

Product Release Note  
Oracle FLEXCUBE Universal Banking  
Release 14.3.0.0.0  
May 2019





Product Release Note  
May 2019  
Version 14.3.0.0.0

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# 1. Release Notes

## 1.1 Background

Oracle Financial Services Software Limited has developed Oracle FLEXCUBE Universal Banking, which enable banks to create a distributed network of branches for effective marketing and efficient handling of customer transactions.

Oracle FLEXCUBE Universal Banking is a real-time online solution, enabled for multi-currency, multilingual, multi-entity, multi-instance operations. Its mission-critical and robust architecture and use of leading-edge industry standard products ensure almost limitless scalability.

## 1.2 Purpose

The purpose of this Release Note is to propagate the enhancements in Oracle FLEXCUBE Universal Banking 14.3.0.0.0.

## 1.3 Abbreviations

Abbreviation	Description
CASA	Current account and Savings Account
SWIFT	Society for Worldwide Interbank Financial Telecommunication
UI	User Interface
LC	Letter of Credit
REST	Representational State Transfer
DB	Database
SBLC	Stand by Letters of Credit
STP	Straight through processing
API	Application Program Interface
BIC	Bank Identifier code
IBAN	International Bank Account Number
OBPM	Oracle Banking Payment
OFSA	Oracle Financial Services Analytics Application
OBCL	Oracle Banking Corporate Lending
RM	Relationship Manager
DDA	Demand Deposit Accounts
LOB	Line of Business
SCF	Silent Confirmation
AASC	AASC – Amendment of Advice to Silent Confirmation will be triggered.

## 1.4 Release Highlights

The rationale for the product release of Oracle FLEXCUBE Universal Banking version 14.3.0.0.0 is to support regulatory requirement and enhance features that are essential in competitive market.

Following are the features included in the release along with forward porting of applicable fixes related to the incidences reported in previous versions and technical qualification to comply with approved Tech Stack.

- Machine Learning for Retail modules
  - Customer Attrition
  - Customer Segmentation
  - Customer Life time Value
  - Model Administration
- Integration with Biometrics for Facial Recognition
- Corporate DDA Enhancements
  - Referral support for ECA and External accounting (EA)
  - Integration with Real Time Liquidity Management for ECA, EA and internal debits
  - Multiple Inter-branch Nostros for LOB wise segregation
- Trade Enhancements
  - SWIFT 2019/2020 changes for Guarantees/SBLCs for conventional and Islamic
  - Obligor Party for Guarantees/SBLCs for conventional and Islamic
  - Co-acceptance/ Availisation
  - STP of MT910 for BC contract liquidation
  - Silent Confirmation
  - Import Letters of Credit – Limit tracking
  - Support for Event Reversal
  - Support for Devolved status for BC contracts
  - SWIFT Message Validation on input
  - Parties Search Using BIC Code
- Customer, Customer Account and Branch Enhancements
  - Cheque Book Issue for Other Branch Accounts
  - IBAN number support for Multi-Currency account
  - Auto account number generation for mask with branch code
  - Account Closure Remarks
  - Handle for periodic rates in Tax Waiver for back value calculation
- ReST APIs for Fine Grained Services
- Treasury - SWIFT 2019 Changes
  - MT 300 Foreign Exchange Confirmation
  - MT 304 Advice/Instruction of a Third Party Deal
- Multi-tenant additional changes

- Integration with other product processors
  - CD – OBCL Integration Enhancement
  - Integration with OBPM using new single payment service via ReST
- Deferred Issues

## **1.5 Release Enhancements**

### **1.5.1 Machine Learning Retail**

#### **Customer Attrition**

- Attrition risk profiles of the customers are identified as,
  - High Risk
  - Medium Risk
  - Low Risk
  - Transition Risk
  - No Risk
- Customer Attrition risks are available across perspectives of
  - Bank as an Enterprise
  - Branch

#### **Customer Segmentation**

- Customer of the bank are segregated as per their profiles and transactions patterns
- Customer segmentation are available across perspectives of
  - Bank as an Enterprise
  - Branch

#### **Customer Life time Value**

- The future life time value of a customer should the relationship continue over a lifetime
- Customer life time value are available for comparative analysis across perspectives of
  - Bank as an Enterprise
  - Customer Segment
  - Individual customer

#### **Model Administration**

- The facility to trigger model building and model execution by the admin user
- The user is provided the flexibility to determine the historic period for pattern identification and model building
  - The model building and execution is consolidated across
  - Customer Attrition

- Customer segmentation
- Customer life time value

### 1.5.2 **Integration with third party Biometrics for Facial Recognition**

- API for notification on RM screen when a customer walks in to the branch and a link to launch customer landing page
- A third party facial recognition system would have to call this API with customer id and image

### 1.5.3 **Corporate DDA Enhancements**

#### **Referral support for ECA and External accounting (EA)**

- ECA request and External Accounting Transactions raising accounting or account validation errors needing dual/multi authorisation are routed to various accounting referral queues
- Further processing is done based on the actions taken from the referral queue and response is sent to the external system

#### **Integration with Real Time Liquidity Management for ECA, EA and internal debits**

- Integration with Oracle Banking Liquidity Management for real time liquidity is made to fetch for funds when there is Debit in Customer Account with insufficient balance
- Transactions in which the fetch is looked are:
  - External Credit Approval (ECA) Debit (ECA)
  - Debit from External Accounting (EA)
  - Debit in Corporate transactions
- This is supported for those corporate accounts, which participate in a real time liquidity structure and are identified by a flag at account level.

#### **Multiple Inter-branch Nostros for LOB wise segregation**

- Enhancement to enable multiple inter branch Nostros for same currency so that there is a clear segregation between lines of business.
- It is achieved by adding module code and product code to the existing setup of inter branch definition

### 1.5.4 **Trade Enhancements**

#### **SWIFT 2019/2020 changes for conventional and Islamic Guarantees/SBLCs**

- Guarantees/SBLC's Messages enhanced to comply with SWIFT 2019/2020 latest standards with provision to support seven extension messages for Guarantee issuance (MT761) and Guarantee amendment (MT775) messages. Standard Wording, Terms and Conditions with Guarantee / Local Guarantee Type are also introduced
- Support for issuance and amendment messages for Counter-Counter Guarantees/SBLCs and validation for length of each messages are kept in place

### **Obligor Party for Guarantees/SBLCs for conventional and Islamic**

- Feature where Obligor as a party for Guarantees/SBLCs can settle the claims in lieu to Applicant
- Collateral can be collected from Obligor and processing/refund of collateral would be based on collateral percentage from Obligor
- Funds from Applicant/Obligor settlement account will be considered for claim settlement and in case of adequate funds then creating loan for obligor can be initialized

### **Co-acceptance/Availisation**

- System enhanced to mark an import as Co-accepted by the bank for which bank can charge commission
- Import/Export collection, Not under LC, 'Usance' bills can be marked as Co-accepted by enabling change of operation Collection to Co-acceptance

### **STP of MT910 for BC contract liquidation**

- On receipt of MT910 messages, BC liquidation will be invoked for the BC contracts. This is supported for Export bills of both conventional and Islamic categories

### **Silent Confirmation**

- System enhanced to support silent confirmation for export letters of credits where the bank adds the confirmation at the request of the beneficiary without the knowledge of issuing bank. This is applicable for conventional and Islamic letters of credit.
- With New operation code Silent confirmation (SCF) introduced, Export LC/LI cannot be booked with operation as SCF, whereas the operation of export LC/LI can be modified to SCF from ADV and the event AASC – Amendment of Advice to Silent Confirmation will be triggered.

### **Import Letters of Credit – Limit tracking**

- System enhanced to track limit for liability amount minus the margin amount, during Import Letters of Credit/Islamic Letters of Credit issuance, option to track limit of liability minus margin have been enabled by introducing new amount tag Liability Minus Margin.

### **Event Reversal for contracts**

- Event reversal for Letter of Credit, Bills and Collections, SBLC and Guarantee contracts with new event code is introduced with option of reversal of latest version with details before the version reversed being reinstated. This will be available for both Islamic and conventional modules.
- On reversal of the version-creating event, all non-version creating events that are triggered after this will also be reversed

### **Devolved status for BC contracts**

- A new status, 'Devolved' is introduced for Bills and Collection module where an import Bill contract is liquidated using a loan, then on final liquidation of the contract the status of the contract would be changed to 'Devolved'.

### **SWIFT Message Validation on Input**

- Provision to validate Message generation based on a preference during Contract save and provide repair reason as error message is introduced. Support provided, for LC and Guarantee in conventional and Islamic screens.
- SWIFT Character validation based on X/Z character set support for each tag with controls are brought in. Extension of this substitution is applicable for Message preview.

### **Parties Search Using BIC Code**



- System enhanced with the provision to list BIC code values in trade operation screens
- Existing customer number LOV of the screens has been enhanced to display BIC code along with the customer details

## **1.5.5 Customer, Customer Account and Branch Enhancements**

### **Cheque Book Issue for Other Branch Accounts**

- Enhancement to allow users to issue Cheque Book for Customer Accounts belonging to other Branch

### **IBAN number for Multi-Currency account**

- Enhancement to generate/validate IBAN Number for Multicurrency

### **Auto account number generation for mask with branch code**

- Auto account number generation supported for account mask with branch code

### **Account Closure Remarks**

- During CASA Closure, provision for entering Maker remarks and viewing them by Checker

### **Handle for periodic rates in Tax Waiver for back value calculation**

- In case of back valued interest calculation, tax waiver calculation is enhanced to consider waiver details pertaining to back value period

## **1.5.6 ReST/Fine Grained APIs**

- Below ReST fine grained APIs are introduced as part of this product release
  - Customer, Customer Accounts
  - Loan accounts for a customer
  - Loan account balance
  - Loan instalment details/Loan account EMI amount
  - Loan Guarantor details
  - Loan account balance
  - Loan security details
  - Corporate Deposit Details
  - Foreign Currency Exchange Details
  - Money Market Details
  - Securities Portfolio Details
  - Derivatives
  - OTC Options
  - Exchange Traded Derivatives Portfolio Details
  - Credit Card
  - Insurance
  - Mutual Funds

- LC Details
- Guarantee Details
- Standing Instructions
- Currency Exchange Rates

## **1.5.7 Treasury - SWIFT 2019 Changes**

### **MT 300 Foreign Exchange Confirmation Message**

- Support for generation of MT 300 Foreign Exchange Confirmation Message as per SWIFT 2019 standards

### **MT 304 Advice/Instruction of a Third Party Deal**

- Support for generation of MT 304 Advice/Instruction of a Third Party Deal Message as per SWIFT 2019 standards

## **1.5.8 Multi-Tenant Changes**

### **Multi-tenant Changes for BIC Code Maintenance**

- BIC Code maintenance screen is split into two screens, similarly underlying table also is split into two tables
- Application root screen (ISDBICDE) would store data which gets uploaded from BIC directory
- Entity level screen (ISDBICPB ) would have fields to store Customer Number, SWIFT Key, Telex Key, SWIFT Key Arrangement and Relations for BIC Code

### **Multi-tenant Remediation of STTB\_ACCOUNT data store**

- Separate data stores similar to STTB\_ACCOUNT created to store data for CASA, Loan and GL
- GL related table is "Data Linked" and other tables are "Metadata Linked"
- STTB\_ACCOUNT is made as a view with union of above tables

## **1.5.9 Integration with other product processors**

### **CD-OBCL Integration Enhancement**

- System is enhanced for fully liquidating a CD contract when the Web service is called with Pre-closure

### **Integration with OBPM using new single payment service via ReST**

- New Single Payment Service Rest API call is made to replace single payment web service for integration with OBPM

### 1.5.10 Deferred Issues

- Consumer Lending Contract Input screen is enhanced to link Collaterals with same name created for two different Liabilities
- Commitment History screen created newly to view changes with respect to different versions of Commitment Contract
- GI Interface support provided for Journal Multi Offset Entry (DEDMJONL)
- Supported Forward Exchange Rates(CYDFWRAE) Propagation from Head Office Branch to other Branches
- Web service support provided for the screen Consolidated Amount Block (CADCAMBL)
- CL's subsystem 'Swift Message Details' enhanced to capture regulatory reporting details
- Changes to capture 'Settlement other' details for each settlement component in settlement sub system. Modified Regulatory reporting details fields from select field type to input text field type
- Next working day handling in case of calendar updates
- To support Currency Holiday and Holiday services upload through, BIC upload screen through existing source code
- System is enhanced to display all unauthorized contracts also which were previously once authorized from the function '360 Degree Corporate/Retail Customer View'

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## 2. Deprecated Functionality

'Tax waiver Non Extensible' screen (STDTAXWV) has been deprecated.

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## 3. Components of the Software

### 3.1 Documents Accompanying the Software

The various documents accompanying the software are as follows:

- Product Release Note and Installer Kit
- User and Installation manuals – [https://docs.oracle.com/cd/F18207\\_01/index.htm](https://docs.oracle.com/cd/F18207_01/index.htm)
- Online Help Files

### 3.2 Software Components

Software Components of Oracle FLEXCUBE 14.3.0.0.0 that form part of this release are as follows:

- Host
  - UI Components ( JS,XML)
  - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
  - Tables, Types, Sequences, INC
  - Reporting Components(Data models(xdmz), Reports(xdoz),Subtemplate(xsbz))
  - Process Framework components (BPEL,BPMN,BAM,BRE)
  - OBIEE Module RPDs
- Branch
  - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
  - UI Components (JS,XML)
  - Java sources
- Java application layer
  - Java sources
  - Configuration files used for deployment
- Integration Gateway
- Switch Gateway (ATM/POS/IVR)
- REST Services
  - Java application layer
    - Java sources
    - Configuration files used for deployment
- Oracle FLEXCUBE Information Server
  - Stored Procedures (Packages, Functions, Procedures, Views)
  - Repositories and pre-defined Reports
- Conversion Utilities
- Installation utilities
- ADF files used by Generic Interface (GI) – incoming and outgoing
- Tools
  - ODT
  - OFT

## 4. Tech Stack

### 4.1 Tech Stack – Oracle

Component	Deployment option	Machine	Operating System	Software	Version Number
Oracle FLEXCUBE Universal Banking	UI-Host and Centralized	Application Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	Oracle Fusion Middleware Infrastructure	12.2.1.3.0
				Java HotSpot(TM) JDK (with WebLogic Application Server)	JDK 1.8 Update 202
				Open Symphony Quartz	2.3.0-d56e1d0
				Oracle Toplink	12.2.1.3.0
		Document Management System	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	Oracle WebLogic	12.2.1.3.0
				JDK	JDK 1.8 Update 202
				Oracle Database (for RCU)	18.3.0.0.0
				Repository Creation Utility	12.2.1.3.0
				Oracle WebCenter Content Imaging	12.2.1.3.0
		Database Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	18.3.0.0.0
		Reporting Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	Oracle WebLogic	12.2.1.3.0
				JDK	JDK 1.8 Update 202
				Oracle BI Publisher	12.2.1.4.0

		FLEXCUBE Information Server – Analytics	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	Oracle WebLogic	12.2.1.3.0
				JDK	JDK 1.8 Update 202
				Oracle Business Intelligence Enterprise Edition (OBIEE)	12.2.1.4.0
		FLEXCUBE Information Server - Data warehouse	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	Oracle Golden Gate	12.3.0.1.4
				Oracle Database (for RCU)	18.3.0.0.0
				Repository Creation Utility	12.2.1.3.0
				Oracle Data integrator	12.2.1.3.0
				Oracle Data integrator Java EE Agent	12.2.1.3.0
				Oracle Fusion Middleware Infrastructure	12.2.1.3.0
		Client Machines <sup>#</sup>	Windows 7	Internet Explorer	11.648.171340CO
				Mozilla Firefox	60.6.1esr(32-BIT)
				Google Chrome	73.0.3683.103
			Windows 10	Internet Explorer	11.648.171340CO
				Mozilla Firefox	60.6.1esr(32-BIT)
				Google Chrome	73.0.3683.103
				Microsoft Edge	42.17134.1.0
			Mac OS X	Mozilla Firefox	Mozilla Firefox for Mac (62+)
				Safari	Safari- 11.1 (13605.1.133.1.4)
		Google Chrome		Google Chrome Release (69+)	
		Single Sign On Server	Oracle Enterprise	JDK	JDK 1.8 Update 202

			Linux Server 7.1 (x86 64 Bit)	Oracle WebLogic	12.2.1.3.0
				Repository Creation Utility	12.2.1.3.0
				Oracle Identity Management	12.2.1.3.0
				Oracle SOA	12.2.1.3.0
				Oracle Identity And Access Management	12.2.1.3.0
				Oracle Web tier Utilities	12.2.1.3.0
				Oracle Web gate	12.2.1.3.0
				OID Connector	OID 11.1.1.6.0
UI Decentralized branch	Branch Application Server – Decentralized	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	JDK	1.8 Update 202	
			Oracle WebLogic Server	12.2.1.3.0	
	Database Branch for Decentralized mode		Oracle RDBMS Standard Edition (SE2)	18.3.0.0.0	
Oracle FLEXCUBE Universal Banking BPEL/BPM N Processes and Process Framework	UI-Host and Centralized	Application Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	JDK	1.8 Update 202
				Oracle WebLogic Server	12.2.1.3.0
				Oracle Database (for RCU)	18.3.0.0.0
				Repository Creation Utility	12.2.1.3.0
				Oracle SOA Suite, Oracle BPM Suite	12.2.1.3.0
Oracle FLEXCUBE Universal Banking Integration Gateway	Web services (incoming)	Integration Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	Oracle WebLogic Server	12.2.1.3.0
	HTTP Servlet (incoming)				
	EJB (incoming)				



	MDB (incoming)				
	Notifications (outgoing)				
Oracle FLEXCUBE Universal Banking Switch Integration Gateway	Switch Integration Gateway	Integration Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	JDK	1.8 Update 202
Oracle FLEXCUBE Universal Banking REST	Web services	Integration Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	JDK	1.8 Update 202
				Oracle WebLogic Server	12.2.1.3.0
				Oracle Toplink	12.2.1.3.0
Oracle FLEXCUBE  Machine Learning	Manual Deployment	Machine Learning Server	Oracle Enterprise Linux server 7.1 (x86 64 bit)	Oracle R Enterprise	1.5.1

Note: # Browser support is no longer based on Operating Systems but strictly tied to the browser themselves, no matter on which Operating Systems they are installed. Current release is certified on client workstations with Windows 7, 8, 10 and Mac OS X.

## 4.2 Tech Stack – IBM

Component	Deployment option	Machine	Operating System	Software	Version Number
Oracle FLEXCUBE Universal Banking	UI-Host and Centralized	Application Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
				IBM WebSphere MQ Server	9.0.0.0
				Open Symphony Quartz	2.3.0-d56e1d0
		Database Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	18.3.0.0.0
		Client Machines <sup>#</sup>	Windows 7	Internet Explorer	11.648.171340CO
				Mozilla Firefox	60.6.1esr(32-BIT)
				Google Chrome	73.0.3683.103
			Windows 10	Internet Explorer	11.648.171340CO
				Mozilla Firefox	60.6.1esr(32-BIT)
				Google Chrome	73.0.3683.103
				Microsoft Edge	42.17134.1.0
			Mac OS X	Mozilla Firefox	Mozilla Firefox for Mac (62+)
				Safari	Safari- 11.1 (13605.1.133.1.4)
Google Chrome	Google Chrome Release (69+)				
Oracle FLEXCUBE Universal Banking Integration Gateway	Web services (incoming)	Integration Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM ( IBM JDK 1.8_64)	9.0.0.0

Component	Deployment option	Machine	Operating System	Software	Version Number	
	HTTP Servlet (incoming)	Integration Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0	
	EJB (incoming)	Integration Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0	
	MDB (incoming)	Integration Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0	
				IBM WebSphere MQ Server	9.0.0.0	
	Notifications (outgoing)	Integration Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0	
				IBM WebSphere MQ Server	9.0.0.0	
	Oracle FLEXCUBE Universal Banking	Switch Integration Gateway	Integration Server		JDK	IBM JDK 1.8_202
	Oracle FLEXCUBE Universal Banking REST	Web services	Integration Server	Oracle Enterprise Linux Server 7.1 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
Oracle Toplink					12.2.1.3.0	

Note: # Browser support is no longer based on Operating Systems but strictly tied to the browser themselves, no matter on which Operating Systems they are installed. Current release is certified on client workstations with Windows 7, 8, 10 and Mac OS X.

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## 5. Third Party Software Details

- For information on the third party software details, refer Oracle FLEXCUBE Universal Banking 14.3.0.0.0 License Guide