

Product Release Notes
Oracle FLEXCUBE Payments 12.3.0.0.0
[February] [2017]



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1. Release Notes

1.1 **Background**

Oracle Financial Services Software Services Limited has developed Oracle FLEXCUBE Payments for providing a payment solution which acts as a standalone payment product processor, catering to requirements of both Retail/Corporate segments. The agile and scalable nature of the solution helps in adapting quickly to market changes. This is a unified payments platform for local and cross-border payment types.

Its mission-critical and robust architecture and the use of leading-edge industry standards ensure almost limitless scalability.

1.2 **Purpose**

The purpose of this Release Note is to highlight the various features in Oracle FLEXCUBE Payments Release 12.3.0.0.0.

1.3 **Abbreviations**

Abbreviation	Description
ACH	Automated Clearing House
SEPA	Single Euro Payments Area
SCT	SEPA Credit transfer
DDA	Demand Deposit Accounts
FX	Foreign Exchange

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

1.4 **Release Highlights**

The scope of the current release in Oracle FLEXCUBE Payments is to develop the below features:

- Domestic Low Value Payments
- Domestic High Value Payments
- Cross-Border Payments
- Direct Debits
- Book Transfers
- Faster Payments
- Operations Queues
- Pricing
- SWIFT Net Connectivity

- Dashboards

1.5 Module wise - Features

1.5.1 Domestic Low Value Payments (ACH)

- The following changes are supported for domestic low value payments dispatch:
 - Ability to Input Outgoing & Incoming ACH Transactions
 - Dispatch File Generation to Networks and Upload of Files coming from the Network
 - Out of the Box Support for SEPA-SCT in EBA Step-2 format

1.5.2 Domestic High Value Payments (RTGS)

- The RTGS module of Oracle FLEXCUBE Payments supports domestic RTGS payment transactions (within a country) or cross border (within a region) RTGS payments.
- Facility is provided for both incoming and outgoing RTGS transactions
- Payment transaction is processed individually at real time without netting
- Support for processing of RTGS Payment transaction only in specified currencies of the network.
- Out of the box support for processing TARGET2 RTGS payments.
- Capability for processing the following outgoing and incoming TARGET2 RTGS messages-
 - Customer payments – SWIFT MT103 and MT103+
 - Interbank payments – SWIFT MT202, MT202COV
- Facility for identification of Receiver of outgoing RTGS payment based on TARGET2 Bank directory.
- Support for Payment processing within operating hours of the RTGS network and on RTGS working days.
- Facility for balance check for the remitter account (ECA check) in case of outgoing RTGS payment.
- Facility for Sanctions check with external Sanctions system
- RTGS module supports processing of outward and inward RTGS payments for a bank in the role of a Direct participant and involves sending/receiving to/from RTGS Clearing infrastructure.
- RTGS payment supports sending of payment messages to SWIFT network with SWIFT Alliance Access.
- Processing of inward pass-through SWIFT payment message as an outward RTGS payment to Direct participant.
- Processing of inward RTGS payment as an outward SWIFT payment to RTGS Indirect participant or a non-member bank.
- Generation of outward Cover payment (MT202COV) to a direct participant for an outward SWIFT Customer transfer.
- Facility is provided to support processing of incoming Sender notification message (MT012) and Abort notification message (MT019) from Settlement Institution.

1.5.3 Direct Debits

- Support for outgoing Direct Debit uploads from customer using pain.008 file format
- Support for incoming Direct Debit uploads from network using pacs.003 file format
- Initiation of outgoing Direct Debits based on Periodic Instructions
- Support for individual payment requests from bank channels via ReST services and J-SON over JMS for Outgoing Direct debit initiation.
- Mandate maintenance for debtor & creditor and the related validations during direct debit processing.
- Provision for auto generation of Dispatch File & file level accounting
- SEPA Direct Debits Core and B2B schemes support in EBA STEP2 format

1.5.4 X-Border - SWIFT Certification Changes:

- The Oracle FLEXCUBE Payments system for Cross-border Payments includes the below Message Types so as to be ready for SWIFT Certification. Facility provided to process both Outward and Inward messages of message types listed below
- The SWIFT Message types cover the following categories
 - Customer Payments (MT1xx)
 - Bank Payments (MT2xx)
 - Common Group Messages (MT19x and MT29x)
- List of SWIFT Message Types are mentioned below –
 - MT102 – Multiple Credit Transfer
 - MT102+ – Multiple Credit Transfer-STP
 - MT201 – Multiple Financial Institution Transfer for its Own Account
 - MT203 – Multiple General Financial Institution Transfer
 - MT205 – Financial Institution Transfer Execution
 - MT205COV – Financial Institution Transfer Execution (Cover)
 - MT210 – Notice to Receive
 - MT190 and MT290 – Advice of charges
 - MT191 and MT291 – Request for charges
 - MT192 and MT292 – Request for cancellation
 - MT195 and MT295 – Queries
 - MT196 and MT296 – Answers
 - MT198 and MT298 – Proprietary Message

- MT199 and MT299 – Free Format Message
- ACK, NAK, MT011, MT010 – Acknowledgement and Notification messages
- Facility provided to initiate above mentioned Outward SWIFT payment messages manually from the Transaction Input screen or through SOAP and ReST services. System would also have the ability to auto-generate few message types based on events (e.g. MT191).
- Facility to manually initiate outward Common Group Messages from a separate screen
- Facility provided in the system to process inward messages of the above types in a STP manner and handle STP exceptions.

1.5.5 Dashboard

- Facility is provided to integrate information from multiple screens and queues and display the date in a dashboard in the home page. This dashboard provides the comprehensive and consolidated snapshot, for easier ways to access information which helps the bank users to analyze, monitor and process information accordingly which saves time and cost.
- Dashboard screen is developed for Payment transactions that display the corresponding transaction counts across all payment types with their appropriate statuses.
- Queue Dashboard is provided for monitoring the number of pending transactions in various business/processing queues.

1.5.6 Pricing

- Facility is provided for maintaining charge/tax related details as a common pricing subsystem applicable for all payment types.
- Pricing related maintenances are enhanced to support the following:
 - Slab based prices
 - Repaired transaction prices
 - Prices Borne by Bank
- Provision is given for posting charges online or on deferred basis.

1.5.7 Faster Payments

- The new Faster Payments module is developed to provide the below key Functional features –
 - Manual Payment Initiation
 - Receipt of individual payment requests from bank channels via ReST services and J-SON over JMS.
 - Business validation
 - External Credit Approval Check for Outward payments
 - External Account Validation for Inward payments
 - Accounting
 - ISO 20022 pacs.008 Message generation

- Processing response of outgoing payment from Clearing infrastructure in ISO20022 pacs.002 message format.
- Receiving incoming payment in ISO20022 pacs.008 message format
- Generation of Real-time Response (pacs.002 message) of Incoming payment within stringent SLA.
- Notification to Originating Customers within overall processing SLA
- Immediate Notification to Beneficiary Customer on Credit
- Sending payment details to external Sanctions systems
- Faster Payments module is a high performance system that supports stringent SLA of a typical Faster Payments scheme.
- It is also highly scalable to increasing transaction volumes and provides very high availability.

1.5.8 Payments Core

- Facility is provided for the below listed core functionalities :
 - Bank Redirection
 - Account Redirection
 - Customer Float days for ACH Outward payments
 - Customer Status Check
- Facility is provided to support two levels of authorization based on the limits maintained for a payment transaction.
- Facility provided for automatic batch closure if transactions pending in exception queues are released.
- For a bulk file, support for Processing-cutoff Queue is also provided. Individual transaction debit amounts are made available for payments received in file.
- Provision for maintaining Small FX limit at Network Currency level
- Facility for maintaining Duplicate check fields for different payment types source wise
- Facility for maintaining authorization rekeys required fields.
- Facility for skipping sanction check for certain customers
- Provision for skipping ECA check for certain accounts
- Facility provided for processing payments belonging to hosts with different time zones
- Provision for maintaining incoming file related parameters.
- Network resolution has been enhanced to cover cross border and RTGS payment requests received in mixed payload.

1.5.9 Messaging

- System is enhanced to support the rule based routing of SWIFT MT messages to folder/queue destination.
- System is enhanced to support the bulking of SWIFT MT messages.
- Bulk message can be handed over to folder/queue or to SWIFT Net through SAG with File Act protocol FTA.

- System is enhanced with the SWIFT Net connectivity framework to receive and send the SEPA Payment files to/from SWIFT Net through SAG with File Act protocol FTA.

1.5.10 Exception Queues

- Provision for moving the payment transaction to Business Override Queue for exceptions which can be overridden by user.
- Provision for Process Exception Queue on runtime errors and maintenance errors
- Sanction Check Queue: External system status mapping and storing the error details are required. Sanctions Check Request and Response Messages are to be stored. Additional details are to be sent in Sanction check request message.
- ECA Queue: External system status mapping and storing the error details are provided.
- Authorization Limit Queues are provided for approval of transactions with transfer amounts more than Authorization limit1 or Authorization Limit 2 maintained.

1.5.11 Multi-context Payment Input Screen

- Facility provided to have a single screen which can accept payment initiation requests irrespective of the payment type.
- Provision for deriving the payment network based on Payment Network rule maintained

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 - These can be accessed from the link given below:

http://docs.oracle.com/cd/E49819_01/index.htm

2.2 Software Components

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

1. Host
 - UI Components (JS,XML)
 - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
2. New UI Application Server
 - Java Sources
 - Configuration files used for deployment
3. Interface
 - ASCII interface sources
 - ✓ Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
4. Gateway
 - Java application layer
 - ✓ Java sources
 - ✓ Configuration files used for deployment
 - ✓ ReST
5. Messaging layer
 - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
6. Services
 - ✓ The WSDL files for the service supported
 - ✓ The XSDs of the messages involved
 - ✓ Structure (dictionary) of the XSD documented as excel sheets (Message-dictionary-xls)
 - ✓ The service documents – describing the services
7. Includes OIM adapter
8. Installation utilities
9. Front end based installation for host
10. Front end based installation for Gateway

11. Script based installation for gateway application server components
12. Installation documents for
 - Oracle FLEXCUBE Installer documents
 - Gateway
13. Online Help Files

3. Annexure – A: Environment Details

3.1 Tech Stack – Oracle

Component	Deployment option	Machine	Operating System	Software	Version
Oracle FLEXCUBE Payments	UI-Host and Centralized	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
		Database Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	12.1.0.2.0
		Client Machines <i>Important - Browser Support is strictly tied to the Browser itself , and no longer based on the Operating System.</i>	Windows 7	Internet Explorer	11
				Mozilla Firefox	50
				Google Chrome	54.0.2840.87
			Windows 8	Internet Explorer	11.0.9600.18500
				Mozilla Firefox	45.0.2
				Google Chrome	54.0.2840.99m
			Windows 10	Internet Explorer	11.0.10240.17146
				Google Chrome	54.0.2840.99m
			Mac OS X	Safari	9.1.1 (9537.86.6.17)
				Google Chrome	54.0.2840.71 (64-bit)
Oracle FLEXCUBE Payments Integration Gateway	Web services (incoming)	Integration Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	JDK	JDK 1.7 Update 99
	HTTP Servlet (incoming)			Oracle WebLogic	10.3.6
	EJB (incoming)			Oracle Identity Management (OID)	11.1.1.9.0
	MDB (incoming)			Oracle Identity And Access Management	11.1.2.3.0
	Notifications (outgoing)				
Oracle FLEXCUBE Payments ReST	Web services	Integration Server	Oracle Enterprise Linux Server 6.6 (x86 64 Bit)	Oracle WebLogic Server	12.2.1.1.0
				JDK	1.8 Update 111
				Oracle WebLogic Server	12.2.1.1.0
				Oracle Toplink	12.2.1.1.0

4. Annexure – B: Third Party Software Details

Licensor 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	Apache POI	3.14
Apache	Commons Net	3.5
Apache	commons-io	2.5
Apache	Log4J	2.6.2
FasterXML, LLC	Jackson	2.7.6
SLF4J	Simple Logging Façade for Java (SLF4J)	1.7.21

Licenser Name	Licensed Technology	Version
Terracota	Quartz Job Scheduler	2.2.3
SLF4J	SLF4J Simple Logging Façade for Java (slf4j-api-1.7.21)	1.7.21

5. Annexure – C: Module Code and Description

Module Code	Module Description
PB	Book/Internal Transfer
PC	Collections
PX	Cross Border Payments
PR	Domestic High Value (RTGS)
PA	Domestic Low Value
PQ	Exception Queues
PI	Immediate Payments
PM	Payments Core
PP	Pricing
PS	Standing Instructions



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