC1Person Inbound Web Service using the C1PersonPhysical Business Object.
C1-PersonDelete	Used to delete an existing Person record. This component invokes the ATC1Person Inbound Web Service using the C1PersonPhysical Business Object.

Component	Description
C1-PersonRead	Used to read an existing Person record. This component invokes the ATC1Person Inbound Web Service using the C1PersonPhysical Business Object.
C1-PersonBSAdd	Used to add a Person record. This component invokes the ATC1PersonBS Inbound Web Service using the C1-PersonAdd Business Service.
C1-PersonBSRead	Used to read a Person record. This component invokes the ATC1PersonBS Inbound Web Service using the C1-PersonRead Business Service.
C1-PersonBSUpdate	Used to update a Person record. This component invokes the ATC1PersonBS Inbound Web Service using the C1-PersonUpdate Business Service.
C1-PremiseAdd	Used to create a Premise record. This component invokes the ATC1Premise Inbound Web Service using the C1PremisePhysical Business Object.
C1-PremiseUpdate	Used to update an existing Premise record. This component invokes the ATC1Premise Inbound Web Service using the C1PremisePhysical Business Object.
C1-PremiseDelete	Used to delete an existing Premise record. This component invokes the ATC1Premise Inbound Web Service using the C1PremisePhysical Business Object.
C1-PremiseRead	Used to read an existing Premise record. This component invokes the ATC1Premise Inbound Web Service using the C1PremisePhysical Business Object.
C1-SARelationshipAdd	Used to create an SA Relationship record. This component invokes the ATC1SARelationship Inbound Web Service using the C1SARelationshipAdd Business Service.

Component	Description
C1-SARelationshipUpdate	Used to update (update, activate, cancel, create sub SA) an existing SA Relationship record. This component invokes the ATC1SARelationship Inbound Web Service using the C1SARelationshipUpdate Business Service.
C1-SARelationshipRead	Used to read an existing SA Relationship record. This component invokes the ATC1SARelationship Inbound Web Service using the C1SARelationshipRead Business Service.
C1-ServiceAgreementAdd	Used to create a Service Agreement record. This component invokes the ATC1ServiceAgreement Inbound Web Service using the C1ServiceAgreementPhysical Business Object.
C1-ServiceAgreementRead	Used to read an existing Service Agreement record. This component invokes the ATC1ServiceAgreement Inbound Web Service using the C1ServiceAgreementPhysical Business Object.
C1-ServiceAgreementUpdate	Used to update (activate, apply new start option, cancel, close, cancel proposal SA, accept proposal SA, decline proposal SA, activate proposal SA, reactivate, stop) an existing Service Agreement record. This component invokes the ATC1ServiceAgreementUpdate Inbound Web Service using the C1ServiceAgreementUpdate Business Service.
C1-StartStopUpdate	Used to invoke the Start Stop functionality including the cancel, stop and start actions. This component invokes the ATC1StartStop Inbound Web Service using the C1StartStopUpdate Business Service.
C1-StartStopRead	Used to read a Start Stop record. This component invokes the ATC1StartStop Inbound Web Service using the C1StartStopRead Business Service.
C1-StartStopBSUpdate	Used to invoke the Start Stop functionality including the cancel, stop and start actions. This component invokes the ATC1StartStopBS Inbound Web Service using the C1-StartStopMaintenanceRead Business Service.

Component	Description
C1-StartStopBSRead	Used to read a Start Stop record. This component invokes the ATC1StartStopBS Inbound Web Service using the C1-StartStopMaintenanceUpdate Business Service.
X1-ServicePointAdd	Used to create a Service Point record. This component invokes the ATX1ServicePoint Inbound Web Service using the X1D-ServicePoint Business Object.
X1-ServicePointDelete	Used to delete an existing Service Point record. This component invokes the ATX1ServicePoint Inbound Web Service using the X1D-ServicePoint Business Object.
X1-ServicePointRead	Used to query an existing Service Point record. This component invokes the ATX1ServicePoint Inbound Web Service using the X1D-ServicePoint Business Object.
X1-ServicePointUpdate	Used to update an existing Service Point record. This component invokes the ATX1ServicePoint Inbound Web Service using the X1D-ServicePoint Business Object.
X1-SPCharacteristicsRead	User to query an existing C2M Service Point Characteristics record. This component invokes the ATD1ServicePointCharacteristics Inbound Web Service using the D1-SPReadCharacteristics Business Service.
X1-SPCharacteristicsUpdate	User to update an existing C2M Service Point Characteristics record. This component invokes the ATD1ServicePointCharacteristics Inbound Web Service using the D1-SPUpdateCharacteristics Business Service.

Data Synchronization

Component	Description
C1-FASyncRequestRead	Used to read an FA Sync Request record. This component invokes the ATC1FASyncRequestRead Inbound Web Service using the C1-FASyncRequest Business Object.

Component	Description
C1-GetSyncRequestId	Used to get the sync request ID of a given primary key ID (for example: Person, SP, SA, Contract Option, Contract Option Event, etc) using a specific query zone. The following zones can be used: • C1-GETSYNCU1 - Get Sync Req ID using Bill Cycle • C1-GETSYNCU2 - Get Sync Req ID using Contract Option Event ID • C1-GETSYNCU3 - Get Sync Req ID using Contract Option ID • C1-GETPERSYN - Get Sync Request ID using Person ID • C1-GETSASYNC - Get Sync Request ID using Service Agreement ID • C1-GETFASYNC - Get Sync Request ID using Field Activity ID • C1-GETSYNCRQ - Get Sync Request ID using External ID This component invokes the ATC1GetSyncRequestId Inbound Web Service using the C1-GetSyncRequestId Business Service.
C1-MDM2ContOptEvtSyncReqRead	Used to read an MDM2 Contract Option Event Sync Request record. This component invokes the ATC1MDM2ContrOptEvtSyncReqRead Inbound Web Service using the C1-MDM2ContrOptEvtSyncRequest Business Object.
C1-MDM2ContractOptSyncReqRead	Used to read an MDM2 Contract Option Sync Request record. This component invokes the ATC1MDM2ContractOptSyncReqRead Inbound Web Service using the C1-MDM2ContractOptSyncRequest Business Object.
C1-MDM2PersonSyncRequestRead	Used to read an MDM2 Person Sync Request record. This component invokes the ATC1MDM2PersonSyncReqRead Inbound Web Service using the C1-MDM2PersonSyncRequestBusiness Object.

Component	Description
C1-MDM2SASyncRequestRead	Used to read an MDM2 Service Agreement Sync Request record. This component invokes the ATC1MDM2SASyncRequestRead Inbound Web Service using the C1-MDM2SASyncRequestBusiness Object.
X1-GetInboundSyncRequestId	Used to retrieve the Inbound Sync Request Id depending on the query zone used. The following zones can be used: • X1-GETSYNCEX - Get Inbound Sync Request ID using External ID This component invokes the ATX1GetSyncRequestInId Inbound Web Service using the X1-GetSyncRequestInId Business Service.

Extendable Lookup

Component	Description
X1-C2MSATypeMappingAdd	Used to create a Customer to Meter SA Type mapping Extendable Lookup record. This component invokes the ATX1C2MSATypeMapping Inbound Web Service using the X1-C2MSATypeMapping Business Object.
X1-C2MSATypeMappingUpdate	Used to update an existing Customer to Meter SA Type mapping Extendable Lookup record. This component invokes the ATX1C2MSATypeMapping Inbound Web Service using the X1-C2MSATypeMapping Business Object.
X1-C2MSATypeMappingDelete	Used to delete an existing Customer to Meter SA Type mapping Extendable Lookup record. This component invokes the ATX1C2MSATypeMapping Inbound Web Service using the X1-C2MSATypeMapping Business Object.
X1-C2MSATypeMappingRead	Used to query an existing Customer to Meter SA Type mapping Extendable Lookup record. This component invokes the ATX1C2MSATypeMapping Inbound Web Service using the X1-C2MSATypeMapping Business Object.

Component	Description
X1-CCBMDM-MDMCCB-LookupAdd	Used to create the mapping values for each field that requires translation between CCB and MDM Maintenance Objects. The following lookup value can be used: • C1_HIGHLIGHT_TYPE_FLG - Highlight Type • C1_USG_RQST_SA_SKIP_RSN_FLG - SA Skip Reason • CONT_OPT_TYPE_CD - Contract Option Type • DISCON_LOC_CD - Disconnect Location • FA_TYPE_CD - Field Activity Type • KEY_SW - key • LS_SL_FLG - Life Support / Sensitive Load • OK_TO_ENTER_SW - OK to Enter • PER_OR_BUS_FLG - Contact Type This component invokes the ATX1CCBMDM-MDMCCB-Lookup Inbound Web Service using the X1-CCBMDM-MDMCCB-Lookup Business Object.
X1-CCBMDM-MDMCCB-LookupUpd	Used to update an existing mapping values for each field that requires translation between CCB and MDM Maintenance Objects. The following lookup value can be used: • C1_HIGHLIGHT_TYPE_FLG - Highlight Type • C1_USG_RQST_SA_SKIP_RSN_FLG - SA Skip Reason • CONT_OPT_TYPE_CD - Contract Option Type • DISCON_LOC_CD - Disconnect Location • FA_TYPE_CD - Field Activity Type • KEY_SW - key • LS_SL_FLG - Life Support / Sensitive Load • OK_TO_ENTER_SW - OK to Enter • PER_OR_BUS_FLG - Contact Type This component invokes the ATX1CCBMDM-MDMCCB-Lookup Inbound Web Service using the X1-CCBMDM-MDMCCB-Lookup Business Object.

Component	Description
X1-CCBMDM-MDMCCB-LookupDel	Used to delete an existing mapping values for each field that requires translation between CCB and MDM Maintenance Objects. The following lookup value can be used: • C1_HIGHLIGHT_TYPE_FLG - Highlight Type • C1_USG_RQST_SA_SKIP_RSN_FLG - SA Skip Reason • CONT_OPT_TYPE_CD - Contract Option Type • DISCON_LOC_CD - Disconnect Location • FA_TYPE_CD - Field Activity Type • KEY_SW - key • LS_SL_FLG - Life Support / Sensitive Load • OK_TO_ENTER_SW - OK to Enter • PER_OR_BUS_FLG - Contact Type This component invokes the ATX1CCBMDM-MDMCCB-Lookup Inbound Web Service using the X1-CCBMDM-MDMCCB-Lookup Business Object.
X1-CCBMDM-MDMCCB-LookupRead	Used to query an existing mapping values for each field that requires translation between CCB and MDM Maintenance Objects. The following lookup value can be used: • C1_HIGHLIGHT_TYPE_FLG - Highlight Type • C1_USG_RQST_SA_SKIP_RSN_FLG - SA Skip Reason • CONT_OPT_TYPE_CD - Contract Option Type • DISCON_LOC_CD - Disconnect Location • FA_TYPE_CD - Field Activity Type • KEY_SW - key • LS_SL_FLG - Life Support / Sensitive Load • OK_TO_ENTER_SW - OK to Enter • PER_OR_BUS_FLG - Contact Type This component invokes the ATX1CCBMDM-MDMCCB-Lookup Inbound Web Service using the X1-CCBMDM-MDMCCB-Lookup Business Object.

Financial

Component	Description
C1-AdjustmentAdd	Used to adding an Adjustment record. This component invokes the ATC1Adjustment Inbound Web Service using the C1AdjustmentAdd Business Service.
C1-AdjustmentDelete	Used to delete an Adjustment. This component invokes the ATC1Adjustment Inbound Web Service using the C1AdjustmentDelete Business Service.
C1-AdjustmentRead	Used to read an Adjustment. This component invokes the ATC1Adjustment Inbound Web Service using the C1AdjustmentRead Business Service.
C1-AdjustmentUpdate	Used to update an Adjustment record. This component invokes the ATC1Adjustment Inbound Web Service using the C1AdjustmentUpdate Business Service.
C1-BillAdd	Used to add a Bill record. This component invokes the ATC1Bill Inbound Web Service using the C1BillAdd Business Service.
C1-BillDelete	Used to delete a Bill record This component invokes the ATC1Bill Inbound Web Service using the C1BillDelete Business Service.
C1-BillRead	Used to read a Bill record. This component invokes the ATC1Bill Inbound Web Service using the C1BillRead Business Service.
C1-BillUpdate	Used to update a Bill record. This component invokes the ATC1Bill Inbound Web Service using the C1BillUpdate Business Service.
C1-BillSegmentAdd	Used to add a Bill Segment record. This component invokes the ATC1BillSegment Inbound Web Service using the C1BillSegmentAdd Business Service.

Component	Description
C1-BillSegmentRead	Used to read a Bill Segment record. This component invokes the ATC1BillSegment Inbound Web Service using the C1BillSegmentRead Business Service.
C1-BillSegmentUpdate	Used to update a Bill Segment record. This component invokes the ATC1BillSegment Inbound Web Service using the C1BillSegmentUpdate Business Service.
C1-BillableChargeAdd	Used to add a Billable Charge record. This component invokes the ATC1BillableCharge Inbound Web Service using the C1BillableChargeAdd Business Service.
C1-BillableChargeRead	Used to read a Billable Charge record. This component invokes the ATC1BillableCharge Inbound Web Service using the C1BillableChargeRead Business Service.
C1-BillableChargeUpdate	Used to update a Billable Charge record. This component invokes the ATC1BillableCharge Inbound Web Service using the C1BillableChargeUpdate Business Service.
C1-DepositControlAdd	Used to add a Deposit Control record. This component invokes the ATC1DepositControl Inbound Web Service using the C1DepositControlAdd Business Service.
C1-DepositControlDelete	Used to delete a Deposit Control record. This component invokes the ATC1DepositControl Inbound Web Service using the C1DepositControlDelete Business Service.
C1-DepositControlRead	Used to read a Deposit Control. This component invokes the ATC1DepositControl Inbound Web Service using the C1DepositControlRead Business Service.
C1-DepositControlUpdate	Used to update a Deposit Control record. This component invokes the ATC1DepositControl Inbound Web Service using the C1DepositControlUpdate Business Service.

Component	Description
C1-FTRead	Used to read a Financial Transaction record. This component invokes the ATC1FT Inbound Web Service using the C1FTRead Business Service.
C1-FTUpdate	Used to update a Financial Transaction record. This component invokes the ATC1FinancialTransaction Inbound Web Service using the C1FTUpdate Business Service.
C1-MatchEventAdd	Used to add a Match Event record. This component invokes the ATC1MatchEvent Inbound Web Service using the C1MatchEventAdd Business Service.
C1-MatchEventDelete	Used to delete a Match Event record. This component invokes the ATC1MatchEvent Inbound Web Service using the C1MatchEventDelete Business Service.
C1-MatchEventRead	Used to read a Match Event record. This component invokes the ATC1MatchEvent Inbound Web Service using the C1MatchEventRead Business Service.
C1-MatchEventUpdate	Used to update a Match Event record. This component invokes the ATC1MatchEvent Inbound Web Service using the C1MatchEventUpdate Business Service.
C1-MultiCancelRebillRead	Used to read a Multi Cancel Rebill record. This component invokes the ATC1MultiCancelRebill Inbound Web Service using the C1MultiCancelRebillRead Business Service.
C1-MultiCancelRebillUpdate	Used to update a Multi Cancel Rebill record. This component invokes the ATC1MultiCancelRebill Inbound Web Service using the C1MultiCancelRebillUpdate Business Service.
C1-OffCycleBillGeneratorAdd	Used to add an Off Cycle Bill Generator record. This component invokes the ATC1OffCycleBillGenerator Inbound Web Service using the C1OffCycleBillGeneratorAdd Business Service.

Component	Description
C1-OffCycleBillGeneratorDelete	Used to delete an Off Cycle Bill Generator record. This component invokes the ATC1OffCycleBillGenerator Inbound Web Service using the C1OffCycleBillGeneratorDelete Business Service.
C1-OffCycleBillGeneratorRead	Used to read an Off Cycle Bill Generator record. This component invokes the ATC1OffCycleBillGenerator Inbound Web Service using the C1OffCycleBillGeneratorRead Business Service.
C1-OffCycleBillGeneratorUpdate	Used to update an Off Cycle Bill Generator record. This component invokes the ATC1OffCycleBillGenerator Inbound Web Service using the C1OffCycleBillGeneratorUpdate Business Service.
C1-PaymentAdd	Used to add a Payment record. This component invokes the ATC1Payment Inbound Web Service using the C1PaymentAdd Business Service.
C1-PaymentDelete	Used to delete a Payment. This component invokes the ATC1Payment Inbound Web Service using the C1PaymentDelete Business Service.
C1-PaymentRead	Used to read a Payment. This component invokes the ATC1Payment Inbound Web Service using the C1PaymentRead Business Service.
C1-PaymentUpdate	Used to update a Payment record. This component invokes the ATC1Payment Inbound Web Service using the C1PaymentUpdate Business Service.
C1-PaymentEventAdd	Used to add a Payment Event record. This component invokes the ATC1PaymentEvent Inbound Web Service using the C1PaymentEventAdd Business Service.
C1-PaymentEventDelete	Used to delete a Payment Event record. This component invokes the ATC1PaymentEvent Inbound Web Service using the C1PaymentEventDelete Business Service.

Component	Description
C1-PaymentEventRead	Used to read a Payment Event record. This component invokes the ATC1PaymentEvent Inbound Web Service using the C1PaymentEventRead Business Service.
C1-PaymentEventUpdate	Used to update a Payment Event record. This component invokes the ATC1PaymentEvent Inbound Web Service using the C1PaymentEventUpdate Business Service.
C1-PaymentEventQuickAddAdd	Used to add a Payment Event Quick Add record. This component invokes the ATC1PaymentEventQuickAdd Inbound Web Service using the C1PaymentEventQuickAddAdd Business Service.
C1-PaymentQuickAddAdd	Used to add a Payment Quick Add record. This component invokes the ATC1PaymentEventQuickAdd Inbound Web Service using the C1PaymentQuickAddAdd Business Service.
C1-StatementAdd	Used to add a Statement record. This component invokes the ATC1Statement Inbound Web Service using the C1StatementAdd Business Service.
C1-StatementDelete	Used to delete a Statement record. This component invokes the ATC1Statement Inbound Web Service using the C1StatementDelete Business Service.
C1-StatementRead	Used to read a Statement record. This component invokes the ATC1Statement Inbound Web Service using the C1StatementRead Business Service.
C1-StatementUpdate	Used to update a Statement record. This component invokes the ATC1Statement Inbound Web Service using the C1StatementUpdate Business Service.
C1-TenderControlAdd	Used to add a Tender Control record. This component invokes the ATC1TenderControl Inbound Web Service using the C1TenderControlAdd Business Service.

Component	Description
C1-TenderControlRead	Used to read a Tender Control record. This component invokes the ATC1TenderControl Inbound Web Service using the C1TenderControlRead Business Service.
C1-TenderControlUpdate	Used to update a Tender Control record. This component invokes the ATC1TenderControl Inbound Web Service using the C1TenderControlUpdate Business Service.
C1-TenderCtrlSearchByAllUser	Used to search an open Tender Control record. This component invokes the ATC1TenderCtrlSearchByAllUser Inbound Web Service using the C1TenderCtrlSearchByAllUser Business Service.

General

Component	Description
C1-CtrlCenSearchByAccountId	Used to search Control Central by Account ID. This component invokes the ATC1CtrlCenSearchByAccountId Inbound Web Service using the C1CtrlCenSearchByAccountId Business Service.
C1-CtrlCenSearchByAddress	Used to search Control Central by Address. This component invokes the ATC1CtrlCenSearchByAddress Inbound Web Service using the C1CtrlCenSearchByAddress Business Service.
C1-CtrlCenSearchByNameAddress	Used to search Control Central by Name and Address. This component invokes the ATC1CtrlCenSearchByNameAddress Inbound Web Service using the C1CtrlCenSearchByNameAddress Business Service.
X1-RetrieveAlerts	Used to retrieve Alerts. This component invokes the ATX1RetrieveAlerts Inbound Web Service using the X1RetrieveAlerts Business Service.

Component	Description
X1-RetrieveGlobalContexts	Used to retrieve Global Contexts. This component invokes the ATX1RetrieveGlobalContexts Inbound Web Service using the X1RetrieveGlobalContexts Business Service.

Master Configuration

Component	Description
X1-C2MMasterConfigurationAdd	Used to create a Customer to Meter Master Configuration record. This component invokes the ATX1C2MMasterConfiguration Inbound Web Service using the X1-C2MMasterConfiguration Business Object.
X1-C2MMasterConfigurationRead	Used to query an existing Customer to Meter Master Configuration record. This component invokes the ATX1C2MMasterConfiguration Inbound Web Service using the X1-C2MMasterConfiguration Business Object.
X1-C2MMasterConfigurationUpdate	Used to update an existing Customer to Meter Master Configuration record. This component invokes the ATX1C2MMasterConfiguration Inbound Web Service using the X1-C2MMasterConfiguration Business Object.

Service Order Management

Component	Description
C1-ActivityInformation	Used to read an Activity Information. This component invokes the ATC1ActivityInformation Inbound Web Service using the C1-ActvtyInf Service Script.
C1-DeviceInformation	Used to retrieving the Device Information. This component invokes the ATC1DeviceInformation Inbound Web Service using the C1-DeviceInf Service Script.

Component	Description
C1-FACompletionMessage	Used for the FA Completion Message. This component invokes the ATC1FACompletionMessage Inbound Web Service using the C1-FACmplMsg Service Script.
C1-PremiseFAGTT	Used for inserting the Premise Activities to GTT. This component invokes the ATC1PremFAGTT Inbound Web Service using the C1-PremFAGTT Service Script.
C1-ServiceRequestUpdate	Used for updating a SOM Request. This component invokes the ATC1ServiceRequestUpdate Inbound Web Service using the C1-SvcReqUpd Service Script.

Usage

Component	Description
C1-GetUsageId	Used to get the usage request ID of given a person name. This component invokes the ATC1GetUsageId Inbound Web Service using the C1-GetUsageId Business Service.
C1-UsageReqCyclicalBillingRead	Used to read a Usage Request Cyclical Billing record. This component invokes the ATC1UsageReqCyclicalBillingRead Inbound Web Service using the C1-UsageRequestCyclicalBilling Business Object.
C1-UsageRequestNonCyclicalRead	Used to read a Usage Request Non-Cyclical Billing record. This component invokes the ATC1UsageRequestNonCyclical Inbound Web Service using the C1-UsageRequestNonCyclical Business Object.

Chapter 2

Function Library Reference

This chapter lists the Oracle Utilities Customer Care and Billing function library OUCCBLIB and the functions available to create components and flows in Oracle Utilities Testing Accelerator Workbench for testing the Oracle Utilities Customer To Meter application.

OUCCBLIB

The OUCCBLIB library is a collection of actions, such as getting the element value in a XML or generating random number on a given string prefixes or suffix. This section provides a list of functions included in the library, along with their usage details.

verificationPoint

Checks if the actual result is the same with the expected result.

```
verificationPoint(String testTitle, String actualResult, String
expectedResult, String testType)
```

@param testTitle - Test title

@param actualResult - Actual Result

@param expectedResult - Expected Result

@param testType - Signify what type of test is to be performed.

```
@ValidTestTypeValue "WildCard" - Wild card, "Exact" - Exact match,
"Contains" - Actual value contains the expected result
```

Example:

```
verificationPoint("Verify if Generate switch is
disabled",sGenerateSW,"false","Exact");
verificationPoint("Verify if CIS Division is
populated",sCisDivision,"*","WildCard");

verificationPoint("Verify the correct Create Date/Time",sCreateDttm,
pst.format(currentDt),"Contains");

Input Parameters: String, String, String, String
```

editElementValue

Edits the value of a given element. This function is significant when trying to edit CLOB fields in a SOAP request.

```
editElementValue(String child, String subchild, String value)
```

@param child - element header of the soap response. This can be the root element

@param subchild - element of the child or sub child

@param value - new value to be supplied

@return edited XML

Example:

```
String strSOAP =
"<businessObjectDataArea>
    <environmentURL>http://www.sample.com</environmentURL>
    <emailBody>
        <messageCategory>11118</messageCategory>
        <messageNumber>12012</messageNumber>
    </emailBody>
</businessObjectDataArea>"

System.out.println(editElementValue("businessObjectDataArea","environm
entURL","www.oracle.com"));
       }
```

Output:

```
<businessObjectDataArea>
       <environmentURL>www.oracle.com</environmentURL>
       <emailBody>
       <messageCategory>11118</messageCategory>
       <messageNumber>12012</messageNumber>
       </emailBody>
     </businessObjectDataArea>

Input Parameters: String, String, String
Return Type: String[]
```

getElementValue

Gets the value of an element.

```
getElementValue(String sElement, String sSubElement)
```

@param sElement - group or list element name

@param sSubElement - element name under the group or list.

@return return a single element value. Returns "null value" if tag is missing.

Example:

```
<faInfo><faId>557162971576</faId></faInfo>
System.out.println("FA ID = " +getElementValue("faInfo","faId"));
```

Output:

```
FA ID = 557162971576
Input Parameters: String, String
Return Type: String
```

getElementValueByIndex

Gets the value of an element in a list.

```
getElementValueByIndex(String sElement, String sSubElement, String
sIndex)
```

@param sElement - group or list element name

@param sSubElement - element name under the group or list.

@param index - Record position. 1 for the first record, 2 for the second. Etc..

@return return a single element value. Returns "null value" if tag is missing.

Example:

```
<spUsagePeriods>
<serviceQty><seq>1</seq><qty>1317.000000</qty></serviceQty>
<serviceQty><seq>2</seq><qty>659.000000</qty></serviceQty>
</spUsagePeriods>
System.out.println("Quantity:"+ getElementValueByIndex("serviceQty",
"qty", 2));
```

Output:

```
Quantity: 659.00000
Input Parameters: String, String, String
Return Type: String[]
```

setPropertiesVariable

Populate c1Variables.properties. This function writes a temporary variable with key, value combination. If the key exists, it updates the value. If the key does not exist, it writes both the key and value. The value of the key can be retrieved by using the getPropertiesVariable.

```
setPropertiesVariable(String field, String value)
```

@parm field - variable name

@parm value - value

Example:

```
setPropertiesVariable("PersonName","Brazil,Mark");
Input Parameters: String, String
Return Type: None
```

> **Note**: To check the properties see directory outsp-function-libs\CCB (For Example: C:\OATSOU\outsp-function-libs\CCB).

getPropertiesVariable

Gets the value of the key from c1Variables.properties. To use this function, c1Variables.properties and the selected key should exist.

```
getPropertiesVariable(String field)
```

@parm field - Value of the field that is to be retrieved (field should exists on the property file)

Example:

```
Variable.properties's AdjId=409779332582
String sAdjId = getPropertiesVariable("AdjId");
info("Adj Id :"+sAdjId);
```

```
Input Parameters: String
Return Type: String
```

Note: To check the properties see directory outsp-function-libs\CCB (e.g. C:\OATSOU\outsp-function-libs\CCB).

autoFormatInput

Auto formats a given input string. For date conversion use the convertDateTimeFormat function.

```
autoFormatInput(String unformattedString, String format)
```

@param unformattedString - Raw Format

@param format - Desired Format

Example:

//Auto generated random number to conform with SSN format
autoFormatInput("521326648","999-99-9999");

```
Output: 521-32-6648
Input Parameters: String
Return Type: String
```

addDayMonthOrYear

Adds 'N' number of day, month, or year to a particular date and format.

```
addDayMonthOrYear(String sDate, String sDateFormat, String sMonth,
String sDay, String sYear)
```

@param sDate - Base date to be manupulated

@param sDateFormat - Define the format of sDate. (y = year, M = month, d = day, H = hours, m = minute, s = seconds)

@param sMonth - Number of months to be added

@param sDay - Number of days to be added

@param sYear - Number of year to be added

Example:

//Add one day to 01-01-2001

```
addDayMonthOrYear("01-01-2001","MM-dd-yyyy","0","1","0");
```

```
Input Parameters: String, String, String, String, String
Return Type: String
```

subtractDayMonthOrYear

Subtracts the number of days, months, or year to a particular date and format.

```
subtractDayMonthOrYear(String sDate, String sDateFormat, String
sMonth, String sDay, String sYear)
```

@param sDate - Base date to be manupulated

@param sDateFormat - Format of sDate. (y = year, M = month, d = day, H = hours, m = minute, s = seconds)

@param sMonth - Number of months to be subtracted

@param sDay - Number of days to be subtracted

@param sYear - Number of year to be subtracted

Example:

```
//Subtract one day to 01-01-2001
subtractDayMonthOrYear("01-01-2001","MM-dd-yyyy","0","1","0");

Input Parameters: String, String, String, String, String
Return Type: String
```

randomNumber

Generates random number of a given length.

```
randomNumber(String sLengthOfRandomNbr)
```

@param sLengthOfRandomNbr - desired length of the random number

Example:

```
randomNumber ("5");
```

Output:

```
53293
Input Parameters: String
Return Type: String
```

addRandomNbrAsPrefix

Generates a random number of a given length to a prefix.

```
addRandomNbrAsPrefix(String sLengthOfRandomNbr,String sField)
```

@parm sLengthOfRandomNbr - Number of Random Numbers to be generated.

@param sField - A prefix field

Example:

```
String strField = " Test Street"
info(addRandomNbrAsPrefix("5",strField);
```

Output:

```
99011 Test Street
Input Parameters: String
Return Type: String
```

addRandomNbrAsSuffix

Generates random number of a given length to a suffix.

```
addRandomNbrAsSuffix(String sLengthOfRandomNbr,String sField)
```

@parm sLengthOfRandomNbr - Length of Random Numbers to be generated.

@param sField - A suffix field

Example:

```
String strField = "E-TEST-"
info(addRandomNbrAsSuffix("5",strField);
```

Output:

```
E-TEST-52697
Input Parameters: String
Return Type: String
```

addBusinessDate

Adds 'N' number of business days on a given date. This does not include holidays, rest day is defaulted to Saturday and Sunday.

```
addBusinessDate(String startDate, String format, String
noOfBusinessDays)
```

@param startDate - Base date to be incremented

@param format - startDate format. (y = year, M = month, d = day, H = hours, m = minute, s = seconds)

@param noOfBusinessDays - Number of business days to be added

Example:

```
06-07-2013 (Fri) + 3 Business days = 06-12-2013
System.out.println(addBusinessDate("06-03-2013","MM-dd-yyyy",3)
```

Output:

```
06-12-2013
Input Parameters: String,String,String
Return Type: String
```

currentDateTimeZone

Gets current time to of a given time zone.

```
currentDateTimeZone(String sDateTimeFormat, String sTimeZone)
```

@param sTimeZone - Time zone to be used. (e.g PST, GMT)

@param sDateTimeFormat - New Format of the string.

@sDateTimeFormat y = year, M = month, d = day, H = hours, m = minute, s = seconds

Example:

```
currentDateTimeZone("yyyy-MM-dd","GMT");
```

Output:

```
2013-03-01
Input Parameters: String,String
Return Type: String
```

Chapter 3

Sample Work Flows

This chapter describes the Oracle Utilities Customer To Meter sample flows that illustrate common use cases for Oracle Utilities Customer To Meter. It also explains the procedure to execute these sample flows. It includes the following sections:

- Sample Flows
- Executing Sample Flows

Sample Flows

The sample flows delivered as part of Oracle Utilities Testing Accelerator for Oracle Utilities Customer To Meter demonstrate how flows can be created for Web services based testing and for a combination of Web services and UI based testing using the same framework.

These flows are designed to run using demo data, giving the user the ability to deploy Oracle Utilities Testing Accelerator for Oracle Utilities Customer To Meter and execute the sample flows immediately. The flows perform a part of the basic sanity testing required to certify that the Oracle Utilities Customer To Meter environment has been set up appropriately.

This section includes the following sample work flows:

- X1-CloudSanity Flow
- X1-CreatePremiseAndAccount Flow
- X1-EndToEndStartService Flow
- X1-CreateBill Flow
- X1-CreatePaymentEvent Flow

X1-CloudSanity Flow

The X1-CloudSanity flow creates a Person, then submits a VAL-PER batch.

> **Note**: The Timezone must be created manually first and added to the Installation Options-Framework.

An additional component that sends the execution results will be provided to be able to notify the user of the test results via an email.

The following table lists the tasks in this flow and their respective components in Oracle Utilities Customer To Meter:

Task	Component
Admin Setup (OUAF)	F1-Algorithm
Admin	C1-IdentifierTypeAdd
Admin Setup (OUAF)	F1-Installation Option
Admin Setup (OUAF)	F1-OutboundMessageType
Admin Setup (OUAF)	F1-ExternalSystem
Master Configuration	X1-C2MMasterConfigurationAdd
Master Configuration	CM-SyncCfgBO
Master Configuration	D1-SeederSyncMasterConfigAdd
Admin	D1-ContactTypeAdd
Extendable Lookup	X1-CCBMDM-MDMCCB-LookupAdd
Customer Information	C1-PersonAdd
Data Synchronization	C1-GetSyncRequestId
Data Synchronization	C1-MDM2PersonSyncRequestRead
Data Synchronization	X1-GetInboundSyncRequestId

Task	Component
Data Synchronization	D1-OngoingSyncReqContactRead
Customer Information	D1-PersonRead
Batch (OUAF)	F1-BatchSubmission
Batch (OUAF)	F1-BatchCompletionStatus
Admin Setup (OUAF)	F1-SendResultsMail

X1-CreatePremiseAndAccount Flow

The X1-CreatePremiseAndAccount flow creates a Premise, Service Point, Person, and Account, collectively referred to as 'V' objects.

An additional component that sends the execution results is provided to notify the user of the test results via an email.

The following table lists the tasks in this flow and their respective components in Oracle Utilities Customer To Meter:

Task	Component
Customer Information	C1-PremiseAdd
Customer Information	C1-ServicePointAdd
Customer Information	C1-PersonAdd
Customer Information	C1-AccountAdd
Admin Setup (OUAF)	F1-SendResultsMail

X1-EndToEndStartService Flow

The X1-EndToEndStartService flow creates a Premise, Service Point, Person, and Account; collectively referred to as "V" objects. This flow also creates a Smart Meter, Device Configuration, Measuring Component, Install Event, Register and starts and activates Service Agreement (which will create a Usage Subscription).

An additional component that sends the execution results will be provided to be able to notify the user of the test results via an email.

The following table lists the tasks in this flow and their respective components in Oracle Utilities Customer To Meter:

Task	Component
Customer Information	C1-PremiseAdd
Customer Information	X1-ServicePointAdd
Customer Information	C1-PersonAdd
Customer Information	C1-AccountAdd
Customer Information	C1-StartStopUpdate
Customer Information	C1-ServiceAgreementUpdate

Task	Component
Data Synchronization	X1-GetInboundSyncRequestId
Data Synchronization	D2-OngoingSyncReqUSRead
Device	D1-SmartMeterAdd
Device	D1-DeviceConfigurationAdd
Device	D1-SmartMeterInstallEventAdd
Device	D1-SmartMeterInstallEventUpd
Device	D1-SmartMeterInstallEventUpd
Device	D1-RegisterAdd
Device	D1-IMDSeederAdd
Device	D1-ManualIMDScalarUpdate
Device	D1-IMDSeederAdd
Device	D1-ManualIMDScalarUpdate
Admin Setup (OUAF)	F1-SendResultsMail

X1-CreateBill Flow

The X1-CreateBill flow generates, freezes, and completes a bill. It uses the C1-BillAdd and C1-BillUpdate components, and an additional F1-SendResultsMail component to be able to notify the user of the test results via an email.

The following table lists the tasks in this flow and their respective components in Oracle Utilities Customer To Meter:

Task	Component
Financial	C1-BillAdd
Financial	C1-BillUpdate
Admin Setup (OUAF)	F1-SendResultsMail

X1-CreatePaymentEvent Flow

The X1-CreatePaymentEvent flow creates a Payment Event, and then distributes and freezes the payments.

The flow uses C1-TenderCtrlSearchByAllUser, C1-PaymentEventAdd, and C1-PaymentEventUpdate components, and an additional F1-SendResultsMail component to be able to notify the user of the test results via an email.

The following table lists the tasks in this flow and their respective components in Oracle Utilities Customer To Meter.

Task	Component
Financial	C1-TenderCtrlSearchByAllUser
Financial	C1-PaymentEventAdd

Task	Component
Financial	C1-PaymentEventUpdate
Financial	C1-PaymentEventUpdate
Admin Setup (OUAF)	F1-SendResultsMail

Executing Sample Flows

This section describes the procedure to setup sample flows and execute them.

- Pre-requisites
- Setting Up Sample Flows

Pre-requisites

To execute the sample flow, ensure the following pre-requisites are met:

- Oracle Utilities Customer To Meter v2.6.0.1 is up and running with the demo data pack.
- Eclipse client for Oracle Utilities Testing Accelerator is installed in the local machine. Refer to *Oracle Utilities Testing Accelerator Installation and Administration Guide* for version details.
- Oracle Utilities Customer To Meter is installed and repository/directory is setup in the local machine appropriately. Refer to *Oracle Utilities Testing Accelerator Installation and Administration Guide* for more details.

Setting Up Sample Flows

To setup a sample flow, follow these steps:

1. Login to Oracle Utilities Customer To Meter.
2. Import the Inbound Web Services into the Oracle Utilities Customer To Meter application where the scenarios need to be executed.

   See **Importing Inbound Web Services** in the *Oracle Utilities Testing Accelerator User's Guide* for steps to import the Inbound Web Services.
3. Navigate to **Admin > Implementation Tools > Bundle Import > Add**.
4. Enter the **External Reference**, **Detailed Description**, and **Bundle Details** from the IWS Bundle Export Dump.
5. Click **Save** and then click **Apply bundle**.
6. Configure the **configuration.properties** file as follows:
   a. Provide the application URL for the parameter:

      ```
      gStrApplicationURL=https\://<%serverName%>\:<%portNumber%>/ouaf
      ```

   b. Provide an environment name for display in the results email:

      ```
      gStrEnvirontmentName=<%testEnvironmentName%>
      ```

   c. Provide the Java Keystore details:

      ```
      gStrJavaKeyStorePath=<%javaKeystorePath%>
      gStrJavaKeyStorePwd=<%javaKeystoreEncryptedPassword%>
      ```

d. Provide the application login user ID:

```
gStrApplicationUserName= <%userName%>
```

e. Provide the application login encrypted password:

```
gStrApplicationUserPassword= <%encryptedPassword%>
```

f. Provide the SMTP email server and e-mail ID:

```
gStrSMTP_HOST_NAME=<%SMTPServerName%>
gStrSMTP_PORT=<%portNumber%>
gStrTO_EMAIL_RECIPIENTS=<%e-mailId%>
```

g. Provide the application database details:

```
gStrApplicationDBConnectionString=<%jdbc Connectionstring%> eg:
jdbc\:oracle\:thin\:@<%DBserverName%>\:<%port%>\:<%DBSID%>
gStrApplicationDBUsername=<%DBUserID%>
gStrApplicationDBPassword=<%encryptedDBPassword%>
```

h. Provide the full directory path of Oracle Utilities Testing Accelerator repository directories in the local machine:

```
gStrOutputFilePath=<%logFilePath%>
Example: D:\\UTA\\Logs\\
gStrXSDFiles=<%XSDfolderPath%>
Example: D:\\UTA\\XSD\\
```

Appendix A

Inbound Web Services

The Oracle Utilities Customer To Meter components are developed using Web services method, and these components require Inbound Web Services to be defined in the application.

For instructions to create, import, or search an Inbound Web Service, see **Setting Up Inbound Web Services** in *Oracle Utilities Testing Accelerator User's Guide*.

The list of Inbound Web Services provided to use with the delivered components and flows is as follows:

- ATC1IdentifierType
- ATC1PremiseType
- ATC1ServiceType
- ATD1ContactType
- ATD1ExternalApplication
- ATD1HeadEndSystem
- ATD1MarketParticipant
- ATC1CollectionProcess
- ATC1CutProcess
- ATC1OverdueProcess
- ATC1PayPlan
- ATC1SeveranceProcess
- ATC1Account
- ATC1AccountBS
- ATC1ContractOption
- ATC1ContractOptEvent
- ATC1Person
- ATC1PersonBS
- ATC1Premise
- ATC1SARelationship
- ATC1ServiceAgreement
- ATC1ServiceAgreementUpdate
- ATC1StartStop

- ATC1StartStopBS
- ATD1Person
- ATD1Business
- ATD1ServicePointCharacteristics
- ATX1ServicePoint
- ATC1FASyncRequestRead
- ATC1GetSyncRequestId
- ATC1MDM2ContractOptSyncReqRead
- ATC1MDM2ContrOptEvtSyncReqRead
- ATC1MDM2PersonSyncRequestRead
- ATC1MDM2SASyncRequestRead
- ATD1OngoingSyncRequestContactRead
- ATD2OngoingSyncRequestDynOptEvtRead
- ATD2OngoingSyncRequestDynOptRead
- ATD2OngoingSyncRequestUSRead
- ATX1GetSyncRequestInId
- ATD1DeviceConfiguration
- ATD1IMDSeeder
- ATD1IntervalChannel
- ATD1ManualIMDInterval
- ATD1ManualIMDScalar
- ATD1ManualMeterr
- ATD1Register
- ATD1SmartMeter
- ATD1SmartMeterInstallEvent
- ATX1C2MSATypeMapping
- ATX1CCBMDM-MDMCCB-Lookup
- ATC1Adjustment
- ATC1Bill
- ATC1BillableCharge
- ATC1BillSegment
- ATC1DepositControl
- ATC1FT
- ATC1MatchEvent
- ATC1MultiCancelRebill
- ATC1OffCycleBillGenerator
- ATC1Payment
- ATC1PaymentEvent

- ATC1PaymentEventQuickAdd
- ATC1PaymentQuickAdd
- ATC1Statement
- ATC1TenderControl
- ATC1TenderCtrlSearchByAllUser
- ATC1CtrlCenSearchByAccountId
- ATC1CtrlCenSearchByAddress
- ATC1CtrlCenSearchByNameAddress
- ATX1RetrieveAlerts
- ATX1RetrieveGlobalContexts
- ATD1SeederSyncMasterConfig
- ATX1C2MMasterConfiguration
- ATC1ActivityInformation
- ATC1DeviceInformation
- ATC1FACompletionMessage
- ATC1PremFAGTT
- ATC1ServiceRequestUpdate
- ATC1GetUsageId
- ATC1UsageReqCyclicalBilling
- ATC1UsageRequestNonCyclical
- ATD1GetUsageFromExtID
- ATD2DynamicOption
- ATD2DynamicOptionEvent
- ATD2UsageSubscription
- ATD2UsageTransaction
- ATC1WriteOff
- ATC1WriteOffProcess
- ATC1CollectionAgencyReferral
- ATC1PaymentArrangementByBill
- ATC1PayArrangement

Appendix B

Identifying Fields For a Web Service Request

The requisite fields need to be filled up with data in order to map the value on a given schema. For example: When a person is added online, only the field description is shown, but the exact field mapping is hidden from the user.

Following are the methods you can use to identify fields for a web service request and add data in those fields:

- Debug Mode in the Application
- IE Development Tool Bar
- SOAP UI

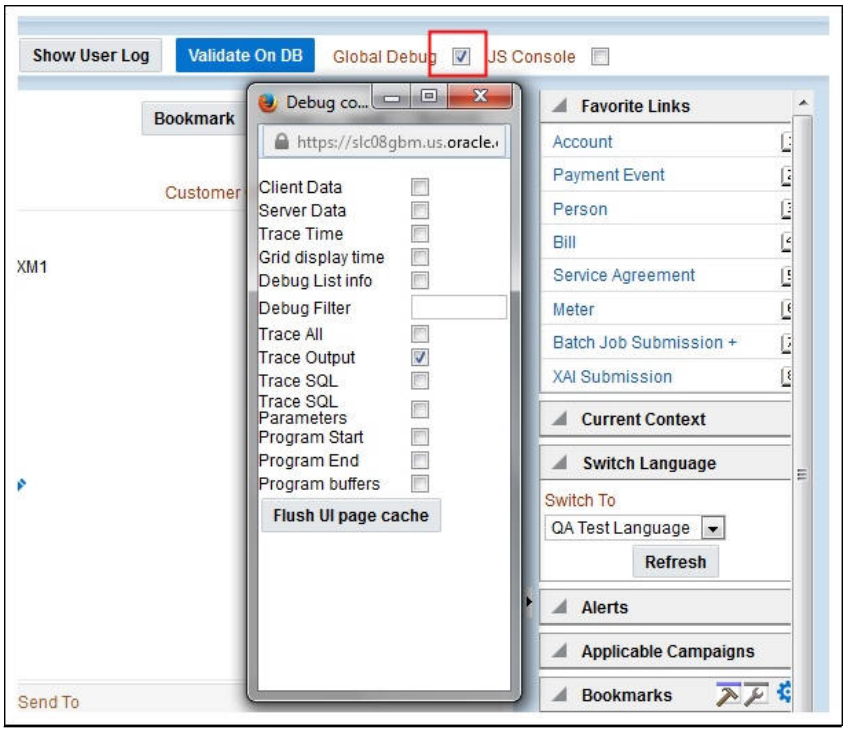
Debug Mode in the Application

The debug mode enables users to check the field mapping on a given maintenance page. This is actually the easiest among the different possible ways; however some clients may have system restriction (such as access restriction) on using debug mode.

To enter test data in the requisite fields using the debug method, follow these steps:

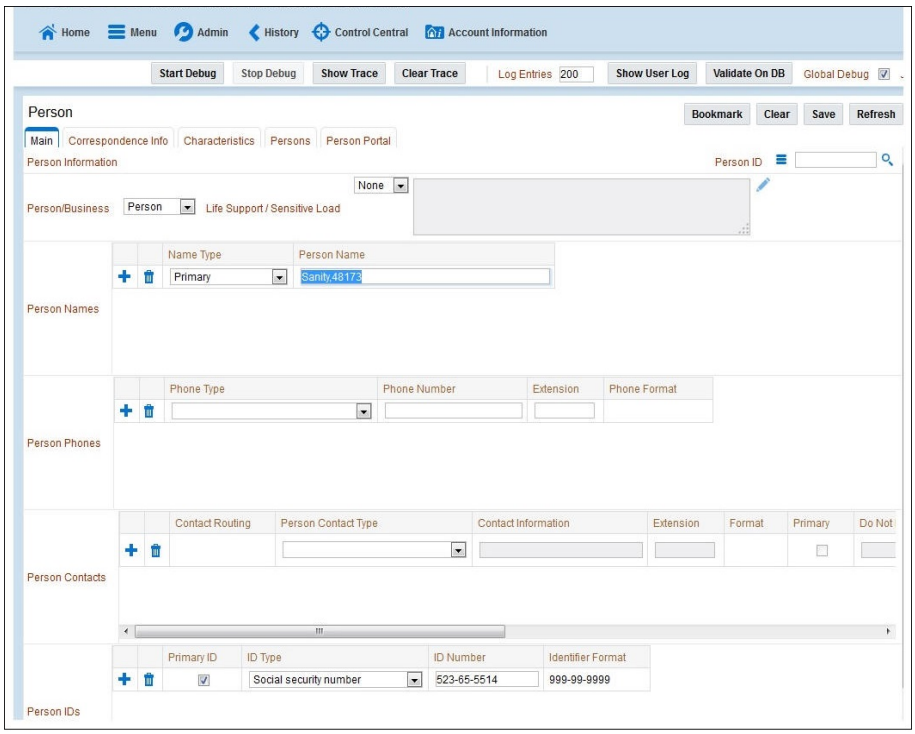
1. Log in to the Oracle Utilities Customer To Meter application in the 'debug' mode.

2. Before clicking the Debug mode switch ensure to navigate first to the target page. For example: Person maintenance page

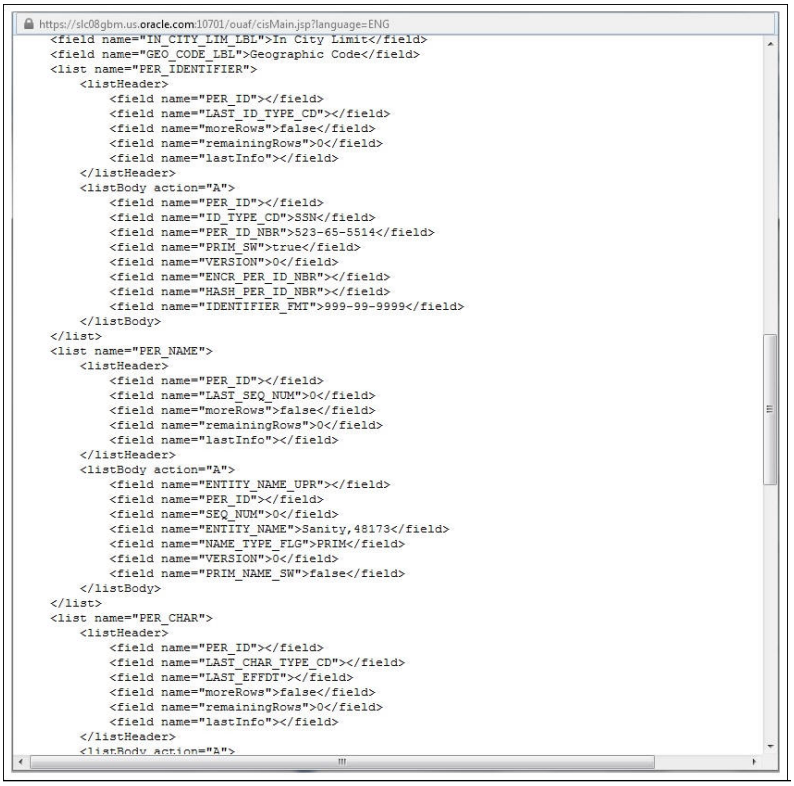


3. Perform the required action. Then, click **Save**.

For example: The figure below shows adding a person (person name, person phone, person contacts, Person IDs, etc)

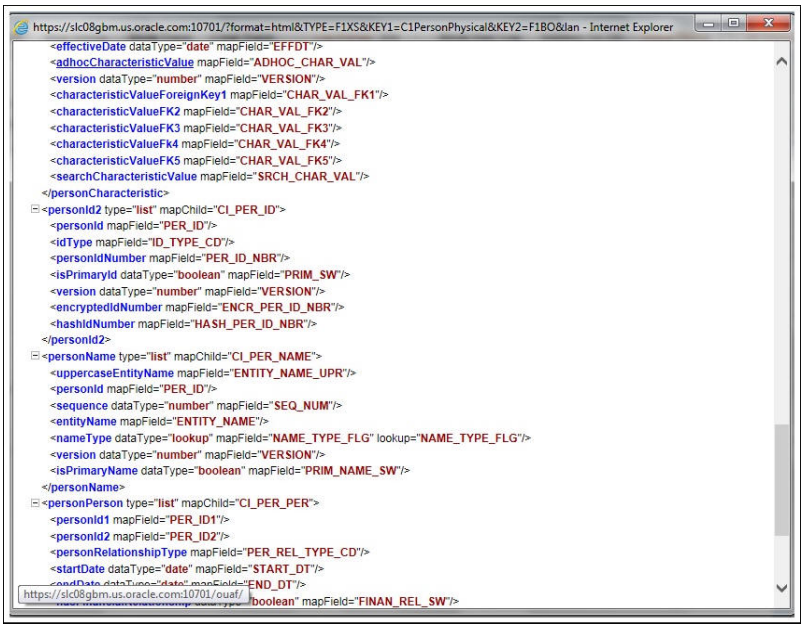


The schema window showing the populated values is displayed.

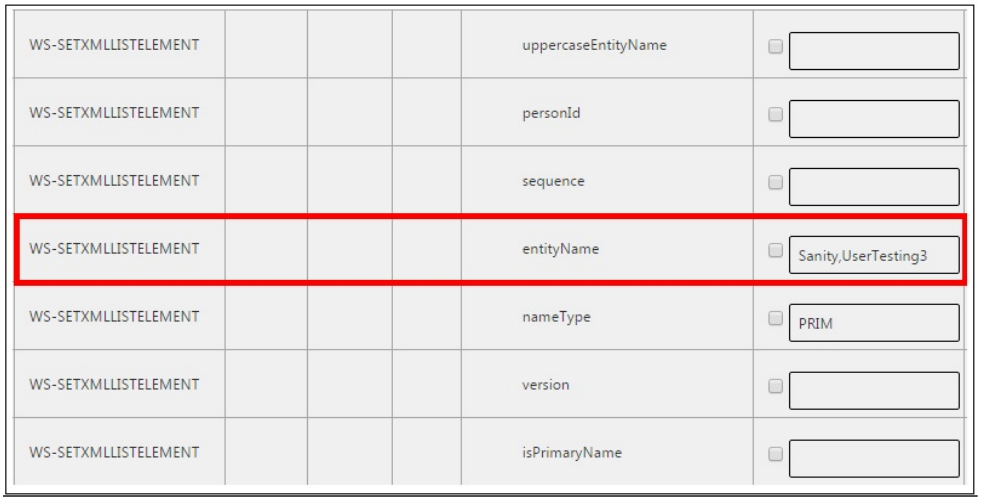


4. Navigate to the Business Object or Business Service look up window for the requisite field.

   For example: In the figure below, ENTITY_NAME is named as entityName.



5. In the flow, search for the requisite field and enter the component test data.



6. Click **Save** to save the test data.

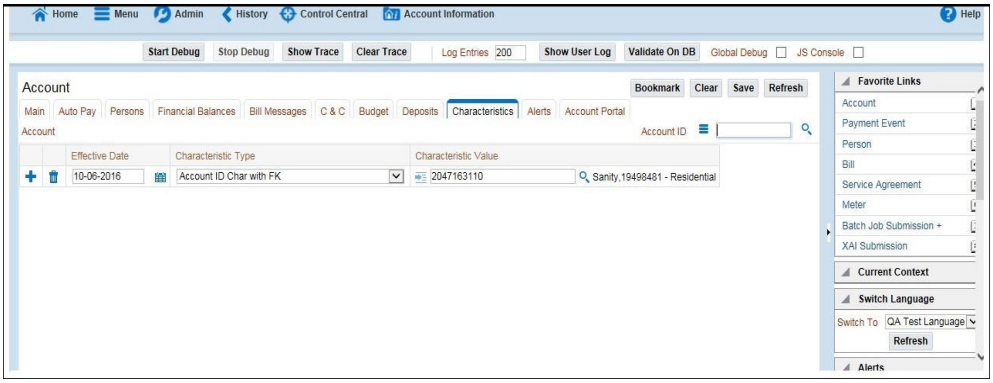
IE Development Tool Bar

The IE Development tool bar, available in IE11, enables users to inspect the page and its field mapping. It is on a 1:1 basis, meaning one inspect = one field.

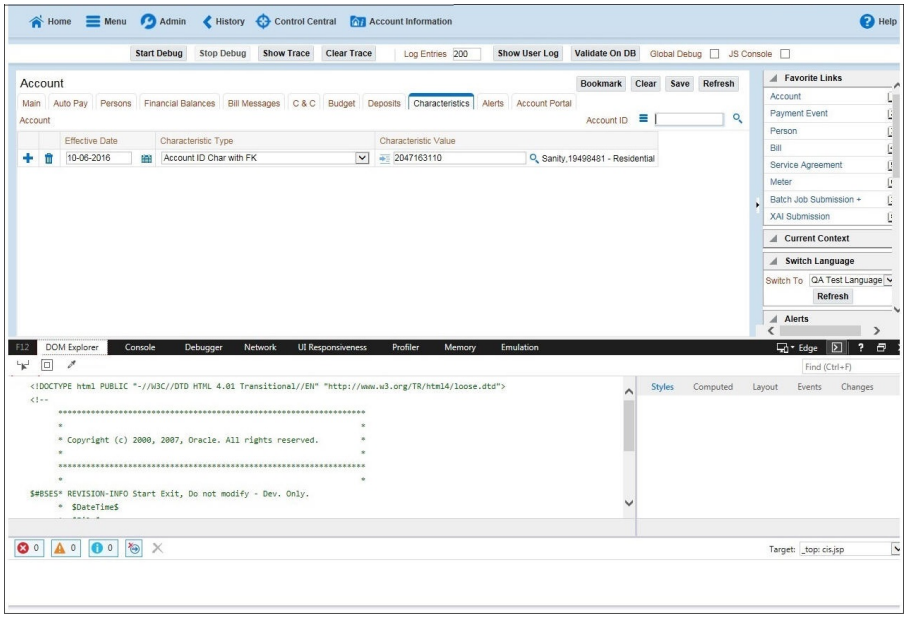
To enter test data in the requisite fields using the IE Development tool bar, follow these steps:

1. Login to Oracle Utilities Customer To Meter using Internet Explorer 11.
2. Navigate to the page where the requisite field needs to be updated with data.

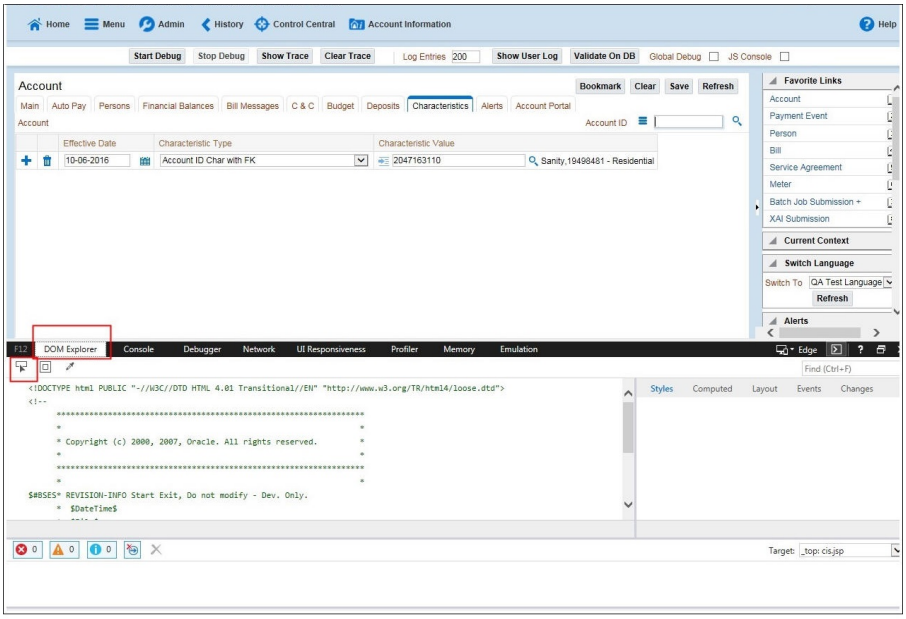
For example: The figure below shows the Account page where the **Characteristic Value** field on the **Characteristics** tab needs to be updated.



3. Press **F12**. The browser displays the F12 developer tools that help in building and debugging web pages.

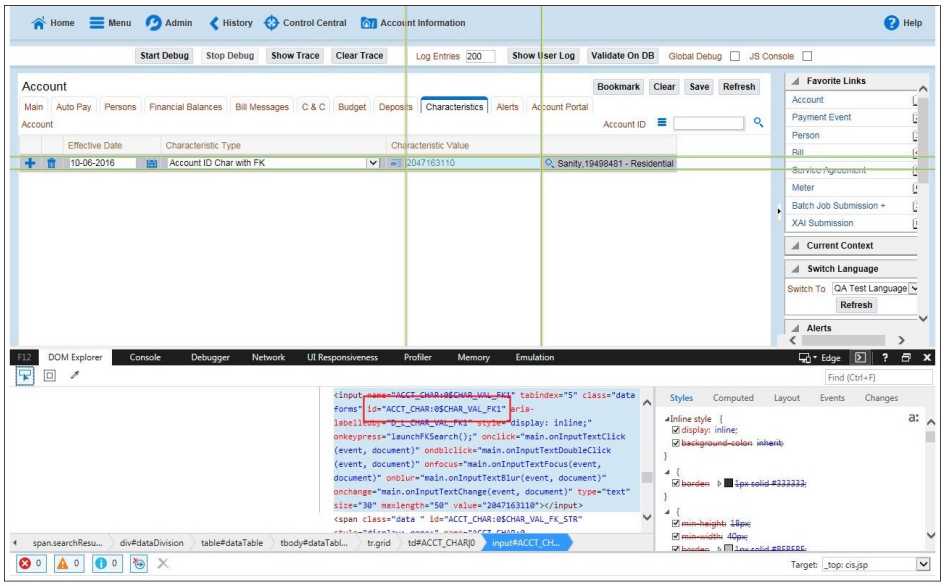


4. On the F12 tools menu, click the **DOM Explorer** tab, and then click the **Select element** icon.



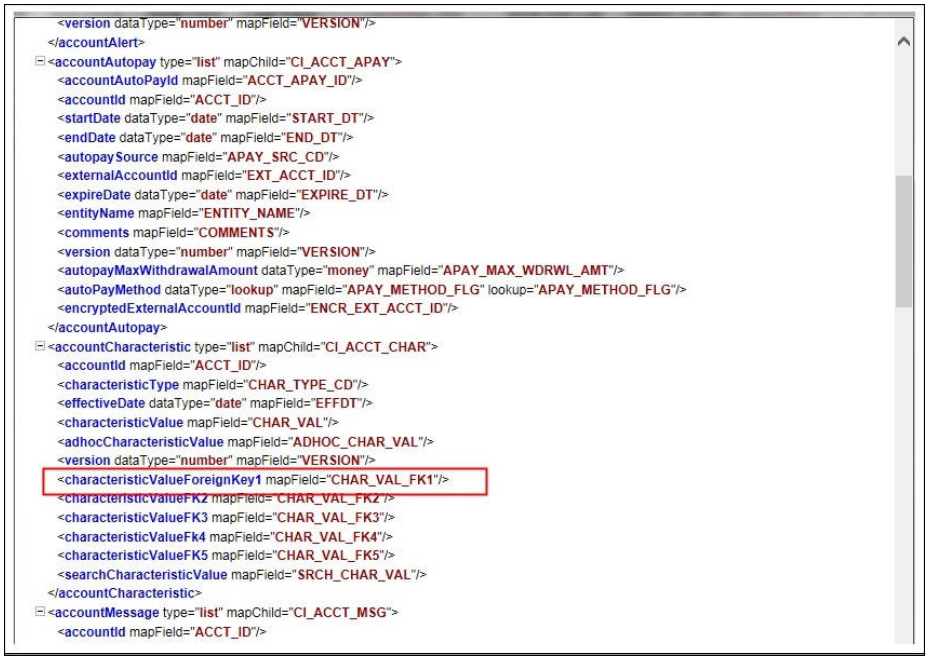
5. On the application page, click the field for which you need to enter the data. The DOM Explorer shows the HTML for the selected field.

   For example: Click the **Characteristic Value** field on the **Account** page. The DOM Explorer shows the **ID** of that field.

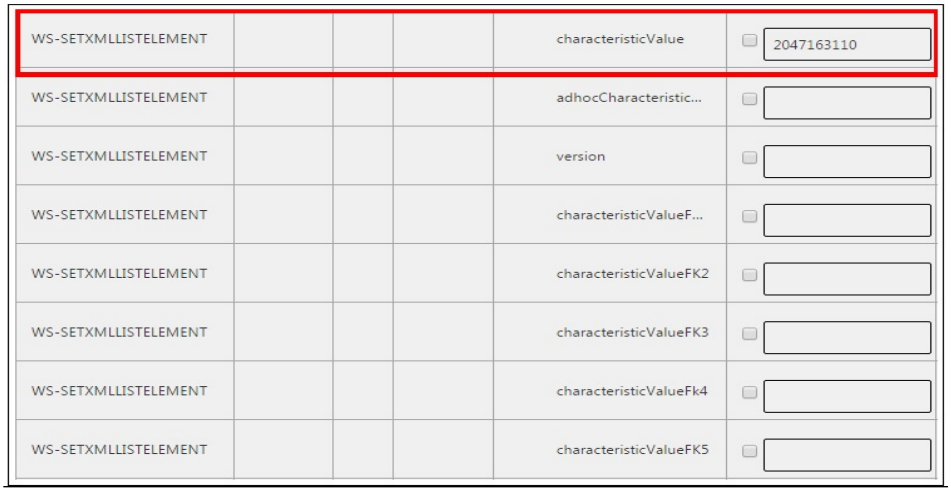


6. On the object lookup window, search the requisite field.

   For example: Search for CHAR_VAL_FK1.



7. In the flow, add the necessary data into the field.



8. Click **Save** to save the data.

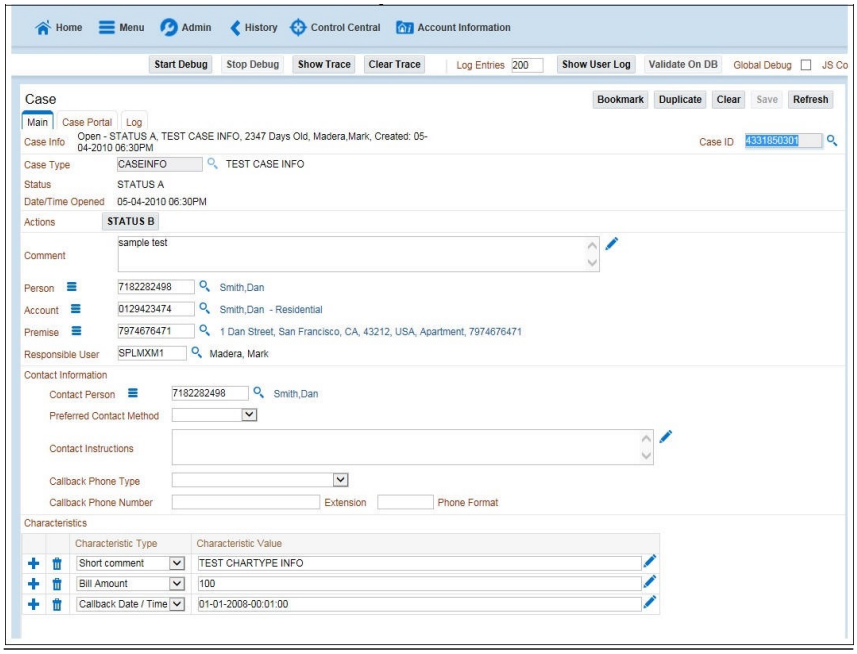
SOAP UI

This method is an alternative to the other methods mentioned above if the user is familiar with SOAP UI.

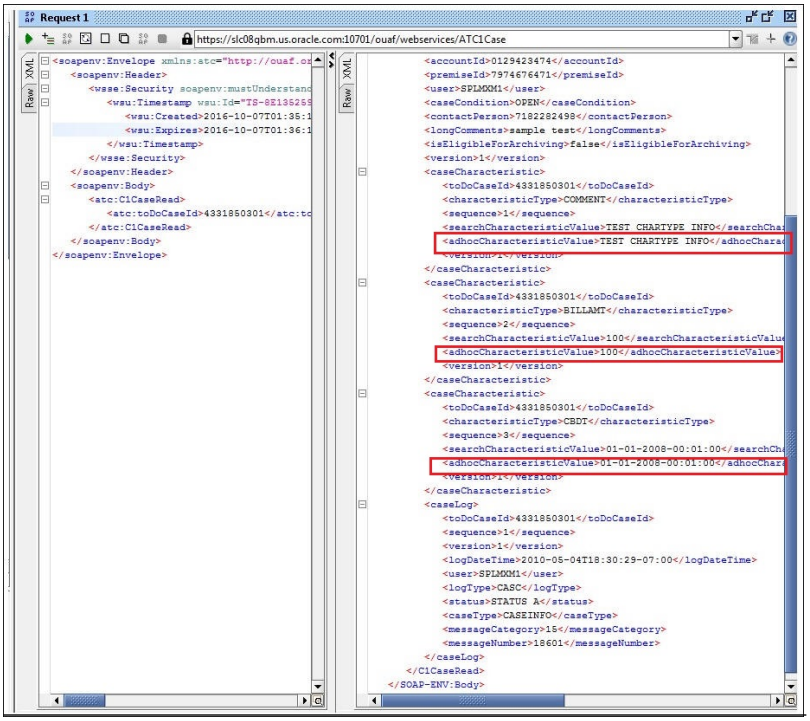
To identify the requisite fields using SOAP UI, follow these steps:

1. Log in to the Oracle Utilities Customer To Meter application.
2. Navigate to the page where the test data has to added. Add the data in the respective fields.

For example: The figure below shows the **Case** page where **Characteristics Type** and **Characteristic Value** are added in the **Characteristics** section.



3. On the SOAP UI, perform a Read using the data that has been added on the **Case** page (in step 2). The result is displayed in the right pane.



4. Copy the values and paste them in the respective fields on the flow.

   For example: COMMENT and TEST CHARTYPE INFO are the values for characteristicType and adhocCharacteristicValue fields.

Note: Not all fields populated on the SOAP response needs to be populated on the flow. (For example: version, info, other type of description, etc).

WS-SETXMLLISTELEMENT			Add	caseCharacteristic	
WS-SETXMLLISTELEMENT				toDoCaseId	
WS-SETXMLLISTELEMENT				characteristicType	COMMENT
WS-SETXMLLISTELEMENT				sequence	1
WS-SETXMLLISTELEMENT				searchCharacteristicValue	
WS-SETXMLLISTELEMENT				characteristicValueFK5	
WS-SETXMLLISTELEMENT				characteristicValueFk4	
WS-SETXMLLISTELEMENT				characteristicValueFK3	
WS-SETXMLLISTELEMENT				characteristicValueFK2	
WS-SETXMLLISTELEMENT				characteristicValueForei...	
WS-SETXMLLISTELEMENT				adhocCharacteristicValue	TEST CHARTYPE INFO
WS-SETXMLLISTELEMENT				characteristicValue	
WS-SETXMLLISTELEMENT				version	

5. Click **Save** to save the data.