

Product Release Note
Oracle FLEXCUBE Investor Servicing
Release 14.0.0.0.0
[May] [2018]





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Version 14.0.0.0.0

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1. Release Notes

1.1 Background

Oracle Financial Services Software Limited has developed a mutual fund automation solution, Oracle FLEXCUBE Investor Servicing that enables mutual fund companies to create a distributed network of branches for effective marketing and efficient handling of unit holder transactions. Oracle FLEXCUBE Investor Servicing 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 highlight the enhancements in Oracle FLEXCUBE Investor Servicing 14.0.0.0.0

1.3 Abbreviations

Abbreviation	Description
FCIS	Oracle FLEXCUBE Investor Servicing
FMG	Fund Manager
UH	Unitholder
UT	Unit Trust

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

1.4 **Release Highlights**

The scope of the current release Oracle FLEXCUBE Investor Servicing 14.0.0.0.0 is to develop the new Component Oracle FLEXCUBE Investor Servicing for Pension Funds is to focus on contribution handling/record keeping for pensions. Primary focus area of the pension funds will be occupational pensions along with some of the products whose business needs align closely with occupational pension and personal pension administration.

This release also focussed on technical qualification to comply with approved Tech Stack along with data privacy features and forward porting of applicable fixes related to incidences reported in previous versions.

1.5 **Oracle FLEXCUBE Investor Servicing for Pension Funds**

This module supports solution for handling occupational pension and personal pension administration. Following features are available in the system.

- Support for maintaining Employer sponsored / Master Trust schemes
- Facility to maintain scheme level parameterization on contribution/withdrawal related rules
- Support for recording mandatory employer / employee contributions via upload file with validations
- Support for pension related transfers/ early withdrawals/ switches/ maturity
- Investment account to hold multiple portfolios, including direct UT investments
- Frequency/ lifetime based investment & withdrawal limits
- Single instruction to transact into multiple investment products (including direct UT investments)
- Support for enquiries/statements

Integrations / Interface: Investor Servicing for Pension funds supports the following integrations/Interfaces

- Integrated with mutual fund module of Oracle FLEXCUBE Investor Servicing for processing
- Facility to update balance/positions from external system for held-away assets
- Facility to upload assets from external system
- Support for recording mandatory employer/employee contributions via upload file with validations

Enhancements to existing modules:

Multifactor Authentication (MFA)

- Introduced Framework to support Multifactor Authentication to integrate with any third party MFA solution provider.
- Two new fields (MFA Applicable and MFA ID) introduced in User Maintenance screen to support MFA.
- On successful login using Application user ID details, the system will prompt new MFA screen with Multi Factor ID defaulted. User need to input Multi Factor PIN to authenticate.
- MFA authentication status will appear on home page after successful login.

Data Masking

System enhanced to support to data privacy/ masking feature. All data which are marked as Personally Identifiable information need to be masked for the Application User as per their configuration in user maintenance screen.

- **Pseudonymization Data Masking:** System enhanced to support masking /unmasking Personal Identifiable Information for the Application users as per user access configuration.
- **Anonymization Data Masking:** System enhanced to support masking of Personal Identifiable Information from production environment before moving to other environment. System enabled to Mask Personal Identifiable Information in Database permanently.

Encryption

System is qualified with Transparent Data Encryption feature. This automatic encryption-decryption capability at the database layer makes the solution transparent to database applications. Access controls that are enforced at the database and application layers remain in effect.

Long term Data Store (LDS)

LDS, an archival solution, enables user to reduce the size of production data by moving passive historical data into long term data store. Only active data is retained in production data store. User can define the data retention period for production environment. The historical data stored in LDS can be accessed seamlessly through same application.

2. Components of the Software

2.1 Documents accompanying the software

The various documents accompanying the software are as follows:

- Release Note
- Installer Kit
- User Manuals and Installation manuals can be accessed from http://docs.oracle.com/cd/E94389_01/index.htm

2.2 Software Components

Software Components of Oracle FLEXCUBE 14.0.0.0.0 that form part of this release are as follows:

- Application Server
 - Java Sources
 - UI Components (JS,XML)
 - Reporting Components(Data models(xdmz), Reports(xdoz))
 - Process Framework components (BPEL)
- Database Server
 - 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)
 - Services
 - The WSDL files for the service supported
 - The XSDs of the messages involved
 - The service documents – describing the services
- Adapters
 - IS-UBS

- FCIS MDB Adapter
 - UI Components (JS,XML)
 - Java sources
 - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
- FCIS Callout Adapter
 - Java sources
 - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
- FCIS Insulation Adapter
 - Java sources
 - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
- Installation utilities
 - UI and Script based installation for Application Server, Database Server and Gateway
 - Installation documents for
 - FCIS Application Deployment
 - Gateway
- Online Help Files

3. Annexure – A: Environment Details

3.1 Tech Stack – Oracle

Component	Deployment option	Machine	Operating System	Software	Version Number
Oracle FLEXCUBE Investor Servicing	UI-Host and Centralized	Application Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	Oracle Fusion Middleware Infrastructure (or) Oracle WebLogic Server	12.2.1.3.0
				Java HotSpot(TM) JDK (with WebLogic Application Server)	JDK 1.8 Update 161
				Oracle Platform Security Services	12.2.1.3.0
				Open Symphony Quartz	2.3.1-9f9e400
		Database Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	12.2.0.1.0
		Document Management System	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	Oracle WebLogic Server	12.2.1.3.0
				Oracle WebCenter Content Imaging	12.2.1.3.0
		Reporting Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	Oracle BI Publisher	12.2.1.3.0
				Java HotSpot(TM) JDK (with WebLogic Application Server)	JDK 1.8 Update 161
		Oracle FLEXCUBE Information Server - Analytics	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	Oracle Business Intelligence Enterprise Edition (OBIEE)	12.2.1.3.0
				Java HotSpot(TM) JDK (with WebLogic Application Server)	JDK 1.8 Update 161
		Client Machines	#Supported Browsers	Internet Explorer	Microsoft Internet Explorer Release(11.*)
				Mozilla Firefox	Mozilla Firefox Release(57+)
				Google Chrome	Google Chrome Release(62.0.3202.94)
				Microsoft Edge	Microsoft Edge (41.16299.15)
				Safari	Safari 11+
				JDK	JDK 1.8 Update 161

		Single Sign On Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	Oracle Fusion Middleware Infrastructure	12.2.1.3.0
				Oracle Identity And Access Management	12.2.1.3.0
				Oracle Identity Management(OID)	12.2.1.3.0
				Oracle SOA	12.2.1.3.0
				OID Connector	OID 11.1.1.6.0
Oracle FLEXCUBE Investor Servicing BPEL/BPMN Processes and Process Framework	UI-Host and Centralized	Application Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	Oracle Fusion Middleware Infrastructure	12.2.1.3.0 (JDK 1.8 Update 161)
				Oracle SOA Suite, Oracle BPM Suite	12.2.1.3.0
Oracle FLEXCUBE Investor Servicing Integration Gateway	Web services (incoming)	Integration Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	Oracle Fusion Middleware Infrastructure (or) Oracle WebLogic Server	12.2.1.3.0
	HTTP Servlet (incoming)				
	EJB (incoming)				
	MDB (incoming)				
	Notifications (outgoing)				

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

3.2 Tech Stack – IBM

Component	Deployment option	Machine	Operating System	Software	Version Number
Oracle FLEXCUBE Investor Servicing	UI-Host and Centralized	Application Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.5
				IBM WebSphere MQ Server	9.0.4.0
				Open Symphony Quartz	2.3.1-9f9e400
		Database Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	12.2.0.1.0
		Client Machines	#Supported Browsers	Internet Explorer	Microsoft Internet Explorer Release(11.*)
				Mozilla Firefox	Mozilla Firefox Release(57+)
				Google Chrome	Google Chrome Release(62.0.3202.94)
				Microsoft Edge	Microsoft Edge (41.16299.15)
				Safari	Safari 11+
Oracle FLEXCUBE Investor Servicing Integration Gateway	Web services (incoming)	Integration Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.5
	HTTP Servlet (incoming)				
	EJB (incoming)				
	MDB (incoming)	Integration Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.5
				IBM WebSphere MQ Server	9.0.4.0
	Notifications (outgoing)	Integration Server	Oracle Enterprise Linux Server 7.3 (x86 64 Bit)	IBM WebSphere Application Server with inbuilt JVM (IBM JDK 1.8_64)	9.0.0.5
				IBM WebSphere MQ Server	9.0.4.0

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

4. Annexure – B: Third Party Software Details

Copyright Holder	Licensed Technology	Version
Apache	Apache Commons Codec	1.11
Apache	Log4J	2.10.0
Apache	ant	1.10.1
Yahoo	YUI Compressor	2.4.8-958491d
Sean Owen	PJL Compressing Filter	2.3.0
Apache	Commons IO	2.6
Apache	Apache Commons Transaction	1.2
Apache	Apache POI	3.17
Apache	Commons Net	3.6
Apache	Commons Collections	4.1
Apache	commons-logging	1.2
MetaStuff, Ltd.	dom4j	2.1.0
Terracota	Quartz	2.3.1-9f9e400

5. Annexure – C: Module Code and Description

Abbreviation/ Acronym	Meaning
FCIS	Oracle FLEXCUBE Investor Servicing
SMS	Security Management System
LEP	Life and Endowment Product
UT	Unit Trust