Oracle FLEXCUBE Universal Banking® 11.3 Development Overview Guide

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1 Preface

This Development Overview document provides the bird's eye view of FLEXCUBE UBS Application development. It touches the concepts, frameworks, tools required and documents available for guidance.

1.1 Audience

This Developer Overview book is intended for authorized FLEXCUBE UBS Application Developers who are expected to perform the following task:

- To develop a Function ID(User Interface Screen)
- To develop a Web Service
- To develop a Notification
- To Extend FLEXCUBE functionality using with extensibility
- To Interface FLEXCUBE with external systems using Generic Interface
- To upload data into FLEXCUBE using upload adaptors
- To use FLEXCUBE UBS framework tools
- To develop BIP Reports
- To develop OBIEE Repository files
- To debug FLEXCUBE at run time
- To Analyze and fix FLEXCUBE UBS bugs

To Use this manual, you need conceptual and working knowledge of the below:

Proficiency	Resources
FLEXCUBE Functional Architecture	Training programs from Oracle Financial Software Services.
FLEXCUBE Technical Architecture	Training programs from Oracle Financial Software Services.
Working knowledge of Web based applications	
Working knowledge of Oracle Database	Oracle Documentations
Working knowledge of PLSQL developer	Respective vendor documents
Working knowledge of PLSQL & SQL Language	
Working knowledge of XML files	

1.2 Related Documents

Refer the below documents for more information on FLEXCUBE UBS Application development.

- 1. FCUBS-FD01-01-01-Development Overview Guide
- 2. RAD
 - a. FCUBS-FD02-01-01-RAD Getting Started
 - b. FCUBS-FD02-02-01-RAD Function ID Development Volume 1
 - c. FCUBS-FD02-02-01-RAD Function ID Development Volume 2
 - d. FCUBS-FD02-03-01-RAD Web Service Development
 - e. FCUBS-FD02-04-01-RAD BIP Report Integration
 - f. FCUBS-FD02-05-01-RAD Notification Development
- 3. Extensibility
 - a. FCUBS-FD03-01-01-Extensibility Getting started
 - b. FCUBS-FD03-02-01-Extensibility Reference Guide
 - c. FCUBS-FD03-03-01-Extensibility By Example Volume 1
 - d. FCUBS-FD03-03-02-Extensibility By Example Volume 2
- 4. Interface
 - a. FCUBS-FD04-01-01-Interface Getting started
 - b. FCUBS-FD04-02-01-Generic Interface Configuration Guide
 - c. FCUBS-FD04-03-01-Upload Adapter Development Guide
- 5. Tools
 - a. FCUBS-FD05-01-01-Tools-Getting Started
 - b. FCUBS-FD05-02-01-RAD-Reference
 - c. FCUBS-FD05-02-02-RAD-Installation and Setup
 - d. FCUBS-FD05-03-01-DDL-Reference
 - e. FCUBS-FD05-04-01-TrAX-Reference
- 6. Support
 - a. FCUBS-FD06-01-01-Support Getting started
 - b. FCUBS-FD06-02-01-Support By Example
- 7. Reports
 - a. FCUBS-FD07-01-01-Report Getting started
 - b. FCUBS-FD07-02-01-BIP Report Development Guide
 - c. FCUBS-FD07-03-01-OBIEE repository Development Guide
- 8. Data model
 - a. FCUBS-FD08-01-01-Data Model getting started

1.3 Conventions

The following text conventions are used in this document:

Convention Meaning

boldface Boldface type indicates graphical user interface elements (for example, menus and menu items, buttons, tabs, dialog controls), including options that you select.

- *italic italic italic* type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
- monospace Monospace type indicates language and syntax elements, directory and file names, URLs, text that appears on the screen, or text that you enter.

2 Introduction

2.1 How to use this Guide

The information in this document includes:

- Chapter 2, "Introduction"
- <u>Chapter 3, "FLEXCUBE UBS Development Introduction"</u>
- <u>Chapter 4, "FLEXCUBE UBS Application Developer Documents"</u>
- <u>Chapter 5, "Developer Glossary"</u>

3 FLEXCUBE UBS Development - Introduction

FLEXCUBE UBS Application development consists of three parts:

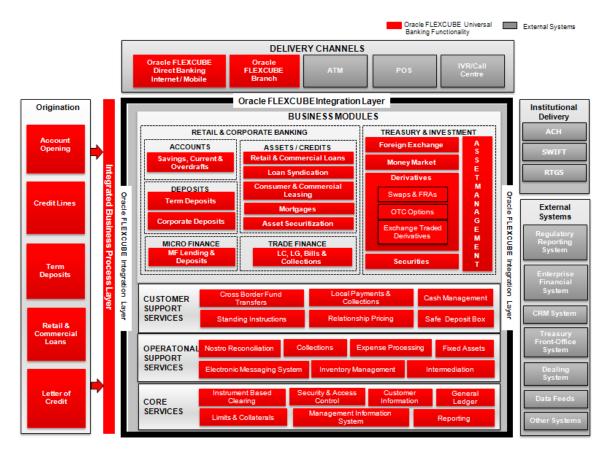
- Framework development
- Tools development
- Application components development using Framework/Tools

This document and associated documents are intended to guide FLEXCUBE UBS "Application component development".

3.1 FLEXCUBE UBS Functional architecture overview

The given below diagram provides the functional architecture of the FLEXCUBE UBS. Refer the respective FLEXCUBE UBS user manuals to know functionality.

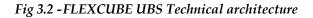


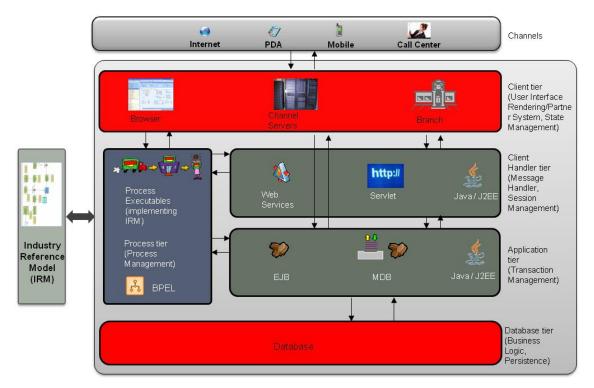


3.2 FLEXCUBE UBS Technical architecture overview

The diagram depicted below represents the FLEXCUBE technical architecture and it consists of the following tiers:

- User Interface tier
- Process tier
- Application and Integration tier
- Database tier





3.2.1 User Interface tier

The user interface of the application is light-weight in nature and based on JavaScript and XML. The communication between the browser and the web server is using XML. The rendering is done on the client using XSLT. The user interface is configurable. The screen can be easily adapted to different languages.

3.2.2 Process tier

Oracle FLEXCUBE provides for processes to be developed around the natively provided application. One can define processes using Oracle BPEL Process Manager and integrate the same into the application's user interface framework. When deployed in a process centric model, Oracle FLEXCUBE provides a task-based user interface. By default, Task based UI is offered for the branch platform.

3.2.3 Application and Integration tier

Oracle FLEXCUBE does not differentiate partner channels from its own native user interface when it comes to data processing. The Application and Integration tier provides the message handling, session management (for the native user interface) and transaction management in the application.

3.2.4 Database tier

The back-end is a relational database management system i.e. Oracle 11g. The database tier ensures integrity of data and also provides business logic written mainly in Oracle PL/SQL from the Oracle database.

3.3 FLEXCUBE UBS data flow

The below self explanatory diagram represents the FLEXCUBE UBS data flow at run time.

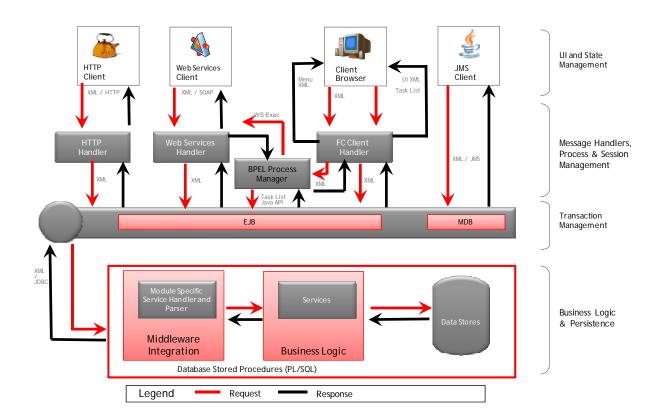


Fig 33 - FLEXCUBE UBS Data flow

3.4 FLEXCUBE UBS Framework

FLEXCUBE UBS Application consists following frameworks to develop the various parts of Application.

3.4.1 User Interface framework

This is used to develop and render various FLEXCUBE UBS interface (Screens aka Function ID). This consists following sub parts:

- o Maintenance
- o Online
- o Report
- o Batch
- o ELCM
- o Notification
- o Branch Screen
- o Process flow

3.4.2 Gateways

This framework used to develop various gateway components and support wide integration mechanism. This consists of following sub parts:

- o Generic XML Gateway
 - EJB
 - MDB
 - Servlet
 - Web Service
 - Notifications
- o Generic ASCII Interface
- o EMS Gateway
- o Switch Gateway

3.4.3 Extensible

This framework allows developing FLEXCUBE UBS extensions

3.4.4 Branch workflow

This framework used to develop workflow based branch screens.

3.4.5 Reports

This framework allows reports development in FLEXCUBE UBS Apps. It consists of the following sub parts:

- o BIP
- OBIEE rpd

3.4.6 **BPEL process flows**

This framework used to develop the process flows that are centric to SOA architecture.

3.5 FLEXCUBE UBS Application components & Tools to be used

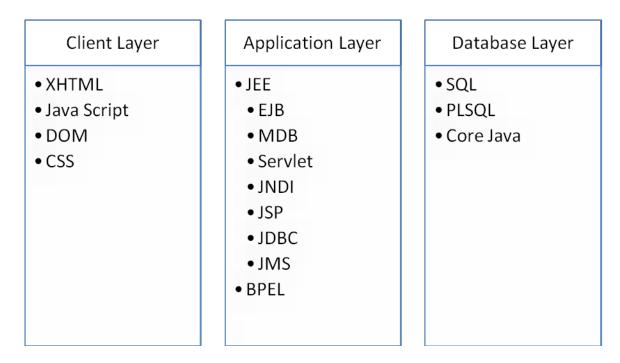
This section describes the FLEXCUBE UBS components and tools used to develop the components

Framework	Component	Tools
User Interface	Maintenance	RAD
	Online	RAD
	Report	RAD
	Batch	RAD
	ELCM	RAD
	Notification	RAD
	Branch Screen	RAD
	Process flows screen	RAD
Gateway	Web service	RAD, TrAX
	Gateway XML message	RAD, TrAX
	Notification	RAD,TrAX
	ASCII Generic Interface	FLEXCUBE UBS
	Upload Adapter	FLEXCUBE UBS
Reports	BIP Canned reports	RAD, BI Publisher
	OBIEE Meta data repository	RAD, OBIEE Suite
Process flows	Process flows	RAD,JDeveloper,Oracle
		BPEL process manager

 Table 3.1 - Framework, components and Tools

3.6 FLEXCUBE Programming Language Overview

FLEXCUBE UBS Application uses the following programming languages for each layer in technical architecture





3.7 FLEXCUBE Data Model

FLEXCUBE Data model is available for select modules. This helps to get the following

- ER relationships of FLEXCUBE UBS Tables
- Table comments
- Column comments with enumeration list

FLEXCUBE UBS Data model helps in understanding the Database design and assist to create specific report development and extensibility changes.

3.8 FLEXCUBE UBS Object Naming Conventions

It is essential to know the naming conventions to create FLEXCUBE UBS application objects. This section helps to understand existing objects naming conventions and to create new ones.

3.8.1 Module

Every database object names start with the two-character module codes. The below list provides possible module codes.

Module Code	Module Name
AC	Accounting
AE	Auto End of Day
AM	Asset Management
BC	Bills and Collections
BL	Billing
BR	Brokerage
СА	CASA
CD	Corporate Deposits
CF	The ICCF
CG	Clearing
CI	Islamic Financing
CL	Retail Lending
CN	Collections
CO	Core Services
CS	Core
CV	Conversion
CY	Currency
DA	Discount Accrual
DD	Demand Draft
DE	Data Entry
DL	Deposit Locker
DL	Derivatives
DV DX	Data Extraction
ED	
	Exchange Traded Derivatives
EI EN	End of Cycle EXCHANGE DERIVATIVES
EN	
	ETD Portfolio Product ETD Portfolio Product
EP	
FA	Fixed Assets
FI	Islamic Assets
FR	FLEXCUBE Reporting System
FS	FX Settlements
FT	Funds Transfer
FX	Foreign Exchange
GA	Cost Allocation
GE	Global Exposure (ELCM)
GI	Generic Interface
GL	General Ledger
GW	Gateway
IA	Islamic Asset Management
IB	Islamic Bills and Collections
IC	Interest And Charges
ID	Islamic Derivatives
IF	Interfaces

Table 3.2 – FLEXCUBE UBS Module code list

IL	Integrated Liquidity Management	
IN	Intermediary	
IS	Settlement Instructions	
IV	Inventory	
LC	Letters Of Credit	
LD	Loans and Deposits	
LE	Leasing	
LI	Islamic Letters Of Credit	
LL	Participant Tranches and Drawdown	
LM	Limits	
LN	Loan Syndication	
LQ	Receivable Liquidation	
LS	Syndication Loans and Commitments	
MB	Millionaire Certificates	
MC	Islamic Money Market	
MG	Margin Management	
MI	Management Information System	
MM	Money Market	
МО	Mortgages	
MS	Messaging	
NR	Reconciliation System	
NT	Netting Across Modules	
OB	Security Management System	
OP	Branch Vault	
OR	Origination	
OT	OTC Options	
PC	Local Payments	
PD	Post Dated Cheques	
RE	Reconciliation System	
RF	Retail Funds Transfer	
RP	Reporting System	
RT	Retail Teller	
SD	Securities Deal Module	
SE	SECURITIES	
SF	Structure Deposit	
SI	Standing Instruction	
SL	Salary Credit	
SM	Security Management System	
SP	Securities Portfolio Module	
SR	Securities Repo and Reverse Repo	
SS	Securities Security Module	
ST	Static Maintenance	
SV	Signature Verification	
SW	Switch Interface	
SZ	Securitization of Loans	
	The Tax	
TA UD	The Tax UDF	

VP	Vendor Payment
WB	FLEXCUBE Web Branch
ХР	Expense Processing

3.8.2 Function IDs

Function IDs created in RAD need to follow the below naming convention:

<two character module><Type><functionality>

<Type> is as follows:

Table 3.3 - Function ID Type list

Third character	Туре
D	Detail
S	Summary
R	Report Call form
С	Call form
Ν	Notification
А	Authorization

Example:

0	STDCIF	- Detailed screen Customer information
0	STSCIF	- Summary screen Customer information
0	ACRJRNAL	– Report Screen Journal
0	CONCUSAD	- Notification of customer address on core module
0	1001	– Web branch screen CashWithdrawal

3.8.3 Table Names

- All tables are divided into 3 categories
 - o Maintenance Tables
 - Tables that have a front-end form through which data is collected
 - o Internal Tables
 - Tables that have no front-end UI for data collection. Their data comes through SQL statements that are executed by program units (either from the back-end or the front-end).
 - o Temporary Work Tables
 - Tables that are much like Internal tables. They store data that are required for a short, definite period of time, typically, lasting only as long as the routine that created it is running the given task. These are, generally, cleared automatically after they serve the purpose they were created for. Contrary to the common inference of the table

name, these tables are not temporary; rather, the data they contain are.

- The 3rd and 4th characters of the table name identify the type of table
 - o "TM" for Maintenance Tables
 - o "TB" for Internal Tables
 - "TW" for Temporary (Work) Tables
- All table names have '_' (underscore) as the fifth character.
- Characters from 6th position onwards are used to identify the content of the table
- E.g. Maintenance Table STTM_CUSTOMER, STTM_CUST_ACCOUNT
 - Internal Table STTB_ACCOUNT, CSTB_CONTRACT
 - o Temp. Work Table ICTW_IS_VALS

3.8.4 Package Names

- Package names generally begin with the module code they belong to.
- All server package names have "PKS" as the 3rd, 4th and 5th characters
- Client-side packages will contain "PKCS", alternatively
- Examples:
 - o BCPKS_CONTRACT Package containing Bills contract related units
 - CFPKS_SERVICES Package containing ICCF units
 - ACPKS Package containing Accounting-related units
 - SMPKCS Front-end package containing SMS-related units

3.8.5 Views

- All view names have "VW" as the 3rd and 4th character
- All view names have '_' (underscore) as the 5th character.
- Characters from 6th position onwards are used to identify the content of the view
- Example
 - o LCVW_UPLOAD_MASTER View used to access LC upload data
 - ACVW_All_AC_Entries View to access all accounting entries

3.8.6 Triggers

- All trigger names have "TR" as the 3rd and 4th character
- All trigger names have '_' (underscore) as the 5th character.
- Characters from 6th position onwards are used to identify the purpose of the trigger
- Example
 - CYTR_RATES_HISTORY_UPD
 Trigger to update currency rates history

3.8.7 Synonyms

All tables, packages and views are referred only through synonyms in code. Synonym names are formed by adding the character "S" after the module and object type identifier

Example

- STTMS_CUSTOMER Synonym for table STTM_CUSTOMER
- STTBS_ACCOUNT Synonym for table STTB_ACCOUNT
- BCPKSS_CONTRACT Synonym for package BCPKS_CONTRACT
- STVWS_CUST_ACCOUNT Synonym for view STVWS_CUST_ACCOUNT

3.8.8 File extensions

FLEXCUBE UBS Application consists of following file extension types.

File extension	Purpose	Tools
ddl	Table DDL file	DDL Tool
inc	INC file	DDL Tool
seq	DB sequences file	DDL Tool
mf	System created Java meta file	Java tools
jar	JAR file	Java tools/FCUBS Installer
rar	RAR compressed file	Java tools/FCUBS Installer
war	Web Archive file	Java tools/FCUBS Installer
ear	EAR file	Jdeveloper/FCUBS Installer
log	System created log files	N/A
rpd	OBIEE repository files	OBIEE
dbc	DB template installation file	Oracle Database
dfb	DB template installation file	Oracle Database
fnc	DB functions	PLSQL Developer
prc	DB procedures	PLSQL Developer
trg	DB Trigger	PLSQL Developer
typ	PLSQL Type file	DDL Tool
vw	DB view file	PLSQL Developer
spc	DB package spec	PLSQL Developer/RAD tool
sql	DB package body	PLSQL Developer/RAD tool
xml	XML file	RAD/Textpad/Jdeveloper/TrAX
xsd	XML schema definition file	RAD/TrAX
sh	Unix shell script	Text pad
xdo	BIP report file	Text pad

Table 3.4 – File extensions list

adf	GI ascii format definition	Textpad
bat	windows batch file	Textpad
С	C program file	Textpad
cmd	windows batch file	Textpad
ddf	FLEXML - DDF type definition	Textpad
fmt	Advice format	Textpad
frm	Advice format	Textpad
properties	Properties file	Textpad
txt	Text file	Textpad
java	Java source	Textpad/Jdeveloper
js	Java script file	Textpad/Jdeveloper
jsp	JSP file	Textpad/Jdeveloper
wsdl	Web service definition file	TrAX
rtf	BIP RTF report file	Windows word with BIP plug-in

3.8.9 RAD object naming conventions

RAD function ID development need to follow the below naming conventions

	2	
Item	Prefix	Example
LOV	LOV_	LOV_BRANCH
Data Block	BLK_	BLK_STTM_CUSTOMER
Labels	LBL_	LBL_CUSTOMER_NO
XSD Tags	Remove hyphen in column name	CUSTOMERNO
XSD node names	From block, replace _ with -	Sttm-Customer
Buttons	BTN_	BTN_EXIT
Screens	CVS_	CVS_MAIN
Tabs	TAB_	TAB_AUXILIARY
Sections	SECn	SEC1
Partitions	Pn	P2
Field Sets	FST	FST 1

Table 3.5 - RAD naming convention list

3.9 FLEXCUBE Hand Coded / Manually developed Components

Other than the RAD generated pl/sql source code, FLEXCUBE UBS consists of core processing database packages. These packages are developed manually. These packages not allowed to be modified as a part of extensibility or customizations.

For e.g.

- ACPKS Performs accounting services
 - CYPKS Performs all currency serices
 - ISPKS Performs Settlement related services
- Wrp_batch Enables a function ID to be executed from Auto EOD process (AEOD)

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4 FLEXCUBE UBS Application Developer Documents

This section describes and links the various Developer documents that are required for FLEXCUBE UBS Application components development.

4.1 Document classifications

The documents are classified as three types

Туре	What it contains	Documents
Concepts	This explains the concepts and bring user to development context.	FCUBS-FD01-01-01-Development Overview Guide
		• FCUBS-FD02-01-01-RAD Getting Started
		 FCUBS-FD03-01-01-Extensibility Getting started
		• FCUBS-FD04-01-01-Interface Getting started
		• FCUBS-FD05-01-01-Tools-Getting Started
		• FCUBS-FD06-01-01-Support Getting started
		 FCUBS-FD07-01-01-Report Getting started
		 FCUBS-FD08-01-01-Data Model getting started
Procedure	This explains step by step procedure with screen shots on how to do a given component development	 FCUBS-FD02-02-01-RAD Function ID Development Volume 1
		 FCUBS-FD02-02-02-RAD Function ID Development Volume 2
		 FCUBS-FD02-03-01-RAD Web Service Development
		 FCUBS-FD02-04-01-RAD BIP Report Integration
		 FCUBS-FD02-04-01-RAD BIP Report Integration
		 FCUBS-FD02-05-01-RAD Notification

			Development
		•	FCUBS-FD03-03-01-Extensibility By Example Volume 1
		•	FCUBS-FD03-03-02-Extensibility By Example Volume 2
		•	FCUBS-FD04-02-01-Generic Interface Configuration Guide
		•	FCUBS-FD04-03-01-Upload Adapter Development Guide
Reference	These are reference documents provided by tools for all possible features.	•	FCUBS-FD06-02-01-Support By Example
		•	FCUBS-FD07-02-01-BIP Report Development Guide
		•	FCUBS-FD07-03-01-OBIEE repository Development Guide
		•	FCUBS-FD03-02-01-Extensibility Reference Guide
		•	FCUBS-FD05-02-01-RAD-Reference
		•	FCUBS-FD05-02-02-RAD-Installation and Setup
		•	FCUBS-FD05-03-01-DDL-Reference
		•	FCUBS-FD05-04-01-TrAX-Reference
	1		

4.2 Document contents

This section briefs the contents of the developer documents available for FLEXCUBE UBS application development.

• FCUBS-FD01-01-01-Development Overview Guide

This provides the bird's eye view of FLEXCUBE UBS Development and set the basic foundation for developer including concepts, architecture, framework, tools and global glossary. *This is the document that you are currently reading*.

- o RAD
 - <u>FCUBS-FD02-01-01-RAD Getting Started</u> This document gives head start to use RAD tool for FLEXCUBE Application development. It covers the RAD development life cycle and specification needed to develop RAD function IDs.
 - <u>FCUBS-FD02-02-01-RAD Function ID Development Volume 1</u> This document explains the step by step procedure to develop the function ID using extensible RAD.
 - <u>FCUBS-FD02-02-02-RAD Function ID Development Volume 2</u> This document explains the step by step procedure to develop the function ID using non extensible RAD.
 - <u>FCUBS-FD02-03-01-RAD Web Service Development</u>
 This document explains the step by step procedure to develop Web service. It covers development life cycle, deployment and testing of web service.
 - <u>FCUBS-FD02-04-01-RAD BIP Report Integration</u>
 This document explains the step by step procedure to integrate the BIP developed in BIP server with FLEXCUBE UBS function ID. This integration helps to launch BIP reports from FLEXCUBE UBS URL.
 - <u>FCUBS-FD02-05-01-RAD Notification Development</u>
 This document explains the step by step procedure to create Notifications using pre-developed query web services and deployment and testing.
- o Extensibility
 - FCUBS-FD03-01-01-Extensibility Getting started

This document gives head start to work on FLEXCUBE UBS extensible framework. It explains the various business areas that extensibility available and concepts behind it.

<u>FCUBS-FD03-02-01-Extensibility Reference Guide</u>
 This reference guide provides extensibility framework concepts and features.

<u>FCUBS-FD03-03-01-Extensibility By Example Volume 1</u>

This document explains the step by step extensible development with simple examples that includes layout changes, addition of UI elements and functional extensibility using SDE/UDF.

- <u>FCUBS-FD03-03-02-Extensibility By Example Volume 2</u> This document explains the step by step extensible development with medium complex example that covers processing and UI changes.
- o Interface
 - <u>FCUBS-FD04-01-01-Interface Getting started</u> This document explains the various Integration and interface concepts of FLEXCUBE UBS. It covers the overview diagrams to set context.
 - <u>FCUBS-FD04-02-01-Generic Interface Configuration Guide</u> This document explains step by step procedure to define GI outgoing and incoming interface.
 - <u>FCUBS-FD04-03-01-Upload Adapter Development Guide</u> This document explains step by step procedure to create spreadsheet based FCUBS upload adapters that are used for data migration into FLEXCUBE UBS.
- o Tools

- <u>FCUBS-FD05-01-01-Tools-Getting Started</u> This document gives head start for development tools available .
- <u>FCUBS-FD05-02-01-RAD-Reference</u> This document provides reference information of extensible RAD that includes all features available and concepts
- <u>FCUBS-FD05-02-02-RAD-Installation and Setup</u>
 This document provides the installation and setup steps for extensible RAD
 - <u>FCUBS-FD05-03-01-DDL-Reference</u> This document provides the reference information of DDL tool features and its usage.

Note: This tool in internal to Oracle Financial Software Services and this document may not be available externally.

 <u>FCUBS-FD05-04-01-TrAX-Reference</u> This document provides the reference information of TrAX tool features and its usage.
 Note: This tool in internal to Oracle Financial Software Services and this document

may not be available externally.

- o Support
 - <u>FCUBS-FD06-01-01-Support Getting started</u> This document provides the possible FLEXCUBE UBS software issues and various tools available for support.
 - <u>FCUBS-FD06-02-01-Support By Example</u> This document provides uses cases that explain the FLEXCUBE UBS software support that covers issue analyze/fix.
- o Reports
 - <u>FCUBS-FD07-01-01-Report Getting started</u> This document gives head starts on reports development in FLEXCUBE UBS using BIP or OBIEE meta data repository.
 - <u>FCUBS-FD07-02-01-BIP Report Development Guide</u> This document explains the step by step procedure to develop the BIP report.
 - <u>FCUBS-FD07-03-01-OBIEE repository Development Guide</u> This document explains the step by step procedure to develop OBIEE Meta data repository.
- o Data Model
 - <u>FCUBS-FD08-01-01-Data Model getting started</u> This document helps to start using FLEXCUBE UBS data model artifacts.

5 Developer Glossary

This section provides the developer glossaries that are applicable in all developer documents.

Acronym	Meaning	
AUDF	Ascii User Defined Field	
Back-end	Represents the Database layer	
BIP	Business Intelligence Publisher	
BLK	Block (used in RAD screen development)	
CI	Configurable Item	
CVS	Canvas	
DDL	Data Definition Language	
DOM	Document Object Model	
DSN	Data Source Name (Microsoft ODBC)	
EAR	Enterprise ARchive file	
EJB	Enterprise Java Bean	
EMS	Electronic Media System	
EOD	End Of Day	
ER	Entity Relationship	
FC BRN	FLEXCUBE Branch	
FCJ	FLEXCUBE Java	
Front-end	Represents the client layer(browser)	
FS-FS	Full Screen - Full Screen (Web service pattern)	
FST	Field Set (used in RAD screen development)	
FTP	File Transfer Protocol	
GI	Generic Interface	
GW_WS	Gateway Web Service	
IC	Interest and Charges	
ICEOD	Interest and Charges End of Day	
IDE	Integrated Development Environment	
IE	Microsoft Internet Explorer	
IMPL	Implementation files (used in web services)	
INC	File extension used to represent static data (Insert statements)	
IO-FS	Input Only - Full Screen (Web service pattern)	
IO-PK	Input Only - Primark Key (Web service pattern)	
JDBC	Java Data Base Connectivity	
JEE	Java Enterprise Edition	
JMS	Java Messaging Standard	
JS	Java Script file	

LBL	Label (used in RAD screen development)		
LOV	List Of Value (used in RAD screen development)		
MDB	Message Driven Bean		
MICON	FLEXCUBE UBS Management and Integration Console		
MSG	Message		
NQS	Network Queuing System		
OBIEE	Oracle Business Intelligence Enterprise Edition		
OLTP	On Line Transaction Processing		
РК	Primary Key of Database Table		
PK_Cols	Primark Key columns names		
PK_Types	Primark Key columns types		
RAD	Rapid Application Development Tool		
RPD	OBIEE Repository(meta data) file		
RTF	Rich Text Format		
SDE	System Data Element		
SEC	Section (used in RAD screen development)		
SEQ	Oracle database SEQuence		
SMS	Security Management System		
SOAP	Simple Object Access Protocol		
SPC	Oracle database package SPeCification		
SQL	Oracle database package body		
SWIFT	Society for Worldwide International Fund Transfer		
SYS	System Java script file		
TIX	Tilda separated in XML format		
TNS	Oracle TNS entries		
TrAX	Tracking and Analyzing xsd's Tool		
TS	Tilda Separated		
UBS	FLEXCUBE Universal Banking Solution		
UDF	User Defined Field		
UI	User Interface		
UIXML	User Interface XML (runtime file)		
WAR	Web Archive file		
WS	Web Service		
WSC	Web Service Custodian		
WSDL	Web Service Description Language		
XDO	Extensible Data Object		
XHTTP	XML HTTP format		
XML	Extensible Markup Language		
XSD	XML Schema Definition		

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