

Product Release Notes
Oracle Financial Services Lending and Leasing
Release 14.7.0.0.0
May 2019
Part No. F16599-01

ORACLE®
Financial Services

Table of Contents

1. RELEASE NOTES	1-1
1.1 BACKGROUND / ENVIRONMENT	1-1
1.2 PURPOSE	1-1
1.3 ABBREVIATIONS	1-1
1.4 PRODUCT SUMMARY	1-2
1.5 RELEASE HIGHLIGHTS	1-2
2. ENHANCEMENTS	2-1
2.1 MASTER ACCOUNT	2-7
2.1.1 Overview	2-7
2.1.2 Seed Data	2-27
2.2 BUSINESS ONLY ACCOUNT	2-28
2.2.1 Overview	2-28
2.2.2 Description	2-28
2.2.3 Screen Changes	2-33
2.2.4 Seed Data	2-34
2.3 CUSTOMER CREDIT LIMIT PHASE II	2-35
2.3.1 Overview	2-35
2.3.2 Seed Data	2-36
2.4 AUTO CONTRACT UI ENHANCEMENT	2-37
2.4.1 Overview	2-37
2.4.2 Seed Data	2-38
2.5 CRITERIA BASED CONDITION POSTING	2-39
2.5.1 Overview	2-39
2.5.2 Screen Changes	2-39
2.5.3 Seed Data	2-41
2.6 EVENTS FRAMEWORK ENHANCEMENTS	2-42
2.6.1 Overview	2-42
2.6.2 Description	2-43
2.6.3 Seed Data	2-47
2.7 WEBHOOK	2-48
2.7.1 Overview	2-48
2.7.2 Description	2-48
2.7.3 Seed Data	2-56
2.8 UI EXTENSIBILITY / CONFIGURABILITY	2-57
2.8.1 Overview	2-57
2.8.2 Description	2-57
2.8.3 Seed Data	2-62
2.9 ADD EXISTING CUSTOMER - NON-MONETARY TRANSACTION	2-63
2.9.1 Overview	2-63
2.9.2 Description	2-63
2.9.3 Seed Data	2-65
2.10 SECURITIZATION POOL UPLOAD	2-66
2.10.1 Overview	2-66
2.10.2 Description	2-66
2.10.3 Seed Data	2-69
2.11 CORRESPONDENCE CHANGE	2-70
2.11.1 Overview	2-70
2.12 REASON CODE FOR ALL NON-MONETARY TRANSACTIONS	2-71
2.12.1 Overview	2-71
2.12.2 Seed Data	2-71
2.13 CONVERSION ENHANCEMENTS	2-72
2.13.1 Overview	2-72
2.14 CUSTOMER SCORE REFRESH	2-74
2.14.1 Overview	2-74

2.14.2	<i>Seed Data</i>	2-76
2.15	ASSOCIATE NON-PRIMARY ASSET TO ACCOUNT.....	2-77
2.15.1	<i>Overview</i>	2-77
2.15.2	<i>Description</i>	2-77
2.15.3	<i>Seed Data</i>	2-77
2.16	ADD BUSINESS AND ADD EXISTING CUSTOMER/BUSINESS (UI ONLY).....	2-78
2.16.1	<i>Overview</i>	2-78
2.16.2	<i>Description</i>	2-78
2.16.3	<i>Screen changes</i>	2-83
2.16.4	<i>Seed Data</i>	2-84
2.17	LEASE SEED DATA ENHANCEMENT.....	2-85
2.17.1	<i>Overview</i>	2-85
2.17.2	<i>Description</i>	2-85
2.17.3	<i>Seed Data</i>	2-85
2.18	CONFIGURABLE TRANSACTION UPLOAD.....	2-86
2.18.1	<i>Overview</i>	2-86
2.18.2	<i>Description</i>	2-86
2.18.3	<i>Seed Data</i>	2-86
2.19	INDEX / MARGIN RATE CHANGE MONETARY TRANSACTION.....	2-87
2.19.1	<i>Overview</i>	2-87
2.19.2	<i>Description</i>	2-87
2.19.3	<i>Seed Data</i>	2-87
2.20	ACCOUNT TRANSACTIONS GET WEB SERVICE.....	2-88
2.20.1	<i>Overview</i>	2-88
2.20.2	<i>Description</i>	2-88
2.20.3	<i>Seed Data</i>	2-88
2.21	RESTFUL WEB SERVICES.....	2-89
2.21.1	<i>Overview</i>	2-89
2.21.2	<i>Description</i>	2-89
2.21.3	<i>Seed Data</i>	2-90
2.22	PRODUCER WEB SERVICES.....	2-91
2.22.1	<i>Overview</i>	2-91
2.22.2	<i>Description</i>	2-91
2.22.3	<i>Seed Data</i>	2-91
2.23	VENDOR WEB SERVICES.....	2-92
2.23.1	<i>Overview</i>	2-92
2.23.2	<i>Description</i>	2-92
2.23.3	<i>Seed Data</i>	2-92
2.24	COLLATERAL WEB SERVICES AND FILE UPLOAD.....	2-93
2.24.1	<i>Overview</i>	2-93
2.24.2	<i>Description</i>	2-93
2.24.3	<i>Seed Data</i>	2-94
2.25	RESCISSION ACCOUNT - NON-MONETARY TRANSACTION.....	2-95
2.25.1	<i>Overview</i>	2-95
2.25.2	<i>Description</i>	2-95
2.25.3	<i>Seed Data</i>	2-95
2.26	LINK CUSTOMER BASED ON CUSTOMER NUMBER.....	2-96
3.	APPENDIX: SEED DATA.....	3-1
4.	PATCHES AND BUGS.....	4-1
5.	SECURITY FIXES.....	5-1
6.	LIMITATIONS AND OPEN ISSUES.....	6-1
7.	COMPONENTS OF THE SOFTWARE.....	7-1
7.1	DOCUMENTS ACCOMPANYING THE SOFTWARE.....	7-1
7.2	SOFTWARE COMPONENTS.....	7-1

8. ANNEXURE – A: ENVIRONMENT DETAILS 8-1
9. ANNEXURE – B: THIRD PARTY SOFTWARE DETAILS..... 9-1

1. Release Notes

1.1 Background / Environment

Oracle Financial Services Software Limited has developed Oracle Financial Services Lending and Leasing solution. The suite is a comprehensive, end-to-end solution that supports full lifecycle of direct and indirect consumer lending business with Origination, Servicing and Collections modules. This enables financial institutions to make faster lending decisions, provide better customer service and minimize delinquency rates through a single integrated platform. It addresses each of the lending processes from design through execution. Its robust architecture and use of leading-edge industry standard products ensure almost limitless scalability.

1.2 Purpose

The purpose of this Release notes is to highlight the enhancements and bug fixes included in the Oracle Financial Services Lending and Leasing Release.

1.3 Abbreviations

Abbreviation	Detailed Description
OFSLL	Oracle Financial Services Lending and Leasing
XML	Extensible Mark-up Language
XSD	XML Schema Definition
GL	General Ledger
XLF	Extended Log Format
JSF	Java Server Faces
EAR	Enterprise Application Archive
UI	User Interface
WSDL	Web Services Description Language
ACH	Automated Clearing House
MDB	Message Driven Bean
JMS	Java Messaging Service
IoT	Internet of Things

1.4 **Product Summary**

Oracle Financial Services Lending and Leasing Release built to meet various challenges faced by financial institutions. It addresses each of the lending processes from design through execution. Its unique value lies in its ability to provide the business with predefined processes and an excellent framework that takes care of business risk and compliance needs.

1.5 **Release Highlights**

The key highlight of this patch release is to fix the critical bugs and to enhance the industry specific requirements.

2. Enhancements

Enhancement	Description
Functional Enhancements	
Master Account	<p>This feature gives a flexibility to Mark an Application/Account as Master Account and link other Accounts (Loan, Line, and Lease) of the Customer to this Master Account. With this Linking, financial Institutions benefits to:</p> <ul style="list-style-type: none"> - Link new application from customer to existing Master Account - Make Payment to Master Account and apply to all its associated Accounts - Post transactions (Payoff Quote, Due Date Change, ACH, and Extension) at Master Account to update all Associated Accounts. - Generate consolidated statement of all associated accounts. - Complete view of the Customer→Master Account→Associated Accounts <p>Detailed information about the functionality is available in subsequent section.</p>
Business only Account (SEV,COL)	<p>This Enhancement provides ability to create Business only Applications/Accounts in OFSLL without the need to add a Primary Application/Customer. This is phase 1 of the total enhancement followed by phase 2 in future release. Broad level impact areas handled are as follows:</p> <ul style="list-style-type: none"> - Correspondence/Letters - Correspondence recipients - Disable Customer tab on tagging Account as Business only - AP Transactions (Business Only Radio button) - New Business Transaction - Changes in batch jobs to include Business only Accounts (Customer Refund Payment Requisitions, Customer Payment File Upload, Customer Statement Letter, Customer Statements Generation) <p>Note: This enhancement is only for Servicing and Collections modules.</p>
Customer Credit Limit Expiry Date Validation in Servicing	<p>This is an update to the Existing Customer Credit Limit functionality with a validation on the Customer service transactions based on the Limit Expiry date.</p>
Auto Contract From OFSLL UI	<p>This is a usability enhancement with a new Suggest button in Contract screen to load an instrument based on the configuration. This reduces the number of steps followed to select instrument and complete the Contract.</p> <p>However, Suggest option is not available if instrument is already loaded.</p>

Enhancement	Description
Criteria based Condition Posting	<p>This feature gives a capability for financial Institutions to define and post criteria based conditions on an Account which in-turn can perform multiple actions such as build a Queue; configure an Event, Transaction Access Control and so on.</p> <p>Some of the Business cases achieved with this enhancement are:</p> <ul style="list-style-type: none"> • Generate special condition based on Account Maturity date less than 90 days from system date (Days to Account get Matured) <ul style="list-style-type: none"> – Send Letters – Post Transactions, etc. • Outstanding Ratio (Current Amount Outstanding/Amount Financed) <ul style="list-style-type: none"> – Replaying 50% of financed amount, system allows posting extension transactions. • Collateral coverage ratio <ul style="list-style-type: none"> – Ability to define condition posting based on Collateral Coverage ratio and define an action • Give 'Extension' to Accounts in a particular zip code affected with natural calamity.

Enhancement	Description										
Events Phase II Enhancements	<p>'Events' functionality has been enhanced with the following features to provide configuration capability to the financial institutions.</p> <p>New 'Events' framework is enhanced with below features:</p> <ul style="list-style-type: none"> • Common Event framework definition for Loan/Line/Lease modules. • Support of creating custom JSON JMS Message based on Event Response User Defined Tables. • New 'Event' indicator in transaction codes to indicate transactions allowed for Event Types and Event Actions. • New Event Types are added for: <ul style="list-style-type: none"> ○ Monetary and Non-Monetary Transaction ○ New Bankruptcy Create and Update • New Event Actions are added for below Entity Types <ul style="list-style-type: none"> ○ Account <ul style="list-style-type: none"> ▪ Post Call Activity ▪ Create Monetary and Non-Monetary Transactions ▪ Send Correspondence and Letters ▪ Create Work Order, Review Request and Comments ▪ Request Credit Bureau ○ Customer ○ Create Comment <p>Below are some Business case examples related to Customer:</p> <table border="1" data-bbox="509 1159 1409 1509"> <tbody> <tr> <td data-bbox="509 1159 1003 1255">Customer Address is created</td> <td data-bbox="1003 1159 1409 1255">Post an custom automatic comment with Alert</td> </tr> <tr> <td data-bbox="509 1255 1003 1318">Customer Address is created</td> <td data-bbox="1003 1255 1409 1318">Send JMS to Customer Hub</td> </tr> <tr> <td data-bbox="509 1318 1003 1381">Customer Address updated</td> <td data-bbox="1003 1318 1409 1381">Send JMS to Customer Hub</td> </tr> <tr> <td data-bbox="509 1381 1003 1444">Customer Telecom created/updated</td> <td data-bbox="1003 1381 1409 1444">Send JMS to Customer Hub</td> </tr> <tr> <td data-bbox="509 1444 1003 1509">Customer Employment Created/update</td> <td data-bbox="1003 1444 1409 1509">Send JMS to Customer Hub</td> </tr> </tbody> </table>	Customer Address is created	Post an custom automatic comment with Alert	Customer Address is created	Send JMS to Customer Hub	Customer Address updated	Send JMS to Customer Hub	Customer Telecom created/updated	Send JMS to Customer Hub	Customer Employment Created/update	Send JMS to Customer Hub
Customer Address is created	Post an custom automatic comment with Alert										
Customer Address is created	Send JMS to Customer Hub										
Customer Address updated	Send JMS to Customer Hub										
Customer Telecom created/updated	Send JMS to Customer Hub										
Customer Employment Created/update	Send JMS to Customer Hub										

Enhancement	Description														
	<p>Below are some Business case examples related to Account:</p> <table border="1" data-bbox="511 268 1339 766"> <tr> <td data-bbox="511 268 966 331">Account Condition created/updated</td> <td data-bbox="966 268 1339 331">Send Custom JMS</td> </tr> <tr> <td data-bbox="511 331 966 394">New Transaction Posted</td> <td data-bbox="966 331 1339 394">Send Letter</td> </tr> <tr> <td data-bbox="511 394 966 489">New Account Created</td> <td data-bbox="966 394 1339 489">Send Webhook to Customer self-service portal</td> </tr> <tr> <td data-bbox="511 489 966 552">Bankruptcy created/updated</td> <td data-bbox="966 489 1339 552">Send Letter</td> </tr> <tr> <td data-bbox="511 552 966 615">Bankruptcy created/updated</td> <td data-bbox="966 552 1339 615">Send JMS</td> </tr> <tr> <td data-bbox="511 615 966 678">Bankruptcy created/updated</td> <td data-bbox="966 615 1339 678">Send Webhook to Attorney</td> </tr> <tr> <td data-bbox="511 678 966 766">Repossession Created/Updated</td> <td data-bbox="966 678 1339 766">Send JMS to 3rd Party</td> </tr> </table>	Account Condition created/updated	Send Custom JMS	New Transaction Posted	Send Letter	New Account Created	Send Webhook to Customer self-service portal	Bankruptcy created/updated	Send Letter	Bankruptcy created/updated	Send JMS	Bankruptcy created/updated	Send Webhook to Attorney	Repossession Created/Updated	Send JMS to 3rd Party
Account Condition created/updated	Send Custom JMS														
New Transaction Posted	Send Letter														
New Account Created	Send Webhook to Customer self-service portal														
Bankruptcy created/updated	Send Letter														
Bankruptcy created/updated	Send JMS														
Bankruptcy created/updated	Send Webhook to Attorney														
Repossession Created/Updated	Send JMS to 3rd Party														
Webhook Implementation	<p>Webhook framework has been created to notify third-party applications using OFSLL Events with following features:</p> <ul style="list-style-type: none"> • Call back mechanism to third party applications from OFSLL • Setup to create Webhook channel to record third-party interfaces • Register OFSLL Events with Webhook Channel • View status of transmission of message • Retrigger failed messages 														
UI Extensibility and Label Configuration	<p>UI Extensibility currently supporting only Producer screen has the following features:</p> <ul style="list-style-type: none"> • 20 new user Defined Fields added (10 text, 5 date and 5 Number) • Ability to enable/disable User Defined Fields • Ability to configure the UI label • Ability to configure the base product label's and define custom label 														
Account level flag to identify Securitization Eligibility	<p>Account level 'Securitization Eligible' flag is available to identify if account qualifies for securitization.</p>														
Customer Score Refresh	<p>Facility to maintain record of Customer scores for Customers and Business.</p>														
Interface (File Upload) Enhancements															
Ability to upload account onto the Securitization pool	<p>File upload facility provided to add accounts to pool, remove accounts from pool and transfer account from pool.</p>														
Collateral Upload File	<p>File upload facility provided to add Collaterals on to the Collaterals.</p>														
Input File Processing Enhancements	<p>Enhanced the Input File Processing batch job.</p>														

Enhancement	Description
New Transactions and related Enhancements	
Add Existing Customer to an Account	New non-monetary transaction to map existing customer in OFSLL to account.
New Asset Transaction	New transaction to associate an existing Asset to Account.
Add Business Customer to the Account from UI	Ability to add business Customer on to the Account from User Interface. Add button is available on the Business tab to add a new Business Customer and disable old Business customer.
Rate Increase / Decrease transaction	Ability to Increase/Decrease the Rate of Interest on the Account.
New transactions to update and have history of Customer scores for Individual and Business.	<ul style="list-style-type: none"> On posting 'Customer Score Update' transaction, details are captured under 'Customer Service > Customer Details > Customer > Customer Score (new tab). On posting 'Business Score Update' transaction, details are captured under 'Customer Service > Customer Details > Business > Business Score (new tab).
Reason Code field to map to all non-monetary transactions	'Reason Code' seed data is available in User defined tables. On mapping the same to any non-monetary transaction, captures the reason while posting the transaction.
Conversion Enhancements	
Conversion Enhancement for Line.	User Interface enhancements to show Line Accounts in the Account Conversion screen.
Conversion Using a File upload – Condition upload.	Enhanced Conversion process to consume account conditions dat file.
Conversion Using a file upload – Bankruptcy Information	Enhanced Conversion process to consume 'Bankruptcy' information dat file.
Link Customer Based on Customer Number <i>Note: This details are added during subsequent update during April 2021</i>	<p>Following set of new system parameters are introduced to determine if Customer/Business/Asset number are to be auto generated during account on-boarding/Conversion process.</p> <p>SYP_AUTO_GEN_BUS_NBR SYP_AUTO_GEN_CUS_NBR SYP_AUTO_GEN_ASE_NBR SYP_LINK_EXISTING_CUSTOMER UPR_PRO_NBR_SYS_GENERATED UVN_VEN_NBR_SYS_GENERATED</p>
Technical Enhancements	

Enhancement	Description
Extensibility Enhancements	<p>Following extensibility is supported with current release:</p> <ul style="list-style-type: none"> • Satellite applications access from base application through OAuth 2.0 token based REST service authentication. • User Defined Extensible fields at each Entity in all layers UI, Services, backend (Producer Screen).
EBR Enhancements – Phase II	<p>EBR enables online application upgrade with uninterrupted availability of the application. When the installation of an upgrade is complete, the pre-upgrade application and the post-upgrade application are available at the same time.</p> <ul style="list-style-type: none"> • Replaced table references with base view in all EVW, FVW and JWV, RVW, SVW, Views references • Created View for all tables • Added intelligence to installer to create BVW as editionable / non-editionable based on configuration of schema.
Lease Seed Data updates	<p>Enhanced Lease module with seed data to compute default Fee Balances. Transaction added for Inspection Fee, Damage Fees, Reconditioning Fees, Purchase Fee, Inspection Fee, and Transportation Fee.</p>
Web service changes	<p>Following web services are introduced:</p> <ul style="list-style-type: none"> • Generate OAuth2.0 Token • Validate OAuth2.0 Token • Webhook • Vendor • Vendor Comments • Producer • Producer Comments • Producer Contacts • Producer Compensation • Producer Statements • Producer Subvention • All Account Tracking Attributes • Monetary Transaction History • Asset • Asset Valuation
SOAP Web service Deprecation	<p>From the current release, deprecated all the existing SOAP services from base version.</p>
Change to existing Web services	<p>Following web services are modified:</p> <ul style="list-style-type: none"> • Account On-boarding • Account Details • Account Search Service • Payment Posting • Customer Payment Posting • Business Payment Posting • Asset
Associate New Asset Transaction	<p>New Non-Monetary transaction is available to associate non-primary asset to an Account.</p>

2.1 Master Account

2.1.1 Overview

This feature gives flexibility to Mark an Application/Account as Master Account and link other Accounts (Loan, Line, and Lease) of the Customer to this Master Account. With this Linking Financial Institute will get the benefits like:

- Link a new application from customer to Existing Master Account.
- Link a new account as an Associated Accounts to a Master Account using Master Account Maintenance Transaction in servicing.
- Make Payment at Master Account and apply to all associated Accounts.
- Ability to post Transactions at Master Account/Associated Accounts which will update all Associated Accounts (Payoff Quote, Due Date Change, ACH, Extension).
- Consolidated Statement at Master Account.
- Complete View of the Customer → Master Account → Associated Accounts.

Origination Changes

1. A new Master Account tab is added under Origination > Application tab next to contract tab.
 - EDIT, VIEW and AUDIT buttons are available in this tab.
 - Following fields are available in Master Account tab.

Field Name	Field Type	LOV Values	Mandatory(Y/N)	Comments
Master Account	Check Box	NA	Y	Check this Check Box to mark a current Application as Master Account. Once this check box is checked "Link to Existing Master Account" LOV will be refreshed "NULL" and made Read Only.
Link to Existing Master Account	LOV	Derived from Master Accounts created under Linked customer to Current Application and the "Link to Existing Customer" flag = Y at Contract (2).	N	This field will be refreshed to NULL and Read-Only, if the Master Account Check box is checked. Use this LOV to link the current application to an existing Master Account. This field will show the : <<Relationship Type>> - Title - Master Account # Once an application funded with Link to existing Master Account field, system will attach the respective account under that Master Account by populating the selected Linked Master Account # in Master Account # field of newly created account in servicing.

Example:

Marking an Application as Master Account:

Application 1001 : Masked as Master Account
After Funding : Account # = 23120191001
Master Account # = 23120191001

Linking an Application to Existing Master Account:

Application 1002 : Link to Existing Master Account # = 23120191111
After Funding : Account # = 23120191002
Master Account # = 23120191111

- Following Contract EDIT added to ensure Billing Cycle and Due day of current application should be same as the Master Account Billing Cycle and Due Day if the current application is going be link to an Master Account.

Edit Name	Default Type	Enabled
BILLING CYCLE AND DUE DAY DOES NOT MATCH WITH THE MASTER ACCOUNT	Warning	N

- If the current application billing cycle and due day is not matching with Master Account, system fires the "Billing Cycle and Due day are not matching with Master Account" edit.
- If current application is linked to existing master Account and product is having "Same billing cycle flag = Y" system will not validate the billing cycle and due day based on same billing cycle flag, the precedence is given to Master Account Billing cycle and Due day.
- Following Contract EDIT added to ensure Product Type of current application should be same as the Master Account Product Type if the current application is going be link to a Master Account.

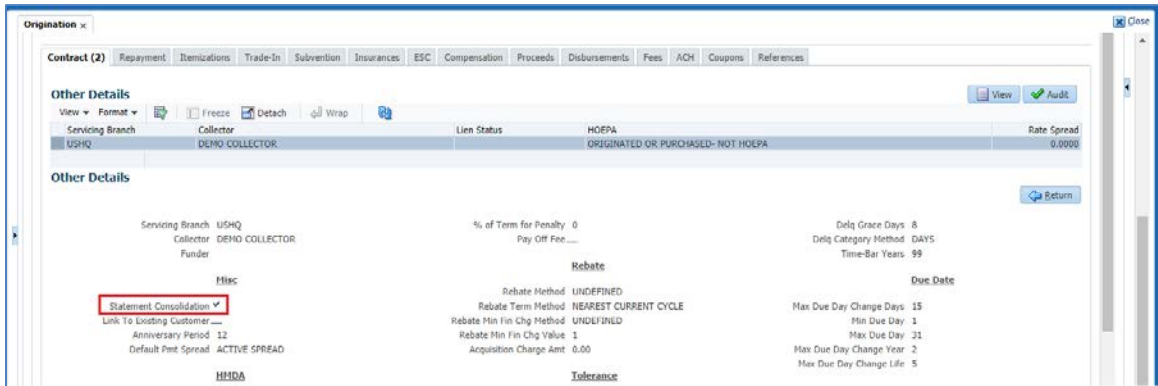
Edit Name	Default Type	Enabled
PRODUCT TYPE DOES NOT MATCH WITH THE MASTER ACCOUNT	Warning	N

- If the current application Product Type is not matching with Master Account, system will fire the "Product Type not matching with Master Account" edit.
- Following EDIT is added to validate Master Account and Application which is going to be Associated are belongs to same Company.

Edit Name	Default Type	Enabled
CURRENT AND MASTER ACCOUNT SHOULD BELONG TO THE SAME COMPANY	Error	N

2. If user wants to create the current application as Master Account, need to check the Master Account check box and once the application is funded, system populates the Master Account # same as Account # in servicing.

3. If the Account # received from external system and the application is marked as Master Account as part of Onboarding, system populates same Account # in Master Account # field once the application funded.
4. A new “Statement Consolidation” flag is added at Origination >Contract (2) and default value is ‘Y’
 - Propagates this flag to servicing >Account Details and Contract (2) as part of funding.



5. Above-mentioned fields added to Master Account section in following web services and API process.
 - Account On-boarding
 - Account Conversion (API Process).

Following validations are applicable to above web services and API process.

- If the Current Application marked as Master Account by checking the “Master Account” check box.
 - Once this check box is checked, “Link to Existing Master Account” field is not required.
 - An edit added to validate “Linked to existing Master Account” field not required when “Master Account” check box is checked.
 - If this edit is set to warning, system will create this application as Master Account and populate the Account # in Master Account # field.

Edit Name	Default Type	Enabled
FOR MASTER ACCOUNT, LINK TO MASTER ACCOUNT FIELD SHOULD BE BLANK	Error	N

- Edit added to validate Master Account belongs to Customers Linked to the Current Application or not.

Edit Name	Default Type	Enabled
CURRENT AND MASTER ACCOUNT SHOULD HAVE AT LEAST ONE COMMON CUSTOMER	Error	N

- Edit added to validate Invalid Master Account #.

Edit Name	Default Type	Enabled

MASTER ACCOUNT # PROVIDED IN LINK TO EXISTING MASTER ACCOUNT FIELD DOES NOT EXIST	Error	N
---	-------	---

- Following edit added to validate Billing Cycle and Due day of current application with Master Account Billing Cycle and Due Day if the current application is going be link to Master Account.

Edit Name	Default Type	Enabled
CURRENT AND MASTER ACCOUNT # SHOULD HAVE SAME BILLING CYCLE AND DUE DAY	Warning	N

- If the current application Billing cycle due day is not matching with Master Account, system will fire the “Billing Cycle and Due day are not matching with Master Account” edit.
- If current application is linked to existing Master Account and product is having “Same billing cycle flag = Y” system will not validate the billing cycle and due day based on same billing cycle flag, the precedence is given to Master Account Billing cycle and Due day.
- Following Contract Edit added to ensure Product Type of current application should be same as the Master Account Product Type if the current application is going be link to a Master Account.

Edit Name	Default Type	Enabled
CURRENT AND MASTER ACCOUNT SHOULD BELONG TO SAME PRODUCT TYPE	Warning	N

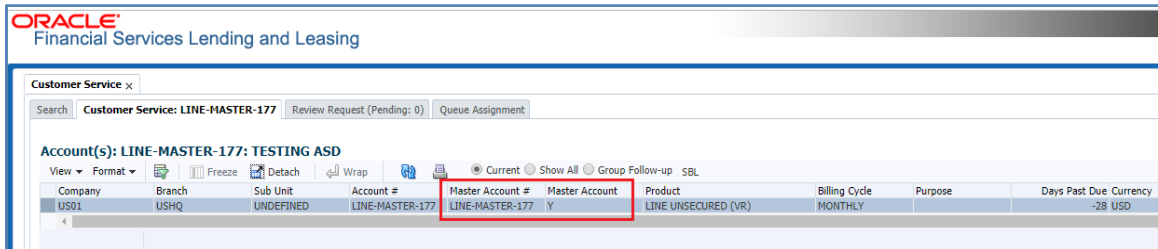
- If the current application Product Type is not matching with Master Account, system will fire the “Product Type not matching with Master Account” edit.
- Edit added to validate Master Account and Associated Account are belongs to same Company.

Edit Name	Default Type	Enabled
CURRENT AND MASTER ACCOUNT SHOULD BELONG TO THE SAME COMPANY	Error	N

Servicing Changes

1. Following fields are added to Servicing > Account (s) table.

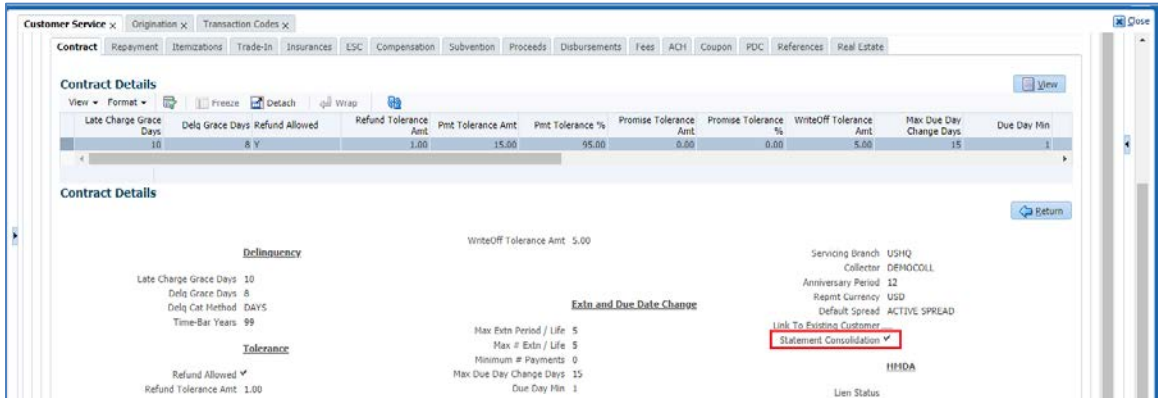
Field Name	Field Type	LOV Values	Mandatory (Y/N)	Comments
Master Account #	VARC HAR	NA	N	<p>Populated same as Account # when a respective Application is marked as Master Account at the time of funding.</p> <p>Populated with provided Account # (Master Account #) if linked to an Existing Master Account at the time of Funding.</p> <p>If the Application neither marked as Master Account nor linked to any existing Master Account then this field will be blank.</p>
Master Account	Check Box	NA	Y	<p>New account level flag propagated from Origination.</p> <p>Display the Master Account indicator next to the Master Account # in Account (s) table.</p>



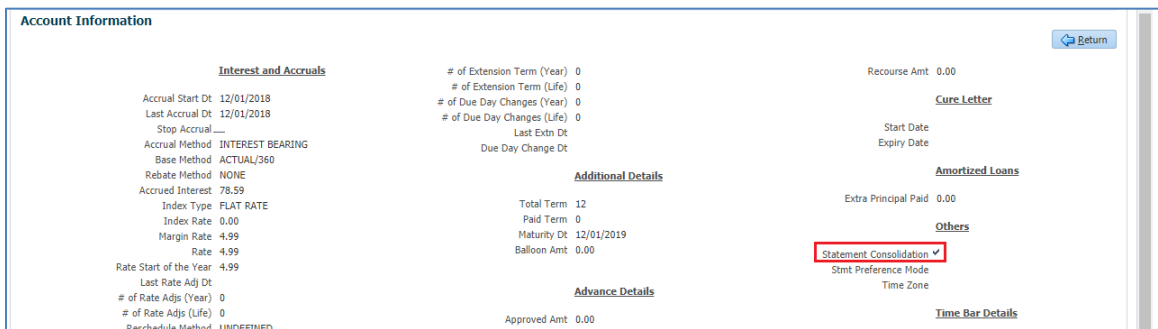
2. Above two fields are part of
 - Queue Parameters
 - Condition Criteria Parameters
 - Correspondence Elements
3. A new "Statement Consolidation" flag is added at Servicing >Account Details and Servicing >Account details >Contract information >Contract.

Field Name	Field Type	LOV Values	Mandatory(Y/N)	Comments
Statement Consolidation	Read Only	NA	Y	Propagated from Origination > Contract (2).

Servicing >Account details >Contract information >Contract



Servicing >Account Details



- If this flag is set to “Y”, this associated account will added to Statement Consolidation at Master Account.

4. A new Master Accounts sub tab is added under Servicing >Customer Credit Limit >Customer / Business >Credit Limit Details section.

- Following fields added to Master Account Detail’s table.
- This tab will be access controlled.

Field Name	Field Type	Comments
Account #	Read Only	
Title	Read Only	
Relation	Read Only	This field is not applicable for Business
Product	Read Only	
Currency	Read Only	
Billing cycle	Read Only	
Delq Days	Read Only	
Pay Off Amount	Read Only	
Amount Due	Read Only	

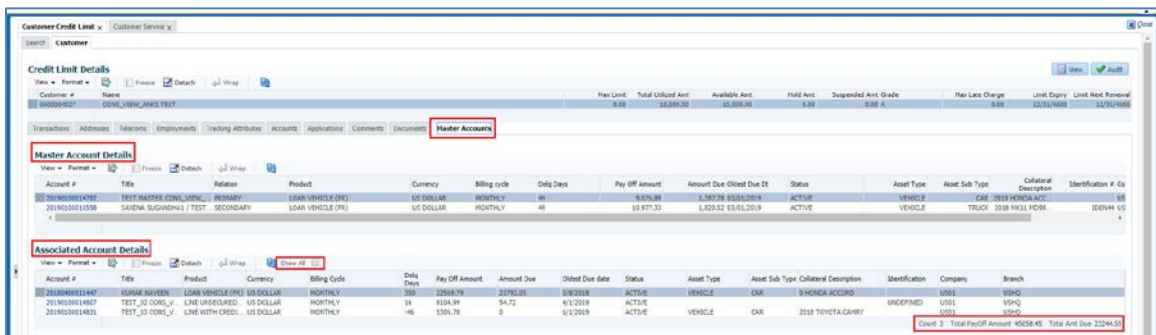
Field Name	Field Type	Comments
Oldest Due Dt	Read Only	
Status	Read Only	
Asset Type	Read Only	
Asset Sub Type	Read Only	
Collateral Description	Read Only	
Identification #	Read Only	
Company	Read Only	
Branch	Read Only	

- The “Associated Account Details” table is added under Customer Credit Limit >Customer/Business >Master Account Sub tab.
 - This “Associated Account Details” table will show the accounts where Account(s) > Master Account # is equal to selected Master Account # at Master Account details header level.
 - Following fields are available in “Accounts” table

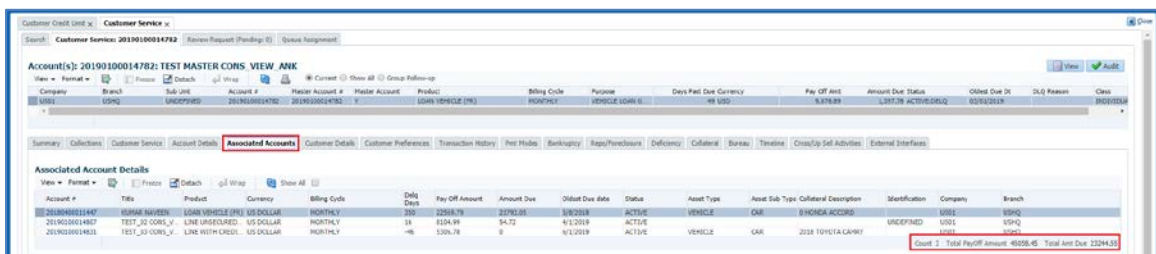
Field Name	Field Type	Comments
Account #	Read Only	
Title	Read Only	
Relation	Read Only	This field is not applicable for Business
Product	Read Only	
Currency	Read Only	
Billing cycle	Read Only	
Delq Days	Read Only	
Pay Off Amount	Read Only	
Amount Due	Read Only	
Oldest Due Dt	Read Only	
Status	Read Only	
Asset Type	Read Only	
Asset Sub Type	Read Only	

Collateral Description	Read Only	
Identification #	Read Only	
Company	Read Only	
Branch	Read Only	

- Displays the Primary Collateral Description and Identification #.
 - No Collateral Description shown for Home Collateral.
- A hyperlink added on “Account #” which will open the respective account in servicing.
- If user is does not have access to Servicing, system shows an error message saying “No access available”.
- “Total Pay off Amt” and “Total Amt Due” field shown bottom of the Accounts table, which includes the Associated Account’s and Master Account Dues and Payoff Amounts.
 - This table shows the accounts having same currency as Master Account.
- A new Show All radio button added to show all the associated accounts with Master Account irrespective of Currency. In this case, no “Total Pay off Amt” and “Total Amt Due” fields displayed.
 - Default value of radio button is ‘N’.
- A “Count” field added at the bottom of the table to display the total number of records displaying in Associated Account Details table.



5. The new “Associated Accounts” tab is added under “servicing >Account(s)” which will display the Associated Account to Master Account. (Account level Master Account # = Master Account #).



- Following fields are available in “Associated Accounts” table.

Field Name	Field Type	Comments
Account #	Read Only	

Field Name	Field Type	Comments
Title	Read Only	
Product	Read Only	
Currency	Read Only	
Billing cycle	Read Only	
Delq Days	Read Only	
Pay Off Amount	Read Only	
Amount Due	Read Only	
Oldest Due Dt	Read Only	
Status	Read Only	
Asset Type	Read Only	
Asset Sub Type	Read Only	
Collateral Description	Read Only	
Identification #	Read Only	
Company	Read Only	
Branch	Read Only	

- Displays the Primary Collateral Description and Identification #.
 - No Collateral Description shown for Home Collateral.
 - A hyperlink added on “Account #” which will open the respective account in servicing.
 - If user is not having the access to Servicing, system will show an error message saying “No access available”.
 - “Total Pay off Amt” and “Total Amt Due” field shown bottom of the Accounts table, which should include the Associated Account’s and Master Account Dues and Payoff Amounts.
 - This table shows the accounts having same currency as Master Account.
 - A new Show All radio button added to show all the associated accounts with Master Account irrespective of Currency. In this case, no “Total Pay off Amt” and “Total Amt Due” fields displayed.
 - Default value of radio button is ‘N’.
 - A “Count” field added at the bottom of the table to display the total number of records displayed in Associated Account Details table.
6. A new non-monetary transaction added to update “Statement Consolidation” flag at Servicing >Account Details.

Description	Group	Action	Monetary	System Defined Yes/No	Enabled	Txn/Bal Type	Statement Txn Type	Batch	Manual	Statement Print	GL
STATEMENT CONSOLIDATION FLAG MAINTENANCE	Accounts	POST	N	No	N	NONE	NONE	N	Y	N	N

- Following are the Transaction parameters.

Parameter Name	Parameter Type	LOV Values	Default Values	Displayed (Y/N)	Mandatory (Y/N)	Comments
TXN DATE	Date	NA	System Date	Y	Y	Transaction posted date
STATEMENT CONSOLIDATION INDICATOR	LOV	YES NO	NO	Y	Y	To update the flag based on provided value
Process Master Associated Accounts	LOV	YES NO	NO	Y	Y	To define whether the transaction expected to post at Current Account or "Master Account and Associated Accounts".
PROCESS SAME PRODUCT TYPE AND FUNDING TYPE ACCOUNTS	LOV	YES NO	NO	Y	Y	If the Parameter set to Y, post this transaction to Associated Accounts where the Product Type is equal to Current Account Product Type where this transaction posted. If the Parameter set to N, Post to all the Accounts under a Master Account.
REASON CODE	LOV	NA	NA	Y	N	Reason code for posting this transaction.
COMMENTS	Text Box	NA	NA	Y	N	Provide if any related comments

- This transaction update the current filed in Account Details >Other > Exclude Statement Consolidation.
7. A new non-monetary transaction “MASTER ACCOUNT MAINTENANCE” added to link an account to an existing Master Account, or to move from one Master Account to other or to remove from a Master Account. This transaction allowed to post from Servicing >Account >Customer Service >Maintenance.

Description	Group	Action	Monetary	System Defined Yes/No	Enabled	Txn/Bal Type	Statement Txn Type	Batch	Manual	Statement Print	GL
MASTER ACCOUNT MAINTENANCE	Accounts	POST	N	No	N	NON E	NON E	N	Y	N	N

- Following are the Transaction parameters when the transaction posted from Account.

Parameter Name	Parameter Type	LOV Values	Default Values	Displayed (Y/N)	Mandatory(Y/N)	Comments
Date	Date	NA	System Date	Y	Y	Transaction posted date
Account Number	Text Box	NA	NA	Y	Y	Which account need to be attached/Move/Remove to/from new Master Account. This field only allow the accounts where the selected customer linked. If there is an invalid account number, system shows an error message saying “Invalid Account #” and not allowed to post the transaction.
Master Account Number	Text Box	NA	NA	Y	Y	This filed have the Master Account # to which the current account is going to mapped or removed. If there is an invalid Master Account #, system shows an error message saying “Invalid Master Account #” and not allowed to post the transaction.
Maintenance Type	LOV	ADD / UPDATE / REMOVE	ADD	Y	Y	To decide whether to ADD/UPDATE/REMOVE a Master Account.

Parameter Name	Parameter Type	LOV Values	Default Values	Displayed (Y/N)	Mandatory(Y/N)	Comments
VALIDATE COMMON CUSTOMER BETWEEN ACCOUNT AND MASTER ACCOUNT	Check Box	NA	Y	Y	Y	<p>This field is to define whether the common customer between the account and Master Account validated or not.</p> <p>If the Parameter = Y and if there is no common customer between Account and Master Account, system shows an error message “No Common Customer found” and not allowed to post the transaction.</p> <p>If this parameter = N and is there are no customer exists between Account and Master Account still system will allow to post this transaction.</p>
VALIDATE BILLING CYCLE AND DUE DATE BETWEEN ACCOUNT AND MASTER ACCOUNT	Check Box	NA	Y	Y	Y	<p>This field is to define whether the same Billing Cycle and Due Day between the Account and Master Contract validated or not.</p> <p>If the Parameter = Y and if the Billing Cycle and Due Day of the Account is different from Master Account Billing Cycle and Due Day, system shows an error message “Billing Cycle and Due day are not matching with Master Account” and not allowed to post the transaction.</p> <p>If this parameter = N and if the Billing Cycle and Due Day is different still system will allow to post the transaction.</p>
VALIDATE PORTFOLIO COMPANY BETWEEN ACCOUNT AND MASTER ACCOUNT	Check Box	NA	Y	Y	Y	<p>Master Account provided in transaction parameters and the Account where this transaction posted are belongs to same Company or not.</p> <p>If the Parameter set to Y, system validate if the Master Account and Account where this transaction posted are belongs to different company and show an error message saying “Company mismatch”.</p> <p>If the Parameter set to N, system will not validate the company is same or not.</p>

Parameter Name	Parameter Type	LOV Values	Default Values	Displayed (Y/N)	Mandatory(Y/N)	Comments
Process Master Associated Accounts	LOV	Yes No	No	Y	Y	To define whether the transaction to be posted at Current Account or "Master Account and Associated Accounts". Txns appear in BMT (both monetary and non-monetary) as well as in Txn history (only monetary).
PROCESS SAME PRODUCT TYPE AND FUNDING TYPE ACCOUNTS	LOV	Yes No	No	Y	Y	If Parameter set to Y, post this transaction to Associated Accounts where the Product Type is equal to Current Account Product Type where this transaction posted. If Parameter set to N, Post to all the Accounts under a Master Account.
Reason	LOV	NA	NA	Y	N	Reason code for posting this transaction.
Comment	Text Box	NA	NA	Y	N	Provide if any related comments

- If the above transaction posted from current Account, Validate Account # parameter should be same as Current Account #.
- If the above transaction posted from Master Account, Validate Master Account # parameter should be same as Master Account #.
- For Add, if Master Account # <> UNDEFINED, Error message "ACCOUNT IS ALREADY LINKED WITH ANOTHER MASTER ACCOUNT".
 - Once this transaction posted successfully, system update the Master Account # in Account level Master Account field.
 - Comment posted on all involved accounts i.e. Master Account and Associated Account.
- For Remove, if Master Account # = UNDEFINED, Error message "ACCOUNT IS NOT LINKED TO GIVEN MASTER ACCOUNT".
 - Comment posted on all involved accounts i.e. Master Account and Associated Accounts.
- For Update, Overwrite the master account number of current account with Master Account # provided in Transaction Parameters.
 - Comment posted on all involved accounts i.e. Master Account and Associated Accounts.
- If the transaction posting fails in any one of the account the transaction will be roll back from all the accounts and shows an error message "Transaction failed to post in <<Account #>> and shouldn't allow to post this transaction.

Note: In case of replacing a primary customer due to deceased primary customer, user is expected to move the accounts under deceased customer >Master Account to new customer Master Accounts manually.

8. Handling of "MULTIPLE ACCOUNTS EXIST" condition:

- This condition open/close in all of following scenarios:
 - When account created using Origination Funding, Account Boarding WS, API/Conversion Process and results in more than 1 associated account under a Master Account, then system opens this Condition on Master Account.
 - When "MASTER ACCOUNT MAINTENANCE" txn posted which resulted in either adding more account under Master Account due to Add/Update or reduced accounts due to Remove and result in more than one account under a Master Account then Open this Condition on Master Account.
 - If Results in Less than or Equal to One Associated Account Remove the Condition.

Web Services

1. Existing Account Onboarding Service enhanced to support creating the Master Account and Associated accounts using single payload.

- Following fields added to Existing Account Onboarding Web Service.

Field Name	WS Element	Field Type	LOV Values	Mandatory(Y/N)	Comments
Master Account #	MasterAccountNumber	VARCHAR	NA	N	At Associate Accounts, This filed indicates which Master Account this Associated Account linked. If a Master Account and their Associate Accounts are going to be created with a single payload and the AUTO GENERATE ACCOUNT NUMBER FOR CONVERSION PROCESS= N, this filed indicates, Associated Accounts are going to be linked to which Master Account.
Master Account Xref #	MasterAccountXrefNumber	VARCHAR	NA	N	At Associate Accounts, This filed indicates which Master Account Xref this Associated Account linked. If a Master Account and their Associate Accounts are going to be created with a single payload and the AUTO GENERATE ACCOUNT NUMBER FOR CONVERSION PROCESS = Y, this filed indicates, Associated Accounts are going to be linked to which Master Account.

Field Name	WS Element	Field Type	LOV Values	Mandatory(Y/N)	Comments
Master Account	MasterAccountIndicator	Check Box	NA	Y	Flag to Indicate Application/Account as Master Account.
Statement Consolidation	StatementConsolidateIndicator	Check Box	NA	Y	Flag to Indicate whether the Associated Account Statement allowed to Consolidated at Master Account or Not.

- If a Master account linked to more than one account as part this service, system posts a condition "MULTIPLE ACCOUNTS EXISTS" on Master Account.
- If the Master Account indicator provided for an account then system should create that account as master account. Here the Existing Master Account number is not required.
- Existing Account Onboarding validations should be applicable to this web service

Assumptions:

- Above services are able to onboard all product types [Loan, Line and Lease]
 - Above service are able to onboard with all product combinations.
 - Ex: Onboard Master Account as a Line of credit
 - 10 Loan Accounts with Vehicle Collateral
 - 5 Lease Accounts with Other Collateral
 - 5 Line Accounts with Unsecured
 - Above services onboard all Collateral Types [Vehicle, Home and Other]
2. Existing Get Account Details web services enhanced to get the Master Account and Associated Account details by sending the Master Account # and Display Associated Accounts fields as request parameters.

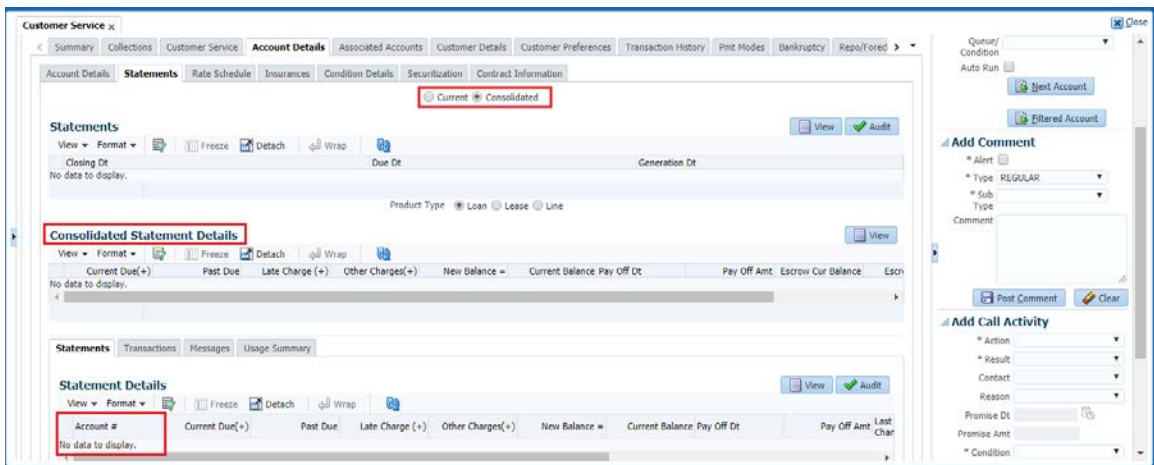
Request Get Account Details Service:

- Account #
- Display Associated Accounts (Optional)
- If the Account # given as part of request Parameter, system will give the respective account details as part of response.
- If the user provides Account # and Display Associated Accounts flag = Y as part of request, System checks if the provided Account is Master Account,
 - If yes, Respective Master Account Details and all the Associated Account details provided as part of response.
 - If No, System shows an error message "Provided Account # is not a Master Account".
- If the Account # and Display Associated Account flag = N is given as part of request Parameters, system will give the respective account details.

Consolidate Master Account Statement

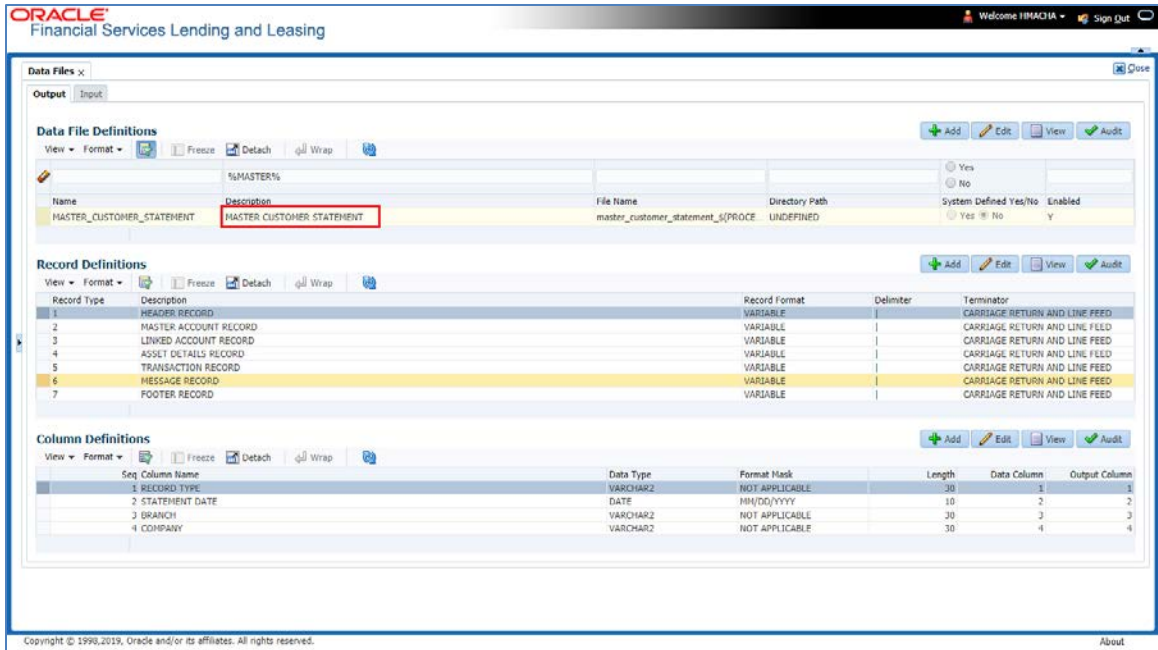
1. New radio buttons 'Current' and 'Consolidated' are available only in Master Account to view statements of current Master Account and consolidated Statements of Master Account and Associated Accounts.

- On selection of “Consolidated” radio button, System displays a table called Consolidated Statement Details. This is similar to existing Statement details with consolidation of statements associated with Master Account.
 - “Loan, Line and Lease” radio buttons added to group the consolidated statements based on Product/Funding type.
 - The default Product type is Master Account Product type.
 - The table fields are similar to existing statement fields of Loan Line and Lease.
- If the User selects Current Radio button, system hide the Consolidated Statement Details table and the Account # field from Statement, Transactions, Messages and Usage Summary.(As Is)
- Consolidation Statement details table should include associated accounts where the “Statement Consolidation flag = Y” along with Master Account Statement.
- A new Account filed added in Statement, Transactions and Messages.
- System excludes the Associated Accounts that belongs to different currency other than Master Account.



- A new batch job “MASTER ACCOUNT STATEMENTS GENERATION” added in batch job set “SET-ODD2” to generate consolidated Master Account statements.

- Following are the sample file formats:
Reference 1: [master_customer_statement_20170404.txt](#)
Reference 2: [statement.xlsx](#)



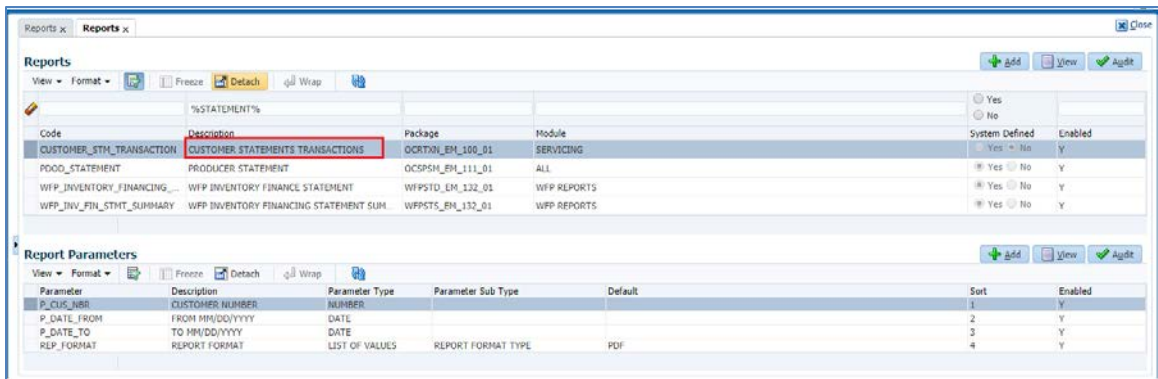
CUSTOMER STATEMENT TRANSACTIONS Enhancement:

2. "Master Account #" field is added to existing "CUSTOMER STATEMENT TRANSACTIONS" report input parameters.

Parameter Name	Parameter Type	Comments
Master Account #	Text Filed	Master Account #'s linked to Customer #

- If user provides only Customer #, System will generate the report with accounts associated with the customer (Existing feature).
- If user provides the Customer # and Master Account # combination, system will generate the report with the accounts, which are in that combination.
- Master Account # field added to Report Header along with Customer #.

Txn DATE	Txn Description	Amount
12/11/2017	LATE CHARGE	30
11/11/2017	LATE CHARGE	30
10/11/2017	LATE CHARGE	30
09/11/2017	LATE CHARGE	30
08/11/2017	LATE CHARGE	30
07/11/2017	LATE CHARGE	30



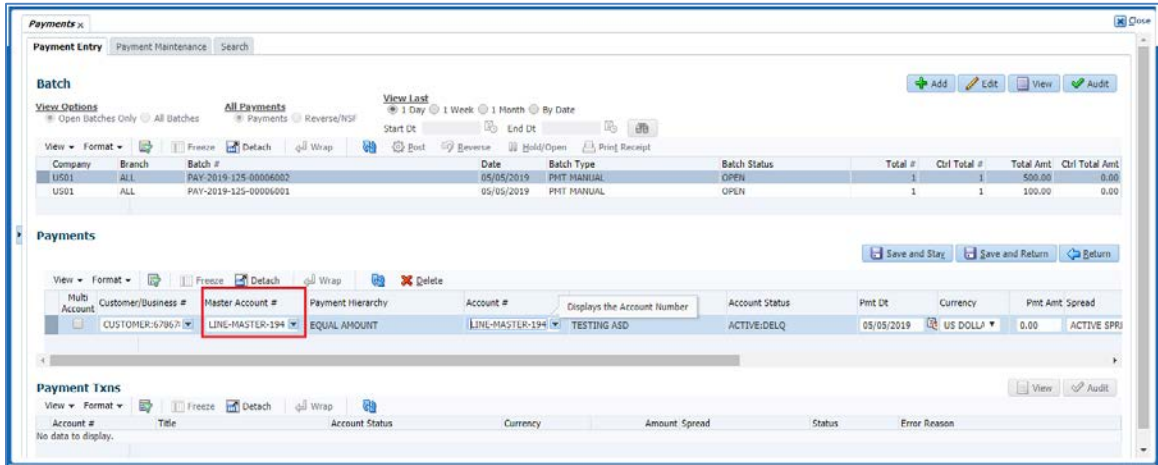
Payment at Master Account level:

1. The “Master Account #” LOV is added to Payment Entry >Payments table after the Customer # field.

Field Name	Field Type	Mandatory(Y/N)	Comments
Master Account #	LOV	N	This field used to provide the Master Account # linked to Customer #.

- A system parameter added to render the Master Account # in Servicing >Payment Entry.
 - Even though the existing “CUSTOMER BASED PAYMENT = N” and the above parameter is Y, system will render the “Payment Hierarchy” and “Populate Accounts” fields.
 - When user selects the Multi Account flag = Y, “Payment Hierarchy” and “Populate Accounts” fields will be enabled (as its happening for Customer based payments).
- This LOV shows the Master Accounts associated with the customer selected in Customer # field.
- If user provides “Customer #, Master Account # and Payment Hierarchy” values and click on populate button, system first filters the accounts based on Customer # and Master Account # and apply the payments based on payment hierarchy and populate the records in Payment Txns block.
- If the customer # not selected, then system shows all the Master Account #'s belongs to selected Company/Branch at Batch level.
- If the user selects only Master Account number then the Account # filed shows the Accounts under selected Master Account in case of single payments.
- If user selects Multi Check box and provides only Master Account and Payment Hierarchy values and click on populate Accounts button, system first filters the accounts related Master Account # and apply the payments based on payment hierarchy, and populate the records in Payment Txns block.
- If user provides only the Customer # and Payment hierarchy and click on “Populate Accounts” button, system populates the accounts related to Customer # and apply the payment based on payment hierarchy. (Existing Functionality).
- Same field should be available in Customer Based payments (Customer/Business) web services as request parameter.
 - Customer # or Master Account # is mandatory.
 - Rest of the existing validation are As Is.
- Same field added to Customer Based Payments (Customer/Business) file upload.

- Customer # or Master Account # is mandatory.
 - If the Customer # field provided then only “Customer Type” filed validated.
 - Rest of the existing validation should be As Is.
- Reference: [CustomerBasedPayments.xls](#)
- This field added to customer based payments child section along with Customer #.



Transaction posting at Master Account level:

1. When following transactions posted at the Master Account level, Same Transaction posted in all the accounts under the Master Account based on transaction parameter.
 - The following parameter added to below transactions to define whether the transaction needs to post at specific Master Account or Master Account and Associated Accounts.

Parameter Name	Parameter Type	LOV Values	Default Values	Displayed (Y/N)	Mandatory (Y/N)	Comments
PROCESS MASTER ASSOCIATED ACCOUNTS	LOV	Yes No	No	Y	Y	To define whether the transaction posted at Current Account or “Master Account and Associated Accounts”.
PROCESS SAME PRODUCT TYPE AND FUNDING TYPE ACCOUNTS	LOV	Yes No	No	Y	Y	To define whether to Post this transaction to Account which are having same product as Current Account where this transaction posted. This parameter will be considered only when PROCESS LINKED ACCOUNTS parameter is Y.

- DUE DATE CHANGE and DUE DATE CHANGE OVERRIDE.

Result: [BEFORE]

Current Due Date = << Due Date>>

Next Due Date = << Due Date>>

[AFTER]

Current Due Date = << Due Date>>

Next Due Date = << Due Date>>

***** Transaction Posting Successful *****

Error Message: <<Unable to post the transaction in <<Account #>> >>

- ACH

- NEW ACH MAINTENANCE

- ACH ONE TIME PHONE PAY

- ACH STOP ALL ACCOUNT ACH

- ACH FEE MAINTENANCE

- Result: ***** Transaction Posting Successful *****

- Error Message: <<Unable to post the transaction in <<Account #>> >>

- Extension

- Result: ***** Transaction Posting Successful *****

- Error Message: <<Unable to post the transaction in <<Account #>> >>

- Extension Override

- Result: ***** Transaction Posting Successful *****

- Error Message: <<Unable to post the transaction in <<Account #>> >>

- Payoff Quote

Master Account 1 has 5 Accounts associated

Payoff Quote at MA1

Total Payoff Quote = <<Sum of 5 Accounts + Master Account Payoff Quote Amount>>

Master Account 1 Payoff Quote

<<Details>>

Account 1 Payoff Quote

<<Details>>

Account 2 Payoff Quote

<<Details>>

Account 3 Payoff Quote

<<Details>>

Account 4 Payoff Quote

<<Details>>

Account 5 Payoff Quote

<<Details>>

Error Message: <<Unable to post the transaction in <<Account #>> >>

- If the Payoff Quote Txn posted from non-master accounts with “Process Master Associated Accounts” is set to Y, system shows an error message saying “PROCESS MASTER ASSOCIATED ACCOUNTS and PROCESS SAME PRODUCT TYPE AND FUNDING TYPE ACCOUNTS should be N” and should not allowed to post the transaction.
- If this transaction is posted from Master Account and “PROCESS MASTER ASSOCIATED ACCOUNTS = Y, system posts this transaction in accounts which are having the same currency as Master Account.
- If this transaction is posted from Master Account and “PROCESS MASTER ASSOCIATED ACCOUNTS = Y and PROCESS SAME PRODUCT TYPE AND FUNDING TYPE ACCOUNTS = Y”, system posts this transaction in accounts which are having the same currency as Master Account.
 - If the transaction failed to post in any one of the account, system reverts from all the accounts and show the error message in Result block of account where the transaction posted.
Error Message: <<Unable to post the transaction in <<Account #>> >>
- All existing validations should be applicable for above transactions.

2.1.2 **Seed Data**

Refer '[Appendix: Seed Data](#)' chapter.

2.2 **Business only Account**

2.2.1 **Overview**

Previously, OFSLL enforces to add Primary Applicant along with the Business/SME. After this release, user can able to create the Business only account i.e., user can create the account without any individual customer and service using the business details.

2.2.2 **Description**

Setup > Product > Contract > Itemizations

- 'CUSTOMER' lookup in DISBURSEMENT_TYPE LOV renamed as 'Customer / Business' because of same contract can be used for Business or Customer.
- If product is 'Direct', and If application/account is business only, then AP will create with business details
- While running the credit refund batch job, system will create the AP transaction with business details for business only account

Customer Service > Customer Service > Correspondence / Letters

- Provided the new Lookup under CORR_MULTI_RECIPIENT_TYPE_CD, as 'Business' for setting up the business correspondences
 - While user generating the Correspondence from the 'Correspondence' tab, if Business details were not there then system shows an error.
 - If the Recipient is business only and business Stop Correspondence is 'Y', then system shows an error.
- Provided the new Lookup under RECIPIENT_TYPE_CD as 'Business'
 - While selecting the recipient as 'Business' under 'Correspondence > Recipient Details' and 'Letters > Recipient Details', system will enable the Mode and Type fields and if user selects the mode and type as eMail, then system will populate the email id from the business details.
 - If Stop Correspondence flag enabled, then system should will show an error on click of send button.

Note: Batch jobs that generates the letters are not part of this release. User can generate the letters for business only account manually, view it on screen and send from UI.

Customer Service > Customer Details > Business

- Provided a new lookup value under the APP_CLASS_TYPE_CD as 'BUSINESS ONLY' to differentiate the business only account
- System will disable the 'Customer Details > Customer' tab and renames the 'Customers Details' tab with 'Business Details' tab.
- On click of Add/Edit following fields are available for modification, except 'Bankruptcy' and 'Update Business Info'

Description	Input/Selectable/Display Only	Object Type	Mandatory Y/N	Data Type/Size	Field Validation	Default Values	Comments
Stop Correspondence Skip Bankruptcy Privacy Opt Out Insurance Opt Out Marketing Opt Out Share Credit opt Out	Selectable	Check Box	Y	Varchar		N	
Update Business Info	Selectable	Check Box	N	Varchar		N	
Email	Input	Text	N	Varchar	Existing Email check	Null	

Customer Service > Customer Details > Business > Address

- On click of Add/Edit following fields are available for modification, except 'Time Zone';
- Populate Time zone from the Business Details, and propagate from the Account onboarding service.

Description	Input/Selectable/Display Only	Object Type	Mandatory Y/N	Data Type/Size	Field Validation	Default Values	Comments
Confirmed Mailing	Selectable	Check Box	Y	Varchar		N	
Time Zone	Selectable	LOV	N	Varchar	TIME_ZONE_CD	Lookup Default	

Customer Service > Customer Details > Business > Telecom

- While user adding a new telecom, each time system will validate there is only one current record exist. i.e., if new telecom been added with current, then if any record exist with the same type, change the previous records' current indicator as 'N' and save the new telecom as 'Y'
- On click of Add/Edit these fields will be available for selection

Description	Input/Selectable/Display Only	Object Type	Mandatory Y/N	Data Type/Size	Field Validation	Default Values	Comments
Time Zone	Selectable	LOV	N	LOV	TIME_ZONE_CD	Null	
Best Day to Call	Selectable	LOV	N	LOV	CALENDAR_DAYS_CD	Null	
Start Time	Input	Text	N	Time	24 hr time	Null	
Period	Selectable	LOV	N	LOV	TIME_PERIOD_CD	Null	
End Time	Input	Text	N	Time	24 hr time	Null	
Period	Selectable	LOV	N	LOV	TIME_PERIOD_CD	Null	

Servicing → AP Transactions

- Added new 'Business' radio button under 'Payee Type'
- If any payable transactions that created for business system will create the AP transaction and populates the Payee Name with 'Business Name' and Address details with 'Business Address Details' for business only account.

Customer Service > Maintenance

- Following new transactions made available for Business Only and SBL Accounts

Txn Code	Txn Description	Txn Parameters
BUS_BANKRUPTCY_INFO	BUSINESS BANKRUPTCY REPORTING INDICATOR	BANKRUPTCY INDICATOR BANKRUPTCY DISPOSITION BANKRUPTCY TYPE EFFECTIVE DATE
BUS_CON_ADR_MAINT	BUSINESS ADDRESS CONFIRMATION	TXN DATE CONFIRMED ADDRESS INDICATOR BUA ADDRESS TYPE CODE
BUS_NAME_MAINT	BUSINESS NAME MAINTENANCE	TXN DATE BUSINESS NAME BUSINESS LEGAL NAME
BUS_PH_MAINT	BUSINESS PHONE MAINTENANCE	TXN DATE

Txn Code	Txn Description	Txn Parameters
		BUA PHONE BUA ADDRESS TYPE CODE PERMISSION TO CALL IND
BUS_PRIVACY_I NFO	BUSINESS OPT-OUT PREFERENCES (PRIVACY OPT-OUT)	TXN DATE PRIVACY OPTOUT INSURANCE OPTOUT SHARE CREDIT OPTOUT MARKETING OPTOUT
BUS_SKIP_MAINT	BUSINESS SKIP	TXN DATE BUSINESS SKIP INDICATOR
BUS_STOP_COR R_MAINT	BUSINESS STOP CORRESPONDENCE	TXN DATE BUSINESS STOP CORR INDICATOR

- Added new parameters to the following existing non-monetary transactions

Txn Code	Txn Description	Txn Parameters
BUS_TEL_MAINT	BUSINESS TELECOM MAINTENANCE	BEST CALL START TIME BEST CALL START TIME PERIOD
BUS_NEW_TEL	ADD BUSINESS TELECOM	BEST CALL END TIME BEST CALL END TIME PERIOD TELECOM TIME ZONE BEST DAY TO CALL
BUS_ADD_MAINT	NEW BUSINESS MAINTENANCE	BUSINESS TIME ZONE BUSINESS SKIP INDICATOR BUSINESS STOP CORR INDICATOR BUSINESS ENABLED INDICATOR PRIVACY OPTOUT BUSINESS EMAIL ADDRESS1
BUS_MAINT	BUSINESS MAINTENANCE	BUSINESS TIME ZONE REASON CODE

Servicing > Batch Transactions > Payments > Payment Entry

- Renamed, Customer # with 'Customer / Business #'

Customer Service > Bureau

- Disabling this tab for business only account

System Monitor > Batch Job

- While running the below batch jobs, system will refer the Business Details for business only account
 - SET-PRQ > PCUPRC_BJ_100_01 > CUSTOMER REFUND PAYMENT REQUISITIONS
- If the business only account having the credit balance and while running this batch job, system will create the AP transaction with the business details
 - SET-IFP > ICPPRC_BJ_100_01 > CUSTOMER PAYMENT FILE UPLOAD
- If the payment uploads happening with business details and those accounts are business only account, system will process the payments
 - SET-LTR2 > LCSSTM_BJ_100_01 > CUSTOMER STATEMENT LETTER
- System will generate the statement using the business details
 - SET-ODD2 > OSTPRC_BJ_100_01 > CUSTOMER STATEMENTS GENERATION
- While running the Archival and Purging, batch jobs system will process the business only and accounts

Account Conversion

- System will convert the business only account with new fields added in the business, telecom and address

Note: Displaying in the UI (conversion screen) is out of scope for this release.

Web services

- Account Search Get WS
 - Added new request parameters to the service
 - Name of the Business
 - Legal Name
 - Tax ID #
 - Business Phone
 - Business Number
- Added following new elements to the response
 - Business Number
 - Name of the Business
 - Business Email Address
 - Business Legal Name
 - ClassType
 - BusinessInd
- New fields added in the business, and telecom also added in the following services

- Account On-boarding
 - Created a new Lookup value under 'APP_CLASS_TYPE_CD' as 'Business Only'
 - If user pass this value then, system will treat that account is Business only
- Account Details
 - As part of the response, system will pass the new elements/blocks as part of the response
 - Also, sharing the securitization results and conditions.

2.2.3 Screen Changes

Customer Service > Customer Service > Correspondence / Letters > Recipient Details

Recipient Details

Recipient	Mode	Type	FAX/Email	Sent Indicator	Comments
				N	

Buttons: Save and Add, Save and Stay, Save and Return, Return

* Recipient: BUSINESS | * Mode: EMAIL | * Type: EMAIL | FAX/Email: PAVAN@YMAIL.COM

Customer Service > Customer Service > Customer / Business Details

Business Details

Current	Business #	Organization Type	Type of Business	Business Category	Name of the Business	Legal Name	Tax ID #
Y	000002061	C CORP	SERVICE		str123	str123	xxxxx5119

Buttons: Add, Edit, View, Audit

Customer Service > Customer Service > Customer / Business Details > Edit

Business Details

Business # 000002061 | * Organization Type: C CORP | * Type of Business: SERVICE

* Management Since: 123 | Payment Hierarchy: EQUAL AMOUNT

* Stop Correspondence

- * Slip
- * Privacy Opt Out
- * Insurance Opt Out
- * Marketing Opt Out
- * Share Credit Opt Out

Credit Limit Details
Max Limit: 0.00

Utilization Details
Total Utilized Amt: 0.00
Available Amt: 0.00
Hold Amt: 0.00
Suspended Amt: 0.00
Grade: ---
Max Late Charge: 0.00
Limit Expiry: 12/31/4000
Limit Next Renewal: 12/31/4000
% of Utilization: 0.00
Utilization Amount: 0

Customer Service > Customer Details > Business > Address

Address Information

Save and Stay Save and Return Return

* Current
* Permission to Call
* Permission to Text
Confirmed
Mailing

Address Type: WORK
* Country: UNITED STATES
* Postal Type: NORMAL ADDRESS
Address #: BKC

Street Pre: EAST
Street Name: RAY ROAD
Street Type: ALLEY ALY
Street Post: NORTH
Apt #: 1405
Address 1: BKC E RAY ROAD ALY N # 1405
Address Line 2:

* Zip: 00603
Zip Extn:
* City: RAMEY
* State: PUERTO RICO
Phone: (000)-000-0000
Own/Lease: RENTS APARTMENT
Time Zone:
Comment:

Customer Service > Customer Details > Business > Telecom

Telecom Information

Save and Stay Save and Return Return

* Permission to Call
* Permission to Text
* Telecom Type: PHONE
Phone: (915)-484-5545
Extn: 12
* Current

Time Zone:
Best Day to Call:
Start Time:
Period:
End Time:
Period:

Servicing > AP Transactions

AP Transactions

Requisitions

Payee Type: All Producer Third Party Vendor Customer **Business**
Pmt Mode: All ACH Check
Status: All Open Close Hold Void

Requisition Id	Company	Branch	Transaction Date	Status	Sub Status	Sub Status Dt	Payee Type	Payee	Currency	Amount
7037	US01	USHQ	04/25/2019	OPEN	READY		PRODUCER	CO-00002-MILE HIGH MITS...	USD	12,000.00
7012	US01	USHQ	04/30/2019	OPEN	READY		PRODUCER	CA-00002-RANDYS AUTO SA...	USD	50,000.00
7035	US01	USHQ	04/25/2019	OPEN	READY		CUSTOMER	20180100021746-NAVEEN C...	USD	15,000.00
7013	US01	USHQ	04/30/2019	OPEN	READY		THIRD PARTY	-	USD	10,000.00
7014	US01	USHQ	04/30/2019	OPEN	READY		CUSTOMER	20190100020218-NAVADE ...	USD	15,000.00
7039	US01	USHQ	04/23/2019	OPEN	READY		THIRD PARTY	-	USD	15,000.00

2.2.4 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.3 Customer Credit Limit Phase II

2.3.1 Overview

This enhancement is to provide Customer Credit Limit Expiry Date validations to the transactions, which result in Maturity Date Change. This will ensure the Maturity date of an account should be less than or equal to Customer Credit Limit Expiry in case of Maturity date changes.

Provided the Customer Credit Limit related fields in Correspondence elements, this will enable user to create customer credit limit related Correspondence.

Customer Credit Limit Expiry Date Validation

1. When user tries to post any Transaction which will result in Account Maturity Date Change, validate if the Maturity date resulted from transaction is greater than the "Customer Credit Limit Expiry date" of any one of the customer who contributed to funding the Account and shown an error saying "<<Transaction Description>> not allowed as Maturity date is greater than Customer Credit Limit Expiry date" and don't allow to post the transaction

Example Transactions:

- Extension
 - Extension Override
 - Reschedule
 - Due Date Change
 - Change Payment Amount
2. Above validation is also be available for following functionalities.
 - Generic Transaction post web service.
 - Transaction Upload File.
 3. Following Customer Credit Limit Details are part of
 - Queue Parameters
 - Condition Posting Criteria Parameters
 - Setup > Correspondence > Elements

Field Name	Data Type
Relation Type	VARCHAR
Customer # / Business #	VARCHAR
First Name	VARCHAR
Middle Name	VARCHAR
Last Name	VARCHAR
Max Limit	NUMBER
Total Utilized Amt	NUMBER
Available Amt	NUMBER

Field Name	Data Type
Hold Amt	Number
Suspended Amt	NUMBER
Grade	VARCHAR
Max Late Charge	Number
Limit Expiry	Date
Limit Next Renewal	Date

2.3.2 **Seed Data**

Refer [Appendix: Seed Data](#) chapter.

2.4 Auto Contract UI Enhancement

2.4.1 Overview

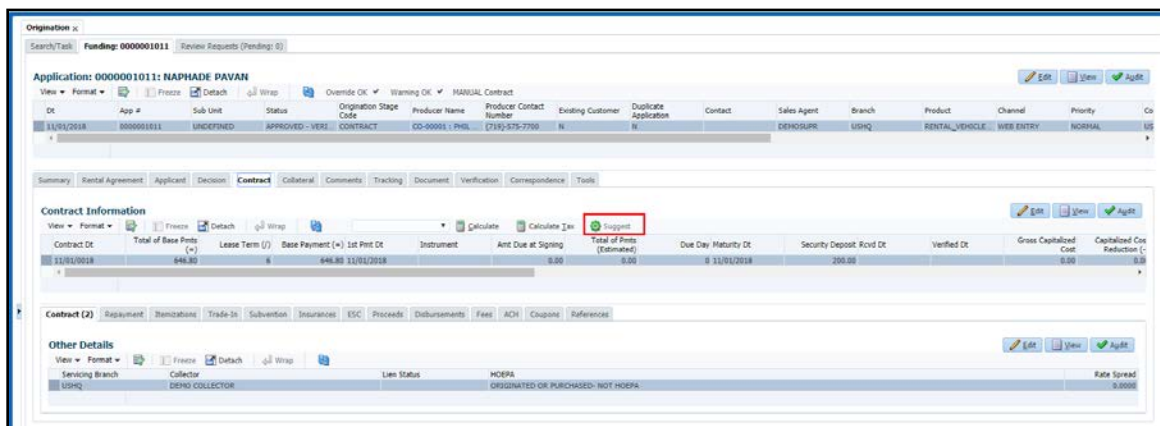
In OFSLL to Fund an application in funding stage, user is expected to complete do following steps

1. Select an Instrument
2. Enter required details like (Contract Date, Amount, term, rate, etc.)
3. Click on Load Instrument
4. Then need to go to Tools, Initialize, Import Value, Calculate and Copy to Contract.

To improve the Operational efficiency, above steps can be done with a single button click know as Suggest. This button click will select the first Contract, default all the required details, and fill all the details required to Fund an Application.

Auto Contract from UI

1. A new “Suggest” button is added in Origination >Contract (funding stage) above the Contract Information table.



2. This button is access controlled.
3. Once user clicks on this button, system will do the following actions.
 - System will select the first Instrument from Instrument LOV and load the same.
 - System will use the existing procedure to load the instrument and shows error message if there is an error returned from that procedure call.
 - After loading the instrument, System will copy the decision level parameters to Contract.
 - Following sheet consists of mapping between decision parameters to contract parameters for “LOAN, LINE and LEASE”.
Reference: [MappingSheet.xlsx](#)
 - After copying the parameters, system will perform “Calculate Payment” [Only for Loan and Lease Application] “Calculate Tax” [Applicable only for Lease Application and only if the system parameter SALES TAX INTERFACE is set to INTERNAL and Sales tax Setup is maintained for INTERNAL Channel].
Note: Only “Calculate Payment” is performed as part of this web service other options [Calculate Interest Rate, Calculate Term, Calculate Sales Tax (VERTEX) etc.] are not available as part of this web service.

- System will use the existing procedure to “Calculate Payment” and shows error message if there is an error returned from that procedure call.
 - “Suggest” Button will be disabled, if the instrument is already loaded in contract.
 - If the selected application product is rental, system will not show the “Suggest” button, as there is no decision details available for Rental application.

2.4.2 **Seed Data**

Refer '[Appendix: Seed Data](#)' chapter.

2.5 Criteria Based Condition Posting

2.5.1 Overview

In OFSLL, there was no facility to classify account based on some predefined criteria and do some action on the Accounts. In OFSLL, there was no facility to define the custom conditions and post the same on the accounts based on configurable parameter setup

New feature provided in OFSLL to add/remove a condition onto an account based on user-defined selection criteria.

A new tab created in Setup > Queue > Criteria Based Condition to allow user to define criteria to add/remove Conditions.

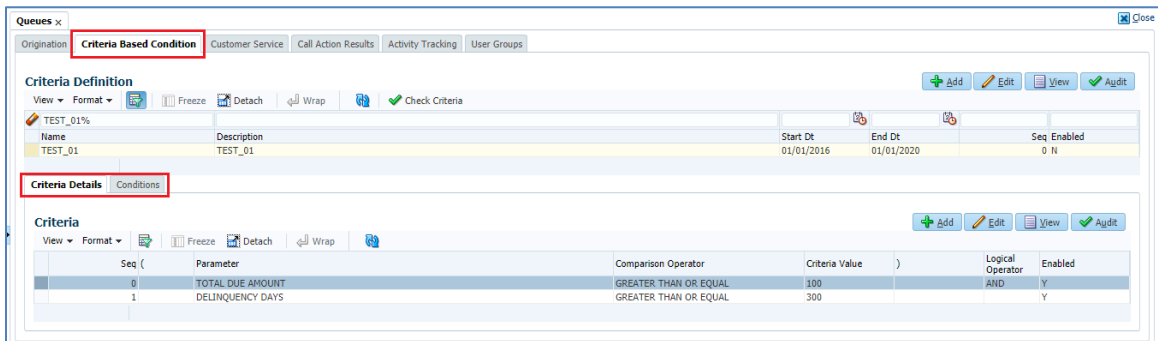
Two sub tabs created in this screen namely, Criteria Details and Conditions

A new batch job “CRITERIA BASED CONDITION POSTING” (available in SET-QCS and SET-QRT) created to execute the setup criteria

Once the criteria matched for an account, system adds/removes conditions defined for the criteria.

2.5.2 Screen Changes

Screen 1 – Criteria Based Condition > Criteria Details



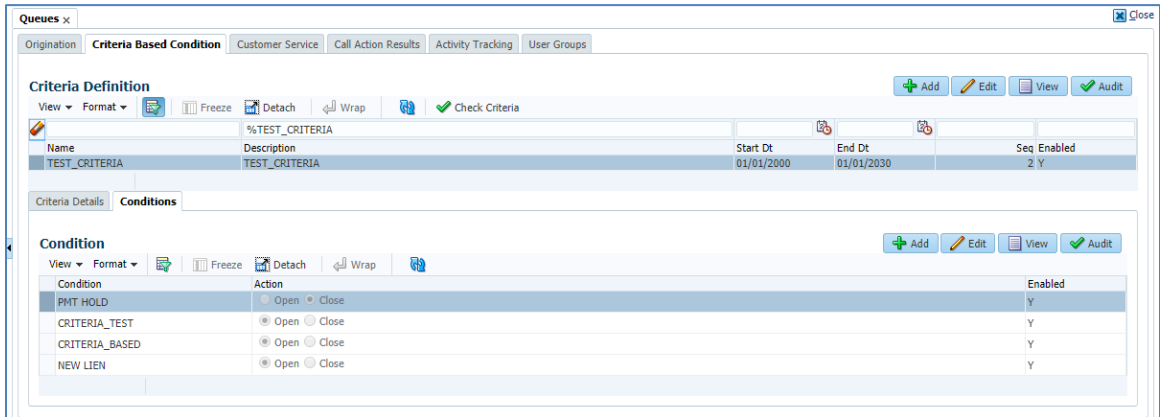
Inputs and Validation Table

Field Name	Type	Default Values	Comments	Reference
Name	A/N	NA	Criteria definition code. Should be read-only in edit mode Unique	NA
Start Dt	Date	NA	Start Date to consider Criteria for execution	NA
End Dt	Date	NA	End Date of Criteria for execution	NA
Enabled	Checkbox	N	Enabled indicator	NA

- Criteria parameters derived using user defined tables. Following is the default list of parameters for these values:

Reference: [ConditionParameters.xlsx](#)

Screen 3 – Criteria Based Condition > Conditions



- A new tab added in Setup → Queue → Criteria Based Condition → Conditions to add/remove Conditions.

Note: Please note that the conditions like Delinquency, Scheduled for Charge-Off and TIP are automatically opened/closed by the system; these will not be allowed to open/close through this setup

Inputs and Validation Table

Field Name	Type	Default Values	Comments	Reference
Condition	A/N	NA	Account Condition lookup description to be opened/closed Unique for each Criteria definition code	Lookup Values from ACC_CONDITION_CD System posted condition should not be part of this LOV DELINQUENT SCHEDULE FOR CHARGE OFF PAYOFF/TERMINATION IN PROGRESS
Action	Radio Button	NA	Conditions to be opened/closed	NA
Enabled	Check box	N	Enabled indicator	NA

Servicing Changes

The screenshot displays the Oracle Financial Services Customer Service interface. At the top, it shows 'Customer Service: 20180100010327' with a search bar and 'Review Request (Pending: 0) Queue Assignment'. Below this, the account details for 'Account(s): 20180100010327: 1 TEST LINEP-00002' are shown, including fields for Company (US01), Branch (USHQ), Sub Unit (UNDEFINED), Account # (20180100010327), Master Account # (UNDEFINED), Master Account (N), Product (LINE HE (VR)), Billing Cycle (MONTHLY), Purpose (VEHICLE LOAN O), and Days Past Due Currency (USD). The interface includes various tabs like Summary, Collections, Customer Service, Account Details, etc. The 'Comments' tab is active, showing a table of comments. Two comments are visible, both system-generated and dated 01/18/2019. The second comment is highlighted with a red box.

Alert	Type	Sub Type	Comment	Comment By	Comment Dt
N	SYSTEM GENERATED	SYSTEM GENERATED	%CONDITION CREDIT%	INTERNAL	01/18/2019 04:35:07 AM
N	SYSTEM GENERATED	SYSTEM GENERATED	CONDITION CREDIT INSURANCE AND WARRANTY CANCEL CLOSED BY CRITERIA BASED CONDITION POSTING B. CONDITION CREDIT INSURANCE AND WARRANTY CANCEL OPENED BY CRITERIA BASED CONDITION POSTING	INTERNAL	01/18/2019 04:30:42 AM

On successful posting of Condition, a new comment “CONDITION XXX OPENDED BY CRITERIA BASED CONDITION POSTING BATCH FOR CRITERIA XXX” created on account.

On successful posting of Condition, a new comment “CONDITION XXX CLOSED BY CRITERIA BASED CONDITION POSTING BATCH FOR CRITERIA XXX” created on account.

Batch Job Changes

- A new batch job “CRITERIA BASED CONDITION POSTING” created to execute these criteria.
- Once the criteria matched for an account, system adds/removes conditions defined for that criterion.
- If the criteria defined to close the condition and the condition is not available (on an account in Open status), batch job will not pick that Account.
- Similarly, for criteria, which defined to open a condition, if condition is already available on the Account then Batch job will not pick that Account.
- If batch job picks an account for removal of condition that is not available on the account then system should not throw error.
- On successful posting of condition, a comment “CONDITION XXX OPENDED BY CRITERIA BASED CONDITION POSTING BATCH” added on the account.
- On successful posting of condition, a comment “CONDITION XXX CLOSED BY CRITERIA BASED CONDITION POSTING BATCH” added on the account.

2.5.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.6 Events Framework Enhancements

2.6.1 Overview

Events framework enhanced with below changes:

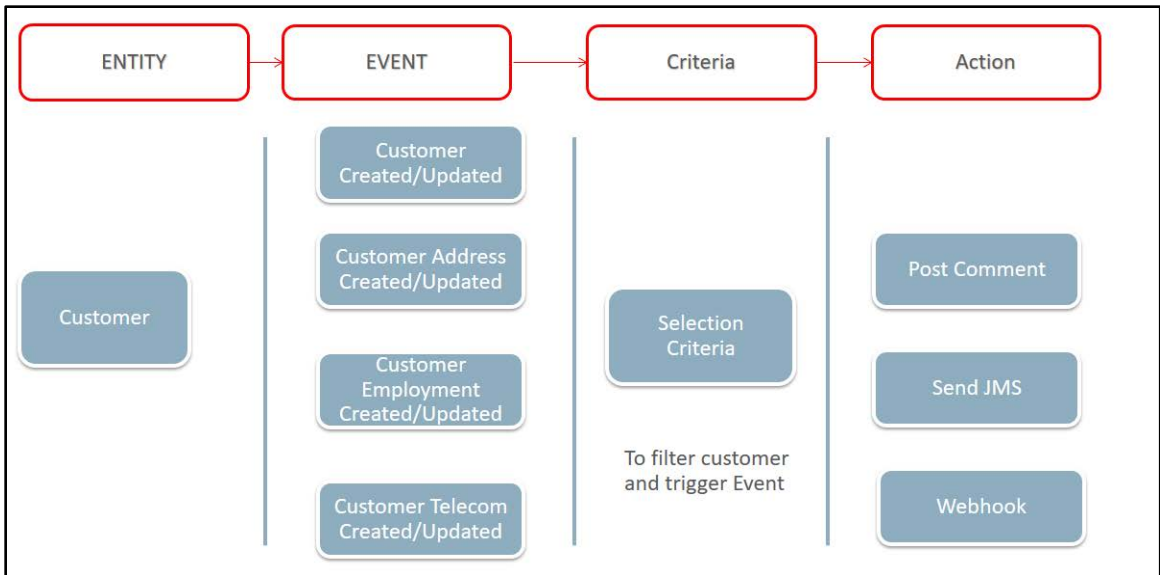
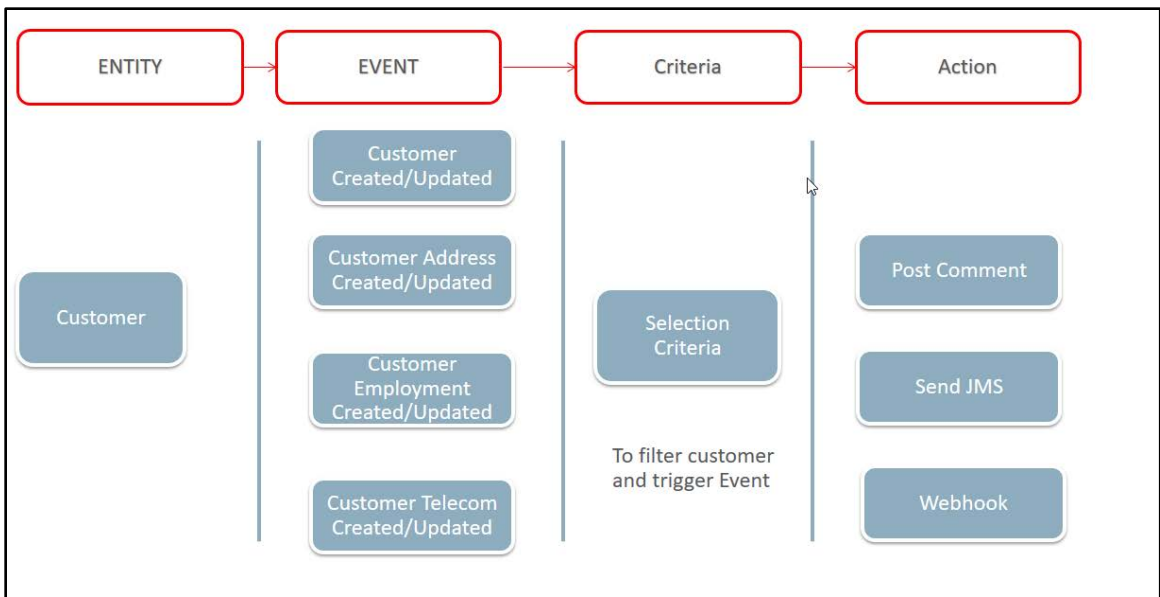
- Common Events setup for Loan/Line/Lease Product Types.
- Enhanced Event Type's and Event Actions.
- Added new "Event" indicator in transaction codes to indicate transactions allowed for Event Types and Event Actions.
- Added support to new Event Action Parameter → Value Type.
- Support custom JSON message, JMS message based on response user defined tables for an event action. (**Note:** Too many event actions as JMS configuration might have performance impact, ensure that due care and properly tested for Application performance based on Infrastructure configuration).
- Some of the examples that can be configured using events are as follows:

Customer

Customer Address Created	Post an automatic comment with Alert
Customer Address Created	Send JMS to Customer Hub
Customer Address updated	Send JMS to Customer Hub
Customer Telecom Created/Updated	Send JMS to Customer Hub
Customer Employment Created/Update	Send JMS to Customer Hub

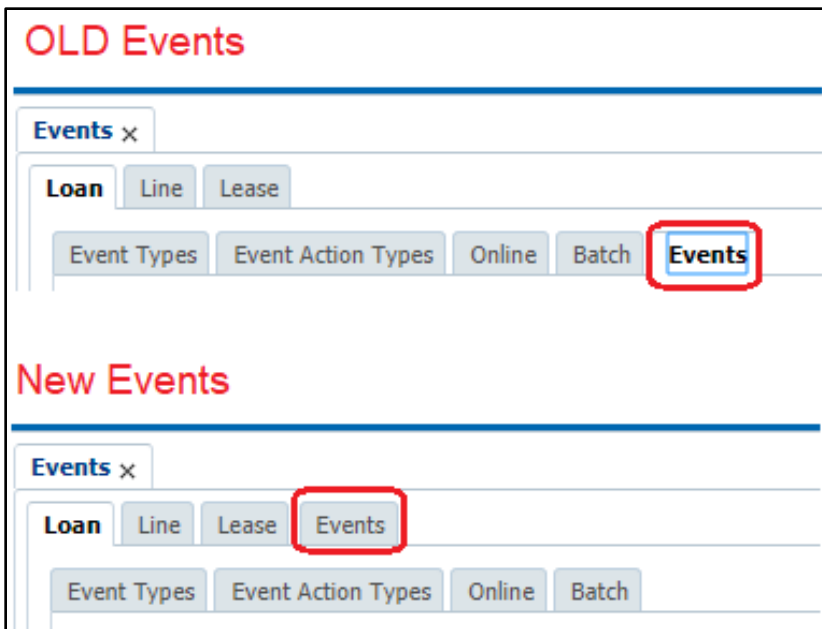
Account

Account Condition Created/updated	Send JMS
New Transaction Posted	Send Letter
New Account Created	Send Webhook to the Customer self-service portal
Bankruptcy Created/updated	Send Letter
Bankruptcy Created/updated	Send JMS
Bankruptcy Created/updated	Send Webhook to 3rd Party Attorney
Repossession Created/Updated	Send JMS to 3rd Party



2.6.2 Description

- New Events framework enhanced to support entities (like Customer) that are common across Loan/Line/Lease Product Types.
- To support these definitions, Event framework definition arranged as a common definition for Loan/Line/Lease Product Types.



Note: Customers using OFSLL 14.6.0.0.0 new event framework will have migration impact and need to manually revisit /handle the Event definitions post migration.

- For entities (like Account) that has to differentiate between Loan/Line/Lease Product Types, two new selection criteria parameters are added
 - ACCOUNT PRODUCT TYPE CODE
 - ACCOUNT FUNDING TYPE CODE

SNO	PRODUCT TYPE	PRODUCT TYPE CODE	FUNDING TYPE CODE
1	LOAN	LN	CE
2	LINE	LN	OE
3	LEASE	LS	CE

- Enhanced support to new Event Types and Actions

Event Types

- Entity → Account
 - EVENT TO PROCESS ACTIONS WHEN NEW MONETARY RECORD IS POSTED
 - EVENT TO PROCESS ACTIONS WHEN NEW NON MONETARY RECORD IS POSTED
 - EVENT TO PROCESS ACTIONS WHEN NEW BANKRUPTCY RECORD IS CREATED
 - EVENT TO PROCESS ACTIONS WHEN NEW BANKRUPTCY RECORD IS UPDATED

Event Action Types

- Entity → Account
 - POST CALL ACTIVITY
 - SEND CORRESPONDANCE
 - SEND LETTER
 - REQUEST FOR CREDIT BUREAU
 - CREATE REVIEW REQUEST
 - POST MONETARY TRANSACTION
 - POST NON MONETARY TRANSACTION
 - POST COMMENT
- Entity → Customer
 - POST COMMENT

Note:

- Recommended to take acute care while defining the events to avoid any wrong implementation issues as the impact may be huge in few cases, which may lead to data corrections or rework etc.
 - Avoid Circular dependencies like “Post Call Activity” triggers “Account Comment” and “Posting Account Comment” triggers same “Call Activity”. Creating such setup consumes server resources and will have a serious performance impact.
 - Customer Based Events co-exists with Non-Monetary transactions and Account Creation Events co-exists with Monetary Active transaction.
- A new “SYSTEM DRIVEN” Value Type added to Event Action Parameters. This will derived the parameter values during the execution of the Event.

SNO	SYSTEM DRIVEN	DESCRIPTION
1	\$GLDATE	GL DATE System Parameter Value
2	\$PAYMENTAMOUNT	Account Monthly Payment Amount
3	\$OUTSTANDINGAMOUNT	Account Total Outstanding Amount
4	\$RATE	Account Rate
5	\$TOTALTERM	Account Total Term
6	\$AVAILABLETERM	Account Available Term

Criteria Details		Action	
Actions			
POST NON MONETARY TRANSACTION	CUSTOMER NAME MAINTENANCE		
Action Type	Action Code	Seq	Enabled
POST NON MONETARY TRANSACTION	CUSTOMER NAME MAINTENANCE	8	Y
Action Parameters			
Description	Value Type	Value	Required
TXN DATE	SYSTEM DRIVEN	\$GLDATE	Y
CUSTOMER FIRST NAME	CONSTANT	NEW ACCOUNT	Y
CUSTOMER LAST NAME	CONSTANT	LOAN BATCH	Y
CUSTOMER MIDDLE NAME	CONSTANT		N
RELATION TYPE CODE	CONSTANT	PRIMARY	Y
CUSTOMER GENERATION CODE	CONSTANT	JR	N

- For Monetary and Non-Monetary transactions, to filter list of transactions applicable for Event Types and Event Actions can be restricted using “Event” indicator in “Transaction Codes” setup.

Transaction Codes											
Transaction Super Group											
Super Group											
ACCOUNT MONETARY TXN											
ACCOUNT NON MONETARY TXN											
AMORTIZATION TXN											
Transaction Codes											
											Y
Group	Action	Monetary	System Defined Yes/No	Enabled	Txn/Bal Type	Statement Txn Type	Batch	Manual	Statement Print	GL	Event
ITARY DUTY	SERVICEMEN CIVIL RELIEF ACT	POST	Yes No	Y	NONE	NONE	N	Y	N	N	Y
ITARY DU...	SERVICEMEN CIVIL RELIEF ACT	POST	Yes No	N	NONE	NONE	N	Y	N	N	Y
	RATE CHANGE	POST	Yes No	Y	NONE	RATE CHANGE	N	N	Y	N	Y
ATE CHANGE	RESCHEDULE	POST	Yes No	Y	NONE	NONE	N	Y	N	N	Y

Note: ‘Events’ are not supported for transaction groups (STM, POF, YTD, MTD and SEC) in 14.7.0.0.0 and can be scoped in future release based on customer feedback.

- In 14.6.0.0.0, system used to send pipe separated message for SEND JMS ACTION. This message format enhanced to a JSON format as attached below.

Reference: [SampleRequest_json.txt](#)

SNO	Element	Description
1	EventID	System Generated Sequence
2	EntityNbr	Entity Number (Customer/Account)
3	EventMessage	Event Action Message details provided by the user
4	EventType	Lookup Code of Event Type Code
5	EventStartDt	Event Generation Date and Time
6	EventProcessedDt	Event Process Date and Time

- A new Response Message Details tab added in **Dashboard → System Monitor → Messages** to displayed JSON messages. This screen enabled only for “EVENT MDB” and “WEBHOOK MDB”.

The screenshot shows the 'System Monitor' application with the 'JMS Queues' tab selected. The 'Messages' section displays a table with columns: Service, Description, Submitted, Completed, Failed, and Resubmitted. The 'Message Details' section shows a table with columns: Message ID, Request Type, Request SubType, Message Type, Status, Message Content, and Time. The 'Response Message Details' section shows a text area with a JSON message content.

Service	Description	Submitted	Completed	Failed	Resubmitted
EVENTS MDB	EVENTS MDB	44	30	0	0
WEBHOOK MDB	WEBHOOK MDB	126	29	59	0

Message ID	Request Type	Request SubType	Message Type	Status	Message Content	Time
87185291EAC94D...	OUTBOUND	EVENTS	EVENT_ACTION	COMPLETED	REQUEST_TYPE=OUTBOUND SUB_TYPE=EVENTS ENTITY_NBR=0000011001 EVENT_...	04/22/2019 12:58...

```

{"EventDetail":{"EventID":158676,"EventType":"EMP_CREATE","EventMessage":"PJ - EMPLOYMENT CREATED","EntityNbr":"0000011001","EventCUSTOMERS_RESPONSE_PARAMETER","StringData":{"KeyName":"CUSTOMER NUMBER","KeyValue":"0000011001"}}, {"CustomTabName":"EVENT_EMPLOYME
  
```

- “Custom” element message details of this JSON message derived based on User Defined Table. User can modify these tables to add more fields into JSON response. Refer [Events_UDT_Mapping.pdf](#) for details.
- Existing “Message Content” is updated with below changes:
 - Deprecated “COMMON_NBR” field
 - Added new “ENTITY_NBR” field. This field will have Entity Number (Account/Customer) based on Entity Type
 - Renamed “EVE_EVENT_TYPE” identifier name to “EVENT_MESSAGE”

Note: ‘Events’ defined in 14.6.0.0.0 has to be revisited because there are changes in event setup screen and the references will have impact to existing 14.6.0.0.0 setup.

2.6.3 Seed Data

Refer ‘[Appendix: Seed Data](#)’ chapter.

2.7 Webhook

2.7.1 Overview

Created new 'Webhook' framework to notify third-party applications with OFSLL Events.

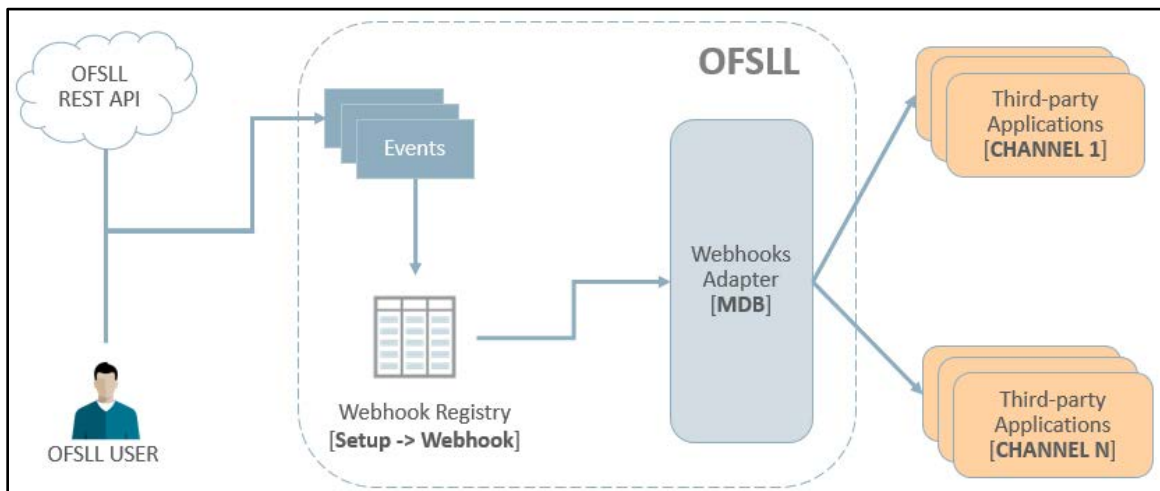
- Setup to create Webhook channel to record third-party interfaces
- Register OFSLL Events with Webhook Channel
- View status of transmission of message
- Retrieger failed messages

Example for Webhook:

- If a 3rd party application is interested in Account's moving to Bankruptcy status to inform Attorney, then a Webhook can be configured to call attorney application whenever Bankruptcy is posted on the Account.
- When repossession posted on an Account, you can configure third party Auction endpoint to send details of the Account and Asset for Repossession.
- When Account moves to Charged-off Status then third Party collection agent system can be informed.

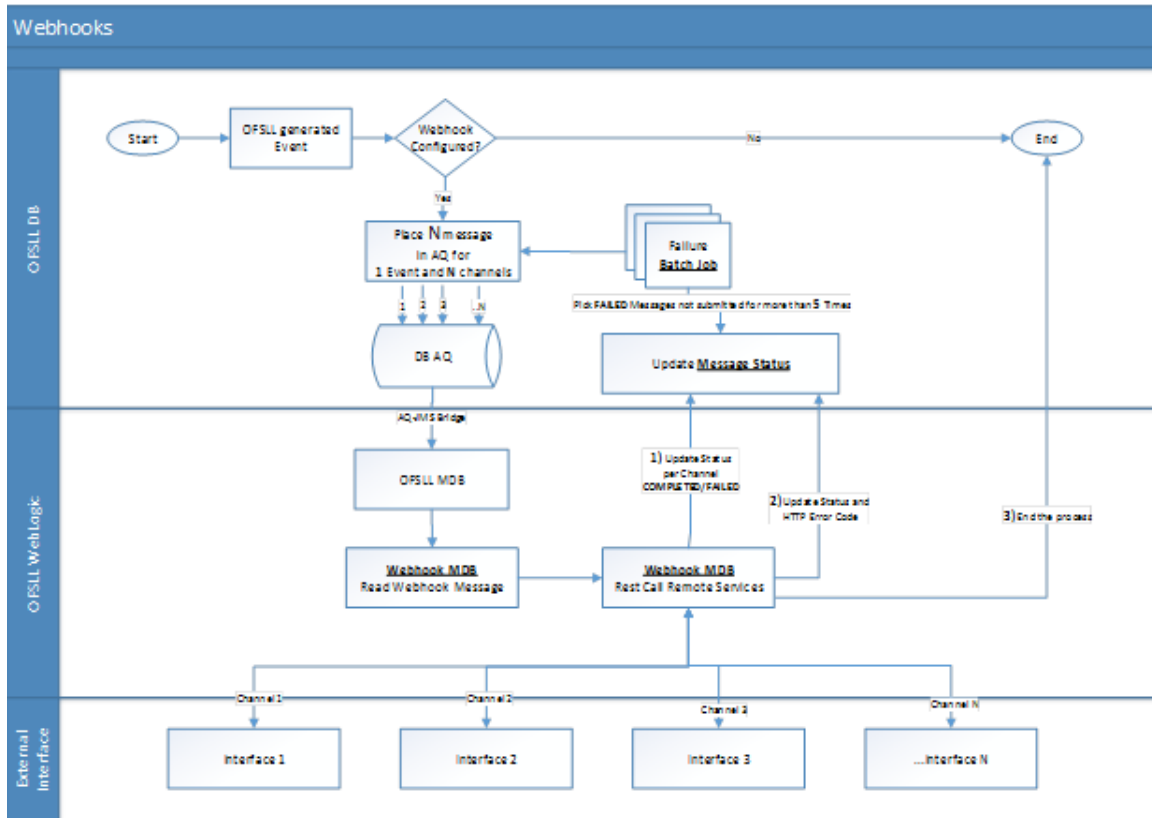
2.7.2 Description

- OFSLL provides Webhook framework to propagate system generated Event notifications to third-party application. This framework use REST API call to notify.
- Webhook framework has the following:
 - **Webhook Registry:** New WEBHOOK setup screen that records third-party interface details as a Channel. This screen also allow users to select Events for which notification are to be sent.
 - **Webhook Adapter:** New WEBHOOK MDB is created to propagate system Events to third-party as a JSON message using REST API.



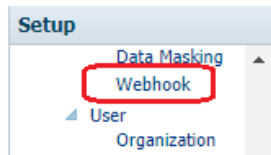
- **Workflow:**
 - Created new WEBHOOK setup screen to record third-party interface details that are interested in OFSLL events.
 - On completing WEBHOOK setup, new WEBHOOK action added to Event Framework.

- Based on activities performed and event definition setup, system will generate Events.
- For all Events with WEBHOOK as the action, an AQ message is placed and is consumed by WEBHOOK MDB adapter through AQ-JMS Bridge. If there is one Event subscribed to 5 channels then system will place 5 WEBHOOK messages into MDB.
- WEBHOOK MDB will read the channel configuration detail from Database and WebLogic CSF (Channel Credentials) to propagate JSON message.
- Based on the outcome of call to the external interface system will update the STATUS and HTTP response code for the message.
- A new Retry batch job picks the failed messages and then resubmits into AQ. The number of retries is based on a System Parameter. **This parameter cannot exceed more than 5.**



Webhook Registry

- Created new WEBHOOK setup screen to register external interface channel details. Credentials recorded as part of this screen are stored in WebLogic CSF framework.



Channel Setup for Basic

Webhook

Channel

EXTERNALINTERFACE-OAUTH20	OAUTH2.0
EXTERNALINTERFACE-HTTP	BASIC

Webhook

Channel: EXTERNALINTERFACE-HTTP

Authentication mode: BASIC

Client Secret Key: ZXjKMgVYQWIPaUpLjFRaUxDS mhiR2NpT2IKSV6VXHNaUoS Lm V55npkV0lpT2KkWFJVSjUUMDIMS

* Service URL: https://10.184.159.226:9506/webhook_c

Test Service URL: https://10.184.159.226:9506/webhook_c

* Enabled:

* Authentication mode: BASIC

* User Name: MANJURED

* Password: *****

Verified:

Event Details

Event	Event Criteria	Service End Point	Event Message	Enabled
EVENT_ACC_NEW_CREATE_BATCH	EVENT_ACC_CREATE_ACCOUNT_BATCH	basic	EXTERNALINTERFACE-HTTP	Y

Channel Setup for OAUTH 2.0:

Webhook

Channel

EXTERNALINTERFACE-OAUTH20	OAUTH2.0
EXTERNALINTERFACE-HTTP	BASIC

Webhook

Channel: EXTERNALINTERFACE-OAUTH20

Authentication mode: OAUTH2.0

Client Secret Key: ZXjKMgVYQWIPaUpLjFRaUxDS mhiR2NpT2IKSV6VXHNaUoS Lm V55npkV0lpT2KkWFJVSjUUMDIMS

* Service URL: https://10.184.159.226:9506/webhook_c

Test Service URL: https://10.184.159.226:9506/webhook_c

* Token URL: http://mum00cie.in.oracle.com:14100/oi

* Enabled:

* Authentication mode: OAUTH2.0

* Grant Type: RESOURCE OWNER PASSWORD

* Client Id: OFSLL_B2B_TEST_CLIENT

* Client Secret: *****

* Identity Domain: OFSLL_SSO_QA_DOMAIN

* Token Header Key: OFSLL_ACCESS_TOKEN

* User Name: OLLUSR1

* Password: *****

Verified:

Event Details

Event	Event Criteria	Service End Point	Event Message	Enabled
EVENT_ACC_NEW_CREATE_BATCH	EVENT_ACC_CREATE_ACCOUNT_BATCH	basic	EXTERNALINTERFACE-OAUT	Y

Field Name	Type	Default Values	Comments	Reference
Channel	A/N	NA	Third-party Application Name. Read-only in edit mode	
Client Secret Key	A/N	NA	OFSLL Generated Secret Key. This is generated on Save and Return. If already present, use Generate button to regenerate. Read-only in Add and Edit mode	NA

Field Name	Type	Default Values	Comments	Reference
Authentication Mode	A/N	NA	Third-party application authentication mode	A new lookup WHK_AUTH_MODE_CD
Service URL	A/N	NA	Third-party Webhook Service URL Context. This URL in conjunction with <i>Service End Point</i> should only Accept POST Request.	NA
Test Service URL	A/N	NA	Third-party Webhook Service URL to check service availability. This URL should only accept GET request and will be accessed using Test Button.	NA
Grant Type	LOV	NA	OAuth 2.0 Grant Type	A new lookup WHK_GRANT_TYPE_CD
Token URL	A/N	NA	Third-party OAuth 2.0 token generation URL	NA
Client ID	A/N	NA	Third-party OAuth 2.0 client ID Will be stored in "ofssl.int.webhook" CSF map.	NA
Client Secret	A/N	NA	Third-party OAuth 2.0 client secret Will be stored in "ofssl.int.webhook" CSF map.	NA
User Name	A/N	NA	Basic Authentication User Name Or Third-party OAuth 2.0 Resource Owner User Name Enabled only for Resource Owner Password Grant Type Will be stored in "ofssl.int.webhook" CSF map.	NA
Password	A/N	NA	Basic Authentication Password Or Third-party OAuth 2.0 Resource Owner Password	NA

Field Name	Type	Default Values	Comments	Reference
			Enabled only for Resource Owner Password Grant Type Will be stored in "ofssl.int.webhook" CSF map.	
Identity Domain	A/N	NA	Third-party OAUTH 2.0 Domain Name Will be stored in "ofssl.int.webhook" CSF map.	NA
Token Header Key	A/N	NA	Third-party HTTP header key that OFSSL should use to pass Access Token Details Will be stored in "ofssl.int.webhook" CSF map.	NA
Enabled	Check box	N	Enabled indicator	NA
Verified	Check box	N	Channel Data Verification indicator. Will be checked by system once channel data is verified using "TEST" button Read-only in Add and Edit mode	NA

Note: Refer OFSSL installation document on creation of "**ofssl.int.webhook**" CSF map.

Event Details:

- Any record added in **Webhook → Event Details** tab will automatically create WEBHOOK Event Action to the selected Event Criteria.
- This setup will only display enabled Event and Criteria definitions available. Disabling Event and Event Criteria will not automatically disable record in Webhook Setup. Ensure that your system administrator keeps both the setup in sync.
- Webhook Event action will not be editable from Event Setup. Perform all the associated maintenance from Webhook Setup.

Field Name	Type	Default Values	Comments	Reference
Event	LOV	NA	Event definition Description. This should will display only enabled records.	LOV will display enabled Events configured
Event Criteria	LOV	NA	Event Criteria definition Description. This should only display enabled records.	LOV will display enabled Event Criteria configured
Service Endpoint	A/N	NA	Endpoint URL.	NA

Field Name	Type	Default Values	Comments	Reference
			Will be propagated to Event Definition as an Event Action Parameter	
Event Message	A/N	NA	Event Action Descriptions Will be propagated to Event Definition as an Event Action Parameter	NA
Enabled	Check box	N	Enabled indicator. This indicator will automatically update associated WEBHOOK Event Action mapped.	NA

The screenshot displays the Oracle Financial Services configuration interface for 'Events'. It includes several sections:

- Events Table:**

Event Code	Description	Entity Type	Event Type
ABC	EVENT_ACC_NEW_CREATE_BATCH	ACCOUNTS	EVENT TO PROCESS ACTIONS WHEN NEW ACCOUNT IS CREATED
- Event Criteria Table:**

Query Name	Description	Enabled
ABC	EVENT_ACC_CREATE_ACCOUNT_BATCH_LEASE	Y
- Actions Table (highlighted in red):**

Action Type	Action Code	Seq	Enabled
WEBHOOK	NONE	1	Y
WEBHOOK	NONE	1	Y
- Action Parameters Table:**

Description	Value Type	Value	Required
CHANNEL	CONSTANT	EXTERNALINTERFACE-HTTP	
EVENT MESSAGE	CONSTANT	EXTERNALINTERFACE-HTTP	
URL PARAMETER	CONSTANT	BASIC	

- **“Generate”** button is used to generate OFSLL specific Client Secret Key.
 - System will generate **“X-Hmac”** header using **“HMAC SHA 256”** and will propagate this header during the call of Webhook service for the configured channel.
 - Use this header to validate the integrity of the source.
 - This generation algorithm uses below logic

Format:

“OFSLL”: Base64 Encoded [HMAC SHA 256 of [“Http Method Types”:”Base64 Encoded Payload”:” Http Content Types”: “Service URL”] with Client Secret Key]

Example:

Client Secret Key

T0ZTTExfQjJCX1RFU1RfQ0xJRU5UOndIbGNvbWUx

Cipher Text for HMAC SHA 256

```
POST:ewogICAgIjIcXVlc3RUeXBlljogIk9VVEJpVU5EIGp9:application/json:http://10.184.159.226:9006/webhook/service/api/resources/webhook/basic
```

Generated Sample “X-Hmac” header

OFSLL:q6xCpZrnudfB8owvYEi2+Aac4cIM3b/XFVTvrChdQKA=

- Click ‘Test’ button to verify configuration details of the external channel.
 - External system should generate “**X-Hmac**” header using “HMAC SHA 256” and propagate this as part of response header to OFSLL.
 - Channel name is used in HMAC digest as given below. This is passed to the external interface using HTTP Header Key “**ChannelName**”. This value will be in base 64 encoded format.
 - System will validate this response and update the Verified indicator. Only HTTP status code 200 is considered as success to validate response.
 - The generation algorithm uses below logic.

Format:

“OFSLL”: Base64 Encoded [HMAC SHA 256 of [“Http Method Types”:“Base64 Encoded Channel Name”:“ Http Content Types”: “Service URL”] with Client Secret Key]

Example:

Client Secret Key

```
ZXIKMGVYQWIPaUpLVjFRaUxDSmhiR2NpT2IKSVV6VXhNaUo5LmV5SnpkV0lpT2IKW
FJVSKIUMDIMSWI3aVEwaEJUazVGVENJNklrVIIWRVZTVGtGTvNvNvVSVkpHUVVOR
kxVOUJWVIJTWpBaUxDSnBjM01pT2IKUFJsTk1URjIYUUVKSVQwOUxJaXdpWlhod0lq
b3hOVFUxTmPnMU1qSXpMQ0pwWVhRaU9qRTFOVFUyT0RRNU1qTjkuemxMb0lzdW
duek1FRnhyblcxYXJleXNMSFliSmVQd0R5SUxvdDdUaXZDMEFVUktEbm5WcDJPWmR
iT1pJald5aHNfSWxNaG1V1dWZUF0YmZRUnl1X2c=
```

Cipher Text for HMAC SHA 256

```
GET:RVhURVJOQUxJTIRFUkZBQ0UtT0FVVEgyMA==:application/json:https://10.184.159.226:9506/webhook_oauthqa/service/api/resources/webhook/test
```

Generated Sample “X-Hmac” header

OFSLL:F/jj07qhgM3g5z91EHU/rdxYbaJ266SRnXsBRoUxgUc=

Webhook Adapter

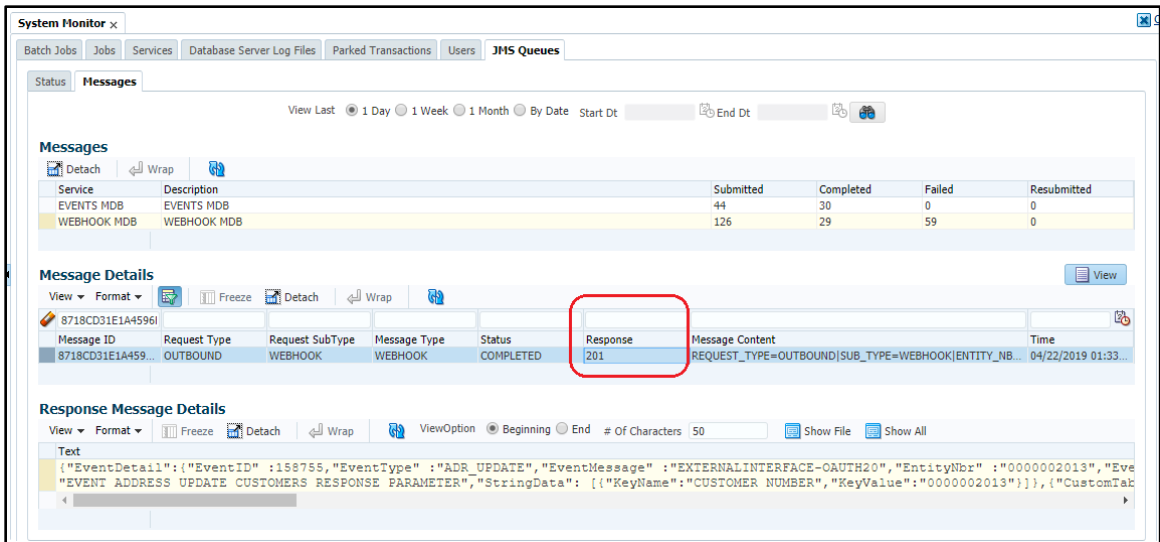
- Event framework triggers Webhook Action. As soon as an Event is triggered in OFSLL, system will check if there are any Webhook Actions defined for different channels. If there are multiple channel registries available for a single Event, OFSLL will create multiple WEBHOOK DB AQ messages to propagate the event details to external channels.
- A new WEBHOOK MDB processes these messages. It will read these messages and process WEBHOOK request based on JSON request created from User Defined Table available for individual Events. The JSON message generation process is similar to EVENT JSON message generation.
- When WEBHOOK MDB POST JSON request to external channel, system expects to return only below HTTP status codes.

HTTP Status Code	MDB Dashboard Status	Description
2XX, 3XX	COMPLETED	
4XX	FAILED	Need to resubmit manually. MDB will update retry count to 5
5XX	FAILED	Will be resubmitted by batch job

- A new System Parameter “EVI_MAX_RETRY_COUNT” records max attempts to retrigger FAILED status messages. This parameter cannot exceed more than 5. If user wanted to manage max retrigger less than 5 times use this system parameter.
- A new batch job **SET-EVE → EVEPRC_BJ_100_02** picks FAILED status messages. This functionality is similar to MDB Dashboard “Resubmit” button. This batch job will consider system parameter “EVI_MAX_RETRY_COUNT” to determine max retrigger.
- System Parameter “CMN_HTTP_CONNECTION_TIMEOUT” determines max time (seconds) external channel should take to respond to OFSLL. If response time exceeds the system parameter then system will mark the request as FAILED with 500 HTTP Status Code.
- If the system is running behind a firewall/proxy network, OFSLL provides below system parameters to configure proxy details.

SNO	System Parameter	Description
1	CMN_HTTP_PROXY_ENABLED_IND	PROXY INDICATOR FOR ALL OUTSIDE HTTP/HTTPS CONNECTION
2	CMN_HTTP_PROXY_PORT	HTTP PROXY SERVER PORT FOR OUTGOING HTTP CONNECTIONS
3	CMN_HTTP_PROXY_SERVER	HTTP PROXY SERVER FOR OUTGOING HTTP CONNECTIONS

- Added new field “Response” to existing MDB Dashboard for Webhook MDB. This field is only displayed for WEBHOOK MDB. It records HTTP Status Code received as response during invocation.



Field Name	Type	Default Values	Comments	Reference
Response	A/N	NA	Used to record HTTP Status Header response received during invocation. In case of timeout, 500 HTTP Status will be stored	NA

2.7.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.8 UI Extensibility / Configurability

2.8.1 Overview

Field Configuration and Label Changes (Producer screen only)

OFSLL supports the following configuration:

- Ability to configure to hide / unhide user defined fields in a screen.
- Ability to Change the Label based on language and Division.
- Ability to change the tool tip.
- Ability to control access of non-mandatory fields based on responsibility.

2.8.2 Description

Ability to add new fields to screen or add new Tab to Existing Screen

- Provided User Defined Extensible fields at each Entity in all layers UI, backend.
- Supports Entity level UDF fields showing up in Producer and related screens as follows:
- 20 Fields, which includes 10 Text, 5 Number and 5 Date fields.

Ability to change label & Provide Access to fields:

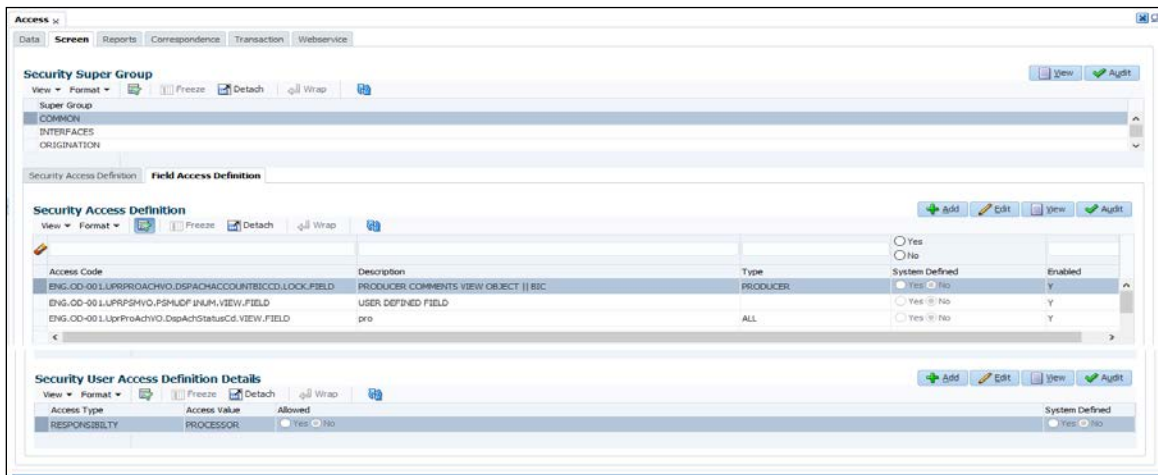
- Entity level UDF fields showing created above shows up in the producer screen.
- Allows facility for Run-time label change of UI and these Labels to be customizable by Division.
- Run-time column view/hide on form layout.

System Parameter to enable configuration

New system parameter 'cmn_label_custom_enable_ind' introduced to indicate whether configurability is enabled or not.

- If the parameter value = Y, system refers the data from database (**new behaviour**)
- If the parameter value = N, system retains the **existing behaviour** i.e., reference of details are from XLIB file.

To support the above mentioned configurability points, existing 'Access' screen has enhanced as indicated below.



Add Screen:

Security Access Definition				
* Language	<input type="text"/>	* Field Name	<input type="text"/>	* Enabled <input checked="" type="checkbox"/>
* Division	<input type="text"/>	* Access Type	<input type="text"/>	
* Object Name	<input type="text"/>	* System Defined	<input type="radio"/> Yes <input checked="" type="radio"/> No	

Details:

Field Name	Data Type/ Tool	Mandatory	Default Value	Comment
Language	LOV	Y	English	Select Language from LOV
Division	LOV	Y	NULL	
Object Name	LOV	Y	NULL	Choose the object name for required tab using search option within LOV
Field Name	LOV	Y	NA	LOV shows only list of fields corresponding to selected object, where user can select.
Access Type	LOV	Y	NULL	Read Only – Makes field visible to user, but read only. Editable – Retains the field editable (if base field is editable)
System Defined	Radio Button	Y	Yes for base fields and No for UDF fields	
Enabled	Check Box	Y	Y	Check this box to apply changes for row.
Security User Access Definition Details				
Access Type	LOV	Y	Responsibility	Refer lookup ACCESS_GRID_TYPE_CD and show only 'Responsibility'.
Access Value	LOV	Y	ALL	List of responsibilities including ALL.
Allowed	Radio Button	Y	N	By default, provided access to field to ALL user responsibilities. If user want to restrict, choose the responsibility and set the allowed value to N.
Enabled	Checkbox	Y	N	Indicates the record is enabled or not.

Validations & Logic:

As part of release, provided the seed data to show the list of Objects and field list ALL Company.

EDIT Screen:

Field Access Definition

Access Code ENG.OD-
002.UPRPROCPPVO.PROLOSSRESERVEAMT.VIEW.FIELD

Description

* System Defined Yes No

* Enabled

* Type

Field Name	Data Type/ Tool	Mandatory	Default Value	Comment
Access Code	View Only	Y		Shows the Access code selected
Description	Text Field	Y	Defaults the access description	User can change the description
Type	LOV	Y	Select the type to regroup the field	
System Defined	Radio Button	Y		
Enabled	Checkbox	Y		

KEY	Access Type 1	Responsibility	Access Type 2	Responsibility	Result
GRADE	VIEW	Allowed = Y	LOCK	Allowed = N	Show the field, But not editable
GRADE	VIEW	Allowed = Y	NO LOCK	NA	Show the field with editable
GRADE	VIEW	Allowed = Y	LOCK	Allowed = Y	Show the field with editable
GRADE	VIEW	Allowed = N	LOCK	Allowed = Y	Doesn't show the field on screen
GRADE	VIEW	Allowed = N	NO LOCK	NA	Doesn't show the field on screen
GRADE	NO VIEW	NA	LOCK	Allowed = Y	Show the field with editable

KEY	Access Type 1	Responsibility	Access Type 2	Responsibility	Result
GRADE	VIEW	Allowed = N	LOCK	Allowed = N	Doesn't show the field on screen

To support the label change related changes, new tab 'Label Configuration' screen has introduced (which looks like in print screen below).

Language	Division	Type	Object Name	Field Name	Data Type	User Defined Label	Tooltip	Required
ENGLISH	OD-001	HEADER	UNDEFINED	UNDEFINED	UNDEFINED	Summary	UNDEFINED	N
ENGLISH	OD-001	TAB	UNDEFINED	UNDEFINED	UNDEFINED	Summary	UNDEFINED	N
ENGLISH	OD-001	HEADER	UNDEFINED	UNDEFINED	UNDEFINED	Title Status Summary	UNDEFINED	N
ENGLISH	OD-001	TAB	UNDEFINED	UNDEFINED	UNDEFINED	Title s Summary	UNDEFINED	N
ENGLISH	OD-001	TAB	UNDEFINED	UNDEFINED	UNDEFINED	Tracking Attributes	UNDEFINED	N
ENGLISH	OD-001	HEADER	UNDEFINED	UNDEFINED	UNDEFINED	Transactions	UNDEFINED	N
ENGLISH	OD-001	TAB	UNDEFINED	UNDEFINED	UNDEFINED	Transactions	UNDEFINED	N
ENGLISH	OD-001	HEADER	UNDEFINED	UNDEFINED	UNDEFINED	ACH STATUS :	UNDEFINED	N
ENGLISH	OD-001	HEADER	UNDEFINED	UNDEFINED	UNDEFINED	STATUS :	UNDEFINED	N
ENGLISH	OD-001	FIELD	UprAccHbkV/O	AccProducerHoldbackAmt	NUMBER	Holdback Amt Test	Displays proceed holdback amount	N
ENGLISH	OD-001	FIELD	UprAccHbkV/O	DispAccAppNbrTitle	VARCHAR	Account	UNDEFINED	N
ENGLISH	OD-001	FIELD	UprAccV/O	AccAppChbkAmt	NUMBER	Chargeback Amount	Displays chargeback amount	N
ENGLISH	OD-001	FIELD	UprAccV/O	AccAppChbkChgoffDays	NUMBER	Charge Off Days	Displays Chargeback days in case of chargeoff	N
ENGLISH	OD-001	FIELD	UprAccV/O	AccAppChbkChgoffPer	NUMBER	Charge off Percent	Displays Chargeback compensation percentage in case of char	N
ENGLISH	OD-001	FIELD	UprAccV/O	AccAppChbkChgoffTerm	NUMBER	Charge Off Term	Displays Chargeback term in case of chargeoff	N

Details:

Field Name	Data Type/ Tool	Mandatory	Default Value	Comment
Search Criteria				
Language	LOV	Y	English	
Division	LOV	Y	ALL	
Type	Display	Y		Indicates whether the object is Tab / Field / Button / Header / Sub header
Object Name	Text Field (Read Only)	Y	NA	Shows list of objects
Field Name	Text Field (Read Only)	Y	NA	Shows only list of fields corresponding to selected object.
Data Type				Indicates field data type (Not applicable for headers tab and shows blank)
User Defined Label	Text Field (Editable)	Y	Same as Actual Label	Labels can be change for all fields (including base fields).
Tool Tip	Text Field (Editable)	Y	NA	Shows tool tip of corresponding field.

				For UDF, this seed data to be provided and allow user to edit.
Default Value	Text Field (Editable)	Y	UNDEFINED for varchar 0 for Number Sys Date for Date	User can input default value for any field, which shows in corresponding screen.
Required	Check Box (Editable for UDF)	Y	NA	Indicates whether the field is required or not and allowed to modify the value of UDF.
Display (Yes/No)	Check Box	Y	For Custom fields show as 'N' and for base fields show as 'Y'	Indicates whether the field is to be displayed on screen. This field is editable, if required value ='N'. Only optional fields can be hidden
System Required	Ready Only	Y		Indicates whether the field is system required. If Yes, system does not allow user to modify fields – Required, Display, Enabled.
Enabled	Check Box	Y	Y	Check this box to apply changes for row, where any label or render condition change are done and 'Apply Changes' button is clicked.

Matrix

	Base Field	User Defined Field	Comment
Label Change	User can make changes	User can make changes	
Data Type	Displayed	Displayed	Identify the data type by field
Default Value	User can make changes	User can make changes	Cannot show the default Value
Required	Not allowed to modify this parameter	Allowed to set the parameter for UDF	
Display (Yes/No)	Allowed to make the Display as NO for Non-mandatory fields	Allowed to make the Display as NO for Non-mandatory fields	Cannot change property of mandatory base field

Validations & Logic

- As part of release, provided the seed data to show the list of Screen, Tab List and Field list for ALL Division and Load button loads the data.
- Label Configuration screen is applicable for both table and form layout i.e. if a field has been marked to hide, the same is hidden from both table as well as form.

Update Button

Update button provided in above screen to refresh cache automatically, to avoid the app server restart. 'Update Button' refreshes data from database server to app server.

2.8.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.9 Add Existing Customer - Non-Monetary Transaction

2.9.1 Overview

OFSLL currently supports only to add **new** customer to account during servicing.

In current release, new transaction created to add existing customer to account in servicing stage.

2.9.2 Description

Non- Monetary Transaction – Add Existing Customer

Following new non-monetary transaction introduced with parameters

Txn Code	Description	Group	Action	Monetary	System Defined	Enable	Txn / Bal Type	St mt Txn Type	Batch	Manual	St mt Print	GL
CUS_EXIS T_AD D_MA INT	ADD EXISTI NG CUSTO MER	CUST OMER NON MONE TARY	POS T	N	Y	Y	NO NE	NO NE	N	Y	N	N

Transaction Parameters:

Parameter Code	Description	Mandatory Y/N	Data Type/ Size	Field Validation	Default Values	Comments
Txn Date	Transaction Date	Y	Date Field	Doesn't allow any back dated or future dated transaction.	System Date	
Existing Customer #	Input field	Y	Text Field - Number		NONE	
Relation Type Code	Select relationship of newly added customer to account.	Y	LOV			Refer RELATION_TYPE_CD

Comment	Input Comment	N	Char		Null	
---------	---------------	---	------	--	------	--

Validations

On Save, system does the following validations and throw error messages:

Field Name	Validation	Error Message
Txn Date	Accepts current System Date	Standard Error message for date validation.
Existing Customer #	Checks if the customer is not deceased. If 'Deceased' shows error message.	Customer selected is deceased. Please select the active customer.
Existing Customer #	Checks if the customer is marked as 'Bankrupt'. If marked as bankrupt shows error message.	Customer selected filed Bankruptcy. Please select the active customer.
Existing Customer #	Checks if the customer number provided already attached to account. If Yes, shows error message and do not allow to post transaction.	<p>Show Error message as 'Customer Number' provided belongs customer, already attached to account.</p> <p>Example:</p> <p>For SSN / National ID:123456789</p> <p>Customer # attached to SSN are 1234, 5678</p> <p>If the account is already having customer with Customer # 1234 and user is trying to add existing customer with customer # 5678; system has to identify that same customer is2 already attached, which is having either same SSN Number or National ID.</p>
Relation Type Code	On save, if the relation selected for customer is already attached to account, shows error message and doesn't post the transaction	<p>If selected Relation Type already exists, please select the different relation.</p> <p>Example: If Primary and Spouse relation types are already attached members of account, show error message, if user trying to attach customer with same relation.</p>

On successful posting of transaction, following actions performed on account:

System attaches customer to account and update the flag to 'Joint' = Yes, if the flag is 'N' (in case of single customer account).

Impact Handling

GRI → Customer Addition would trigger details update to GRI.

2.9.3 **Seed Data**

Refer '[Appendix: Seed Data](#)' chapter.

2.10 Securitization Pool Upload

2.10.1 Overview

Enhanced Securitization functionality with below capability:

1. Introduced new field to indicate account as 'securitization Eligible' in servicing and conversion
2. Enabled securitization file upload to do following actions:
 - Add Accounts to pool
 - Remove Accounts from the pool
 - Transfer account from Pool A to Pool B (for configurable statuses).

2.10.2 Description

Securitization Eligible

Introduced new field 'Securitization Eligible' under Servicing → Account Details → Account Information → Others.

Field	Field Description	Data Type	Default Value	Comment
Securitization Eligible	Indicates Account eligible for securitization	Varchar2 – Text box	N	Related functionality handled in next release.

File upload facility to handle pool Account

Addressed the following cases:

The purpose of this file definition is to allow the following actions:

- Add Accounts to pool
- Remove Accounts from the pool
- Transfer account from Pool A to Pool B (for configurable statuses).

New Batch Job:

- New batch job (ISCPRC_BJ_100_01) created under the SET-IFP, Input file processing. This batch job reads the file from ISC folder (<OFSLL>/input/isc) and uploads the accounts on to the Pool.

Action on running of batch job:

Sl.no.	Pool Id in File	Pool Id on Current Account	Action	Action Details
1	!= UNDEFINED (ABCD)	UNDEFINED	Add to new Pool	Post 'Add Account' transaction on Pool ABCD
2	UNDEFINED	!= UNDEFINED (ABCD)	Remove Account from existing Pool	Post 'Remove Account' transaction on Pool ABCD

Sl.no.	Pool Id in File	Pool Id on Current Account	Action	Action Details
3	!= UNDEFINED (ABCD)	!= UNDEFINED (EFGH)	Remove Account from existing Pool and Add to New pool	Post 'Remove Account' transaction on Pool EFGH Post 'Add Account' transaction on Pool ABCD
4	SAME as Pool Id on Account (ABCD)	SAME as Pool Id in file (ABCD)	Do Nothing and Report error	Show Error – Account already mapped to Pool.

Field Details and Validations:

Field	Description	Data Type	Mandatory	Validation
Pool Id	This field should consists of valid pool Id	Varchar2(30)	No	Valid Pool Id required and additional validations - documented below.
Account Number	This field should consists of valid account numbers	Varchar2(30)	Yes	Account number should be valid and additional validations - documented below.

- System checks the validations related to accounts and ignores query qualification criteria (if any) to upload accounts to pool.
- File definition is comma separated file.
- On transferring an account from Pool A to B, system posts transactions on each pool.
- 'Remove Account' transaction on pool A and 'Add Account' transaction on Pool B.
Txn: 'Remove Account' on From Pool Transaction posted on pool A with following information
Reason: Pool Account Transfer
Date: System date of file upload.
Txn: 'Add Account' on To Pool transaction posted on pool B with following information
Reason: Pool Account Transfer
Date: System date of file upload.
Note: This txn is posted, only after validating 'From & To Pool Id' details.
- Transferring account from Pool A to UNDEFINED, system posts transaction on pool A.
 - 'Remove Account' transaction on pool A posted.

Validation Applicable to Action	Field	Validation	Error Message	Action / Comment
---------------------------------	-------	------------	---------------	------------------

1,3,4	Pool Id	If the pool Id provided in file is not existing or NULL	Pool ID doesn't exist	Processes valid rows and rejects the corresponding record and show reason in error log.
1,2,3,4	Pool Id	If the pool status is not in the configured list of statuses (From and To)	Invalid Action Code.	Processes valid rows, rejects corresponding record and shows reason in error log.
1,2,3,4	Account No.	If the account number is not found, batch job rejects the corresponding record to upload / transfer	List of rejected records – Reject Reason	Processes valid rows and rejects the corresponding record and show reason in error log.
1,3	Account No.	If the system parameter POOL_ACTIVE_ACCOUNTS_ONLY is Y and file contain accounts other than 'Active'	List of rejected records – Reject Reason	Processes valid rows, rejects the corresponding record and shows reason in error log.
1,3	Company	If the pool → Account Company is different from Pool Company Or Account Company of From and To Pools are different, system rejects record.	List of rejected records – Reject Reason (Cannot process record, Company Mismatch)	Processes valid rows, rejects the corresponding records and shows reason in error log.
1,3	Product Type	If the pool → Product Type belongs to 'Loan' and file contains 'Lease' accounts or vice-versa If the pool → Account Product Type is different from Pool Or Account Product Type of From and To Pools are different, system rejects record.	List of rejected records – Reject Reason (Cannot process record, Product Type Mismatch)	Processes valid rows, rejects the corresponding records and shows reason in error log.

Setting up the configuration:

- System allows to Add / Remove accounts from pool only for the configured pool statuses.
- To enable this, created new lookups as follows:
POOL_ADD_ACC_CRITERIA (CRITERIA TO ADD REMOVE ACCOUNT FROM POOL)
POOL_REMOVE_ACC_CRITERIA (POOL CRITERIA FOR REMOVING ACCOUNT)

Following seed data maintained in base:

```
POOL_ADD_ACC_CRITERIA|CRITERIA TO ADD REMOVE ACCOUNT FROM  
POOL|N|Y  
POOL_REMOVE_ACC_CRITERIA|POOL CRITERIA FOR REMOVING ACCOUNT|N|Y  
POOL_ADD_ACC_CRITERIA|H||2|HELD|N|Y  
POOL_ADD_ACC_CRITERIA|O||1|OPEN|N|Y  
POOL_REMOVE_ACC_CRITERIA|N||2|NEW|N|Y  
POOL_REMOVE_ACC_CRITERIA|O||1|OPEN|N|Y
```

Assumption:

- User creates the pool from screen and mentions the exiting pool ID in file to upload accounts to existing pool. (File does not create any new pool).
- System transfers Account between two pools ignoring the pool class / type.

Sample File: [SecuritizationFileSample.txt](#)

2.10.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

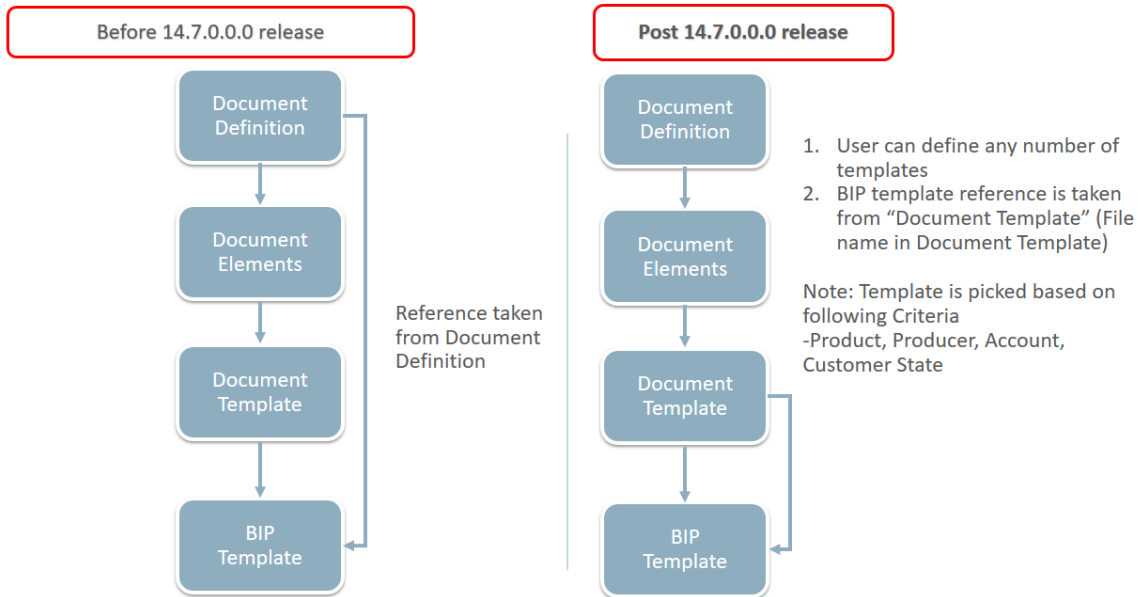
2.11 Correspondence Change

2.11.1 Overview

Multiple Template Support

OFSLL refers the document definition and currently only one template can be mapped to each event.

After change, user can define the multiple templates for each event and BIP template is picked based on criteria – Product and Producer / Account / Customer State.



2.12 Reason code for All Non-monetary Transactions

2.12.1 Overview

Reason Code configuration in non-monetary transactions

Provided seed data for reason code in 'Flex Table attributes' and corresponding lookup codes and values.

User has to enable the 'Reason Code' for corresponding non-monetary transaction to input while posting transaction.

Attribute	Description	Data Type	Length	Sort	Operator	System Defined (Y/N)	Enabled	Sub Attribute	LOV Type	LOV Validation Ind	Lookup Type	Default Value
TNM_REASON_CD	Reason Type	CHARACTER	30		LIKE	Y	Y		Lookup	Y	TNM_REASON_CD	

Reference Lookup Details

Lookup Type	Description	System Defined (Yes / No)	Enabled
TNM_REASON_CD	Reason Type	Y	Y

Lookup Code	Description	Sort	Sub code	System Defined (Yes / No)	Enabled
TRADE	Trade	0	ACC	Y	Y
GRADE	Grade	1	ACC	Y	Y

2.12.2 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.13 Conversion Enhancements

2.13.1 Overview

Updated the existing SET-API process with below changes.

- Added unique constraint for Asset # in Customer Servicing and Collection. This might have migration impact if existing customer is using duplicate asset numbers. In such a case, you need to update existing asset number to unique values.

Loading Account Conditions

- Conversion process enhanced to consume account conditions dat file. However, system generated account conditions should not be included in dat file and process validates to stop loading system generated conditions.
- System supports loading enabled Account Conditions using API process. This process does not allow loading below conditions and on successful conversion of account certain conditions like DELINQUENT would be posted on account by API process.
 - DELINQUENT
 - SCHEDULE FOR CHARGE OFF
 - PAYOFF/TERMINATION IN PROGRESS
 - NON ACCRUAL
 - BANKRUPTCY
 - DEFICIENCY
 - REPOSSESSION
 - FORECLOSURE

Loading Bankruptcy Information

- Enhanced conversion process to consume bankruptcy information dat file.
- Earlier bankruptcy details are conversion process driven by defaulting few values.
- After enhancement user can supply bankruptcy details, which would be loaded to OFSLL.

Account Conversion Line

Enhanced following screens in 'Line Conversion Accounts' with new/update fields.

Contract Main Table:

Contract Dt	Term	1st Pmt Dt	Instrument	Credit Limit	Draw Term	Reprt Term	Maturity Dt	Index	Margin Rate	Due Day
07/29/2018	12	12/29/2018	LINE OF CREDIT ...	50,000.00	7	12	11/29/2019	FLAT RATE	4.9900	29

Rcvd Dt	Verified Dt	PDC Ind	Promotion	Maturity Index	Strnt Preference Mode
07/29/2018	07/29/2018	N	NONE	FLAT RATE	

Contract Edit Section:

Contract Information

Contract Details

* Contract Dt: 07/29/2018
 Instrument: LINE OF CREDIT HOME EQUITY
 * Credit Limit: 50,000.00
 * Draw Term: 7
 * Reprt Term: 12
 * Term: 12
 * Maturity Dt: 11/29/2019
 * Index: FLAT RATE
 Index Rate: 0.0000
 * Margin Rate: 4.9900
 Rate: 4.9900
 * 1st Pmt Dt: 12/29/2018
 * Due Day: 29
 * Rcvd Dt: 07/29/2018
 Verified Dt: 07/29/2018
 Verified By:
 * PDC Ind:

Promotion Details

Start Days: 0
 Stop Accrual Days: 99999
 FDC Security Ind: ...
 ACH Fee Ind: ...

* Promotion: UNDEFINED
 Type: NONE
 Term: 0
 Index: FLAT RATE
 Index Rate: 0.0000
 Margin Rate: 0.0000
 Rate: 0.0000

Rate Caps and Adjustments

Increase Per Year: 2.0000
 Increase Per Lifetime: 5.0000
 Increase Ceiling: 20.0000
 Decrease Per Year: 2.0000
 Decrease Max Lifetime: 5.0000
 Decrease Floor: 5.0000
 # of Adjs / Year: 99.0000
 # of Adjs / Life: 999.0000

Advance

Initial Advance Min: 10000
 Initial Advance Max: 100000
 Advance Min: 10000
 Advance Max: 100,000.00

Billing

Draw Period Billing Method: INTEREST ONLY
 Draw Period Payment %: 0.0000
 Reprt Period Billing Method: PERCENTAGE OF PRINCIPAL PLUS
 Reprt Period Payment %: 2.0000
 Min Payment Amt: 50.00
 Min Finance Charge: 1.00
 Advance Tolerance: 10.00
 Advance Tolerance %: 0.0000
 Accrual Post Maturity:
 * Maturity Index: FLAT RATE
 * Maturity Rate: 4.9900

Others

Strnt Preference Mode:

Instrument Details

Start Dt Basis: EFFECTIVE DATE
 Accrual Method: AVERAGE DAILY BALANCE
 Rate Method: AC 11/04 / 18/11/04

Account Details > 'Details' Main Table:

Stop Accrual	Accrued Interest	Index Type	Index Rate	Margin Rate	Rate	Last Rate Change Dt	Accrual Start Dt	Last Accrual Dt	Rate Start of the Year
N		FLAT RATE	0.00	4.99	4.99	07/29/2018	03/08/2019		

# of Rate changes (Year)	# of Rate changes (Life)	# of Extensions (Year)	# of Extensions (Life)	# of Extension Term (Year)	# of Extension Term (Life)	# of Due Dt Changes (Year)	# of Due Dt Changes (Life)	Last Extn Dt	Due Day Chg Dt
		0	0	0	0				

Credit Limit	Hold (-)	Consumed (-)	Suspended (-)	Available Credit (=)	Over Limit Year	Over Limit Life	Last Advance Dt	Last Advance Amt	Time Zone
50,000.00	0.00	0.00	0.00	50,000.00	0	0		0.00	

Account Details > 'Details' Edit Section:

Additional Information

Interest and Accruals

Stop Accrual: ...
 Accrued Interest: ...
 Index Type: FLAT RATE
 Index Rate: 0.00
 Margin Rate: 4.99
 Rate: 4.99
 Last Rate Change Dt:
 Accrual Start Dt: 07/29/2018
 Last Accrual Dt: 03/08/2019
 Rate Start of the Year
 # of Rate changes (Year)
 # of Rate changes (Life)

Extn and Due Dates

Hold (-): 0.00
 Consumed (-): 0.00
 Suspended (-): 0.00
 Available Credit (=): 50,000.00
 Over Limit Year: 0.00
 Over Limit Life: 0.00
 Last Advance Dt:
 Last Advance Amt: 0.00

Credit Details

Credit Limit: 50,000.00

Others

Time Zone

2.14 Customer Score Refresh

2.14.1 Overview

Provided facility to maintain record of scores for Customers and Business.

During the service and lifecycle of the credit/ loan, it is required that updated Customers scores are maintained in OFSLL that could give a snapshot of credit score movements in recent history and not just stick to one particular score obtained during funding.

Customer Score

- Created an account level new non-monetary transaction as “Customer Score Update”.
- On posting this transaction a record will be captured under ‘Customer Service > Customer Details > Customer > Customer Score [New Tab]’.
- Below are the Transaction Code details:

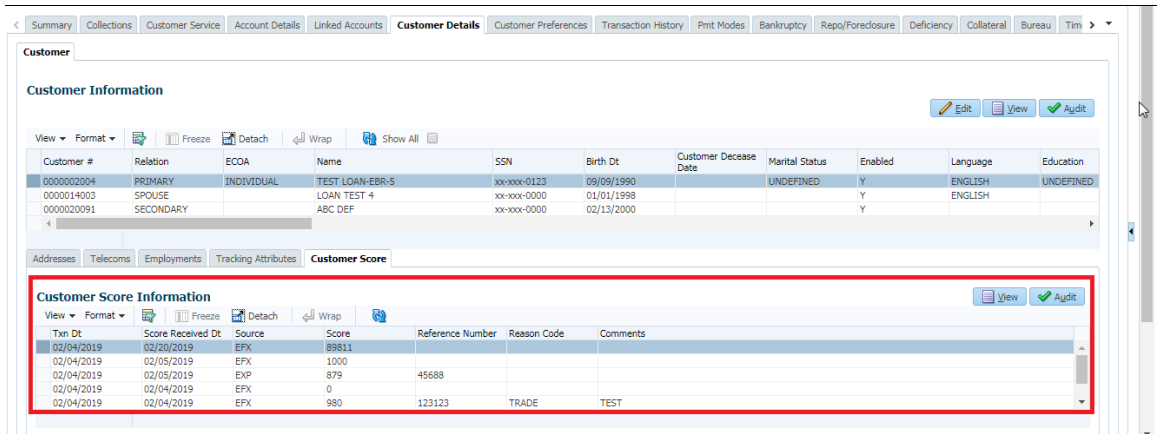
Txn Code	Description	Group	Action	Monetary	System Defined (Yes/No)	Enabled	Txn/Bal Type	Statement Txn Type
CUS_SCORE	CUSTOMER SCORE UPDATE	CUSTOMER NON MONETARY	POST	N	NO	Y	NONE	NONE
Batch	Manual	Statement Print	GL					
N	Y	N	N					

- Following are the transaction parameters and field details.

S No	Field Name	Field Format	Mandatory	Default Value
1	TXN DATE	Text Box with Calendar	Y	NA
2	SCORE RECEIVED DATE	Text Box with Calendar	Y	NA
3	RELATION TYPE	LOV [RELATION_TYPE_CD]	Y	Primary
4	SOURCE [EXP/EFX/TUX]	LOV [CRB_SOURCE_CD]	Y	NA
5	SCORE	Text Box	Y	0
6	REFERENCE NUMBER	Text Box	N	
7	REASON CODE	LOV [New LOV development WIP for Non-Monetary Transactions]	N	
8	COMMENTS	Text Box	N	

Note: If in one account “Customer Score Update” transaction is posted, then system posts this transaction to all the accounts linked to that customer.

- Provided new “Customer Score” tab, under ‘Customer Service > Customer Details > Customer’ to maintain the record of customer score data.



Business Score

- Created an account level new non-monetary transaction as “Business Score Update”.
- On posting this transaction a record will be captured under ‘Customer Service > Customer Details > Business > Business Score [New Tab]’.
- Below are the Transaction Code details:

Txn Code	Description	Group	Action	Monetary	System Defined (Yes/No)	Enabled	Txn/Bal Type	Statement Txn Type
BUS_SCORE	BUSINESS SCORE UPDATE	BUSINESS NON MONETARY	POST	N	NO	Y	NONE	NONE
Batch	Manual	Statement Print	GL					
N	Y	N	N					

- Following are the transaction parameters and field details.

Sl. No	Field Name	Field Format	Mandatory	Default Value
1	TXN DATE	Text Box with Calendar	Y	NA
2	SCORE RECEIVED DATE	Text Box with Calendar	Y	NA
3	SOURCE [EXP/EPX/TUX]	LOV [CRB_SOURCE_CD]	Y	NA
4	SCORE	Text Box	Y	0
5	REFERENCE NUMBER	Text Box	N	
6	REASON CODE	LOV [New LOV development WIP for Non-Monetary Transactions]	N	

Sl. No	Field Name	Field Format	Mandatory	Default Value
7	COMMENTS	Text Box	N	

Note: There is a validation to post this transaction only to the Business accounts.

- Provided new “Business Score” tab, under ‘Customer Service > Customer Details > Business’ to maintain the record of business score data.

The screenshot shows the Oracle Financial Services Customer Details web interface. The 'Business Score' tab is highlighted with a red box. The table below shows the data for the Business Score Information.

View	Format	Freeze	Detach	Wrap	Print	Apply
Tab Dt	Score Received Dt	Source	Score	Reference Number	Reason Code	Comments
02/25/2019	02/25/2019	TUC	300	94	TRADE	SCORE
02/28/2019	02/28/2019	TUC	600	23	GRADE	SCORE UPDATE
02/28/2019	02/28/2019	TUC	0		TRADE	SCORE UPDATE 1
02/27/2019	02/27/2019	SPX	500	13Q	TRADE	SCORE
02/28/2019	02/25/2019	SPX	489	2P	TRADE	SCORE

- Customer Score details and Business Score details are provided in the ‘Account on Boarding’ web service.
- Customer Score details and Business Score details are provided in the Conversion process.

2.14.2 Seed Data

Refer ‘[Appendix: Seed Data](#)’ chapter.

2.15 **Associate Non-Primary Asset to Account**

2.15.1 **Overview**

A non-monetary transaction created to associate a non-primary asset to an Account.

2.15.2 **Description**

- A new non-monetary transaction “ADD NEW ASSET” created in OFSLL to associate existing collateral to an Account.
- This transaction allow collaterals with status (NEW, INACTIVE and RELEASED) to associate with Accounts.
- All the new Assets associated are with Primary indicator as N.
- On successful posting on this transaction, added a new record in Customer Service → Collateral Management, Asset Relation and Asset Status History.
- A new comment “NEW COLLATERAL ADDED - ASSET NBR: XXX , PRIMARY IND: N” is also posted on the Account.

2.15.3 **Seed Data**

Refer '[Appendix: Seed Data](#)' chapter.

2.16 Add Business and Add Existing Customer/Business (UI Only)

2.16.1 Overview

OFSLL accepts only one Business Applicant, whereas if an existing business bought over by another business; which will encompass adding a new record of business name, TIN, and other details on the account; and an update to the credit bureau to indicate the buy. There is no option or transaction available to ADD NEW BUSINESS.

Enabled OFSLL to add new / existing Business to an Account from screen (instead of updating the details from screen and transaction) and post non-monetary transaction for history.

2.16.2 Description

From customer service screen, user can add a new business to an account using ADD button and user can add an existing customer business to the account using non-monetary transaction

Following are the changes done:

- Provided a 'Add' button and 'Current' indicator field in the Customer Service > Customer Details > Business > Business Details
- On click of 'Add' button, system will show the following fields

Attribute	Description	Input/ Selectable/ Display Only	Object Type	Mandat ory Y/N	Data Type/ Size	Field Valida tion	Default Values
Organizati on Type	BUSINESS_O RGANIZATIO N_TYPE_CD	Selectable	LOV	Y	Chara cter	NA	LOV Default
Type of Business	BUSINESS_T YPE_CD	Selectable	LOV	Y	Chara cter	NA	LOV Default
Business Category	CUSTOMER_ CATEGORY_ CD	Selectable	LOV	Y	Chara cter	NA	LOV Default
Name of the Business		Input	Text	Y	Chara cter		Null
Legal Name		Input	Text	Y	Chara cter		Null
Tax ID #		Input	Text	Y	Chara cter	Less than 9 chara cter	Null

Attribute	Description	Input/ Selectable/ Display Only	Object Type	Mandat ory Y/N	Data Type/ Size	Field Valida tion	Default Values
Start Dt		Input /selectable	Calendar	Y	Date	Shoul d be less than syste m date	Null
# of Employee s (Cur)		Input	Text	Y	Numb er	Shoul d not be less than 0	0
# of Employee s		Input	Text	Y	Numb er	Shoul d not be less than 0	0
Contract person		Input	Text	N	Chara cter		Null
Business Checking Bank		Input	Text	Y	Chara cter		Null
Bank Acc #		Input	Text	Y	Chara cter		Null
Currency	From Currency setup	Selectable	LOV	Y	Chara cter	NA	Null
Avg Checking Balance		Input	Text	Y	Chara cter		Null
# of Location		Input	Text	Y	Numb er	Shoul d not be less than 0	0

Attribute	Description	Input/Selectable/Display Only	Object Type	Mandatory Y/N	Data Type/Size	Field Validation	Default Values
Management Since		Input	Text	Y	Number	Should not be greater than current system year	0
Payment Hierarchy	From Payment Hierarchy setup	Selectable	Text	N	Character	NA	Null

- On saving the record, system changes the existing records' Current Indicator as 'N' and new Business's current indicator as 'Y' and creates the New Business Number. In this case, none of the child records will be available/created.
- On click of 'Save', If TAX number is exist in the system, system shows a warning 'Business Details exist with Same Tax Number'. With Ok.
- Following table illustrates on how system populates the credit limit details. These can be visible on EDIT and VIEW

	Adding Existing Business (B2 having limits)	Adding New Business(NB – no limits)
If Linked Business having Limits (B1)	<p>Changes to B2</p> <p>If Available Amt is less than Liabe Amount of contributed Account, system should show error message as 'No limit available to add the business.</p> <p>Limit Expiry Dt should be greater than or equal to account maturity date</p> <p>Adjust the limit as follows</p> <p>Total Utilized Amt = Add Liabe amount to this field</p> <p>Available Amt = Deduct 'liabe amount' from this field.</p> <p>Change in Linked Business Limit Details (B1)</p> <p>Total Utilized Amt = reduce Liabe amount Amt to this field</p> <p>Available Amt = add 'liabe amount' from this field.</p>	<p>Adjust the limit as follows</p> <p>Max Limit = Liabe amount</p> <p>Total Utilized Amt = Liabe Amount</p> <p>Available Amt = 0</p> <p>Hold Amt = 0</p> <p>Suspended Amt = 0</p> <p>Max Late Charge = 0</p> <p>Limit Expiry Date = Account Maturity date</p> <p>Next Limit Renewal = Account Maturity date</p> <p>Note: If user wants to update the limits, use customer level credit limit transactions</p>

	Adding Existing Business (B2 having limits)	Adding New Business(NB – no limits)
If Linked Business not having Limits	No impact on the Credit Limit Fields	No impact on the Credit Limit Fields

Reference: [CreditLimits.xlsx](#)

- Added the simulation sheet above for Credit Limit field's population.
- After this patch, if the ACC_BUSINESS_IND IS 'Y', then only system enable Business tab.
- If user using Business Tab to add a business, then system will post a non-monetary transaction, 'New Business Maintenance' with transaction date as system date.
 - In the result, system shows the message as, "Direct Record Update. Transaction Posted Successfully.
- Added the following parameters to the transaction
- "Add Existing Business" non-monetary transaction

Parameter Code	Description	Mandatory Y/N	Data Type/ Size	Field Validation	Default Values	Comments
TXN Date	Transaction Date	Y	Date	Should be equal to System Date		
Existing Business #	Text field	Y	Varchar	Na	NONE	if user select the same customer number linked to the account, validate on post

- After posting this transaction, system will populate the details in business tab also and changes the existing records' Current Indicator as 'N' and new Business Customer's current indicator as 'Y' along with, populate the all child details (like address, Telecoms, Partners...) on to this account.
 - "New Business Maintenance" non-monetary transaction

Parameter Code	Description	Mandatory Y/N	Data Type/ Size	Field Validation	Default Values	Comments
TXN Date	Transaction Date	Y	Date	Should be equal to System Date		
Organization Type	BUSINESS_ORGANIZATION_TYPE_CD	Y	Character	NA	LOV Default	

Parameter Code	Description	Mandatory Y/N	Data Type/ Size	Field Validation	Default Values	Comments
Business Type	BUSINESS_TYPE_CD	Y	Character	NA	LOV Default	
Business Category	CUSTOMER_CATEGORY_CD	Y	Character	NA	LOV Default	
Business Name		Y	Character		Null	
Legal Name		Y	Character		Null	
Tax ID #		Y	Character	Exact 9 character	Null	
Start Dt		Y	Date	Should be less than system date	Null	
# of Employees (Cur)		Y	Number	Should not be less than 0	0	
# of Employees		Y	Number	Should not be less than 0	0	
Contract person		N	Character		Null	
Business Checking Bank		Y	Character		Null	
Bank Acc #		Y	Character		Null	
Avg Checking Balance		Y	Character		Null	
# of Location		Y	Number	Should not be less than 0	0	

Parameter Code	Description	Mandatory Y/N	Data Type/ Size	Field Validation	Default Values	Comments
Managem ent Since		Y	Number	Should not be greater than current system year	0	
Payment Hierarchy	From payment Hierarchy setup	Y	Character	Based on sub code	Null	

- If user post these transactions on to a non-business account, system show an error “Cannot link/add business details to Individual Account”
- Added a Show All check box in the Business Details, by default it will show only the current record. On click of the Show All, system will show the all records.

New Fields

- Added the following Read Only fields in the Customer and Business tabs and is visible on click of Edit and View. These fields will not show in the header block

Header name as ‘Utilization Details’

- % of Utilization and Utilization Amount as number fields
- These two fields will get populated on funding the application with credit limits or while adding the existing customer / business to an account if the account is under credit limits

2.16.3 Screen changes

After implementing the changes, screen appearance is as below:

Customer Service > Customer Details > Business > Add

The screenshot displays the Oracle Business Details interface. At the top, there are navigation buttons: Add, Edit, View, and Audit. Below this is a toolbar with View, Format, Freeze, Detach, Wrap, and Show All (with a checkbox). The main area contains a table with columns: Current, Business #, Organization Type, Type of Business, Business Category, Name of the Business, Legal Name, Tax ID #, Start Dt, and # of Emplo. A single record is shown with values: Y, 0000002051, C CORP, CORPORATE, Lending Leasing, SOFTWARE SERVICES PVT LTD, xxxxx5119, 12/18/2017. Below the table is a form titled 'Business Details' with various input fields and dropdown menus, including Organization Type, Business Category, Name of the Business, Legal Name, Tax ID #, Start Dt, Business Checking Bank, Bank Acc #, Avg Checking Balance, # of Locations, Management Since, Payment Hierarchy, # of Employees (Cur), # of Employees, and Contact Person. The 'Add' button and 'Show All' checkbox are highlighted with red boxes.

Customer Service > Customer Details > Business > Edit

Business Details

Business # 000002051

* Organization Type C CORP

* Type of Business CORPORATE

Business Category

* Name of the Business LENDING LEASING

* Legal Name SOFTWARE SERVICES PVT LTD

* Tax ID # XXXXX5119

* Start Dt 12/18/2017

* # of Employees(Cur) 10

* # of Employees 10

Contact Person CONTACT PERSON

* Business Checking Bank HDFC

* Bank Acc # 20000100061065

* Avg Checking Balance 1,234.01

* # of Locations 5

* Management Since 745

Payment Hierarchy EQUAL AMOUNT

Credit Limit Details

Max Limit 0.00

Total Utilized Amt 0.00

Available Amt 0.00

Hold Amt 0.00

Suspended Amt 0.00

Grade

Max Late Charge 0.00

Limit Expiry 12/31/4000

Limit Next Renewal 12/31/4000

Utilization Details

% of Utilization 0.00

Utilization Amount 0

Save and Stay Save and Return Return

Customer Service > Customer Details > Customer > Edit

Customer

Customer # 0000289010

Relation PRIMARY

EOA INDIVIDUAL

Name LOAN BUSINESS

Birth Dt 10/12/1987

Marital Status

Enabled

Language ENGLISH

Education UNDEFINED

Mother's Maiden Name

* Class Type NORMAL

Category

Email

* Stop Correspondence

* Disability

* Skip

Bankruptcy

* Privacy Opt Out

* Insurance Opt Out

* Marketing Opt Out

* Share Credit Opt Out

Existing CIF 0000011001

Update Customer Info

Identification Details

Passport #

Issue Dt

Expiry Dt

Visa #

Nationality USA

National ID - - 0

* SSN XX-XXX-4500

License #

License State

Military Service

Active Military Duty

Effective Dt

Order Ref #

Release Dt

Customer Decease Date

KYC

Reference #

Status

FATCA

Birth Place

Birth Country

Permanent US Resident Status

Power of Attorney

Power of Attorney

Holder Name

Address

Country

Nationality

Telephone Number

Credit Limit Details

Max Limit 100,000.00

Total Utilized Amt 25,000.00

Available Amt 75,000.00

Hold Amt 0.00

Suspended Amt 0.00

Grade

Max Late Charge 0.00

Limit Expiry 12/31/4000

Limit Next Renewal 12/31/4000

Utilization Details

% of Utilization 50.00

Utilization Amount 25000

Save and Stay Save and Return Return

2.16.4 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.17 Lease Seed Data enhancement

2.17.1 Overview

Below are the sample fee balances provided in base for Lease

- Inspection Fee
- Damage Fees
- Reconditioning Fees
- Purchase Fee
- Transportation Fee

2.17.2 Description

- Following transactions codes are provided with Post, Reverse, Waive, Adjust Plus, Adjust Minus, Charge Off/Write Off, Bill
 - Inspection fee
 - Damage Fees
 - Reconditioning Fees
 - Purchase Fee
 - Transportation Fee
- Along with this, following transaction parameters are provided for Post, Waive, Adjust Plus, Adjust Minus, Charge Off/Write Off, and Waive
 - Txn Date
 - Amount
 - Comment

2.17.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.18 Configurable Transaction Upload

2.18.1 Overview

OFSLL supports uploading the monetary and non-monetary transactions through flat file but does not support the bulk upload and the input file delimiter is not configurable.

Now, this transaction upload functionality enhanced with bulk upload and make input file delimiter as configurable.

2.18.2 Description

- Existing transaction upload file structure definition is provided in the Setup > Data Files > Input
- Existing SET-IFP > INPUT DATA INSERTION (IDDPRC_BJ_000_01) batch job will process the files under ITU folder as existing i.e., it will process the transaction with the traditional process
- Introduced new SET-IFP > IDDPRC_BJ_000_02 > BULK INPUT DATA INSERTION batch job which will work for when CLOB is 'N' and it will read the files from ITU folder itself. After placing the file, if user runs this batch job, system will process the files/transactions in bulk process.
 - Each Transaction in uploaded file will recorded in Customer Service > External Interfaces. Accept and Reject button will not be displayed for individual transactions
 - If file having multiple transactions and any one transaction not valid then, system will process all the valid transactions and generates a bad file with failed transactions

The screenshot displays the 'Data Files' application interface. It is divided into two main sections: 'Input Data File Definitions' and 'Column Definitions'. The 'Input Data File Definitions' section shows a table with one entry: 'ITU_TXN_UPLOAD' with file name 'ITU_TXN_UPLOAD.CSV', description 'TXNS FILE UPLOAD', directory path 'ITU', delimiter ',', record format 'VARIABLE', and enabled status 'Y'. The 'Column Definitions' section shows a table with 10 columns, including 'Seq', 'Column Name', 'Column Description', 'Data Type', 'Format Mask', 'Length', 'Sort', and 'Enabled'. The columns are: 1. TUP_AOC_NBR (ACCOUNT NUMBER), 2. TUP_ID (TXNS UPLOAD ID), 3. TUP_POST_DT (TXNS POST DATE), 4. TUP_TXI_CODE (TXNS CODE), 5. TUP_TXN_STATUS_CD (TXNS STATUS CODE), 6. TUP_PARAMETER1_CD (TXNS UPLOAD PARAMETER CODE 1), 7. TUP_VALUE1 (TXNS VALUE 1), 8. TUP_SIGN1 (TXNS SIGN 1), 9. TUP_PARAMETER2_CD (TXNS UPLOAD PARAMETER CODE 2), and 10. TUP_VALUE2 (TXNS VALUE 2).

Name	File Name	Description	Directory Path	Delimiter	Record Format	Enabled
ITU_TXN_UPLOAD	ITU_TXN_UPLOAD.CSV	TXNS FILE UPLOAD	ITU	,	VARIABLE	Y

Seq	Column Name	Column Description	Data Type	Format Mask	Length	Sort	Enabled
1	TUP_AOC_NBR	ACCOUNT NUMBER	CHARACTER	NOT APPLIC...	30	1	Y
2	TUP_ID	TXNS UPLOAD ID	NUMBER	NOT APPLIC...	30	2	Y
3	TUP_POST_DT	TXNS POST DATE	DATE	MM/DD/YYYY	30	3	Y
4	TUP_TXI_CODE	TXNS CODE	CHARACTER	NOT APPLIC...	30	4	Y
5	TUP_TXN_STATUS_CD	TXNS STATUS CODE	CHARACTER	NOT APPLIC...	30	5	Y
6	TUP_PARAMETER1_CD	TXNS UPLOAD PARAMETER CODE 1	CHARACTER	NOT APPLIC...	30	6	Y
7	TUP_VALUE1	TXNS VALUE 1	CHARACTER	NOT APPLIC...	240	7	Y
8	TUP_SIGN1	TXNS SIGN 1	CHARACTER	NOT APPLIC...	30	8	Y
9	TUP_PARAMETER2_CD	TXNS UPLOAD PARAMETER CODE 2	CHARACTER	NOT APPLIC...	30	9	Y
10	TUP_VALUE2	TXNS VALUE 2	CHARACTER	NOT APPLIC...	240	10	Y

2.18.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.19 Index / Margin Rate Change Monetary Transaction

2.19.1 Overview

OFSLL supports to overwrite the Rate as a while like Rate from X to Y say, 8% to 10%.

Request is to change the rate by 1% (i.e.) reduce rate by 1% from 8% to 7% or Increase by 2% from 8% to 10%.

2.19.2 Description

- New 'Adjustment Type' transaction Parameter to RESCHEDULE_INDEX Monetary Transaction as follows to update the margin rate by indicating either Increase or Decrease with certain basis points

Parameter code	Default	Displayed? (Y/N)	Required? (Y/N)	Comment
Adjustment Type	Actual	N	N	Three Values Actual Increase Decrease

- If Actual, system will work as existing. If user doesn't enabled Displayed / Required, system will refer the default value and perform the action accordingly
- Say, account having the following information

Index Type	PRIME RATE
Index Rate	12.00
Margin Rate	4.99
Rate	16.99

- Now if user posted the transaction with **Decrease - 1.2**
System will post 'RESCHEDULE_INDEX' Transaction with Details as "INDEX= PR, MARGIN RATE= 12.0000 AND FROM RATE = 16.99 TO RATE 15.79"
 - Updates the account information as

Index Type	PRIME RATE
Index Rate	12.00
Margin Rate	3.79
Rate	15.79

System will also accrue the interest up to this transaction date with the old rate.

2.19.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.20 Account Transactions Get web service

2.20.1 Overview

New Get service that gives capability to get Transactions for an Account.

2.20.2 Description

A new Web Service to get Account Monetary Transaction Details. The service allows filtering the data at a minimum based on Account Number, From Date, and To Date.

- Those transactions which can see in Customer service > Transaction History > Transactions [UI will only show only few monetary transaction groups]
- This service will send the list of all transactions posted by the user/system for specific account along with payment allocation details.
- In the request, following parameters are provided
 - Account Number
 - Transaction Type
 - From Date
 - To Date
- Here both From and To Dates are inclusive and will refer the “Txn Dt” field in the transaction history tab and
 - Only validation is, From Date should be less than or equal to To Date. From Date can be less than Account Contract Date, and TO Date can be greater than System Date.
- Only account number is mandatory; system will validate does it exist or not.
- If user does not provide the Transaction Type, system will send the All Transactions.
- If user does not provided the Dates, send all transactions.
 - If From Date provided, system will send transactions from date to till system date.
 - If To Date is provided, system will send the transactions from first transaction till To Date.
- Data shared in Descending order. i.e, latest records shown first.
- Transaction Type options are as follows:

Transaction Type in WS Option	Reference (Txn History > Txns > View Options)
PAY_GOOD	Good Payments
PAY_ALL	All Payments
FEE_GOOD	Good Fees
FEE_ALL	All Fees
ALL_GOOD	Good Txns
ALL_ALL	All Txns

2.20.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.21 RESTful Web Services

2.21.1 Overview

From 14.7.0.0.0 release, deprecated all the SOAP services from the base version.

RESTful Web Services enhanced with below changes:

- Support for OAuth 2.0 authentication
- New Web Services
- Changes/Modifications to existing Web Services

2.21.2 Description

New/Update of RESTful Web Service

Categorized OFSLL Web Service enhancements as indicated below. The specification and element descriptions of these services specified in Swagger documentation.

- **New Web Services:** Newly added in current release.
 - Authentication-This service is used for Requesting Access token to access protected OFSLL REST API
 - Generate OAuth2.0 Token (POST)
 - Validate OAuth2.0 Token (GET)
 - Note:** For more details on OFSLL support on OAUTH2.0 refer to the OAuth Implementation guide shared in OTN library:
https://docs.oracle.com/cd/F16599_01/references.htm
- Setup
 - Webhook (POST, PUT and GET): Use this service to add, update and fetch Webhook setup details.
- Vendor
 - Vendor (POST,PUT and GET)
 - Vendor Comments (POST and GET)
- Producer
 - Producer (POST,PUT and GET)
 - Producer Comments (POST and GET)
 - Producer Contacts (POST and GET)
 - Producer Compensation (GET)
 - Producer Statements (GET)
 - Producer Subvention (GET)
- Customer Service
 - All Account Tracking Attributes (GET)
 - Monetary Transaction History (GET)
- Collateral
 - Asset (PUT)
 - Asset Valuation (POST,PUT and GET)
- **Update of Existing Services:** Updated in request/response and underlying PL/SQL record types

- Customer Service
 - Account On-boarding (POST)
 - Account Details (GET)
 - Account Search Service (GET)
 - Payment Posting (POST)
- Customer
 - Customer Payment Posting (POST)
- Business
 - Business Payment Posting (POST)
- Collateral
 - Asset (POST,GET)

2.21.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.22 Producer web services

2.22.1 Overview

Provided new set of Producer RESTful Web Services.

2.22.2 Description

Introduced the following new RESTful Web Services.

Service	Purpose	Method
Producer On boarding services → Details Block	To post Producer details with information like name, address etc.,	POST
	To update Producer details like name, address etc.,	PUT
	To query and fetch Producer information like name, address etc.,	GET
Producer → Contact	To post Producer contact details	POST
Producer → Compensation	To get Producer Compensation Details	GET
Producer → Subvention	To get Producer Subvention Details	GET
Producer → Holdback & Reserve	To get Producer Holdback and Reserve Details	GET
Producer → Statements	To get Producer Statement Details	GET
Producer → Comment	To post the comment in Producer tab using Producer ID	POST
	To fetch the comment in Producer tab using Producer ID	GET

- For Producer POST service
 - If the system parameter **UVN_PRO_NBR_SYS_GENERATED** is 'Y', system ignores **Producer Number** element and generates the number.
 - If this parameter is 'N', **Producer Number** element is mandatory and unique constraint validation happens.

2.22.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.23 Vendor web services

2.23.1 Overview

Provided Vendor RESTful Web Services.

2.23.2 Description

Introduced the following new RESTful Web Services.

Service	Purpose	Method
Vendor On boarding services → Details Block	To post Vendor details with information like name, address etc.	POST
	To update Vendor details like name, address etc.	PUT
	To query and fetch Vendor information like name, address etc.	GET
Vendor → Comment	To post the comment in Vendor tab using Vendor ID	POST
	To fetch the comment in Vendor tab using Vendor ID	GET

- For Vendor POST service,
 - If the system parameter **UVN_VEN_NBR_SYS_GENERATED** is 'Y', system ignores **Vendor Number** element and generates the number.
 - If this parameter is 'N', **Vendor Number** element is mandatory and unique constraint validation happens.

2.23.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.24 Collateral web services and File Upload

2.24.1 Overview

Provided Collateral RESTful Web Services. Using the file upload system creates the collateral details, valuation, add-ons and tracking attributes.

2.24.2 Description

Introduced the following new RESTful Web Services.

Service	Purpose	Method
Collateral Management → Collateral Details Block	To update collateral details using the asset number	PUT
Collateral Management → Collateral Details → Valuation Block	To update collateral valuation details	PUT
	To create collateral valuation details	POST
	To get collateral valuation details	GET
Modified Services		
Collateral Management → Collateral Details Block	Create the collateral details and link to an account	POST
	Get the collateral details using the account number	GET

- 'Create Collateral' file upload
 - Provided new input folder called '**ICC**' along with the system parameter to specify the folder location
 - Provide the setup configuration under Setup > Data Files > Input
 - Use the existing SET-IFP batch job (IDDP RC_BJ_000_02 - BULK INPUT DATA INSERTION) to process this input file
 - While processing the files, system refers to the data file setup, maps the data with column name and then validates.
- Using this service, user can create and update the collateral details including valuation, add-ons and tracking attributes.
- As part of the response, system generates processed/bad/error file in the input > ICC > > Processed folder.
- Collateral Update File- using this service, user should be able to update following in bulk
 - Details – using the Asset number user should able to update the details.
 - If no data provided, field left blank.
 - If the data is exist, system validates the data and updates the value.
 - Valuation – using the asset number, user can update the **current** valuation only
 - Add On – using the asset number, user should able to update the **current** valuation's add-on details
 - Tracking Attributes – using the asset number and tracking item, user should able to update the tracking attribute values. To update the multiple tracking items for single asset, user should send it in multiple records with different tracking item.
- 'Operation Ind' refers to the Create (I) or Update (U) the record.

Note: In this release, system does not use the existing input file CLOB parameter (CMN_FILE_PROCESS_TO_LOB) for processing these files. i.e., it will work only for 'N'.

In the Setup > Data Files > Input tab providing the seed data with the file structure

The screenshot shows two tables in a software interface. The top table is 'Input Data File Definitions' and the bottom table is 'Column Definitions'.

Name	File Name	Description	Directory Path	Delimiter	Record Format	Enabled
ASSET_ASE_UPLOAD	IUT_ASE_UPLOAD.CSV	ASSET FILE UPLOAD	ICC	,	VARIABLE	Y
ASSET_ATA_UPLOAD	IUT_ATA_UPLOAD.CSV	ASSET TRACKING ATTRIBUTES FILE UPLOAD	ICC	,	VARIABLE	Y
ASSET_ATR_UPLOAD	IUT_ATR_UPLOAD.CSV	ASSET ADDONS FILE UPLOAD	ICC	,	VARIABLE	Y
ASSET_AVL_UPLOAD	IUT_AVL_UPLOAD.CSV	ASSET VALUATIONS FILE UPLOAD	ICC	,	VARIABLE	Y

Seq	Column Name	Column Description	Data Type	Format Mask	Length	Sort	Enabled
1	ASE_OPERATION_IND	OPERATION IND	CHARACTER	NOT APPLIC...	30	1	Y
2	ASE_NBR	ASSET NUMBER	CHARACTER	NOT APPLIC...	30	2	Y
3	ASE_ORIG_SYS_XREF	XREF	CHARACTER	NOT APPLIC...	30	3	Y
4	ASE_COLLATERAL_TYPE_CD	COLLATERAL TYPE	CHARACTER	NOT APPLIC...	30	4	Y
5	ASE_PRIMARY_IND	PRIMARY	CHARACTER	NOT APPLIC...	30	5	Y
6	ASE_ASSET_CLASS_CD	ASSET CLASS	CHARACTER	NOT APPLIC...	30	6	Y
7	ASE_AST_TYPE	ASSET TYPE	CHARACTER	NOT APPLIC...	30	7	Y
8	ASE_ASB_TYPE	SUB TYPE	CHARACTER	NOT APPLIC...	30	8	Y
9	ASE_REGISTRATION_NBR	REGISTRATION #	CHARACTER	NOT APPLIC...	30	9	Y
10	ASE_YEAR	YEAR	NUMBER	ZERO FILL 4 ...	30	10	Y

Sample File

Reference: [IUT_ASE_UPLOAD.csv](#)

2.24.3 Seed Data

Refer '[Appendix: Seed Data](#)' chapter.

2.25 Rescission Account - Non-Monetary Transaction

2.25.1 Overview

OFSLL 'generic post transaction RESTful service' does not allow any reversal transactions. From the third party system user should void an account in OFSLL using the Web Service.

2.25.2 Description

- Provided new **Rescission Account** non-monetary transaction with transaction date, using this transaction user can able to void any type of account (loan/line/lease) and status should be 'ACTIVE' and 'TERMINATE'.
 - Also, existing validations on 'Transaction History > Transactions > Active > Reverse' will be applicable for this transaction.
 - System does not allow to post if account status is in 'Void' status.
- System will check the account backdate date which should be less than or equal to the accounts activation date.
 - If not, an error "Backdating of Transaction is allowed for date after <account backdate date> only" will be shown.
 - If user wants to void a Paid or Charged Off account, user need to reverse the transaction from the UI and can post this transaction to void an account.
- System posts the '**REVERSE ACTIVE**' transaction and change the following:
 - Account status to 'Void'.
 - Corresponding Application status to 'Void', if exist.
 - Reverses all the Good Transactions on to the account.
- Transaction parameters are:
 - Txn Date, which should be equal to the System Date
 - Reason

2.25.3 Seed Data

Refer [Appendix: Seed Data](#) chapter.

2.26 Link Customer Based on Customer Number

A new system parameter “AUTO GENERATE BUSINESS NUMBER FOR CONVERSION PROCESS” is introduced to determine if the Customer Number should be generated automatically or provided by external interface.

UpdateCustomerInfo: This field is used to update existing customer details with new details provided as part of the new Account on-boarding request.

LinkExistingCustomerInd: This field is used to link existing customer provided with new Account. If Customer ID is not provided then system will search with SSN/National ID and associate existing Customer with new Account. If Customer ID is provided then system will validate SSN/National ID and associate it with new Account.

SNO	CusId	LinkExisting CustomerInd	OFSLL Has Customer	Description
1	Y	Y	Y	System will search Customer based on CusID, validate CusID with SSN/National ID and associate new Account with matched customer
2	N	N	N	System will create new customer and associate to new Account
3	Y	Y	N	System will search Customer based on CusID and on no match found system will throw error
4	N	Y	Y	System will search Customer based on SSN/National ID and associate new Account with matched customer
5	N	Y	N	System will create new customer and associate to new Account

A new system parameter “LINK CUSTOMER BY CUSTOMER NBR/ID” should be created to toggle logic of associating to existing customer between Customer ID and Customer Number.

If the values is CUSTOMER ID, then existing logic continues. If the value is CUSTOMER NBR, then new logic will be written to associate based on Customer Number and not validate using SSN/National ID.

SNO	CusNbr	LinkExisting CustomerInd	OFSLL Has Customer	Description
1	Y	Y	Y	System will search Customer based on CusNbr and associate new Account with matched customer
2	N	N	N	System will create new customer and associate to new Account
3	Y	Y	N	System will search Customer based on CusNbr and on no match found System will throw Error – If create customer system parameter is N

SNO	CusNr	LinkExisting CustomerInd	OFSLL Has Customer	Description
				System will create Customer – If create customer system parameter is Y
4	N	Y	Y	System will throw error
5	N	Y	N	System will throw error

Also, the following additional parameters are introduced:

Parameter Name	Description
SYP_AUTO_GEN_BUS_NBR (AUTO GENERATE BUSINESS NUMBER FOR CONVERSION PROCESS)	During Account on-boarding/conversion process, this system parameter is used to determine if Business Number is to be generated by OFSLL (if set as Yes) or provided by External System (if set as No).
SYP_AUTO_GEN_ASE_NBR (AUTO GENERATE ASSET NUMBER FOR CONVERSION PROCESS)	During Account on-boarding/conversion process, this system parameter is used to determine if Asset Number is to be generated by OFSLL (if set as Yes) or provided by External System (if set as No).
UPR_PRO_NBR_SYS_GENERATED (PRODUCER NUMBER IS SYSTEM GENERATED)	During new Producer creation, this system parameter is used to determine if Producer Number is to be generated by OFSLL (if set as Yes) or provided by External System (if set as No).
UVN_VEN_NBR_SYS_GENERATED (VENDOR NUMBER IS SYSTEM GENERATED)	During new Vendor creation, this system parameter is used to determine if Vendor Number is to be generated by OFSLL (if set as Yes) or provided by External System (if set as No).

3. Appendix: Seed Data

Seed data for all the impacted modules against specific enhancement is available in the below location.

OTN Documentation Library - [Seed Data 14.7.0.0.0.pdf](#)

4. Patches and Bugs

Bug Id	Bug Description	Fix Description
NA	NA	NA

5. Security Fixes

-NA-

6. Limitations and Open issues

-NA-

7. Components of the Software

7.1 Documents accompanying the software

The various documents accompanying the software are as follows:

- Product Release Notes
- Product Installation Guide
- Installer Kit
- User Manuals and Installation manuals - These can be accessed from the link https://docs.oracle.com/cd/F16599_01/index.htm

7.2 Software Components

Software Components of this patch release are as follows:

- Core
 - UI Components Ear file (JSF, XML, XLF, JSFF)
 - Stored Procedures (Packages, Views, Java Stored procedures)
 - Reporting Components(Data models(xdm), Reports(xdo, rtf))
 - BIP / canned reports
- Interface
 - Stored Procedures (Packages, Views, Types)
 - The WSDL files for the service supported
 - XSD Structure (dictionary) for the web service
 - Configuration files for the web service
 - Java classes for the web service
 - The service documents – describing the services
 - Extensibility Document – Describes customization for the services.
- Installation utilities
 - Script based installation for Database components
 - Installation documents for Database, UI, Web services

8. Annexure – A: Environment Details

Component	Deployment option	Machine	Operating System	Software	Version	
Oracle Financial Services Lending and Leasing	Centralized	Application server	Oracle Enterprise Linux 6.7+ & 7.0 (64 Bit) and Sun SPARC with Oracle Solaris 11 (64 Bit)	Oracle WebLogic Enterprise Edition(Fusion Middleware Infrastructure installer – includes ADF and RCU)	12.2.1.3.0	
				Oracle JDK	1.8.0_202	
				Application Development Framework	12.2.1.3.0	
				Oracle Database Enterprise Edition	12.1.0.2.0 / 12.2.0.1.0 / 18.3.0.0.0	
		Reporting Server		Oracle Business Intelligence Publisher	12.2.1.3.0 / 12.2.1.4.0	
		Client Machines		Windows 7 (Patch Version 6.1)	Microsoft Internet Explorer (64 Bit)	11.706.17134.0CO
					Mozilla Firefox (32 Bit)	60.6.3esr
					Google Chrome (64 Bit)	74.0.3729.131
				Windows 10 (Patch Version 1703)	Microsoft Edge (64 Bit)	42.17134.1.0
					Mozilla Firefox (64 Bit)	66.0.4
					Google Chrome (64 Bit)	74.0.3729.131
				Mac OS X	Apple Safari (64 Bit)	12.2

9. Annexure – B: Third Party Software Details

For information on Third Party Software Details, refer to Licensing guide available in OTN library - https://docs.oracle.com/cd/F16599_01/pdf/refdocs/Licensing_Guide.pdf

ORACLE®

Financial Services

Product Release Notes
Oracle Financial Services Lending and Leasing Release 14.7.0.0.0
May 2019

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
<https://www.oracle.com/industries/financial-services/index.html>

Copyright © 1998, 2019, 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 recompilation 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.