What's New in

Temenos Infinity

April 2022

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|Release Highlights

Temenos Infinity

Digital Banking

Digital Banking Servicing Micro Apps

Micro Apps are applications with specific functionality which are fast and efficient than monolithic applications. While traditional monolithic apps contain a wide range of functionality including front-end and back-end operations, Micro Apps are simple, lightweight in nature with targeted functionality.

- **Trade Finance Micro App**: Developed to cover the Amendments capability for the Import LCs and the Drawings capability for the Export LCs.
  - Import Amendments
    - View the list of Import LC Amendments.
    - Search for a particular Import LC Amendments by using different keywords.
    - Filter the list of Import LC Amendments records.
    - Select a particular Import LC Amendments and view its details.
    - Raise a request for new Import LC Amendments.
    - Submit an Import LC Amendments for approval.
    - Print and download the Import Amendment report.
  - Export Drawings
    - Submit documents to an approved Export LC (create a drawing).
    - Save the new Export Drawing request as a draft.
    - Edit an Export Drawing draft.
    - Delete an Export Drawing draft.
    - Submit an Export Drawing for approval.
    - View the list of Export Drawings.
    - Filter the list of Export Drawings.

- Search for a particular Export Drawing record by using different keywords.
- Select an Export Drawing record and view its details.
- View and manage the discrepancies for an Export Drawing.
- Print and download an Export Drawing record.
- **Bulk Payment**
  - User can edit the past-dated template and initiate the bulk request with current or future date from existing Bulk Template.
  - During Edit Bulk template flow, a user can edit or remove the added Beneficiary in the same form rather than moving across different forms.

The topic related to this feature is given below:

Digital Banking Servicing Micro Apps

Infinity Spotlight

Spotlight application is used to set up and maintain customer and employee-related information and to configure the behavior of digital banking applications associated with this information.

- Enhancements to Per Transaction, Daily, and Weekly limit validations for a Feature Action in Master Data Management.
- SCA related items
  - Spotlight - Device Management
    - End user bound device will be listed as part of single customer view and bank staff can perform operation such as suspend/unsuspend/revoke.
    - Bank staff can do master reset for the end user.

- Spotlight with Generic Framework Integration
  - Vendor agnostic solution for any authentication vendor can be integrated.
  - Dynamically configuration is driven to control the communication during enrolment and device management.
  - Three users profile reset.
- SCA Scenarios - Active/InActive: SCA scenarios to control the step-up authentication for given features action.
- SCA scenarios - Risk score: SCA scenarios to control the step-up authentication for given features action driven through risk score mechanism.

The topic related to this feature is given below:

Infinity Spotlight

NextGen UI Components

The NextGen UI components are reusable components created using the Component 2.0 architecture of Quantum Visualizer. These components facilitate the usage of components across user journeys (features) of a Micro App to deliver the end-to-end user experience. They are also configurable according to the context of the consuming functions or features. The NextGen UI components are available for the Mobile Native channel only.

The following components are introduced in this release:

Postal Address	Email Address	Phone Number	Footer Menu
Frequency Picker	Data Aggregation	Account Selection	File Upload
Numerical Range	Selection Input File	Truncating Label	

- The following components are enhanced in this release:
    - Dropdown
    - Data Range
    - Keyword Search
    - Animating Text Box
- Modified the content for framework: Data Formatting

> **The topic related to this feature is given below:**
>
> NextGen UI Components

Infinity Origination

Enables banks and credit union members to open deposit accounts with a seamless process across multiple channels and submit retail and business loan requests quickly.

Retail Origination

- **Infinity Retail Origination App**
    - Introduced Mortgage Loan Product so that customers can apply for Mortgage Loan digitally without visiting the bank branch.
        - Added Mortgage Loan on the Landing Page and Mortgage Purpose "First Time Buyer" on the Dashboard.
        - Added Mortgage loan eligibility calculator which allows user to compute the maximum loan amount one can avail based on the information provided.
        - Ability to provide consent and start application as Prospect customer or existing customer.
        - Provision to capture Personal Information.
        - Enhanced Financial Information (Income and Employment) screen to collect financial data.
        - Added Mortgage - Property Details screen to capture Mortgage property details.

- Added Mortgage - Funding Position screen to capture Source/use (Inflow/Outflow) of Funds to Purchase Mortgage Loan.
- Added Mortgage Composition screen to structure (single/multi part) Mortgage Loan as per personal need.
- Enhanced Document Checklist screen to collect Mortgage specific documents.
- Enhanced Summary screen to review Mortgage details before submitting the application.
- Submit the Application.
- Notify customer on successful submission of Mortgage Loan application.
- Enhanced Co-applicant screens with invite feature to allow existing customer to be added to the application.

- Introduced Invite Co-applicants feature
  - A customer can add Existing customers as co-applicant by Sending Invite.
  - Invited co-applicant receives the Invite via email and can login using OLB credentials to acknowledge (Accept) or Reject Invite and proceed to capture the details and submit the application.
  - A customer can continue to add prospect customers as co-applicants and fill the data on behalf of prospect customers.

- Document Checklist Enhancements
  - Provision to Edit information for uploaded Documents.
  - Enhanced DMN rules to get Mortgage Product and Property specific additional documents in checklist.

- Consents Enhancements
  - Receive multiple consents from customer (Main applicant and Co-applicants).
  - Provision to receive Explicit Consents.
  - Added additional consents to get explicit consents from Main applicants and Co-applicants.

- Integration with Formpipe: A Temenos Exchange partner for generation of system documents related to Retail Mortgage Journey for Simulation and generation of Repayment Schedule.

- **Back-office Application (Infinity Assist App) for Bank Users**
  - Renamed Facility Overview as Product Overview across Retail Lending applications including Mortgage Loans.
  - Post Application Submission: Receiving and Processing of Mortgage Applications in Infinity Assist.
    - Designed Post submission workflow using PAM for Mortgage Products.
    - Designed Stages and Tasks at application (Request) and Product (Facility) level for Mortgage Loan.
    - Enhanced Request Overview, Product Overview and Entity Overview screens to map fields of Retail Mortgage Lending applications from ODMS / Party MS to OPMS.
    - Introduced Product > Drawing Structure to support Facility > Drawing Structure, where, Mortgage applications initiated with single/multi parts is shown as individual drawing (part) under a Mortgage Product (Facility).
    - Mortgage – Property (Collateral) Valuation and Title Search.
    - Mortgage Loan - First Time Buyer: In-Principal Approval/ Illustrative ESIS generation through Formpipe.
    - Mortgage Loan - First Time Buyer: Offer Letter and ESIS document generation through Formpipe.
    - Trigger customer actions for Offer acceptance, upload signed document, capture Disbursement and Repayment Instructions.
    - Capture Notary details.
    - Fulfilment enhancements.
    - Follow-up enhancements.
  - Stages, Tasks, Assessment, and Decision
    - Post submission, the application will have the following stages: Submitted, Pre-Screening, Credit Packaging, Underwriting, Complete, Withdrawn.

- Post submission, each Mortgage Product /Drawing will have the following stages: Submitted, Pre-Screening, Credit Packaging, Underwriting, Offer Acceptance, Due diligence, Closing, Follow-up, Complete, Withdrawn.
- Tasks for bank user to review the application.
- Edit application data by bank user.
- Automatic Credit Assessment: Display Score Card in Decision Section showing score graph, individual score for each attribute, and overall scores.
- Execute Decision Engine Rules and support Auto Decisions: Auto Approve/ Auto Decline and exception handling via Manual Review (Decision).
- Ability to withdraw Application until legal department reviews and approves the application in Closing stage.

- Integration with Formpipe: A Temenos Exchange partner for generation of system documents related to Retail, SME, and Corporate Origination journeys. Consequently, Receipt MS has been deprecated.
- Automated and real-time generation of documents: The following documents are generated OOTB as defined - Approval In-principal, Illustrative ESIS Offer Letter, and ESIS document generation.
- Fulfilment
    - Integration with core system for customer creation, mortgage facility (Product) arrangement creation, and Drawing Account Creation.
    - Integration with core system for performing New Offer (Arrangement) creation in Transact, offer letter, and ESIS generation to customer.
- User Roles and Permission
    - Creation of multiple Retail roles (MortgageRM, MortgageUW, MortageOps, Mortgage SupervisorRM, Mortgage Supervisor and Mortgage Credit Approver) in Spotlight.
    - Configure access rights in Entitlements MS.
    - Role based setting up of permission.

- Permission based rendering of Infinity Assist screens.
- Role based Dashboards.

- Task and server-side workflow management
    - Designing of Manual (Bank User Tasks) and Automated Tasks for Mortgage workflow.
    - Capability of user to Initiate Ad-hoc Tasks.

- Post completion of tasks, stage moves from one stage to another automatically.

- Workspace to Assist Migration Enhancements
    - Enabled Global search on application number generated from Origination app.
    - Display of Onboarding product features in Product Overview.

- Customer actions Enhancement
    - Customer actions related to invited co-applicants who are existing customers will be sent to their respective mail addresses.
    - Invited parties will receive information on offer letter acceptance/ rejection decision made by the Primary applicant.

- Queue Management - Automatic Assignment Rules
    - Automatic assignment of applications based on pre-configured DMN rule considering the count of applications in a user's worklist.
    - Automatic assignment of tasks based on pre-configured DMN rules considering attributes such as,
        - Count of tasks in a user's worklist.
        - Due date of incoming task and the count of tasks with the same due date in the individual user's worklist.
        - Priority of incoming task and the count of tasks with the same priority in the individual user's worklist.

SME Origination

- **Infinity SME Origination Application**
  - Enabled Send Invite option for Related parties who are existing customers.
    - A customer can add Existing customers as Related Parties by sending an invite.
    - Invited Related Party receives the Invite Email and can login using OLB credentials to acknowledge (Accept or Reject) and proceed with data capturing and submission of application.
  - Enabled Edit and Delete option in the Document upload section.
  - Handling of consents for Company and Related parties.
- **Back-office Application (Infinity Assist App) for Bank Users**
  - Enhanced Document section in all the three overviews
    - Separate Document section with further sub sections as Uploaded Documents and System Generated documents.
    - Display of documents uploaded from Origination app in Request Overview and Facility Overview.
    - Displaying the uploaded /system generated documents by Document category grouping.
  - Introduction of Document Checklist
    - Introduction of Document Checklist in Facility Overview using DMN rules, where a bank user can click and check the required/mandatory documents for the Application.
    - Document checklist icons for showing the status of documents as Pending or Completed.
  - Display of Credit Score card in Decision Section.
  - Enhancements in Consent Management.
  - Enhancement in Queue Management
    - Automatic assignment of applications to Relationship Manager.
    - Automatic assignment of tasks from the queue to users.
  - Workspace to Assist Migration Enhancements
    - Enabled Global search on application number.
    - Display of Onboarding product features in Product Overview.

- Customer Actions Enhancement
    - Customer actions related to invited parties who are existing customers will be sent to their respective mail addresses.
    - Invited parties will receive information on offer letter acceptance/ rejection decision made by the Primary party.

The topics related to this feature are given below:

Retail Origination

SME Origination

Corporate Origination (Infinity Assist)

Provides banks the ability to onboard corporate lending entities and originate retail, SME, and corporate credit facilities on a digital-focused platform for the lending market.

- Modification Journey for Add Party/Release Party, Add Collateral/Release Collateral
    - Implementation of the modification infrastructure in Assist provides an option for the bank user to process a modification request for an existing facility. Two new types of Modifications can be done.
        - Add/Release Party from Facility
        - Add/Release Collateral from Facility.
    - Changes made to Onboarding screens, Request Overview, Facility Overview, and Entity Overview to support modification flow.
    - Designed a new workflow specific to type of modification.
- Integration with Transact
    - Parties created in Infinity is now created in Transact while an arrangement is created.
    - After the amendment journey for Amount and Maturity date is completed, the updated amount and updated maturity date for the existing arrangement now reflects in Transact.

- Commencement date of the facility now can be selected by the user, and this will be passed to Transact.
- Availability Draw restrictions captured in Infinity is integrated with Transact.

- Document Checklist Infrastructure
  - Document section moved from General section.
  - Addition of reference data of various types of document categories.
  - Rules to ensure the persistence of documents in various objects (Request, Facility and Entity Overview).

> **The topic related to this feature is given below:**
>
> Corporate Origination (Infinity Assist)

Microservices

Originations Data Storage

Origination Data Storage microservice implements the storage features offered by Journey Manager. This is mainly because the requirements will come from the development of custom user Journeys and Journey Manager has been developed from many years of writing these journeys and it makes sense to learn and expand these features rather than start from scratch.

- Added listener app for Azure stack,
- Automated MS version for image tag.
- Kafka version upgrade from 2.7.2 to 3.1.0.
- Added metadata files for automating azure deployments.

> **The topic related to this feature is given below:**
>
> Originations Data Storage

Origination Processing (Previously Corporate Loan Origination Service)

Origination Processing is a financial service that is offered to corporates in the context of corporate financing and raise capital. This Microservice supports the following functions during the journey of the corporate origination by persisting the data.

- Introduced new APIs to create, update, get and Delete for Consent.
- Introduced new APIs to create, update, get and Delete for Payment Scheduler.
- Introduced new APIs to create, update, get and Delete for Drawing.
- Introduced new APIs to update Collateral Relationship.

- Kafka version upgraded from 2.13 -2.7.2 to 2.13-3.1.0.
- Added new Document Categories and Types in master data.
- Enhancement in the collateral Info and related party Info collection added the amendRequestTypeStatus and amendRequestType.
- Enhancement in the Feature Details collection added the description.
- Added Mortgage reference data in master data.
- App listener changes for Azure pack.
- Postgres version upgraded from 12.5 to 13.3 for AWS package.
- Added metadata files for automating azure deployments.

> **The topic related to this feature is given below:**
>
> Origination Processing

Document Storage

Document Storage microservice provides the virus-free documents hosting capability for Infinity and core banking system.

- Evidence Management APIs.
- Health Check API enhancements for Docker and K8s.
- Automated MS version for image tag.
- Disabling clamav by default.
- Removed Formpipe dev credentials.
- Oracle DB support.
- EKS and AKS scripts.
- Kafka version upgraded from 2.7.2 to 3.1.0.
- Increased maximum number of search metadata fields allowed.

> **The topic related to this feature is given below:**
>
> Document Storage

Marketing Catalog

Marketing Catalog microservice provides an independent cloud-enabled solution to manage marketing information of the core banking products. It exposes management APIs to manage marketing information for products managed in the core banks.

- Extended the support of the Strimzi version to 0.27.0.
- PostgreSQL version is upgraded to 13.3 on AWS.
- Implemented DR to consume the latest Data events during ingestion.
- Azure: Packaging structure modification and bundling of metadata files.
- Enhanced to bring Portfolio Products from the back office.
- Automation is taken care of Kubernetes tag generation.

> **The topic related to this feature is given below:**
>
> Marketing Catalog

Due Diligence

Due Diligence microservice enables the banks to handle local regulations regarding the intentions of the customer to consume the services of the bank versus how these are consumed. Different geographies have different regulations in terms of money movement, tax rules, etc. The Due Diligence microservice has a superset of this information and can support local regulations across different geographies.

- Extended the support of the Strimzi version to 0.27.0.
- PostgreSQL version is upgraded to 13.3 on AWS.
- Azure: Packaging structure modification and bundling of metadata files.
- Automation is taken care of Kubernetes tag generation.

> **The topic related to this feature is given below:**
>
> Due Diligence

Party

Party microservice is used to store various details about the party (customers in Transact) such as personal information, identity details, address details, and so on. A user can create/update/get parties by using the Enterprise APIs of the party microservice Enterprise APIs.

- Extended the support of the Strimzi version to 0.27.0.
- PostgreSQL version is upgraded to 13.3 on AWS.
- Address Entity is now enhanced to hold data from the back office through Ingestion.
- Customer Household Pricing development.
- Automation is taken care of Kubernetes tag generation.
- Standard Search Criteria for Party.
- Azure: Packaging structure modification and bundling of metadata files.
- BIAN Naming conversion for new events.
- Implemented DR to consume the latest Data events during ingestion.

> **The topic related to this feature is given below:**
>
> Party

Service Request

Service Request microservice is a generic order management system. It helps to capture the customer's different service requests that are raised by the Retail Banking channels. The microservice maintains the life cycle of all the service

requests. The service requests involve services such as New Cheque Book, Stop Payment Request, Dispute transactions, and Block Debit Card.

- Enabled Ingester Health Check API.
- K8 Tag Automation changes.
- Upgraded AWS PostgreSQL version and DB instance class.
- Increased maxLength of physicalDocuments.
- DDL data update for MongoDB/DynamoDB and postgres in all the stacks.
- Updated K8-onpremise MongoDB script version.
- Vocabulary Check for events is set to false.
- Euro Bank changes for SRMS.

> **The topic related to this feature is given below:**
>
> Service Request

Arrangement

Arrangement Microservice persists all the static information of the arrangements in the core banking system and provides the same details to the digital front office during the stand-in processing or a planned outage (For example, online upgrade of Temenos Transact).

- Added the Mock test files.
- Added New Entity Party Roles to persist AA.CUSTOMER.ROLE from transact and its invoked or given out to the end user using the rest API.
- Added changes to configure the names of replica set. A user can provide the environment specific name for each deployment through start script "ENV_NAME" variable. The pod names are prefixed with the ENV_NAME specified.
- Enabling Health check API for ingester containers for holdings micro service. Health check APIs help us the get the availability status of containers.
- Updated the Spring beans version to avoid the build failure.

- Lambda connection syncing with MySQL Scripts-Lambda standardization changes the lambda function names following the set of rules of naming convention.

- DDL script execution and script changes in AWS and Azure stacks.

- Defer Date done in getBillDetails in the path: *ms-arrangement-core/src/main/java/com/temenos/microservice/arrangement/ingester/ArrangementIngester.java*.

- Hikkari pool changes increased maximum pool size to 150 and minimum to 10, in all stacks to accommodate a greater number of DB connections.

- K8 Tag automation changes implemented. From now onwards, setting the version is automated as we have made changes that take the version from a version.txt file which is generated during the build.

- Script clean-up for build files and packK8 scripts done in docker stack.

- Helm build scripts updated, gave read access to the build file so that we can encounter the permission denied error.

- Done vocabulary check in all the pom.xml files in all stacks.

- Corrected scripts for creation of Local Reference Table for Customer, Account and Company in the path: *ms-arrangement-test/TestWare/Parallel/Thread_1/Testware/Testware.xlsx*.

> **The topic related to this feature is given below:**
>
> Arrangement

Account Aggregation

Account Aggregation is an online service, which allows you to consolidate a range of accounts and other financial information into one interface to simplify the management of personal finances. To bring them into the Infinity fold, Account Aggregation makes use of the Account Aggregation Microservices and a MarketPlace partner solution.

- Added changes to configure the names of replica set. User can provide the environment specific name for each deployment through start script "ENV_

NAME" variable. The pod names are prefixed with the ENV_NAME specified.

- Added the namespace values as variables for service, DB instead of creating the namespaces directly in docker/k8 stacks.

- Enabling Health check API for ingester containers for holdings micro service. Health check APIs help us the get the availability status of containers.

- Updated spring bean version to the latest version to avoid build failure.

- Added escape sequence in azure scripts as some random path is getting appended to resources. Adding the escape sequence has avoided that path.

- Hikari pool changes increased maximum pool size to 150 and minimum to 10 in all stacks to accommodate a greater number of connections.

- K8 Tag automation changes, from now on setting the version is automated as we have made changes that take the version from a version.txt file which is generated during the build.

- Helm build scripts updated, gave read access.

> **The topic related to this feature is given below:**
>
> Account Aggregation

Consent Management

The Consent Management microservice stores the consents received from the Third-party provider (TPP).

- Kafka Version Updated for Consent MS.
- Memory Limit Changes for K8 – Consent.
- Added logger property.
- MSSQL_SUPPORT for Consent MS in all the stacks.
- Euro bank changes for Consent MS.
- Updated reference data in DDL scripts.

- Enhanced the termsNConditionContent GET API with isConsentMandatory field, versionNo and applicationId.
- Added new Get API – GetPartyConsentDetailsByCriteria.
- Increased Memory limit for MSSQL.
- K8 Tag Automation changes.
- Hikari connection pool changes.
- Vocabulary Check for events is set to false.

> **The topic related to this feature is given below:**
>
> Consent Management

Holdings

Holdings is a read-only microservice for providing balances and transactions. It allows the client applications to view account details along with associated transactions. It also provides generic data model to manage account balances and transactions.

- Added changes to configure the names of replica set. You can provide the environment specific name for each deployment through start script "ENV_ NAME" variable. The pod names are prefixed with the ENV_NAME specified.
- Data Reconciliation changes. Ensure that no overwriting/ingesting of the data into MS for the old DES events which hit the MS after the latest DES events for the same has already been updated.
- Enabling Health check API for ingester containers for holdings micro service. Health check APIs help us the get the availability status of containers.
- Modified E2E test cucumber scripts to support latest Transact data.
- Upgraded AWS PostgreSQL version in install-aws-postgresql.sh file.
- K8 Tag automation changes implemented. From now on, setting the version is automated as we have made changes that take the version from a version.txt file which is generated during the build.

- Added vocabulary check tag in properties in pom.xml of model, all stacks folder to avoid build failure.
- Helm build scripts updated, gave read access to the build file so that we can encounter the error permission denied.
- Updated k8 on-premise MongoDB script version.

The topic related to this feature is given below:

Holdings

Savings Pot

Savings Pot microservice lets you to create, fetch, and update the savings pot details required for both front office and back office.

- Upgraded AWS PostgreSQL version and DB instance class.
- Tag Automation changes for K8 deployment.
- Updated K8-onpremise MongoDB script version.
- Vocabulary Check for event is set to false.
- Added Support for environment specific deployment.

The topic related to this feature is given below:

Savings Pot

Campaign

Campaign Microservice enables the branch users of banks to define and store the details of the campaigns created through the front office solution developed for the campaign management, which is called as Real Time Engagement (RTE).

- Added logger and metrics.
- Automated MySQL Azure scripts.
- Oracle DB support for helm.
- Oracle DB support for Azure and AWS.
- Added parameter for vocab disabling.
- Added metadata files for automating azure deployments.

The topic related to this feature is given below:

Campaign