

Oracle® Banking Corporate Lending Development Workbench - Service XML Development



Release 14.8.1.0.0
G43529-01
October 2025

ORACLE®

Copyright © 2007, 2025, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

Preface

Purpose	i
Acronyms and Abbreviations	i
Audience	i
Critical Patches	ii
Conventions	ii
Diversity and Inclusion	ii
Documentation Accessibility	ii
Related Resources	iii
Screenshot Disclaimer	iii

1 Service XML

1.1 Generate Service XML	1
--------------------------	---

2 Open Development Tool Silent Utility

2.1 Prerequisites	2
2.2 Run utility on Windows/Unix	2
2.3 Configure SilentODTUtility	2
2.3.1 SilentOdt.properties	3
2.3.2 ODTOperations.properties	5
2.3.3 GW_CONFIG.properties	12
2.4 Generation of Web service Artifacts through SilentOdtUtility	14
2.4.1 Log Files	16
2.4.2 Ant Build Scripts	17
2.4.3 Gateway Property Files	18

Preface

This topic contains the following sub-topics:

- [Purpose](#)
This manual is designed to help acquaint you with the steps to create or modify the Service XML and generate web service artifacts for building EAR files using the Oracle FLEXCUBE Universal Banking Development Workbench.
- [Acronyms and Abbreviations](#)
- [Audience](#)
- [Critical Patches](#)
- [Conventions](#)
- [Diversity and Inclusion](#)
- [Documentation Accessibility](#)
- [Related Resources](#)
- [Screenshot Disclaimer](#)

Purpose

This manual is designed to help acquaint you with the steps to create or modify the Service XML and generate web service artifacts for building EAR files using the Oracle FLEXCUBE Universal Banking Development Workbench.

Acronyms and Abbreviations

Table 1 Acronyms and Abbreviations

Acronyms	Abbreviations
FCUBS	Oracle FLEXCUBE Universal Banking Solution
OBCL	Oracle Banking Corporate Lending
ODT	Oracle Development Tool

Audience

This document is intended for Oracle FLEXCUBE Universal Banking Application developers/ users that use Development Workbench to develop various Oracle FLEXCUBE Universal Banking components. To use this manual, the user needs a conceptual and working knowledge of the below:

Table 2 Proficiency Details

Proficiency	Resources
Oracle FLEXCUBE Universal Banking Technical Architecture	Training programs from Oracle Financial Software Services.
Working knowledge of Web based applications	Self Acquired
Working knowledge of Oracle Database	Oracle Documentations

Critical Patches

Oracle advises customers to get all their security vulnerability information from the Oracle Critical Patch Update Advisory, which is available at [Critical Patches, Security Alerts and Bulletins](#). All critical patches should be applied in a timely manner to ensure effective security, as strongly recommended by [Oracle Software Security Assurance](#).

Conventions

The following text conventions are used in this document:

Table 3 Conventions

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	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.

Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <https://www.oracle.com/corporate/accessibility/>.

Access to Oracle Support

Oracle customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

Related Resources

For more information on any related features, refer to the following documents:

- Development Workbench – Administration
- Development Workbench - Getting Started
- Development Workbench - Source Upgrade

Screenshot Disclaimer

Personal information used in the interface or documents is dummy and does not exist in the real world. It is only for reference purposes.

1

Service XML

This topic provides an overview of the Service XML.

Oracle FLEXCUBE Universal Banking Development Workbench provides the developer with a user-friendly console for defining a gateway service of FCUBS. One Service XML corresponds to one Gateway Service. All the function IDs which are part of the particular service would be captured in the Service XML along with the operation details.

Open Development Tool assist developers in developing the web service with the capability of generating the Following artifacts for building EAR file:

Table 1-1 Webservice

Files	Description
<Service Name>Src*Impl.java	IMPL files for service
<Service Name>WSDL*.wsdl	WSDL files for service
<Service Name>Config*.xml	Config files
<Service Name>XSD*.xsd	Service specific XSD's
<Service Name>Common*.xsd's	Common XSD's (call forms) part of service
• <Service Name>\<Service Name>META-INF\application.xml • <Service Name>\<Service Name>META-INF\MANIFEST.MF	Config XML's for building the Web service
<Service Name>\<Service Name>\commons-codec-1.2.jar	Utility Jar for building the web service
<Service Name>\<Service Name>\wscommon.jar	Utility Jar for building the web service
Sample Ant file	For building service ear file

Note

Non-extensibility function ID's operations don't allow add/modify any existing service; it will allow delete operation only.

- [Generate Service XML](#)
This topic provides systematic instructions to generate a new Service XML in Open Development Tool.

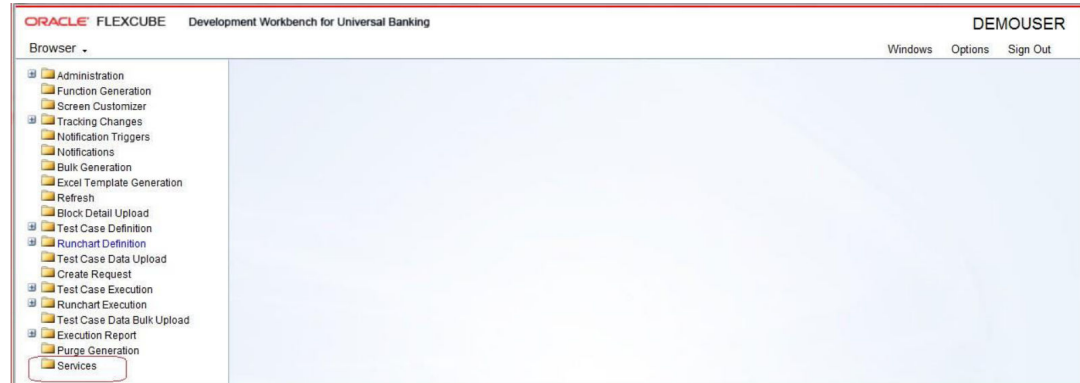
1.1 Generate Service XML

This topic provides systematic instructions to generate a new Service XML in Open Development Tool.

- Refer to the [Development Workbench – Administration](#) guide for creating users.
- Refer to the Development Workbench – Getting Started guide for detailed explanation on mapping the session to the release and environment as required.

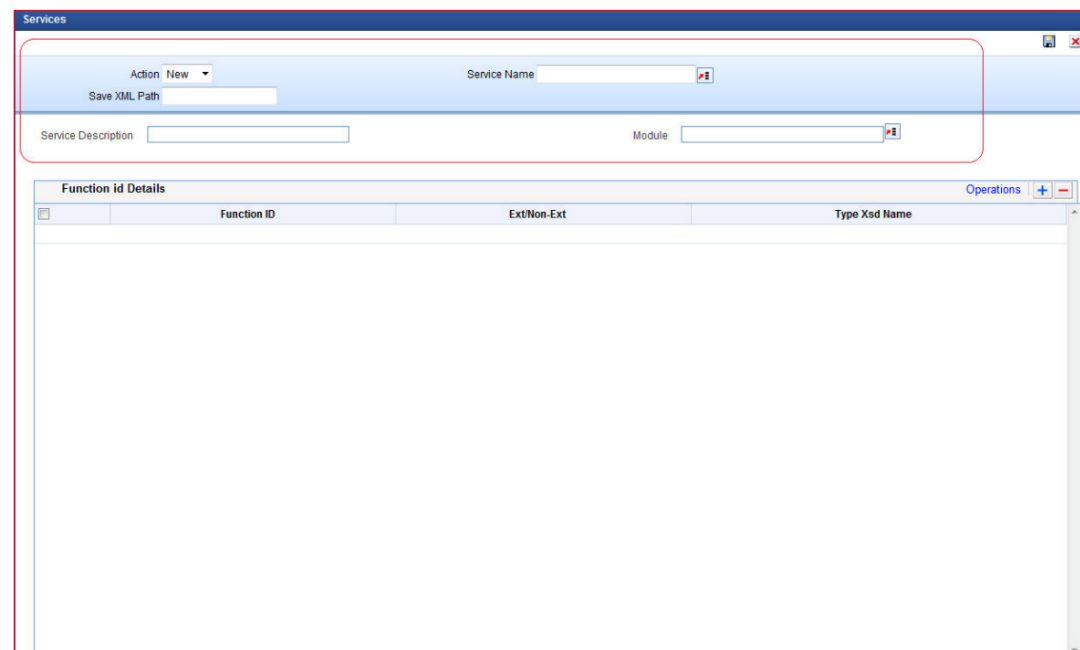
1. Log in to the Development Workbench for Universal Banking.
The **Development Workbench For Universal Banking** screen displays.

Figure 1-1 Development Workbench For Universal Banking



2. On the **Development Workbench For Universal Banking** landing page, click the **Services** node under the **Browser** menu.
The **Services** screen displays.

Figure 1-2 Services



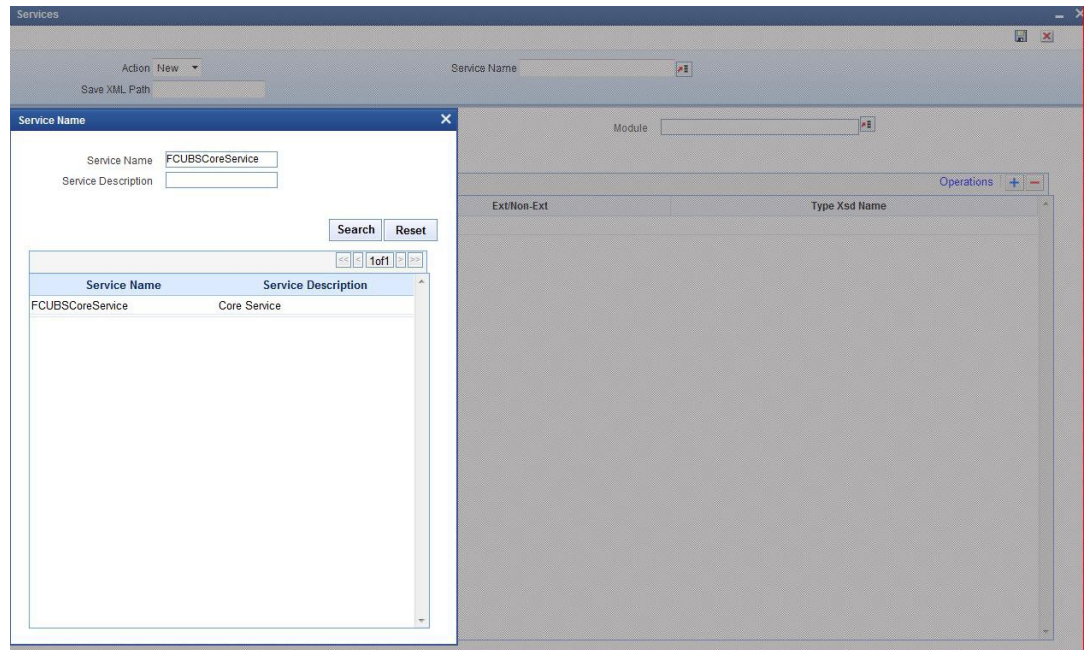
3. Specify the following details in the **Services** screen while creating a new service in ODT.
For more information on fields, refer to the field description table.

Table 1-2 Services – Field Description

Field	Description
Action	Specify the Action from the drop-down list. The list displays the following values: • New • Load Select the Action as New for a new Service development. Select the Action Load to load the corresponding service XML using the browser option in the Save XML Path field.
Service Name	Click the List of Values icon and select the Service Name from service LOV. If the Action is selected as New, Service Name should be selected from service LOV (Service LOV will fetch values from GWTM_SERVICES_MASTER. For new service, service name needs to be added in GWTM_SERVICES_MASTER of business schema).
Service Description	Service description will be populated based on the Service Name selected.
Module	Click the List of Values icon and select the Module code from service LOV. If the Action is selected as New, the Module should be selected from Module LOV (Module LOV will fetch values from SMTB_MODULES of Business schema). Module Name always not be from the LOV. Note that Artifacts would be generated based on the Module Name specified. Hence provide source Folder module names (For example, Core for CS) in this field.
Save XML Path	Specify the Save XML Path if the Action is New. It is optional and if provided, then the generated units will be saved in the path mentioned. Note: The value in the Save XML Path will be used only if the Save Format is Client Path and if the User has given CURRENT_DIRECTORY in the User Preferences Work Directory. The label description of the field will change depending on the action. If the Action is Load, Open Development Tool provides a Browse button, so that the user can browse the Service XML and load it.

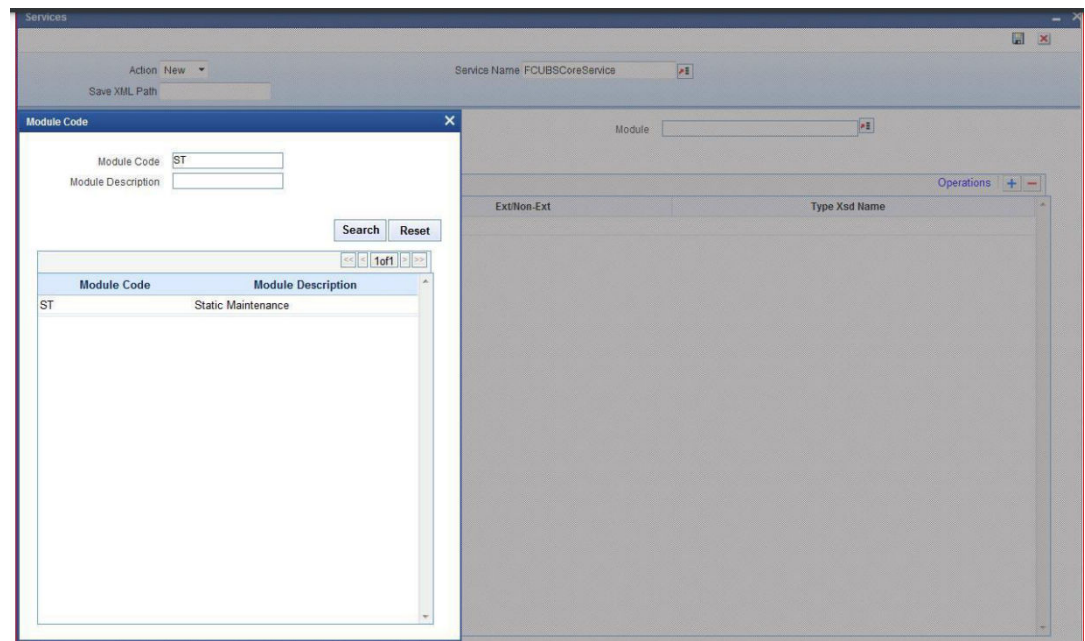
4. Select the **Service Name** from the service LOV, if the action is selected as **New**.
The **Service Name** window populates.

Figure 1-3 Service Name LOV



5. Select the **Module** from the Module LOV, if the action is selected as **New**.
The Module Code window populates.

Figure 1-4 Module Code LOV



6. To load an existing service in Open Development Tool, click on the **Browse** button in the **Save XML Path** field.
The **Upload** window displays.

Figure 1-5 Upload – Choose File to Upload

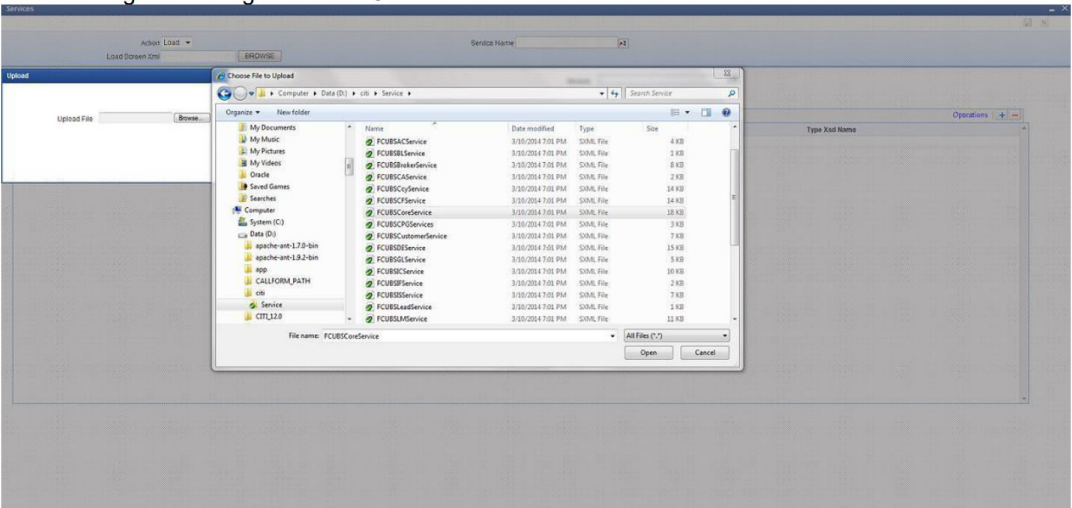
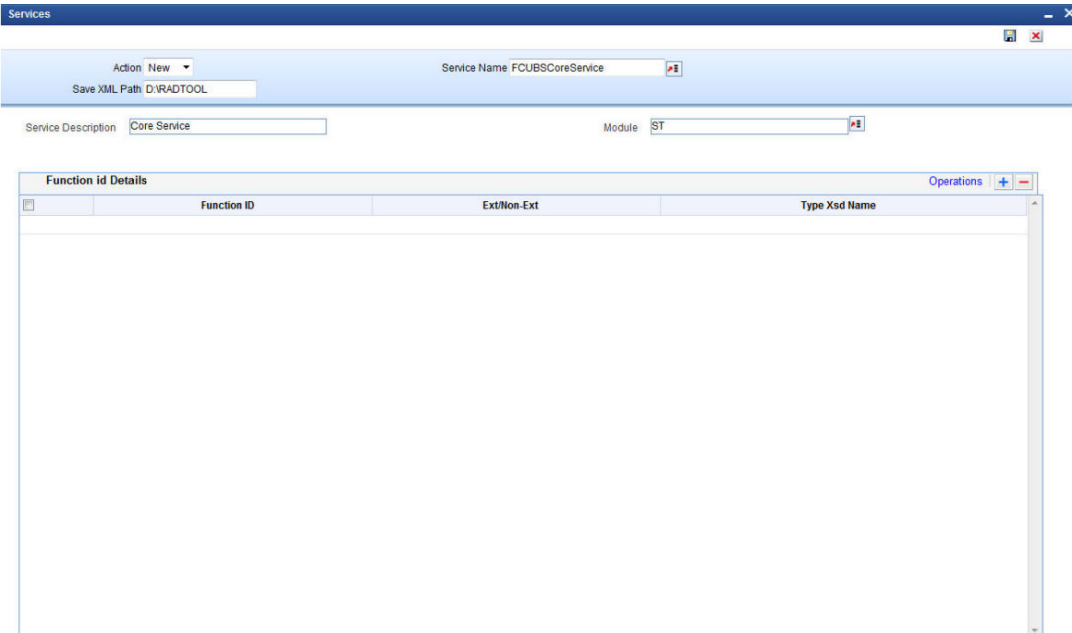


Figure 1-6 Services - Save XML Path



7. Select an existing service SXML file and click on the **Open** button.
The **Services** screen displays with function ID details of the selected service.

Figure 1-7 Services – Function ID Details

Services

Action: Load Service Name: FCUBSCoreService

Load Screen Xml: FCUBSCoreService.sxr BROWSE

Service Description: Core Service Module: Core

Function ID	Ext/Non-Ext	Type Xsd Name
STDCOUNT	Non-Extensible	ST-STCountryCodes-Types.xsd
COOSCHME	Non-Extensible	CO-RPSchMnt-Types.xsd
COBENFT	Non-Extensible	CO-RPBenPlan-Types.xsd
CODEPLN	Non-Extensible	CO-RPEPlan-Types.xsd
STDLCHOL	Non-Extensible	ST-LHoliday-Types.xsd
CSDDEVPR	Extensible	CS-Project-Types.xsd
CSDACCTR	Extensible	CS-TransferAccount-Types.xsd
SMDUSHOL	Extensible	SM-UserHoliday-Types.xsd
CSDACTRP	Extensible	CS-AccountBranchMaintenance-Types.xsd
CSDDEVDT	Extensible	CS-Developer-Types.xsd
CSDECASC	Extensible	CS-Csddecasc-Types.xsd
CSDSNCS	Extensible	CS-Csdsnccsc-Types.xsd
CSDACLTR	Extensible	CS-AccountClassTransfer-Types.xsd

8. For a creation of new service, specify the below function ID details in the **Services** screen.

The developer can use **Function ID Details** to attach the Function IDs as the part of the service or also remove the same from the service if not required.

Table 1-3 Function ID Details

Field	Description
Function ID	Select the function ID from function ID LOV to add the same for that service. Function ID LOV will populate data from SMTB_MENU . Make sure that FC_FUNCTION_ID values are selected for function ID so that a physical RADXML file for the same function ID exists. For example, Select STDCIF and not STGCIF
Extensible/Non-Extensible	On select of the Function ID field, this field value would be populated.
Type Xsd Name	Type Xsd Name would be defaulted along with Operations for an Extensible function ID. For Non-Extensible function ID, Type Xsd Name has to be explicitly mentioned in the field.

The **Function Name-Module** window populates.

Figure 1-8 Function Name- Module

Services

Action: New Service Name: FCUBSCoreService Save XML Path: D:\RADTOOL

Function Name-Module

Function Name: STDCIF Module: ST

Search Reset

Function Name	Module
STDCIF	ST

Module: ST

Ext/Non-Ext Type Xsd Name Operations

Figure 1-9 Screen to populate Function ID

Services

Action: New Service Name: FCUBSCoreService Save XML Path: D:\RADTOOL

Service Description: Core Service Module: ST

Function id Details

Function ID: STDCIF Ext/Non-Ext: Extensible

Function ID checkbox checked

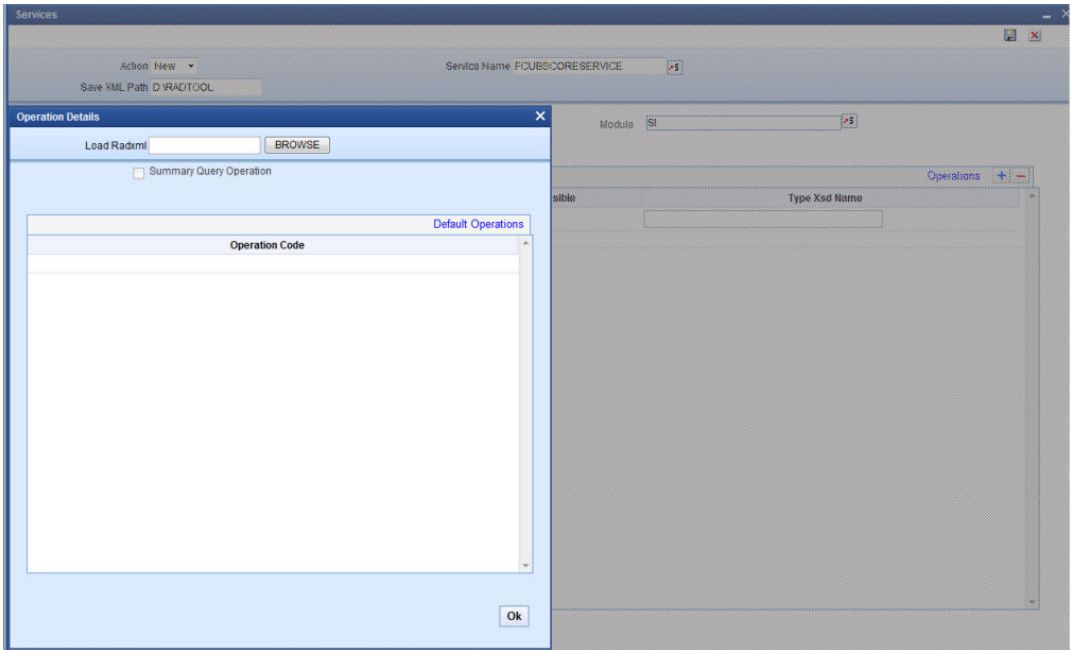
Operations

9. Select the **Function ID** checkbox and click on **Operations**.

Operation codes are defined in each RADXML which has to be defaulted in the corresponding Service XML as well.

The **Operation Details** window displays.

Figure 1-10 Operation Details



10. Specify the following details in the **Operation Details** window.

Table 1-4 Operation Details

Field	Description
Load Radxml	In the Operation Details screen, click the Browse button to it so that the user can browse the function ID Radxml and load it to populate operations.
Default Operations	Click on the Default Operations link in the Operation Details screen. The Operation Code and Type Xsd Name will be defaulted from loaded RADXML.
Save ServiceXML	Open Development Tool saves all the activities carried out by the developer in an XML file hereby referred to as SXML. The persistence of the WEBSERVICE is achieved through SXML and RADXML. If some changes are required on the web services in a future release, the same SXML can be loaded and changes can be done on this SXML. Open Development Tool can segregate the changes done on different releases and save the SXML accordingly. SXML will adhere to following naming convention: Service Name + .sxml For example, FCUBScoreService.sxml

2

Open Development Tool Silent Utility

This topic provides an overview of the operations in the Open Development Tool Silent Utility.

The following operations are supported in the silent utility of Open Development Tool:

1. **LOGIN**
2. **SET RELEASE**: Setting Release and Environment Details
3. **BULKGENERATION**: Bulk Generation of RADXML's units
4. **REFRESH**: Bulk refresh of RADXML's
5. **SXML_REFRESH**: Bulk refresh of Service XML's
6. **SXML_UPDATER**: Bulk Updater of service XML's based on the changes in RADXML's
7. **SXML_BULKGENERATION**: Bulk Generation of web service artifacts

Execution of Operation will be as per the sequence maintained in **OdtOperations.properties**.

Example:

1. Operation = **LOGIN**
2. Operation= **SETRELEASE**
3. Operation= **REFRESH**

If the sequence of operations is as above, then Login Operation, Set Release, and Refresh Operations would be processed in the respective sequence.

Note

Login and set release are mandatory operations to be performed.

This topic contains the following sub-topics:

- [Prerequisites](#)
Before the run utility operation in Open Development Tool, ensure the installation of the following technologies:
- [Run utility on Windows/Unix](#)
The topic briefs on run utility operation in Windows/Unix.
- [Configure SilentODTUtility](#)
This topic provides an overview of the configuration process of Silent Open Development Tool Utility.
- [Generation of Web service Artifacts through SilentOdtUtility](#)
This topic provides an overview of the generation process of Web service Artifacts through SilentOdtUtility.

2.1 Prerequisites

Before the run utility operation in Open Development Tool, ensure the installation of the following technologies:

- **JDK**
License Information: JDK is distributed by Sun Microsystems, Inc under Java Development Kit Binary Code License agreement.
Instructions: The installer requires JDK 8 Update 321 version to be downloaded in the system and the same Should be set as an environmental variable.
- **Apache Ant 2.0**
Instructions: The installer requires ANT 2.0 version to be downloaded in the system and the same should be set as an environmental variable.

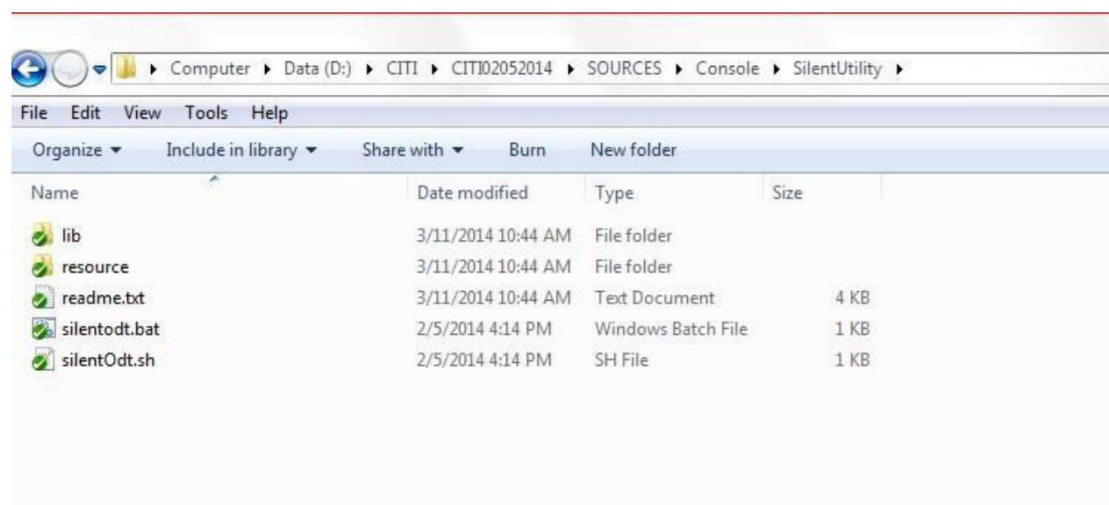
2.2 Run utility on Windows/Unix

The topic briefs on run utility operation in Windows/Unix.

After copying the installer sources and library folder to your local system, make sure you uncheck the read only checkbox in source properties and apply the same to all the sub folders.

The screenshot below shows how the source folder in your local system should look like.

Figure 2-1 Path of SilentODTUtility Source



2.3 Configure SilentODTUtility

This topic provides an overview of the configuration process of Silent Open Development Tool Utility.

All Configuration files can be found inside the resource folder of the utility.

Note

- Copy **jaxb-xjc-2.3.5.jar** to the lib folder. This can be obtained from application server libraries. For example, In Weblogic 12c
<Oracle_Home>\oracle_common\modules\com.sun.xml.bind.jaxb-xjc.jar
- Also make sure **ojdbc6.jar** is available under lib folder.

This topic contains the following sub-topics:

- [SilentOdt.properties](#)
This topic describes about SilentOdt.properties.
- [ODTOperations.properties](#)
This topic explains the ODTOperations.properties in detail.
- [GW_CONFIG.properties](#)
This topic briefs GW_CONFIG.properties.

2.3.1 SilentOdt.properties

This topic describes about SilentOdt.properties.

The sample property file has been given below.

Refer the details mentioned for each property in the below table. Some of them are encrypted using **ODTPassEncryption.bat** (**ODTPassEncryption.sh** for UNIX).

Use 16 characters length of symmetric key for encryption (Preferably Alphanumeric) which will be prompted for input from user when the encryption utility is lunched. The same symmetric key must be mentioned in the property file as well.

Figure 2-2 SilentODT Properties

```

1 #####
2 ##ODT Version ==> 12.2/12.1/12.0.2/12.0.1/11.4 etc
3 ##type ==> FCUBS/FCIS/ELCM ; specifies the product
4 ##release ==> Release of the product specified
5 #####
6 odtVersion=12.2
7 #FCUBS,FCIS,ELCM,PAYMENTS
8 type=FCUBS
9 release=FCUBS_12.2.0.0.0
0 productDesc=Oracle FLEXCUBE Universal Banking
1 ReleaseMonth=May
2 ReleaseYear=2016
3
4 #####ODT DataSource Credentials
5 #####
6 OdtJdbcUrl=O40fjmATqNKRRdNFP9UR3eeXUUMaPnZJ1gthVtXkIyVEgM1qCkuNqcIs96vR4NFq
7 OdtDbUser=ODT121
8 OdtDbPassword=ITgBkLEJpG06AuYE6jJkmg==
9 SymmetricKey=oraclefinancials
0
1 ##### Logger Properties#####
2 #logreqd Default set to N
3 #Default Path set to User Home directory, if not provided
4 #LEVEL ==>DEBUG/INFO/WARNING/SEVERE ; default value is INFO
5 #####
6 logreqd = Y
7 logpath = D:/DESTTEMPDIR/ODT/log.txt
8 level = DEBUG
9
0
1 #####System Properties#####
2 ##JAVA_HOME is mandatory
3 ##WEBLOGIC and WebSphere Home would be required only if ANT scripts are being generated.
4 ##Use Backward Slash(\) for File Separator
5 #####
6 JAVA_HOME=C:\Program Files\Java\jdk1.8.0_73
7 WEBLOGIC_HOME=D:\Oracle\Middleware
8 WAS_HOME=D:\WAS

```

Refer to the below table for more details.

Table 2-1 Open Development Tool Data Source Detail Credentials

Open Development Tool Data Source Detail Credentials	Description
OdtJdbcUrl	Encrypted JDBC URL, Sample JDBC URL (before encrypting) jdbc:oracle:thin:@10.184.xx.xx:1521:FCDEMO
OdtDbUser	DB User Name
OdtDbPassword	Encrypted Password.
SymmetricKey	The key is used when encrypting the JDBC URL and password. This should have exactly 16 characters. Note: User must use the same key for both JDBC URL and password encryption.

Table 2-2 Logger Properties

Logger Properties	Description
Logreqd	Y/N. Default set to N .
Logpath	Provide the path where the Logger files will be generated.
Level	Provide the Logger Level. This can be either SEVERE/WARNING/INFO/CONFIG/FINE/FINER/FINEST . Provide as FINEST for writing detailed log. The default value would be set to INFO .

Table 2-3 System Properties

System Properties	Description
JAVA_HOME	Maintain the Java(JDK) installed location.
WEBLOGIC_HOME	Maintain the Oracle WebLogic installed location.
WAS_HOME	Maintain the IBM Websphere installed location.

2.3.2 ODTOperations.properties

This topic explains the ODTOperations.properties in detail.

Configure the Operations files as per Requirement.

The following operations are supported in silent utility of Open Development Tool:

- **LOGIN**
- **SETRELEASE**: Setting Release and Environment Details
- **BULKGENERATION**: Bulk Generation of Radxml units
- **REFRESH**: Bulk refresh of radxml
- **SXML_REFRESH**: Bulk refresh of Service Xmls
- **SXML_UPDATER**: Bulk Updater of service Xmls based on the changes in radxml's
- **SXML_BULKGENERATION**: Bulk Generation of web service artifacts.

Execution of Operation will be as per the sequence maintained in **OdtOperations.properties**.

For Example:

1. Operation = **LOGIN**
2. Operation= **SETRELEASE**
3. Operation= **REFRESH**

If the sequence of operations is as above, then **LOGIN**, **SETRELEASE**, and **REFRESH** Operations would be processed in the respective sequence.

Note

LOGIN and **SETRELEASE** are mandatory operations to be performed.

1. **LOGIN**
LOGIN should always be the first operation to be configured as part of any execution.

Figure 2-3 SilentODT Login Properties

```

25 1.operation = LOGIN
26 1.userId= RADTOOL
27 1.password= wS/PEjVOI5pdJ7aYvjLuNQ==
28

```

Table 2-4 Log in to Tool

Field	Description
Operation	LOGIN
User Id	Specify the Open Development Tool User ID which is created in the Open Development Tool Application
Password	Specify the Open Development Tool Password which is created in the Open Development Tool Application. Encrypted using ODTPassEncryption.bat . Refer section Configure SilentODTUtility for more details about encryption.

2. SETRELEASE

This operation can be used for setting Release and Environment Preferences for SilentODTUtility.

Note

Connection to the FLEXCUBE Universal Banking schema would be established based on data maintained in Open Development Tool or through the data in **env_config.xml** as explained in earlier section.

Figure 2-4 SilentODT Set Release Properties

```

6  ##Set Release and Environment for the User
7  ## 2.operation= SETRELEASE
8  ## 2.relCode=MODEL_BANK
9  ## 2.envCode=MODEL_BANK_DEV_ENV
10 ## 2.langCode=ENG
11
12

```

Table 2-5 Set Release and Environment for User

Field	Description
Operation	SETRELEASE
relCode	Specify the Open Development Tool Release Code which is created in the Open Development Tool Application.
envCode	Specify the Open Development Tool Environment Code which is created in the Open Development Tool Application.
langCode	Specify the Lang code for the mentioned release code.

3. BULKGENERATION

For generating all RADXML artifacts for release in bulk this feature can be used.

Table 2-6 BULKGENERATION

Field	Description
radxmlListFile	Prepare text file which contains absolute path of all RADXML's. Provide the same file path.
srcPath	Source path refers to the path where all RADXML's are presented. List File would be generated by the tool in this case. Note that only either radxmlListFile or srcPath should be present. If both are present, then the radxmlListFile parameter would be considered for Bulk Generation.
fileType	EXTENSIBLE: artifacts generated only for extensible screens. NON_EXTENSIBLE: artifacts generated only for non-extensible screens. BOTH: artifacts for all files would be generated.
destpath	Provide the path where the files will be generated.
gen	Provide the type of files to be generated. For example, UIXML, SYS_JS, MAIN_SPC, MAIN_SQL, KERNEL_SPC, KERNEL_SQL

Figure 2-5 SilentODT Bulk Generation Properties

```

12
13 ##Bulk Generation Utility
14 ## 3.operation=BULKGENERATION
15 ## 3.radxmlListFile=D:\ODT123\ABC.TXT      -- A File containing absolute path of all radxmls to be processed
16 ## 3.srcPath=E:\FCUBS12.0\MAIN            -- Source Path Refers to the path where all radxmls are present. List File
17 would be generated by the Tool in this case.
18 ##                                     Note that only either of radxmlListFile or srcPath should be present .
19                                     If both are present ,then radxmlListFile would be considered for Bulk
20 Generation
21 ## 3.fileType=EXTENSIBLE                  -- EXTENSIBLE/NON_EXTENSIBLE/BOTH
22 ## 3.destpath=D:\RADTOOL                  -- destination Path
23 ## 3.gen = UIXML,SYS_JS                    -- Files to be Generated seperated by coma. Possible entries are listed below
24 ##
25 UIXML,SYS_JS,MAIN_SPC,MAIN_SQL,KERNEL_SPC,KERNEL_SQL,CLUSTER_SPC,CLUSTER_SQL,CUSTOM_SPC,CUSTOM_SQL,UPLOAD_SPC,UPLOAD_SQ
26 L,
27 UPLOAD_TRIGGER,UPLOAD_TABLE_DDL,XSD_FILES,MENU_DETAILS,LABEL_DETAILS,AMEND_DETAILS,SUMMARY_DETAILS,SCREEN_DETAILS,LOV_D
28 ETAILS,
29 ##
30 BLOCK_PK_COLS,CALL_FORM_DETAILS,BLOCK_DETAILS,DATASCR_DETAILS,FUNCTION_CALL_FORMS,GATEWAY_DETAILS,NOTIFICATION_DETAILS,
31 FUNCTION_PARAMETERS
32 ## NOTIFICATION_TRIGGER,PURGE_DETAILS,ARCHIVE_TBL_DEF

```

Table 2-7 Bulk Generation Utility

Input	Output
radxmlListFile	UIXML,SYS_JS,MAIN_SPC,MAIN_SQL,KERNEL_SPC,KERNEL_S QL, CLUSTER_SPC,CLUSTER_SQL,CUSTOM_SPC,CUSTOM_SQL, UPLOAD_SPC,UPLOAD_SQL,UPLOAD_TRIGGER,UPLOAD_TABL E_DDL, XSD_FILES,MENU_DETAILS,LABEL_DETAILS,AMEND_DETAILS, SUMMARY_DETAILS,SCREEN_DETAILS,LOV_DETAILS, BLOCK_PK_COLS,CALL_FORM_DETAILS,BLOCK_DETAILS, DATASCR_DETAILS,FUNCTION_CALL_FORMS,GATEWAY_DETAI LS, NOTIFICATION_DETAILS,FUNCTION_PARAMETERS NOTIFICATION_TRIGGER,PURGE_DETAILS,ARCHIVE_TBL_DEF in destpath
srcPath	
fileType	
gen	
destpath	

4. REFRESH

Refresh Functionality allows developers to upgrade the existing radxml to its later version keeping the sub version specific changes intact. Three kinds of refresh can done using the Tool. (Refer to the *Development Workbench - Source Upgrade*).

- **Child Refresh**
- **Screen Child Refresh**
- **Source Refresh**

Table 2-8 REFRESH

Field	Description
Refresh Type	Provide the refresh type (CHILD_REFRESH/SCRCHILD_REFRESH/SOURCE_REFRESH).
srcFileList	A text file containing the list of all source RADXMLs. i.e. RADXMLs have to be refreshed.
baseFileList	A text file containing the list of all base RADXMLs.
srcRelType	Provide the release type of source RADXMLs list(KERNEL/CLUSTER/CUSTOM).
baseRelType	Provide the release type of base RADXMLs list (KERNEL/CLUSTER/CUSTOM).
destpath	Provide the path where the files will be generated.

Figure 2-6 SilentODT Refresh Properties

```

28 ##Refresh Utility
29 ## 4.operation=REFRESH
30 ## 4.refreshType=SOURCE_REFRESH      -- Either of CHILD_REFRESH/SCRCHILD_REFRESH/SOURCE_REFRESH
31 ## 4.srcFileList=D:\\REFRESH\\src.txt  -- A txt File containing the List of all Sources radxmls. i.e radxmls which
32 has to be refreshed
33 ## 4.baseFileList=D:\\REFRESH\\base.txt -- A txt File containing the List of all base radxmls.
34 ## 4.srcRelType=CUSTOM                -- Release Type of Source Radxmls; Either of KERNEL/CLUSTER/CUSTOM
35 ## 4.baseRelType=KERNEL               -- Release Type of Base Radxmls; Either of KERNEL/CLUSTER/CUSTOM
36 ##                                     Note that base and Src Release Types should be the same for Child and
37 screen Child Refresh
38                                     Base Release Type should be atleast one level below Src Release type for
39 SOURCE Refresh.
40 ## 4.destpath=D:\\RADTOOL

```

Table 2-9 Refresh Utility

Input	Output
refreshType	Refreshed Radxml's in destpath.
srcFileList	Refreshed Radxml's in destpath.
baseFileList	Refreshed Radxml's in destpath.
srcRelType	Refreshed Radxml's in destpath.
baseRelType	Refreshed Radxml's in destpath.
destpath	Refreshed Radxml's in destpath.

5. SXML_BULKGENERATION

Web service artifacts can be generated through this operation.

Table 2-10 Service XML Bulk Generation

Field	Description
sxmlListFile	Prepare text file which contains absolute path of all Service XML.
radxmlListFile	Prepare a text file that contains the absolute path of all RADXML which are used for those services.
xsdListFile	Prepare a text file that contains the absolute path of all XSDs which are used for those services. Non-extensibility/Common XSDs are copied from this path.
srcPath	Specify the source folder path which is an option (tool will create radxmlListFile and xsdListFile by itself from the srcPath). Note: If srcPath is provided, radxmlListFile and xsdListFile need not be provided.
gen	Specify the type of files to be generated (separated by comma). The available options are: • IMPL_FILE • CONFIG_FILES • WSDL_FILE,XSD_FILES • GW_WS_PROP_FILES • ANT_BUILD
nonExtServicesReqd	Specify as Y/N , Specifies whether NonExtensible Operations has to include in the generated components.
destpath	Specify the path where the files will be generated.
validateXsds	Specify as Y/N , Default set to Y . If the value is set to Y all XSD will be validated by the tool.

Figure 2-7 SilentODT Service XML Bulk Generation Properties

```

40 ## Service XML Component Generator
41 ## 5.operation=XML_BULKGENERATION
42 ## 5.sxmlListFile=D:\ODT123\TEST\srcFile.TXT          -- List Of Absolute path of all sxml files in a text file
43 ## 5.radxmlListFile=                                -- A txt File containing the List of all radxmls.
44 ## 5.xsdListFile=                                    -- A txt File containing the List of all xsds. This
parameter is required only if NonExt Operations are Required.
45 ##                                                    Nonextensile XSDs are copied from this path
46 ## 5.srcPath=Z:\EXEC\FLEXCUBE_Kernel\FCUBS_12.0.0\MAIN -- Src Path. Tool will create radxmlListFile and
xsdListFile by itself from the srcPath if provided
47 ##                                                    Note that if srcPath is provided, radxmlListFile and
xsdListFile need not be provided
48 ## 5.gen=IMPL_FILE,CONFIG_FILES,WSDL_FILE,XSD_FILES  -- Files to be generated. Possible entries are Listed
below
49 ##
IMPL_FILE,CONFIG_FILES,WSDL_FILE,XSD_FILES,GW_WS_PROP_FILES,ANT_BUILD
50 ## 5.nonExtServicesReqd=Y                            -- Y/N Specifies whetherNonExtensible Operations has to
included in the Generated Components
51 ## 5.destpath=D:\RADTOOL                            -- destination Path
52 ## 5.validateXsds=Y                                -- validate the xsds Y/N

```

Table 2-11 SilentODT Service XML Bulk Generation Properties

Input	Output
sxmlListFile radxmlListFile xsdListFile srcPath baseRelType destpath validateXsds	IMPL_FILE,CONFIG_FILES,WSDL_FILE,XSD_FILES,GW_WS_PR OP_FILES,ANT_BUILD in destpath

6. SXML_UPDATER

This feature can be used to update the Service XMLs with the latest data from Radxmls. the following details will be updated.

- Any addition, deletion or modification of operation codes in function ID would be updated in Service XML.
- If any function ID is removed from the service (specified in RADXML); then the same would be removed from Service XML.
- If any new function ID is attached to the service (in RADXML); then the same will not be updated in the Service XML. This has to added manually in the Service XML through Open Development Tool user interface.

Table 2-12 Service XML Updater

Field	Description
Operation	SXML_UPDATE
sxmlListFile	Prepare a text file that contains the absolute path of all Service XML. Provide the same file path.
radxmlListFile	Prepare a text file that contains the absolute path of all RADXMLs which are used for those services. Provide the same file path.
srcPath	Specify the source folder path. This field is optional (tool will create radxmlListFile and sxmlListFile by itself from the srcPath). Note that if srcPath is provided, radxmlListFile and sxmlListFile need not be provided.
destpath	Specify the path where the files will be generated.
confirmStage	SINGLE_STAGE_UPDATE (Default Value should not be modified by the developer)

Figure 2-8 SilentODT Service XML Updater Properties

```

56 ## Service XML Updater
57 ## 6.operation=SXML_UPDATER
58 ## 6.xmlListFile=D:\ODT123\TEST\srcFile.TXT -- List Of Absolute path of all xml files in a text file
59 ## 6.radxmlListFile= -- A txt File containing the List of all radxmls.
60 ## 6.xsdListFile= -- A txt File containing the List of all xsds. This
parameter is required only if NonExt Operations are Required.
61 ##
62 ## 6.srcPath=Z:\EXEC\FLEXCUBE_Kernel\FCUBS_12.0.0\MAIN -- Src Path. Tool will create radxmlListFile and
xsdListFile by itself from the srcPath if provided
63 ## Note that if srcPath is provided, radxmlListFile and
xsdListFile need not be provided
64 ## 6.destpath=D:\RADTOOL -- destination Path
65 ## 6.confirmStage=SINGLE_STAGE_UPDATE --
SINGLE_STAGE_UPDATE/UPDATE_FROM_STAT_FILES/STAT_FILE_GEN
66 ## SINGLE_STAGE_UPDATE : Updation of service Xmls in
one step process.
67 ## If any New function id is found mapped to a
Service, it will not be updated.
68 ## STAT_FILE_GEN : First Stage if Updation carried in
2 Steps. generates Stat Files in destPath.
69 ## User can decide whether to update new
FunctionId's to Service Xmls
70 ## UPDATE_FROM_STAT_FILES : Second Step . Utility will
update the Service Xml based on the confirmation
71 ## information provided by User in the Stat files
generated in previous Stage.Stat Files has to be placed in the destPath
72 ##

```

Table 2-13 Service XML Updater

Input	Output
xsdListFile	Updated Service XML's in destpath.
sxmlListFile	Updated Service XML's in destpath.
radxmlListFile	Updated Service XML's in destpath.
srcPath	Updated Service XML's in destpath.
destpath	Updated Service XML's in destpath.
confirmStage	Updated Service XML's in destpath.

7. SXML_REFRESH

Refresh Functionality allows us to upgrade the existing service xml to its later version keeping the sub version specific changes intact.

Table 2-14 Service XML Refresh

Field	Description
srcFileList	Prepare a text file that contains the absolute path of all Service XML, the same file should be provided i.e. service XML which has to be refreshed.
baseFileList	Prepare a text file that contains the absolute path of all base service XMLs. Provide the same file path. For instance, for a custom development team; all the latest Kernel files have to be mentioned in baseFileList while the custom Service XMLs to be refreshed has to be mentioned in the srcFileList .
srcRelType	Specify the release type of Source RADXMLs list (KERNEL/CLUSTER/CUSTOM).
baseRelType	Specify the release type of base RADXMLs list (KERNEL/CLUSTER/CUSTOM). baseRelType should be at least one level below srcRelType for SOURCE Refresh. For Instance, for a custom development team, srcRelType would be CUSTOM and baseRelType can be either KERNEL/CLUSTER depending on the base source type.

Table 2-14 (Cont.) Service XML Refresh

Field	Description
destpath	Specify the path where the files will be generated.

Figure 2-9 SilentODT Service XML Refresh Properties

```
## Service XML Refresh
## 7.operation=XML_REFRESH
## 7.srcFileList=D:\\REFRESH\\src.txt -- A txt File containing the List of all Sources sxmls. i.e sxmls which has
to be refreshed
## 7.baseFileList=D:\\REFRESH\\base.txt -- A txt File containing the List of all base sxmls.
## 7.srcRelType=CUSTOM -- Release Type of Source sxmls; Either of KERNEL/CLUSTER/CUSTOM
## 7.baseRelType=KERNEL -- Release Type of Base sxmls; Either of
KERNEL/CLUSTER/CUSTOM##
## Base Release Type should be atleast one level below Src Release type for
SOURCE Refresh.
## 7.destpath=D:\\RADTOOL
```

Table 2-15 Service XML Refresh

Input	Output
operation	Refreshed Service XML's in destpath.
srcFileList	Refreshed Service XML's in destpath.
baseFileList	Refreshed Service XML's in destpath.
srcRelType	Refreshed Service XML's in destpath.
baseRelType	Refreshed Service XML's in destpath.
destpath	Refreshed Service XML's in destpath.

2.3.3 GW_CONFIG.properties

This topic briefs GW_CONFIG.properties.

GW_CONFIG.properties

The parameters of these property files are used to generate gateway web service property files. This configuration file is optional. Specify only if Gateway Web service property files (**GW_WS_PROP_FILES**) is being generated as part of Service XML Bulk generation operation.

Figure 2-10 SilentODT GW Config Properties

```

#####GW_EJB Properties#####used for creation GW Property file #####
#####
#EJB_APP_NAME - Name of the deployed EJB Application
EJB_APP_NAME=GWEJB
# EJB_APP_SERVER(WEBLOGIC,WEBSPPHERE)
EJB_APP_SERVER=WEBLOGIC
#Reference name of the EJB by which it has been deployed. This should be '<EJB_APPLICATION_NAME>/ejb/GW_EJB_Bean'
EJB_JNDI_NAME=GWEJB/ejb/GW_EJB_Bean

EJB_SERVER_URL=http://localhost:7010
EJB_SERVER_USERNAME=weblogic
EJB_SERVER_PASSWORD=weblogic1

##Location of Logger Property File path in the server where Webservice is to be deployed.
##Provide Path Including File Name
GW_WS_LOGGER_PROP_FILE_PATH=/home/orallgas/Gateway11.0/GW_WS/config/gw_ws_logger.properties
##Location where Debug Files will be written
GW_WS_LOGGER_FILE_PATH=/home/orallgas/Gateway11.0/GW_WS/log
#Location of Gateway Property File. If not provided ; assumed to be same as of Logger property File Path
GW_WS_PROP_FILE_PATH=/home/orallgas/Gateway11.0/GW_WS/prop

XSD_PATH=/home/orallgas/Gateway11.0/GW_WS/XSD

```

Table 2-16 GW_CONFIG.properties

Field	Description
EJB_APP_NAME	Specify the Name of the deployed EJB Application.
EJB_APP_SERVER	Specify Application server name in which ear deployed.
EJB_JNDI_NAME	EJB JNDI Name is the reference name of the EJB by which the EJB has been deployed.
EJB_SERVER_URL	Specify the application server IP Address & port where the EJB application is deployed.
EJB_SERVER_USERNAME	Specify the user name of the application server where the EJB application is deployed.
EJB_SERVER_PASSWORD	Specify the password of the application server where the EJB application is deployed.
GW_WS_LOGGER_PROP_FILE_PATH	Specify the Location of Logger Property File path in the server where web service is to be deployed. Provide path including the file name. For example, Windows path: D:/Kernel11.1/GW_WS/config/gw_ws_logger.properties Linux or UNIX: /oraint1/kernel//Gateway/GWWS/config/gw_ws_logger.properties
GW_WS_LOGGER_FILE_PATH	Specify the location where debug files will be written. For example, Windows: D:/Kernel11.1/GW_WS/log/ Linux or Unix: /oraint1/kernel/FC120INS_DEBUG/Gateway/GWWS/log
GW_WS_PROP_FILE_PATH	Specify the path where property file is placed in the server. This will be referred to in web.xml of the web service property file. For example, Windows: D:/Kernel11.1/GW_WS/prop/ Linux or UNIX: /oraint1/kernel/FC120INS_DEBUG/Gateway/GWWS/prop

2.4 Generation of Web service Artifacts through SilentOdtUtility

This topic provides an overview of the generation process of Web service Artifacts through SilentOdtUtility.

To generate web service artifacts for a service, configure the property files of the utility as explained in the previous section. Following operations needs to be configured in **OdtOperations.properties** in the respective sequence:

1. **LOGIN**
2. **SETRELEASE**
3. **SXML_BULKGENERATION**

Provide following values for **gen** parameter of

- SXML_BULKGENERATION IMPL_FILE
- CONFIG_FILES, WSDL_FILE
- XSD_FILES
- GW_WS_PROP_FILES
- ANT_BUILD

To generate Web service Artifacts through SilentOdtUtility, the user has to double click the batch file **silentOdt.bat/sh** present in the Open Development Tool source and command prompt displays.

Figure 2-11 SilentODT Sources Folder

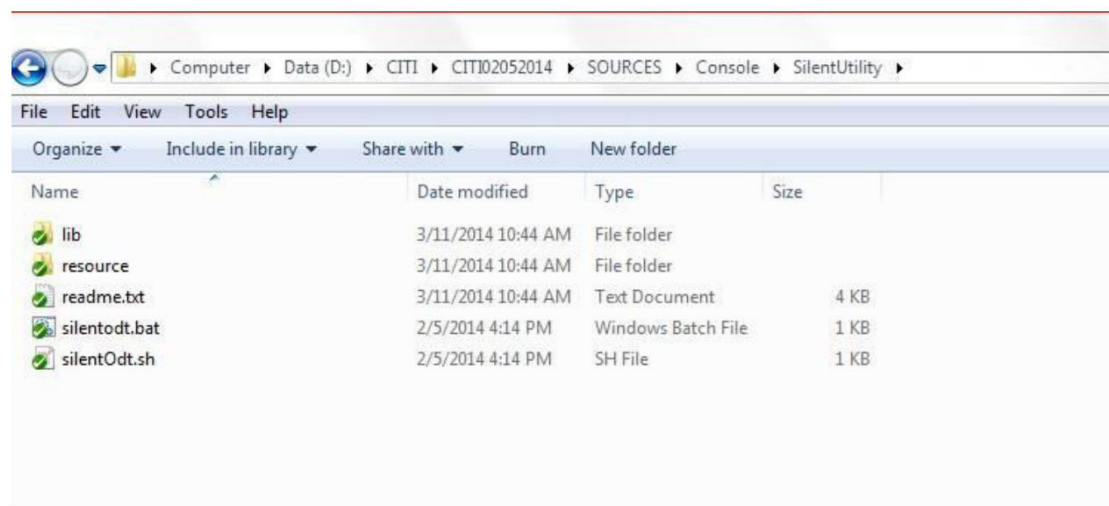
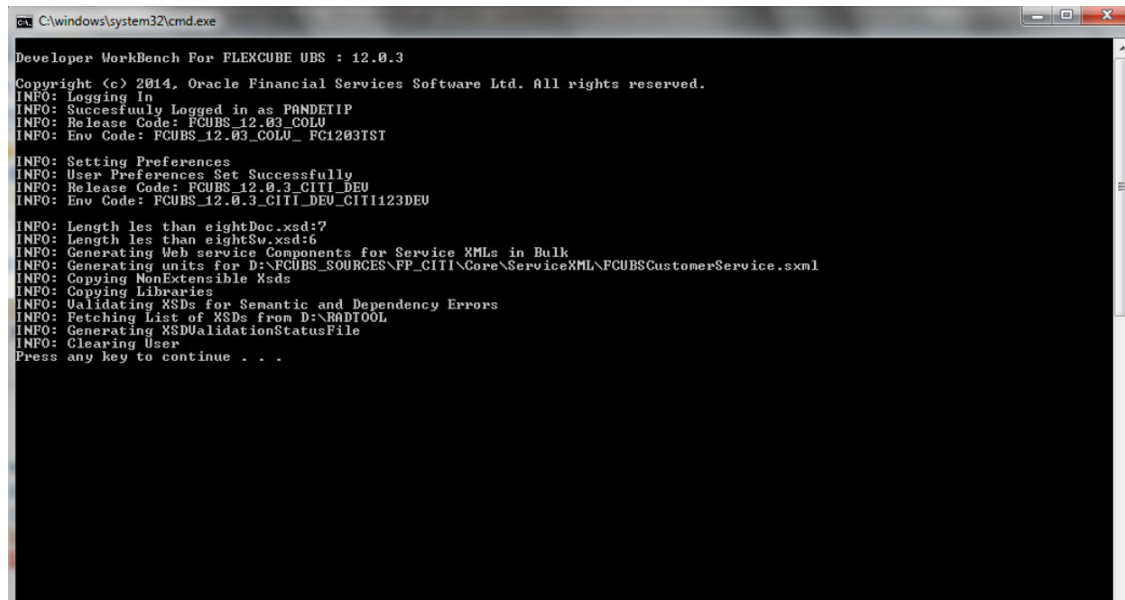


Figure 2-12 SilentODT Running in Command Prompt


```

C:\windows\system32\cmd.exe
Developer WorkBench For FLEXCUBE UBS : 12.0.3
Copyright (c) 2014, Oracle Financial Services Software Ltd. All rights reserved.
INFO: Logging In
INFO: Successfully Logged in as PANDEITIP
INFO: Release Code: FCUBS_12.03_COLU
INFO: Env Code: FCUBS_12.03_COLU_FC1203TST
INFO: Setting Preferences
INFO: User Preferences Set Successfully
INFO: Release Code: FCUBS_12.0.3_CITI_DEU
INFO: Env Code: FCUBS_12.0.3_CITI_DEU_CITI123DEU
INFO: Length less than eightDoc.xsd:7
INFO: Length less than eightSv.xsd:6
INFO: Generating Web service Components for Service XMLs in Bulk
INFO: Generating units for D:\FCUBS_SOURCES\PP_CITI\Core\ServiceXML\FCUBSCustomerService.xml
INFO: Copying NonExtensible Xsds
INFO: Copying Libraries
INFO: Validating XSDs for Semantic and Dependency Errors
INFO: Fetching List of XSDs from D:\RAD100L
INFO: Generating XSDValidationStatusFile
INFO: Clearing User
Press any key to continue . . .

```

After the successful built operation, the following Service artifacts files will be generated in the destination directory specified.

Table 2-17 Service Artifacts files

Files	Description
<Service Name>Src*Impl.java	IMPL files for service
<Service Name>WSDL*.wsdl	WSDL files for service
<Service Name>Config*.xml	Config files
<Service Name>XSD*.xsd	Service specific xsd's
<Service Name>Common*.xsd's	Common XSD's (call forms) part of service
<Service Name>\<Service Name>\META-INF\application.xml <Service Name>\<Service Name>\META-INF\MANIFEST.MF	Config XML's for building the Web service
<Service Name>\<Service Name>\commons-codec-1.2.jar	Utility Jar for building the web service
<Service Name>\<Service Name>\wscommon.jar	Utility Jar for building the web service
Sample Ant file	For building service ear file (Can be modified by Dev team as per Folder structure)

Figure 2-13 SilentODT Generated Files Tree Structure



This topic contains the following sub-topics:

- [Log Files](#)
This topic gives an overview on Log Files.
- [Ant Build Scripts](#)
This topic gives an overview on Ant Build Scripts.
- [Gateway Property Files](#)
This topic gives an overview on Gateway Property files.

2.4.1 Log Files

This topic gives an overview on Log Files.

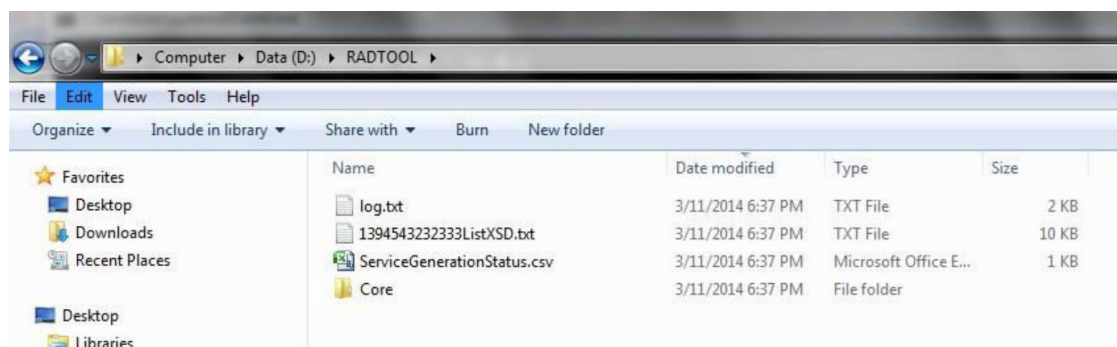
The following files are being generated:

- **ServiceGenerationStatus.csv**
The generation status will be saved in the above mentioned file. This will be generated in the destination path.
- **XSDValidationErrors.csv**
XSD Validation errors, if any, will be saved in above mentioned file. This will be generated in the destination path.
- **Utility Log File**
The Log File of the utility will be generated in the path configured in SilentOdt.properties. This can be used in case of any troubleshooting.

Note

Proceed only if the status is Success for all services in **ServiceGenerationStatus.csv** and **XSDValidationErrors.csv** is not generated.

Figure 2-14 SilentODT Generated log Files

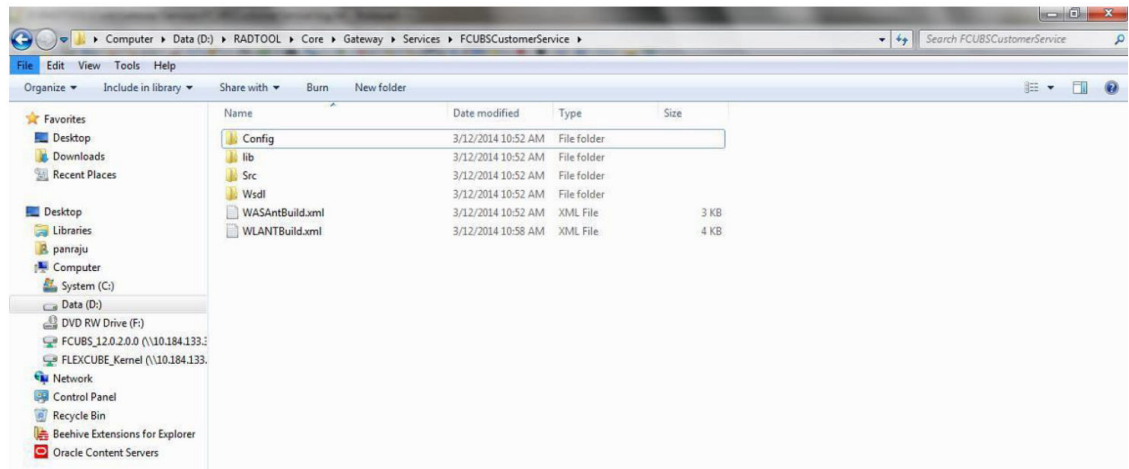


2.4.2 Ant Build Scripts

This topic gives an overview on Ant Build Scripts.

Tool will generate the sample ant scripts for weblogic and websphere application server. Developer can write ant script based on sample ant script or same ant file can be used for building ear file.

WLANTBuild.xml – Ant script for weblogic server

Figure 2-15 SilentODT Generated Files Ant Build Files

2.4.3 Gateway Property Files

This topic gives an overview on Gateway Property files.

Gateway property files will be generated in GW_WS folder inside the destination path. The following files will be generated.

- gw_ws_logger.properties
- GW_WS_Prop.properties