TEMENOS
THE BANKING SOFTWARE COMPANY

What's New in

Temenos Transact

July 2020

Table of Contents

Release Highlights

Application Framework

System Core » Alert Generation for Expiring Documents and Removal of Posting Restrictions

As part of document management, alerts were generated for documents nearing expiry only on the first day of the notice period, initially. This customer alert functionality is now enhanced to generate alerts on all days during the notice period either when a document is created during the notice period or if *End Date* in `CUST.DOCUMENT` is changed. If the expired document is replaced with a new document, the system resets the Alert Sent field in `CUST.DOCUMENT` and `DM.CUST.EXTRACT` and removes posting restrictions.

Banking Framework

Accounts/General Ledger » Internal Funding Position (IFP) Memo Balance

Temenos Transact has been enhanced to support two or more balance types during the Cover Control process. To enable this, the *Ifp Balance* field is added in the `AC.BALANCE.TYPE` application for the system to consider an off-balance sheet (reporting) amount. In addition, the SHADOW and SUPPRESS.CREDIT.PROJECTIONS optional balance components are added in the `AC.CREDIT.CHECK` application. These optional components can be attached to a base component when defining a balance type in `AC.CREDIT.CHECK`.

Temenos Transact now allows banks to:

- Include a memo balance type (reporting) in addition to a base balance in the Cover Control process. For example, it can be considered if the IFP option is enabled when creating an AC.CASH.POOL group. The amount swept between accounts within a Cash Pool Group will be considered in the Cover Control process as an IFP balance.
- Define and perform two cover controls for an arrangement account based on different balance types for the same debit transaction.
- Attach a bank limit or internal limit amount to a cover control type.

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

Loan Loss Provisioning » Multi-GAAP Provisioning

Banks providing financial services globally operate from different countries, and they need to comply with the local regulations of the country where it is

operating. Each country may have their own set of rules for classification of customers or asset and provision calculation (that is, local GAAP). Some banks have the obligation to present the consolidated balances at Group level, where the Group may follow other Generally Accepted Accounting Principles (GAAP) regulations in addition to the Local regulations (that is, additional GAAP).

The Provisioning (PV) module in Temenos Transact is enhanced to define different risk profiles, provision rates and accounting details to support multiple GAAP for the same contract.

- Standard provisioning rules can be configured for different GAAP.
- The provision on any particular loan (asset) is calculated based on the local GAAP and the additional GAAP.
- The provision amount is calculated for the contract as per local GAAP and additional GAAP. If there is any difference in the provision amount between the local GAAP and additional GAAP, special adjustment to the provision amount is made under the additional GAAP.
- The provision balance as per local GAAP is reported in the Local General Ledger and the local and additional provision balances can be reported in the Group consolidated General Ledger.

System Tables » Exit Status for Prospects and Customers

In certain scenarios, banks may not be in a position to on board all the prospects. In such situations, banks may need to flag prospects with a particular type of status and reason for exiting the prospect role. Similarly, banks may also need to mark customers who do not have an active role with an exit status. Temenos Transact now allows banks to mark customers or prospects who have exited their role with the bank.

- Banks can define a list of customer exit statuses, exit reasons, and if the users can remove the exit status for a prospect or customer in the `ST.CUSTOMER.EXIT.STATUS` application based on the requirement.

- The bank user can capture the *Exit Status* and the *Exit Reason* in the CUSTOMER application for a prospect or active customer, indicating that the prospect or customer has left their current role with the bank.
- Prospect or active customers marked with an exit status will not be able to perform any activities through the business applications in Temenos Transact.
- This feature allows banks to classify and segregate active prospects and customers from those who do not have an active role.

Limits » Corporate Lending Club Loans: Facility Limits

Club loans are a type of syndicated loans, which represent a large credit facility issued by a consortium of lenders to a single borrower. The lenders are usually composed of banks, but financial institutions like mutual funds and insurance companies may also participate in this type of lending.

The LIMIT.REFERENCE application in Temenos Transact has been enhanced with a new limit type (Standalone) and the *Suppress Accounting* and *Third Party Exposure* fields to support Facility Limits for Club Loans:

- Standalone – This option in the *Limit Type* field allows the Limit product to hold Standalone Limit records, which have the same functionality as the Utilisation Limit records, except that they hold no parent or child limits. This allows linking of Standalone Limit records to Club Loan Facility arrangements.
- *Suppress Accounting* – This field, if set to Yes, will suppress any GL accounting performed against the Limit records under the Limit product. Only the lowest level of the Limit structure will accept an input in this field (that is, no value is set in the *Reference Child* field for the Limit record).
- *Third Party Exposure* – This field allows the bank users to mark the given Limit records under the Limit product as holding the third-party exposure for its customers. Any exposure created against those Limit records will be excluded from the bank's risk reports.

Standing Order » Joint Beneficial Owners as Ordering Customers in STO

For AA accounts with multiple owners, Temenos Transact now accepts a joint beneficial owner (different from the debit customer) of the account as an ordering customer in the `STANDING.ORDER` (STO) application. This is applicable only for standing orders that are set up to be executed through the `PAYMENT.ORDER` application (POA).

If the user enters the customer ID in the *Ordering Customer* field in STO, the system populates the exact ordering customer details set up in STO in the Payment Order. If the user enters a name in the *Ordering Customer* field in STO or if this field is left blank, the *Ordering Customer* field in POA will be populated with the debit customer ID.

- For AA accounts, Temenos Transact accepts a joint account owner of the account as an ordering customer only if the role associated with the customer ID of the joint account owner is set up as a beneficial owner of the account.
- For AC accounts, the ordering customer must be the debit customer of the account.

System Tables » ISO Alpha-3 Country Code

To support the widely used ISO 3166 standards, the `COUNTRY` application in Temenos Transact now allows users to define the alpha-3 country code, three-digit numeric code, and reporting country name for each country.

- *Alpha Three Code* – This optional field holds a three-letter code that represents a country name similar to ISO standards (for example, USA or GBR). The user cannot enter a value if the country record is suffixed with year (for example, US.2020).
- *Numeric Code* – This optional field holds a three-digit code that represents a country name similar to ISO standards (for example, 840 or 826). The user cannot enter a value if the country record is suffixed with year.

- *Reporting Country* – This optional field holds the reporting country name for compliance reporting purpose. This field accepts a valid country ID that is already available in the Country table, except the country ID of the country records suffixed with year.

The reference-countries-service-v1.0.0 API provides the ability to retrieve the list of countries that are available in the system.

System Tables » Customer Spread in Percentage

The Customer Spread in Percentage feature provides flexibility to the bank to set default, treasury and customer spread in percentage as basis points (BPS) for each currency market. Using this value, Temenos Transact calculates the actual spread rate and populates it in the respective fields in the `CURRENCY` application (price table). This spread would be applicable to the transaction where the system refers the price table to retrieve the latest exchange rates for the given currency market.

To enable this feature, the following optional fields are added to the `CURRENCY` application:

- *Default Sprd Percent* – Allows the user to define default spread in percentage.
- *Trsy Small Sprd Percent* – Allows the user to define treasury small spread in percentage.
- *Cust Small Sprd Percent* – Allows the user to define customer small spread in percentage.
- *Trsy Medium Sprd Percent* – Allows the user to define treasury small spread in percentage.
- *Cust Medium Sprd Percent* – Allows the user to define customer medium spread in percentage.

Corporate

Cash pooling » Sweeping Suspension and Considering Locked Amount with Multiple Value Dates

Bank user can currently suspend the sweeping of amount at cash pooling level, based on the updates in the *Suspend Start Date* and *Suspend End Date* fields. However, the cashpool suspension is not blocked when an account is blocked (debit or credit). This feature is now enhanced to help the users to suspend the sweep only for debit or credit by setting the *Susp Sign* field to ‘Cr’ or ‘Dr'. If the account is blocked for debit transactions, then the sweeping is allowed for credit transactions and vice-versa. This allows the user to restrict the sweep based on the posting restriction setup at sweep or link account. Sweep is processed only when the specific sign (*Susp Sign)* is updated in the cash pool record.

Sweep is currently executed on every value date, and does not consider the locked amount when processed with back-value date. A new functionality is now introduced that allows Transact to consider locked amount:

- For the respective value date when processing a sweep.
- When sweeping the funds from sweep to link account.

This enables the user to include the locked amount while processing multiple value dated sweeping.

Islamic Banking

Finance - Profit Upfront Sale Product Group » Capitalisation of Profit Accruals

Banks grant an initial grace period for repayments in an upfront profit contract. During this period, the customer does not make any repayments. The profit accruals during this period can now be capitalised to the principal amount.

- If the actual amount defined in the Payment schedule is insufficient to settle the due interest, then by using the new Due and Cap option in *Alt Payment Method* attribute it is now possible to settle the portion of due interest and capitalise the difference between the due and settled interest, to the principal amount of the arrangement. It is applicable only for payment methods that have annuity calculation type. This option enables the bank to capitalise the accrued interest amount that is not made due on the repayment date.
- In upfront profit contracts, profit-only schedules can now be set to capitalise to the principal. During the construction period, the bank can capitalise the interest amount to the principal for these contracts and then start collecting the repayments once the asset is handed over to the customer.
- Some banks may prefer to use these upfront profit contracts without changing the profit amount agreed upfront with the customer. If the Due and Cap option is used for these contracts, then the income gets amortised into PL category quickly before the maturity date of the contract.

Private Wealth

Securities » Different FX Rates for Intra-day and End of Day Process

The Central Bank of a country publishes the exchange rates at the end of each day. Most regulations insist that the portfolio valuations should be based on the Central Bank provided official rates. Currently, the system uses the same currency market Foreign Exchange rates for both valuations and transactions done during the day and during COB. The intra-day FX rates is used for all the intraday valuations and transactions.

The Securities module is now enhanced to define two different currency markets for transactions during the day and the valuations done in COB. Separate currency markets can be defined for the transactions and valuations using the *Default Ccy Market* and *Cob Ccy Market* fields in `SC.PARAMETER`. This functionality supports the regulatory requirements where it is mandatory to report portfolio valuations using a specific end of day Central Bank rate.

Corporate Actions » Purchase or Sale of Rights through Market or Custodian

In a rights event, the customers are provided with rights based on their holdings in a company.

The customers can choose to exercise the allocated rights, and also purchase additional rights in the company or sell the rights multiple times during the trading window.

The corporate actions module is now enhanced to allow the user to place the trading instruction of the customer (purchase/sale of rights) in market or with custodian in a rights event. Accordingly,

- If the user chooses to place the purchase or sell the rights through market, a market order is placed.

- If the user chooses to place the purchase or sell through custodian, an instruction (SWIFT MT565) is sent to the custodian.

The module also supports election of specific quantity of new shares to be received by the customer, rather than electing the rights. Accordingly, the system decides whether additional rights need to be purchased or sold.

Institutional Custody » Order Creation and Management for Institutional Customers

Some institutional customers use SWIFT as one of the methods to instruct the purchase or sale of securities. The messages exchanged are in MX (ISO 20022) format. The customers who have activated the option to send instructions through SWIFT messages are identified at the customer level and the order instruction from those customers are recognised by the system to create or amend a securities order.

The system is enhanced to handle inward SETR.004 and SETR.010 SWIFT messages from institutional customers to place a redemption and subscription order respectively. On receiving the instruction, if the customer is eligible for order creation through SWIFT, then the securities order is created in the system for the customer and transmitted to the market. The institutional customer, who has instructed the purchase or sale is informed of change in order status through SETR.016 message. Once the order is executed, the customer is notified through order confirmation messages SETR.006 and SETR.012 for purchase and sale of securities, respectively.

Regional Banking Solutions

Argentina Model Bank

Accounts » Account Type for Inactive Accounts (Saldos Inmovilizados)

As per the regulatory requirements of Central Bank of Argentina, every customer must have a separate internal account called Saldos Inmovilizados, to receive the remaining balance of savings or payroll accounts that will be closed for three different reasons:

- The bank decides to close the account and transfer the funds to the Saldos Inmovilizados account because of legal disqualification, insolvency, not providing the requested documentation, making suspicious movements in the account, giving false information to the bank, breach of the terms and conditions in the contract, etc.
- The customer decides to close the account and transfer the remaining balance to the Saldos Inmovilizados account.
- The account becomes inactive when there are no changes on the balance for the past 730 days.

This functionality allows the user to manage the new Saldos Inmovilizados account product. Two variations of this product are created to configure the maintenance charges for transferring funds from savings and payroll accounts. It is not a product that can be sold to customers and the accounts under this product are automatically created by the system.

Accounts » Customer Monthly FX Limit

Central Bank of Argentina (BCRA) provides a list of blacklisted customers on a daily basis that are not allowed to perform foreign exchange transactions. The

ARACCT.FX.BLACKLIST application is used to store the details of the incoming files for blacklisted customers.

If the customer is not blacklisted, Temenos Transact calls the Operation API to validate the eligibility of the customer to perform foreign exchange (FX) transactions. If the API response returns true, then the user will be able to authorise the payment. If the API response returns false, then the user will not be able to authorise the payment.

After cancelling and reversing a payment, Temenos Transact calls the Cancellation API to cancel the payment in BCRA. Then, the payment order record will be updated with the API cancellation response.

The connection details between Temenos Transact and the Central Bank of Argentina is established with a REST API.

Accounts » Early Redemption Deposit with UVA

Early Redemption Deposit with Purchasing Value Unit (UVA) is a new type of regulatory deposit in Argentina.

In Argentina, UVA is used for loans and deposits. The UVA value is updated daily by the Reference Stabilisation Coefficient (CER). It is published by the Central Bank of Argentina (BCRA) on its website.

This new regulatory deposit follows the new macroeconomic context of Argentina of low taxes and it tries to stimulate the investments in local currency, offering an option that is adjusted to the evolution of the prices.

The purpose of this functionality is to give a fixed-term deposit with early redemption option following the mandatory application of Financial Entities that offer any other type of fixed-term deposit. This pre-cancellable type of deposit will have 2 terms, 90 and 180 days.

Accounts » PAIS Tax for FX Debit Cards

This functionality calculates the PAIS (Para una Argentina Inclusiva y Solidaria) tax for international debit card Point of Sale (POS) transactions that require a foreign exchange from US-Dollars (USD) to Argentine Peso (ARS). The transaction amount in USD will be converted to ARS using the National Bank of

Argentina rate and the system will apply a tax of 8% for digital services and a 30% tax for non-digital services. When POS transactions are locked or reserved with an authorization request, the PAIS tax is calculated and then added to the transaction amount so that the total of the transaction plus the tax amount will be locked.

Accounts » FX Transactions Restrictions on Debit Card

This functionality performs blacklist customers checks and preferred international account validations for FX debit card transactions before the transaction entries are posted. The system will convert the debit card transaction amount from USD to ARS and will store the Foreign Currency (FCY) code, the FCY amount and the foreign exchange rate applied, in the `ATM.TRANSACTIONS` application.

Transactions through debit cards are handled in Temenos Transact through the ATM framework.

Accounts » PAIS Tax for Payments

PAIS (Para una Argentina Inclusiva y Solidaria) tax is applicable when customers buy USD from ARS accounts and for currency exchanges.

A fee is charged when customers buy foreign exchange through payment orders. This applies to resident customers where the source account is in Argentinian Pesos, the target account is in USD, and both accounts belong to the same customer.

This functionality allows the user to configure the PAIS tax for the following operations:

- Foreign currency exchange made by financial institutions on behalf of the client or borrower.
- Purchases in foreign currency made from portals, virtual sites or any other modality.
- Book transfers from ARS to USD.

- Transactions between accounts in different currencies (ARS to USD) owned by the same customer.

Taxes » Tax Returns

In Argentina, taxes have a general method of calculation, but specific contributors are categorised as exempted or with different tax rates.

These categorisations are published by the tax authorities, nationals or jurisdictional, at the contributor level, (Unique tax identification Code (CUIT), Unique labor identification Code (CUIL) or Identification Key(CDI)) through periodic files called padrons. Padrons are published by the regulators, including information for contributors.

This functionality sends all the debits performed for a specific tax, a specific client and in a determinate period to be returned to Catamarca, Salta and Tucuman.

The `ARTAXS.RETURN.TAX.FILE.DETAILS` application stores the details of the return padron files.

CEMAC Model Bank

Alyssa - Centralisation of Payment Incident

A payment incident is the refusal of a financial institution to pay for any payment instrument due to lack of funds.

This functionality allows banks to provide declarations to the Central Bank of Africa for the creation, regularization and cancellation of incidents of payments and to manage the creation and release of an irregular instrument of payment.

Once the declaration files are sent to the Central Bank system, the acknowledgement is received from Alyssa with the statuses as accepted, rejected or on hold. The statuses of the sent declaration files is recorded in the `AFRCIP.PAYMENT.INCIDENT` application.

Balance of Payments

BEAC (Bank of Central African States) requests banks under its control to declare the financial transactions carried out by its customers (residents and non-residents) in foreign currency on a monthly basis. The transactions that are expected to be reported are teller, standing orders, payment orders, forex, money market, letter of credit, miscellaneous deal, payments, and Arrangement Architecture (AA).

The transactions have to be reported in the .txt file format before the 15th of every month for the previous reporting month. Details about customers who are part of such transactions also need to be reported in a separate file (either individual or corporate). BEAC provides a protocol document that needs to be refereed when generating these files, in particular, pre-defined values have to be referred from the protocol document.

This functionality allows the user to generate a report for foreign currency transactions to the BEAC on a monthly basis. The `AFRBOP.BOP.PARAMETER` application is introduced to store some of the information required for the file generation process and for defining the extraction period. The

GENERATE.BATCH.XML service is created to fetch the related details from the AFRBOP.TXN.DETAILS, STMT.ENTRY and CUSTOMER applications.

Hungary Model Bank

Transaction Fees » Financial Transaction Levy Fee

There is a legal requirement in Hungary to calculate and pay the levy to the state for the payment debits that clients execute on their payment accounts.

The Financial Transaction Levy Fee functionality allows users to calculate the levy on financial transactions, which is paid by the bank to the tax authority. The `HUTXNF.LEVY.PARMETER` application stores all the parameters for the levy calculation.

Warrants » Queuing of Payments and Warrants

This functionality allows banks to have a legal compliant collection process in case of insufficient funds on the customer accounts.

The functionality manages loan repayment collections from settlement accounts and queuing and collection of the same, in case there are insufficient funds in the settlement account. The functionality also manages loan repayment collection in case a warrant exists in the settlement account and/or in the extended account.

All requests from PCS (a third party clearing system in operation at the bank) are stored in the `HUWRNT.WARRANT.REQUEST` application. The records from the `HUWRNT.WARRANT.REQUEST` application are taken up for primary validations and if the validation is successful, the *Warrant Status* field is updated as Validation Successful. Only if this validation is successful, the following secondary validations are performed like: name number mismatch check, customer liquidation status check, currency mismatch check, posting restrictions check, multiple warrant check and funds sufficiency check.

India Model Bank

Accounts » Internal Account Restriction

The Internal Account Restriction functionality allows banks to store the reference number of the original transaction during the reversal of an entry in Temenos Transact. In addition, when committing a record, the system validates the transaction to check whether the current amount is less than or equal to the original transaction amount.

This allows the users to perform reversal transactions from the PL (Profit and Loss) account through the PL Charge Reversal enquiry.

Goods and Services Tax

Goods and Services Tax (GST) is an indirect tax for India. Under the GST regime, the tax is levied at every point of sale. In the case of intra-state sales, Central GST (CGST) and State GST (SGST) are charged. Inter-state sales are chargeable to Integrated GST (IGST).

This functionality allows the user to identify which taxes can be applied from the following taxes available: CGST and SGST, or IGST. The system will automatically calculate these taxes using new routines.

Payments Information » Remittance Regulatory Returns to FIRC

A Foreign Inward Remittance Certificate (FIRC) acts as a documentation for a foreign money transfer. It tracks the amount of the transfer in both the foreign currency and in rupees, as well as where the transfer comes from and where it ends up. Since the foreign fund transactions might be used for illegal activities like money laundering, a FIRC is a safeguard against such purposes.

FIRC issued by the bank will maintain the stock of such financial certificates or instruments. Each certificate will carry a unique serial number.

The STOCK.ENTRY application can be configured to operate the stock register for FIRC.

The CHEQUE.TYPE application is used to include the FIRC instrument in the stock and to maintain the stock register for FIRC.

A new PP.ORDER.ENTRY,REP.FIRC version for the payment order is released to store the purpose codes.

The DEAL.SLIP.FORMAT application allows the users to define the FIRC layout to enable print advice generation in Temenos Transact.

Israel Model Bank

Fees Optimisation » Non-Execution and Minimum Fee

The Fees Optimisation module allows the calculation and posting of fees for securities or derivatives orders, based on the gross amount total of the corresponding trade executions. Non-execution, minimum or maximum fees can be applied.

This functionality allows the user to charge the minimum or the maximum fee for the sum of all partial executions and the non-execution order fee or cancellation.

If there is no-execution for a particular day, then the minimum fee is charged. However, if there are no no executions at all by the time the orders expire, then the non-execution fee will be applied.

Spain Model Bank

Cheques and SNCE Clearing » Partial Cheque Returns

This functionality allows the bank to clear a cheque to the extent of amount that is requested by the customer, and the balance amount that is unpaid in the cheque will be returned.

A new version `PP.ORDER.ENTRY,ESCLNG.REP.CTR` is created, wherein the cheque that is in the repair queue can be picked up by the user to partially honour the cheque requested by the customer.

Cheques and SNCE Clearing » Regulatory Requirement for SNCE04

Cheques are a common means of payment for commercial transactions across the world. In Spain, the cheques are cleared through the agencies of Iberpay, which is the Spanish company responsible for managing the interbank payments infrastructure, which among other things also covers the clearing and settlement process of cheques, between banks.

The exchange of cheques is carried out using the SNCE04 proprietary message format. The record of the SNCE04 inward files and outward files from the `DFE.MAPPING` application contains the maximum limit definition to indicate if the instrument will be marked as truncated or non-truncated. This configuration will hold the revised limit amount.

Customer Infrastructure » AJD Notary and Other Fees

Banks offer mortgage products to customers. As part of the mortgage, some fees are charged and the customer needs to settle the same through the defined

liquidation account. There are some additional standalone fees, which are incurred as part of the loan, for example, the notary, AJD (Actos Jurídicos Documentarios) and record fees, which will be paid out by the bank and will not be included in the loan contract itself.

As part of the AJD Notary and Other Fees functionality, a new product configuration is released for the vendor product (notary) to capture the additional fees, which are paid by the bank to notary.

Two new enquiries are released as part of this functionality:

- The ESBASE.MORTGAGES.TRIGGER.COMMISSIONS enquiry allows the user to trigger the vendor charge once the invoice is received.
- The ESBASE.MORTGAGES.COMMISSION.DETAILS enquiry allows the user to view the amortised and unamortised portion of the charges for a loan contract.

Informa Interface » Informa AnaCredit Report

AnaCredit (Analytical Credit and Credit Risk Dataset) is a project from the European Central Bank (ECB) to create a shared database containing information on bank loans to companies.

The bank checks the available public data in the Informa interface. The required details are available in Informa and are extracted and updated in the bank's customer details.

The *Duns Number* field is added in the `CUSTOMER,CORP.ES` version to accommodate the DUNS number. The DUNS number is a unique nine-digit identification sequence that provides unique identifiers of single business entities, while linking corporate family structures together. The `INFORMA.ANACREDIT.DETAILS` application stores the information received from Informa.

SEPA Iberpay » Cut-off Changes for SEPA CT

As part of this functionality, a new cut-off time is available for Single Euro Payments Area (SEPA) credit transfers (CT). The payments initiated after the

cut-off time will have the settlement day as the next working day.

For a payment initiated through the PAYMENT.ORDER application, the ESIBER.ENRICH.API.IBERPAY API is attached to the PP.MSGMAPPINGPARAMETER application, to the PayOrder.IB.SEPA record, to identify the message priority.

For the payments initiated through pain.001, the ESIBER.ENRICH.API.IBERPAY API is attached in the PP.MSGMAPPINGPARAMETER application, to the IBERPAYCTI.pain.001S record, to determine the message priority and assign the cut-off time.

For the cut-off time for pacs.004, the ESIBER.ENRICH.API.IBERPAY API is attached to the PP.MSGMAPPINGPARAMETER application, to the IBERPAY.pacs.008 record, to determine the message priority and assign the cut-off time.

SEPA Iberpay » Order Accounts for Domiciled Payments

This functionality allows banks to create entries to contingent accounts to recognise the risk associated with a direct debit return after a certain number of days, as permitted by Spanish clearing regulations. The contingent entries move through various internal accounts, during different stages in the direct debit life cycle, until they are ultimately liquidated, at the end of the lifecycle.

As part of this functionality, new configuration records are released in the PP.STATUS.ACTION application, along with the API for different statuses (for example, 706 and 999) of the direct debit processing. The BNK/INWARD.MAPPING and BNK/PAYMENT.STPFLOW.MEDIUM services are used to raise the contingent entries. The ESIBER.CONTIGENT.ACC.PARAM application allows users to map the accounting entries configuration to every rule applied on the direct debit transaction.

Special Institutions Interfaces » Embargo

In Spain, the Embargo process is used to recover outstanding dues for taxes and other commercial obligations. The process entails the blocking of funds, under the order of the competent authority, held as credit balances in accounts of customers in banking institutions, and the subsequent recovery of the funds when the block period is over.

This functionality allows the users to unblock the files received from the tax authorities: AEAT (Agencia Estatal de Administración), Navarra, and Guipuzkoa territories.

The `ESSPIN.EMBARGO.AGREEMENT,INPUT` version is created to allow the user to input IDs for AEAT entities, like 57, 80, and 31. The *Creditor Type* field in the `ESSPIN.EMBARGO.AGREEMENT` application allows the user to indicate the type of entity for which the record is created.

The `AC.LOCKED.EVENTS,EMBARGO` version is created to allow the user to accept or reject the errors from the phase C files.

The `ESSPIN.PHASEC.DETAILS` application is created to hold the details of the phase C file, which will be written from the `ESBASE.INTERFACE.PAYMENT.LOG` application.

The ESSPIN.EMBARGO.PHASEC.ERROR equiry allows the user to amend locks and to manually change an error message, to respond to phase C or to reject the record.

Tax Payments Collections » Cancellation File to AEAT

Customers in Spain can pay their taxes through multiple modes including payment at branches, initiation from internet banking, and AEAT (Agencia Estatal de Administración) websites. The request is received by banks for processing an NRC acknowledgement is generated in specific cases. This information is transmitted to the tax authorities on a fortnightly basis along with the list of customers and the tax collections made by the banks.

This functionality includes the following:

- Validation of the tax model codes.
- Generation of the outward files to AEAT based on the AEAT calendar.
- Cancellation of tax payments based on the customer request.
- Processing bulk tax payment transactions.
- Recycling of transactions for tax payments.

Sri Lanka Model Bank

Dormancy » Dormancy and Abandandon Property

This functionality allows users to classify bank issued instruments like pay order as abandoned property, if an instrument remains unrealised for a specific period of time after its expiry date.

The ACCDOM.DORMANCY.PARAM application allows users to parameterise instruments as abandoned property. When an instrument is classified as Abandoned Property, the corresponding funds will be transferred to an internal account.

During the COB process, a version of the PAYMENT.ORDER application will be triggered to transfer the funds to an internal suspense account as parameterised in the ACCDOM.DORMANCY.PARAM application.

Switzerland Model Bank

Securities Reporting » SIX Transaction Reporting

The SIX Transaction Reporting functionality has been enhanced to comply with regulatory requirements. This functionality supports the upload of the ISIN's (International Securities Identification Number) file received from the SIX server and the eligibility of a report transaction. Some fields were added, removed or amended in the existing SIX reporting file, to comply with the changes in the regulation.

The SIX reporting file covers the duty to report trades and order transmissions in derivatives with one or several underlying instruments. It applies if at least one underlying instrument is subject to reporting obligations and has a 25% more weight than the financial instrument traded.

Retail

Retail Lending » Loan Payoff from Payoff Statement

Loan Arrangement Overview screen is enhanced providing the Settle by Payment Order option through which the user can perform loan payoff instantly. When the user clicks this option, the system populates the Payment Order version defaulting the field values from the `AA.BILL.DETAILS` and `AA.ARR.SETTLEMENT` tables (when available). This process speeds up the total loan payoff work flow via a payment order.

> **NOTE:** The `AA.BILL.DETAILS` table stores the details of bills that are generated after payoff simulation is completed successfully based on the defined payoff date.

Arrangement Architecture » Projecting Progressive Payment for Future Disbursements

The payment amount for future scheduled disbursements can now be calculated progressively and projected to the customer on the arrangement date. For this, a new option called Progressive has been introduced to the *Include Future Disb* attribute in the Payment Schedule Product Condition. This allows the user to specify if the future scheduled disbursements need to be considered for calculating the projected payment amount.

Arrangement Architecture » Overriding Capitalisation Amount

There are instances where bank prefers to check for a minimum balance before capitalising any debit interest or charges. This is achieved by defining an user API that validates during the capitalisation of interest , charges and decides if it should override the capitalisation amount and restrict overdraws in the account.

Arrangement Architecture » Multiple Disbursements for Upfront Profit Flat Rate Contracts

- Upfront profit contracts with a flat rate of profit calculation can have multiple disbursements and the profit amount is calculated for the financed period. The instalment amount for these contracts can have equated monthly instalments calculated with [or] without considering the future disbursements.
  The *Include Future Disb* attribute in the Payment Schedule Property Class can be set to Yes to calculate instalments considering the future instalments. The instalment amount is constant from the start date until the maturity date of the contract. Any principal disbursement scheduled in the future is taken into consideration for this calculation.
- In upfront profit contracts with a flat rate of profit calculation, a custom routine can now be attached to the Interest condition to define the conditions for recalculation of the profit amount in the contract.

Retail Lending » Manually Ageing an Arrangement

Banks sometimes prefer to mark all the loans of a customer as non-performing asset if any one of the loans is identified as non-performing. Therefore classifying the asset to the worst status based on the customer repayment behavior in other arrangements or any contracts is facilitated now through manually ageing an arrangement:

- Age an arrangement to a specific overdue status triggering the LENDING-SET-OVERDUE*OVERDUE.STATUS Activity.
- Age a specific bill type in an arrangement using the LENDING-SET-OVERDUE*OVERDUE.STATUS*BILL.TYPE Activity Class.

Any further repayments done to the arrangement after it is manually aged does not change the ageing status of arrangement.

To restore or revert to automatic aging as per overdue definition, the LENDING-MANUAL.RESET-OVERDUE Activity Class has to be used.

Arrangement Architecture » Calculating Memo Interest using Routines

Banks can now have memo type of interest calculation on the non-contingent balances of the account in specific scenarios. For this,

- The Interest Property Class is enhanced with:
  - A new option **Memo Only** is introduced as a Property Type in Interest Property. This enables configuring memo interests on real accounts.
  - A new attribute *Refer to Routine* in Interest Property Class enables banks to attach a user-designed routine to determine the tier amount for interest calculation.
- The ACCOUNTS-UPDATE.BALANCE-ARRANGEMENT Activity Class is introduced to facilitate the adjustment of memo balances.

Arrangement Architecture» Capitalisation of Interest Accruals

Banks grant an initial grace period for loan repayments. During this period, the customer does not make any repayments. The interest accruals during this period can now be capitalised to the principal amount.

If the actual amount defined in the Payment schedule is insufficient to settle the due interest, then by using the new Due and Cap option in *Alt Payment Method* attribute it is now possible to settle the portion of due interest and capitalise the difference between the due and settled interest, to the principal amount of the arrangement. It is applicable only for payment methods that have annuity

calculation type. This option enables the bank to capitalise the accrued interest amount that is not collected on the repayment date.

Technology

Data Framework

Operational Data Store/Snapshot Data Store » TDL Support in Azure Cloud Platform

The following features are included in Temenos Data Engineering (TDE) product to support cloud native service:

- Azure Event Hub – It is a huge data streaming platform and event ingestion service, which can receive and process millions of events per second. TDE reads and stores the data in data lake using this streaming platform.
- Azure Data Lake Storage – It creates data lake's storage in TDE to build powerful cloud-native applications. It scales up high-performance computing and machine learning workloads.
- Azure SQL – It is a managed cloud based database that runs on a cloud computing platform, whose access is provided as a service. It is included in TDE to promote scalability, backup, and high availability of the database.
- Kubernetes (K8s) – It is an open-source container-orchestration system that is used to build a fault-tolerant scalable platform, to automate and centrally manage containerised applications. It is used in TDE product for applications to deploy and scale automatically.

Integration Framework

Data Event Streaming » Handling Avro Data Types based on Temenos Transact Data Types

The strict data type method converts all the Avro field data types to specific Temenos Transact field data types. This is an optional feature where a user can switch between the existing data type and the new strict data type method.

In the existing data type method (in DES), all the Temenos Transact data types were considered as String. Therefore, field data types of all the outgoing Avro messages were also String and users who consumed the events Avro messages from the Stream topic inferred all the values as String or plain text.

In the new strict data type method, an end user can directly infer each field with its own data type instead of plain text.

Interaction Framework

IRIS R18 » Company Agnostic API Support in IRIS R18

IRIS R18 can now use the header parameter 'companyId' from the transact request to fetch the corresponding metadata from the respective company.

If the end user does not pass the company ID in the header parameter, then IRIS R18 will consider the default company of user 't24.security.context' from `jms.properties/standalone-comms.properties` and if 't24.security.context' is not configured, then GENERIC.USER of IRISMETADATA of OFS.SOURCE will be considered to fetch the corresponding metadata (existing behaviour).

In all these cases, if Temenos Transact doesn’t return metadata, then value of the 'otherOperationalCompanyId' from the `jms.properties/standalone-comms.properties` file will be passed to fetch the corresponding metadata from the respective company. This feature allows the users to maintain the backward compatibility.

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

Platform Framework

Design Studio » Temenos Workbench

Temenos workbench is a web-based interface that allows users to configure Temenos products. It replaces Design Studio with a web based interface that include web based configuration tooling and packaging capability.

It allows users to:

- Extend Transact Data model in a few steps with guided wizard to cover uses cases like adding a new field and maintain Transact APIs with dedicated designers for both API based on Enquiries and Versions.
- Configure Transact models (for Version, Enquiries, Composite and Tabbed screens, UXP Browser composite screens, Menus, PW transition and PW activity, and Rules) using editors.
- Configure and Package using Transact Packager.

Installation and Configuration Notes

Technology

Interaction Framework

IRIS R18 » Company Agnostic API Support in IRIS R18

Default company for all APIs can be defined in the **Settings** tab present in the IRIS workbench.

Technical Notes

Banking Framework

Accounts/General Ledger » Internal Funding Position (IFP) Memo Balance

Credit check details for a dual credit check setup will have two sets of data recorded in the *Credit Chk Dtls Name* and *Credit Chk Dtls Value* fields of the record in the `STMT.ENTRY` application for each credit check, with the first set being the least of the two credit check balances. Any local development using the data recorded in these fields needs to be revisited.