Oracle® Banking Payments Product Release Note



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ORACLE

Oracle Banking Payments Product Release Note, Release 14.8.0.0.0

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1 Preface

- Purpose
- Audience
 This manual is intended for the following User/User Roles:
- Documentation Accessibility
- Critical Patches
- Diversity and Inclusion
- Conventions

1.1 Purpose

This guide is designed to help acquaint you with the Oracle Banking Payments application. This guide provides answers to specific features and procedures that the user need to be aware of the module to function successfully.

1.2 Audience

This manual is intended for the following User/User Roles:

Table 1-1 User Roles

Role	Function
Implementation & IT Staff	Implementation & Maintenance of the Software

1.3 Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

1.4 Critical Patches

Oracle advises customers to get all their security vulnerability information from the Oracle Critical Patch Update Advisory, which is available at Critical Patches, Security Alerts and Bulletins. All critical patches should be applied in a timely manner to make sure effective security, as strongly recommended by Oracle Software Security Assurance.



1.5 Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

1.6 Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

2 Release Notes

- Background
- Purpose
- Abbreviations
- Release Highlights

2.1 Background

Oracle Financial Services Software Services Limited has developed the Oracle Banking Payments, a stand-alone Payments Product Processor, to cater to the requirements of both Retail & Corporate segments. The agile and scalable nature of the solution helps Banks in quickly adapting to market changes. This is a Unified Payments platform for Local Clearing or Low Value, High Value or Large Value (RTGS), Cross-Border (SWIFT) and Book or Internal Transfer payments.

2.2 Purpose

The purpose of this Release Note is to highlight the various features introduced in Oracle Banking Payments Release 14.8.0.0.0.

2.3 Abbreviations

Abbreviation	Description
SWIFT	Society for Worldwide Interbank Financial Telecommunication
SWIFT gpi	SWIFT global payments innovation
SWIFT CBPRPlus	SWIFT Cross-border Payments and Reporting
ACH	Automated Clearing House
TARGET2	Trans-European Automated Real-time Gross Settlement Express Transfer System
SEPA	Single Euro Payments Area
NACHA	National Automated Clearing House Association
CHIPA	Clearing House Interbank Payments System
NEFT	National Electronic Funds Transfer
RTGS	Real Time Gross Settlement
IMPS	Immediate Payment Service
NACH	National Automated Clearing House
CNAPS	China National Advanced Payments System
OBVAM	Oracle Banking Virtual Account Management
FC Core	Oracle FLEXCUBE Core Banking
OBDX	Oracle Banking Digital Experience
ISO	International Standards Organization



Abbreviation	Description
BIC	Bank Identifier Code
IBAN	International Bank Account Number
FI	Financial Institution
UETR	Unique End-to-End Transaction
REST	Representational State Transfer
SOAP	Simple Object Access Protocol
API	Application Programming Interface
XML	Extensible Markup Language
XSD	XML Schema Definition
GL	General Ledger
MIS	Management Information System

2.4 Release Highlights

The scope of the Oracle Banking Payments 14.8.0.0.0 Release is to develop new features apart from making enrichments to the existing functionality.



- Regulatory Changes
- Generic Wire ISO Changes
- Cross Border MT / RTGS MT Changes
- India UPI Changes
- Book Transfer Changes
- Clearing & Instruments Changes
- Generic ACH Changes
- EU SEPA Changes
- US Payments Changes
- India Payments Changes
- Bulk File Processing Changes
- Payments Core Changes
- Integration Changes
- Services

3.1 Regulatory Changes

- SWIFT SR 2024
- SWIFT SR 2023
- SWIFT GPI SR 2024
- EU T2 RTGS
- EU SEPA2023
- US Fedwire ISO
- India NEFT ISO
- India IMPS

3.1.1 SWIFT SR 2024

Support is provided for generating and receiving the following SWIFT ISO messages:

- Charges Payment Notification (camt.105)
- Charges Payment Notification Multiple Charges (camt.105)
- Charges Payment Request (camt.106)
- Charges Payment Request Multiple Charges (camt.106)



3.1.2 SWIFT SR 2023

Support is provided for generating and receiving the following SWIFT ISO messages:

- Cheque Presentment Notification (camt.107)
- Cheque Stop Request (camt.108)
- Cheque Cancellation or Stop Report (camt.109)
- Customer Direct Debit Initiation (pain.008)
- Customer Payment Cancellation Request (camt.055)
- FI to FI Customer Direct Debit (pacs.003)
- Notification to Receive Cancellation Advice (camt.058)

3.1.3 SWIFT GPI - SR 2024

Support for:

- Generating and validating gCCT confirmation as per trck.001.001.03 version
- Generating and validating gCOV confirmation as per trck.001.001.03 version
- Generating and validating Universal Confirmation per trck.001.001.03 version

3.1.4 EU T2 RTGS

Support is provided for generating and receiving the following T2 RTGS ISO messages impacted for November 2024 UDFS guidelines:

- FI to FI Customer Credit Transfer (pacs.008)
- FI Credit Transfer (pacs.009)
- Payment Return (pacs.004)
- Support for generating and receiving the FI Credit Transfer (pacs.009) message processing as per UDFS Version 3.0 guidelines.

3.1.5 EU SEPA2023

- Changes are done in SCT / SDD for generation & upload of EBA files and Non-CSM messages in ISO 2019 format. Structured address fields for Debtor/Creditor, proxy account details for Debtor /Creditor accounts & LEI details for applicable parties are added for transactions. Customer LEI default is provided for transactions from Customer LEI preferences.
- EMS related maintenance changes in Connector File Type Linkage PMDCONFL is done to support different versions using specific Connector / Folder. SEPA Message Preferences are made mandatory for supporting new message versions. Pain file upload preferences (Function ID PMDPAINP) is provided to support different versions of pain.001 message for same bank based on separate connector/folder maintenance in EMS.
- Changes are done in SCT Instant too to support for generation & upload of messages in ISO 2019 EPC format and additional fields and LEI default support too are provided in screens.



3.1.6 US Fedwire ISO

Maintenance Changes:

- A new network type code US-FWX is added for FEDWIRE ISO network. FEDWIRE ISO is supported in existing Generic Wires.
- Header Preferences related fields are added in Generic RTGS Network Preferences (Function ID: PSDGRTNP).

Network Configurability for Business Validations:

- Support is provided to configure business validation rules based on message type.

Message Types Supported:

- Fedwire ISO messages support is provided in Generic wires module using MCS based XSD maintenance for RTGS MX:
 - pacs.008.001.08
 - pacs.009.001.08
 - pacs.004.001.10
 - pacs.002.001.10
 - camt.029.001.09
 - camt.056.001.08
 - camt.110.001.01
 - camt.111.001.01
 - pacs.028.001.03
 - pain.013.001.07
 - pain.014.001.07
- Business Application Header version 3 is supported admi messages:
 - admi.004.001.02 (Fedwire Funds Broadcast)
 - admi.011.001.01 (Fedwire Funds System Response)
 - admi.002.001.01 (Message Reject)
 - admi.004.001.02 (Connection Check)
 - admi.007.001.01 (Fedwire Funds Acknowledgement)

Drawdown Support:

- Inbound drawdown payment message (pacs.008/009)
- Outbound drawdown payment (pacs.008/009)
- Manual Release or Reject of drawdown request from the Drawdown Queue
- Manually generation of pain.014 with PNDG status

3.1.7 India NEFT - ISO

Support for:



- NEFT messaging is moved from IFN298 format to ISO20222 format. Additional fields for NEFT ISO added to PTDOTONL, PTDOVIEW, PTDITONL, PTDIVIEW, PTSOVIEW, PTSIVIEW screens.
- Processing and bulking of outgoing NEFT payments initiated through UI, Channel/SPS and generate pacs.008.001.09 (formerly N06) messages.
- Generation and bulking of pacs.004.001.10 (formerly N07) messages, camt.059.001.06 (formerly N10) credit confirmation messages.
- Generation of Business Application Header (formerly Block A) as per specification for every message sent.
- Parsing and de-bulking of incoming NEFT payments which are uploaded as pacs.008.001.09 (formerly N02) messages.
- Processing of camt.059.001.06 (formerly N10) credit confirmation messages, admi.004.001.02 (formerly F Series) ACK/NAK messages, Pacs.002.001.11 reject message (formerly IFN298N03), camt.052.001.08 (formerly IFN972) SOD message.
- Service Changes done for Validation Service, SPS service to add/map LEI and Category Purpose Code tags. Pain.001 mapping changes done for LEI fields, category purpose code.
- FCRA Validation for NEFT outbound is added.

3.1.8 India IMPS

UDIR:

Support is provided for IMPS Unified Dispute and Issue Resolution processing.

- API processing changes are done for:
 - Request from NPCI to Remitter Bank to credit back the remitter (for reversal) by modified 'ReqPay' API
 - Response from Remitter Bank to NPCI to provide status of online credit (for reversal) using modified 'RespPay' API
 - 'ReqChkTxn' API initiated from Remitter Bank to NPCI to check the status of the transaction / dispute or adjustment raise at NPCI.
 - 'RespChkTxn' API initiated from NPCI to Remitter Bank to provide latest details of transaction / dispute.
 - 'ReqChkTxn' API initiated from NPCI to Beneficiary Bank to accept the API for Dispute / Autoupdate Status check.
 - 'RespChkTxn' API initiated from Beneficiary Bank to NPCI to provide latest status.
- Screen Changes are provided in IMPS Outbound Transaction View Detailed (PJDOVIEW) & in Inbound Message Browser (PJSINBRW) for viewing reversal details. In IMPS Inbound Transaction View Detailed (PJDIVIEW), new display fields added for 'Original Retrieval Reference' & Transaction sub-type with list of values PAY and DR_REVERSAL. New Screen Reject Reversal Details (Function ID: - PJDREVDL) is provided to display the reject details of remitter online credit transaction if the original matching transaction is not found.
- New API | Rest API (JSON format) impsChkTxnOut to be initiated from banking channel to check transaction status for a financial transaction to OBPM.
- New API | Query service impsChkTxnOut Query to be initiated from banking channel to view the response transaction status check from OBPM for a financial transaction.



- Screen IMPS Outbound Payment Preferences Detailed (PJDNWOPF) is modified.
- 2 new fields (Request Acknowledgment Time-Out Period and Auto Status Check Time-Out Period) are added. Screen IMPS Outbound Transaction View Summary (PJSOVIEW) is modified to display Check Transaction status details.
- New APIs are added for handling complaints raised through channels:
 - Rest API for banking channel to send the complaint for a financial transaction to OBPM.
 - Query service for viewing the response complaint from OBPM for a financial transaction.
 - 'ReqComplaint' API to be initiated from OBPM system for raising complaint for a financial transaction to NPCI.
 - 'RespComplaint' API to be initiated from NPCI to provide response of the raised complaint to OBPM system.

MCC codes for Credit Card Transactions

- Support is provided to populate Credit Card payment specific MCC codes - MCC 5415 (Corporate) or MCC 5414 (Retail) in IMPS outbound transactions.

IMPS- Retail Transaction Limit Changes

- Support is provided for IMPS to maintain & validate per day cumulative limit for successful transactions per remitter account. If there are more than 'n' number of times decline/ reversal transactions for an account in a day further IMPS outbound transactions to be disallowed for 24 hours.
- Changes are applicable if MCC code used is for retail transactions. New limit preferences are added in in IMPS Transaction Limit Maintenance (Function ID: PMDDFLMT).

3.2 Generic Wire ISO Changes

- SWIFT CBPRPlus Features
- RTGS ISO Features
- Features

3.2.1 SWIFT CBPRPlus - Features

Support for:

- Allowing up to 35 characters in Transaction Identification field of Outbound SWIFT CBPRPlus FI to FI Customer Credit Transfer (pacs.008), FI Credit Transfer (pacs.009) transactions and sending up to 35 characters in Transaction Identification in the Return / Recall Message types - pacs.004 / pacs.002 / camt.056 / camt.029.
- Performing pattern validations on the Account Other Identification, Settlement Date and Settlement Time Indicator fields in Outbound SWIFT CBPRPlus FI to FI Customer Credit Transfer (Pacs.008) and FI Credit Transfer (pacs.009) transactions.
- Generating Outbound SWIFT CBPRPlus Notification to Receive (camt.057) message to the Nostro Account BIC for Inbound SWIFT CBPRPlus FI Credit Transfer (pacs.009) transactions based on a new flag 'Generate Notification to Receive' at transaction level; Generating Outbound SWIFT CBPRPlus Notification to Receive (camt.057) message to the Debit Nostro Account BIC for Inbound Cross-border Bank Transfer MT 202



transactions based on the system parameter instead of generating Notification to Receiver MT 210 message.

3.2.2 RTGS ISO - Features

Support for:

- Change of TARGET2 transaction screens titles to RTGS ISO from TARGET2.
- Capturing Network Directory Key during TARGET2 RTGS Directory upload through File envelope.
- Booking Outbound TARGET2 transactions with Instruction Identification value having up to 35 characters; Defaulting of transaction reference in Instruction Identification and allowing user to input up to 35 characters.
- Defining separate XML Schema validation file path by introducing a new file type for TARGET2 pacs.009 COVER message.
- Receiving and processing the incoming Rejection (admi.002) message; Matching and linking the Rejection (admi.002) message with an Outbound TARGET2 ISO message; Moving the original message to NACK Message Repair Queue for modifying the message (or) for reversing the underlying transaction; Reversing the Accounting of the Outbound matched transaction on reversing the underlying transaction.
- Skipping Currency Holiday check for RTGS ISO transactions.
- Populating Clearing System Code value in outgoing transactions with the value configured in Network Service ID of Generic RTGS Preference and deriving network code based on Clearing System Code field from the incoming messages for Network Code derivation.
- Capturing the Business Service value for each for the ISO message type, Header Version, Receiver BIC, Business Service in Generic RTGS Network Preference and Populating Business Service, Receiver BIC and Generating Business Application Version in Outbound RTGS ISO messages.
- Performing Special character check for outbound Payment Return (pacs.004), FI to FI Payment Cancellation Request (camt.056), Resolution of Investigation (camt.029) messages and replacing disallowed special character on Enrich user action with Replacement Character.
- Capturing the RTGS ISO XML Schema (XSD) for each of the ISO message type against the Media Control System (MCS) using the new maintenance (Function ID: PSDGRXSP); Mapping RTGS ISO network to Media Control System (MCS); Validating the Outgoing RTGS ISO messages generated and incoming RTGS ISO messages against the XSD captured at MCS level; Resolving RTGS ISO network based on the MCS to network mapping for Incoming RTGS ISO messages, and deriving network based on Network Service ID and Interbank Settlement currency value received in the incoming RTGS ISO messages when multiple networks are found.

Note:

For Fedwire ISO, the XSDs must be captured in the new maintenance. For RTGS ISO networks using network type code as 'EU-TGT', the XSDs can be captured in the new maintenance by enabling the new system parameter.



3.2.3 Features

Support for:

- Validating Role level / User level limit amounts for manually booked Outbound / Inbound FI to FI Customer credit Transfer (pacs.008), FI Credit Transfer (pacs.009) and Liquidity Credit Transfer (camt.050) transactions.
- Allowing the authorizer to reject (or) send to maker for modification of manually booked Outbound / Inbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions.
- Generating the messages immediately after Payment Chain building process and an option for user to preview the messages in the transaction Messages sub screen. This feature supported for Outbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions.
- Allowing user to modify the Future Valued Outbound / Inbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions in Warehouse Queue using 'Modify' user action.
- Processing Outbound / Pass-through FI-to-FI Customer Credit Transfer (pacs.008), Outbound Payment Return (pacs.004) transactions and Pass-through FI Credit Transfer COVER (pacs.009) with only Name (without Address Lines) in Parties - Debtor / Creditor / Initiating Party / Ultimate Debtor / Ultimate Creditor.
- Defaulting debit account IBAN as Debtor IBAN value in the Outbound FI to FI Customer Credit Transfer (pacs.008) transactions based on the Source / Network level preferences (Function ID: PMDSORNW).
- Defaulting the BIC code associated with the Debit Account and populating BIC code in the outgoing pacs.009 message when Debtor Account number is provided in the Outgoing pacs.009 message.
- Defaulting of customer LEI from Customer LEI Preferences Maintenance (Function ID: PMDEXLEI) for Outbound FI to FI Customer Credit Transfer (pacs.008) transactions.
- Defaulting Sender BIC, Creditor details on Enrich user action while booking inbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions manually.
- Showing only the accounts of the payment transaction customer in the Charge Accounts LOV in the Outbound / Inbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transaction input screens.
- Moving the Outbound FI to FI Customer Credit Transfer (pacs.008) transactions booked through Incoming SWIFT MT 101 and SWIFT CBPRPlus pain.001 messages to NON STP Queue by allowing user to define Generic Wires ISO transaction related rules in NON STP rules for Channel Type 'MT101'.
- Defining Non STP rules based on the Account Identification field and various account status values and moving the transaction to Non STP Queue based on the defined rules. Account status values are referred by calling the Service exposed by FCUBS.
- Inputting values in 'Purpose Proprietary' field from an LOV field, validating the 'Purpose Proprietary' field valued based on system parameter value for manually booked transactions, Defining Non STP rules based on rule elements introduced for Purpose Code / Proprietary field values and Defining rule-based pricing based on the Purpose Code or Purpose proprietary field value.



- Mapping the data received in existing Sender's charges and Receiver's charges fields of Single Payout Service to Outbound FI to FI Customer Credit Transfer (pacs.008) transactions.
- Mapping the newly added Structured Remittance, Regulatory Reporting, Related Remittance, Settlement Time Requirement and Structured Address fields in Single Payout Service to Outbound FI to FI Customer Credit Transfer (pacs.008) and to Outbound FI Credit Transfer (pacs.009) transactions.
- Deriving the ISO Clearing code from the 2-character SWIFT network code value while booking Outbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions via Single Payout service.
- Booking Standing Instruction Templates and defining Standing Instructions for FI-to-FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions.
- Deriving credit account from the creditor BIC received in Inbound FI-to-FI Customer Credit Transfer (pacs.008) / FI Credit Transfer (pacs.009) messages using BIC Code Customer (Function ID: ISDBICPB), External Customer Account (Function ID: STDCRACC) and BIC Code Account Details (Function ID: PSDBICAC) maintenances.
- Deriving transaction type as Incoming for Incoming FI Credit Transfer (pacs.009) messages without having Creditor Agent based on Creditor BIC being a Vostro correspondent.
- Moving incoming FI to FI Customer Credit Transfer (pacs.008), FI Credit Transfer (pacs.009) transactions to Network Cutoff queue if transaction is initiated after network cutoff time and for moving incoming transaction to Non STP queue on the processing date.
- Doing messaging only on successful completion of accounting entries posting processing and after network cutoff validations and updating Transaction Status as 'Processed'. Transaction Status is set as 'Exception' till the accounting is pending in Accounting Queue.
- Making Assignment Identification field in Outbound FI to FI Cancellation Request (camt.056) Input screen as an editable field, defaulting Assignment Identification field with the value as NONREF on clicking Enrich user action and allowing user to modify the defaulted value.
- Populating the transaction reference generated or the external system reference received in the Instruction Identification field of Single Payout Request to the newly introduced 'Source Reference Number' field in Outbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions and populating either the Transaction Reference (or) Source Reference as Instruction Identification in generated messages; Populating the Source reference in Outbound Debit Confirmation (camt.054) message for outbound transactions; Populating the incoming message Instruction Identification as the Source Reference Number for pass-through outbound / for outbound booked via uploaded Customer to Bank pain.001 and SWIFT CBPRPlus pain.001 and Populating Source reference Number in the gpi / Universal confirmation messages generated for passthrough transactions; Populating Source reference Number in the Sanction handoff and accounting handoff request.
- Putting the generated Outbound messages on Hold and releasing them or suppressing the generated Outbound messages based on the Message Hold Release (PMDHSRLP) rules defined.
- Earliest Release Date / Time feature for Outbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions.
- Deriving Debit / Credit Entry on values for Outbound transactions FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) based on Source Network Preference and handing off the accounting entries on the entry date – Activation Date or Value Date.



- Capturing separate account as charge account in the Inbound FI to FI Customer Credit Transfer (pacs.008), FI Credit Transfer (pacs.009) Transaction Input screens and defaulting charge account maintained in Customer Preference screen (PMDFLPRF) as transaction charge account. Handing off accounting entries for charge leg with force debit when charge account is different from the credit account. Note: Feature is exempted for pacs.008 transactions with Charge Bearer as 'DEBT'.
- Auto booking of Payment Return / Reject transactions for the Inbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions based on the Credit Account validations related error codes to Return or Reject mapping done (Function ID: PSDRJTRM).
- Suppressing the Outbound Payment Return (pacs.004) or Payment Reject (pacs.002) message generation, accounting entries posting and confirmation message generation for Inbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions.
- Suppressing the Outbound Payment Return (pacs.004) (or) the Outbound Payment StatusReport (pacs.002) message for the cover leg when the incoming SWFT CBPRPlus FI to FI Customer Credit Transfer (pacs.008) transaction with Settlement Method as 'COVE' is getting returned based on a system parameter value.
- Performing Cross validation / Network Validation rules for Outbound Payment Return (pacs.004) transactions Charges Information, Creditor Agent, Return Instructed Amount, Currency, Return Exchange Rate fields.
- Marking the Incoming Payment Status (pacs.002) transaction status as "Suppressed" if Incoming Payment Status (pacs.002) message received for outbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer ADVICE (pacs.009 ADV) transactions having Settlement Method as Cover without any processing.
- Validating duplicate check on the incoming SWIFT CBPRPlus Interbank Customer Credit Transfer Initiation (pain.001) messages based on Host Code, Sender, Message Identification (Under Group Header) fields and Moving to Business Override Queue for user action.
- Doing auto cover matching of incoming FI Credit Transfer Advice (pacs.009 ADVICE) against Nostro account statement entries populated in Statement Browser (Function ID: PMDSTBRW).
- Capturing the Settlement Instruction Label (SSI Label) and defaulting the settlement instructions based on SSI label value for Inbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions.
- Generating the un-generated and suppressed outbound messages in Outbound Message Browser (PMSOUTBR) manually.
- Modifying the incoming XML message that are in Inbound Message Browser with status as Repair and Submitting the repaired message for Reprocessing on authorization.
- Generating Notification on successful processing, on cancellation, on moving to Future Valued Queue of Outbound FI to FI Customer Credit Transfer (pacs.008), Outbound FI to FI Credit Transfer (pacs.009) transaction processing and populating the underlying message ISO message type value in the notifications. Generating Notification on receiving inbound Payment Return (pacs.004) and Payment Status Report (pacs.002) for Outbound FI to FI Customer Credit Transfer (pacs.008), Outbound FI to FI Credit Transfer (pacs.009) transactions.
- CNY CNH Currency conversion in all the Outbound / Inbound SWIFT CBPRPlus messages and in all the Outbound / Inbound SWIFT gpi / Universal confirmation messages.



- Validating process cut-off checks for transactions booked via Single Payout service against the Checker date & time value received in service request and for transactions via C2B pain.001 uploads based on Creation Date Time field value received in file upload.
- Reversing the Inbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions manually; Posting reversal accounting entries. Reverse action opens the Outbound Payment Return (pacs.004) with Return Type as 'Reverse'.
- Capturing Factory-shipped ISO 2-Char country codes and Listing factory-shipped ISO 2-Char country codes in the Country Code field of Structured Address maintenances -Customer Structured Address (STDCRCAD) / Account Structured Address(STDACCAD) and in the Country Code, Country of Residence fields of Generic Wires ISO Outbound / Inbound Transaction Input screens. Option to map the 3-Char country code defined in Common Core Country Code maintenance with the ISO 2-Char country code and defaulting ISO 2-Char country code in the Generic Wires ISO transaction screens by mapping 3-Char country code given in the customer / address maintenances.
- Displaying Sanctions / ECA Queue Cancellation Reason details on Inbound / Outbound cancelled pacs.008/pacs.009 transaction viewscreens.
- Charge Claim Processing For Outbound Claims, Income entry posting is done on realization of claim amount when the newly introduced system parameter 'REALIZED_INCOME_FOR_CLAIMS' value is set as 'Y' instead of posting entry at the time of claim message generation.
- Reversing the Outbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transactions via Service and Posting reversal accounting entries.
- Deriving Transaction Code based on Transaction Code rules for Return and Reversal transactions.
- Defining Standard or Rule-based Pricing for Outbound Payment Return (pacs.004) transactions, posting charge accounting entries and populating the charges information details in the Outbound message.
- Generating Debit Confirmation and Credit confirmation in SWIFT MT format for FI-to-FI Customer Credit transfer (pacs.008), FI Credit transfer (pacs.009), Payment Return (pacs.004) transactions. based on the format preference selected in the Bilateral Agreement (PMDCMAGT) maintenance. Generating Debit Confirmation and Credit confirmation in Mail format for Outbound / Inbound FI to FI Customer Credit Transfer (pacs.008), FI Credit Transfer (pacs.009) and Payment Return (pacs.004) transactions.
- Populating Remittance Information, Instruction for Next Agent details of FI-to-FI Customer Transfer (pacs.008) in the Debit Credit Confirmation advice generated in ISO (camt.054) format.
- Populating Confirmed Amount considering charges excluding Counterparty charges (Credit Amount minus Charge Amount) in Universal Confirmation (trck.001) Credit Confirmation.
- Skipping book dated validations for both outbound /inbound Generic Wires transactions based on the parameter for Booking dated processing set in Source Network Preferences. The following processing steps are completed before moving the transactions to Future Valued Queue:
 - Mandatory field checks
 - Upfront reject validations
 - Routing rules

If the Activation Date is in future, the transaction status is marked as 'Future Valued' and the transaction is moved to Future Valued Queue without further processing. Non STP validations are applicable on release from Warehouse queue.



 Showing the Network Status and Clearing System Reference values in the Outbound FI to FI Customer Credit Transfer (pacs.008) and FI Credit Transfer (pacs.009) transaction view screens. Generating Network status Notification 'NETWORK_STATUS' after processing Inbound Payment Status Report (pacs.002) and when the Notification preference is enabled.

3.3 Cross Border MT / RTGS MT Changes

- SWIFT MT Features
- RTGS MT Features
- Features

3.3.1 SWIFT MT - Features

Support for:

- Performing duplicate check on the incoming Request for Transfer (MT 101) message based on Host Code, Sender, Reference Number (Field 20), Message Index (28D) and Message Total (28D) fields and Moving to Business Override Queue for user action.
- Performing duplicate check on the incoming Financial Institution Transfer for Own Accounts (MT 200) message based on Sender, Message Type and Field 20 Reference fields and Moving to Business Override Queue for user action.
- Applying cover suppression preferences after resolving the Correspondent from Currency Correspondent Rule to resolve the Receiver or Receiver of Cover.
- Populating the Field 54 of MT 103 with correspondent details when the Outbound MT 103
 message is sent in cover method, cover message via RTGS and having only one
 correspondent between sender and receiver.
- Deriving Currency correspondent based on Currency correspondent rule lookup as 1st step when incoming MT messages resulting in Outbound pass-through MT transactions followed by currency correspondent check, global correspondent check and Primary Currency correspondent check.

3.3.2 RTGS MT – Features

Support for:

- Validating Future Dated transactions whether the instruction date is within the 'Maximum future Value Days Allowed' value captured in a newly introduced RTGS Payments Network Additional Preferences (Function ID: PMDADPRF).
- Modifying the network cutoff time to an earlier time in the network cut off time extension (PMDNCTEM) maintenance and moving the Outbound transactions after cutoff time to Network Cutoff Queue.
- Processing incoming RTGS Multiple Customer Credit Transfer (MT 102) messages by booking individual RTGS Single Customer Credit Transfer (MT 103) transactions.
- Defining Cross Border to RTGS rules based on Transfer Amount, Service level, Creditor Agent BIC, and Cutoff time processing.

3.3.3 Features

Support for:



- Defaulting debit account IBAN in Ordering Customer (Field 50) Party Identifier field in the Outbound Cross-border / RTGS Customer Transfer (MT 103) transaction based on Source / Network level preference (PMDSORNW).
- Defaulting Name, Address of Debit account from External Customer Input (STDCIFCR) as Field 50 Ordering Customer in Outbound Customer Credit Transfer (MT 103) transaction booked due to incoming MT101 based on system parameter value 'PAINFILE CUST DEFAULT'.
- Skipping Field 72 code word validation for Customer Credit Transfer (MT 103) transactions based on system parameters.
- Defining the list of applicable Transaction Type codes (or) Purpose codes for each of the Cross border / RTGS network codes and mapping for Transaction Type codes or Purpose Codes between Cross- border and RTGS networks; Validating the Transaction Type code (Field 26T) value inputted in Customer Credit Transfer (MT 103) transactions based on the list of applicable codes defined; Defining Non STP rules based on Transaction Type code field values; Mapping of Transaction Type code if the Inbound message network is different from the pass- through transaction network.
- Populating the Outbound Customer Credit Transfer (MT 103) Regulatory Reporting (Field 77B) field based on the value received in the Transaction Type Code (Field 26T); Populating Transaction Type code (Field 26T) based on the value given in Field 77B Regulatory reporting for Outbound pass-through and Inbound transactions booked due to SWIFT messages upload; Defining Non STP rules based on rule elements related to Field 77B Regulatory Reporting value for Outbound / Inbound transactions; Populating the Transaction Type Code (Field 26T) based on value received in the Regulatory Reporting (Field 77B) for Outbound transactions booked via incoming MT 101.
- Capturing the Account Status Enquiry service details in the External Credit Approval Interface (PMDINECA) maintenance; Defining Non STP Rules based on rule elements related to various account statuses like No Credit, Frozen, Dormant for the Credit Account and IBAN validations and moving the Incoming Cross-border / RTGS transactions to Non STP Queue.
- Capturing Return preferences at Network Currency Preference (PMDNCPRF) level for Cross border / RTGS network codes.
- Marking the Inbound / Outbound pass-through Customer Credit Transfer (MT 103) transactions for Return from Non STP Queue using cancel action resulting in transaction status updated as 'Return Initiated'; Initiating the outbound return transaction using the 'Return' user action introduced in the Outbound and Inbound Cross-border / RTGS Transaction View Summary screens; Capturing the original transaction reference in the Outbound Cross-border / RTGS transaction view screen and return transaction reference in the Inbound / Outbound pass-through Cross border / RTGS transaction view screen.
- Capturing the MT195 message generation triggering event preference (PMDQFFMT) at the Non STP Rule level for Inbound SWIFT messages received via SWIFT and Capturing the MT195 message contents through a back-end table store; Logging the Inbound messages that are moved to Non STP Queue due to Non STP Rules marked for MT195 message generation; Generating the MT195 messages through a payment auto job (Preferably to be configured at the End of Day time).
- Capturing separate account as charge account in the Inbound Cross-border / RTGS transaction input (PXDITONL) screen; Defaulting charge account maintained in Customer Preference screen (PMDFLPRF) as transaction charge account.; Handing off accounting entries for charge leg with force debit when different charge account is different from the credit account.

Note:

Feature not applicable for Customer Credit Transfer (MT 103) transactions with charge option as 'OUR'.

- Booking outbound charge claim settlement transaction (MT202 / pacs.009) with new UETR always.
- Doing manual cover matching of payment message with cover messages without considering the value date as one of the matching criteria.
- Marking messages in Inbound Unmatched Queue as Suppressed using a new user action 'Suppress' introduced in Unmatched Queue.
- Defining rule-based pricing for Outbound / Inbound Customer Credit Transfer (MT 103) transactions based on the Transaction Type Code (Field 26T) field value.
- Auto cancelling the Outbound Cross-border / RTGS Customer Credit Transfer (MT 103) transactions booked through uploads when the Charge Amount calculated is more than the Transfer Amount and Charge Whom option is BEN.
- Deducting charges from credit account for incoming Cross-border / RTGS Customer Credit Transfer (MT 103) transactions with Charge Whom as OUR based-on Pricing Component level 'Borne By' flag value is 'Counterparty'.
- Skipping the underlying transaction gpi check for Incoming Charge Claim (MT191) requests based on System Parameter.
- Doing ECA check on the Outbound Claim settlement MT202 transaction booked for Incoming claim messages.
- Populating the Correspondents in the Outbound Claim settlement MT202 transaction booked for incoming claim message when the original outbound MT103 was sent in cover settlement method.
- Defining Currency Correspondent rules based on Field 58 Beneficiary Institution BIC for Outbound transactions.
- Defining Cover Suppression rules based on Transfer Type and pass-through transaction flag for Outbound transactions.
- Defining Verification rules based on debit account currency and pass-through flag for Outbound transactions.
- Defining Pricing rules based on gpi Payment flag for Outbound / Inbound transactions.
- Skipping defining network rules based on whether RMA is available for MT/MX message types for Creditor Agent BIC or Account with Institution BIC. Rule elements applicable for channel types 'Single Payout', 'MT101', 'SWIFT' and 'SWIFT MX'.
- Showing the Fields 70 Remittance Information and Field 72 'Sender to Receiver Information in the 'Transaction Preview' screen in the Outbound Cross-border / RTGS Transaction Input (PXDOTONL) screen.
- Showing the accounts of the payment transaction customer in the Charge Accounts LOV in the Outbound / Inbound Transaction Input screens.
- Showing the original transaction remittance information and amendment request remittance information details in the Transaction Amendment Request Queue (PQSAMNAQ).
- Updating the Message Status as 'Move to Sanctions Check Queue' when the incoming MT 202/205/202COV/205COV messages are meant for cover matching and when those



messages are moving to sanctions check queue; Launching the Sanctions Check Queue for the 'View Queue (STP Layer)' user action when the Message Status value of the selected message is 'Move to Sanctions Check Queue'; Updating the Message Status as 'STP Cancelled' when the incoming payment messages getting cancelled from STP Layer exception queues like Business Override, Process Exception, Inbound Messages STP Queue; Launching the STP Layer Transaction View screen for the 'View Transaction' user action when the Message Status value of the selected message is 'STP Cancelled'.

3.4 India UPI Changes

- APIs for Customer Registration
- API to Reset/Update UPI MPIN
- API to Send & Receive Heartbeat
- Bank APIs
- PSP APIs
- Bank UPI Switch APIs
- PSP UPI Switch APIs
- UPI-Unified Dispute and Issue Resolution (UDIR)
- UPI Alerts Changes
- UPI List Services

3.4.1 APIs for Customer Registration

Support for:

- List Account Service Provides the list of all available accounts from CBS (core banking) linked with provided Mobile Number to register on UPI.
- OTP Service -Verify selected account number, validate debit card details then generate OTP & send via SMS to customer Mobile Bank API.
- Register Mobile Service-Verify selected account number, validate debit card details with PIN, validate OTP then generate/set UPI MPIN Bank API.

3.4.2 API to Reset/Update UPI MPIN

Support for:

- Set Credentials API to Reset/Update UPI MPIN by providing existing UPI PIN, Mobile number and New MPIN to be set and applied Bank API.

3.4.3 API to Send & Receive Heartbeat

Support for:

- API to send Heartbeat scheduled heartbeat requests to NPCI to validate the target server
- API to receive Heartbeat Receive incoming scheduled heartbeat requests from NPCI and provide the current server status.



3.4.4 Bank APIs

Support for:

- Validate Address API This API is initiated by PSPs and sent to the bank through NPCI whe1n PSP customer want to add a beneficiary within PSP application (for sending & collecting money).
- Balance Enquiry API This API allows user to enquire account balance of a user.
- Request Pay API This API is used by NPCI to post Debit or Credit transactions to the accounts.
- Check Transaction API This API is used to request transaction status.

3.4.5 PSP APIs

- List Account Service API
- OTP Service API
- Register Mobile Service API
- Balance Enquiry Service API
- Validate Address Service API
- Set Credentials Service API
- Heartbeat Service API
- Transaction Confirmation Service API

3.4.6 Bank UPI Switch APIs

Support is provided for the following APIs:

- ReqValCust (Validate Customer)
- ReqMandate (Mandate Maintenance)
- ReqMandateConfirmation (Mandate Confirmation)

3.4.7 PSP UPI Switch APIs

Support is provided for the following APIs:

- ReqPay (Request Pay)
- ReqChkTxn (Check Transaction)
- ReqAuthDetails (AuthDetails)
- ReqValCust (Validate Customer)
- ReqAuthValCust (Auth Validate Customer)

3.4.8 UPI-Unified Dispute and Issue Resolution (UDIR)

Enhancing complaint handling and resolution process for UPI transactions. NPCI has
introduced UDIR which can act as layer for member Banks and PSPs to connect their
system and handle disputes / queries through API calls.



- The UDIR release is to support the following API's.
 - ReqChkTxn (BACKOFFICE) To check the status of a transaction / dispute from PSP UPI switch to NPCI UPI switch.
 - RespChkTxn (BACKOFFICE) ReqChkTxn response from NPCI UPI switch to PSP UPI switch.
 - ReqComplaint To raise a complaint for a financial transaction from Payer PSP UPI switch to NPCI UPI switch.
 - RespComplaint Complaint response from NPCI UPI switch to Payer PSP UPI switch.
 - ReqChkTxn (AUTOUPDATE) Initiated from NPCI to Bank, based on the details received in the API, bank is to post DRC or TCC transaction.
 - RespChkTxn (AUTOUPDATE) ReqChkTxn (AUTOUPDATE) response from Bank UPI switch to NPCI UPI switch.
 - ReqChkTxn (BACKOFFICE) To check the status of a transaction / dispute from Bank UPI switch to NPCI UPI switch.
 - RespChkTxn (BACKOFFICE) ReqChkTxn response from NPCI UPI switch to Bank UPI switch.
 - ReqComplaint Initiated from NPCI to Bank, based on the details received in the API, bank is to post DRC or TCC transaction.
 - RespComplaint –ReqComplaint response from Bank UPI switch to NPCI UPI switch.
 - RespComplaint (Status Update) From NPCI to Payee PSP UPI switch and the other bank involved in the original financial transaction and to which ReqComplaint was not sent by NPCI.
 - ReqTxnConfirmation From NPCI UPI switch to Bank UPI switch to notify the transaction status update of UDIR AUTOUPDATE Processing.
 - RespTxnConfirmation Response of ReqTxnConfirmation from Bank UPI switch to NPCI UPI switch.

3.4.9 UPI Alerts Changes

Based on the configuration, OBPM system generates SMS / Email alert and store in the OBPM database from where the alert triggering system can read the alert and dispatch accordingly. The alert processing is async process and hence won't increase the transaction processing time.

3.4.10 UPI List Services

Support is provided for the following APIs:

- List PSP Service API
- List Account Provider Service API
- List Keys Service API
- Manage VAE Service API
- List VAE Service API



3.5 Book Transfer Changes

• Features

3.5.1 Features

Support for:

- GL to GL transfer is allowed using Book Transfer payment type. Existing restriction on such transactions is removed.
- Support for Debit / Credit Advice in SWIFT CBPRPlus camt.054 / MT900 / MT910 formats, provided in Customer advice preferences maintenance (Function ID: PMDCSADV), media is selected as 'SWIFT', then 'Format Preference' value in Bilateral Agreement for Cash Messages (Function ID: PMDCMAGT) is referred for SWIFT MT/SWIFT MX options. New fields Debtor Additional Information & Creditor Additional Information fields are added in Book Transfer Input & View screens which is mapped to camt.054 customer advice tag Notification / Entry / EntryDetails / TransactionDetails / AdditionalTransactionInformation for debit/credit advice generated. For MT 900 /MT 910 generation, field 72 will be populated with Debtor /Creditor Additional Information field value trimming the value considering 35 length each to 6 lines.
- For Book transfer reversal, the credit advice / debit advice can be generated in SWIFT MT (MT 900 / MT 910) or SWIFT CBPRPlus (camt.054) format.
- Messaging after accounting changes Book transfer transaction status update as Processed only on successful completion of accounting. If accounting is pending in accounting queue, transaction status remains as Exception.
- Accounting Branch input is allowed for GLs in Book Transfer. Changes are done in Single Payout service to received account branch field (optional).
- Support for modifying Activation / Instruction dates for future dated Book Transfer transaction in Warehouse Queue using 'Change Value Date' user action.
- Support for reversal entries for Book Transfer with negative amount based on system parameter configuration.
 Param Name - REVERSE_ACC_WITH_NEGATIVE_AMT
- Changes are done in Process Cut-off check to consider checker date& time received in the Single Payout request for cut-off validation done on same date. If the process cut-off validation is done on a subsequent date, system date & time is used. For pain.001 file uploads, CreationDateTime tag for the pain.001 file is used for process cutoff check based on Source code maintenance (Function ID: PMDSORCE) configuration.

3.6 Clearing & Instruments Changes

• Features

3.6.1 Features

Support for:

 Inbound clearing file re-processing of failed clearing records - A new summary screen -PGSCGTXN is provided for viewing the status of transaction records of Inbound Clearing files uploaded and this screen allows retry of single/ multiple records with Process status as 'Error'.



- For Outbound/inbound clearing & related returns, credit/debit advice generation is made available in SWIFT MT (MT900/MT910) (or) SWIFT CBPRPlus format (camt.054) formats. If media is selected as 'SWIFT' in Customer advice preferences maintenance (Function ID: PMDCSADV), then the 'Format Preference' can be set as SWIFT MT/SWFIT MX Bilateral Agreement for Cash Messages (Function ID: PMDCMAGT).
- Demand Draft Payable Bank Changes Demand Draft issue support is provided for external Bank codes & branches. Network Preferences for Instruments (Function ID: PIDINPRF) is enhanced to capture Payable GL branch as Issue Branch or Designated Branch. Validation is added in Instrument pay and in Inward Clearing not to allow instruments where payable bank & branch are external.
- Support is provided to settle inward / outward clearing entries to Nostro account in place of Clearing GL; Charge application for inward clearing return is made to check the flag for return charge applicability at reject code maintenance PMDRJMNT; Instrument code is added in Source level duplicate check parameters.
- pain.001 upload is supported for generation of DD/Manager's cheque and Foreign Currency DD instruments. Instruments are created and processed as individual records.
- Support is provided for reissuing the instrument for instrument of types of DD, BC and FCY
 DD with same instrument number by reversing the original transaction and reissuing the
 instrument with same number. A new option for Reverse is given in Instrument Payment
 screen so that the Instrument issue entries can be reversed. Re-issue flag is provided in
 Instrument issue screen itself.

3.7 Generic ACH Changes

Features

3.7.1 Features

ACH Credit - pacs.002 Processing Changes

Changes are done to propagate the Network status of dispatched file and the clearing reference received in pacs.002 files to ACH transaction level. Notification Event 'NETWORK_STATUS' is introduced in PMDNOTIF Screen. If notification is configured, system generates 'Network Status Notification' for the original transaction on Network Status update with clearing system reference and Network status tags.

ACH Credit - pacs.002 Full File Auto Reject

A new Network Reject Handling preference is introduced in preferences screen for both generic ACH CT and ACH DD (Function IDs: PYDONPRF / PZDONPRF) which can be Auto or Manual (existing). In ACH Reason Code Screen PMDRSNCD too Network reject handling preference is provided. These preferences are applicable for pacs.002 RJCT (network reject) processing for full file reject of ACH CT/ACH DD. 'Reject Handling' preference look-up is at two levels. It is done from Network preferences first. If it is maintained as 'Auto', then Reason code level preference is checked. Auto reject processing is done only if at Reason code level the preference is 'Auto'.

ACH Credit - Messaging After Accounting

- ACH CT messaging is done only on successful completion of accounting and then network cutoff.
- If accounting is pending in accounting queue, transaction status will be Exception. Network cutoff check is done after accounting.



 Transaction status is updated as 'Processed' only on accounting & Network cutoff check completion.

ACH Additional Features

- Support for Relationship Pricing extended for ACH Debit incoming transactions.
- ACH Credit/Debit Return of Inbound Transactions On Return processing from exception queues If Return GL is maintained in Credit/Debit Preferences, then the accounting for the Inbound transaction will be posted to Return GL and will get reversed from Return GL as part of Return transaction accounting.
- When External System Requests are sent through JMS queue and Network priority is being considered, the network priority is derived from Network Preferences (PYDONPRF) / (PYDINPRF).

3.8 EU SEPA Changes

• Features

3.8.1 Features

While doing ECA processing for inbound debits or EAC for inbound credits, if DDA system returns multiple error codes, system checks for the presence of the error code linkage in Reject Code Maintenance PMDRJMNT screen for individual error codes and if any error code linkage is present and if auto cancel is enabled for reject status, auto return is processed.

- SEPA Debit Features
- SEPA Instant Features

3.8.1.1 SEPA Debit - Features

- Outbound SDD date derivation is modified to consider Latest dispatch days maintained in Collection Network Preferences. Changes are done in PCDNWDDP Collections Network Preference screen for Earliest Collection Days / Latest collection days.
- The following restrictions screens are modified to support Allowed/disallowed feature:
 - PMDCARES Direct Debit Credit Account Restrictions
 - PMDSHRES-Direct Debit Creditor Scheme Restrictions
 - PMDMNRES- Direct Debit Mandate Restrictions

Restrictions are applicable for SDD, ACH DD and US ACH DD transactions.

3.8.1.2 SEPA Instant - Features

- Relationship Pricing support is extended for Inbound SEPA Instant.
- Routing matrix support is extended for SEPA Instant for UI, Services and Bulk file upload.
- pain.002.001.10 generation is supported for records uploaded by pain.001.001.09.

3.9 US Payments Changes

- US ACH Prefunded / Credit to GL Transactions Support
- US ACH Support for Default Company ID



- US ACH Features
- US Fedwire Additional Features

3.9.1 US ACH - Prefunded / Credit to GL Transactions Support

Prefunded GL/Credit to GL functionality is added for outbound US ACH Credit/Debit transactions. Debit from GL flag is added in the outbound US ACH Credit Input /View screens. Credit to GL flag is added in outbound US ACH Debit Input /View screens.

3.9.2 US ACH - Support for Default Company ID

Company ID if not received in the outbound US ACH credit / debit request, system will default the same based on the new maintenance (Function ID: PNDCMPID), if maintained.

3.9.3 US ACH - Features

Changes are done for mapping same ABA Number to multiple branch codes in the ABA Number mapping maintenance. Support is provided for populating the ABA Number based on the transaction branch in the outbound messages. Processing Branch for the incoming NACHA file is derived based on the default processing branch preference.

3.9.4 US Fedwire - Additional Features

- Support for mapping same Fedwire Routing Number to multiple branch codes in the ABA Number mapping maintenance and for populating the Fedwire Routing Number based on the transaction branch in the outbound messages.
- Support for processing incoming US Fedwire messages with Tag 8200 having XML message with up to 9000 characters and showing the received Tag 8200 value in the Inbound Fedwire Transaction Allowing user to input Tag 8200 value with XML message (up to 9000 characters) for manually booked transactions, allowing to input through Non STP Modify user action for uploaded transactions.

3.10 India Payments Changes

Features

3.10.1 Features

Support for:

- Support for IFSC Proliferation Message System is enhanced to process the incoming xml message "admi.004.001.01" received as (<BizSvc> 'PROF', <EvtCd> 'F95'). All successfully processed records of IFSC will be updated in dedicated table and populated in IFSC Directory.
- Changes are done to populate Local Bank Directory in common core to reflect the entries done in IFSC Directory maintenance from UI or through Proliferation Message upload.
- VAM Account Support Outbound India Payments
- India Payments Usability Changes
- India IMPS Additional Features
- India Payments Mobile Number Field Changes



- India NEFT Retry Option in Dispatch Browser
- India RTGS Retry Option in Dispatch Browser
- India RTGS Incoming Payments Auto Return

3.10.1.1 VAM Account Support - Outbound India Payments

VAM Account support for Outbound India Payments NEFT/RTGS/IMPS initiated from any channel.

3.10.1.2 India Payments - Usability Changes

- NEFT, RTGS, and IMPS Search/View screens are updated to enhance user experience.
- PMSOTNVW/PMSITNVW Common View screens a new field Unique Transaction Reference is added in query & detailed section.

3.10.1.3 India IMPS - Additional Features

- IMPS Fund transfers (P2P and P2A) within same bank are not sent to NPCI. Instead, the same transaction is treated as intra bank transfer. Such transactions are classified as 'On Us Transfer' and identified with the help of new flag 'On Us Transfer'.
- Support for Populating Payer Merchant Classification Code (MCC) in Request Pay XML and Check Transaction Status XML based on Payer Type – PERSON/ENTITY.

3.10.1.4 India Payments - Mobile Number Field Changes

Support for capturing mobile number along with country code. Hence Mobile Number field length is increased from 10 to 15 numeric value. Changes are done to maintenance screens, beneficiary registration screen, inbound/outbound transaction input screen, view screen and summary screen. This change is also applicable for SPS / IMPS Services.

3.10.1.5 India NEFT - Retry Option in Dispatch Browser

Retry option is provided in PTSOUTBR, PTSINBRW, PLSOUTBR & PLSINBRW to retry the error records and reprocess the same. In PLSOUTBR screen existing action button names are modified to reflect the operation being called.

3.10.1.6 India RTGS - Retry Option in Dispatch Browser

Retry option is provided in PTSOUTBR, PTSINBRW, PLSOUTBR & PLSINBRW to retry the error records and reprocess the same. In PLSOUTBR screen existing action button names are modified to reflect the operation being called.

3.10.1.7 India RTGS - Incoming Payments - Auto Return

Enabling auto return processing changes for inbound India RTGS when return is initiated from exception queues. Supported for specific set of system error codes and for configured EAC external error codes.

3.11 Bulk File Processing Changes

 Bulk File Processing - Consolidation of Debit for Cross border MT/Generic Wires ISO/ India Payments



- Bulk files Itemized Accounting SEPA Changes
- Bulk File Processing Book Transfer & Generic ACH Credit
- Bulk File Processing Itemized Accounting and Posting of Credit Liquidation
- Batch Processing Date Re-derivation for Future Valued Batches / Transactions
- Requested Execution Date Processing
- Batch Processing Query by Batch Booking Flag
- Batch Processing Bulk File Retry Support
- Bulk Files Duplicate Message ID Check Changes

3.11.1 Bulk File Processing - Consolidation of Debit for Cross border MT/ Generic Wires ISO/ India Payments

- It will be possible to process consolidation of debits like other non-urgent payments regrouping the records based on Instruction Date, Activation Date, Network / Instrument Code, Transfer Currency, Company ID & FX Reference.
 - Cross border /RTGS MT
 - Generic wires/ RTGS ISO
 - India RTGS
 - India NEFT
 - India IMPS
 - Instruments
- For this, the processing type for the below 5payment types is maintained as N in the static table PMTB_PAYMENT_PREFERENCE_TYPE
- Non urgent preferences maintained in (PMDONPRF) / (PMDONCST) are applicable and customer file preference (PMDFLPRF) is to be maintained. It is possible to configure either itemized or consolidated posting. Batch preference (PMDBTPRF) and Batch validation Preference (PMDBTVAL) are to be maintained. Accounting mode can be consolidated or itemized. Successful response from accounting system is required before proceeding for next stage of processing. Network cutoff check and messaging are done on successful completion of accounting. Transactions are marked as processed only on successful completion of accounting. Messaging is done on successful completion of accounting & network cutoff.
- A new system parameter MESSAGING_AFTER_ACCOUNTING is provided which is to be enabled with value as Y for the messaging after accounting changes to take effect in the following scenarios:
 - Bulk File non-urgent flow
 - ACH CT
 - Generic Wires

3.11.2 Bulk files Itemized Accounting - SEPA Changes

Itemized posting of SCT/SDD consolidated Batches - Credit leg accounting entry posting for SCT transactions and Debit leg accounting posting of SDD transactions are done at transaction level instead of bulk posting to Clearing GL provided MESSAGING_AFTER_ACCOUNTING system parameter value is Y.



3.11.3 Bulk File Processing – Book Transfer & Generic ACH Credit

- If MESSAGING_AFTER_ACCOUNTING system parameter is enabled, then Book Transfer & Generic ACH Credit: For both consolidated & itemized accounting, successful response from accounting system is required before proceeding for next stage of processing.
- If consolidated batch level accounting or Network cutoff check is pending, transaction records are marked with status as 'Pending Accounting'.

ACH Credit:

- Itemized posting --> Changes are done to do the credit leg of the itemized posting at transaction level instead of bulk posting to Clearing GL.
- On successful posting of the accounting entries, transaction level Network cutoff is done. Messaging is done once the accounting and network cutoff are successfully completed.
- For consolidated batches, network cutoff is done after successful completion of accounting. Messaging is done on completion of both accounting and network cutoff.

Book Transfer:

- Transaction level status update is done as Processed only on successful completion of accounting.

3.11.4 Bulk File Processing - Itemized Accounting and Posting of Credit Liquidation

- A new system parameter IS_ACCOUNTING_SEQ_REQUIRED is provided with Default value - Y. This is introduced for account locking issue faced when multiple debits are posted to same account in FCUBS.
- If 'IS_ACCOUNTING_SEQ_REQUIRED' is maintained as 'Y', then multiple transactions (having different transaction ref numbers) belonging to the same transaction debit account can be bulked in a single accounting request to FCUBS. This request XML is built using the multi transaction accounting XSD provided by FCUBS. In response, FCUBS sends response for individual transaction. On receiving response for the first set of entries, next set of entries are handed off for posting. Number accounting entries (after split n netting) in an accounting request can be configured using system parameter MAX_EXT_TXN_ACCOUNTING_LIMIT.
- If 'IS_ACCOUNTING_SEQ_REQUIRED' is maintained as 'N', then existing accounting format - having one transaction in an accounting request is handed off to the FCUBS system.

3.11.5 Batch Processing – Date Re-derivation for Future Valued Batches / Transactions

- If the Activation Date is in future and transaction is received in bulk file, consolidated batch is moved to Warehouse queue. When the consolidated Batch or transaction is released from the Warehouse queue, date re-derivation is not happening and the accounting and dispatch are processed with back date, if the Activation Date is marked as a holiday.
- Changes are applicable to Book Transfer, Generic Wires ISO, and Generic ACH Credit.

3.11.6 Requested Execution Date Processing

- Changes are done to consider the Requested Execution Date as either Instruction Date or Activation Date from channel /bulk file /UI (if available). Changes are done for:
 - Cross border /RTGS MT
 - Generic wires/RTGS MX
 - SEPA CT
 - SEPA Instant
- A new field 'Requested Execution Date Considered as' is added in Source Network Preferences (Function ID: PMDSORNW). Options are Instruction Date (Default) / Activation Date. If Instruction Date option is selected the date derivation will continue as existing.

3.11.7 Batch Processing - Query by Batch Booking Flag

Batch Booking flag value is added in Batch Booking Browser (PMDBATBR) and summary (PMSBATCH).

3.11.8 Batch Processing - Bulk File Retry Support

Support for:

- Reprocessing failed records using the newly added Retry option in bulk file processing related summary screens.

- Bulk File summary (PMSBATBR)
- Bulk File Batch Summary (PMSBATCH)
- Bulk File Consolidated Batch Summary (PMSCONSL)
- Bulk File Transaction Summary (PMSBTTXN)

3.11.9 Bulk Files - Duplicate Message ID Check Changes

It is possible to receive same message ID for pain.001/pain.008 files from different customers. Changes are done in bulk file upload not to reject the files with same message ID if received from different customers, the customer of the first batch in the file is considered for this.

3.12 Payments Core Changes

- Branch Code, Customer Name User ID, Account, Account Description Length Changes
- ECA / EAC Request Separate Indicators for Balance / Account Status
- ECA / EAC Request Sending via Separate Queues
- ECA Auto Retry Changes
- ECA / EAC Merger with Accounting
- ECA Reversal Processing
- Accounting Queue Additional Changes
- Messaging after Accounting Changes Additional Modules Supported



- Accounting Reversal Processing
- External System Calls Sanctions Time Out Handling (Asynchronous)
- External System Calls Relationship Pricing Technical Failure Handling
- Notifications Notification Generation Changes
- Narrative Population
- Queues ECA / ECA Bulk Retry Support
- Usability Changes
- File Handoff for Generic ACH / US ACH Files
- File Handoff (C2B pain.002)
- Notification Handoffs

3.12.1 Branch Code, Customer Name User ID, Account, Account Description - Length Changes

Maximum allowed column length for the following entities is changed:

Field Name	No. of Characters
Branch Code	6 Characters
User ID	320 Characters
Customer Number	20 Characters
Customer Name	140 Characters
Account Number	34 Characters
Account Description	140 Characters

3.12.2 ECA / EAC Request - Separate Indicators for Balance / Account Status

 Support is provided for processing the transactions overriding Account Status / Balance related exceptions received from ECA systems manually, by using the additional flags provided in External Credit Approval Queue --> Retry Action screen (Function ID: PQDACQAU). New field 'Reject Category' added in External Credit Approval System screen-->Status mapping sub screen to indicate the type of the reject reason to control the usage of 'Skip Account Status Checks' / 'Account Status Override' flags of Retry action screen.

Note:

- It is external ECA system responsibility to decide whether to skip the validations which failed in the previous attempt or to skip all validations. There is no indication of the previous list of errors from Payments side.
- For FCUBS requests force block only is applicable skipping both status and balance checks.

 A new system parameter 'APPROVE_EAC_REJECTS' is provided so that EAC records which are in Rejected status can be manually approved. Note: If Accounting system should have the capability to process the exceptions successfully, then only this parameter to be enabled.

3.12.3 ECA / EAC Request – Sending via Separate Queues

Support is provided for sending the ECA / EAC requests through separate queues to ECA system when the communication mode is JMS or Queue.

3.12.4 ECA Auto Retry Changes

- ECA Retry Preference (Function Id: PMDECAPR) is introduced to maintain the host code + network code + source code level auto ECA retry preference. External Credit Approval System Detailed (Function Id: PMDECAMT) is modified to introduce new sub screen to capture "ECA Auto Retry Preference. The ECA response status is "Reject", then based on the parameters set, system does auto retry.
- New auto job ECA Carry Forward (Function id: PMDECCFD) is introduced to carry forward the payment pending from ECA queue with status as Reject.

3.12.5 ECA / EAC Merger with Accounting

- A new system parameter EC_EA_MERGER_WITH_ACC is introduced so that it will be possible to do single step accounting if the value is maintained as Y merging ECA/EAC validations with accounting. Changes are applicable for the below payment types for outbound and inbound individual transactions: Book Transfer, Cross Border / RTGS MT, Cross Border MX / TARGET2 MX, India Payments (NEFT, RTGS, IMPS), SEPA CT.
- In Accounting queue new actions are added for:
 - 1. Resend Request (applicable for records with Current status Timed Out, Queue Exception & Handoff status W/E i.e., request posting failed in internal/external queue).
 - Reprocess Response (for records where Response is received by OBPM, however the record is remaining in 'Response Received' status andnot getting processed further, to derive status like approved/Rejected/Interim/Referral).
 - 3. Cancel
 - 4. Retry
 - 5. Authorize
 - 6. Accept Referral If Referral Type for ECA system is Internal and referral is accepted by user for a Referral pending record
 - 7. Reject Referral If Referral Type for ECA system is Internal and referral is rejected by user a Referral pending record
 - 8. View Queue Action
 - 9. View Transactions These actions are applicable if the new system parameter is enabled. In place of existing Resend action for rejected records in Accounting Queue, Retry action is to be used.



3.12.6 ECA Reversal Processing

- Changes are done to ensure ECA reversal completion as part of processing with separate Exceptions Queue for processing exceptions. Changes are applicable for Generic wires / ACH CT and Book Transfer in the following cases:
 - ECA reversal as part of ECA response on a later date online/ consolidate batch processing.
 - Cancel from Network Queue before accounting.
 - Queue Dashboard changes for including ECA reversal exception queue.
- System Parameter 'MESSAGING_AFTER_ACCOUNTING' is to be maintained as Y for new changes to take effect.

3.12.7 Accounting Queue - Additional Changes

- Additional Queue action and 'Carry Forward' is added in Accounting Queue PQSACCQU is applicable for accounting rejected records. Delete and Reject actions are newly added in Accounting Queue. Changes are applicable only for Generic Wires, ACH CT & Book Transfer modules & for transaction types outgoing & incoming.
- A new Auto job with Job Code PQDACCFW is introduced in PMDAJBPR (Auto Job Parameter Screen) which can be configured to automatically carry-forward all consol / transactions in accounting queue whose accounting entries are rejected.
- Accounting entries Retry on a later Date From accounting queue, if a rejected accounting entry is retried on a later date, changes are done to do ECA reversal and re-process the transaction from initial validations. Changes are applicable to outbound transactions of ACH CT, Book Transfer & Generic wires. In all other cases accounting retry on a later date will continue to re-post accounting entries irrespective of the date of retry action.
- Accounting queue -Response on a later Date Support for From accounting queue, if the success response is received on a later date , changes are done to do reversal of accounting and re-process the transaction from initial validations. Changes are applicable to outbound transactions of ACH CT, Book Transfer & Generic wires. In all other cases accounting will be considered as completed as existing.

3.12.8 Messaging after Accounting Changes - Additional Modules Supported

- Changes are done to send the messages once the accounting is successfully completed. Till the time accounting is completed transaction remains in Accounting Queue with Pending / Exception status. Transaction status is updated as Processed only on completion of accounting. Network cutoff is done after accounting completion if cutoff check is applicable for the payment type. Transaction status changes are applicable for inbound payments / R transactions as well.
- The following payment types/transaction types are covered:
 - India RTGS/NEFT Outbound/Inbound /Reject & Returns of Outbound/ Return of Inbound processing
 - Instruments Issue/ Payment / Payment Reversal processing o Clearing Outbound / Inbound /Returns /Reversal of Inbound Clearing processing
 - ACH DD Outbound /Inbound /Reject & Return of Outbound/Reversals processing



- SDD Outbound /Inbound /Reject & Return of Outbound/ Return of Inbound transactions/Reversals processing
- SCT Outbound /Inbound /Reject & Return of Outbound/ Return of Inbound transactions/Recall Acceptance processing

3.12.9 Accounting Reversal Processing

Changes are done to ensure accounting reversal completion as part of processing with separate Exception Queue for processing exceptions. Changes are applicable for Generic wires / ACH CT and Book Transfer in the following cases:

- Accounting reversal as part of accounting response on a later date online/ consolidate batch processing.
- Cancel from Network Queue after accounting.
- Batch Cancellation changes when Consolidated batch / Transaction completed accounting, not dispatch.
- Queue Dashboard changes for including accounting reversal exception queue.

System Parameter MESSAGING_AFTER_ACCOUNTING is to be maintained as Y for new changes to take effect.

3.12.10 External System Calls - Sanctions - Time Out Handling (Asynchronous)

Resend action is allowed from Sanctions Check queue for asynchronous calls too, subject to some configurations /conditions. If user initiates Resend action for a record which is in Pending status, resend will be allowed if System parameter SC_RESEND_ASYNC_MODE is maintained as 'Y', Communication method is 'Asynchronous' in Sanction Sanctions Check System maintenance (Function ID: PMDSNCKM) and Timeout Period maintained is over after sending the previous request.

3.12.11 External System Calls - Relationship Pricing - Technical Failure Handling

Relationship Pricing requests sent to FCUBS - technical failure handling is done for cross border MT/MX & Inbound SEPA payments SCT Instant, SCT & SDD. On getting technical failure response, based on the retry count maintained in system parameter RP_AUTO_RETRY_COUNT, auto retry of the RP pricing request is done.

3.12.12 Notifications - Notification Generation Changes

- New screens for transaction/batch Notification Preferences (Function Id: PMDNOTIF / PMDBTNOT) are introduced to capture network code level, notification preference for the payment. For generation of notification, "Notification Required" flag should be enabled for the source code in Source Maintenance Details (Function Id: PMDSORCE) screen.
- Notification generation can be configured for predefined set of payment statuses and queue statuses. The changes are applicable to Generic ACH Credit, Book Transfer & Generic Wires ISO for transaction level statuses / queue actions. In "System Parameters Detailed" screen, (function id: PMDSYSPM), new system parameter NEW_NOTIF_SERVICE_PAYMENT_TYPE, must be maintained with list of Payment Types separated by #, for which new notification service needs to be enabled. Notification



format is enhanced to include dispatched XML /inbound source XML messages for Generic Wires.

3.12.13 Narrative Population

Support for:

- Populating the counterparty Bank Name in India RTGS, NEFT and IMPS payments narratives.
- Narrative generation for Bulk file consolidated accounting, Instrument Issue, Instrument Payment, NACH CR outbound/inbound, NACH DR outbound/inbound.
- Narrative population for Nostro accounts.

3.12.14 Queues – ECA / ECA - Bulk Retry Support

Support for:

- Selecting bulk records when manual retry action is initiated from ECA / EAC queue to FCUBS.

3.12.15 Usability Changes

- View change log is added in the below listed screens India Payment RTGS/NEFT/Generic wires outbound /inbound transaction screens and Book Transfer Template screen.
- Support for querying transactions in Outbound Common Transaction View (PMSOTNVW) using Consolidated Batch Reference. Field Consolidated Reference is added in both query fields and detailed section.
- A transaction level re-assign screen PMDRATXN is provided. Re-assign is supported for Outbound/inbound transaction input screens of:
 - Cross border/ RTGS MT
 - Generic Wires ISO
 - Clearing / Instruments
 - Generic ACH Credit / Debit

3.12.16 File Handoff for Generic ACH / US ACH Files

For Cloud Deployments, support is provided for capturing REST endpoint related information of the consumer application in the Dispatch Connectivity Maintenance (PMDDISCN). Handing-off generated files to on-prem application through OBRH using REST endpoint captured.

3.12.17 File Handoff (C2B pain.002)

For Cloud Deployments, support is provided for capturing REST endpoint related information of the consumer application in the Batch Validations maintenance (PMDBTVAL). Handing-off generated pain.002 files to on-prem application through OBRH using REST endpoint captured.



3.12.18 Notification Handoffs

For Cloud Deployments, support is provided for capturing REST endpoint related information of the consumer application in the Notification Preference (PMDEXTNT). Handing off the generated messages through OBRH using REST Service profile captured.

3.13 Integration Changes

- OBA Integration
- OBRL Integration

3.13.1 OBA Integration

Support for:

- System class is added in Accounting System Maintenance, ECA system maintenance and ECA Interface System Maintenance.
- Integration is provided in ECA/EAC and accounting calls.

3.13.2 OBRL Integration

Support for:

- If inbound US ACH transactions are received for the credit of OBRL loan accounts, changes are done to do EAC check and validate loan account using OBRL API. Current support is for loan accounts available in STDCRCLN screen and the available loan accounts are listed in PNDITONL screen.
- Integration is done for calling OBRL notification API on processing the returns of outbound credits/debits sent through US NACHA network.

3.14 Services

- Generic Wires ISO Inbound Transaction Booking Service for pacs.009
- Payments Core Start & Stop Jobs
- Payments Core C2B Files Upload
- Technical Message ID Duplicate Validation
- REST API Request / Response Format

3.14.1 Generic Wires ISO - Inbound Transaction Booking Service for pacs.009

Additional Rest APIs are provided for:

- Booking of Inbound pacs.008 / pacs.009 transactions
- Booking of SWIFT CBPRPlus / RTGS ISO pacs.008 /pacs.009 Standing Instruction Template Transaction using REST Service
- Querying MT101 transactions
- Querying SEPA participants details from SEPA Directory



- Booking of Status movement Positive Pay
- User Reference based query is provided for Outward Remittance Query Service

3.14.2 Payments Core - Start & Stop Jobs

New REST service is introduced to control the auto job status, Once the status is changed to Hold, API service should be invoked to change the status back to Active. This is applicable for auto jobs, seed jobs and timer jobs.

3.14.3 Payments Core - C2B Files Upload

New REST service is introduced to initiate the file envelope upload. File is sent as a multipart / form-data in the request along with the file envelope details. This API uploads the file to the server in the configured path and then processes the file envelope.

3.14.4 Technical Message ID Duplicate Validation

When duplicate Message ID is received in channel requests, system picks up the response status and response for the Original Transaction Id and send the same as response. If duplicate message id is received more than 10 times, then an error response will be sent. The number of times duplicate message ID is to be received for generation of the error message is made configurable using system parameter MSGID_DUP_ORGNL_RESP_COUNT.

3.14.5 REST API Request / Response Format

- REST services Request and Response types are changed.
- New REST endpoint is added for each existing endpoint changing the request / response types.

Note:

It is recommended to use the new REST endpoints and to adhere to the Request / Response formats. The existing endpoints will get deprecated in the next release.



4 Non - Functional Enhancements

- Redwood Theme Adoption
- Technical Changes
- High Availability Changes

4.1 Redwood Theme Adoption

The Oracle Redwood theme has been implemented across all the screens in the Oracle Banking Payments. This implementation does not affect any functionality.

4.2 Technical Changes

This topic provides the information about the technical changes added in this release.

- Changes in the architecture moving from a monolith deployment of the application to a decomposed services deployment model. The decomposed services as detailed below cover the various OBPM Network processing capabilities & OBPM Foundation services (followed by each individual service name).

- OBPM-Foundation-Service
- OBPM-Interface-Service
- OBPM-Cross Border-Service
- OBPM-Generic-Service
- OBPM-China-Service
- OBPM-Europe-Service
- OBPM-Europe-Instant-Service
- OBPM-US-Service
- OBPM-US-Instant-Service
- OBPM-India-Service
- OBPM-India-Imps-Service
- OBPM-India-UPI-NONFIN-Service
- OBPM-India-UPI-FIN-Service
- OBPM-India-UPI-PSP-NONFIN-Service
- OBPM-India-UPI-PSP-FIN-Service

4.2.1 OBPM-Foundation-Service

• This service contains logic for generating transaction reference number for all the payment types irrespective of the micro-service in which they are present.



- It also contains logic for automatic and manual dispatch scheduler call for Generic ACH, SEPA and NACHA payment types, further it includes file upload logic to submit the file processing request through a File Envelop screen (Function Id: PMDFLEVP) and rest endpoint ("/fileEnvelop").
- This service also contains payment requests of Single payment service (SPS) for booking outbound Cross-border, RTGS, ACH, Book transfer and Fedwire transactions.
- Contains C2B transaction flows wherein we process the bulk transaction input file and all the jobs for "Urgent" and "Non-Urgent" flows are configured here and the call to respective payment types present in different micro-services happens through rest template.

4.2.2 OBPM-Interface-Service

- External interactions are handled through this service.
- It contains validation and approval for Sanctions Approval, External Credit Approval (ECA), External Account Check (EAC), Accounting, Forex Exchange rate check and Electronic Messaging System flows.
- The listeners for these flows will be present in this service and all micro-services will
 interact with interface-service for the above-mentioned flows.

4.2.3 OBPM-Cross Border-Service

It contains Cross Border Payments module of Oracle Banking Payments. It takes you through the various stages in processing of a Cross border SWIFT Payment transaction (involving both Swift MT and Swift MX transaction) and the associated maintenances.

4.2.4 OBPM-Generic-Service

ACH (Automated Clearing House) Credit transfer and Debit Transfer, Book or Internal Transfer, Instruments, Instrument Clearing and Positive Pay processing and its associated maintenance are part of this micro-service.

4.2.5 OBPM-China-Service

It contains China National Advanced Payment System (CNAPS) functionality of Oracle Banking Payments. All the various stages of processing (such as inbound, outbound and maintenance related flows and related function id's) a CNAPS payment transaction and the associated maintenance are part of this micro-service.

4.2.6 OBPM-Europe-Service

SEPA Credit Transfer (SEPA-CT), and SEPA Direct Debits (SEPA-DD) payment transaction and its associated maintenance are part of this micro-service.

4.2.7 OBPM-Europe-Instant-Service

It contains SEPA Instant Credit Transfer (SCT Inst) an instant payment instrument for the execution of credit transfers in Euro. Various process involved in this payment type and its associated maintenance are part of this micro-service.



4.2.8 OBPM-US-Service

- NACHA Payments (known as US ACH Payments), it includes both Credit Transfers and Direct.
- Debit collections and Fedwire Payments which processes each RTGS payment initiated by the Fedwire Member bank. This microservice includes all the various stages in processing a request and its associated maintenance of these 2 payment types.

4.2.9 OBPM-US-Instant-Service

US Real-Time Payments and its various stages in processing an Inbound/ Outbound US RTP credit transfer. It is a new real-time system for all U.S. financial institutions and the network is open 24/7.

4.2.10 OBPM-India-Service

Domestic Low Value Payments India NEFT (National Electronic Funds Transfer) and High Value RTGS (Real Time Gross Settlement) Payments and its associated maintenance are part of this micro-service.

4.2.11 OBPM-India-Imps-Service

India IMPS (Immediate Payment Service) Payments is an instant real time interbank electronic funds transfer service available 24x7x365. The various stages in processing Inbound/ Outbound IMPS Payments and its associated maintenance are part of this microservice.

4.2.12 OBPM-India-UPI-NONFIN-Service

This service includes Bank UPI switch non-financial APIs:

- ReqListAccount
- ReqOtp
- ReqRegMob
- ReqSetCre
- ReqValAdd
- ReqMandate
- ReqMandateConfirmation
- ReqValCust

4.2.13 OBPM-India-UPI-FIN-Service

This service includes Bank UPI switch financial APIs:

- ReqBalEnq
- ReqHbt
- ReqPay
- ReqChkTxn



ReqComplaint

4.2.14 OBPM-India-UPI-PSP-NONFIN-Service

This service includes PSP UPI switch non-financial APIs:

- ReqListAccount
- ReqOtp
- ReqRegMob
- ReqListPsp
- ReqListAccPvd
- ReqListKeys
- ReqManageVae
- ReqValCust
- ReqAuthValCust
- ReqValAdd
- ReqListVae
- ReqMandate
- ReqAuthMandate
- ReqMandateConfirmation

4.2.15 OBPM-India-UPI-PSP-FIN-Service

This service includes PSP UPI switch financial APIs:

- ReqBalEnq
- ReqHbt
- ReqPay
- ReqChkTxn
- ReqTxnConfirmation
- ReqAuthDetails
- ReqComplaint

4.3 High Availability Changes

- Dynamic Value Generation for server.id
- Master Jobs High Availability

4.3.1 Dynamic Value Generation for server.id

- Application instance will get a unique value allocated for server.id internally.
- On a graceful shut down of an application instance, server.id value allocated for this instance will return to pool.



- In case of a crashed instance, the server.id value will not go back to pool immediately. A
 monitoring job will check and recover this value back to pool. This will regulate the
 continuous growth of values for server.id.
- The values generated for server.id is in the range of 1 to 99.
- The value for server.id allocated from a pool is not sticky to a node. For example, in a cluster of 5 nodes, if node1 gets server.id values allocated as 1 and node2 gets server.id value allocated as 2; on a complete restart of all the nodes, the previous allocated number may shuffle across the nodes. Coincidentally each node may get back the same value upon restart, but it is not guaranteed.
- The allocation and de-allocation of the server.id values are tracked centrally in a database.
- Possibility of race-condition is anticipated when all the nodes can start together, and this situation is taken care to avoid allocation of duplicate value to multiple nodes.
- Refer to system configuration changes section.

4.3.2 Master Jobs High Availability

- This feature provides a self-resiliency to the master jobs in the application against the failure of a master node on which these master jobs are running.
- One of the active application instances will get designated as a master and starts the master jobs on its node.
- On a graceful shutdown of a master node, it de-registers itself as a master and allows one of the other active application instances to take over as a master and the new master node will start the master jobs.
- On a crash scenario, a health check job running on all the nodes will designate one of the application instances as a master. This new master will start the master jobs.
- In either of a scenario (graceful shutdown or crash), the master node switch-over will happen only during the next run of a health check job, so a little delay in switch-over can be expected Application instance will get a unique value allocated for server.id internally.



5 Deprecated Features

Below mentioned features will be deprecated in Oracle Banking Payments 14.9.0.0.0.

SOAP Web Services

5.1 SOAP Web Services

Upcoming software releases would no longer focus on enhancing SOAP Web services, and it's recommended to use corresponding REST APIs instead.



6 Components of the Software

- Documents Accompanying the Software
- Software Components

6.1 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 below link: https://docs.oracle.com/en/industries/financial-services/banking-payments/index.html

6.2 Software Components

Software Components of Oracle Banking Payments 14.8.0.0.0 that form part of this release are as follows:

- 1. Host
 - UI Components (JS, XML)
 - Stored Procedures (Packages, Functions, Procedures, Triggers, Views)
- 2. 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
- 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- dictionaryxls)



- The service documents describing the services
- 7. Installation utilities
- 8. Front end-based installation for host
- 9. Front end-based installation for Gateway
- 10. Script based installation for Gateway Application Server Components
- **11.** Installation documents for
 - Oracle Banking Installer documents
 - Gateway
- 12. Online Help Files



7 Annexure – A: Environment Details

Tech Stack

This topic lists the technical compatibility details of this release.

7.1 Tech Stack

This topic lists the technical compatibility details of this release.

Component	Deployment Option	Machine	Operating System	Software	Version Number
Oracle Banking Payments	UI-Host and Centralized	Application Server	Oracle Enterprise Linux Server 8.7 (x86 64 Bit)	Oracle WebLogic Server	14.1.2.0.0
				Java HotSpot(TM) JDK (with WebLogic Application Server)	17.0.12
		Database Server	Oracle Enterprise Linux Server 8.7 (x86 64 Bit)	Oracle RDBMS Enterprise Edition	19.26.0.0.0
Oracle Banking Payments Integration Gateway	Web services (incoming) HTTP Servlet (incoming) EJB (incoming) MDB (incoming) Notifications (outgoing)	Integration Server	Oracle Enterprise Linux Server 8.7 (x86 64 Bit)	Oracle WebLogic Server	14.1.2.0.0
Oracle Banking Payments REST	Web services	Integration Server	Oracle Enterprise Linux Server 8.7 (x86 64 Bit)	JDK Oracle WebLogic Server Oracle Toplink	17.0.12 14.1.2.0.0 14.1.2.0.0

Table 7-1 Tech Stack - Oracle Banking Payments

Note:

Oracle Applications are developed and tested on Oracle Linux, which is optimized for performance, stability, and security.

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 10 and Mac OS.

Note:

For detailed information on Browser Support, please refer to the Oracle Software Web Browser Support Policy at : https://www.oracle.com/middleware/ technologies/browser-policy.html.



8 Annexure – B: Third Party Software Details

For information on the third-party software, refer Oracle Banking Payments 14.8.0.0.0 License Guide in the Documentation Library.

