Oracle Identity Manager Interface User Guide Oracle FLEXCUBE Universal Banking

Release 14.4.0.3.0

Part No. F38223-01

February 2021



Oracle Identity Manager Interface User Guide Oracle Financial Services Software Limited Oracle Park

Off Western Express Highway Goregaon (East) Mumbai, Maharashtra 400 063 India Worldwide Inquiries: Phone: +91 22 6718 3000 Fax: +91 22 6718 3001 https://www.oracle.com/industries/financial-services/index.html

Copyright © 2007, 2021, Oracle and/or its affiliates. All rights reserved.

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

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. 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 failsafe, 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.

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.

This software or hardware and documentation may provide access to or information on 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. 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.

Contents

1.	Pret	face		1-1
	1.1	Introdu	lction	1-1
	1.2	Audien	ICe	1-1
	1.3	Docum	entation Accessibility	1-1
	1.4	Organi	zation	1-1
	1.5	Abbrev	<i>r</i> iations	1-2
	1.6	Organi	zation	1-2
	1.7	Glossa	ry of Icons	1-2
		1.7.1	Related Documents	1-2
2.	Ora	cle FLE	EXCUBE - Oracle Identity Manager Interface	2-1
	2.1	Oracle	FLEXCUBE - Oracle Identity Manager Integration	2-1
	2.2	Integra	tion Deployment Configuration	2-1
	2.3	Operat	ions for Identity Management	2-2
	2.4	Interfac	ce Attributes	2-2
		2.4.1	Data for User Provisioning	2-3
		2.4.2	Data for Reconciliation	2-5
	2.5	Interfac	ce Maintenances	2-6
		2.5.1	Maintaining an External Source	2-6
		2.5.2	Maintaining OIM Admin User	2-6
3.	Ann	exure	Α	3-1
	3.1	Oracle	Identity Manager Components	3-1
	3.2	OIM G	Seneric Technology Connector Configuration	3-2
	3.3	SPML	Request/Response Message Formats	3-5
		3.3.1	Add Request	3-5
		3.3.2	Modify Request	3-11
		3.3.3	Delete Suspend and Resume Requests	3-13
		3.3.4	Set Password Request	3-13
		3.3.5	Add and Modify Responses	3-14
		3.3.6	Delete Suspend Resume and Set Password Responses	3-16
	3.4	Messa	ge Exchange Sequence for User Creation	3-17
	3.5	Messa	ge Exchange Sequence for User Field Modification/ Set Password	3-18
	3.6	Messa	ge Exchange Sequence for User Delete / Suspend / Resume	3-19

1. Preface

1.1 Introduction

This manual talks about the interface between Oracle FLEXCUBE and the Oracle Identity Manager system used in your bank. The maintenances required for the proper functioning of this interface, the interface workflow, validations, and processing for the interface have been documented in this manual.

1.2 <u>Audience</u>

This manual is intended for the following User/User Roles:

Role	Function
Back office data entry Clerks	Input functions for maintenance related to the interface.
Back office Managers/ Officers	Authorization functions.

1.3 **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.

1.4 Organization

This manual is organized as follows:

Chapter	Description	
Chapter 1	About this Manual gives information on the intended audience. It also lists the various chapters covered in this User Manual.	
Chapter 2	<i>Oracle FLEXCUBE - Oracle Identity Manager Interface</i> explains about the integration and configuration of OIM with Oracle Flexcube.	
Chapter 3	Annexure A details about the OIM Components and the various Messages generated within the module.	
Chapter 4	<i>Function ID Glossary</i> has alphabetical listing of Function/Screen ID's used in the module with page references for quick navigation.	



1.5 <u>Abbreviations</u>

Abbreviation	Description
System	Unless specified, it shall always refer to Oracle FLECUBE
OIM	Oracle Identity Manager
SPML	Service Provisioning Mark-up Language
DSML	Directory Service Mark-up Language
GTC	Generic Technology Connector

1.6 Organization

This manual is organized into the following chapters:

Chapter Description	
Chapter 1	About this Manual gives information on the intended audience. It also lists the various chapters covered in this User Manual.
Chapter 2	<i>Oracle FLEXCUBE</i> – <i>Oracle Identity Manager Interface:</i> Oracle Identity Manager Interface helps in integrating the two systems for user provisioning and de-provisioning services.
Chapter 3	<i>Annexure A -</i> deals with the: OIM Components, SPML Request and Response Message Formats, Message Exchange Sequences.

1.7 Glossary of Icons

This User Manual may refer to all or some of the following icons.

lcons	Function
×	Exit
+	Add row
1	Delete row
Q	Option List

Refer the Procedures User Manual for further details about the icons.

1.7.1 <u>Related Documents</u>

You may refer the following manuals for more information

- Oracle FLEXCUBE manual on Core Entities
- Oracle Identity Manager User Manual (not included with Oracle FLEXCUBE User Manuals)



2. Oracle FLEXCUBE - Oracle Identity Manager Interface

The Oracle FLEXCUBE - Oracle Identity Manager Interface helps in integrating the two systems for user provisioning and de-provisioning services.

Oracle Identity Manager (OIM) automates user provisioning, identity administration, and password management. OIM manages the entire life cycle of user identities and entitlements and helps to control user access across all resources in the organization.

This chapter contains the following sections:

- Section 2.1, "Oracle FLEXCUBE Oracle Identity Manager Integration"
- Section 2.2, "Integration Deployment Configuration"
- Section 2.3, "Operations for Identity Management "
- Section 2.4, "Interface Attributes"
- Section 2.5, "Interface Maintenances "

2.1 <u>Oracle FLEXCUBE - Oracle Identity Manager Integra-</u> tion

The integration between Oracle FLEXCUBE and Oracle Identity Manager is done via a Generic Technology Connector (GTC). The GTC provides for provisioning and reconciliation tasks via the following components:

- For Reconciliation
 - Reconciliation Transport Provider moves the reconciled data from Oracle FLEXCUBE into OIM.
 - Reconciliation Format Provider converts the message received from Oracle FLEXCUBE into a format understandable by OIM.
 - Validation Provider validates data received from Oracle FLEXCUBE before passing it on to OIM.
- For Provisioning
 - Provisioning Format Provider (Service Provisioning Markup Language) converts the provisioning data from OIM into a format understood by Oracle FLEXCUBE.
 - Provisioning Transport Provider (web service) carries the provisioning message received from the Provisioning Format Provider to the Oracle FLEXCUBE.

For sample GTC configurations refer Annexure A.

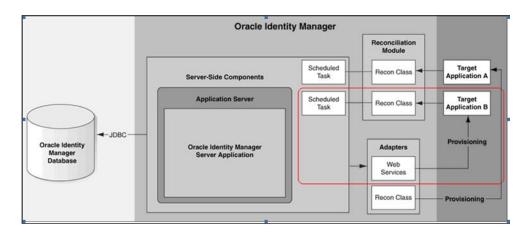
2.2 Integration Deployment Configuration

The OIM- Oracle FLEXCUBE integration is designed to follow a Provisioning and Reconciliation deployment configuration. In this kind of deployment configuration the Oracle Identity Manager performs both provisioning and reconciliation tasks.

The tasks performed by OIM in this deployment configuration are as follows:

- Provisioning tasks of OIM are the creation, maintenance, and deletion of accounts on the Oracle FLEXCUBE system.
- Reconciliation task of OIM is to periodically update the data it maintains with regard to Oracle FLEXCUBE using the data from Oracle FLEXCUBE.





2.3 **Operations for Identity Management**

You can have certain operations regarding User Identity Management using the OIM GTC. The requests for these operations are sent from OIM GTC and are as follows:

- Add request For creating a New User Record in Oracle FLEXCUBE
- Modify request For modifying the existing User Record in Oracle FLEXCUBE
- Suspend request For closing the respective User record in Oracle FLEXCUBE
- Resume request For Reopening the Respective User record in Oracle FLEXCUBE
- Delete request For closing the Respective User record in Oracle FLEXCUBE
- Set Password Request For changing the Password of the respective user in Oracle FLEXCUBE

2.4 Interface Attributes

This section contains the following topics:

- Section 2.4.1, "Data for User Provisioning"
- Section 2.4.2, "Data for Reconciliation"

OIM GTC is used for both user provisioning/de-provisioning services and for reconciliation in Oracle FLEXCUBE.

For user provisioning and de-provisioning services the Oracle FLEXCUBE Gateway user upload services is used. Reconciliation is done using the 'SMBOIMHF' EOD activity in Oracle FLEXCUBE.

Note

If the Logging Enable property has been selected, then a log file containing OIM request and response with corresponding message id will be maintained in location defined by you.

Note

OIM- Oracle FLEXCUBE integration will remain functional with or without the Oracle FL-EXCUBE Single Sign on mode.



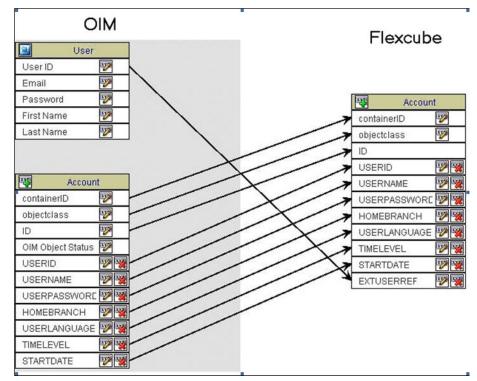
For sample GTC configurations refer to Annexure A.

2.4.1 Data for User Provisioning

The data sent from OIM to Oracle FLEXCUBE for user provisioning will contain only the following:

- Mandatory fields for the creation of users in Oracle FLEXCUBE
- External user reference identification containing the OIM id for a user

The data sent from OIM to Oracle FLEXCUBE for user provisioning is illustrated below.



2.4.1.1 Collecting Data for User Provisioning

The data for provisioning is collected from the OIM user creation form. The fields to be collected - such as User ID, User Name and User Password – are defined in the 'Provisioning form for Oracle FLEXCUBE GTC'.

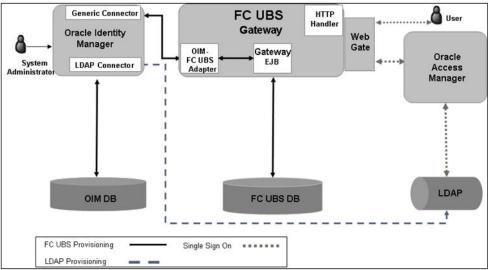


	LEXCUBEGTC	
Indicates required		
containerID	FLEXCUBEDB	
objectclass	Users	
ID	FXUSER001	
USERID	* FXUSER001	
USERNAME	* FXUSER001	
USERPASSWORD	*	
HOMEBRANCH	* СНО 🔑 <u>сі</u>	ear
USERLANGUAGE	* ENG	ear
TIMELEVEL	• 9 <u>~ ci</u>	ear
STARTDATE	* June 23, 2008	
Save		
0.000		

The 'Provisioning form for Oracle FLEXCUBE GTC' is filled up by the OIM Administrator. OIM Administrator uses Direct Provisioning to provision Oracle FLEXCUBE to any OIM user.

The Field values like Name, Password, and User Id in the provisioning data form shall be prepopulated from the OIM user maintenance form.

2.4.1.2 Provisioning Process Flow



The Provisioning process flow is illustrated in the diagram shown below.



2.4.2 Data for Reconciliation

The data for reconciliation contains the same set of mandatory fields used for user provisioning.

	Recon	ciliation	
FLEXCUB	GTC	FLE	EXCUBEGTC
USERID	¥ ×		¥ 😵
USERNAME	¥ **	USERNAM	1E 🌮 😵
USERPASSWOR	. 🌮 🙀	USERPAS	SWORE 🕎 🎘
USERLANGUAGI	¥ ×	USERLAN	IGUAGE 🕎 🍕
HOMEBRANCH	27 X	HOMEBRA	алсн 🕎 😽
TIMELEVEL	19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		L 🌮 🍕
STARTDATE	77 12	STARTDA	TE 🅎

2.4.2.1 Reconciliation File Handoff

The EOD activity 'SMBOIMHF' creates the handoff file for reconciliation. The handoff file will be in CSV (Comma Separated Values) format.

Handoff File Name

The Handoff file name has two parts which are:

- Prefix SMOIMHOFF
- Suffix the current date in rrrr-MM-dd format

Handoff File Format

The Handoff file will be in Comma Separated Values (CSV) format and will contain the following:

- First Line ##FC UBS user data rrrr-MM-dd
- Second line contains comma separated column names
- Third line onwards has the corresponding column values

Sample Handoff file

##FC UBS user data 2008-05-06

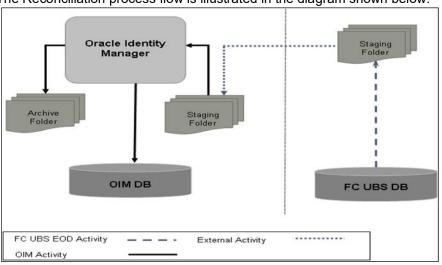
 ${\tt USERID, USERNAME, USERPASSWORD, TIMELEVEL, HOMEBRANCH, STARTDATE, USERLANGUAG} \\ {\tt E}$

TESTUSER1,TEST USER, 56A04A86FADBA54D2AD649D98E3FB63F,9,CHO,31-DEC-07,ENG

TESTUSER2,TEST USER, 3FE06AFE34C9A53E0320E74E43FB3F45,9,CHO,31-DEC-07,ENG

:

2.4.2.2 Reconciliation Process Flow



The Reconciliation process flow is illustrated in the diagram shown below.

2.5 Interface Maintenances

You have to perform the following maintenances for the OIM – Oracle FLEXCUBE Interface.

This section contains the following topics:

- Section 2.5.1, "Maintaining an External Source"
- Section 2.5.2, "Maintaining OIM Admin User"

2.5.1 Maintaining an External Source

For processing OIM requests, a source named IDM is maintained in Oracle FLEXCUBE. This source has access to Oracle FLEXCUBE Gateway user upload services.

The external source can be maintained in the 'External System Detailed' screen. Invoke this screen from under Gateway – External System in the Application Browser.

2.5.2 Maintaining OIM Admin User

You must maintain an 'OIM Admin User' in Oracle FLEXCUBE to serve as Maker Id for user provisioning and de-provision. You can maintain the OIM Admin User reference in the 'External Identifier' field.



🔶 User Maintenance			_ ×
🖹 New 🕞 Enter Query			
User Details		User Status	Enabled
User Identification *			Hold
Name *			Obisabled
User Reference			Clocked
Language *		Classification	 Staff
Home Branch *			Branch
Customer No		Status Changed On	
Department Code		Last Signed On	
Department Description			Staff Customer Restriction
Tax Identifier			Required
LDAP DN		ELCM User ID	
Time Level *			Multi Branch Access
Amount Format			Other RM Customer Access Restricted
Number Format Mask	XXX,XXX,XXX,XXX		Show Dashboards
	\bigcirc XX,XX,XX,XX,XXX,XXX		Alerts on Home
Date Format	~		✓ Front-End Debug Enabled
	Auto Authorization		F10 Access Required
	Validate		F11 Access Required
Supervisor Identification			F12 Access Required
Supervisor Name			MFI User
Access Control	Both 🗸		External Alerts
		- Multi-Factor Authentication —	
		MFA Enabled	Disabled V
		MFA ID	
User Password		Start Date *	K
Password		End Date	
Password Changed On			
Email			
Reference No			
		- Screen Saver Details	
Invalid Logins			
No of Cumulative Logins		Screensaver Interval (in seconds)	
No of Successive Logins		seconds)	
Restricted Password Roles	s Rights Functions Tills	Account Classes Genera	I Ledgers Limits Branches
Products Disallowed Funct	ions Users Holiday Fields	Group Restriction Central	zed Role Dashboard Mapping
Maker	Date Time:		
Checker			
	Date Time:		Exit
Mod No	Record Status Authorization Status		
	Autorization Status		

The 'External Identifier' field is available in the 'User Maintenance' screen where you can maintain other details of the Oracle FLEXCUBE User as well.



3. Annexure A

This chapter deals with the following additional information with respect to the Oracle FLEXCUBE – Oracle Identity Manager Interface:

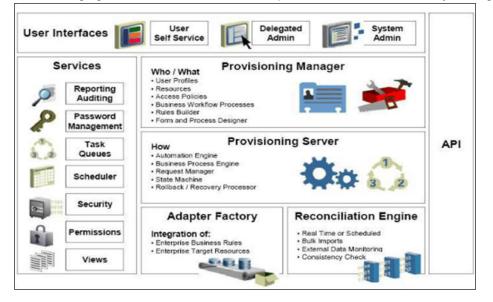
- Section 3.1, "Oracle Identity Manager Components"
- Section 3.2, "OIM Generic Technology Connector Configuration"
- Section 3.3, "SPML Request/Response Message Formats"
- Section 3.4, "Message Exchange Sequence for User Creation"
- Section 3.5, "Message Exchange Sequence for User Field Modification/ Set Password"
- Section 3.6, "Message Exchange Sequence for User Delete / Suspend / Resume"

3.1 Oracle Identity Manager Components

Oracle Identity Manager includes the following components:

- User Interfaces for the user to define and administer the provisioning environment.
- Provisioning Manager for maintaining provisioning details such as user profiles, access policies, business process workflows and business rules.
- Provisioning Server for the Provisioning Manager
- Adapter Factory for integrating OIM with other managed systems and application
- Reconciliation Engine ensures consistency between the provisioning done by OIM and the resources managed by OIM.

The following figure illustrates the various components of the Oracle Identity Manager system





3.2 OIM Generic Technology Connector Configuration

The following table lists the parameter fields and the corresponding sample values for OIM GTC.

Parameter Fields	Sample Value	Remarks		
Run-Time Parameters of the				
Shared Drive Rec	onciliation Transport Provider			
Staging Direc- tory (Parent Identity Data) field	<oim_server_home\gtc\recon\stag- ING></oim_server_home\gtc\recon\stag- 	Full Path of the data file that con- tains data to be modified for the Oracle FLEX- CUBE User in OIM		
Archiving Direc- tory field	<oim SERVER_HOME\GTC\RECON\ARCHIVE></oim 	Path to the folder where OIM keeps processed file after reconcilia- tion		
File Prefix field	SMOIMHOFF	Prefix of the data file for reconcilia- tion		
Specified Delim- iter field	,	This (a comma) is only delimiter available with CSV format		
Tab Delimiter check box	Check box not selected	NA		
Fixed Column Width field	NA			
Specified Delim- iter field	NA			
Unique Attribute (Parent Data) field	NA			
Run-Time Parameter of the Web Services				
Provisioning Transport Provider				
Web Service URL field	http://hostname:port/FCUBSProvisioningAd- Service/services/FCUBSProvisioningAdSer- viceSEI	Web service URL of FCUBSProvi- sioning web ser- vice		



Parameter Fields	Sample Value	Remarks		
Run-Time Parameters of the SPML Provi- sioning Format Provider				
Target ID field	Oracle FLEXCUBE	Will be same as Destination field of FCUBS Header		
User Name (authentication) field	NA			
User Password (authentication) field	NA			
Design Parameter	rs of the Shared Drive			
Reconciliation Tra	nsport Provider			
File Encoding field	Cp1251	Canonical name for character set encoding for oper- ating system with the English-lan- guage setting for the corresponding java.io API sup- ported by OIM GTC		
Design Parameter	rs of the Web Services			
Provisioning Transport Provider				
Web Service SOAP Action field	http:// spmladapter.ws.oim.integra- tion.fcubs.iflex.com /processRequest	Will be same as defined in corre- sponding WSDL		
Design Parameter	rs of the SPML			
Provisioning Format Provider				
WSSE Config- ured for SPML Web Service? check box	Check box not selected	There will be No support for WSSE		
Custom Authen- tication Creden- tials Namespace field	http:// spmladapter.ws.oim.integra- tion.fcubs.iflex.com	Target Name- space value of corresponding WSDL		



Parameter Fields	Sample Value	Remarks
Custom Authen- tication Header Element field	OIMUser	Tag name in Soap Header that will carry user infor- mation provided above
Custom Element to Store User Name field	OIMUserId	Do
Custom Element to Store Pass- word field	OIMUserPassword	Do
SPML Web Ser- vice Binding Style (DOCU- MENT or RPC) field	DOCUMENT	Binding style of Corresponding web service
SPML Web Ser- vice Complex Data Type field	FCCProvisioningDocument	Complex data type name defined in Corresponding WSDL
SPML Web Ser- vice Operation Name field	NA	Operation name defined in Corre- sponding WSDL
SPML Web Ser- vice Target Namespace field	http:// spmladapter.ws.oim.integra- tion.fcubs.iflex.com	Target Name- space value of corresponding WSDL
SPML Web Ser- vice Soap Mes- sage Body Prefix field		NA
ID Attribute for Child Dataset Holding Group Membership Information field		NA
Generic Design Parameters		
Target Date For- mat field	yyyy-MM-dd	Will be same as the Oracle FLEX- CUBE Date For- mat
Batch Size field	All	



Parameter Fields	Sample Value	Remarks
Stop Reconcilia- tion Threshold field	None	
Stop Threshold Minimum Records field	None	
Source Date Format field	уууу-MM-dd	Will be same as the Oracle FLEX- CUBE Date For- mat
Reconcile Dele- tion of Multi val- ued Attribute Data check box	Check Box not selected	As no child data is configured
Reconciliation Type list	Full	Reconcile all accounts in Oracle FLEXCUBE that are given into staging data files into the Oracle Identity Manager

3.3 SPML Request/Response Message Formats

This section contains the following topics:

- Section 3.3.1, "Add Request"
- Section 3.3.2, "Modify Request"
- Section 3.3.3, "Delete Suspend and Resume Requests"
- Section 3.3.4, "Set Password Request"
- Section 3.3.5, "Add and Modify Responses"
- Section 3.3.6, "Delete Suspend Resume and Set Password Responses"

3.3.1 Add Request

This request contains all the data about users. For a Oracle FLEXCUBE user creation, only mandatory fields will be sent in the request.

Sample Request

<addRequest returnData="identifier" targetID="FLEXCUBE">

<containerID ID="FLEXCUBEDB" targetID=" FLEXCUBE "/>

<data>

<dsml:attr name="objectclass">

<dsml:value>Users</dsml:value>



</dsml:attr>

<dsml:attr name="USERID">

<dsml:value>value</dsml:value>

</dsml:attr>

<dsml:attr name="USERNAME">

<dsml:value>value</dsml:value>

</dsml:attr>

<dsml:attr name="USERPASSWORDNAME">

<dsml:value>value</dsml:value>

</dsml:attr>

<dsml:attr name="USERLANGUAGENAME">

<dsml:value>value</dsml:value>

</dsml:attr>

<dsml:attr name="TIMELEVEL">

<dsml:value>value</dsml:value>

</dsml:attr>

<dsml:attr name="HOMEBRANCH">

<dsml:value>value</dsml:value>

</dsml:attr>

<dsml:attr name="STARTDATE">

<dsml:value>value</dsml:value>

</dsml:attr>

<dsml:attr name="EXTUSERREF">

<dsml:value>value</dsml:value>

</dsml:attr>

</data>



</addRequest>

Field Tag	Field Type	Field Description	Restrictions	Remarks
addRequest ::	Ele- ment	Start tag for create user request		
addRequest : targetID	Attrib- ute	Defines the Target system id on which user is to be cre- ated	String	This value will be defined as Oracle FLEX- CUBE while configuring Generic connec- tor in OIM. This will be provided as the destina- tion tag value in the Header part of the Oracle FLEXCUBE Gateway request.
addRequest : returnData	Attrib- ute	Defines ReturnDataType	Identifier	For identifier return data type, only PSO ID will be sent as the OIM response content.
addRequest :: containerID	Ele- ment	Identifies an object that exists on the target		
addRequest :: containerID : ID	Attrib- ute	The value of ID uniquely identifies an object within the namespace of the target specified by the "targetID"	String	This value will be defined as FLEXCUBEDB while configura- tion of Generic connector in OIM.
addRequest :: containerID : targetID	Attrib- ute	Defines the Target system id on which user is to be cre- ated	string	This value will be defined as Oracle FLEX- CUBE while configuring GTC in OIM.
addRequest :: data	Ele- ment	This Node contains the User details	Extensible	



Field Tag	Field Type	Field Description	Restrictions	Remarks
addRequest :: data :: dsml:attr :	Ele- ment	Contains user field as attribute		
addRequest :: data :: dsml:attr :: name= objectclass	Attrib- ute	This defines the group to which user belongs.		Not Used (Needed for compliance with SPML format)
addRequest :: data :: dsml:attr : dsml:value	Ele- ment	Users		This value will be defined as Users while con- figuration of GTC in OIM.
addRequest :: data :: dsml:attr :	Ele- ment	Contains user field as attribute		
addRequest :: data :: dsml:attr :: name= USERID	Attrib- ute	User identifier that is to be created in Oracle FLEXCUBE		This field is mapped as the USERID col- umn of an Ora- cle FLEXCUBE User account.
addRequest :: data :: dsml:attr : dsml:value	Ele- ment	User identifier value	Date Type: String, Length:12	
addRequest :: data :: dsml:attr :	Ele- ment	Contains user field as attribute		
addRequest :: data :: dsml:attr :: name= USERNAME	Attrib- ute	User Name		This field is mapped as the USERNAME column of an Oracle FLEX- CUBE User account.



Field Tag	Field Type	Field Description	Restrictions	Remarks
addRequest :: data :: dsml:attr :	Ele- ment	value	Date Type: String, Length:35	
dsml:value				
addRequest :: data ::	Ele- ment	Contains user field as attribute		
dsml:attr : addRequest :: data :: dsml:attr :: name= USERPASS- WORD	Attrib- ute	User Password		This field is mapped as the USERPASS- WORD column of an Oracle FLEXCUBE User account.
addRequest :: data :: dsml:attr : dsml:value	Ele- ment	value	Date Type: String, Length:32	
addRequest :: data :: dsml:attr :	Ele- ment	Contains user field as attribute		
addRequest :: data :: dsml:attr :: name= STARTDATE	Attrib- ute	User Account Start Date		This field is mapped as the STARTDATE column of an Oracle FLEX- CUBE User account.
addRequest :: data :: dsml:attr : dsml:value	Ele- ment	value		
addRequest :: data :: dsml:attr :	Ele- ment	Contains user field as attribute		

Field Tag	Field Type	Field Description	Restrictions	Remarks
addRequest :: data :: dsml:attr :: name= TIMELEVEL	Attrib- ute	User Time Level	Data Type: String Length:1	This field is mapped as the TIMELEVEL col- umn of an Ora- cle FLEXCUBE User account.
addRequest :: data :: dsml:attr : dsml:value	Ele- ment	value		
addRequest :: data :: dsml:attr :	Ele- ment	Contains user field as attribute		
addRequest :: data :: dsml:attr :: name= HOMEBRANCH	Attrib- ute	User Home Branch code	Data Type: String Length:3	This field is mapped as the HOME- BRANCH col- umn of an Oracle FLEX- CUBE User account.
addRequest :: data :: dsml:attr : dsml:value	Ele- ment	value		
addRequest :: data :: dsml:attr :	Ele- ment	Contains user field as attribute		
addRequest :: data :: dsml:attr :: name= USERLAN- GUAGE	Attrib- ute	User Language		This field is mapped as the USERLAN- GUAGE column of an Oracle FLEXCUBE User account.
addRequest :: data :: dsml:attr : dsml:value	Ele- ment	value	Data Type: String Length:3	



Field Tag	Field Type	Field Description	Restrictions	Remarks
addRequest :: data ::	Ele- ment	Contains user field as attribute		
dsml:attr :				
addRequest ::	Attrib-	EXTUSERREF		This field is
data ::	ute			mapped as the EXT US-
dsml:attr ::				ER_REF
name=				Column of an
EXTUSERREF				Oracle FLEX- CUBE User account.
addRequest ::	Ele-	value	Data Type:	
data ::	ment		String	
dsml:attr :			Length:20	
dsml:value				

3.3.2 Modify Request

A sample Modify request is given below:

<modifyRequest returnData="identifier">

<psoID ID="FLXUSER1" targetID=" FLEXCUBE">

</psoID>

<modification>

<dsml:modification name="<Field Name>" operation="replace">

<dsml:value>value</dsml:value>

</dsml:modification>

</modification>

</modifyRequest>

Field Tag	Field Type	Field Description	Restriction s	Remarks
modifyRequest	Ele- ment	Start tag to mod- ify field request		
modifyRequest : returnData	Attrib- ute	Defines ReturnDataType	Identifier	For identifier return data type, only PSO ID will be sent as the OIM response content



Field Tag	Field Type	Field Description	Restriction s	Remarks
modifyRequet :: psoID	Ele- ment	Identifies user in the Oracle FLEX- CUBE	String	This will be mapped with the User Id col- umn of Oracle FLEX- CUBE
modifyRequest :: psoID : ID	Attrib- ute	User Id Value	Data Type: String Length: 12	This will be used to identify a user in Ora- cle FLEXCUBE
modifyRequest :: psoID : targetID	Attrib- ute	Defines the Target system id on which user field is to be modified	string	This value will be defined as Oracle FLEXCUBE while con- figuring GTC in OIM. This will be provided as destination tag value in Header part of the Oracle FLEX- CUBE Gateway request.
modifyRequest :: modification	Ele- ment	Parent tag for data to be modi- fied		
modifyRequest :: modification :: dsml:modifica- tion:	Ele- ment	Contains data to be modified		
modifyRequest :: modification :: dsml:modifica- tion: name	Attrib- ute	User field name that needs to be modified		This will be used to identify the column name in Oracle FLEX- CUBE
modifyRequest :: modification :: dsml:modifica- tion: operation	Attrib- ute	Defines modifica- tion mode type	Add/ replace	An Oracle FLEXCUBE Gateway modify request will be sent for the field

Field Tag	Field Type	Field Description	Restriction s	Remarks
modifyRequest :: modification :: dsml:modifica- tion: dsml:value	Ele- ment	Contains field value to be modi- fied		

3.3.3 Delete Suspend and Resume Requests

The message format is same for suspend and resume request with their respective start tag.

Sample Request

<deleteRequest>

<psoID ID="<User Identitfier>" targetID=" FLEXCUBE">

</psoID>

</deleteRequest>

Field Tag	Field Type	Field Description	Restrictions	Remarks
deleteReq- uest::	Ele- ment	Start tag		
deleteReq- uest:: psoID	Ele- ment	Identifies the user in Oracle FLEXCUBE	String	This will be mapped with the User Id column of Ora- cle FLEXCUBE
deleteReq- uest:: psoID : ID	Attrib- ute	User Id Value	Data Type: String Length: 12	This will be used to identify a user in Oracle FLEX- CUBE
deleteReq- uest:: psoID : targetID	Attrib- ute	Defines the Tar- get system id on which user field is to be modified	string	This value will be defined as Oracle FLEXCUBE while configuring GTC in OIM. This will be provided as destination tag value in Header part of the Oracle FLEXCUBE Gateway request.

3.3.4 Set Password Request

The following is a sample Set Password Request.

<setPasswordRequest xmlns="urn:oasis:names:tc:SPML:2:0:password">

```
<psoID ID="<User Identitfier>" />
```



<password>password2</password>

</setPasswordRequest>

Field Tag	Field Type	Field Description	Restrictions	Remarks
setPasswordRe- quest ::	Element	Start tag		
setPasswordRe- quest :: psoID	Element	Identifies a user in Oracle FLEXCUBE	String	This will be mapped with the User Id col- umn of Oracle FLEXCUBE
setPasswordRe- quest :: psoID : ID	Attribute	User Id Value	Data Type: String Length: 12	This will be used to identify a user in Ora- cle FLEXCUBE
setPasswordRe- quest :: password	Element	Contains the password to be set	Data Type: String Length: 32	This will be mapped with the user_pass- word column of Oracle FLEX- CUBE .

3.3.5 Add and Modify Responses

The Add and Modify messages have the same format is same except for their respective start tags.

Sample for successful response

< addResponse status="success">

< pso>

< psoID ID="<USER ID>" />

</pso>

</addResponse>

Sample for unsuccessful response

< addResponse status="failure" error="alreadyExists">

< errorMessage>

exception=tcDuplicateUserException;errorMessage=User already exists

</ errorMessage>



</ addResponse>

Field Tag	Field Type	Field Description	Restrictions	Remarks
addRe- sponse :	Ele- ment	Root Tag		
addRe- sponse : status	Attrib- ute	Defines the status of request	success failure	This will be used to convey the success or failure of the request to OIM.
addRe- sponse :: error	Attrib- ute	Defines the error code	malformedRequest unsupportedOperation unsupportedIdentifier- Type noSuchIdentifier customError unsupportedExecution- Mode invalidContainment noSuchRequest unsupportedSelection- Type resultSetTooLarge unsupportedProfile invalidIdentifier alreadyExists containerNotEmpty	In case of failure status appropri- ate SPML code will be decided and sent to the OIM
addRe- sponse :: errorMes- sage	Ele- ment	Contains the error descrip- tion		In case of failure status this will contain the description of error code.
addRe- sponse :: pso	Ele- ment	Identifies user in Ora- cle FLEX- CUBE	String	
addRe- sponse :: pso: psoID	Attrib- ute	User Id Value	Data Type: String Length: 12	This will be same as sent in request to iden- tify user in OIM.



3.3.6 Delete Suspend Resume and Set Password Responses

Message format is the same for suspend and resume responses except for their respective start tags.

Sample for successful response

<deleteResponse status="success"/>

Sample for unsuccessful response

< deleteResponse status="failure" error=" noSuchIdentifier ">

< errorMessage>

exception= tcDuplicateUserException;errorMessage=User not found

</ errorMessage>

</ deleteResponse >

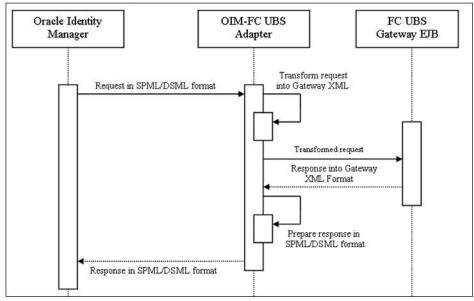
Field Tag	Field Type	Field Description	Restrictions	Remarks
deleteRe- sponse :	Ele- ment	Root Tag		
deleteRe- sponse : status	Attrib- ute	Defines the status of request	success failure	This will be used to convey the success or failure of the request to OIM
deleteRe- sponse :: error	Attrib- ute	Defines the error code Note: Appli- cable when status is fail- ure	malformedRequest unsupportedOperation unsupportedIdentifier- Type noSuchIdentifier customError unsupportedExecution- Mode invalidContainment noSuchRequest unsupportedSelection- Type resultSetTooLarge unsupportedProfile invalidIdentifier alreadyExists containerNotEmpty	In case of fail- ure status appropriate SPML code will be decided and sent to the OIM



Field Tag	Field Type	Field Description	Restrictions	Remarks
deleteRe- sponse :: errorMessage	Ele- ment	Contains the error description		In case of fail- ure status this will contain the description of error code.

3.4 Message Exchange Sequence for User Creation

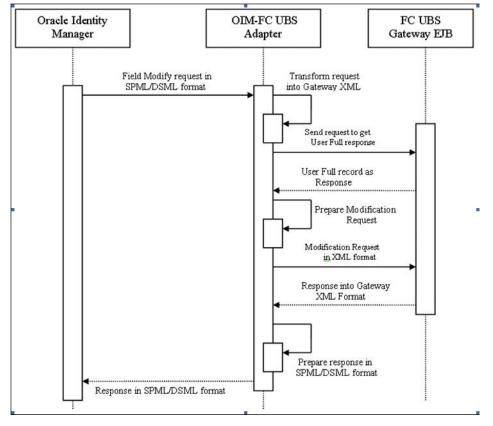
The following diagram illustrates the messages exchange sequence during user creation.





3.5 <u>Message Exchange Sequence for User Field Modifica-</u> tion/ Set Password

The following diagram illustrates the messages exchange sequence during user field modification and set password.





3.6 <u>Message Exchange Sequence for User Delete / Suspend / Resume</u>

