Oracle Banking APIs

Release Notes
Release 18.3.0.0.0

Part No. F12055-01

December 2018

ORACLE

Oracle Banking APIs Release Notes

December 2018

Oracle Financial Services Software Limited

Oracle Park

Off Western Express Highway

Goregaon (East)

Mumbai, Maharashtra 400 063

India

Worldwide Inquiries:

Phone: +91 22 6718 3000

Fax:+91 22 6718 3001
www.oracle.com/financialservices/

Copyright © 2018, Oracle and/or its affiliates. All rights reserved.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are “commercial computer software” pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate failsafe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

This software or hardware and documentation may provide access to or information on content, products and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Table of Contents

1. Preface 6

1.1 Audience 6

1.2 Documentation Accessibility 6

1.3 Access to Oracle Support 6

1.4 Related Documents 6

2. Theme of the Release 7

2.1 Introduction 7

3. Highlights 9

4. Specialized Corporate Servicing 18

4.1 Liquidity Management 18

4.2 Virtual Accounts Management (VAM) 20

4.3 Electronic Bill Presentment & Payment 21

5. Digitized Customer Engagement 23

5.1 Multi-modal Assisted banking (Via Voice and Video call) 23

6. Open Banking 24

6.1 Account Aggregation 24

6.2 Internal OAuth Server 25

6.3 API Builder 26

7. Enhanced Administrative Capabilities 27

7.1 User Segments 27

7.2 Enhancements to First Time Login Steps 27

8. New Retail Capabilities 28

8.1 Wealth Management Services 28

8.2 UPI Payments – India Region 29

8.3 Deposit Enhancements – India Region 29

9. Enriched Payment Services 30

9.1 Twitter Payments 30

9.2 Funds Transfer History 30

9.3 Limit Enhancements 30

9.4 Claim Money Enhancements 32

9.5 Domestic Transfer – Network Suggestion 32

9.6 Payee Account Type 33

9.7 Demand Draft Enhancements 33

10. Qualifications 34

11. Known Issues and Limitations 36

11.1 Limitations: 36

11.2 Oracle Banking APIs Known Issues 36

11.3 Oracle Banking APIs Limitations 36

12. OBAPI 18.3.0.1.0 Release (March 2019) 37

12.1 HIGHLIGHTS 37

12.1.1 Credit Facility Management 37

12.1.2 Corporate Lending Management 38

12.1.3 Open Banking Enhancements 40

12.2 Qualifications 41

12.3 Known Issues and Limitations 42

13. OBAPI 18.3.0.2.0 Release (May 2019) **43**

13.1 Open BANKING Enhancements 43

1. Preface

The release notes contain the details of the new components that are part of the release and include important known issues as of version 18.3.0.0.0.

Oracle recommends that you review the contents of the release notes before installing or working with the product.

This preface contains the following topics:

- Audience
- Documentation Accessibility
- Access to Oracle Support
- Related Documents

1.1 Audience

This release note is intended for all purchasers of Oracle Banking APIs.

1.2 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.

1.3 Access to Oracle Support

Oracle customers 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 Related Documents

For more information, see the following documentation:

- For installation and configuration information, see the Oracle Banking APIs Installation documents
- For a comprehensive overview of security for Oracle Banking, see the Oracle Banking APIs Security Guide
- For information related to the Oracle Banking APIs product licenses and third party libraries or licenses, see the Oracle Banking APIs Licensing Guide
- For information on the functionality and features of the Oracle Banking APIs product licenses, see the respective Oracle Banking APIs User Manual documents

2. Theme of the Release

2.1 Introduction

In an environment characterized by the constant introduction of new digital technologies and increasing consumer expectations, it is imperative for banks to come up with means by which to attract and retain customers. The main incentive behind customer loyalty to a bank is good customer service. However, good customer service must be combined with services that add value to the customer in order to enable banks to effectively improve customer retention.

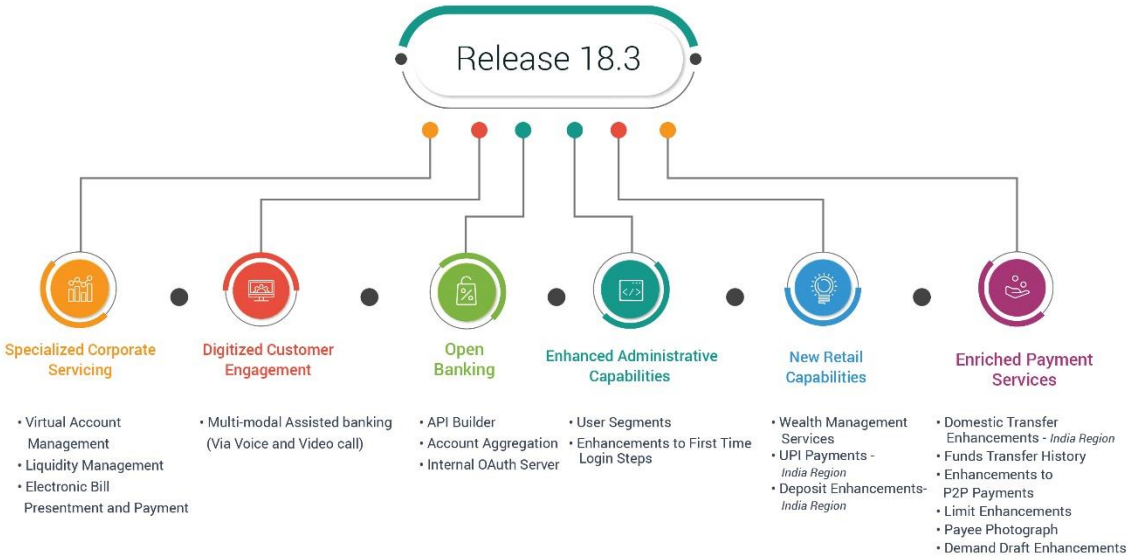
The aim of the OBAPI 18.3 release has been to strengthen its portfolio of online banking services. As part of this release, new APIs for features such as **Virtual Account Management (VAM)**, **Liquidity Management (LM)** and Electronic Bill Payment and Presentment (EBPP) have been introduced to enhance the banking services provided to corporate clients. Additionally, steps have been taken to digitize business customer engagement through **integration with Oracle Live Experience to enable voice and video call assistance**.

The services specific to retail banking customers have also been enriched through the introduction of **UPI Payments** on the mobile banking application, enhancements made to the deposit module to provide deposit products that meet the needs of NRI customers and the introduction of **Wealth Management** to cater to the needs of High Net worth Individuals.

APIs of payments module has been strengthened through the introduction of new APIs for **Funds Transfer History** inquiry, India specific enhancements made to the domestic transfer initiation to capture the account type of the payee and to enable the system to suggest networks based on transfer details, enhancements to Peer to Peer (P2P) Transfers through the addition of transfer mode - Twitter and transforming the process by which recipients of P2P Transfers claim funds have been made. Additional enhancements are made to the payments module APIs to facilitate users with the facility to specify third party addresses while defining delivery preferences for demand draft requests and the addition of ad-hoc demand drafts.

Open banking capabilities have also been enriched through the introduction of **Internal OAuth Servers, Account Aggregation and API Builder**. Enhancements to administrator maintenances such as Limits, Definition of First Time Login Steps along with the introduction of **User Segments** have been made, so as to provide a complete bouquet of digital banking APIs

As a part of OBAPI 18.3.0.1.0 release, Corporate Banking Module have further been enriched through the introduction of new set of APIs for **Credit Facility Management** and **Corporate Lending Management**. These APIs facilitates the corporate user to originate a request for New Facility/Sub Facility and New Loan Account and to inquire existing Credit Facilities, Collaterals and Loan Accounts. Open Banking module have also been enhanced by introducing the APIs for **UK Open Banking** as part of OBAPI 18.3.0.1.0 release, which provides interface for consuming account information and payment services through APIs. **Click Here** to know the detailed feature list supported as a part of these modules.


Release 18.3
Specialized Corporate Servicing
• Virtual Account Management
• Liquidity Management
• Electronic Bill Presentment and Payment
Digitized Customer Engagement
• Multi-modal Assisted banking (Via Voice and Video call)
Open Banking
• API Builder
• Account Aggregation
• Internal OAuth Server
Enhanced Administrative Capabilities
• User Segments
• Enhancements to First Time Login Steps
New Retail Capabilities
• Wealth Management Services
• UPI Payments - India Region
• Deposit Enhancements- India Region
Enriched Payment Services
• Domestic Transfer Enhancements - India Region
• Funds Transfer History
• Enhancements to P2P Payments
• Limit Enhancements
• Payee Photograph
• Demand Draft Enhancements

3. Highlights

This section describes in brief, the enhancements made as a part of Oracle Banking APIs 18.3 release.

Specialized Corporate Servicing

Corporates need better control and visibility over their cash flows and liquidity positions. Moreover, corporate customers of today are digitally savvy and expect the same experience from corporate digital banking applications that they are used to in retail banking.

As a part of OBAPI release, the corporate banking module APIs has been enhanced to cater to these corporate requirements through the introduction of new APIs for Virtual Account Management, Liquidity Management and Electronic Bill Payment & Presentment tools.

Virtual Account Management

In light of a corporate's need for better control and visibility over its cash inflow and outflow and for enhanced liquidity risk management, banks are investing in innovations such as Virtual Accounts Management.

Virtual accounts, also referred to as 'shadow accounts' are dummy accounts used to make and receive payments on behalf of physical accounts. OBAPI's Virtual Accounts Management (VAM) APIs are only integrated with Oracle Virtual Account Management Solution which can help corporates to create, manage and monitor virtual accounts through self-service channels.

Liquidity Management

In times of a highly regulated and globalized economy, liquidity management is the key to a company's survival.

APIs for Liquidity Management solution offered as a part of OBAPI is only integrated with Oracle Liquidity Management Solution and is comprehensive and flexible to meet the unique requirements of each corporate customer of the bank. APIs for Account Structure Maintenance feature enables customers to build new account structures and also view and edit existing account structures. Additionally, using these APIs for customers can also pause account structures for periods of time and initiate the ad-hoc execution of sweeps for specific structures.

Electronic Bill Presentment & Payment

APIs for Electronic Bill Presentment & Payment (EBPP) offers corporate customers the convenience of viewing and paying utility bills in a manner that is quick, hassle-free and secure. As part of 18.3 release, OBAPI developed new APIs for registering billers for presentment and for billers for online recharge of prepaid services. Also APIs to edit and delete the registered billers, for setting up auto pay instructions, for initiating one time or schedule payments, prepaid service plans recharge and pay bills towards billers that are not registered are built.

Digitized Customer Engagement

Banking customers of today want simplified banking, personalized interactions and to be able to access their banking applications through advanced technology. At the same time voice enabled assistants have become a part of people's everyday lives and are rapidly gaining in popularity.

In keeping with this theme, the APIs has been enhanced so as to offer its business customers constant assistance via voice and video chat.

Multi-modal Assisted banking (Via Voice and Video call)

Online banking users can now avail of the enhanced assistance tools available as a part of OBAPI release. In addition to the existing chatbot assistant, now provides business users with the facility to initiate voice or video calls from within the banking application. These APIs enables users to reach out to bank executives as and when they need banking assistance.

2.3 Open Banking

Open banking enables users to access the data of multiple financial institutions through the use of application programming interfaces (APIs). One of the key benefits of introducing open banking as a part of OBAPI is the ability to provision business users to access their accounts held across different banking institutions from a single place. The following enhancements, made as a part of OBAPI release are listed below.

1 – API Builder –

API Builder tool enables banks to create APIs by consuming the REST APIs exposed by a backend banking application such as a Core Banking System, Corporate Mid Office Application or any other third party application. Since the APIs exposed by a backend system may not have all the validations and checks required from the point of view of a digital channel platform, this tool also facilitates in applying additional channel level validations such as entitlements, transactional limits, approvals, second factor authentication, transaction blackout and working window etc.

2 – Account Aggregation –

The Account Aggregation feature introduced in this release provides APIs which enables business users to consolidate account information across savings, term deposits and loan accounts held with multiple banks and financial institutions into a single place so as to provide the user with a comprehensive view of all his assets and liabilities.

3 – Internal OAuth Server –

Open Banking allows third party developers i.e. TPPs to build applications and services around financial institutions through the use of Open APIs. It is a collaborative model in which banking data can be shared through APIs between parties to deliver enhanced capabilities to the marketplace.

The PSU (Payment Service User) i.e. customer of the ASPSP (Bank) will give their consent to the Third Party Application i.e. TPPs to initiate payments or access account information and transaction data.

As part of this release, OAuth 2.0 capability has been enabled that allows the PSUs to delegate access of specific scopes to TPPs and the TPPs getting the required token. Once the TPP gets the access token, it can securely access customers i.e. PSU's data and interact with their bank account through APIs exposed by their bank.

2.4 Enhanced Administrative Capabilities

Bank Administrative module have also been enhanced, as a part of OBAPI release to support following features.

1 User Segments

In order to cater to the specific banking needs of customers, banks need to employ a method of segmentation wherein customers sharing certain attributes are grouped together. Segmentation can be done on the basis of many factors such as geography, demography or behavior among others, with the main aim of grouping together customers that share the same needs, wants and expectations from a banking or financial institution. By creating such user segments, the bank can ensure that each segment, and in turn, each user is offered a banking experience that is tailored to them.

As part of this release, a new maintenance is offered to bank administrators that enable them to define and manage user segments. Currently, user segments can be created only for retail users. Some of the maintenances that can be allotted at the user segment level are limits, mailers, product mapping, dashboards, authentication, brands and payee restrictions.

2 Enhancements to First Time Login Steps

Enhancements have been made to this maintenance to enable configuration of the steps involved in which a business user logs in to the digital banking application for the first time. The bank administrator can choose the steps to be included in this process and also define the order in which the steps are to be made available to the users.

2.5 New Retail Capabilities

The focus of the 18.3 release pertaining to retail banking has been on enhancing and expanding the portfolio of digital banking services offered to retail customers. Wealth management services has been added in the retail banking module to cater to the needs of high net worth individuals and enhancements specific to Indian customers have been made by adding UPI payments and NRI specific deposit functionalities.

1 Wealth Management Services

High net worth individuals are increasingly seeking digital capabilities in wealth management that provide sophisticated and customized services in financial planning and advisory options. In times of rapidly changing technology, stricter regulations and evolving customer needs, banks and financial institutions must invest in wealth management services that enhance the overall

experience of their customers by harnessing emerging technologies and at the same time meeting regulatory and security needs.

The OBAPI Wealth Management Services module offers business users, the APIs to open investment accounts with the bank and to place orders to purchase, redeem or switch any listed funds. APIs to track the performance of mutual funds & for generating various reports related to wealth management activity like Portfolio report, Transaction report, Capital gains report etc. are also built.

UPI Payments - India Region

Developed by the National Payments Corporate of India (NPCI), Unified Payments Interface (UPI), is an immediate real time interbank payment system that works by instantly transferring funds between two bank accounts through a mobile platform. Some of the advantages of UPI are that it is currently the cheapest means by which to transfer money electronically, is secure, funds are transferred instantly and users do not need to enter extensive account information of the intended recipient.

Owing to the many benefits of this payment system, various banks and fintechs are hosting UPI on their mobile applications and have even created mobile applications specifically for UPI.

As part of this release, APIs to enable UPI Payments to retail users on the mobile banking channel are developed. In order to avail this facility, users need to create a Virtual Payment Address (VPA) and map the same to a current or savings account held with the bank. Once created, this VPA can be used to transfer funds from the mapped account to any VPA or account held within the country.

Deposit Enhancements - India Region

The Deposits module has been enhanced in this release to cater to India region specific requirements. APIs to open and manage NRE, NRO, FCNR and RFC term deposits for NRI customers have been developed to cater the needs of NRI customers.

2.6 Enriched Payment Services

The key areas of focus for banks while looking to adopt an efficient digital payment solution is that it should be simple, easy to use and fast. Additionally, changes in digital technology are impacting the way people are making payments. Keeping this in mind, the following enhancements have been made as a part of OBAPI release to cater to the evolving needs of digital banking users.

1 Domestic Transfer Enhancements - India Region

In this release, the feature of network suggestion has been introduced for domestic transfers initiated within the India region. This feature suggests the payment network (out of IMPS, NEFT and RTGS) to business users while initiating domestic fund transfers, on the basis of multiple factors such as daily cutoff, payee bank support, transaction limits and the priority of network configured by Bank Administrator in the Network Preference Maintenance.

The domestic transfer APIs have also been enhanced through the capture of the payee account type which is required for the processing of NEFT transfers. This information is now captured in payee maintenance API for adding domestic account payees in the India region and similarly in adhoc domestic fund transfers APIs.

2 Funds Transfer History

A new feature, by means of which retail users can list the statuses of transfers initiated from the direct banking channels, has been introduced in this release. Using these APIs users can search for specific transfers on the basis of transfer type, transfer reference number, etc. and can proceed to list details of the transfer including the current status (success, failure, in progress) as fetched from the host system.

3 Enhancements to P2P Payments

One of the main advantages of peer to peer payments to an end user is that it omits the need for the initiator of the transfer to know the account information of the recipient. Users can simply specify the identifier as provided by the recipient, while making the transfer. This identifier can be the recipient's email ID, mobile number, Facebook ID or as introduced in this release, the recipient's Twitter Handle. On initiating a transfer towards the recipient's Twitter ID, a direct message is sent to the recipient via Twitter and the user can claim funds by clicking on the link received as part of the direct message.

The process by which the recipient can claim funds has also been enhanced through the introduction of dynamic links. These links are created by the system specifically for a payment when it is initiated and sent to the recipient. This link will have the payment identifier linked so as to validate the security code entered by the recipient. APIs for claiming the Money using the dynamic link is also enhanced in the current release.

Limit Enhancements

Limits module has been greatly enhanced in this release impacting both administrator limit maintenances as well as business user limit packages.

Administrators can now maintain global limit packages (limit package assigned to the group of all internal touch points) and can map the same to specific user segments, parties and users. The module has also been enhanced to enable administrators to view the limits (current available as well as utilized limits) assigned to a specific retail user and can modify these limits as required. Additionally, it is also now possible for administrators to set separate limits for payments (Internal, Domestic and International Transfers) that are initiated towards registered payees and those that are ad-hoc.

APIs have been provided for retail users to view the final available transaction limits while initiating a transaction. These limits are derived based on transaction initiation limit (min-max amount per transaction), cumulative daily/monthly limits, payee cooling period and payee limits set if any by the user. All applicable limits set for a transaction for a specific channel or group of channels are considered for arriving at final available transaction limits.

With the introduction of global limits packages, business user can additionally get applicable global limits.

Payee Photograph

As of this release, the risk of sending money to the wrong recipient has been minimized through the introduction of payee photographs. Users can now attach photographs against payees so as to promote ease in identifying the intended payee at the time of transfer initiation.

These payee photographs can be edited or deleted using the payee maintenance.

Demand Draft Enhancements

The existing demand draft initiation feature has been enhanced so as to enable a business user to opt to have the draft delivered at a third-party address if the user does not want the draft delivered at any of his addresses registered with the bank or at any of the bank's branches. This feature enables the user to have the bank deliver the draft directly to the recipient by entering the recipient's address in the provided address fields or to have the draft delivered to any other third-party address as desired.

An additional feature built in this release is the provision to business users to initiate adhoc demand drafts. Users can avail this feature to initiate requests for drafts to be payable to recipients that are not registered as payees with the bank.

4. Specialized Corporate Servicing

The following enhancements have been made to Corporate Banking in the 18.3 OBAPI release:

4.1 Liquidity Management

The Liquidity Management solution, introduced in this release, facilitates corporate customers to manage their liquidity by optimizing interests to offset account balances, reducing interest costs, maximizing net returns and by providing greater visibility over cash positions.

The following functions comprising the liquidity management module, are provided to the corporate customers of the bank.

Account Structure Maintenance

Account structure is an efficient tool that helps to optimize the working capital of a business. The objective of creating an account structure is to bring together the credit and debit balances of different current and checking accounts into one single concentrated account of the corporate. This enables corporate users to manage the daily liquidity of their businesses in a consolidated fashion and to derive maximum benefits at minimal cost.

This enables the corporate users to maintain account structures by providing sweep or pool instructions.

The following features are supported in the application:

- **Build Account Structure**

  The application enables the corporate user to build new account structures using the digital banking platform. While building a structure, the corporate can perform the following tasks:

  - Define Structure Details (Sweep, Pool, Hybrid etc.)
  - Define Account Mapping and specify the hierarchies
  - Check basic validations
  - Set up instructions between each account pair.

- **Manage Structure**

  Corporate users can search the account structures maintained between the internal and external accounts of their parties. They can further, manage the structure details along with the instructions set between an account pair.

- **Pause/Resume and Ad-hoc Execution**

  Corporate users can pause the processing of a structure for a specific time period and can also initiate an ad-hoc execution of sweeps for specific structures.

Sweep Log Monitor

The Sweep Log Monitor enables corporate users to view the sweep logs of a structure by specific status which are identified below:

- Executed Sweeps
- Upcoming Sweeps
- Exceptions (Failed executions)

4.2 Virtual Accounts Management (VAM)

The Virtual Accounts Management module serves as a solution to corporates to reduce the complexity of money management. Virtual accounts help large corporates to reduce the number of real accounts needed and thereby reduces their associated costs. Additionally, virtual accounts provide ease of reconciliation and provides better visibility over deployment of money.

Using the APIs being offered under this module, a corporate can create and manage multiple virtual entities, virtual accounts and virtual account structures via self-service channels.

The following features have been built for the corporate user in Virtual Account Management:

Manage Virtual Accounts

Virtual accounts are notional accounts which represent real accounts and are either linked to real accounts directly or are linked via virtual account structure. These accounts are a series of dummy accounts used to make and receive payments on behalf of one physical account. Virtual accounts also offer corporates the ability to reconcile payments in real time.

Manage Virtual Entities

Virtual accounts are notional accounts which represent real accounts and are either linked to real accounts directly or are linked via virtual account structure. In Manage Virtual Accounts corporate user can create virtual accounts (without any ceiling on the number of accounts) , view, edit & delete these virtual accounts. User will identify the virtual entity to which the virtual account belongs and can also link these virtual accounts to real accounts. User can further set the preferences that would guide the behavior of the virtual account – for example are debits & credits allowed, does the virtual account have an IBAN etc.

Manage Virtual Account Structure

Virtual Entities are notional entities representing real business entities. This feature enables a corporate user to create virtual entities, view, edit & delete them. Virtual entities created can be of type individual or a corporate. The user can also indicate the KYC status of the virtual entity getting created.

Manage Remitter Lists

Virtual identifiers are dynamic short identifier based virtual accounts, which consist of corporate identifiers and remitter IDs.

It enables a corporate to create and manage his virtual remitter ID list. Since these are unique in nature, a corporate user can track his payments and receivables easily and perform faster reconciliation.

4.3 Electronic Bill Presentment & Payment

Corporates regularly pay various bills for services they use such as utilities, telecom, internet etc. Being able to view these bills and pay them online is an important functionality that the bank can offer to its corporate customers, which in turn, can play a crucial role in enhancing the relationship that the corporate customer has with the bank.

Corporate User Capabilities

As per the general practice amongst corporates, all the EBPP transactions too, go through the maker checker process. Individual functionalities available for a corporate user are as follows:

- **Biller Registration:**

  Business users can register billers of presentment type, payment type, presentment and payment type and recharge type by providing the required registration information and defining a nickname for each biller. The registration can go through a validation process, if required, by the biller and on successful registration; the user will start receiving bills from the next cycle from those billers that present bills.

- **Manage and Delete billers:**

  Once a biller is registered, users can modify the registration by modifying the biller nickname and can also modify the auto payment or scheduled payments set up for the biller. The user is also provided with the option to delete a registered biller.

- **Bill Payments**

  Users can pay bills using the current and savings accounts that they have access to. Bills can be paid immediately using the 'Pay Now' option or can be scheduled for payment at a later date using the 'Pay Later' option.

  Business users can create auto pay instructions for presentment type of bills to have the bills paid automatically on the due dates. An upper limit can be set for auto pay instructions so that, if bill amount breaches the limit, the system will alert the user and await his instructions to pay the bill. For billers who do not present bills, users can pay anytime and also schedule a recurring payment i.e. to have a fixed sum of money paid to the biller at regular intervals.

- **Recharges**

  Users can recharge their pre-paid services using the recharge transaction. After registering the recharge type biller, an existing pre-paid services plan can be topped up or a new plan can be chosen.

- **Quick Bill Pay and Quick Recharges**

  Users can pay bills or carry out recharges for non-registered billers provided the biller accepts such payments.

- **Payment History**

  Users can list the bill payments of the past and can download or print such bill payments.

5. Digitized Customer Engagement

The following enhancements have been made as a part of OBAPI release to digitally transform customer engagement:

5.1 Multi-modal Assisted banking (Via Voice and Video call)

In this release, the option by which business users can initiate video or voice calls from the channel platform has been introduced. This features also enables users to share their screen with the bank user, which comes in handy if the user is facing an issue while performing a transaction and is in need of assistance from the bank.

Integration with Oracle Live Experience has been done to provide assistance to business users on desktop. This involves passing transaction attributes such as the user's User ID, First Name/Last Name, Module and Screen Name of the transaction being performed, so that the call can get assigned to the designated bank user, on the basis of the attributes received.

6. Open Banking

The following open banking features have been built as part of the OBAPI 18.3 release:

6.1 Account Aggregation

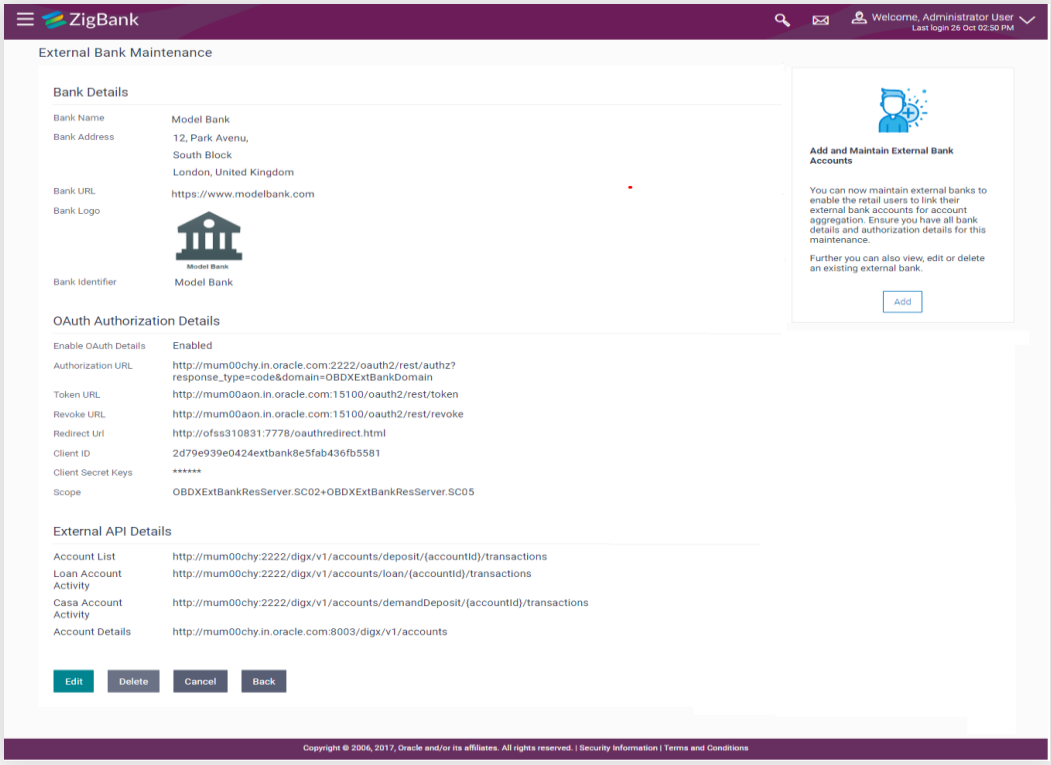
The Account Aggregation feature enables retail users to link their external bank accounts and provides them with an ability to access all their savings, term deposits and loan accounts information anytime and anywhere using a single digital platform.

The benefit of account aggregation is that the business users can get a snapshot of all their financial accounts and can easily retrieve account details, such as recent transactions, with a single login. They can also make quick payments between their accounts across banks.

As a part of this module, the following functions are provided to the bank user and business users of the Bank.

Administration Maintenance

The feature 'External Bank Maintenance' has been introduced as a part of the Account Aggregation module. This enables the bank administrator to add external banks using which retail customers can link their external accounts held at these banks to manage their money in an easier way. Multiple external APIs can be enabled to facilitate access of data, which will then be available for the perusal of the customer.



Customer Functions

A facility has been provided to logged in retail customers to link their external accounts using the Account Aggregation platform. Retail users can also login using external bank credentials to link the accounts held at that bank.

Retail Users can also track their net worth, view transactions of other bank accounts and manage accounts across banks.

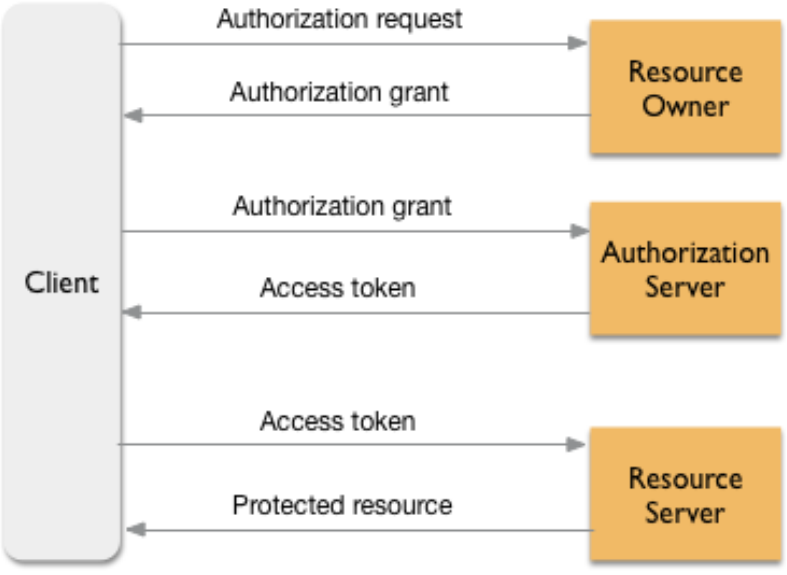
6.2 Internal OAuth Server

The OAuth 2.0 authorization framework enables a third-party application to obtain limited access to an HTTP service, either on behalf of a resource owner by orchestrating an approval interaction between the resource owner and the HTTP service, or by allowing the third-party application to obtain access on its own.

As part of this release, the capability of Internal OAuth has been developed to enable 2 legged and 3 legged OAuth flows. New administrative maintenances have been developed to define Identity Domain, Resource Server and Client.

The Identity Domain has the Identity store and token settings defined and the Resource Server has a set of scopes defined. Each Third-Party App is onboarded as a client and mapped to an Identity Domain. The Client is provided with a client ID and secret key and also has scopes mapped with the token settings.

The Client will need to pass the required details to request for an access token that can be subsequently used for requests to the resource server on behalf of the user with the required consents.



6.3 API Builder

API Builder is an in-built tool that assists banks in developing Pass through APIs for OBAPI using the REST APIs exposed by a backend banking application like Core Banking System, Wealth Management System, and Corporate Mid Office Application etc.

From the channel banking perspective, there can be some extra validations and aspects required to be made available on the Pass-through APIs. Additional checks like setting up of transaction limits, configuration of accounts that a user can access on a channel, Maker and Checker rule for corporate transactions, second factor authentications (OTP, Security Question, Soft Token) etc. can be enabled on the pass-through APIs.

Features:

- API Group Builder – Host level parameters like Host IP, Port name etc. that are common for a set of APIs and for one module can be configured at API group level.
- API Builder – Once the API group is created, the bank user can create pass through APIs for that module using this function. All the service level parameters like service name, service URL, transaction type, entitlement category details etc. needs to be entered for creating a service. Transaction aspects that need to be levied over the service being created can also be configured while creating the API.

7. Enhanced Administrative Capabilities

The following features have been built as a part of OBAPI release to enhance the Bank Administrative capabilities:

7.1 User Segments

In order to offer products and services to customers that best suit their banking needs, banks need to employ some method of segmentation. Banks can group customers into different segments on the basis of different attributes of the customer, which could be demographic, geographical, behavioral etc. Banks can have different communication mailers, authentication mechanisms, transaction limits on the basis of customer segmentation.

As part of this release, a new maintenance has been created to define and manage user segments. User Segments are associated to a user type and has currently been enabled only for user type 'Retail'. Each segment can optionally have application roles mapped so that in case of association of a segment to users, those application roles are by default available to the users.

Some of the maintenances which can be defined for a User Segment, in addition to the existing definition at user type level are:

a. Limits
b. Mailers
c. Product Mapping
d. Authentication
e. Payee Restrictions

7.2 Enhancements to First Time Login Steps

The process by which a business user would log in to the channel banking application for the first time used to comprise of a pre-defined set of steps (Accept Terms and Conditions and Set Security Questions). These steps have now been made configurable, which not only enables the bank user to choose the steps (from a predefined list of steps) but also to decide the sequence in which they should be displayed to business users.

8. New Retail Capabilities

The following features have been added in this release to further enhance the retail banking module of OBAPI:

8.1 Wealth Management Services

Wealth Management or Investment Management is an important offering in a bank's product bundle. It facilitates the bank customer to invest in instruments such as equity mutual funds, shares, bonds, insurance etc. From a customer's point of view - being able to view his investments regularly, being able to place orders and to communicate with the bank are of high importance. Therefore, self-service channels/channel banking plays a critical role in wealth management.

The Wealth Management Service functionality introduced in 18.3, enables business users to transact in mutual funds. Mutual fund processor has to supply the relevant data and details, which the customer can view and act on in the self-service channel. Following are the features available in WMS.

Starting Investments

This facility enables the customers to invest by opening an Investment Account which holds the customer's mutual fund investments. The account opening is initiated resides in the mutual fund processor. Provisions to perform FATCA check and risk profiling of customers is provided. In risk profiling, the customer is posed a set of questions and based on the answers chosen, his risk profile is determined. With each risk profile comes a recommended asset allocation for the customer.

Placing Orders

Customers can place Purchase, Redemption or Switch orders for any of the listed funds. These orders can be for lump sum orders or for recurring orders i.e. Systematic Investment Plan, Systematic Withdrawal Plan and Systematic Transfer Plan. Mutual fund orders can be placed for the same business day or a future date from any of the customer's current or savings accounts. Customer can also place multiple orders in one go.

Investment Details

Customer can list their mutual funds holdings with the Investment Details, where the business user can inquire about performance of their funds, dividend distributed, and units held along with recurring orders currently underway. The customer can even get the details of mutual funds he had held in the past.

Reports

Multiple reports are available to customers, by which they can gain information regarding their wealth management activities. The reports available are as follows:

- Transactions Report
- Dividends Report
- Capital Gains Report

8.2 UPI Payments – India Region

Unified Payments Interface (UPI) is an immediate real time payment system that enables the transfer of funds between two bank accounts through a mobile platform. This payments interface has been developed by the National Payments Corporation of India (NPCI), which is regulated by the Reserve Banking of India (RBI).

In order to transfer and receive funds through UPI, users need to create a Virtual Payment Address (VPA). A VPA is in the format of unique name@bankname and needs to be mapped to the user's current or savings account. This VPA can be used by others to transfer funds to the user. Hence, users need not know or remember the account numbers and IFSC codes of their intended recipients.

Retail users can now initiate UPI transfers through the mobile application channel. APIs for 'Manage VPAs' feature enables users to create VPAs and to edit or delete a VPA. By means of VPA transfers, users can transfer funds by selecting a VPA from which the funds are to be transferred and can initiate ad-hoc transfers towards other VPAs or towards domestic bank accounts. Additionally, users can create VPA payees and also initiate VPA transfers towards payee VPAs and domestic account payees.

8.3 Deposit Enhancements – India Region

In this release, the deposits module has been enhanced so as to cater to the specific needs of NRI customers. The enhancements include the facility to enable NRI customers to open and manage NRO and NRE deposits to be held in INR currency and to open and manage FCNR deposits. Additionally, NRIs who have returned to India can also open RFC deposits.

These enhancements in deposit APIs enable NRI customers to open deposits in INR as well as in foreign currencies, subsequently helping them to manage their taxes properly and to earn higher returns of interests with the additional option to also hold deposits in foreign currency.

9. Enriched Payment Services

As part of this release, the payments module has been enhanced with the following features:

9.1 Twitter Payments

Retail users can now initiate peer to peer transfers using Twitter handles. Once the user selects this option, the system will display the Twitter login page. Once the user logs in to his Twitter account, he will be able to select the Twitter handle towards which funds are to be transferred. Only a handle that follows the user's Twitter handle or that has enabled the option to receive direct messages from everyone (This option can be switched on through Twitter settings), can be selected as a recipient.

Once a transfer is initiated successfully, a direct message will be sent to the recipient on his/her Twitter account. The recipient can claim the funds by selecting the link provided in the message and following the claim money flow. The claim money feature has also been enhanced so as to enable users to select the option 'Twitter' by which to claim funds.

9.2 Funds Transfer History

A new Funds Transfer History feature has been introduced to enable users (both retail and corporate) to view the status of payment transactions initiated from the internet and mobile banking channels. All the transfers initiated over a period of time are listed down with the current status fetched from the host system. The user can list additional details of each transfer by selecting the provided option and can also re-initiate the transfer, if so desired.

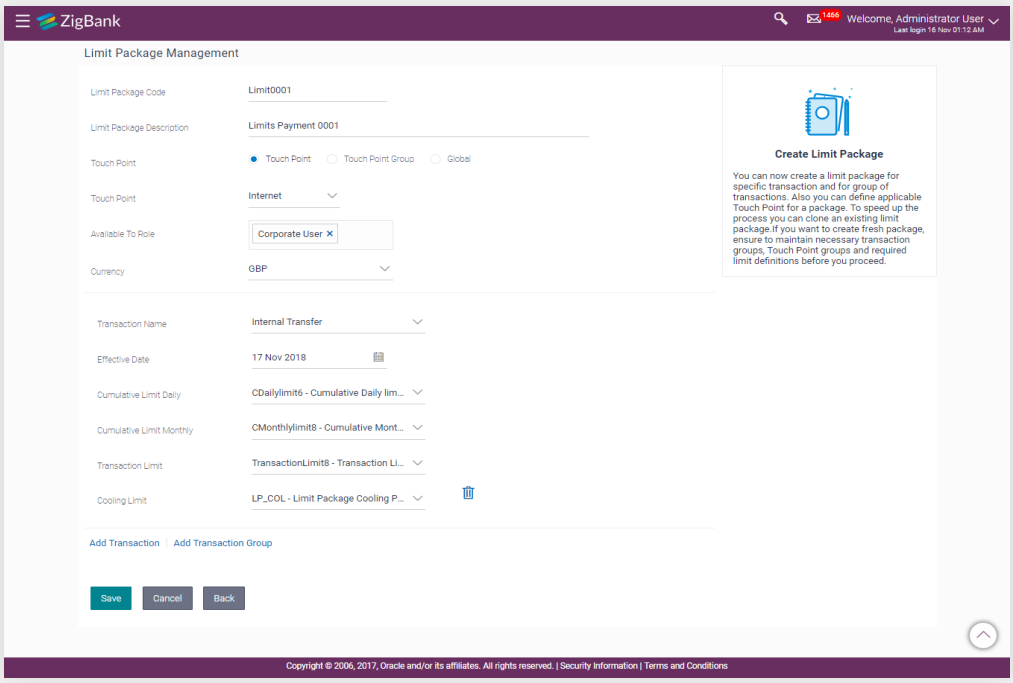
9.3 Limit Enhancements

The Limits module has been enhanced to support the following features:

Administrative Enhancements

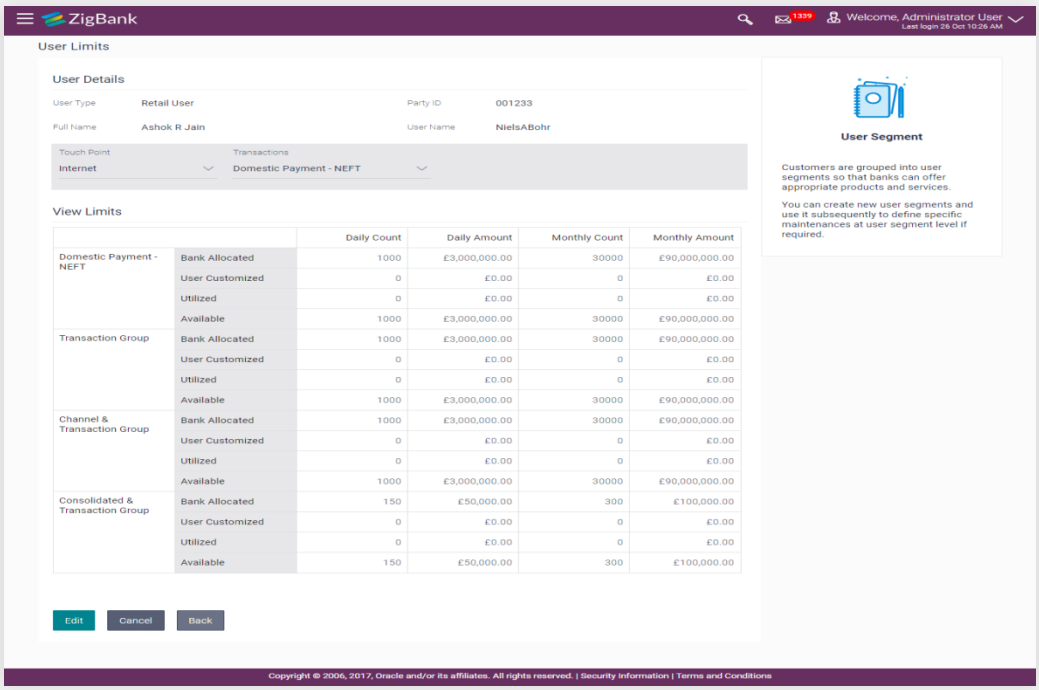
- **Global Limit Package Maintenance**

Using this feature the bank user can maintain global limit packages (default touch point group with all internal and external touch points) and can map it to a user, user segment or a party. Also, a facility has been provided to search, view, edit and delete the limit packages maintained at a global level.



- **User Limits**

Using this feature, the bank user can get the current available and utilized limits of a specific retail user and can modify (increase or decrease) these limits as required.



- **Sub Limit Maintenance**

A bank user can now set up separate limits for payments initiated as ad-hoc payments and payments initiated towards registered payees. This feature has been enabled for the following transactions.

- Internal Fund Transfer
- Domestic Fund Transfer
- International Fund Transfer

Business User specific Enhancements

- **List Global Limits**

The existing feature using which business users can list transaction limits has been enhanced to list global limits assigned to the user too.

- **List Derived Limits**

An option has been provided to the retail user to list the available limits for a transaction, his cumulative limit, applicable cooling period and set payee limits, if any, while initiating a transaction.

9.4 Claim Money Enhancements

The feature enabling recipients of peer to peer transfers to claim money has been enhanced in this release. Recipients can now claim funds via dynamic URLs, the links which are sent to the users as part of the payment alert. Each link is unique and tightly coupled with the payment initiated. If incorrect security code is entered more than the allowed number of times, the hold on the transfer amount is released and the transfer is cancelled.

The static claim money page has also been enhanced through the addition of the Payment ID field. The recipient is now required to enter the payment ID that is sent as part of the payment alert, on the claim money page. This way, the system is able to identify whether the security code being entered is for the specific payment or not and if incorrect security code is entered more than the permitted number of times, the transfer is cancelled.

9.5 Domestic Transfer – Network Suggestion

Network suggestion has been introduced as part of India region specific domestic transfers.

While initiating domestic transfers towards existing payees (including multiple transfers and repeat transfers initiation) or doing an ad-hoc transfer, the system can now suggest a network out of NEFT, IMPS and RTGS based on factors including the payee's bank, network limits and working window maintenance. The system first disables those networks that are not supported based on these factors and suggests a network out of the enabled networks based on the network preference definition identified by the bank user.

The bank user has got the option to enable/disable the domestic transfer suggestion flag in system configuration.

9.6 Payee Account Type

The India region domestic transfers facility (retail and corporate) have been enhanced to capture the payee account type. The account type values provided are – Savings, Current, Overdraft, Cash Credit, Loan Account and NRE. This value is sent to the host system as part of the domestic transfer details.

This value will be captured as part of domestic transfer payee creation. In case of ad-hoc domestic transfers, the payee account type will be captured at the time of transfer initiation.

9.7 Demand Draft Enhancements

The demand draft feature (domestic as well as international draft initiation) has been enhanced through the addition of the delivery option 'Other Address'. By selecting this option, the user can opt to have the draft delivered to an address, one that is other than the initiator's address or a branch of the bank. If this option is selected, the user is required to enter the address at which the draft is to be delivered.

Users will also have the option to initiate ad-hoc demand drafts (domestic and international drafts), i.e. users can now request for demand drafts to be payable towards recipients that are not registered as payees with the bank.

10. Qualifications

Sr. No.	Oracle Banking APIs Modules	Host Integration*	Version
1	Oracle Banking APIs for Retail Banking	Oracle FLEXCUBE Core Banking Oracle FLEXCUBE Universal Banking Oracle Banking Payments	11.7.0.0.0 14.0.0.0.0 and 14.1.0.0.0 14.0.0.0.0 and 14.1.0.0.0
2	Oracle Banking APIs for Customer Financial Insights	Oracle FLEXCUBE Core Banking Oracle FLEXCUBE Universal Banking	11.7.0.0.0 14.0.0.0.0 and 14.1.0.0.0
3	Oracle Banking APIs for Origination of Liability Accounts	Oracle FLEXCUBE Universal Banking	14.0.0.0.0
4	Oracle Banking APIs for Origination of Loans and Mortgages	Oracle Banking Platform	2.6.2.0.0
5	Oracle Banking APIs for Corporate Banking	Oracle FLEXCUBE Core Banking Oracle FLEXCUBE Universal Banking Oracle Banking Payments Oracle Banking Virtual Account Management Oracle Banking Liquidity Management	11.7.0.0.0 14.0.0.0.0 and 14.1.0.0.0 14.0.0.0.0 and 14.1.0.0.0 14.1.0.0.0 14.1.0.0.0

6	Oracle Banking APIs for Bulk Payments	Oracle FLEXCUBE Core Banking Oracle FLEXCUBE Universal Banking Oracle Banking Payments	11.7.0.0.0 14.0.0.0.0 and 14.1.0.0.0 14.0.0.0.0 and 14.1.0.0.0
7	Oracle Banking APIs Corporate Trade Finance	Oracle FLEXCUBE Universal Banking	14.0.0.0.0 and 14.1.0.0.0

11. Known Issues and Limitations

11.1 Limitations:

1. Liquidity Management solution offered by OBDX mandatorily needs Oracle Liquidity Management Solution in the backend for integration.

2. Virtual Account Management solution offered by OBDX mandatorily needs Oracle Virtual Account Management Solution in the backend for integration.

11.2 Oracle Banking APIs Known Issues

NA

11.3 Oracle Banking APIs Limitations

NA

12. OBAPI 18.3.0.1.0 Release (March 2019)

12.1 HIGHLIGHTS

This section describes the new APIs introduced as a part of OBAPI 18.3.0.1.0 release.

OBAPI has enriched the corporate banking module in this release to cater to corporate requirements through the introduction of new APIs for Credit Facility Management and Corporate Lending Management features.

12.1.1 Credit Facility Management

Credit facility is an umbrella of financial assistance offered by Banks or Financial institutions to Corporates to meet their financial needs.

New APIs have been introduced as a part of Credit Facility Management module with the ability to the existing corporates to originate new Credit Facility request along with the management of their existing Facilities and Collaterals.

This module have been divided under two main functions, which is Credit Facility Origination and Credit Facility Servicing.

Credit Facility Origination

Credit Facility origination module of OBAPI is integrated with Oracle Banking Credit Facility Process Management System (OBCFPM) for initiation of new facility origination/amendment application and for tracking the application status.

- New Credit Facility Application and Existing Facility Amendment Application

  Corporate Facility Origination APIs enables the existing corporate to initiate an application for new credit facility or a sub facility under an existing credit facility by entering their funding requirements, Collateral details and by uploading the required documents. Using the 'Facility Amendment Application' feature, the request can also be initiated for change in facility amount/tenure and for addition of new collateral.

  On submission of the applications, the requests gets assigned to the bank (OBCFPM Bank User) for further processing.

- Application Tracker

  Application tracker APIs allows the corporate user to view the current status of submitted applications for new facility and amendment of existing facilities and also to resume applications that have been saved as draft. Using these APIs, Corporate can also view

the details of the submitted application and can download the documents provided at the time of application submission.

Credit Facility Servicing

Credit Facility Servicing module of OBAPI is integrated with Oracle FLEXCUBE Enterprise Limits and Collateral Management (ELCM). Credit Facility servicing APIs enables the corporate user to inquire existing Credit Facilities and Collaterals.

- Facilities and Collateral Management Overview

  Facility and Collateral Overview APIs provides synopsis of available and utilized amount of Credit Facilities and collaterals for a corporate to facilitate quick decisioning.

- Facility and Collateral Summary and Details

  Module also provides APIs that lists down all the facilities available for corporate with an option to check the detailed view of a facility along with the information of collaterals and covenants linked to the facility.

  Collateral summary APIs enables the corporate to view all the collateral groups along with the collaterals linked to each group along with an option to view the details of a collateral along with the covenants linked.

12.1.2 Corporate Lending Management

Corporates often needs to borrow money to meet their funding requirements typically to invest in infrastructure, expand business operations, upgrade to the latest plant and machinery etc. OBAPI has enriched the corporate banking module by introducing new APIs for Corporate Lending Features with Loan Origination capability and Loan Accounts Management.

Corporate Loan Origination:

Most of the corporates consider borrowing a business loan from the financial institutions is a convenient option because of its flexibility and affordability. Corporate Loan Origination APIs provides with an ability to the existing corporate customers to initiate the request for new Business Loan and track the application status using the Digital Banking Platform.

Corporate Loan Origination APIs are integrated with Oracle Banking Corporate Lending Process Management (OBCLPM) for initiation of new loan request and for tracking the application status and Oracle FLEXCUBE Enterprise Limits and Collateral Management (ELCM) for fetching and utilizing the existing facilities.

- **New Loan Application**

  Loan Origination APIs, introduced in this release, facilitates existing corporate to initiate a new business loan for by providing details like Loan Requirements, Real Estate and plant and machinery information based on the product selection.

  APIs supports Loan Origination for following Corporate Lending Products:

  - **Term Loan**
  - **Working Capital**
  - **Real Estate Loan**
  - **Equipment Loan**

  On submission of the application, the requests gets assigned to the bank (OBCLPM Bank User) for further processing.

- **Application Tracker**

  Application Tracker APIs enables the corporate user to view the progress of submitted loan applications and also to retrieve and to resume applications that have been saved as draft. Using these APIs, Corporate can also view the details of the submitted application and can download the documents provided at the time of application submission.

Corporate Loan Servicing

OBAPI provides a platform by which banks can offer their corporate customers an enriching experience in servicing the corporate loans accounts. Corporate Loan Servicing APIs are integrated with Oracle Banking Corporate Lending (OBCL).

- **Loan Overview, Details and Transactions**

  Loan Overview APIs provides with the consolidated and easy to understand view of their business loans position, with an option to check the detailed view each loan account. APIs also enables the Corporate to view the information of upcoming and overdue loan installments and also the detailed loan account activity.

- **Disbursement Details, Repayment Schedule and Repayments**

  Quick & hassle-free online loan repayment option allows the corporate to initiate payment against outstanding installments or even to pay full settlement amount using OBAPI. APIs also enables the users to view the loan disbursement information along with the option to view and download loan amortization schedule.

12.1.3 Open Banking Enhancements

Open banking is a collaborative model in which financial services customers can securely share their financial data with other financial institutions. One of the key benefits of introducing open banking, is the ability to support UK Open Banking and also provide the capability of Account Aggregation wherein business users can access their accounts held across different banking institutions from a single place.

UK Open Banking

UK Open Banking feature introduced in OBAPI as part of OBAPI 18.3.0.1.0 release provides interface for consuming account information and payment services through APIs. Third parties i.e. TPPs bearing the roles of "payment initiation service providers", "account information service providers" or both, will consume two types of exposed resources i.e. accounts information APIs or payments initiation and inquiry APIs.

The following API end points (from UK Open Banking Specification) have been developed as part of this release:

1. **POST /account-access-consents**
2. **GET /account-access-consents/{ConsentId}**
3. **DELETE/account-access-consents/{ConsentId}**
4. **GET /accounts**
5. **GET /accounts/{AccountID}**
6. **GET /accounts/{AccountId}/balances**
7. **GET /accounts/{AccountId}/transactions**
8. **POST /domestic-payment-consents**
9. **GET /domestic-payment-consents/{ConsentId}**
10. **GET /domestic-payment-consents/{ConsentId}/funds-confirmation**
11. **POST /domestic-payments**
12. **GET /domestic-payments/{DomesticPaymentID}**

12.2 Qualifications

Sr.No.	Oracle Banking Digital Experience Modules	Host Integration*	Version
1	Oracle Banking APIs Retail Banking	Oracle FLEXCUBE Core Banking Oracle FLEXCUBE Universal Banking Oracle Banking Payments	11.7.0.0.0 14.1.0.0.0 and 14.2.0.0.0 14.1.0.0.0
2	Oracle Banking APIs for Corporate Banking	Oracle FLEXCUBE Core Banking Oracle FLEXCUBE Universal Banking Oracle Banking Payments Oracle Banking Credit Facility Process Management System (OBCFPM) Oracle FLEXCUBE Enterprise Limits and Collateral Management (ELCM) Oracle Banking Corporate Lending Process Management (OBCLPM) Oracle Banking Corporate Lending (OBCL)	11.7.0.0.0 14.1.0.0.0 and 14.2.0.0.0 14.1.0.0.0 14.1.0.1.0 14.2.0.0.0 14.1.0.1.0 14.2.0.0.0
3	Oracle Banking APIs for Customer Financial Insights	Oracle FLEXCUBE Core Banking Oracle FLEXCUBE Universal Banking	11.7.0.0.0 14.1.0.0.0
4	Oracle Banking Digital Experience Corporate	Oracle FLEXCUBE Universal Banking	14.1.0.0.0

	Trade Finance		
5	Oracle Banking APIs for Bulk Payments	**Oracle FLEXCUBE Core Banking** **Oracle FLEXCUBE Universal Banking** **Oracle Banking Payments**	**11.7.0.0.0** **14.1.0.0.0** **14.1.0.0.0**
6	Oracle Banking APIs for Origination of Liability Accounts	Oracle FLEXCUBE Universal Banking	**14.1.0.0.0**
7	Oracle Banking APIs for Origination of Loans and Mortgages	Oracle Banking Platform	**2.6.2.0.0**

*** Refer 'Transaction Host Integration Matrix' section available in module specific user manuals to know transaction level integration details.**

12.3Known Issues and Limitations

This chapter covers the known anomalies and limitations in of Oracle Banking API Release 18.3.0.1.0

12.1 Oracle Banking API Known Issues

NA

12.2 Oracle Banking API Limitations

1. **Credit Facility Management solution mandatorily needs Oracle Banking Credit Facility Process Management System (OBCFPM) and Oracle FLEXCUBE Enterprise Limits and Collateral Management (ELCM) in the backend for integration.**
2. **Corporate Lending Management solution mandatorily needs Oracle Banking Corporate Lending Process Management (OBCLPM), Oracle Banking Corporate Lending (OBCL) and Collateral Management (ELCM) in the backend for integration.**

13. OBAPI 18.3.0.2.0 Release (May 2019)

13.1 Open BANKING Enhancements

The following API end points (from UK Open Banking Specification) have been developed as part of this release:

1. **POST /domestic-scheduled-payment-consents**
2. **GET /domestic-scheduled-payment-consents/{ConsentId}**
3. **POST /domestic-scheduled-payments**
4. **GET /domestic-scheduled-payments/{DomesticScheduledPaymentId}**
5. **POST /domestic-standing-order-consents**
6. **GET /domestic-standing-order-consents/{ConsentId}**
7. **POST /domestic-standing-orders**
8. **GET /domestic-standing-orders/{DomesticStandingOrderId}**
9. **GET /accounts/{AccountId}/party**
10. **GET /party**