

Product Release Note
Oracle Banking Enterprise Limits and Collateral Management
Release 14.4.0.0.0
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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
www.oracle.com/financialservices/

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1. Release Notes

1.1 Background

Oracle Banking Enterprise Limits and Collateral Management is an enterprise application that enables banks to manage their exposure by centralizing limits definition process along with collateral management and effectively managing the underlying rules and the validations needed. It is a real-time, solution for exposure tracking, credit facility creation, renewal and utilization along with collateral pooling and collateral re-valuation and is enabled for multi-currency, multi-entity, multi-instance operations. Built on SOA, Oracle Banking Enterprise Limits and Collateral Management offers strong integration capability to coexist with the existing application landscape.

Oracle Banking Enterprise Limits and Collateral Management 14.4.0.0.0 is enhanced on the Base Version of 14.3.0.0.0 Oracle FLEXCUBE Enterprise Limits and Collateral Management.

1.2 Purpose

The purpose of this Release Note is to highlight the enhancements in Oracle Banking Enterprise Limits and Collateral Management 14.4.0.0.0

1.3 Abbreviations

Abbreviation	Description
CO	Core Services
ECM	Enterprise Collateral Management
EJB	Enterprise Java Beans
ELCM	Oracle Banking Enterprise Limits and Collateral Management
ELM	Enterprise Limits Management
FCUBS	Oracle FLEXCUBE Universal Banking
JDK	Java Development Kit
JS	JavaScript
LOV	List of Values
ODT	Oracle Development Tool
OR	Origination
RDBMS	Relational Database Management System
ReST	REpresentational State Transfer
RTF	Rich Text Format
SB	Savings Bank
SMS	Secure Management System
SOA	Oracle Service-Oriented Architecture
SSO	Single Sign On
SQLJ	A SQLJ program is a Java program containing embedded SQL statements.
UCM	Universal Content Management
UI	User Interface
XML	Extensible Markup Language
XDM	Experience Data Model

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

1.4 Release Highlights

The scope of the current release of Oracle Banking Enterprise Limits and Collateral Management 14.4.0.0.0 is mainly on the following enhancements:

- Ability to capture collateral details with following collateral types
 - Commercial Paper
 - Corporate Deposit
 - Crop
 - Perishable
 - Inventory
 - Account Receivable
 - Guarantee
 - Other Bank Deposit
 - Commodity
 - Fund
 - Bond
 - Stock – existing function id (GCDCOLLS) is retained for this collateral type
 - Accounts Contracts – sub-system in GCDCOLLT screen is carved out and created as a new collateral type
 - All the above collateral types introduced with capability to add multiple child records.
- Collateral Usage Fees
 - Ability to charge Fees based on the Usage as collateral moved through various life cycle stages
 - Charging one-time event based fee and recurring fee on collaterals enabled
- Collateral Valuation and Revaluation
 - Introduced frequency based revaluation covering various depreciation methods as well as external revaluation for collaterals with pricing from external sources
- ELM-ECM Segregation
 - Ability for Enterprise Limits to work independently with external collateral management
 - Ability for Enterprise Collaterals to work independently with external Limit management
- Collateral order of utilization
 - Signifying order number for multiple collaterals linked to a pool for tracking utilization thereof
- Notification
 - Framework to send notification details of specific collaterals, collateral pool and facility when enabled with signified fields which are modified
- Change Log
 - Enabling change log at facility, liability, collateral pool and customer-liability linkage level to view modifications
- Currency Restriction
 - Restricting sub-line currency to one of the allowed currencies at main line level
- Netting related changes
 - Modified approach of fetching accounts from linked application through external LOV for creation of collateral

1.5 Enhancements to Existing Modules/Functionalities

1.5.1 Collateral Types

Following new collateral types are introduced for collateral creation.

- Commercial Paper – Collaterals of type commercial paper which is issued at face value or discounted value is considered. Issuer details, maturity and rating details of security can be captured.
- Corporate Deposit – Collaterals of type corporate deposits from different categories like sovereigns, banks or corporates can be captured. Issuer details with rating details, deposit details including mode of interest payment like cumulative or non-cumulative are captured.
- Crop – Collateral type Crop supports collateral creation for different types of crops. Details of crops like area, produce details, market price, harvest season, crop shelf life, etc., can be captured.
- Perishable – Perishable type of collaterals can be created for different item types like fruit, vegetable and flower. Collateral supports capturing of produce details, shelf life, when harvested and storage details.
- Inventory – Inventory type collateral supports capturing of details like work in process, raw materials cost along with cost of finished goods with break-up of product details. Obsolete inventory cost as well of existing lien details against the products can be captured and reckoned for calculating total inventory cost.
- Account Receivable – Collateral under Account Receivable collateral type can be created with multiple invoices with details like invoice amount and currency, invoice date, due date, received amount details for the invoice duly arriving at outstanding amount. Existing lien details against these invoices can be captured and reckoned while calculating amount of account receivable. Multiple currencies for invoice, account receivable and collateral is considered and collateral value calculated appropriately.
- Guarantee – Creation of guarantee collateral supports different guarantee types like financial, performance, etc., Issuer details, issue date, effective date and expiry date of guarantee, rating details, beneficiary details can be captured while creating the collateral.
- Other Bank Deposit – Collateral creation of type other bank deposits supports capturing of deposit details like deposit amount/contribution, maturity amount, deposit start date and maturity date, interest rate and type. Deposit bank branch details as well as existing lien details against the deposit can be captured.
- Commodity – Commodity type collateral supports capturing details of commodity like type, quantity, commodity price, storage details and existing lien details.
- Fund – Creation of collaterals of fund type of collateral can be done by capturing details like fund category, issuer details, security details, folio number, name of fund/scheme, rating details, mode of holding like electronic.
- Bond – Collateral type bond supports capturing of details like security code, issuer code, folio number, tenure, maturity date, rating details, and mode of holding like electronic.
- Stock – Collateral creation of type stock is supported through GDCCOLLS which was earlier used for creation of marketable securities type of collateral. Stock details like issuer, security code, folio number, rating details, brokerage details and mode of holding like electronic can be signified while creating the collateral.

- Accounts Contracts – Earlier existing sys-system in GDCCOLLT is carved out created as a new collateral type for creating collateral with accounts and contracts. Different account types like SB, Current account, Term deposit, and Corporate Deposit are supported. Details like contract reference, contract contribution, account balance, maturity date, lien amount, etc., can be captured while creating the collateral.
- Earlier existing GDCCOLLT function will be used for creating collaterals of miscellaneous type
- Earlier existing Guarantee collateral type is renamed as Obligation as it covered personal guarantee and introduced as a new function
- Other notable features –
 - Provision to support multiple child records while creating a collateral
 - Multi-level approach – for ex., support for multiple invoices within a child record of Account Receivable and multiple products within a child record of Inventory with provision to note multiple lien against these invoices/products.
 - Support for different currencies like Collateral currency, Child currency (For Example, Account Receivable) and Invoice currency (for multiple invoices attached to Account Receivable).
 - Different maturity date/end date for different child records in a collateral and reduction of collateral value as and when a particular child record reaches maturity date/end date
 - Collateral value modification through batch process based on changes in applicable exchange rates of currencies involved
 - Multiple collaterals can be revalued together with facility to upload values pertaining to the collateral from external sources.

1.5.2 Collateral Fees

Introduction of fees functionality for collaterals with the following features

- One time event based fee for collateral creation, suspension, reactivation, expiry and extension.
- Auto collection of event based fee on the date of event from the configured account
- Recurring fee on collateral amount like collateral maintenance fee at predefined liquidation frequency.
- Accrual of recurring fee as per configured accrual frequency.
- Provision to signify start date and end date at fee rule level
- Waiving of one or more fee linked to a collateral through fee class at the time of creation
- Support for signifying different slab/tier for rate and different slab for amount and calculating fee as per rate/amount configured
- Support for fixed amount of fee of type user input
- Liquidation of recurring fee as per holiday processing settings

1.5.3 Collateral Valuation /Revaluation

- Two types of revaluation are supported, viz., Manual and Auto.
- Individual collaterals marked for manual revaluation can be revalued directly/through upload.
- Automatic revaluation covers depreciation type of revaluation methods, external revaluation of market based securities and others where price change is driven externally.
- Three types of depreciation methods are supported viz., straight line method, written down value method and sum of year digit method.

- Custom revaluation method provided to enable customizing revaluation process which is other than what is supported out of box.
- Automatic revaluation is frequency based and collaterals where next revaluation date = business date become candidates for automatic revaluation.
- Modification of revaluation type from manual to auto and vice-versa is supported.
- Revaluation is supported with holiday processing settings as available elsewhere in the application.
- Modification of some of the revaluation settings like rate of depreciation, holiday processing setting, revaluation frequency, month/day of revaluation, etc., are supported post creation.

1.5.4 ELM-ECM Segregation

- ELM-ECM segregation is done to support limits and collaterals as separate components.
- Functionalities which are common to both limits and collaterals are identified and supported for both
- Services are re-modeled for invoking components to communicate with the external application when needed.
- Generic services are introduced which can communicate with other external applications as under -
 - Valid limit service
 - Create pool service
 - Collateral block service

1.5.5 Order of utilization

Order of utilization signifies the order in which collaterals are to be considered as contributing to the pool utilization thereon.

For example, if a pool is created with 2 collaterals of 10000 USD each with order of utilization signified and pool is utilized to the extent of 9000 USD, then collateral with order number 1 cannot be delinked from the collateral as this is construed to be blocked towards existing utilization at pool level.

Features -

- Specifying the order number for all the collaterals linked to a pool during creation or as part of pool amendment.
- Linked amount of collateral with order of utilization will define the order in which the collaterals are to be considered as utilized when pool is partially utilized.
- Delinking of such collaterals with order specified which are considered as utilized based on the order number will not be allowed.
- Modifying the order of utilization to enable delinking of collaterals which are not marked as utilized (based on order of priority) is supported.

1.5.6 Notification

- New framework to send notification details of collateral, collateral pool and facility through JSON
- Specific entity like collateral, pool or facility is supported.
- Out of box provided identified fields can be enabled for notification in these entities.
- Old and new values of identified fields enabled for notification will be sent along with main details of collateral, collateral pool and facility

- Modification of collateral value impacting pool and facility will trigger multiple notifications for each of the impacted entity
- Notification for other entities or for additional fields for existing enabled entities can be handled as part of customization.

1.5.7 Change Log

- Change log feature extended to facility, liability and collateral pool and customer-liability linkage functions.
- Enables the user to see the details of amendments at a particular record level by invoking change log button

1.5.8 Currency Restriction

- Sub-line currency has to be one of amongst the list of allowed currencies at main line level
- Allowed currencies at sub-line can be equal to or sub set of allowed currencies at main line level
- Once a utilization is done in a particular currency, user will not be allowed to remove this currency from the allowed currencies at facility level

1.5.9 Netting related changes

- Support to fetch account details from FCUBS through external LOV.
- Instead of earlier push approach, modified pull approach will fetch accounts for the particular customer for the selected account type for creation of collateral

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/F29383_01/index.htm

2.2 Software Components

Software Components of Oracle ELCM 14.4.0.0.0 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))
- 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 Tech Stack – Oracle

Component	Machine	Operating System	Software	Version Number
Oracle Banking Enterprise Limits and Collateral Management	Application Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	Oracle Fusion Middleware Infrastructure	12.2.1.4.0
			Java HotSpot(TM) JDK (with WebLogic Application Server)	1.8 Update 241
			Open Symphony Quartz	2.3.2
			Oracle Toplink	12.2.1.4.0
	Database Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	19.6.0.0.0
	Reporting Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	Oracle WebLogic Server	12.2.1.4.0
			JDK	1.8 Update 241
			Oracle Analytics Server (Oracle BI Publisher)	5.5.0
	Client Machines Important - Browser Support is strictly tied to the Browser itself , and no longer based on the Operating System.	Windows 10	Internet Explorer	11+
			Mozilla Firefox	66+
			Google Chrome	73+
			Microsoft Edge	44+
		Mac OS X	Safari	12+
			Google Chrome	73+
	Single Sign On Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	JDK	1.8 Update 241
			Oracle WebLogic Server	12.2.1.4.0
			Repository Creation Utility	12.2.1.4.0
			Oracle Identity Management	12.2.1.4.0
Oracle SOA			12.2.1.4.0	

			Oracle Identity And Access Management	12.2.1.4.0
			Oracle Webtier Utilities	12.2.1.4.0
			Oracle Webgate	12.2.1.4.0
Oracle Banking Enterprise Limits and Collateral Management Integration Gateway 1. Web services (incoming) 2. HTTP Servlet (incoming) 3. EJB (incoming) 4. MDB (incoming) 5. Notifications (outgoing)	Integration Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	Oracle WebLogic Server	12.2.1.4.0
Oracle Banking Enterprise Limits and Collateral Management REST- Web services	Integration Server	Oracle Enterprise Linux Server 7.6(x86 64 Bit)	JDK	1.8 Update 241
			Oracle WebLogic Server	12.2.1.4.0
			Oracle Toplink	12.2.1.4.0

3.2 Tech Stack – IBM

Component	Deployment option	Machine	Operating System	Software	Version Number	
Oracle Banking Enterprise Limits and Collateral Management	Standalone	Application Server	Oracle Enterprise Linux Server 7.6 (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	2.3.2	
		Database Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	19.6.0.0.0	
		Client Machines Important - Browser Support is strictly tied to the Browser itself , and no longer based on the Operating System.	Windows 10	Internet Explorer	11+	
				Mozilla Firefox	66+	
				Google Chrome	73+	
				Microsoft Edge	44+	
				Mac OS X	Safari	12+
					Google Chrome	73+
			Mozilla Firefox	Mozilla Firefox for Mac (62+)		
Oracle Banking Enterprise Limits and Collateral Management Integration Gateway	Web services (incoming)	Integration Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0	
	HTTP Servlet (incoming)	Integration Server	Oracle Enterprise Linux Server 7.3 (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 7.6 (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 7.6 (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 7.6 (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 Banking Enterprise Limits and Collateral Management REST	Web services	Integration Server	Oracle Enterprise Linux Server 7.6 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.0
				Oracle Toplink	12.2.1.4.0

4. Annexure – B: Third Party Software Details

For information on the third party software details, refer Oracle Banking Enterprise Limits and Collateral Management 14.4.0.0.0 *License Guide*.

5. Annexure – C: Module Code and Description

Abbreviation/ Acronym	Meaning
CO (Core)	Oracle FLEXCUBE Core
SMS	Security Management System
EL	Enterprise Limit
GE	Global Exposure
GC	Global Collateral