

Product Release Note
Oracle FLEXCUBE Corporate Lending
Release 12.3.0.0.0
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Version 12.3.0.0.0

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Table of Contents

1.	RELEASE NOTES	1-1
1.1	BACKGROUND	1-1
1.2	PURPOSE.....	1-1
1.3	ABBREVIATIONS	1-1
1.4	RELEASE HIGHLIGHTS	1-1
1.5	FEATURES OF BILATERAL LOANS MODULE.....	1-2
1.5.1	<i>Billing Notice</i>	<i>1-2</i>
1.5.2	<i>Slab / Tier based Fee and waiver</i>	<i>1-2</i>
1.5.3	<i>Auto Step-up / Step down of Commitment.....</i>	<i>1-2</i>
1.5.4	<i>Composite rate for loans.....</i>	<i>1-2</i>
1.5.5	<i>Re-price of floating rate to fixed and vice versa</i>	<i>1-2</i>
1.5.6	<i>Manual Rate Revision.....</i>	<i>1-3</i>
1.5.7	<i>Interest Rate type and Maturity type change for loans</i>	<i>1-3</i>
1.5.8	<i>Overpayment and refund of fees and interest</i>	<i>1-3</i>
1.5.9	<i>Value dated amendments, payments and payment reversals</i>	<i>1-3</i>
1.5.10	<i>Back Valued Activities</i>	<i>1-3</i>
1.5.11	<i>Interest capitalization on Renewal.....</i>	<i>1-3</i>
1.5.12	<i>Non-performing loans and commitments.....</i>	<i>1-4</i>
1.5.13	<i>Amortization of fees</i>	<i>1-4</i>
1.6	ENHANCEMENTS TO THE EXISTING MODULES	1-4
1.6.1	<i>Negative Interest Rate.....</i>	<i>1-4</i>
1.6.2	<i>Adhoc-Fee for Loans</i>	<i>1-4</i>
1.6.3	<i>ELCM Integration with Corporate Lending</i>	<i>1-4</i>
1.6.4	<i>Payments in Corporate Lending</i>	<i>1-4</i>
2.	COMPONENTS OF THE SOFTWARE.....	2-5
2.1	DOCUMENTS ACCOMPANYING THE SOFTWARE	2-5
2.2	SOFTWARE COMPONENTS.....	2-5
3.	ANNEXURE – A: ENVIRONMENT DETAILS	3-1
3.1.1	<i>Tech Stack – Oracle.....</i>	<i>3-1</i>
3.1.2	<i>Tech Stack – IBM.....</i>	<i>3-3</i>
4.	ANNEXURE – B: THIRD PARTY SOFTWARE DETAILS.....	4-1
5.	ANNEXURE – C: MODULE CODE AND DESCRIPTION.....	5-2

1. Release Notes

1.1 Background

Oracle Financial Services Software Limited has developed Oracle FLEXCUBE Corporate Lending Solution to service a big corporate customer, for a huge value transaction in the form of loan. Oracle FLEXCUBE Corporate Lending suite enables large value corporate loans and syndicated loans. It enables banks to play multitude of roles in syndication. Trading platform enables trading of syndicated loans and keeps track of position and balances of different portfolio's of bank.

Oracle FLEXCUBE Bilateral Loans

Empowers financial institutions of varied sizes to offer and manage complex commercial loan products catering to large corporate and SMEs. Product manufacturing enables the bank to create innovative products, cuts down time to market and respond to competition efficiently and effectively. Rule driven delinquency handling provides better control over stressed loan assets enabling timely action.

1.2 Purpose

The purpose of this Release Note is to highlight the enhancements in Oracle FLEXCUBE Corporate Lending 12.3.0.0.0

1.3 Abbreviations

Abbreviation	Description
FIFO	First In First Out
LIFO	Last In First Out
ODT	Oracle Development Tool
UI	User Interface

For module code and description details, please refer Annexure C.

1.4 Release Highlights

The scope of the current release Oracle FLEXCUBE Corporate Lending 12.3.0.0.0 includes conversion of Bilateral Loans module of Oracle FLEXCUBE Corporate Lending 12.1.0.0.0 from Forms to ODT-UI Framework and few functional enhancements.

1.5 Features of Bilateral Loans Module

1.5.1 Billing Notice

System capability enhanced to define billing notice days for each component (Principal, Interest, and Fee) at product level. This will be defaulted at loan or commitment contract level. Ability to modify or suppress billing notice for a component is provided. Facility to capture whether the component should be liquidated automatically or manually for interim and maturity schedule is provided. 1-3 New screen is provided to generate and re-generate billing notice for loans. Also facility to store the billing notice and the information is supported.

For contracts that are past maturity date but not paid, facility to generate billing notice on every anniversary after maturity is provided.

Message processing is enhanced to send bills to multiple client addresses.

Facility to liquidate least of billed and schedule amount for a component is introduced based on preference at contract level.

1.5.2 Slab / Tier based Fee and waiver

Ability to define Slab / Tier based Fee based on Utilized or Unutilized balance for commitments is introduced. Facility to exclude certain loans (mostly LCs) while computing unutilized commitment fees. Facility to waive commitment fees either partially or in full during liquidation of fees is provided.

For loans Slab / Tier based spread definition is possible based on principal outstanding balance of loan. Spread based on Slab / Tier should be derived automatically based on loan outstanding balance.

1.5.3 Auto Step-up / Step down of Commitment

Facility to define step up or step down schedules as part of booking a commitment contract is provided. System will trigger VAMI to increase or decrease the principal for step up / step down as part of batch process.

1.5.4 Composite rate for loans

Facility to setup system derived composite rate codes is provided. The resultant composite rate is stored as per the derivation logic. Possibility to setup auto rate revision for loans with composite rate codes is enabled. 1-4

1.5.5 Re-price of floating rate to fixed and vice versa

Facility to support re-pricing of fixed rate to floating and floating to fixed rate contracts is enabled. Facility to split one contract into multiple or consolidate multiple contracts into one contract is provided. The principal outstanding and utilization of commitment remains unaffected as part of re-pricing process. No settlement to customer is done as part of re-pricing process.

In case of re-price and prepayment existing payment schedules will be retained and option provided to mark the payment schedules as settled to the extent of prepaid principal based on FIFO / LIFO basis.

1.5.6 Manual Rate Revision

Facility to manually enter / modify the rate before confirmation is enabled for floating periodic loans. The rate fixing can be performed during contract booking, re-pricing and after contract booking (using the manual rate revision screen).

1.5.7 Interest Rate type and Maturity type change for loans

For interest components facility to change rate type from Fixed to Floating Auto or Floating periodic Auto/Manual is enabled. Similarly, it is possible to change rate type to Fixed from any floating variant.

Change of maturity type from Call to Fixed and vice versa is allowed.

1.5.8 Overpayment and refund of fees and interest

System enhanced to accept payment of interest and fees more than the due amount as on the payment date. The excess interest or fee will be adjusted against subsequent schedules. It should be possible to refund the excess interest or fee collected to customer before settlement of future schedule where the excess amount is adjusted. Such excess amount paid by the customer or refunds should be reflected in the billing notice sent to customer.

Overpayment is allowed for installment Bearing loans with Fixed / Call maturity type.

1.5.9 Value dated amendments, payments and payment reversals

System restrictions relaxed to accept payments and perform value dated amendments on the value date of loan contracts.

Flexibility to reverse payments of interest, principal, fees and charges of loans and commitments for any intermediate schedule or bullet schedule is provided. Payments arising out rollover / reprice cannot be reversed. Auto liquidation of bearing capitalized loans cannot be reversed.

1.5.10 Back Valued Activities

Interest computation and schedule population logic has been modified to enable the following back valued activities

- Perform rate changes beyond liquidated schedules
- Make back dated payments beyond last amendment date.
-
- Apply spread change beyond the liquidated schedules
- Amendment beyond payment date
- Change the rate for a Floating Periodic Manual contract, for the period which is already fixed.
- Bring down the reset end date for Floating Periodic Manual Contracts, for the period which is already fixed.
- Change the reset value date for Floating Periodic Manual contracts, when the rate has to be fixed for interim gap period created due to reset end date being brought down.

1.5.11 Interest capitalization on Renewal

System flexibility to capitalize unpaid interest onto the principal of rolled over child contract.

1.5.12 Non-performing loans and commitments

System restrictions relaxed to enable the user to book loans and commitment in non-performing status. The user defined status of commitment is propagated to all linked loan contracts that are outstanding. Facility to renew loan contracts and generate child contracts in same non-performing status.1-6

1.5.13 Amortization of fees

Flexibility to enter exchange rate where fee currency is different from settlement currency. The facility to enter exchange rate is provided as part of contract input, fee liquidation and fee amendment.

Facility to transfer amortized fees to child contract as part of re-price.

Facility to transfer unamortized fees or recognize it as income as part of re-pricing / rollover.

1.6 Enhancements to the Existing Modules

1.6.1 Negative Interest Rate

Facility provided in LD module, for maintaining interest as negative fixed rate/ floating rates. Interest accrual/payment accounting has been enhanced to support negative interest. For these modules, it is mandatory that resolved interest rate after adding variance spread has to be a positive rate.

1.6.2 Adhoc-Fee for Loans

Facility provided to configure and collect adhoc-fee for loans. The fee can be in the loan currency or in any other currency. It is possible to collect such adhoc-fee periodically during the loan life cycle and define schedules for the same. System also supports accrual of such adhoc fees collected from the customer.

1.6.3 ELCM Integration with Corporate Lending

Facility provided to link Credit lines created in ELCM while booking loans and commitments in Corporate Lending. Depending on the event triggered in Corporate Lending, corresponding utilization of the linked credit line will be triggered as part of Save / authorize events.

1.6.4 Payments in Corporate Lending

Facility provided in Corporate Lending payment module to post payment and process the account entry once it is approved by external system.

2. Components of the Software

2.1 Documents accompanying the software

The various documents accompanying the software are as follows:

- Release Note
- Installer Kit

Note: User Manuals and Installation Guide can be accessed from

http://docs.oracle.com/cd/E81274_01/index.html

2.2 Software Components

Software Components of Oracle FLEXCUBE 12.3.0.0.0 that form part of this release are as follows:

- Host
 - UI Components (JS,XML)
 - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
 - Reporting Components(Data models(xdm), Reports(xdo and rtf))
 - Process Framework components (BPEL)
- New UI Application Server
 - Java Sources
 - Configuration files used for deployment
- Interface
 - ASCII interface sources
 - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
- Gateway
- Java application layer
 - Java sources
 - Configuration files used for deployment
 - Messaging layer
 - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
- Installation utilities

- Front end based installation for host
- Front end based installation for Gateway backend
- Installation documents for
 - Oracle FLEXCUBE Installer documents
 - Gateway
- SMS Related Components
- Reports
 - Stored Procedures (Packages, Functions, Procedures, Views)
 - Repositories and pre-defined Reports
- Online Help Files

3. Annexure – A: Environment Details

3.1.1 Tech Stack – Oracle

Component	Deployment Option	Machine	Operating System	Software	Version		
Oracle FLEXCUBE Corporate Lending	Stand Alone	Application Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	Oracle Fusion Middleware Infrastructure	12.2.1.1.0		
				Java HotSpot(TM) JDK (with WebLogic Application Server)	JDK 1.8 Update 111		
				Open Symphony Quartz	2.2.3		
				Oracle Toplink	12.2.1.1.0		
		Document Management System	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	Oracle WebLogic	10.3.6		
				JDK	JDK 1.7 Update 99		
				Oracle Database (for RCU)	12.1.0.2.0		
				Repository Creation Utility	11.1.1.9.0		
		Oracle WebCenter Content Imaging	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	Oracle WebCenter Content Imaging	11.1.1.9.0		
				Oracle RDBMS Enterprise Edition	12.1.0.2.0		
				Reporting Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	Oracle WebLogic	12.2.1.1.0
						JDK	JDK 1.8 Update 111
		Oracle Database (for RCU)	12.1.0.2.0				
		Repository Creation Utility	12.2.1.1.0				
		Oracle BI Publisher	12.2.1.1.0				
		Client Machines	Windows 7	Internet Explorer	Microsoft Internet Explorer Release (11.*)		
				Mozilla Firefox	Mozilla Firefox Release(45+)		
				Google Chrome	Google Chrome Release(50+)		
			Windows 8	Internet Explorer	Microsoft Internet Explorer Release(11.*)		
				Mozilla Firefox	Mozilla Firefox Release(45+)		

				Google Chrome	Google Chrome Release(50+)
			Windows 10	Internet Explorer	Microsoft Edge
				Mozilla Firefox	Mozilla Firefox 1 Release(45+)
				Google Chrome	Google Chrome Release(50+)
			Mac OS X	Mozilla Firefox	Mozilla Firefox for Mac (45+)
				Safari	Safari 9.1.1
				Google Chrome	Google Chrome Release(50+)
		Single Sign On Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	JDK	JDK 1.7 Update 99
				Oracle WebLogic	10.3.6
				Repository Creation Utility	11.1.1.9.0
				Oracle Identity Management (OID)	11.1.1.9.0
				Oracle SOA	11.1.1.9.0
				Oracle Identity And Access Management	11.1.2.3.0
				Oracle Webtier Utilities	11.1.1.9.0
				Oracle Webgate	11.1.2.3.0
				OID Connector	OID 11.1.1.6.0
Oracle FLEXCUBE Corporate Lending Integration Gateway	Web services (incoming)			Integration Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)
	HTTP Servlet (incoming)				
	EJB (incoming)				
	MDB (incoming)				
	Notifications (outgoing)				

3.1.2 Tech Stack – IBM

Component	Deployment Option	Machine	Operating System	Software	Version
Oracle FLEXCUBE Corporate Lending	Standalone	Application Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	8.5.5.9
				IBM WebSphere MQ Server	8.0.0.2
				Oracle Toplink	12.2.1.1.0
				Open Symphony Quartz	2.2.3
				Oracle WebCenter Content: Imaging	11.1.1.9.0
		Database Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	12.1.0.2.0
		Client Machines	Windows 7	Internet Explorer	Microsoft Internet Explorer Release(11.*)
				Mozilla Firefox	Mozilla Firefox Release(45+)
				Google Chrome	Google Chrome Release(50+)
			Windows 8	Internet Explorer	Microsoft Internet Explorer Release(11.*)
				Mozilla Firefox	Mozilla Firefox Release(45+)
				Google Chrome	Google Chrome Release(50+)
			Windows 10	Internet Explorer	Microsoft Edge
				Mozilla Firefox	Mozilla Firefox 1 Release(45+)
				Google Chrome	Google Chrome Release(50+)
			Mac OS X	Mozilla Firefox	Mozilla Firefox for Mac (45+)
				Safari	Safari 9.1.1
Google Chrome	Google Chrome Release(50+)				
Oracle FLEXCUBE Corporate Lending Integration Gateway	Web services (incoming)	Integration Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	8.5.5.9
	HTTP Servlet (incoming)	Integration Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	8.5.5.9

EJB (incoming)	Integration Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	8.5.5.9
MDB (incoming)	Integration Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	8.5.5.9
			IBM WebSphere MQ Server	8.0.0.2
Notifications (outgoing)	Integration Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	8.5.5.9
			IBM WebSphere MQ Server	8.0.0.2

4. Annexure – B: Third Party Software Details

Licenser Name	Licensed Technology	Version
Apache	Apache Commons Transaction 1.2	1.2
MetaStuff, Ltd.	Dom4j	1.6.1
Apache	xercesImpl.jar	2.11
Apache	xml-apis.jar	2.11.0
Sean Owen	PJL Compressing Filter	1.8.1
Apache	Apache XMLBeans	2.6.0
Apache	Xalan	2.7.2
Yahoo	YUI Compressor	2.4.8
Apache	XML Commons Resolver	1.2
Apache	commons-logging	1.2
The Apache Software Foundation	Serializer	2.7.2
Apache	Apache Commons Codec	1.1
Apache	Ant	1.9.7
Apache	Commons Net	3.5
Apache	commons-io	2.5
Apache	Log4J	2.6.2
Apache	Apache POI	3.14
Terracota	Quartz Job Scheduler	2.2.3
SLF4J	SLF4J Simple Logging Façade for Java (slf4j-api-1.7.21)	1.7.21
SLF4J	Simple Logging Façade for Java (SLF4J)	1.7.21

5. Annexure – C: Module Code and Description

Abbreviation/ Acronym	Meaning
CO (Core)	Oracle FLEXCUBE Core
OL	Oracle Lending
SMS	Security Management System