# SOA Based Service Catalog for Oracle Utilities ICS Adapter

Implementation Guide Release 12.1 **E81878-01** 

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SOA Based Service Catalog for Oracle Utilities ICS Adapter, Release 12.1 Implementation Guide

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## **Preface**

This document is intended for anyone implementing the SOA Based Service Catalog for Oracle Utilities ICS Adapter.

### **Documentation and Resources**

For more information regarding this integration, foundation technology and the edge applications, refer to the following documents:

#### **Product Documentation**

Торіс	Description
Integration documentation:	
SOA Based Service Catalog for Oracle	
Utilities ICS Adapter	Refer to the Oracle Utilities applications
Installation Guide	documentation page:
	http://docs.oracle.com/cd/E72219_01/
SOA Based Service Catalog for Oracle	documentation.html
Utilities ICS Adapter Implementation Guide	
Imperientation Guide	
Oracle Utilities ICS Adapter	Refer to the Oracle Utilities ICS Adapter
documentation	documentation page:
	https://docs.oracle.com/cloud/latest/intcs_gs/
	ICSUT/toc.htm
Additional Product documentation	Refer to the Oracle Utilities applications
	documentation page:
	http://docs.oracle.com/cd/E72219_01/
	documentation.html

Resource	Location				
SOA Suite 12c documentation	Refer to the SOA documentation at: http://www.oracle.com/technetwork/middleware/ soasuite/documentation/index.html				
Oracle Support	Visit My Oracle Support at https:// support.oracle.com regularly to stay informed about updates and patches.				
	Access the support site for the Edge Application Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1) or refer to the Oracle Utilities Integrations page at http://my.oracle.com/site/ tugbu/productsindustry/productinfo/utilities/ integration/index.htm				
Oracle Technology Network (OTN) Latest versions of documents	http://www.oracle.com/technetwork/index.html				
Oracle University for training opportunities	http://education.oracle.com/				
Web Services Security	For more information about Web services security using Oracle Fusion Middleware 12c refer to https: /docs.oracle.com/middleware/12211/cross/ webservicestasks.htm.				
Oracle Fusion Middleware 12c documentation	Refer to the Oracle applications documentation page: http://docs.oracle.com/en/middleware/				
Oracle Fusion Middleware "What's New In Oracle WebLogic Server"	http://docs.oracle.com/middleware/1221/wls/ NOTES/whatsnew.htm#NOTES570				
Section: Standards Support, Supported Configurations and WebLogic Server Compatibility, Database Interoperability					
For additional information on the type of database to use.					
Instructions on installing this integration on non-Windows/ Linux platforms	Refer to Oracle Support Knowledge Article ID 1349320.1.				

#### Additional Documentation

## **Documentation Accessibility**

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

#### Access to Oracle Support

Oracle customers have access to electronic support for the hearing impaired. Visit: http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs

### 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.
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 table lists the commonly used abbreviations in this guide.

Abbreviation	Definition
BPEL	Business Process Execution Language
ССВ	Oracle Utilities Customer Care and Billing
DB	Database
DVM	Domain Value Map
ICS	Integration Cloud Service
MDS	Meta Data Store
OUAF	Oracle Utilities Application Framework
SOA	Service Oriented Architecture

# Chapter 1

## Introduction

This document provides configuration and administration information for SOA Based Service Catalog for Oracle Utilities ICS Adapter.

The overview includes the following:

- Prerequisites
- About SOA Based Service Catalog for Oracle Utilities ICS Adapter

#### Prerequisites

All participating applications must be installed, set up, and working properly.

#### About SOA Based Service Catalog for Oracle Utilities ICS Adapter

This section provides general information about the functionality and processing of the SOA Based Service Catalog for Oracle Utilities ICS Adapter.

Oracle Integration Cloud Service simplifies building integrations in the cloud, enabling to connect securely to applications and services, both in the cloud and on-premises.

The Oracle Utilities Adapter integrates Oracle Utilities Suite with your SaaS and onpremise applications to allow faster implementation, increased control, and lower costs.

Trigger (inbound) and Invoke (Outbound) support is provided for the Oracle Utilities ICS Adapter. The trigger capability enables Oracle Utilities Applications to trigger integration in Oracle Utilities ICS Adapter and the invoke capability allows invocation of an Oracle Utilities Application using web services from Oracle Integration Cloud Service.

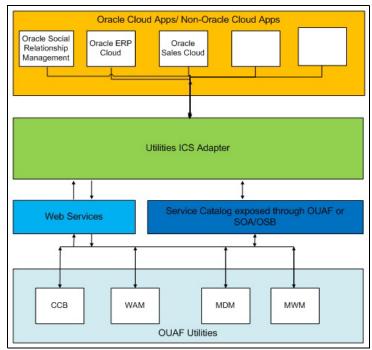
Both Inbound and Outbound Services are exposed using the Oracle Utilities Service Catalog. The Service Catalog provides a comprehensive list of services available for integration. Oracle Utilities ICS provides a simplified user experience in terms of creating data mappings at design time while constructing integrations with Utilities applications using the Oracle Utilities Adapter.

When creating a connection using the Oracle Utilities ICS Adapter, specify a web service that returns a list of all Inbound/Outbound Services that are currently exposed as part of the Catalog Service by one or more OUAF based applications.

The information retrieved by the adapter includes the name, the source system, description, the WSDL location and namespace. Every Inbound/Outbound service structure is exposed using a SOAP based WSDL.

**Note:** In order for the Oracle Utilities ICS Adapter to work with a Service Catalog, an interim solution of a SOA based BPEL catalog has been created to handle the aspect of returning the Catalog information required. In order for the catalog to work properly the username/ password used when creating an ICS connection should be synchronized between OUAF applications and the SOA Catalog Service.

**Note**: This document covers the basic details about the SOA based Catalog service. The documentation for the Service Catalog provided by Oracle Utilities Application Framework is part of the OUAF documentation.



**ICS Integration Overview** 

# Chapter 2

## Understanding the Integration Process

This chapter provides the Service Catalog Enterprise Business Flow (EBF) processing details.

The Service Catalog EBF returns a list of catalog services from integration. The message format returned from integration is in the same format as what Oracle Utilities Application Framework returns; this way the catalog can be seamlessly switched between using SOA Service Catalog and OUAF Service Catalog.

- The Service Catalog EBF is a synchronous BPEL process receiving requests to return the list of services provided by the edge applications.
- The BPEL process invokes a Transformation/XSLT that looks up the Number\_Of\_Services.dvm to read the number of services currently in the Service Catalog.
- After the number of services is obtained, the next step in the transformation is to loop through each of the service and read the ServiceCatalog.dvm to obtain the following values in the DVM for each serviceNumber:
  - product serverRole
    - 0011011101
  - serviceMode
- category

description

serviceName

synopsis

- wsdlLocation
- wsdlTargetNamespace
- The transformed message is returned as response to the Service Catalog.
- Any errors encountered are handled in the integration layer.
- By default, oracle/oracle/Utilities\_wss\_http\_token\_service\_policy\_OPT\_ON security policy is attached to the Service Catalog, so no credentials are needed to invoke the Catalog service.

The credentials provided while creating a connection in ICS should be the same as the credentials to access OUAF based applications, as well as SOA Catalog. Ensure the username is setup correctly in both OUAF based applications and SOA Catalog.

# Chapter 3

# **Configuring the Integration**

The DVMs Number\_Of\_Services.dvm and ServiceCatalog.dvm control what is returned by the Service Catalog.

This section provides details about the configuration settings required for the integration, and also discusses the following in detail:

- Adding a Service to Service Catalog
- Sample Service Catalog Request/Response
- Creating New Utilities Adapter Connection in ICS
- Creating Integration Wizard for UGBU Connection

#### Adding a Service to Service Catalog

To add a new service to the Service Catalog follow these steps:

- 1. Navigate to Number\_Of\_Services.dvm and update it with the number of services to be read from the catalog.
- 2. Navigate to ServiceCatalog.dvm and update it with all the details needed for the service.
- 3. Run the following commands at the Command prompt to update MDS with the updated values of DVM.

Linux

```
cd $PRODUCT_HOME/bin
ant -f InstallBuild.xml installSOA -
DInstallProperties=$PRODUCT_HOME/config/InstallProperties.xml -l
InstallICSCatalog.log
```

Windows

```
cd %PRODUCT_HOME%\bin
ant -f InstallBuild.xml installSOA -
DInstallProperties=%PRODUCT_HOME%/config/InstallProperties.xml -l
InstallICSCatalog.log
```

Note: The DVMs can also be updated using the SOA Composer.

Update using SOA Composer will not update the local dvms stored on the file system; hence local DVM files are maintained in sync with that in MDS.

The figure below shows the DVM that can be modified from SOA Composer where the ICS Catalog is deployed.

ORACLE' SOA Composer										Links 👻 wel	blogic *
+ Create Session										ServiceCatal	log
Deployment View 🔻 🕁 🕞	etharch × ServiceCata	log.dvm ×								<b>21 × 月</b> 日	x
a 📰 SOA Infra	Name ServiceC	Catalog									
Composites	Description										
a 📷 Metadata	Description										
CaseManagementBaseDict											
DynamicRouting.rules											
MDM_ODM_AssetDeviceSta	View w										
MDM_ODM_AssetDeviceTyp	serviceNumber	product	serverRole	serviceMode	category	serviceName	description	synopsis	wsdlLocation	wsdlTargetNamespace	
MDM_ODM_ContactType.dv/ =	Service11	C1	Development	Outbound	system	AP Request	AP Request Desc	ri Account Payable i	Ri http://sic08fsk.us.o	or http://xmins.oracle.com/ICS/CCB-ERP/C	CB/APRequest/
MDM_ODM_Country.dvm	Service12	C1	Development	Outbound	system	GL	GL Data Descript	o General Ledger R	te http://sic08fsk.us.c	or http://xmins.oracle.com/ICS/CCB-ERP/CI	CB/GL/
MDM_ODM_DisconnectLoc:	Service13	C1	Development	Inbound	Inbound	AP Data	AP Data Descripti	oi AP Data Long De	sc http://blr00cbd.idc	o http://xmins.oracle.com/ERPToCCBAPDa	ataBPELProcess
MDM_ODM_ErrorCode.dvm	Service14	C1	Development	Inbound	Inbound	C1-CustomerMain	nt Customer Mainter	at Add incoming Cu	st http://sic09ogd.us	c http://ouaf.oracle.com/webservices/c1/C1	1-AddCustRR
MDM_ODM_LifeSupportSen	Service15	C1	Development	Outbound	Outbound	C1-CustomerMain	nt Customer Mainter	ne This service is us	e http://sic09ogd.us	c http://ouaf.oracle.com/webservices/c1/C1	1-AddCustRR
MDM_ODM_MO.dvm	Service16	W	Development	Outbound	system	Requistion WAM	Reguistion Descr	p Reguistion Long	de http://sic08fsk.us.o	n http://xmins.oracle.com/OUWAM/Messag	je .
MDM_ODM_NodeDispositio	Service17	w	Development	Outbound	system					or http://xmins.oracle.com/OUWAM/Messag	
MDM_ODM_OKToEnterCode	Service18	C1	Development	Inbound	Inbound					c http://ouaf.oracle.com/webservices/c1/C1	
MDM_ODM_SPNodeType.dv	Page 2 of 2 (11-1		K < 1 2	s si		2.2250000000000					
MDM_ODM_TimeZone.dvm	rage 2 012 (11-1	o or 10 m2(115)	n								

- 4. After the new service is added to the Service Catalog, navigate to the existing ICS connection and refresh the metadata on the connection.
- 5. Now, you can create or go to an existing integration and see the new service appear while selecting the connection. The new service is ready for use.

#### Sample Service Catalog Request/Response

Below is a sample Service Catalog request/response.

#### Request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/
envelope/" xmlns:ser="http://ouaf.oracle.com/webservices/builtin/
ServiceCatalog">
    <soapenv:Header/>
    <soapenv:Header/>
    <soapenv:Body>
        </soapenv:Body>
    </soapenv:Body>
</soapenv:Envelope>
```

#### Response

```
<instra:tracking.FlowId xmlns:instra="http://
xmlns.oracle.com/sca/tracking/1.0">4280015</
instra:tracking.FlowId>
            <instra:tracking.CorrelationFlowId xmlns:instra="http:/</pre>
/xmlns.oracle.com/sca/tracking/
1.0">0000LUv9Zo75QdT I9L6if1Nyrxz00000H</
instra:tracking.CorrelationFlowId>
         </wsa:ReferenceParameters>
      </wsa:ReplyTo>
      <wsa:FaultTo>
         <wsa:Address>http://www.w3.org/2005/08/addressing/
anonymous</wsa:Address>
      </wsa:FaultTo>
   </env:Header>
   <env:Body>
      <qetCatalogResponse xmlns:plnk="http://docs.oasis-open.org/</pre>
wsbpel/2.0/plnktype" xmlns:soap="http://schemas.xmlsoap.org/wsdl/
soap/" xmlns:mime="http://schemas.xmlsoap.org/wsdl/mime/"
xmlns:soap12="http://schemas.xmlsoap.org/wsdl/soap12/"
xmlns:ns0="http://ouaf.oracle.com/webservices/builtin/
ServiceCatalog" xmlns="http://ouaf.oracle.com/webservices/builtin/
ServiceCatalog">
         <ns0:serviceCatalog>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Inbound</serviceMode>
               <category>system</category>
               <serviceName>Adjustment Maintenance</serviceName>
               <description>Adjustment Maintenance Description
description>
               <synopsis>Adjustment Maintenance Long description
that can span few lines</synopsis>
               <wsdlLocation>http://CCB HOST:CCB PORT/spl/
webservices/xla/ClAdjustmentMaintenance?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/c1/C1AdjustmentMaintenance</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Inbound</serviceMode>
               <category>system</category>
               <serviceName>View Account</serviceName>
               <description>View Account Description</description>
             <synopsis>View Account Long description that can span
few lines</synopsis>
               <wsdlLocation>http://CCB HOST:CCB PORT/spl/
webservices/WXViewAccount?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/c1/WXViewAccount</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>M2</product>
               <serverRole>Development</serverRole>
               <serviceMode>Inbound</serviceMode>
               <category>system</category>
               <serviceName>Make Payment</serviceName>
               <description>Make Payment Description</description>
             <synopsis>Make Payment Long description that can span
few lines</synopsis>
```

```
<wsdlLocation>http://MWM HOST:MWM PORT/spl/
webservices/WXMakePayment?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/c1/WXMakePayment</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>D2</product>
               <serverRole>Development</serverRole>
               <serviceMode>Inbound</serviceMode>
               <category>system</category>
               <serviceName>IMD Initial Load</serviceName>
               <description>IMD Initial Load Description</
description>
              <synopsis>IMD Initial Load Long description that can
span few lines</synopsis>
               <wsdllocation>http://MDM HOST:MDM PORT/ouaf/
webservices/D1-InitialLoadIMD?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/d1/D1-InitialLoadIMD</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>system</category>
               <serviceName>Requistion</serviceName>
               <description>Requision Description</description>
               <synopsis>Requistion Long description that can span
few lines.Lorem Ipsum is simply dummy text of the printing and
typesetting industry. Lorem Ipsum has been the industry's standard
dummy text ever since the 1500s, when an unknown printer took a
galley of type and scrambled it to make a type specimen book.orem
Ipsum is simply dummy text of the printing and typesetting
industry. Lorem Ipsum has been the industry's standard dummy text
ever since the 1500s, when an unknown printer took a galley of type
and scrambled it to make a type specimen book. It has survived not
only five centuries, but also the leap into electronic typesetting,
remaining essentially unchanged. It was popularised in the 1960s
with the release of Letraset sheets containing Lorem Ipsum
passages, and more recently with desktop publishing software like
Aldus PageMaker including versions of Lorem Ipsum.</synopsis>
               <wsdlLocation>http://SOA HOST:SOA PORT/soa-infra/
services/OUWAMERP/SyncRequisitionOUWAMUtilitiesReqABCSImpl/
WAMSyncRequisitionRequestService ep?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://xmlns.oracle.com/OUWAM/
Message</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>system</category>
               <serviceName>Supplier Party</serviceName>
              <description>Supplier Party Description</description>
               <synopsis>Supplier Party Long description that can
span few lines</synopsis>
               <wsdlLocation>http://SOA HOST:SOA PORT/soa-infra/
services/OUWAMERP/SyncSupplierPartyOUWAMUtilitiesReqABCSImpl/
WAMSyncSupplierPartyRequestService ep?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://xmlns.oracle.com/OUWAM/
Message</wsdlTargetNamespace>
            </service>
```

```
<service xmlns="">
               <product>M2</product>
               <serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>system</category>
               <serviceName>SP Query</serviceName>
               <description>SP Query Description</description>
             <synopsis>SP Query Long description that can span few
lines</synopsis>
               <wsdlLocation>http://SOA HOST:SOA PORT/soa-infra/
services/OUWAMERP/HelloWorld/
helloworldbpel client ep?WSDL=MWMWSPQuery.wsdl</wsdlLocation>
               <wsdlTargetNamespace>http://xmlns.oracle.com/OUWAM/
Message</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Inbound</serviceMode>
               <category>Inbound</category>
               <serviceName>SP Query</serviceName>
               <description>SP Query</description>
               <synopsis>SP Query</synopsis>
               <wsdlLocation>http://CCB HOST:CCB PORT/ /spl/
webservices/ClServicePointQuery?wsdl</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/c1/C1ServicePointQuery</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>system</category>
               <serviceName>FA Info</serviceName>
               <description>FA Info Description</description>
              <synopsis>FA Info Long description that can span few
lines</synopsis>
               <wsdlLocation>http://CCB HOST:CCB PORT/spl/
webservices/xla/ExtractFAInfo?wsdl</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/c1/ExtractFAInfo</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>system</category>
               <serviceName>FA Info</serviceName>
               <description>FA Info Description</description>
              <synopsis>FA Info Long description that can span few
lines</synopsis>
               <wsdlLocation>http://CCB HOST:CCB PORT/spl/
webservices/xla/ExtractFAInfo?wsdl</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/c1/ExtractFAInfo</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>system</category>
               <serviceName>AP Request</serviceName>
```

```
<description>AP Request Description</description>
               <synopsis>Account Payable Request Long description
that can span few lines</synopsis>
               <wsdlLocation>http://SOA HOST:SOA PORT/soa-infra/
services/OUWAMERP/HelloWorld/
helloworldbpel client ep?WSDL=APRequest.wsdl</wsdlLocation>
              <wsdlTargetNamespace>http://xmlns.oracle.com/ICS/CCB-
ERP/CCB/APRequest/</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>system</category>
               <serviceName>GL</serviceName>
               <description>GL Data Description</description>
               <synopsis>General Ledger Request Long Description</
synopsis>
               <wsdlLocation>http://SOA HOST:SOA PORT/soa-infra/
services/OUWAMERP/HelloWorld/
helloworldbpel client ep?WSDL=GL.wsdl</wsdlLocation>
              <wsdlTargetNamespace>http://xmlns.oracle.com/ICS/CCB-
ERP/CCB/GL/</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Inbound</serviceMode>
               <category>Inbound</category>
               <serviceName>AP Data</serviceName>
               <description>AP Data Description</description>
               <synopsis>AP Data Long Description</synopsis>
               <wsdlLocation>http://SOA HOST:SOA PORT/soa-infra/
services/CCB-ERP/ERPToCCBAPDataBPELProcess/client?WSDL</
wsdlLocation>
               <wsdlTargetNamespace>http://xmlns.oracle.com/
ERPToCCBAPDataBPELProcess</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Inbound</serviceMode>
               <category>Inbound</category>
               <serviceName>C1-CustomerMaintenanceRequest
serviceName>
               <description>Customer Maintenance Request
description>
             <synopsis>Add incoming Customer Relationship Request.
It invokes the Customer Relationship Creation processing script
that is defined in Customer Relationship Integration master
configuration. The base product provides sample script Create
Customer Relationship Request (C1-CreCustRR) that can be plugged in
on master configuration. This sample script contains logic that
maps the request data sent in from the external system into the
Customer Relationship Request record.</synopsis>
               <wsdlLocation>http://CCB HOST:CCB PORT/spl/
webservices/C1-AddCustRR?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/c1/C1-AddCustRR</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
```

```
<serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>Outbound</category>
               <serviceName>C1-CustomerMaintenenceRequest
serviceName>
               <description>Customer Maintenence Request
description>
               <synopsis>This service is used in the SRM
integration. It creates a customer maintenance request in CCB.</
synopsis>
               <wsdlLocation>http://CCB HOST:CCB PORT/spl/
webservices/C1-AddCustRR?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/c1/C1-AddCustRR</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>W</product>
               <serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>system</category>
               <serviceName>Reguistion WAM</serviceName>
               <description>Requistion Description</description>
               <synopsis>Requistion Long description that can span
few lines</synopsis>
               <wsdlLocation>http://SOA_HOST:SOA_PORT/soa-infra/
services/OUWAMERP/SyncRequisitionOUWAMUtilitiesReqABCSImpl/
WAMSyncRequisitionRequestService ep?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://xmlns.oracle.com/OUWAM/
Message</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>W</product>
               <serverRole>Development</serverRole>
               <serviceMode>Outbound</serviceMode>
               <category>system</category>
               <serviceName>Supplier Party WAM</serviceName>
              <description>Supplier Party Description</description>
               <synopsis>Supplier Party Long description that can
span few lines</synopsis>
               <wsdlLocation>http://SOA HOST:SOA PORT/soa-infra/
services/OUWAMERP/SyncSupplierPartyOUWAMUtilitiesReqABCSImpl/
WAMSyncSupplierPartyRequestService ep?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://xmlns.oracle.com/OUWAM/
Message</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
               <serverRole>Development</serverRole>
               <serviceMode>Inbound</serviceMode>
               <category>Inbound</category>
               <serviceName>C1CustomerContactMaintenance
serviceName>
               <description>Customer Contact Maintenance
description>
               <synopsis>Customer Contact Maintenance</synopsis>
               <wsdlLocation>http://CCB HOST:CCB PORT/spl/
webservices/xla/C1CustomerContactMaintenance?WSDL</wsdlLocation>
               <wsdlTargetNamespace>http://ouaf.oracle.com/
webservices/c1/C1CustomerContactMaintenance</wsdlTargetNamespace>
            </service>
            <service xmlns="">
               <product>C1</product>
```

```
<serverRole>Development</serverRole>
               <serviceMode>Inbound</serviceMode>
               <category>Inbound</category>
               <serviceName>Test Fault</serviceName>
               <description>Test Fault</description>
               <synopsis>Test Fault</synopsis>
               <wsdlLocation>http://SOA HOST:SOA PORT/soa-infra/
services/default/TestICSThrowFault/bpelprocess1 client ep?WSDL</
wsdlLocation>
               <wsdlTargetNamespace>http://xmlns.oracle.com/
Application1/TestICSThrowFault/BPELProcess1</wsdlTargetNamespace>
            </service>
         </ns0:serviceCatalog>
      </getCatalogResponse>
   </env:Body>
</env:Envelope>
```

#### **Creating New Utilities Adapter Connection in ICS**

To create a new Utilities Adapter connection in ICS, follow these steps:

1. Configure the Service Catalog in the Connection Properties of ICS.

lication/endpoint and process requests.
Property Value
http://example.com:8001/soa-infra/services/default/ServiceCatalog/ServiceCatalogService?wsdl
OK Cance

2. Specify the credentials to access the inbound/outbound services.

**Note**: HTTP Basic Authentication is the only security policy supported at the time of this release.

**Note**: While specifying the username/password, ensure that the same credentials are valid to invoke both the SOA Catalog Service and the

OUAF endpoints. The username/password specified here should exist on both the SOA server, as well as the OUAF server.

Credentials				
You can configure	the Security Policy f	or this connection. Please select the Security Policy.		
Security Policy	Basic Authenticatio	n 🔹		
Your application/e below.	ndpoint requires tha	t users and services provide security credentials for access. Specify the login cr	edenti	als
Property Name	e	Property Value		
Username		SYSUSER I		
Password		•••••		
Confirm Passw	rord	•••••		
			ок	Cancel

### **Creating Integration Wizard for UGBU Connection**

The Integration Wizard for the new connection (see Creating New Utilities Adapter Connection in ICS section for steps) can be created in the following ways:

#### Configuring Outbound from ICS and Inbound into Oracle Utilities Customer Care and Billing

The screens below show the configuration of outbound from ICS and inbound into Oracle Utilities Customer Care and Billing.

Configure Oracle Ut	ilities Endpoint							>
				🕙 Help 🔻	< Back	Next >	Cancel	Done
	the Operations to Perform in business service and operatio	-						×
🖋 Basic Info	Browse by Product	Customer Care And E	Billing 💌					
Basic Info  Operations  Summary	Select a Business Sel Filter by service nam Adjustment Maintena AP Data C1-CustomerMainten C1CustomerContact Test Fault View Account	e ance nanceRequest	Select the Ope	eration to Perform on t	he Business	Service		
	Creation processing configuration. The b Request (C1-CreCu script contains logic	: mer Relationship Requ script that is defined in ase product provides s sIRR) that can be plugg sIRR) that cans be request onship Request record	Customer Relatio ample script Creat red in on master co data sent in from th	nship Integration mast e Customer Relationsh onfiguration. This samp	er nip			

Configure Oracle U	tilities Endpoint								>
				0	Help 🔻	< Back	Next >	Cancel	Done
	tilities Endpoint Configuration ilities Endpoint Configuration								×
Basic Info	TargetCCB								
<ul> <li>Operations</li> <li>Summary</li> </ul>	Description								
		Customer Care And C1-CustomerMainte C1-AddCustRR							
			-0						

### Configuring Inbound into ICS and Outbound from Oracle Utilities Customer Care and Billing

The screens below show configuring inbound into ICS and outbound from Oracle Utilities Customer Care and Billing.

Configure Oracle Utilities Endpoint							
	· Help ▼	cel Done					
	tities Request Endpoint Configuration he Service that you would like to receive from Oracle Utilties Service as 'Request' to this integration flow	3					
✓ Basic Info	Browse by Product Customer Care And Billing 👻						
Request Response	Select a Business Object Select the Customer Care And Billing Object to recieve						
Summary	Filter by object name from the target application. AP Request						
	C1-CustomerMaintenenceRequest FA Info						
	GL Requision						
	Supplier Party						
	Object Description :						
	General Ledger Request Long Description						

Configure Oracle Ut	ilities Endpoint							1
				🕑 Help 🕇	< Back	Next >	Cancel	Don
	ilities Response Endpoint Cont ne object that you would like to r	-	oplication	as 'Response' from th	e integration flo	w.		:
Basic Info	Browse by Product	Customer Care And Billing	•	Response Type:	Request	-Response	🔽 Sen	d Fau
Request	Select a Business Ob	ject					1	
Summary	Filter by object name			the Customer Care And ne target application.	d Billing Object	to recieve		
	AP Request C1-CustomerMaintenenceRequest FA Info							
	GL Requisiton Supplier Party							
	Object Description : General Ledger Request Long Description							
	•							

Configure Oracle Utilities Endpoint							
			🕑 Help	▼ < Back	Next >	Cancel	Done
	es Endpoint Configurations Endpoint Configuration						>
✓ Basic Info ✓ Request	UGBUInsert	GLData					
✓ Response	Description						
Summary	Product Request Object	Customer Care And Billing GL					
	Response Object	Customer Care And Billing GL Request-Response: True Send Fault: True	ß				