What's New in

Temenos Transact

September 2020

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|Release Highlights

Analytics

Analytics Data Store

Analytics Data Store (ADS) provides a data platform for analytics and risk products. ADS is a section of Temenos Data Engineering (TDE) that allows the user to capture and write data from Snapshot Data Store (SDS) to ADS target DB. It provides a proper integration between Temenos Transact data of SDS and ADS so that the data can be used for various analytical purposes. ADS will perform business-specific transformations on incoming data and updates it in a pre-defined format into the target DB.

ADS supports the following features:

- SDS change capture to message queue
- ADS TDE configuration and integration
- Rollover Snapshot process – LCY Conversion process and Rollover process

Operational Data Store APIs » Operational Data Store APIs through Semantic Query Layer

Semantic Query Layer is used to access the Temenos Transact data from Operational Data Store in data lake solution. Extended additional APIs are added in Reference, Holdings, System and Party domains to access Temenos Transact Data in different forms through Semantic Query Layer from Data Lake solution, which separates the read from Temenos Transact system.

Application Framework

System Core » Scalability in COB

This feature introduces a scalability mechanism where an external orchestrator such as Kubernetes identifies the workload based on various attributes and issues new containers using scale metric from Temenos Transact. The number of agents in each container is pre-configured. The agents in each container does a self-allocation based on the services that need to be run. Also, these agents have the capability to monitor other running agents and release infrastructure when it is not required.

This functionality provides the ability to:

- Automatically scale up or down the computing resources that are allocated to an application based on its needs at any given time.
- Debug for dynamic scaling feature.
- Shut down all the agents in cloud environment.
- Run services based on frequency specified.
- Make Temenos Transact Cloud native.
- Pay only for what you use.

System Core » Elastic Scaling of Agents

This feature allows users to capture elastic fields in workload profile for dynamic agent allocation for non-cloud implementation. It is fully compatible with Multi-Server configuration and supports distinct configuration for the multi-servers independent of each other.

To enable this feature, elastic fields (*Elastic DateTime*, *Elastic Job Name*, *Elastic Queue Depth* and *Agents Required*) are introduced in `TSA.WORKLOAD.PROFILE` to define the required number of agents based on the time, queue depth and jobs.

The `TSA.RUNNING.SERVICE` table is then updated with details like queue depth, name of the current running job and total number of agents required for the service. The TSM allocates agents based on the definition in

`TSA.WORKLOAD.PROFILE` and the queue depth information in
`TSA.RUNNING.SERVICE.`

Banking Framework

Limits » Updating Limit Exposure through LIMIT.UPDATE.SERVICE

The exposure against a Limit can be updated in near real time using the LIMIT.UPDATE.SERVICE. This is an alternative to the real-time update of Limits and has effect only on Limit records that are created under Limit products parametrised for information purposes only. This reduces the effect of locking contention between parallel processes in scenarios where the bank does not use Temenos Transact Limits module for credit checking purposes.

To enable this functionality, the *Delay Txn Update* field is added to the `LIMIT.PARAMETER` application. When the user sets the *Delay Txn Update* field to Yes, the LIMIT.UPDATE.SERVICE is triggered, which will record and maintain all the exposure details of a Limit and then update the `LIMIT` record with all the exposure in near real time.

- `LIMIT` records created under Limit products with the *Fx Or Time Band* field set to 'In' and the *Default Check* field set to Suppress will not be updated at all – neither directly by transactions in real time nor by the LIMIT.UPDATE.SERVICE in near real time.

- `LIMIT` records created under Limit products with *Fx Or Time Band* set to 'In' and *Default Check* set to No or Null will not be updated directly by transactions in real time. Instead, they will be updated by the LIMIT.UPDATE.SERVICE in near real time, if *Delay Txn Update* is set to Y in `LIMIT.PARAMETER`. No online Limit check occurs, no excess overrides are generated and no exception log is updated.

- `LIMIT` records created under Limit products with *Fx Or Time Band* set to 'In' and *Default Check* set to Y will also be updated by the LIMIT.UPDATE.SERVICE in near real time, if *Delay Txn Update* is set to Y in `LIMIT.PARAMETER`. The difference is that online Limit check occurs, excess overrides are generated and exception log is updated.

System Tables » Defining Beneficiaries for Payment-Related Services

This functionality allows users to manage payees used for payment purposes by defining the beneficiary customer using an ID, BIC or name as separate attributes. To enable this functionality, the following fields are added to the BENEFICIARY application:

- *Ben Customer Id* – represents the beneficiary customer ID.
- *Ben Customer Name* – represents the beneficiary customer name.
- *Ben Customer Bic* – represents the beneficiary customer BIC.

The user can use these fields together with the existing *Ben Customer* field.

Cheque and Draft Issue Management » Charge Amount, Exchange Rate and Cheque Return Updates

During cheque processing, the correspondents apply different types of charges that are not known in advance. Temenos Transact now allows users to:

- Capture the charge amount when a cheque is marked as cleared.
- Capture the exchange rate at the time of realisation of drafts with foreign currency.
- Return an already cleared cheque.
- Modify the rejection reason for a returned cheque without increasing the return count.

Corporate

Letter of Credit » Handling Optional Tags 50B and 53A in `LC`

Only mandatory fields were handled and optional fields were excluded in Swift 2018 changes. Now, it is possible to handle all the optional fields in `LC` and `LC.AMENDMENTS` applications. The following optional fields are introduced for:

- Tag 53A as part of MT707.
- Tag 50B as part of MT707/710/720.

These specific fields can be used to convey any information on LC and its amendments instead of using the free text fields. Additionally, non-bank issuer details for outward messages like MT707/710/720 can be captured using these fields.

Private Wealth

Institutional Custody » Recording Order Confirmation Cancellation Instruction from Incoming SWIFT

The broker after confirming the execution of an order may cancel the confirmation and then follow it up with an amendment message. These confirmation cancellation messages should be recorded separately as the messages are to be analysed by the back office user before taking necessary action.

Following are the new features of this functionality:

- The system is now enhanced to record cancellation of confirmation when received through the incoming SWIFT MX message SETR.047 (subscription order confirmation cancellation instruction) or SETR.051 (redemption order confirmation cancellation instruction).

- When the above messages are received, the system identifies the order to which the messages pertain and records the receipt of the message in `SC.ORD.INSTR.LOG`.

- The messages indicates whether a replacement SETR.012 or SETR.006 message is sent from the broker and if the replacement is expected, then the replacement message is also recorded in the log.

- The `SC.ORD.INSTR.LOG` displays the current status of the order that is,

    - if the execution is updated but not authorised or
    - if execution is authorised or
    - if both execution and trade are authorised.

    Based on the status of the order and expected replacement message, the back office user can take necessary action.

- If the ordering customer needs to be intimated of the confirmation cancellation (if eligible to receive the message), then the outward SETR.047 or SETR.051 can be manually triggered.

Corporate Actions » Incremental Customer Election and Confirmation per Option

In an optional event or mandatory event with choice (such as Optional Dividend), the customer instructions can be sent multiple times to the custodian through MT565 for each option until the optional cut-off date. The securities movements or cash movements are done automatically and immediately upon manual confirmation from custodian through MT566 message.

The Securities module in Temenos Transact supports the generation of customer instructions to the custodian through MT565 incrementally (that is, the previously instructed MT565 messages that are sent are not cancelled). Until the cut-off date, the instruction can be triggered multiple times for each option in each election. The custodian confirms through MT566 for each option. On the pay date, the MT566 received for each option is treated independently.

Regional Banking Solutions

Argentina Model Bank

Taxes » Income Tax of UVA Deposits

This functionality allows users to calculate the income tax for customers that have UVA (Purchasing Value Unit) fixed-term deposits.

This tax is calculated when the credit interest amount is greater than 240 Argentinian pesos and the deposits reached the maturity date. For early redemption deposits in UVA, the income tax is not applied.

A customer may have exceptions in the tax rate that will be applied when calculating the income tax. The information to identify these exemptions comes through three padrones, each one with a specific format:

- AFIP contributor's padron: Indicates the general rate to be applied for a customer.
- RG268: Indicates if a customer is fully exempted.
- RG830: Indicates if a customer is partially or temporarily exempted.

Five new fields are added to the `CUSTOMER` application to store the information required for the padrons of the income tax.

The `ARTAXS.PADRON.FUTURE.RATES` application is used to store the padrons' information, including the new fields required for the padrons.

Taxes » Stamp Tax Calculation

This functionality allows the user to calculate the stamp tax for non-instrumented loans considering the tax calculation base given by the customer's jurisdiction. The possible tax calculation bases are the outstanding principal amount, the principal amount and the principal amount in instalment.

There are three different variations, one per calculation base, which are assigned to the jurisdictions in the `PROVINCE` application.

There are three eligibility rules, one per calculation base, to verify the variation returned from the system. The eligibility rule is assigned to the arrangement during its creation.

The ARCHARGE new payment type allows the user to combine bills at the parent level and use it in the payment schedule.

Australia Model Bank

Capital Gains Tax API » CGT API Reconciliation and Recoverability

This functionality allows users to generate three capital gain reports for unrealized gain or loss, realized gain or loss and parcel history or tax lots history.

The new Capital Gain Taxes (CGT) API extracts, take into account the parcels that have changed in the last two years.

Brazil Model Bank

Customer Compliance » Positive Register Customer File

This functionality allows banks to generate the positive register customer file. The file contains the customer information that will be used by the financial institutions in Brazil that have an interface with JD Consultores.

The Data Formatting Engine (DFE) framework is used to extract the customer data from Temenos Transact and generate the positive register customer file. The file is generated through a new batch process that is executed during Close of Business (COB) with weekly frequency.

The `BRBASE.POSITIVE.REGISTER` application is used to store the positive register customer file data and the file generation date.

The BRBASE.POSITIVE.REGISTER.FILE.DETAILS enquiry is used to view the data of the positive register customer file and the date when the file was generated.

Central Bank Model Bank

Treasury Management (Auctions)

This module helps Central Banks to run the auction process, capture bid information, keep track of expected amounts, capture the cut-off price and select the successful bidder for treasury bills or bonds.

Securities are configured in the `SECURITY.MASTER` application. The `SECURITY.MASTER,CBTMGT.TSEC` version is provided to capture the treasury bills and bonds.

Bids are captured in the `SEC.OPEN.ORDER` application. The *Bid Rate* and *Source of Funds* fields are

added to the application to capture the expected interest rate. The bids can be captured manually or from an online channel. The `SEC.OPEN.ORDER,CBTMGT.MANUAL.BIDS` version is provided to manually capture the bids and the `SEC.OPEN.ORDER,CBTMGT.ONLINE.BIDS` version is provided to capture the bids from an online channel.

Price of the T-Bill or bond will be calculated and displayed using the CBTMGT.BIDS.INFORMATION enquiry. In addition, this enquiry will have the *Source Of Funds* field as new search criteria. The enquiry output will calculate the average price based on the weighted average formula.

Colombia Bank Model Bank

Accounting Classification » Accounting by Status

To define the status change based on the inactive period, Temenos Transact uses the Dormancy property where a product condition is created and attached to the saving account product. Based on this configuration, the system will update the status of the saving account automatically.

This functionality allows the user to configure the `EB.LOOKUP` application to define the Abandoned status in the Dormancy product condition for the saving account.

The Dormancy product condition specifies the status of the saving accounts:

- Inactive: The status of a savings account is changed to inactive if there is no activity on the account for the past 6 months (182 days).
- Abandoned: The status of a savings account is changed to abandoned if there is no activity on the account for the past 36 months (913 days).

Finland Model Bank

Account Related Processing » Account Statements Including Generic and Regulatory Notifications

This functionality allows banks to capture additional notifications to be sent to the customer as part of the account statement. This applies to all types of accounts that are offered to retail and corporate customers.

The `NORACC.PARAMETER` application is created to allow the bank to configure the property that needs to be included for the notifications in the account statement.

The `NORACC.ACSTMT.PRENOTICE.DATA` application is updated to accommodate additional fields.

The service fees, payment due, deposit guarantee, and penalty interest will be captured based on the configuration in the `NORACC.PARAMETER` application and the required data will be stored in the `NORACC.ACSTMT.PRENOTICE.DATA` application.

Payments Posting and Validations » Finnish Reference Number

This functionality allows the user to validate the received or captured creditor reference number, in the Finnish format or International Creditor Reference Number (RF) format, at the bank level, regardless of the channel for both outgoing and incoming transactions.

The following applications are introduced as part of this functionality:

- The `FIPAVL.FINNISH.STANDARD.REF,INPUT` version allows the user to store the structured reference number from the `PAYMENT.ORDER` application and its description.

- The `STANDING.ORDER,INPUT` version allows the user to create standing orders with creditor reference number validation.

Student Loan » Student Loan Termination

This functionality allows the user to perform the loan termination for student loans and normal loans. The user can set the loan termination and maturity date for the loan that needs to be terminated and select the demand reason as appropriate. The user can reverse a loan termination.

During the termination, there will be validations based on the termination reason updated by the user. Disbursements and repayments are validated against the termination flag set in the XKELA property during the termination activity.

The `FIBASE.KELA.PARAMETER.DETAILS` application is updated to include additional fields to allow the user to record the null termination reasons, suspense account and restructure status that needs to be excluded from termination.

The AA.OVERVIEW-HEADING.LIV.FI enquiry allows the user to view the arrangement overview header appended as Terminated.

Student Loan » Display KELA Details

The student loan details received from KELA (Social Insurance Institution of Finland) are available in the corresponding Arrangement Overview screen.

This functionality allows banks to validate the disbursements done for a student loan against the plan provided by KELA. The bank can cancel the student loans to facilitate the transfer to another bank and Temenos Transact will not allow disbursements for cancelled loans.

The following enquiries allow the bank to get all KELA related information for a particular loan:

- AA.KELA.CONDITIONS: This enquiry displays the *KELA Rejection of capitalization counter, Loan disbursement Mode, Guarantee Expiry Date, Loan Disbursement prohibition and the Amount of Transferred Loan.*
- AA.KELA.GUARANTEE: This enquiry contains the guarantee details of the KELA loan.

- AA.KELA.GUARANTEE.INCREASE: This contains details related to the increase in the guarantee amount.
- AA.KELA.GUARANTEE.CANCELLATION: This enquiry contains details related to the guarantee cancellation.
- AA.KELA.DISBURSEMENT.PLAN: This enquiry contains details related to the reservation disbursement plan.

An activity API (Application Programming Interface) is attached to the disbursement activity and change schedule activity to check if the disbursement or amended plan is within the KELA disbursement plan. Also, the API will check if the cancellation is processed for the corresponding loan.

Hungary Model Bank

Payment Account Validations » IBAN Validation

This functionality allows banks to validate the International Bank Account Number (IBAN) when payment orders are initiated manually or from the Pain.001 or MT 101 files.

- When the manual payment order is initiated for a credit transfer, the IBAN will be validated. The validation is attached in the *Validate API* field in the `PAYMENT.ORDER.PRODUCT` application.
- When the payment for a credit transfer is received in the Pain.001 or MT 101 files, the IBAN will be validated. The validation is attached in the *Enrich API* field in the `PP.MSG.MAPPING.PARAMETER` application.
- If the IBAN is not given, then the IBAN will be generated based on the Basic Bank Account Number (BBAN).

India Model Bank

Accounts » Tax Deduction (TDS) on Deposits

This functionality allows banks to outline the exact eligibility criteria and applicable scenarios for calculating the interest and tax deduction (TDS) for fixed deposits. Whenever the interest on customer deposits crosses the threshold, the tax will be deducted.

The `INACCT.TAX.FORM.PARAMETER` application is used to define the forms that are obtained through the *Legal Doc Name* field from the `CUSTOMER` application.

The *Tax Form* field is introduced in the `CUSTOMER` application, and it contains the tax waiver forms submitted by the customer.

The `INACCT.INTEREST.TAX.INFO` application is used to store the details of the interest and tax deducted on the customer account. The application is updated every time there is interest capitalisation.

Lending Compliance » Minimum Tenor and Working Capital

This functionality allows banks to have a minimum tenor check on the loans for large borrowers as per the regulatory guidelines. Large borrowers are identified from the Central Repository of Information on Large Credits (CRILC). These customers will be bulk classified in the system.

As per the Reserve Bank of India (RBI) guidelines, the regulation doesn't allow banks to disburse any working capital purpose loans for a tenor of less than 7 days for large borrowers. This validation is built in the system during loan disbursements and amendments to ensure that the loans are not having a tenor of less than 7 days. The guideline also restricts any prepayment, partial or full, on loans for 7 days from the loan start date.

Using the using the *Legal ID* as selection criteria, the ENQ.CUSTOMER.DETAILS.IN enquiry will fetch the details of the *Customer ID*.

The output will display the *Customer ID*, *Short Name* and current *Sector* of the customer along with a drill-down which will open the `CUSTOMER,LARGE.BORROWER` version for updating the sector of the customer.

The ENQ.LARGE.BORROWER enquiry is used to fetch the details of the customers that are classified as large borrowers in the system. The output will display all the *Customer ID* with the *Vis Type* field defined as large borrower along with the *Short Name* and *Sector* of the customer and a drill-down which will open the `CUSTOMER,LARGE.BORROWER` (classify, remove large borrower) version where the user will be able to remove the large borrower type defined in the *Vis Type* field.

Lending Compliance » Non-Performing Asset (NPA) Validations and Calculations

The functionality allows banks to classify, monitor and manage the lifecycle of the accounts and non-performing assets as per the Reserve Bank of India's (RBI) regulations.

The past-due assets are classified based on their ageing lifecycle and the recoverability quality of the asset. There are two specific stages of the classification: special mentioned account stages (SMA) and non-performing asset (NPA) stages. The SMA stage is at a facility or asset level while NPA is at a borrower level.

All assets will be classified as NPA if any other facility offered to the customer moves to the NPA status. The asset classification based on the overdue days is achieved using the `EB.RULES.VERSION`, `PV.LOAN.CLASSIFICATION`, `PV.MANAGEMENT` and `PV.PROFILE` applications.

Goods and Services Tax

The Goods and Services Tax (GST) is an indirect tax for the entire country. This functionality allows the user to apply the GST tax for transactions involving currency conversions using the `PAYMENT.ORDER` application.

For foreign currency conversions, GST is calculated as a two-step process:

1. Calculate the conversion amount in India Rupees (INR), which will have the buy rate of INR against the converted currency, to arrive at the base amount for calculating GST.

2. Apply the Interstate Goods and Services Tax (IGST) or the Central Goods and Services Tax (CGST) + State Goods and Services Tax (SGST).

Israel Model Bank

Stock Borrowing and Lending Agreement Conditions » Contract Conditions Framework

Securities lending refers to the lending of securities by one party to another. The lending terms are governed by a securities lending agreement. The agreement is a contract, enforceable under the relevant law, which is specified in the agreement.

The functionality allows banks to comply with the Stock Borrowing and Lending (SBL) agreement for borrowing stocks and lending transactions.

The `ILSBLF.FRAMEWORK.AGREEMENT` application allows the configuration of the required lending and borrowing terms at various hierarchy levels.

Mexico Model Bank

Account Parties » Nominee Details in Accounts and Deposits

This functionality allows users to register one or more nominees in an individual account or term deposit and control that the sum of the percentage allocation is equal to 100%.

An existing customer can also be linked as a nominee in an individual account or term deposit.

Customer Compliance » Customer Regulatory Requirements

This functionality allows the user to create records for the different types of customers like new individual, business individual, corporate customers and trust.

The user can also create individual, corporate customers, prospects, stakeholders and employers records using the `PERSON.ENTITY` application.

Saudi Arabia Model Bank

AI ELM Interface - Yakeen Services » Customer ID Check

This functionality allows banks to query the Yakeen system to verify customer information as part of the customer onboarding process.

Yakeen is a third party system offering many services. Yakeen services are used to validate customer information during the onboarding process. There are nine instances where Temenos Transact can trigger the request with the customer Legal Id and receive the response with details related to it. This is an online interface working in request-response mode.

The system will send the request from the SAAELM.SERVICES enquiry and the response will be displayed in the `SAAELM.RESPONSE` live application in real-time. In addition to the creation of the live file, the response will also be updated in the SAAELM.SERVICES enquiry.

Goods and Services Tax

This functionality allows the user to calculate the output Value Added Tax (VAT) on liable income sources. VAT is applied to all charges collected from customers.

The *AA Reference* and *Commission Type* fields are added to the `TAXREG.GST.DETAILS` application to allow the user to identify the commission of a specific arrangement.

Sri Lanka Model Bank

Goods and Services Tax » VAT Tax on Cheque Charge

The Value Added Tax (VAT) is a tax on domestic consumption of goods and services. The VAT tax is applied to the goods imported into the country and the goods and services supplied within the territorial limits of the country. There are two types of VAT taxes: Input and Output VAT.

This functionality allows the user to calculate the Output VAT tax based on liable income sources.

IFRS9 Impairment

This module allows banks to classify the credit facilities, including loans and overdrafts, non-fund based facilities, bank guarantees, and letters of credit as per the IFRS (International Financial Reporting Standards) regulations. Also, the ECL (Expected Credit Loss) is calculated based on specific criteria.

The following applications and versions are introduced for this functionality:

- The `LKIFRS.PARAMETER` application allows users to specify the criteria applicable for the IFRS classification.
- The `LKIFRS.STAGING.CRITERIA` application allows users to specify the criteria value and the corresponding stage applicable for the IFRS classification.
- The `LKIFRS.PDLGD.DETAILS` application allows users to capture the PD (Probability of Default) or LGD (Loss Given Default) values as uploaded by the bank.
- The `LETTER.OF.CREDIT,LKIFRS.INPUT` and `MD.DEAL,LKIFRS.INPUT` versions allow users to capture the risk factors for letters of credit and miscellaneous deals.

Withholding Tax

This module allows users to calculate the tax for all joint holders of an arrangement. Temenos Transact will split the tax for customers. The tax will be calculated for customers for whom the tax percentage is configured in the arrangement and the tax will be applied based on the tax liability percentage configured for each joint holder in the arrangement.

Tunisia Model Bank

Customer Infrastructure » Customer and Customer Relationship Management

There are different types of legal documents that need to be submitted by the customer according to their type (individual, corporate, professional), the nationality and the residence of the customer. This functionality allows the validation of the legal documents that need to be submitted by the customer when creating a customer record.

The `CMBASE.STATE,TNCUIN.DELEGATION.DETAILS` and `TNCUIN.POSTAL.CODE` applications store the details of the governorates, delegations, places and postal code. When the *Place* is updated, the system automatically updates the the *Governorate*, *Delegation* and *Postal Code* fields.

The `TNCUIN.CUSTOMER.PARAM` application checks if the customer is minor or major, and if the necessary relationship is updated if the customer is minor or dependent.

United States Model Bank

Remote Deposit Capture Interface » Alogent - RDC - Mobile Capture

Remote Deposit Capture (RDC) is a service that allows a user to scan checks and transmit the scanned images to a financial institution for posting and clearing. The service allows checks to be truncated and cleared electronically.

Alogent is a third party software vendor, who provides an end-to-end solution of RDC mobile capture to Temenos's US SaaS clients. Infinity is Temenos's mobile banking app which will be integrated with Alogent.

This functionality provides an interfacing capability from Transact to Infinity (Temenos's mobile banking app) to process outward check transactions deposited via Alogent's mobile capture solution.

The posting file from Infinity for the outward checks is processed by this functionality to credit the customer's account and post the settlement entries to the clearing account.

Retail

Retail Lending » Flexible Repayment

Flexible repayment is a convenient option provided by the bank to ease the repayments of loan contracts by skipping few payments or by reducing or increasing the scheduled payment amounts within the prescribed limits. It can be achieved by setting rules at the product or the contract level.

The existing design had issues when the scheduled payments were recalculated when a flexible repayment was in force. For instance, consider a 12 month loan. A flexible repayment holiday is input to skip two payments and extend the term, making the new term as 14 months. This utilises the limit to the extent of two skipped payments. When there is an interest rate change, that is set to recalculate the scheduled payments, the system considers the term to be 14 months, does not skip the flexible payment dates and does not reinstate the limit.

The user is also not given an option to cancel the declared future holidays and thereby compelling him to avail the holidays when it is declared once.

Considering such limitations and to keep the defaulters in check, the flexible repayment is enhanced with the following key features.

- Payment modification of a bill that is already issued (that is, a pre-notified payment)
- Finalisation of payment amount where it provides a period until which an issued bill can be modified, beyond which, the payment is finalised and any changes can be accepted only for the next payment date. This can be achieved using the payment holiday.
- Standard reverse and replay process, thereby updating the flexible repayment limit based on the change for any recalculation of scheduled payments when a flexible repayment is in force.
- Limit utilisation and restoration when the payment amount is increased or decreased.
- The user to see the original payment amounts while declaring holidays.

Arrangement Architecture » Enquiry for AA Specific Accounting Entries

The `TXN.ENTRY.MB` enquiry is used to display:

- Accounting entries of a transaction (Example: FT or TT)
- Entries for contract-based applications (Example: LD, MM)

Although it displays entries for AA, the output is not refined and it lacks AA specific accounting details, such as balance type, Activity references, etc. Besides, the entries raised from external applications are not displayed.

The enquiry is now enhanced to display the entries based on Arrangement ID and Activity ID. It also supports to search for the following:

- All the accounting entries raised on an arrangement listed at one place using the arrangement ID
- Search using an activity reference like repayment or disbursement is possible. That is, if queried using a AAA reference, the system spools the entire child and linked activities that are generated and lists the entries from all such activities.
- Entries raised through external applications like Funds transfer, Teller, etc during events like manual repayment.
- Entries pertaining to authorised AAA activity through (using *More Actions* tab) of the arrangement activity reference.

  NOTE: However, this enquiry returns only the entries related to the given activity and does not include the child and linked activities.

The enquiry is also made accessible through context sensitive enquiries (using *More Actions* tab) of `AA.ARRANGEMENT.ACTIVITY`. The user can sort the entries based on the details such as value date, booking date, trans reference etc., to index arrangement entries on a specified date.

Retail Lending » Ageing Deferment of Installment Falling on a Non-Working Day

It is regulatory in some markets, to offer a grace time until the end of the

immediate working day to repay the installment and start the ageing process only when the installment is unpaid until the end of the next working day.

To defer the delinquency processing in such situations, the *Pre Grace* attribute is introduced in the Overdue Property Class. The user can configure the system to defer the first overdue processing till the end of the immediate working day when an installment falls on a holiday.

The ageing deferment for an installment falling on a holiday has the below advantages:

- The loan customers are given sufficient time (end of immediate working day following the holiday) to repay the outstanding instalment.
- They are not charged any penalties during the holiday period of an installment.

Arrangement Architecture » Recalculating Term for Forward Dated Payment Conditions

Certain loan products can have more than one interest or payment conditions applicable during the life of a loan. A teaser loan for example has the interest rate fixed for initial years and then it switches to a variable rate. In this case, there are two different payment amounts applicable based on fixed and variable rates.

When a prepayment transaction is performed that has forward conditions, the system allows recalculation of a new payment amount.

The system now supports recalculation of the term, on loans that have payment conditions effective from a forward date which was earlier restricted by means of an error.

For this term recalculation, the system uses the term that is recalculated based on the last forward dated condition. When more than one condition exists, the last maturity date, that is, the recalculated maturity date as on the applicable last forward date is considered for any subsequent processing.

There can be cases, when the repayment amount is huge and the repayment term ends before moving into a forward condition. In such cases the forward condition is not applicable and the maturity date recalculated based on the

current condition is considered.

The final maturity date gets updated in `AA. ACCOUNT DETAILS` and `AA.ARR.TERM AMOUNT`.

Technology

Integration Framework

Inflow » Posting Restful HTTP API Messages to Inflow

Users can now send inflow requests using a Restful HTTP API (http://<host:port>/inflow/api/V1/process).

Interaction Framework

IRIS R18 » Default XACML Authorisation

The XACML authorisation feature is enabled by default, whenever a user creates a new container WAR using the latest version of service archetype container.

This feature allows users to control the authorisation for every API and restricts anonymous user requests. In order to use the feature effectively, users need to ensure that they define relevant policy file to control the authorisation for every API. This will help to improve the security level of the product.

IRIS R18 » ADS Workbench

The ADS (Analytics Data Store) workbench in IRIS R18 allows users to fetch the ADS metadata from Atlas and create APIs based on the metadata. This functionality uses the ADS endpoints to load the applications and fields in the workbench. The workbench also supports rules and joins.

The ADS workbench follows the below procedure:

- Once the query is designed, the workbench generates an inventory and posts it to IRIS.
- IRIS design time processor processes the inventory request, generates the Swagger and service.xml, and sends the response to workbench.
- When multiple tables are used in an API definition, IRIS runtime processor generates the GraphQL query and accesses the GraphQL endpoint to get the response.

UXP Browser » Borderless Enquiry Results

UXP Browser displays the enquiries as a simple table with rows and columns in a HTML page. In the output or HTML page, border lines separate these rows and columns. However, in legacy browser and Desktop environments, these borders are not displayed.

UXP Browser is now enhanced to hide the border lines in the enquiry results. This feature is achieved by configuring the *borderlessEnquiries* field in the `DESKTOP-COMPATIBLE-ENQ-LAYOUT-SETTINGS.properties` file.

This feature helps users migrating from Desktop and legacy browser to UXPB. Also, it helps to display plain enquiry results.

Treasury

Money Market » LIBOR Replacement in Money Market

Risk-Free Rate (RFR) will replace London Interbank Offered Rate (LIBOR) at the end of 2021. The backward-looking RFR requires daily averaging (simple or compound), which provides the final rate by the end of the interest period. However, Cash products (such as Money Market) follows lookback market convention to arrive at the final interest rate for the period.

The `MONEY.MARKET` application that captures and processes (L)IBOR-linked transactions is enhanced to calculate the interest rate in arrears, based on the RFR and interest rate spread. This functionality offers the following benefits:

- Process new MM transactions with RFR.
- Allow MM contract to use RFRs, which used benchmark rates (such as LIBOR) to calculate the interest rate.
- Ensure a smooth transition from (L)IBOR to RFR.

> Click here to understand the technical impact of this enhancement for customisation and upgrades.

Foreign Exchange » Spot Definition for Currency Pairs

FX spot trades are generally settled on T+2. However, the spot definition for a few currency pairs (such as USD/CAD) is one business day after the trade date (T+1). The FX module is enhanced to allow banks to define spot day convention for currency pairs, and also capture and process the FX transaction based on it. This offers the following benefits:

- To define spot day convention for currency pairs, which are not in the generic spot definition bracket.

- To segregate FX spot and FX forward positions, based on spot day convention defined for the currency pair.

|Technical Notes

Banking Framework

New Modules for Legacy Payment Processing using Funds Transfer and Generic Accounting Interface

Two new technical licensing modules Legacy Payment Processing using Funds Transfer (FTFULL) and Generic Accounting Interface (ACCCSM) are split from Funds Transfer (FT). During upgrade from lower release, if FT is already present, FTFULL and ACCCSM will get installed automatically. For new installations, FTFULL and ACCCSM will be available on top of FT module. The below functionality is enabled.

- FT – This module allows creation of `FT.TXN.TYPE.CONDITION` records of type and underlying payments can be initiated only for ACXX types.
- FTFULL – This module is required to create `FT.TXN.TYPE.CONDITION` of any type other than ACXX. All payment initiation applications have `FT.TXN.TYPE.CONDITION` as CHECKFILE, and if no record is present, transaction initiation will be blocked.
- ACCCSM – This module is required to configure `AC.ENTRY.PARAM` and post Generic Accounting Request strings.

Treasury

Money Market » LIBOR Replacement in Money Market

When back patched clients are upgrading to the current release, the MM.CONV.RFR.MONEY.MARKET service has to be executed once to map the values from the local reference fields to core Risk-Free Rate (RFR) fields.