# What's New in

# Temenos Transact

April 2021

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# Release Highlights

# Analytics

## Reconciliation » Business Reconciliation in TDE

In TDE, business reconciliation is introduced to reconcile the data between EB Contract Balance (ECB) and Consolidate Asset Liability (CAL). It ensures proper data transfer and accurate financial reports.

In this reconciliation, the following tables are replicated with financial data in Operational Data Store (ODS):

- `EB.CONTRACT.BALANCES` (ECB)
- `CONSOLIDATE.ASST.LIAB` (CAL)

The data from these tables are compared at CONSOL.KEY and ASSET.TYPE levels. Aggregation and filtration of data in ECB and CAL can be performed separately. The results can be compared for exact match and any exceptions or variances are reported.

Click here to understand the installation and configuration updates for this enhancement.

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

Reconciliation

## Metadata Management and Transact Data Hub » Column Lineage and ADL GEN2 upgrade in TDE

In TDE, the column lineage is introduced to capture the lineage between source and target at column level. It helps understanding how the business entities are traversed through upstream to downstream applications at column level. As a

part of this enhancement, TDE:

- Supports additional storage platform using ADL Gen2.
- Simplifies the license registration and product activation process.
- Provides logger configuration for ODS and SDS process, to control the logger level during runtime in TDE process.

Click here to understand the installation and configuration updates for this enhancement.

**The topics related to this feature are given below:**

Metadata Lineage

ADL Storage Gen2

## Operational Data Store APIs » Extension of ODS API Landscape

Semantic Query Layer now allows you to access the Temenos Transact data from Operational Data Store (ODS) in data lake solution, which separates the read from Transact system. Semantic layer has a framework and exposes the GraphQL end point to accept the GraphQL query as an input and process it to access the data from ODS. This generic framework leverages the GraphQL and SQLBuilder libraries to process the GraphQL query and converts them into SELECT statements to retrieve the data from ODS. 50 APIs are introduced from Holding, Party, Reference, Order, Product and System domains to access data from ODS in Data Lake.

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

Working with ODS APIs

# TDE-Designer, TDE-Administrator and Analytics Data Store » Risk Profitability in TDE

TDE Platform is extended to support Risk profitability while storing the dataset corresponding to risk models like Probability of Default and Loss Given Default in Analytical Data Store (ADS).

The classification rules are defined in the TDE system. These rules are utilised in the data flow for mapping portfolio definitions in ADS. The End of Day (EOD) calculations for PD and LGD models are scheduled and updated in ADS tables.

**Data Lake Platform**

Risk Profitability in Data Lake Platform allows you to:

- Develop reusable designer component for Risk Model (PDLGD) so as to run the EOD calculations for different models independently (PD Macro Economic Variable, and LGD Statistical and Workout models).
- Schedule the Risk Modelling component to run on adhoc basis at scheduled frequency (daily, monthly and quarterly), which is required for EOD process.
- Provide the administrator capability to create a Classification Rule and its definitions.
- Upload the historical data (CSV file) for `FactDPD` and `FactRecovery` tables from the Administrator screen that are required for EOD calculations. As a result, any ADS table can be uploaded after few changes.

**Data Lake for Transact**

Risk Profitability in Data Lake for Transact allows you to:

- Create the EOD process for Classification Rule of Portfolio that should be run after the Close of Business date is cycled.
- Schedule the ADS job associated with the EOD process.
- Expose the Risk Services as web services for uploading the bulk MEV, Portfolio and Bridge tables.

This in turn eliminates manual intervention.

**The topics related to this feature are given below:**

Risk Modelling

Managing Analytics Data Store

EOD Process

Risk Web Services

# Application Framework

## Temenos Transact Upgrade » Upgrading Container in Online Mode with Elastic Scalability

Temenos Transact uses `TSA.SERVICE` in tSM to identify the production image and upgrading image for performing upgrade service orchestration and downscaling.

Since there is no more tSM, in tSM-less environment, a new mechanism is introduced to facilitate online upgrade service orchestration that provides a mechanism to downscale the pods in the production image during switch over. To provide this mechanism, `TSA.PARAMETER` is enhanced to allow you to specify upgrade and inactive image.

This feature allows Upgrade services while upgrading images and prevents BAU services till switch-over period. Thus, providing a smooth exit during switch-over period and automatically allowing BAU services in upgrading the server post switch-over period.

> **The topic related to this feature is given below:**
>
> Upgrading Container in Online mode with Elastic Scalability

## System Core » Transact Standards 2021 (TS2021)

COB runs with batches in all five supported stages namely Application(A), Systemwide(S), Reporting(R), Start of Day(D) and Online(O). After using the NonStop (NS) module, Online became as an invalid stage for COB, as it was occupying unnecessary space and increased the COB window. So, there is a need to reduce the number of Batch/Job that comes under COB scope.

From R21, a new module named Transact Standard 2021 (TS2021) has been

introduced, that governs the product standards applied to clients. After R21, the TS2021 automatically gets added during Initial System Build (ISB) and it is thus mandatory for implementations that start with R21 and above.

The key features of TS2021 module are as follows:

- COB now considers only the following as valid stages:
  - Application(A)
  - Systemwide(S)
  - Reporting(R)
  - Start of Day(D)
- On completion of COB, a new service called `ONLINE.SERVICE` is triggered, which now considers only Online (O) stage and orchestrates the job that are defined to run in Online stage.
- This feature allows a separate workload profile for the `ONLINE.SERVICE`.
- Job Times (JT) and Report Times (RT) provide means to differentiate the COB and ONLINE jobs separately.
- `ONLINE.SERVICE` is fully a Global Processing (GP) compliant and runs in sync with COB.
- No new Batch or Jobs to a batch in Online stage can be added.
- New clients (including upgrading clients) cannot add new Batch or new Jobs to a Batch in any stages of COB.

Any upgrading clients can continue to have their COB run with Online stage.

With the separation of Online Stage, the product redefines how a COB is run and leverages the task of running the Online stage Batch/Job under the `ONLINE.SERVICE` instead of COB.

> **The topics related to this feature are given below:**
>
> Transact Standards 2021
>
> Scheduler and Dynamic Profile

# System Core » Managing Packager Auto Service

In service framework (tSM mode), services are managed by tSM, which identifies the list of services set to START/AUTO and then starts the agents per server.

The TSA.PARAMETER table is enhanced with a new field called *Package Deployment* to facilitate the banks to manage services during package deployment mode by tSM. This field acts as a switch to decide whether to run only the deployment services or all the services. With this new functionality, service framework stops all the services from running except the deployment service during deployment mode without changing the service control manually.

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

Managing Packager Auto Service

# System Core » Auto Unique ID Generation

For generating Auto ID, Transact generates a random key as ID, based on the field BASE.TABLE in the AUTO.ID.START. At times, while generating ID, performance issues occur as system checks each ID generated in the Database against LIVE, NAU and HIS tables for uniqueness.

To overcome these issues, a new field called *Database Unique* is now introduced in the AUTO.ID.START table. When the *Database Unique* field is set, the underlying platform framework (TAFj) generates the sequential ID for Transact and facilitates to generate both Numeric and AlphaNumeric sequences, depending on the field information in Base Table of AUTO.ID.START.

Following are the benefits:

- For Customer and Account application, the framework always checks the ID generated in Live, NAU and HIS files to ensure that the new sequence is unique, and no existing Customer or Account number is reused.
- While generating key, platform framework (TAFj) maintains details such as last generated ID for applications.

> **The topic related to this feature is given below:**
>
> Auto Unique ID Generation

## System Core » Transact Monitoring Using Grafana

The `SPF` table is enhanced with a new option called *Ext* in the *Maint Tec Output* field to dynamically log the information of various events (online and Batch transactions) and the TAFJ events to Grafana using Platform framework function TEC events. Grafana is a third-party external monitoring tool.

This functionality triggers various events such as COB, Standalone Service, Activation Service, Online Transaction commits, Cache information, Extensibility Metrics.

> **The topic related to this feature is given below:**
>
> Transact Monitoring Using Grafana

# Banking Framework

## Account Reporting Events and Service » Cash Management (CAMT) – Statement Cycle Event

The Cash Management (CAMT) messages solution offering from Temenos Transact is packaged under the IZ module covering the Account Reporting Events and Services. A statement event from the statement cycling process needs to be streamed with the details of the statement and it must store the details of the event in a repository for statement generation.

An out-of-the-box statement event is released by Temenos for handling the information required for the ‘Statement’ and ‘Header’ tags of the CAMT account statement messages.

This functionality provides a pre-configured statement event with specific details, such as the message header, account owner, recipients of the messages and account balances for each account statement.

**The topics related to this feature are given below:**

Introduction to Events and Services

Working with Events and Services

## Account Reporting Events and Service » Intraday Statement – CAMT.052

The Cash Management message CAMT.052 is an interim account report or an intraday account report that shows the accounting movements in the requested account from the previous statement date. This report can be requested by the customer on demand or it can be scheduled to generate at pre-defined time periods.

This functionality allows the user to generate intraday statement in the

CAMT.052 format using the pre-configured entry events and statement events leveraging the Integration Framework and Data Streaming capabilities.

> **The topic related to this feature is given below:**
>
> Intraday Statement – CAMT.052

## Account Reporting Events and Service » Initial Load Processing for CAMT

When the Account Reporting Events and Services (IZ) module is configured to stream the accounting movements, the accounting entries for the requested account are streamed near real time to the Data Events through the designated Entry Events released by Temenos. However, there may be accounting movements pertaining to the statement period that have already happened before the IZ module configuration and have to be streamed for inclusion in the next Cash Management (CAMT) statement generation. Such accounting movements are handled through an initial load process.

With the initial load processing, it is possible to stream the accounting movements raised for the statement period for the account before configuring the IZ module and data streaming capability to have all the entries available for the statement generation.

The initial load processing ensures the smooth transition to use the IZ module and data streaming capability of Temenos Transact by making available all the accounting movements for the statement period for the next statement generation.

> **The topic related to this feature is given below:**
>
> Initial Load Processing for CAMT

# Account Reporting Events and Service » CAMT-Entry Event for External SEP

Most of the account movements in Temenos Transact are triggered by applications within the system, while some may be triggered through an accounting interface from the transactions originating outside Temenos Transact, for example an external SEPA system or clearing transaction. The EXTERNAL.SEPA.DETAILS application in Temenos Transact provides the framework to load the transaction details originating outside Temenos Transact and it needs to be updated manually or through an interface.

Temenos Transact has released an out-of-the-box Entry Event for handling transactions processed through External SEPA system. This enriches and streamlines the accounting entries where the underlying transaction details are maintained outside Transact. Then, these entries are loaded into the EXTERNAL.SEPA.DETAILS application, either manually or through Generic Accounting Interface (GAI).

This functionality helps the user to stream the underlying transaction details processed outside Temenos Transact, like SEPA payments or external clearing transactions and capture them in the EXTERNAL.SEPA.DETAILS application.

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

Working with Events and Services

# Expected Receipts » Receiving and Matching ISO20022 Credit Advises and Notification Messages

SWIFT's cross-border payments and reporting messages are being migrated to ISO2002 standard from November 2022. The MT and ISO20022 standards will coexist until November 2025 when the FIN service will not be used anymore for

payments.

The Expected Receipts module is enhanced to accept the inward CAMT.054 credit or debit notification messages (the ISO20022 equivalent for the existing MT910) and match the credit entries with the corresponding payments, confirming that the cover for the payments has been received. In addition, the Expected Receipts module can also handle the inward camt.057 messages (the ISO20022 equivalent for the existing MT210) as notifications that funds will be received by the bank to be credited to the account of the account owner. These notifications can be used to monitor the position of the Nostro or Vostro accounts and will be matched with the corresponding payments.

This functionality provides banks the ability to handle the equivalent ISO20022 messages for with MT910 and MT210 and allow Temenos Payments Hub (TPH) to automatically release the payment when the cover notification is received from the counterparty. Moreover, the banks can effectively monitor their liquidity based on the notification received from customers that they will receive funds through a certain counterparty.

**The topics related to this feature are given below:**

Introduction to Matching of Advised Funds

Configuring Matching of Advised Funds

Working with Matching of Advised Funds

Capturing Expected Receipts for CAMT057

# Transaction Recycler Process » Recycler Process for Non-working Days

Customers of a bank are allowed to transfer funds to their funding accounts during non-working days, for example, during weekends or public holidays. The value date of these transfers or payments is the calendar date when the transfer is done and not the system's current business date. In case there are pending requests for loan repayments or deposit funding, the bank expects the Recycler

to collect the funds with the same value date as the date of the customer's transaction and not with the system's current business date.

The Recycler functionality has been enhanced to process retry requests with a back value date. The system can be set up to check any backdated credit transactions that are posted to a customer's account which has pending retry request handed off to the Recycler. The *Track Bk Cr Txn* field is added in the `RC.PARAMETER` application to allow the Recycler to track these types of transactions. If the *Track Bk Cr Txn* field is set to Yes, whenever the Recycler process is run (online or during COB), the system considers any backdated credits and processes the retry requests with the appropriate back value date. The funds are recovered with a back value date only if the value dated balance for the respective day as well as the booked balance for the current business date is available.

This functionality allows tracking of all the back value dated credit transactions for an account that has pending retry requests.

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

Process Retry Requests based on Back Value Dated Credit Transactions

# Delivery » Support MX Messages through SWIFT Interact Services

Various High Value Payment Systems (HVPS), also referred as Real Time Gross Settlement systems, have adopted or are in the process of adopting ISO20022 messaging standards. The majority of these HVPS like SIC, CHAPS, T2, etc. use SWIFT as a network service provider. Starting November 2022, SWIFT is also migrating the cross border payments currently processed using FIN service to ISO20022 standards.

Temenos Delivery module offers Temenos Business modules a framework to exchange ISO20022 messages with a SWIFT Alliance Access, using Interact based services.

Delivery provides the capabilities to:

- Define the distinguish name rules for the bank itself as well as for its counterparties
- Define the rules for the business service used by various HVPS and CBPR+
- Define Delivery Message Headers, indicating the schema, its version and the header elements, and associated them with a channel/service (Delivery Carrier)
- Generates SAA technical header (XMLv2)
- Generates Business Application Header(BAH) specific to each service
- Processes the acknowledgements (Ack/Nack ) received from the SWIFT Network
- Request and Processes the inward Delivery Notifications (positive, negative, overdue warning)
- Generates/validates Local authentication code
- Generates/validate the digital signature by the local layer
- Routes the inward messages to the Business Applications

Business Modules like **Temenos Payments Hub** (TPH), IZ Account Statement use the Delivery capabilities to send/receive Interact messages to SWIFT Alliance. Temenos SWIFT Interact Connector acts as an interface between Transact Delivery queues and SWIFT Alliance.

Click here to understand the installation and configuration updates for this enhancement.

**The topics related to this feature are given below:**

Support MX Messages through SWIFT Interact Services

Tasks for MX Messages through SWIFT Interact Services

Enquiries and Reports

DE.DELIVERY.RESPONSES

DE.DLN.REQUIREMENTS

# Corporate

## Arrangement Architecture (AA) » Non-Customer facing Interest

The lenders or banks prefer to protect their loan from turning into bad debts. So they either mitigate by selling the risk exposure to risk participants or take an insurance for the loan. In both the cases, the lenders must pay a particular percentage of the risk covered as fees or premium.

In some cases the own bank may act as a risk participant for some other bank , that is, they act as a guarantor to repay a part of the loan, if the borrower fails to repay. In such cases, the bank earns revenue in the name of risk margin. A percentage of the risk covered is paid as risk margin or risk fees in regular intervals. Thus the bank needs to accrue the amount on a daily or monthly basis, and either pay to or receive from the other bank.

Since these payments are not associated with the borrower, it must not be disclosed to the borrower. Payments must be accrued and paid separately as part of the loan, but to a non-customer, that is, not to the arrangement's owner.

- The existing Interest property class is now enhanced to allow the user to define an interest for a non-customer and accrue it on a regular frequency.
- The accrued amount can be paid out or made due regularly to the non-customer, based on the payment frequency defined for that interest.

This functionality allows the bank to track the non-customer expense or revenue specifically from each arrangement.

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

Click here to understand the installation and configuration updates for this enhancement.

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

Non-Customer Facing Interest

# Arrangement Architecture (AA) » Defining Default Settlement Instructions

The repayment account used for settling the loan can be configured using the Settlement product condition. In case of Club Loans, the bank can create a Deal or Facility before creating a loan contract. The standard settlement instructions (SSI) defined at the Deal level needs to be propagated automatically to Facility or Drawings arrangement.

The Inheritance Property and Product Condition has been enabled to capture customer wise or currency wise default settlement instructions at the Deal level. While creating the Facility or Drawings arrangement, the system defaults the details automatically in the Settlement arrangement condition by validating the borrower's customer number and loan currency. The user can now define multiple settlement instructions specific to different customers and currencies.

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

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

Defining Default Settlement Instructions

# Private Wealth

## Repo » Configurable Fee Schedule for Bilateral SBL Deals

The fees calculated on Securities borrowing or Lending (SBL) transactions greatly depends on the counterparty and differs from what is calculated by Transact. The actual payment dates could also be different. In such cases, users have to update the fee schedule. Payment order should be raised from a SBL transaction where fees is be paid to the counterparty.

The fee calculation and posting functionality for (SBL) transaction is enhanced to allow banks to update a fee schedule manually. Standard settlement instructions (SSIs) can be set for the counterparty and the same defaults automatically in the SBL transaction. Payment order is raised when payment is made to the counterparty for fees or maturity. Payment message is handled by the Payment Order.

This functionality enables the user to define his own schedule for fee calculation and charging. The fee accrual and payment is based on the schedule defined by the user. Thus, reconciliation difference with the counterparty is avoided. Payment Order integration offers all benefits of handling payments from the same module.

**The topics related to this feature are given below:**

Handling of SBL Fees

Tasks for Stock Borrow or Lending

## Securities » Central Securities Depositories Regulation

The Central Securities Depositories Regulation (CSDR), which was originally

introduced in 2014 along with Markets in Financial Instruments Directive (MiFID) II and European Market Infrastructure Regulation (EMIR), aims to increase the safety and efficiency of securities settlement and the settlement infrastructures in the European Union. This requires the firms to mitigate settlement delays and endorse straight through processing (STP) to maintain high settlement rates. For trades that fail, Settlement Discipline Regime (SDR) imposes daily penalties or charges as well as mandatory buy-ins.

Temenos Transact is now enhanced to set different tolerances based on the settlement amount. If the difference between the settlement amount in the confirmation and the intended settlement is greater than the tolerance, settlement is not processed. Only if the difference is within the range of defined tolerance, settlement is processed and the difference is posted to Profit and Loss (P&L) or suspense account. This functionality provides the following benefits:

- Ensures that the trades for which cancelation is requested are available for settlement until the cancellation confirmation is received from the depository. On receipt of cancellation confirmation, the trade is reversed by the system automatically.
- Allows a user to put an instruction on hold and release it again later at any stage in the instruction life cycle before the transaction has settled.
- Handles more than one status and reason code as part of MT548 messages:
    - More than one status sequence (for example, MTCH and SETT) in the same instruction is handled.
    - More than one reason for a status (for example, NMAT//DSEC and NMAT/DTRD) for unmatched reason is handled.
    - Receipt of multiple MT548s for the same instruction (on the same day, on different days, pre-settlement, post-settlement date) and capture all the instructions.
    - System stores the latest status in the settlement record
- Allows to opt out of partial settlement at the account level. Whether partial settlement is allowed for an account or not can also be defined based on threshold quantity or amount.
- Handles split settlements - receive original instruction cancellation and the MT548s for the split instruction, process settlement confirmation received for the split instructions.

**The topics related to this feature are given below:**



# Account Reporting Events and Service » Entry Events for Private Wealth

To support the framework enhancement for streaming of accounting movements pertaining to Private Wealth (PWM) applications for Cash Management (CAMT) message.

CAMT is an ISO 20022 Payment Message definition that stands for Cash Management and specifically covers bank to Customer Cash Management reporting. As a part of the framework enhancement, there is a requirement to cover `STMT.ENTRY` generation from Private Wealth (PWM) applications with additional details for generating CAMT messages.

Pre-configured Entry events and Event flows have been released to support the following PWM applications for CAMT message through the Account Reporting Events & Services.

- `SEC.TRADE`
- `SECURITY.TRANSFER`
- `ENTITLEMENT`

- DX.TRADE
- SY.DCI
- SAFEKEEP.HOLDING
- SC.ADVISORY.CHG

Whenever a STMT.ENTRY is generated from these PWM applications, additional details are sent to the framework along with the basic information.

> **The topic related to this feature is given below:**
>
> Working with Events and Services

# Regional Banking Solutions

## Africa CEMAC Model Bank

### Asset Classification and Provisioning

This functionality allows banks to calculate the provision amount based on the assets which are classified depending on the guarantee type during the life cycle of an asset.

The following items are introduced as part of this functionality:

- The `AFRACP.CUS.ASSET.CLASSIFICATION.DETAILS` application is introduced to store the classification details at the customer level, based on the outcome of the asset classification, obligor, and contagion processes.
- The `AFRACP.PROVISION.CALC.PARAM` application is introduced to store all the parameter values required for asset provisioning.
- The AFRACP.PV.GET.CALCULATION API is introduced to calculate the provision amount based on the details from the `AFRACP.CUS.ASSET.CLASSIFICATION.DETAILS` application.
- The following fields were added to the `AFRACP.CUS.ASSET.CLASSIFICATION.DETAILS` application: *Id*, *Cust Asset Classification Date*, *Cust Asset Classification*, *Year Start Date*, and *Year End Date*.
- The following fields were added to the `AFRACP.PROVISION.CALC.PARAM` application: *Id*, *Type of Guarantee*, *No of Yrs Max Prov*, *Year*, *Guarantee Type Code*, *Prov Code Rate*, *Year Start No Day*, and *Year End No Day*.

> **The topic related to this feature is given below:**
>
> Asset Classification and Provisioning

# Argentina Model Bank

## Accounts » Additional Tax on FX Debit Card Transactions

According to Argentinian regulation, when customers buy USD from ARS accounts and currency exchanges on debit card payments, an additional tax (RG4815) will be applied, independently from the current Impuesto PAIS tax.

Whenever a payment from a debit card is done into a different currency than ARS, the new tax will be applied independently from the current Impuesto PAIS.

This functionality allows banks to apply an additional tax (RG4815) whenever a payment from a debit card is done into a different currency than ARS.

The `ARACCT.FX.ATM.PARAMETER` application was introduced to store the tax types linked to digital or non-digital, with a flag to activate or inactivate the same.

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

## Accounts » CFT and CFTEA Calculation Method

CFT represents the cost of the amount borrowed (interest), plus all the expenses, commissions, insurance, and taxes that the customer must pay for the loan during its life. That means the correct way to calculate it is using the Interest Rate Return (IRR) financial formula in the calculus for CFTEA.

This functionality allows banks to calculate the CFT and CFTEA values applying the Interest Rate Return (IRR) financial formula in the CFTEA calculation and then its results to be used in the CFT calculation.

The ARACCT.CALCULATE.IRR.CFT.RATE routine is introduced as part of this functionality to calculate the CFT with taxes considering IRR.

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

# Accounts » UVA Deposits - Simulation of Early Redemption

This functionality allows users to have an overview of the total amount that the final customer will be paid in case to decide to cancel a UVA deposit to satisfy the information need about the pre-cancellation simulation for UVA deposits.

The following items are introduced as part of this functionality:

- The *Redemption Amount* and *Redeem Days Convention* fields were added to the AA*XDEPOSIT.CONDITIONS record of the `AA.ARR.XDEPOSIT.CONDITIONS` application to store the redemption value and define if the value must be calculated according to the calendar or working days.
- The *Redemption Amount* field was added to the `AA.ARR.XDEPOSIT.CONDITIONS,REDEEM.DATE` version to allow the user to know how much is the redemption value amount.
- To allow the system to calculate the *Redeem Request Date*, the ARACCT.CALCULATE.REDEEM.REQUEST.DATE routine is used to identify if the calculation must be done according to the working days or calendar days.
- The ARACCT.SET.REDEEM.REQUEST.DATE routine was amended to store the *Redemption Amount* so that the user will know how much the redemption value amount is.

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

# Accounts » Tax PAIS Rate for Debit Cards based on Digital Service Providers Flag

Whenever a purchase is made in a currency different from ARS, the PAIS (Para una Argentina Inclusiva y Solidaria) tax will be calculated and charged as a separate transaction to the saving account linked with the debit card. There can be different tax rates for Impuesto Pais based on matches with digital service providers. The PAIS tax is applicable when customers buy USD from ARS accounts and currency exchanges.

This functionality calculates the new PAIS tax for international debit card POS transactions that require a foreign exchange from USD to ARS. This functionality enables banks to handle the PAIS tax rate applied to the beneficiary of a debit card purchase done in a currency different from ARS.

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

Accounts

# Accounts » Turnover Retention Tax and VAT on Payments to Digital Providers

Tax authorities in Argentina published a list of Foreign Digital Services Provides as per RG 4240/2018 and 354/2018 that will be used by banks to identify the services paid by its customers that are subject to the perception of additional taxes (VAT and Turnover retention tax).

This functionality allows banks to identify whether the beneficiary of a debit card purchase belongs to the list of digital service providers. Temenos Transact will convert the transaction amount, validate the digital providers and calculate the taxes. Also, the system will raise separate accounting entries for taxes when the debit card transactions will be processed.

The following items are introduced as part of this functionality:

- New fields are added to the ATM.TRANSACTION application to capture the digital provider's information.
- The *Reservation Charges Api* field is added to the ATM.CHG.TABLE application to attach the charge routine for the POS transactions, which uses the reservation method.
- New fields are added to the ARACCT.FX.ATM.PARAMETER application to store the tax types linked to VAT or Turnover, with a flag to active or inactive the same.

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

Accounts

# Australia Model Bank

## Lending » Lending Products

This functionality allows banks to use the following lending products: personal loans, vehicle loans, mortgage loans (fixed rate), mortgage loans (variable rate) in a predefined SaaS environment.

The new AU product conditions have been prefixed with AU and the existing core product conditions that have been reused do not have this prefix.

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

## Withholding Tax and Trust Income Distributions » Tax Class

This functionality allows banks to define the tax classes by configuring the `AUWHTX.TAX.CLASS` application. The attributes consist of the *45 Day Rule Flag*, *Income Basis*, *CGT Basis*, and *Instrument Listing Type*.

The `AUWHTX.TAX.CLASS` application allows banks to create a three-letter tax class, such as FPO (Fully Paid Ordinary).

New fields are added to the `SECURITY.MASTER` application to indicate the tax class and attributes vetted from the `AUWHTX.TAX.CLASS` application. These fields are auto-defaulted based on the respective tax class chosen, through a new validation routine.

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

# Withholding Tax and Trust Income Distributions

# Brazil Model Bank

## Deposit Certificate » CDB Pre-fixed and Post-fixed

In the Brazilian market, Bank Deposit Certificates (CDB) are deposits placed by customers. During the life of the deposits, customers can request partial or total withdrawal of a deposit.

This functionality allows users to perform a partial or total withdrawal of CDB deposits as per the regulatory requirement demanded by Brazil.

When performing a partial or total withdrawal transaction, the user can view the various types of values calculated to comply with the regulatory requirement using the BRDEPO.ADVANCE.WITHDRAWAL enquiry.

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

Deposit Certificate

## Deposit Certificate » Full Withdrawal Reports

This functionality allows users to generate an XML file for the positive register of the prefixado deposits for today's date activities.

The BRBASE.POSITIVE.REGISTER*COMPANYCODE record from the `EB.LOOKUP` application is reused to store the company code of CETIP (Center for Custody and Financial Settlement of Certificates and Bonds).

The BRDEPO.EARLY.WITHDRAWAL.REPORT record is created in the `DFE.PARAMETER` application to store the output directory for the early withdrawal report.

Two records are created in the `DFE.MAPPING` application to store the mapping of the information of the registers of Prefixado deposits for today's date activities

which product attribute is CDB.WITHDRAWAL, the BRDEPO.EARLY.WTHDWL.REP.HEADER record for the header, and the BRDEPO.EARLY.WITHDRAWAL.REPORT record for the details.

The BRDEPO.EARLY.WITHDRAWAL.REPORT service is created in the `TSA.SERVICE` application to generate the file.

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

Deposit Certificate

# Canada Model Bank

## Lending Insurances

This functionality allows Financial Institutions to offer insurance products for their Line of Credit (LOC) products. The insurance product offering for the LOC product is based on age-group-wise rate eligibility, gender, and smoking habits of the customer. The facilitation for the accessed provincial taxes on the insurance product is also applicable and accounted for the LOC product.

The following application and enquiry are introduced as part of this functionality:

- The `LENIS.INSURANCE.PARAM` application is introduced to configure the age, rate, and amortisation rate for insurance premium calculation.
- The LENIS.INSURANCE.ENQUIRY enquiry allows users to search the insurance information of the customer and co-borrower.

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

## Lending Renewals

It is common in the mortgage and commercial term marketplace for a bank to offer its clients several terms and payment options before renewing a loan.

This functionality allows banks to capture the data required to renew a loan.

The following applications and enquiries are introduced as part of this functionality:

- The `LENREN.RENEWAL.PARAM` application is used to configure the lending renewal scenario generation.
- The `LENREN.RENEWAL.REJECT.PARAM` application is used to configure the valid reasons or conditions for suppressing renewal scenarios for

accounts considered as delinquent or for high-risk customers or considered as NPL and/or NAB or set to manual renewals.

- The LENREN.AUTOREN.SUPPRESS.PARAM application is used to define business rules for suppressing auto-renewals so that the bank can manually validate internally and renew the account if required.
- The LENREN.RENEWAL.REJECTS application is used to store the details of those (delinquent and high-risk customer) accounts in which the scenario generation is rejected.
- The LENREN.RENEWAL.SCENARIO application is updated with the accounts that are eligible for the successful renewal scenario generation.
- The LENREN.OFS.FAIL.DET application is used to capture the reason for activity update failure, which occurs in some cases.
- The LENREN.SCENARIO.REJECTS enquiry is used to list all the accounts in which lending renewal scenarios are not generated due to NAB, NPL, or any other reason.
- The LENREN.OFS.FAILDET enquiry is used to list all arrangements where the OFS update activity failed for some reason.

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

# Finland Model Bank

## Collateral » Automatically Renew Certain Guarantee

Whenever any guarantee is about to expire, banks need to notify the respective customers. Once the customers agree to renew the guarantees, the users will be able to renew them in Temenos Transact.

This functionality allows banks to renew certain guarantees, as the maximum expiry date is 10 years. The 10 years maximum expiry date can be configured as per the bank's requirements.

The following items are introduced as part of this functionality:

- The *Expiry Grantee Type* and *Grantee Renewal* fields are added to the `FICOLL.COLLATERAL.PARAM` application to allow the user to configure the collateral types for which the expiration date needs to be checked and the renewal years for each collateral type.
- The *Notify Period* field is added to the `COLLATERAL.TYPE` application to allow the user to configure the renewal notification date at the product level and the same will be defaulted in the *Renewal Notify Date* field in the `COLLATERAL` application so that the user can also change the notification date at the `COLLATERAL` application level.
- The `COLLATERAL,NOTIFY.DATE` version is used to capture collaterals using notify dates.
- The `COLLATERAL,RENEWAL.DATE` version is used to capture collaterals using renewal dates.
- The FICOLL.COLLATERAL.TO.BE.RENEWED enquiry is used to list the `COLLATERAL` records for which the notification date has arrived.
- The `COLLATERAL,AMEND.NOTIFY.DATE` version is used to amend the *Expiry Date* and *Notify Date* for collaterals.
- The `FICOLL.TO.BE.RENEWED.COL` application is used to store the collaterals that are to be renewed.

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

## Lending » Performing and Initiating Credit Loss

This functionality allows banks to perform full and partial credit loss using the adjust bill activity that is part of the arrangement. The adjusted balance is updated into a new local contingent balance to calculate the penalty interest. The adjusted amount is then moved into the corresponding P&L (Profit and Loss) account and the details are stored in the `AA.PRD.DES.XCREDITLOSS` external property class for information purposes. When banks recover money from customers, the adjust balance activity will be reversed, the payment will be applied and the balance will be increased, if necessary.

The following items are introduced as part of this functionality:

- The `AA.PRD.DES.XCREDITLOSS` external property class is used to store the write-off details.
- The LENDING-ADJUST.ALL-BALANCE.MAINTENANCE named activity can be used by the bank to perform the credit loss on the arrangement. This activity cannot be reversed by users as it is a no reverse activity. Whereas another activity will be provided to reverse the credit loss performed earlier.
- New activities API's are used to perform and reverse the write-off if required.
- The FILEND.WRITEOFF.DETAILS enquiry is used to view and reverse the write-off details.

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



# Germany Model Bank

## Taxation Interface to CPB SECTRAS » Customer Static Data

This functionality allows financial institutions to transfer static customer and account data from Temenos Transact to CPB Sectras.

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

Customer Static Data

# Global Model Bank

## Tax Rectification Tool » Rectification Tool Operation

This functionality allows banks to use the rectification tool to generate rectification transactions without affecting the original transaction.

The following items are introduced as part of this functionality:

- The `TXRECT.RO.TRANSACTIONS` application allows users to create a new rectification operation transaction.
- The `TXRECT.RO.SELECTION` application is used to enquire the transactions on a given internal tax account and other selection fields.
- The TXRECT.RECTIFICATION.OPERATION enquiry contains the list of transactions selected based on the selections criteria given in the `TXRECT.RO.SELECTION` application.
- The TXRECT.QUERY.RO.TRANSACTIONS enquiry allows users to view, modify, delete or authorise rectification operation transactions.
- The TXRECT.QUERY.RT.TRANSACTIONS enquiry allows users to authorise or amend rectification transactions.
- The TXRECT.RO.TRANSACTIONS.UNAUTH enquiry allows users to authorise a reversal.
- The TXRECT.RECLASSIFICATION.AUTH enquiry allows users to reverse a rectification operations transaction reclassification.
- The SC.ADJ.TXN.UPDATE.TXRECT.UNAUTH enquiry allows users to authorise `SC.ADJ.TXN.UPDATE` records.

> **The topic related to this feature is given below:**
>
> Tax Rectification Tool

# Hong Kong Model Bank

## Lending

This functionality allows users to support crediting the loan amount to customers before the same-day HIBOR or LIBOR is available, for the loans with the interest rate based on specific periodic indexes like HIBOR or LIBOR.

When the same-day HIBOR or LIBOR is available, the system will trigger an update of the interest rate to all the related disbursements and generate the updated advice. After the rate changes, the system will not affect the available limit for the contract.

Interest rate comparisons offer a special kind of interest conditions for which the user can select up to a certain number of interest rates for comparison. The system calculates the list of interest rates configured, and selects the best rate for the contract. The interest system review process has a pre-defined frequency.

The following items are introduced as part of this functionality:

- The `HKLEND.PARAMETER` application is introduced to maintain the HKMB product configurations for HK Lending module.
- A new external property class, XHKLENDING.INTEREST, is introduced to configure the list of interest rates used for comparisons.
- A new interest condition is introduced to select the best interest rate from a list of pre-defined interest rates.
- The HKLEND.UPDATE.PI.RATE service is used to update the interest rate before COB. This is only applicable to periodic interest rate contracts disbursed with the interest rate of a day earlier.

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

# India Model Bank

## Lending Compliance » SFMS Header

This functionality allows the user to capture the Indian Financial System Code (IFSC) codes of the banks and generate INFINET (Indian Financial Network) Format Number (IFN) messages whenever a transaction happens in the LC (letter of credit), BG (bank guarantee) or Bills application, that warrants the exchange of messages between two banks or branches within India.

The following application is introduced with this functionality:

- The `INLEND.SFMS.HEADER.DETAILS` application is used to hold the values that will be used for the creation of the header in the SFMS message.

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

# New Zealand Model Bank

## Open Bank Resolution » Term Deposit

This functionality allows the statutory manager (a special type of user) to split the current balances in the deposits into available funds and frozen funds.

The Open Bank Resolution (OBR) is a stage when a statutory manager nominated by a regulator takes control of the bank in case of bank failure. OBR involves a process where the current deposit balances are split into two types of funds, for example, available funds and frozen funds.

The customer can access the available funds but the customer cannot access the frozen funds temporarily. The frozen funds are released in parts until it is fully released.

The `NZOBRS.FUNDS,NZ.FREEZE.INPUT I DEPOSITS` version is introduced to freeze a defined percentage of funds and set up frozen funds within a deposit arrangement which will be later returned to available funds. This unfreezing operation will go on until the release percentage touches 100% for all the deposit products.

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

Open Bank Resolution

# Saudi Arabia Model Bank

## Account Infrastructure » Account Statements

This functionality allows banks to provide account statements that include all the relevant information for the transaction types. Each transaction must contain details related to the delivery channel, debit information in case of debit transactions, and credit information in case of credit transactions.

The following versions are introduced as part of this functionality:

- The `TELLER,CREDIT.CARD.PAYMENT` version is introduced for the credit card bill payments, in order to capture the credit card number.
- The `TELLER,ATM.CASHDEP` version is introduced to facilitate the cash deposit at the ATM through the Teller module.
- The `TELLER,ATM.CASHWD` version is introduced to capture the cash withdrawal from the ATM through the Teller module.

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

Account Infrastructure

# Spain Model Bank

## Cheques and SNCE Clearing » SNCE08 Initiations Additional Outgoing

This functionality allows banks to send and respond to the SNCE08 messages. Also, the system will apply charges on the incoming and outgoing messages.

The following items are introduced as part of this functionality:

- The `ESCLNG.SNCE.DATA.MODEL,TRANS.TYPE.01` version is used to capture the details for the 01 transaction type.
- The `ESCLNG.SNCE.DATA.MODEL,TRANS.TYPE.02` version is used to capture the details for the 02 transaction type.
- The `ESCLNG.SNCE.DATA.MODEL,TRANS.TYPE.03` version is used to capture the details for the 03 transaction type.
- The `ESCLNG.SNCE.DATA.MODEL,TRANS.TYPE.04` version is used to capture the details for the 04 transaction type.
- The `ESCLNG.SNCE.DATA.MODEL,TRANS.TYPE.11` version is used to capture the details for the 11 transaction type.
- The `ESCLNG.SNCE.DATA.MODEL,TRANS.TYPE.12` version is used to capture the details for the 12 transaction type.
- The `ESCLNG.SNCE.DATA.MODEL,TRANS.TYPE.13` version is used to capture the details for the 13 transaction type.
- The `ESCLNG.SNCE.DATA.MODEL,TRANS.TYPE.15` version is used to capture the details for the 15 transaction type.
- The `ESCLNG.SNCE.DATA.MODEL,TRANSACTION.TYPE.COLLECTIONS` version is used to list the transaction types related to collections.

> **The topic related to this feature is given below:**
>
> Cheques and SNCE Clearing

# Tunisia Model Bank

## Foreign Currency Operations » Export Documentary Credit

This functionality allows banks to link the EDC (Export Documentary Credit) settlements with the underlying TCE (Foreign Trade Title) and AVA (Business Travel Allowance) records so that the payments will be processed accordingly, irrespective of the fact that TCE or, and AVA is domiciled in the bank or not. The system will perform various validations to ensure that the EDC payment is allowed to be created only if the available amount is greater than the payment amount, in the case of TCE.

The following items are introduced as part of this functionality:

- The `DRAWINGS.EXPAC.TN` version is used to view and amend the documents pending for acceptance under export LC.
- The `DRAWINGS.EXMXPYMT.TN` version is used to view and amend the export LC's pending for payment and acceptances under mixed drawings.
- The `DRAWINGS.EXPMAT.TN` version is used to view and amend the accepted documents under export LC.
- The `DRAWINGS.EXPSP.TN` version is used for doing sight payments, view and amend the export LC's documents pending payment for an Export LC.
- The `DRAWINGS,EXMXAMD.TN` version is used to view and amend the mixed drawings.
- The `DRAWINGS.PAYRES.TN` version is used to view and amend the pay under reserve, approval or collection records.
- The `DRAWINGS.EXSPRES.TN` version is used to view and amend the payment of the sight bill paid under reserve records.

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

# Foreign Currency Operations » Outgoing Transfers

Outward transactions are highly regulated in Tunisia. Any transfer of funds requires approval from the regulatory authorities, including the Central Bank. The purpose of the outgoing transfer can be towards schooling fees or trade import and export transactions or towards any other transaction that is prohibited without approval from the Central Bank in Tunisia.

This functionality allows banks to initiate payments towards schooling or professional file as an ad-hoc payment or as a frequency-based transfer. The underlying title document will be validated while initiating outward transfer towards the schooling or professional fees, trade-related, and other restricted transactions. Also, Temenos Transact allows banks to generate the information sheet on the successful completion of the schooling payments.

The following items are introduced as part of this functionality:

- The `STANDING.ORDER,TNFCOP.INPUT` version is used to input the permanent transfer setup.
- The `STANDING.ORDER,TNFCOP.AUTH` version is used to authorise the permanent transfer setup.
- The `STANDING.ORDER,TNFCOP.AMEND` version is used to amend the permanent transfer setup.
- The `PAYMENT.ORDER,TNFCOP.OFS.INPUT` version is used for processing permanent transfers for Tunisia.
- The *Title Sheet Ref, Cust Ident Type, Payment Mode*, and *Ft Reference* fields are added to the `TNFCOP.INFO.SHEET` application to capture the payment-related information for the underlying school or professional file reference for which a payment was initiated.

- The *Carry Fwd Used Amt* field is added to the `TNBASE.FINANCIAL.DETAILS` application to carry forward the used amount.
- The *Expense Type* field is added to the `TNBASE.CNBP.CODES` application to indicate if the indicated BP code relates to the registration fees or other expenses, living expenses, etc.
- The *Trf Eligible* field is added to the `TNFCOP.FOREIGN.TRADE.TITLE`, `TNFCOP.FORM.APPLICATION` and `TNFCOP.INFO.SHEET` applications to identify if the indicated title code is eligible for transfer.

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

Foreign Currency Operations

# Retail

## Arrangement Architecture (AA) and Retail Lending » Capturing EIR or AMC Information During Migration

During the migration or conversion of a bank's loan portfolio, the EB Cashflow Capture application (which is available outside AA) has been allowing the user to capture the EIR or AMC and then the cash flows can be handed off.

Now, it is possible to achieve this within AA using the TAKEOVER.CASHFLOW-REPORTING activity. Using this cashflow type activity class, in AA, the user can now capture EIR or Carry cost associated with a loan during migration or takeover activity.

**The topics related to this feature are given below:**

Capturing EIR/AMC during Migration

Capturing EIR/AMC during Migration - Working with

## Arrangement Architecture (AA) and Retail Lending » Income Recognition Using Cost-Recovery Method

In AA framework when an interest repayment is made on a suspended loan, the repayment amount is recognized to income even when the underlying loan continues to be in an impaired or suspended state due to lack/uncertainty of capital/principal recovery. This Cash-Basis income recognition method is considered an aggressive approach under certain regulations

Contrastingly, in the new Cost-Recovery method the system stores the

repayment amounts in a Recoveries During Suspend (RSP) balance type which represents the recovery or repayment amount made on the suspended loan. When the loan is resumed, the RSP portion of the loan is amortized over the remaining life of the loan on a straight-line basis using `EB.ACCRUAL` under an ACR prefix. ACR represents the unamortized amount which is realized to income.

If the suspended loan is paid-off, then the recovery amount is fully realized to income account.

**NOTE:** Currently only Interest properties can be configured under Cost-Recovery income recognition method.

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

**The topics related to this feature are given below:**

Income Recognition Using Cost-Recovery Method - Introduction

Income Recognition Using Cost-Recovery Method - Configuration

Income Recognition Using Cost-Recovery Method – Working with

# Retail Deposits and Retail Lending » Migration of LIBOR Contracts to Risk Free Rates (Lending and Deposits)

As (L)IBOR rates are retiring by the end of 2021, the banks will be migrating large volume of existing contracts from (L)IBOR to RFR rates.

Temenos Transact has thus been enhanced with a migration tool called RFR Migration to do the migration in one go. The intelligence is built inside the utility

by defining the attributes inside RFR.MIGRATION and RFR.CONDITION tables to select list of contracts that require migration. The migration process itself is a two-step processing of:

- Preview Mode – In this mode, the user can preview the selected records that are built inside the RFR.CONDITION table and verify the results based on the defined selection criteria. There is option to ignore or include the records by verifying RFR.MIGRATION.DETAILS table.
- Execute Mode - The migration happens in this mode and thus (L)IBOR contracts are converted to RFR rates successfully.

This feature facilitates the banks to migrate huge volume of contracts automatically from (L)IBOR to RFR with greater accuracy and still with multiple level of verification.

> **The topics related to this feature are given below:**
>
> Migration of LIBOR Contracts to Risk Free Rates - Lending
>
> Migration of LIBOR Contracts to Risk Free Rates - Deposits

# Technology

## Design Framework

### Temenos Workbench » Inheritance Capability of API Version and API Enquiry

Temenos Workbench provides two editors API with Version and API with Enquiry for API Versions and API Enquiries respectively. Both the editors are now enhanced to ease the inheritance capability and the new functionality is given below:

- This feature avoids the duplicate work and handling of duplicate artefacts.
- This feature helps in defining an inheritance and extension of core artefacts at country level.
- APIs now point to the merged version or enquiry that does not exist physically but are available at run-time.
- During API invocation, version or enquiry is merged accordingly and executed for a response that ensures country flavors are available.
- IRIS workbench returns with merged Transact artefact for the API developer.

**The topics related to this feature are given below:**

Working with API Version

Working with API Enquiry

## Temenos Workbench V1 (UXP) » Design Framework (DSF) Packager Repository

DSF package repository is now independent of Transact to extend its support for any kind of product extension.

It acts as a repository for all the package definitions and an audit capability with the status of package deployments. The product such as Transact can have their own package repository but only for audit purposes to trace the deployments.

It supports high volume of package definitions with immediate response for inputting and querying.

> **The topic related to this feature is given below:**
>
> Design Framework Packager Repository

# Integration Framework

## Integration Framework Runtime (IF) » Initial Load Service Improvements

Initial load service is used to load the external system with Transact business data. It supports to perform initial load for the application level flows.

This functionality is now extended to:

- Perform Initial Load at Version Level
- Perform Initial Load for specific event types
- Redirect Initial Load Events to a different table

Initial Load can be performed at more granular level and redirected to initial load events to a separate table, so that online events does not get disturbed.

> **The topic related to this feature is given below:**
>
> Configuring and Running the Initial Load Service

# Integration Framework Designer (ED) » Defining and Using Outward Landing Table

When the user publishes an integration project from the event designer, the exit point and flow details gets updated in its corresponding `IF.EXIT.POINTS` and `IF.INTEGRATION.FLOW.CATALOG` table records.

Instead of changing these tables, you can now use the `IF.OUTWARD.DESIGN.LANDING` table, which can be editable and acts as a source table for the `IF.EXIT.POINTS` and `IF.INTEGRATION.FLOW.CATALOG` tables to the workbench.

> **The topic related to this feature is given below:**
>
> Defining and Using Outward Landing Table

# Integration Framework Designer (ED) » Defining and Using Inward Landing Table

When the user publishes an inflow project using the inflow designer, the inflow details gets updated in its corresponding `IF.INFLOW.CATALOG` table record.

Instead of changing the `IF.INFLOW.CATALOG` table, you can now use the `IF.INWARD.DESIGN.LANDING` table, which can be editable and acts as a source table for the `IF.INFLOW.CATALOG` table to the workbench.

> **The topic related to this feature is given below:**
>
> Defining and Using Inward Landing Table

# Interaction Framework

## IRIS R18 » IRIS R18 Timeout

IRIS R18 now supports API timeout based on the SLA mapped against `operationId` with a timeout value in milliseconds in Config Microservice during the development phase. This loads all the values from the Config Microservice and places them in the cache before invoking the Transact API request.

Based on the domain and `operationId`, IRIS gets the SLA configured for the API from the Config Microservice.

IRIS also determines the `system.environment` variable from the Config Microservice:

- For non-production `system.environment`, IRIS times out the API response with 408 error code and it is logged with an error message.
- For production `system.environment`, IRIS logs the warning message and wait for the actual response from Temenos Transact.

> **The topic related to this feature is given below:**
>
> IRIS R18 Timeout

## IRIS R18 » Swagger Links Specification

In IRIS, while constructing a payload for a user request, you must define the

values for few fields as per their check file tables such as `CUSTOMER, SECTOR` and so on.

To know the API used to fetch the list of records for an API field that are check file table-based fields, you can refer the new field called *Hyperlink*, which is introduced in Transact Version Definitions. Based on the Transact Version Definition, the API link to the list is generated in Swagger specification with the new attribute `x-link` in the swagger field properties.

> **The topic related to this feature is given below:**
>
> Swagger Links Specification

# IRIS R18 » IRIS Rules Engine

IRIS now supports payload validation against the configured rules engine. During API design, IRIS invokes the rules that are written and deployed in Rules Engine. It then validates the payload and displays all the rules deployed in the rules engine, which allows user to:

- Select one or more rules to be executed against the current API
- Map the field for each rule from the request payload

If there are any rules mapped against the currently executing API, IRIS checks the API and invokes the rule engine during runtime. Rules Engine returns a True Boolean value, if all the rule executions pass and it returns False value, even if anyone rule fails.

- IRIS returns the control to the client with an HTTP Error code 422 unprocessable entity, when the rule fails.
- IRIS sends the payload to Transact to continue the business operation, when all the rules are validated successfully.

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

IRIS Rules Engine

# IRIS R18 » Installing and Configuring New Quantum Based IRIS Workbench

In IRIS R18, a new workbench is designed using Kony Visualiser and Fabric platform, which supports all the features available in AngularJS workbench. IRIS endpoints can now be used to load the Transact artefacts in workbench. Once the artefact is added, workbench can be used to create inventory and send the request to IRIS that generates Swagger and service xml. It also allows you to download the zip file generated.

This feature allows to:

- Create Published Microservice APIs and view the Vocabulary
- View the services deployed in a selected server

Click here to understand the installation and configuration updates for this enhancement.

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

Installing and Configuring New Quantum Based IRIS Workbench

# Treasury

## Foreign Exchange/Money Market » Rate Tolerance Calculation for Adjusted Rates

The FX and MM rate tolerance calculation methodology has been enhanced to support a new method where an adjusted rate is checked for raising overrides during deal capture.

# Installation and Configuration Notes

# Analytics

## Reconciliation » Business Reconciliation in TDE

To enable business reconciliation in TDE, you should perform the following configurations in data flow.

**Dynamic Schema Update**

As user perspective schema gets changed, to make it dynamic, you should replace the schema name that is configured in ODS system configuration.

When you click **Run** for designer job, the schema replacement happens and the schema issue is resolved.

> **NOTE:** You cannot validate and save the ODS SQL Read component (you can only save).

**Write HDFS Configuration**

In designer flow, the following flows are introduced to Write HDFS:

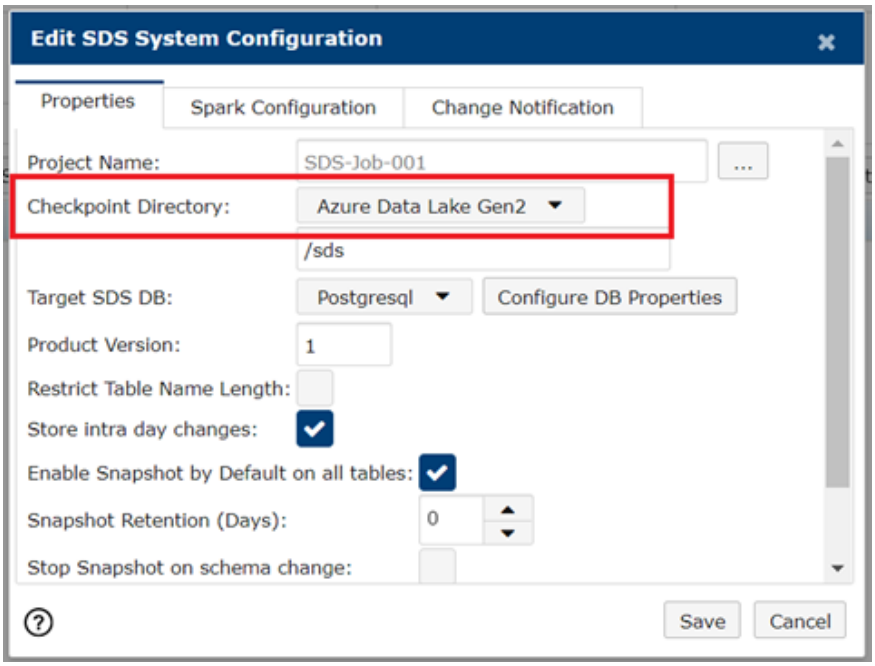
- Write HDFS for reconcile data
- Write HDFS for non-reconcile data

By default, Write HDFS components are configured. You should configure the components and path to write the records.

**Data Flow Deployment in TDE**

Designer flow is automated to fetch the schema and tables from target ODS database. You should configure the path to save the result reports (Write HDFS components).

During the init stage, job flow is inserted into jobs table with job name as `ECB_CAL_Reconciliation_tns`. The data flow is deployed as transformation job under the ODS-Job-001 project.

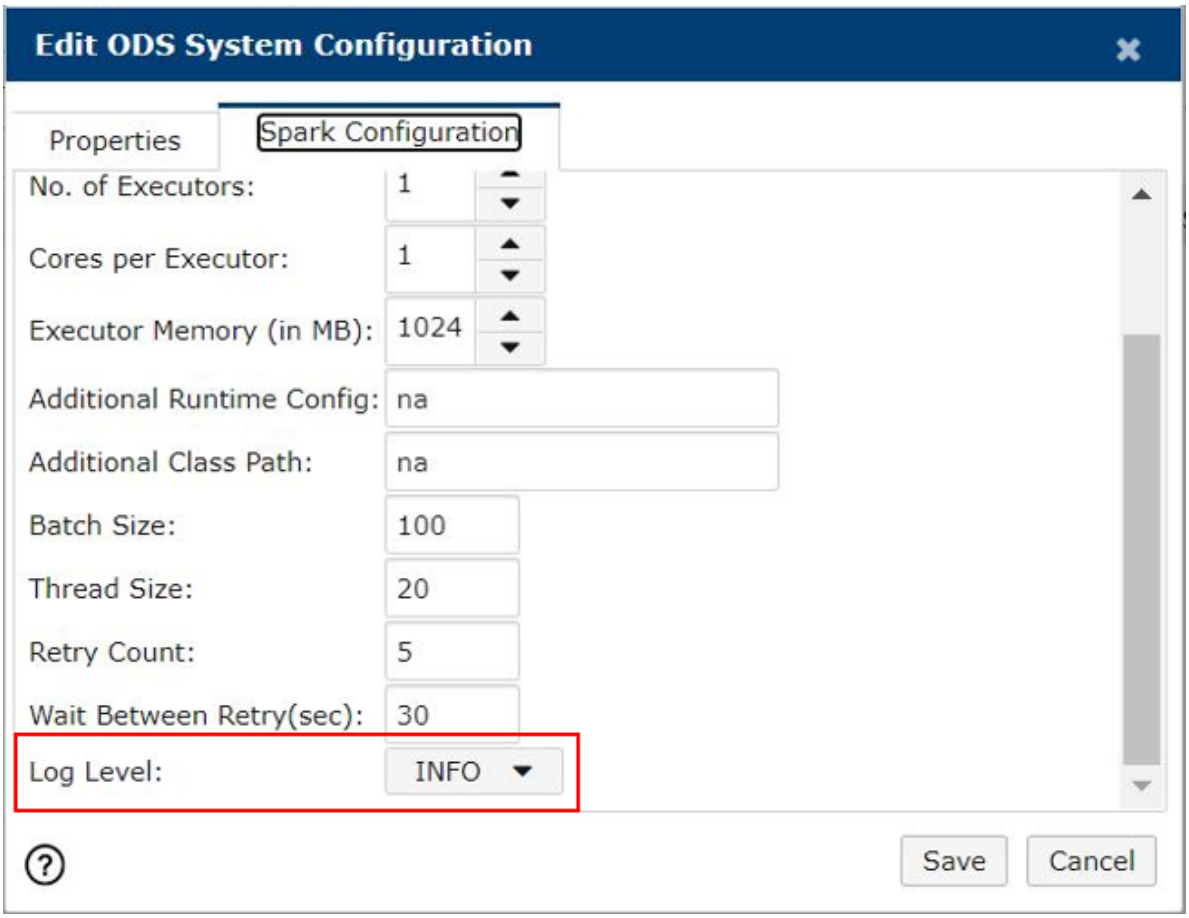



# Metadata Management and Transact Data Hub » Column Lineage and ADL GEN2 upgrade in TDE

To enable column lineage in TDE, you should perform the following configurations.

**Logger Configuration**

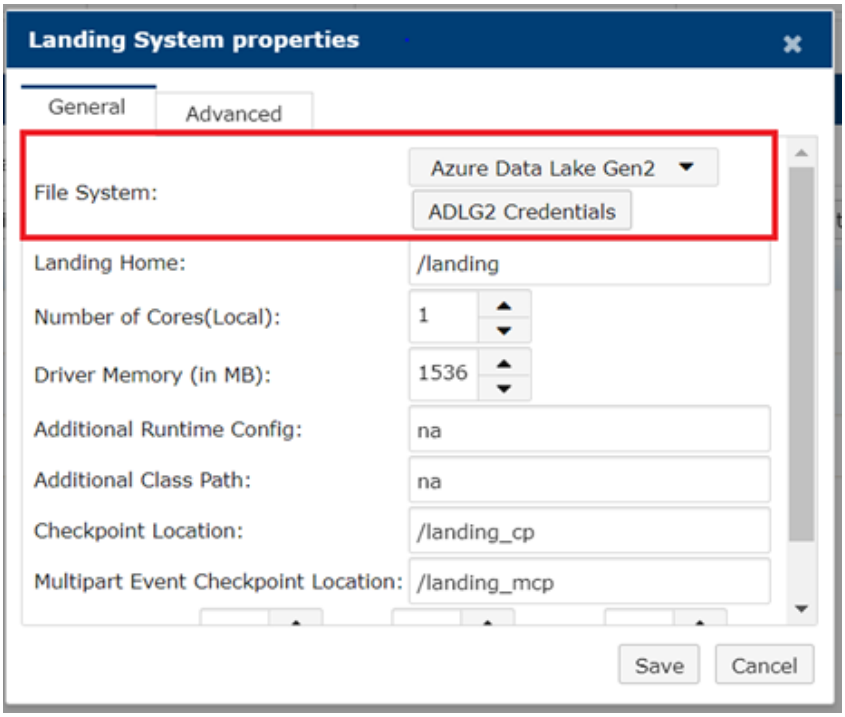
The configuration for ODS and SDS system in Admin is shown in the following screenshot.



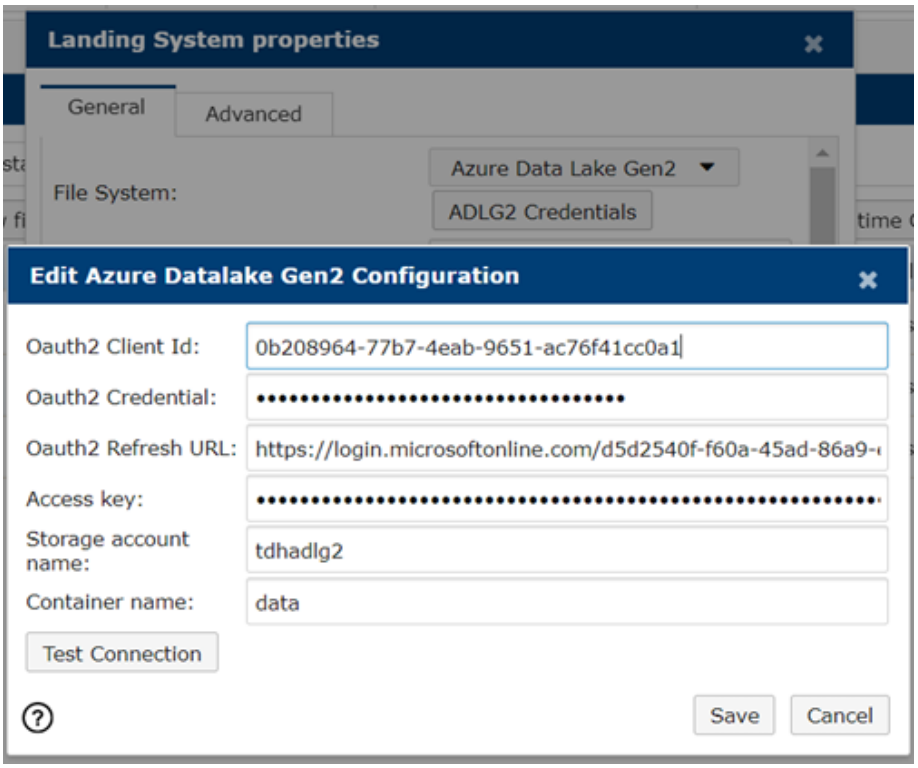

### ADL Gen 2 Configuration Properties

To configure the configuration properties, perform the following steps:

1. Configure the Landing System Properties is shown in the following screenshot.



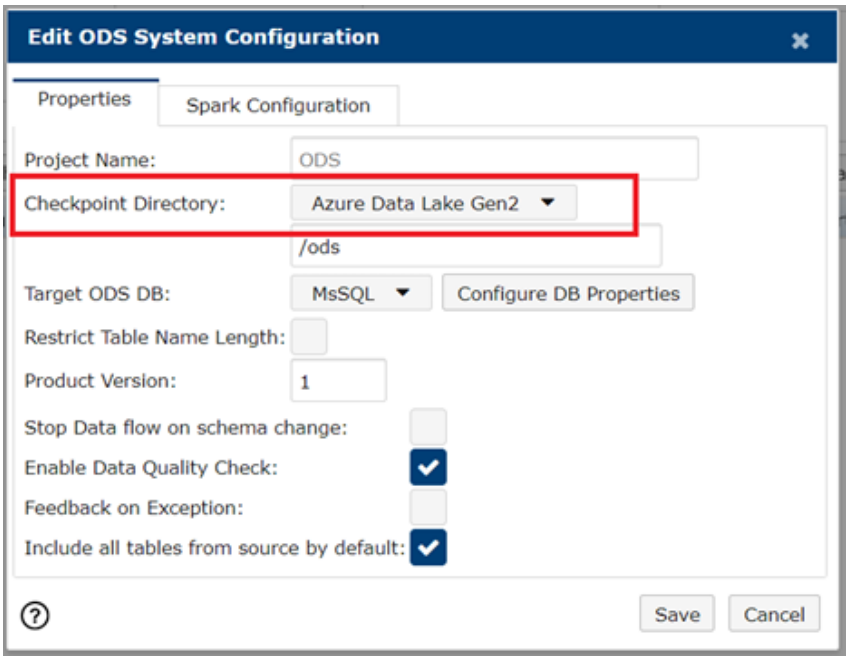

2. Click **ADLG2 Credentials**. The Edit Azure Datalake Gen2 Configuration window is displayed as shown below.



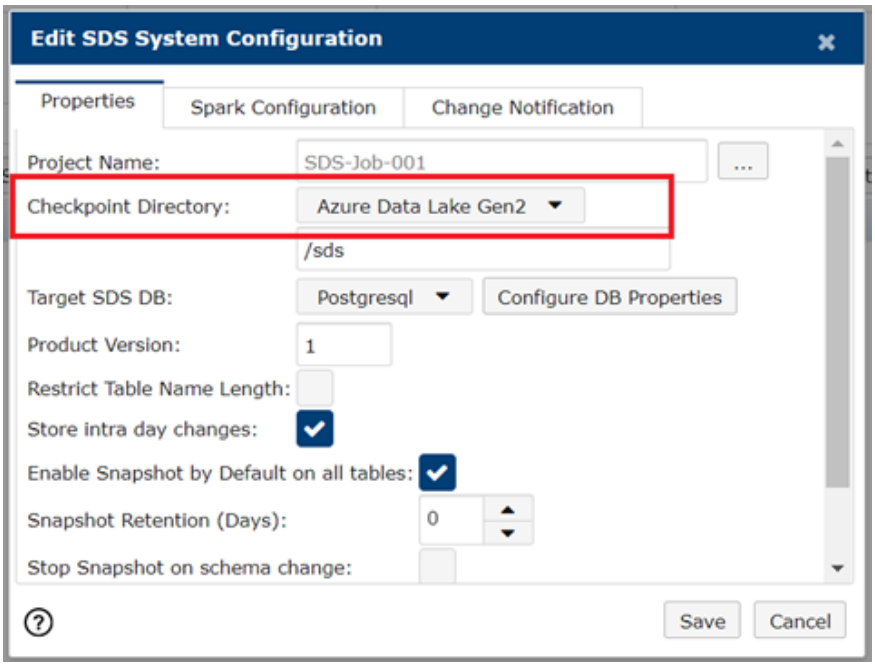
3. Update the following fields in this screen as explained below.

| Field | Description |
|---|---|
| *Oauth2 Client Id* | Azure Data lake Gen 2 Client Id |
| *Oauth2 Credential* | Azure Data lake Gen 2 Password or Secret |
| *Oauth2 Refresh URL* | Refresh URL for Azure Data lake Gen 2 |
| *Access Key* | Access key for Azure storage containers |
| *Storage account name* | Storage account name to that you want to access |
| *Container name* | Container name inside storage account that you entered |

The ODS Configuration screen is shown below.




The SDS Configuration screen is shown below.


Edit SDS System Configuration
Properties
Spark Configuration
Change Notification
Project Name:
SDS-Job-001
...
Checkpoint Directory:
Azure Data Lake Gen2
/sds
Target SDS DB:
Postgresql
Configure DB Properties
Product Version:
1
Restrict Table Name Length:
Store intra day changes:
Enable Snapshot by Default on all tables:
Snapshot Retention (Days):
0
Stop Snapshot on schema change:
Save
Cancel

# Banking Framework

## Delivery » Support MX Messages through SWIFT Interact Services

The bank must setup their own Distinguish Names (Requestor DN) which will be used to determine the Responder DN that must be sent in the SWIFT Interact technical header. Preferably, this should be set at the DE.CARRIER level, for those carriers which are using the Formatting Module XMLISO.

Alternatively, if the Requestor DN varies based on the address, message type, this can be setup in the `DE.DISTINGUISH.NAME.RULES` application, specify in the Domain the field the Delivery Carrier, and in selecting Requestor for the *Scope* field.

# Corporate

## Arrangement Architecture (AA) » Non-Customer facing Interest

To enable auto settlement of non-customer type of Interest or Charges, a new set of fields namely *Non Cust.Settle Categ* and *Pc Non Cust Settle Categ* are introduced in the Accounting product condition to define the settlement category from which auto settlement has to happen. During the settlement, the system posts the opposite entries to the Interest/Fees to the internal account/PL depending upon the category defined in these fields.

# Technology

## Interaction Framework

### IRIS R18 » Installing and Configuring New Quantum Based IRIS Workbench

You must import the IRIS Workbench application, to use it in Quantum platform.

# I Technical Notes

# Corporate

## Arrangement Architecture (AA) » Non-Customer Facing Interest

The *Internal Booking Account* attribute introduced for non-customer charges is obsoleted with the *Non Cust.Settle Categ* and *Pc Non Cust Settle Categ* fields since it was incapable of handling currency specific settlement accounts.

## Arrangement Architecture (AA) » Defining Default Settlement Instructions

The Settlement Property Class is enabled for Inheritance. When the *Inheritance Link* field is set as Tracking in Target arrangement, any changes to the default settlement instructions at the source arrangement level are inherited to the target arrangements through `AA.ARR.TRACKER.SERVICE`. This service can be run as an online service or can be run during COB.

# Retail

## Arrangement Architecture (AA) and Retail Lending » Income Recognition Using Cost-Recovery Method

To enable income recognition using the cost recovery method new events are released. To view a complete list of AC.EVENT records click here.