Installation
Oracle Banking Corporate
Lending Release 14.5.0.0.0
[May] [2021]



## **Table of Contents**

1.	1. FLEXCUBE UBS Installation			
	1.2 De	eployment Options	1	
	1.2.1	Centralized	1	
	1.2.2	Decentralized	2	
	1.2.3	Hybrid	2	
	1.3 O	racle FLEXCUBE Installation Varieties	3	
	1.3.1	Creating New Installation Directory		
	1.3.2	Creating Patch-set Directory	3	
	1.3.3	New Installation	4	
	1.3.4	Cloning Existing Environment	4	
	1.3.5	Applying Patchset	4	
	1.4 Ca	omponents of Oracle FLEXCUBE	5	
	1.4.1	Plug-Ins Required		
	1.4.2	Setting up the Plug-Ins	6	
	1.4.3	Manual Deployment	6	
	1.4.4	FCUBS Application Installation	7	
	1.4.5	GATEWAY Application Installation	8	
	1.4.6	Restful Services		
	1.4.7	SWITCH Interface Installation		
	1.4.8	FCUBS Process Flow Deployment	9	
2.	Differe	nt OBCL Installation Scenarios	10	
		CUBS and OBCL new installation		
		stallation of OBCL 14.4 with pre-installed FCUBS 14.4		
		stallation of OBCL 14.4 with pre-installed FCUBS 14.4 with patchsets		
	2.5 III	satiation of ODCL 14.4 with pre-instance I CODS 14.4 with patchsets	11	



# 1.1. FLEXCUBE UBS Installation

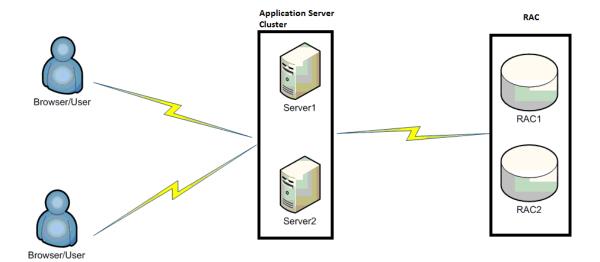
## 1.1 Introduction

This manual is designed to help acquaint you with the various deployment options supported by the installer, the various components that make FLEXCUBE UBS, the plug-ins that are supported by these components and the detailed installation steps of the various components supported by Oracle FLEXCUBE.

## 1.2 **Deployment Options**

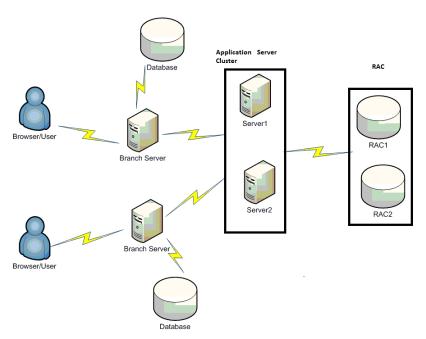
Centralized	In this mode there will be only one setup. The build, configuration and deployment would be targeted to this setup alone.
De-Centralized	Here there would be 2 setups, i.e. Host and Branch. Build, configuration and deployment would be done separately for each of these setup.
Hybrid	Combination of both the above said. Build, configuration and deployment would be based on what is handled by each of the setup.

## 1.2.1 Centralized

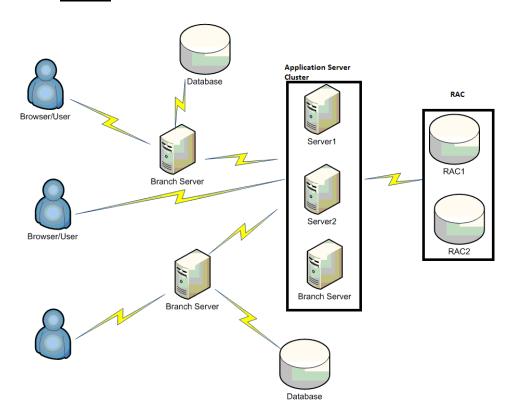




## 1.2.2 <u>Decentralized</u>



## 1.2.3 Hybrid



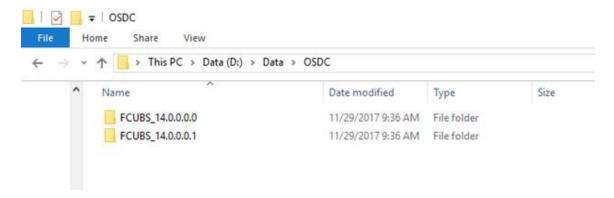


## 1.3 Oracle FLEXCUBE Installation Varieties

Installing FLEXCUBE can happen in multiple varieties. Please follow steps mentioned in first 3 sections before starting any installation steps.

Installer does not accept spaces in file path. Its applicable for all path including but not limited to source path, temp destination directory, property file path etc.

The below screenshot shows sample "OSDC.zip" folder structure. This is the location to be pointed, if installer asks for FC Home directory.



In the above screenshot, main release content can be found directly under this directory.

#### 1.3.1 Creating New Installation Directory

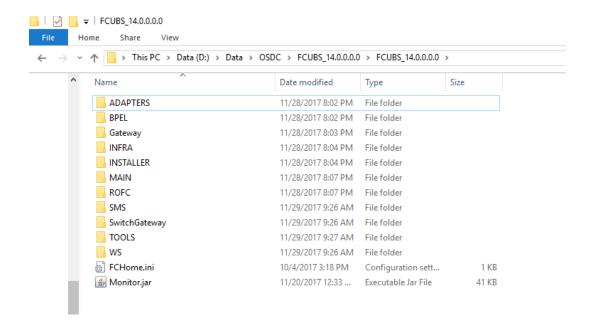
Extract the ZIP file FCUBS\_<Version>.zip

- 1. Create a **FCUBS\_<Version>** Folder and extract the above zip into this folder.
- 2. Make sure that **FCUBS\_<Version>** Directory is accessible by both Application server and Database Server.

#### 1.3.2 Creating Patch-set Directory

- 1. Extract the ZIP file FCUBS\_<Patch No>.zip into FCUBS\_<Patch No> folder.
- 2. Make Sure that the FCUBS\_<Patch No> folder should be kept parallel to FCUBS\_<Version> folder as shown below.





#### 1.3.3 New Installation

This section explains the step by step procedure for fresh installation using installer:

 Apply the environment settings for FLEXCUBE. (Refer to the document FCUBS Installer Prerequisite).

#### 1.3.4 Cloning Existing Environment

- 1. Navigate to the folder which was chosen as **FCUBS\_<Version>** and Launch the installer by running FCUBSInstaller.bat in the Installer folder.
- Import a dump of FLEXCUBE database. (Refer 'Installing Oracle FLEXCUBE Database' chapter of <u>FCUBS\_DB\_Setup</u>)
- Create two FLEXCUBE Users using Installer.(Refer <u>User Creation Utility</u> document under Utilities).
- 4. Get the Property file of the Environment to be cloned and Modify the property file by loading it in the Installer.
- 5. Update the Ear file with the New Property File.
- 6. Deploy the Built EAR in application server and login to the FLEXCUBE.
- 7. Login into FLEXCUBE using the users created as part of step3 and reset/Modify the Password of all the users.

#### 1.3.5 Applying Patchset

This section describes applying patchset. The PATCHSET\_INSTALLATION flag should be Y in env.properties.



#### 1.3.5.1 Applying FLEXCUBE Patch Set - Middleware

#### **Webloaic**

- 1. Navigate to the Patch Set folder **FCUBS\_<Patch No>** and Launch the installer byrunning FCUBSInstaller.bat in the Installer folder.
- 2. Provide the path of the FCUBS\_<Patch No> folder as Source Path.
- 3. Build an EAR by loading the existing property file.
- 4. Deploy the built EAR in weblogic application server.

Building of EAR can be done in remote location but the application deployment should be done in local system where the application server in installed.

#### Websphere

- Navigate to the folder which was chosen as FCUBS\_<Patch No> and Launch the installer by running FCUBSInstaller.bat in the Installer folder.
- 2. Provide the path of the FCUBS\_<Patch No> folder as Source Path.
- 3. Build an EAR by loading the existing property file
- 4. Deploy the built EAR in websphere application server.

#### 1.3.5.2 Applying FLEXCUBE Patch set - DATABASE

- 1. Navigate to the folder which was chosen as **FCUBS\_<Patch No>** and Launch the installer by running FCUBSInstaller.bat in the Installer folder.
- 2. Compile the Data Base Objects by Referring to FCUBS\_DB\_Compilation Document.
- 3. Provide the path of the FCUBS\_<Patch No> folder as Source Path.
- 4. Provide Database server connection details
- 5. Apply the patch set into the Database server.

## 1.4 Components of Oracle FLEXCUBE

Following are the components of the oracle FLEXCUBE:

- Open Development Tool (ODT)
- FLEXCUBE Universal Banking Solution (FCUBS)
- GATEWAY
- Restful Services
- SWITCH Interface Installation
- Standalone Scheduler

#### 1.4.1 Plug-Ins Required

Application	Plug-ins Supported
-------------	--------------------



Open Development Tool	Not applicable
Oracle FLEXCUBE Universal Banking	<ul> <li>Branch</li> <li>BPEL</li> <li>Scheduler</li> <li>Reports</li> <li>FGL</li> <li>OFTW</li> <li>DMS</li> <li>Insulation</li> </ul>
Oracle FLEXCUBE ELCM	<ul><li>BPEL</li><li>Scheduler</li><li>FGL</li><li>Reports</li><li>OFTW</li><li>DMS</li></ul>
Oracle Banking Treasury	<ul><li>Scheduler</li><li>Reports</li></ul>
Oracle Banking Trade Finance	<ul><li>Scheduler</li><li>Reports</li><li>DMS</li></ul>
Gateway	Not applicable
Restful Services	Not applicable
Switch Interface Installation	Not applicable
Standalone Scheduler	Not applicable

#### 1.4.2 Setting up the Plug-Ins

The Setting\_up\_Plugins document describes the step by step details of setting up the various plug-ins supported by FLEXCUBE. This is under FCUBS Main.

#### 1.4.3 Manual Deployment

This section explains the steps to deploy Oracle FLEXCUBE UBS application manually. Application server resources required are detailed in "Resources\_To\_Be\_Created" document. This is present under Environment Setup > Application Server

Follow the document "FCUBS Manual Deployment WL" for Weblogic.

For Websphere please follow "FCUBS Manual Deployment WAS".



For Tomcat, please refer to the document "Branch Deployment on Tomcat".

Tomcat is supported only for Deployment of Decentralized branch war file. FCUBS EAR deployment is only on Weblogic or Websphere.

All these documents are present in the Environment Setup > Application Server.

#### 1.4.4 FCUBS Application Installation

All documents can be referred under FCUBS Components > FCUBS.

This Section describes the various operations performed for FCUBS application. This application is operated in two modes during property file creation:

- Custom mode: All inputs are provided by the user.
- Default Mode: Property file is created by considering the default properties. User inputs are minimal.

Database Installation	This document gives the step by step instructions for setting up FCUBS Data Base. It also explains the process of importing full dump, and also explains the process of loading static data. Refer to the document FCUBS DB Setup			
Building Property File	This section explains the detailed instructions to be followed for Building FCUBS Property file , it explains the instructions for setting up the property file with plug-ins and plug-in related properties. Refer to the document FCUBS Property File Creation			
Building Ear	This section explains the detailed instructions to be followed for Building FCUBS EAR, it explains the step by step instructions for building the EAR with the corresponding property file. Refer to the document FCUBS EAR Building			
	Weblogic	FULL Deployment	This section gives the detailed instructions for FULL deployment of UBS application in weblogic server, it also explains the basic instructions for creating the resources required for deployment of UBS application. Refer to the document FUBS_Application_Deployment_Weblogic	
Application Deployment		Patch/Patchset Deployment	This section gives the detailed instructions for Partial deployment of UBS application, It explains the steps for deployment of the patches of the existing ear in weblogic server. Refer to the document FUBS_Application_Deployment_Weblogic	
	Websphere	FULL	This section gives the detailed	



		Deployment	instructions for FULL deployment of UBS applicationin websphere server, it explain the steps to be followed for
			deploying UBS application in websphere server using installer Refer to the document FUBS_Application_Deployment_Web sphere
		Patch/Patchset Deployment	This section gives the detailed instructions for partial deployment of UBS application in websphere server, it explains the steps to be followed for deploying the patches for the existing application in websphere server. Refer to the document FUBS_Application_Deployment_Web sphere
Building Property file	This section explains the detailed instructions to be followed for Building GATEWAY Property file, it explains the instructions for setting up the property file with plug-ins and plug-in related properties. Refer to the document GATEWAY Property File Creation		

## 1.4.5 GATEWAY Application Installation

All documents can be referred under FCUBS Components > Restful Services.

Building Ear	This section explains the detailed instructions to be followed for Building Restful Service EAR, it explains the step by step instructions for building the EAR. Refer to the document RESTService Compliation Build	
Application Deployment	Weblogic	This section gives the detailed instructions for FULL deployment of Restful application in weblogic server. Refer to the document RESTService Deployment Weblogic
	Websphere	This section gives the detailed instructions for FULL deployment of Restful application in websphere server. Refer to the document RESTService Deployment Websphere



#### 1.4.6 Restful Services

#### 1.4.7 **SWITCH Interface Installation**

All documents can be referred under FCUBS Components > Switch.

#### **Building Ear for** Monitor

This section explains the detailed instructions to be followed for Building Monitor EAR, it explains the step by step instructions for building the EAR with the corresponding property file. Refer to the document Switch Monitor Installation



For running Monitor setup, switch EAR should be available

#### 1.4.8 FCUBS Process Flow Deployment

#### **FCUBS Process** Flow Deployment

This section describes the instructions for FCUBS process flow deployment, it also provides detailed description on deploying FCUBS BPEL process flows onto a weblogic server configured with SOA suite components. It covers different approaches for deploying a process. Refer to the document FCUBS ProcessFlow Deployment under FCUBS Main.

#### Building **Property file**

This section explains the detailed instructions to be followed for Building Scheduler Property file, it explains the instructions for setting up the property file with plug-ins and plug-in related properties. Refer to the document Scheduler Property File Creation

All documents can be referred under FCUBS Components > Scheduler.

**GATEWAY Application Installation** 

Standalone Scheduler Installation



### 2. Different OBCL Installation Scenarios

## 2.1 FCUBS and OBCL new installation

- Add below line in the environment properties before applying the Patchset.
   OBCL Config Path=.../OBCL 14.4.0.0.0/INSTALLER/SOFT/config/Application
- 2. Copy the ""OFCL"", ""REST\_WS"" & ""WS"" folders parallel to ""ROFC" folder of FCUBS exec.
- 3. Copy the following class folders from \ADAPTERS\FCExternal of OBCL Exec to FCUBS exec \ADAPTERS\FCExternal folder
- 4. Copy the following class folders from \INFRA of OBCL Exec to FCUBS Exec \INFRA folder
  - PIApps,
  - PICommon,
  - PIDto.
  - PIEJB,
  - PIEntities,
  - PIKernel,
  - PIKernelDao,
  - PIUtility,
  - COCommon,
  - CODto,
  - COEJB,
  - COEntities,
  - COKernel,
  - COKernelDao,
  - COUtility
- 5. Copy the contents of FCJNeoWeb and FCJScheduler from OBCLInfra to \INFRA FCJNeoWeb and FCJScheduler.
- 6. Build the consolidate ear by executing /INSTALLER/SOFT/ROFCEarRun.sh for Unix installations or /INSTALLER/SOFT/ROFCEarRun.bat for Windows installations.
- 7. Copy the CLGatewayEarRun.bat, CLGatewayEarRun.sh and CLGatewayEarCreation.jar files to FCUBS Exec. Exec folder /INSTALLER/SOFT to build Corporate Lending Gateway EAR.
- 8. Copy the CLGatewayRestEarRun.sh, CLGatewayRestEarRun.bat and CLGatewayRestEarCreation.jar files to FCUBS Exec Exec folder /INSTALLER/SOFT to build Corporate Lending GatewayRest EAR."

## 2.2 Installation of OBCL 14.4 with pre-installed FCUBS 14.4

This scenario is about installation of OBCL 14.4 along with pre-installed FCUBS 14.4 without any patchset but same common core version

You have to take OBCL 14.4 OSDC, remove files from Common core folder and install OBCL.

#### **Db Compilation Steps:**

- 1. Remove common core folders. (/MAIN)
- 2. Compile the incremental DB units by executing /INSTALLER/SOFT/CLDBCompileRun.sh for Unix installations or /INSTALLER/SOFT/CLDBCompileRun.bat for Windows installations.



#### **EAR Creation Steps:**

- 1. Add below line in the environment properties before applying the Patchset.

  OBCL Config Path=.../OBCL 14.4.0.0.0/INSTALLER/SOFT/config/Application
- 2. Copy the "OFCL", "REST\_WS" & "WS" folders parallel to "ROFC" folder of FCUBS exec.
- 3. Copy the following class folders from \ADAPTERS\FCExternal of OBCL Exec to FCUBS exec \ADAPTERS\FCExternal folder
- 4. Copy the following class folders from \INFRA of OBCL Exec to FCUBS Exec \INFRA folder
  - PIApps.
  - PICommon,
  - PIDto,
  - PIEJB,
  - PIEntities,
  - PIKernel.
  - PIKernelDao,
  - PIUtility,
  - COCommon,
  - CODto.
  - COEJB.
  - COEntities,
  - COKernel,
  - COKernelDao,
  - COUtility
- 5. Copy the contents of FCJNeoWeb and FCJScheduler from OBCLInfra to \INFRA FCJNeoWeb and FCJScheduler.
- 6. Build the consolidate ear by executing /INSTALLER/SOFT/ROFCEarRun.sh for Unix installations or /INSTALLER/SOFT/ROFCEarRun.bat for Windows installations.
- 7. Copy the CLGatewayEarRun.bat, CLGatewayEarRun.sh and CLGatewayEarCreation.jar files to FCUBS Exec. Exec folder /INSTALLER/SOFT to build Corporate Lending Gateway EAR.
- 8. Copy the CLGatewayRestEarRun.sh, CLGatewayRestEarRun.bat and CLGatewayRestEarCreation.jar files to FCUBS Exec. Exec folder /INSTALLER/SOFT to build Corporate Lending GatewayRest EAR.

## 2.3 <u>Installation of OBCL 14.4 with pre-installed FCUBS 14.4</u> with patchsets

This scenario is about installation of OBCL 14.4 along with pre-installed FCUBS 14.4 along with patchsets but same common core release number of FCUBS is higher than OBCL release number For example, 14.4.0.0.0 to 14.4.0.0.1

- FCUBS 14.1 (OSDC along with some PS) is installed already and OBCL 14.4 to be installed (already installed Common core Version is lower than OBCL OSDC Common core Version). This scenario is NOT allowed. You have to upgrade from the existing common core version to the OBCL OSDC common core version.
   Subsequent FCUBS PS have to be installed to bring it in sync if co-deployed setup is required.
- FCUBS 14.4 (OSDC along with some PS) is installed already and OBCL 14.4 to be



installed (already installed Common core Version is higher than OBCL OSDC Common core Version)

You have to take OBCL 14.4 OSDC, remove files from Common core folder and install OBCL. Follow the below steps.

#### **Db Compilation Steps:**

- 1. Remove common core folders. (/MAIN)
- 2. Compile the incremental DB units by executing /INSTALLER/SOFT/CLDBCompileRun.sh for Unix installations
  - or /INSTALLER/SOFT/CLDBCompileRun.bat for Windows installations.

#### **EAR Creation Steps:**

- 1. Add below line in the environment properties before applying the Patchset. OBCL\_Config\_Path=.../OBCL\_14.4.0.0.0/INSTALLER/SOFT/config/Application
- 2. Copy the "OFCL", "REST\_WS" & "WS" folders parallel to "ROFC" folder of FCUBS exec.
- 3. Copy the following class folders from \ADAPTERS\FCExternal of OBCL Exec to FCUBS exec \ADAPTERS\FCExternal folder
- 4. Copy the following class folders from \INFRA of OBCL Exec to FCUBS Exec \INFRA folder
  - PIApps,
  - PICommon,
  - PIDto,
  - PIEJB,
  - PIEntities,
  - PlKernel,
  - PIKernelDao,
  - PIUtility,
  - COCommon,
  - CODto.
  - COEJB,
  - COEntities,
  - COKernel,
  - COKernelDao,
  - COUtility
- 5. Copy the contents of FCJNeoWeb and FCJScheduler from OBCLInfra to \INFRA FCJNeoWeb and FCJScheduler.
- 6. Build the consolidate ear by executing /INSTALLER/SOFT/ROFCEarRun.sh for Unix installations or /INSTALLER/SOFT/ROFCEarRun.bat for Windows installations.
- Copy the CLGatewayEarRun.bat, CLGatewayEarRun.sh and CLGatewayEarCreation.jar files to FCUBS Exec. Exec folder /INSTALLER/SOFT to build Corporate Lending Gateway EAR.
- 8. Copy the CLGatewayRestEarRun.sh, CLGatewayRestEarRun.bat and CLGatewayRestEarCreation.jar files to FCUBS Exec. Exec folder /INSTALLER/SOFT to build Corporate Lending GatewayRest EAR.
- 9. You have to apply all PS of OBCL to bring it in sync with existing common core.





Installation [May] [2021] Version 14.5.0.0.0

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.