What's New in

Temenos Transact

May 2021

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Release Highlights

Application Framework

Security Management System » Using Keycloak for Identity Management

The user authentication mechanism is enhanced from the standard (legacy) login method to Keycloak Authentication. Keycloak is an open source Identity and Access Management solution aimed at modern applications and services, which secures them with a little to no-code. Users can now authenticate with Keycloak, thus avoiding too many Temenos products like UXP Browser and Fabric.

This functionality supports all single domain login for UXP Browser, helps to have a secure authentication and prevents from security attacks.

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

The topic related to this feature is given below:

Using Keycloak for Identity Management

Private Wealth

Derivatives/Structured Products » Generating Payment Order for DX and SY Contracts

The applications in Derivatives (DX) and Structured Products (SY) modules have an in-built capability to settle contracts through book transfers and externally through correspondent banks by supporting the generation of SWIFT payments and advices. The counterparty with whom banks enters a contract are classified into two categories. One of the counterparties have an account relationship with Temenos Transact bank and the other counterparty does not have the account relationship with Temenos Transact.

If account relationship exists, settlement takes place through accounts of the counterparties. If account relationship does not exist, the settlement is done through Nostro account of the counterparty. If the settlement takes place through Nostro Account, then the applications in the DX and SY modules have the in-built capability to automatically determine the Nostro and generate Swift Payment Message (MT202). The `DX.TRADE, DX.OPTSTRUCT, SY.ACCU.DECU, SY.DCI` and `SY.FX.FORWARDS` applications is integrated with the `PAYMENT.ORDER` application in order to centralise the processing and generating of all swift payment messages through Payments module.

The DX and SY module now supports the generation of `PAYMENT.ORDER` which in turn generates payment messages, where the payments are to be made to external counterparties. If Payments Hub (PH) is also licensed, the Nostro account is also determined by PH and the payments module posts the accounting entries and raises the payment message. This functionality ensures centralised and straight-through processing (STP) of payments.

The topics related to this feature are given below:

Payment Order Generation from `DX.TRADE`

Payment Order Generation from `DX.OPTSTRUCT`

Payment Order Generation from SY.ACCU.DECU, SY.DCI, SY.FX.FORWARDS

Corporate Actions » Generating MT565 Message as per Deadline of the Option

In an optional or a mandatory corporate action event with choice, different options such as cash, security, and no action are offered to the customers. Each option have different deadline dates. On the option deadline date, corporate action instructions are sent to the custodian through MT565. Customers can elect each option at different times until the option deadline (cut-off) date. The corporate action functionality in Transact needs to provide feasibility to trigger the MT565 per option automatically on the option cut-off date.

The Securities Corporate Actions (SC CA) module in Temenos Transact is now enhanced to automatically generate MT565 messages for the different options based on the option deadline date. The system also provides feasibility to generate MT565 messages for the different options in an ad hoc manner.

The topics related to this feature are given below:

Generating MT565 automatically as per option deadlines

Generating MT565 Manually as per option on Adhoc

Securities » Creating Generic Groups for Applying Fees and Charges

Banks group customers based on certain criteria, such as nationality and/or relationship manager and so on for the purpose of charging differential fees and charges. Temenos Transact allows groups to be created based on attributes of

the customer or portfolio. However, banks may need to create ad hoc groups that do not follow criteria based on these applications.

The Securities (SC) module in Temenos Transact is enabled to set up fee conditions in SCTR.GROUP.CONDITION, SCSK.GROUP.CONDITION and SCPM.GROUP.CONDITION applications for ad hoc or generic groups. The generic group can be created without any corresponding records created in CONDITION.PRIORITY and SCTR.GEN.CONDITION or SCSK.GEN.CONDITION or SCPM.GEN.CONDITION application. The ID of the record must be prefixed with 'G-' to indicate that the created group is an ad hoc group. The group must be set as actual groups in CUSTOMER.CHARGE application (for transaction, safekeeping and advisory charges) in order to allow the system to default the appropriate fees and charges.

The generic group can also be manually provided at the transaction level in SEC.OPEN.ORDER, SEC.TRADE, SECURITY.TRANSFER, DX.ORDER and DX.TRADE applications, and it overrides any default group. This functionality enables the banks to create generic or ad hoc groups of fees and charges without setting parameters first, thus allowing greater flexibility and ease of use.

The topics related to this feature are given below:

Creating Generic Groups in SCSK.GROUP.CONDITION

Creating Generic Groups in SCPM.GROUP.CONDITION

Creating Generic Groups in SCTR.GROUP.CONDITION

DX.ORDER or DX.TRADE

Regional Banking Solutions

Argentina Model Bank

Accounts » BCRA Health Check API

This functionality allows banks to access the Central Bank of Argentinian Republic (BCRA) service and display the status of their APIs using the ARACCT.BCRA.HEALTH.CHECK enquiry. The response from BCRA will indicate whether the services are working or not.

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

Accounts » BCRA Operations GET

This functionality allows banks to use the BCRA (Central Bank of the Argentina Republic) service to check the FX (Foreign Exchange) operations executed by a customer on a particular day. This service is used to query the database in BCRA and validate the FX operations executed to amend or verify these FX operations.

The following items are introduced as part of this functionality:

- The ARACCT.BCRA.OPERATIONS.GET enquiry is used to get the operation data in the BCRA.
- The ARACCT.BCRA.OPERATION.PO enquiry is used to get the data generated in the payment order in Temenos Transact.

The topic related to this feature is given below:

Accounts

Taxes » Additional Tax on Foreign Currency Buy Transactions

This functionality allows banks to apply an additional tax whenever a customer transfer's money from an ARS account to another account owned by the same customer and with different currency than ARS.

New fields were added to the exemption framework in order to define the kind of origin and the destiny currency and whether the conversion is exempted or not.

The topic related to this feature is given below:

Taxes

Taxes » Change of Exchange Rate for PAIS Tax on Book Transfers

This functionality allows the user to configure the PAIS tax. For PAIS tax calculation, the exchange rate market taken into account is the same as the exchange rate market used by core to exchange the book transfer itself.

The ARACCT.PAIS.TAX.BASE.AMT tax base amount routine is introduced to validate the payment currencies and then exempt the PAIS tax when the transaction is for selling dollar.

The topic related to this feature is given below:

Taxes

Ethiopia Model Bank

Foreign Exchange Operations » Retention Accounts

This functionality allows banks to manage foreign exchange operations. This includes the retention of foreign currency accounts, the definition of applicable percentages and liquidation days with exporters, service providers to foreign customers, resident companies, institutions, individuals and government organizations other than diplomatic missions who continually receives incoming foreign remittances.

Users can open two new retention accounts along with the main account. The foreign currency earning, when credited to the main account, will be split into two retention accounts based on the parameter percentage.

The following items are introduced as part of this functionality:

- The *Create Retention Ac* field is introduced in the account property class to allow the creation of two retention accounts along with the creation of the main account.
- The `ETFXOP.PARAM,INPUT` version allows users to capture the retention account parameter related details.
- The `ETFXOP.RETENTION.TRANSFER` application is used to store the details of the transactions for the retention accounts.
- The ETFXOP.ACCOUNT.LIST enquiry allows users to list the retention accounts.

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

Finland Model Bank

Collateral » Secondary Pledge

Bearer bonds are the type of collaterals that can be created on ships, vehicles, aircraft, and floating charges.

This functionality allows banks to handle the status of the bearer bonds, capture the details of the underlying asset, issue a secondary pledge on a bearer bond and capture the details of the issued or received secondary pledges.

The following items are introduced as part of this functionality:

- The `FICOLL.ASSET.DETAILS` application allows banks to store the asset-related details for which the bearer bonds are created.
- The *Asset Type* and *Bearer Bond Col Type* fields are added to the `FICOLL.COLLATERAL.PARAM` application to store the collateral type of the underlying asset and the collateral types of the bearer bonds.
- The `FICOLL.SECONDARY.PLEDGE.DETAILS` application is used to capture and store the details of the secondary pledges and bearer bonds created outside Temenos Transact.
- The `FICOLL.SECONDARY.PLEDGE.DETAILS,INPUT` version allows users to input records in the `FICOLL.SECONDARY.PLEDGE.DETAILS` application.
- New fields are added to the `COLLATERAL` application to capture the status, underlying asset *Id*, and the number of the bearer bond and the secondary pledge, issued or received.

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

Germany Model Bank

Taxation Interface to Sectras » Transaction Filter, Internal Securities and Goodwill Payments

This functionality allows banks to share the tax relevant information from Temenos Transact to CPB SECTRAS. CPB SECTRAS will return the tax details and Temenos Transact will post the accounting entries against the respective transaction.

The topic related to this feature is given below:

Taxation Interface to Sectras

Global Model Bank

European Investment Fund Guarantee

This functionality allows banks to credit the small and medium enterprises (SMEs) by using the collateral management in respect to EIF (European Investment Fund) guarantees.

An EIF SME guarantee is a guarantee instrument based on the European Union initiative, the SME Initiative, and is used to support small and medium enterprises SMEs. The EIF's SME guarantee covers 50% of the loan balance. The guarantee is a secured collateral and its risk weight is zero in the banks' capital solvency calculations.

The following items are introduced as part of this functionality:

- The *Eif Collateral Type* field is added to the `EUIFGT.PARAMETER` application to store the *Collateral Type* of the EIFG guarantee type.
- The *Collateral Max Value* and *Loan Max Value* fields are added to the `EUIFGT.PARAMETER` application.
- The *Guarantee Program* local reference field is added to the collateral file and its value is stored in the `EB.LOOKUP` application.

> **The topic related to this feature is given below:**
>
> European Investment Fund Guarantee

Hong Kong Model Bank

Infrastructure

This functionality allows users to validate the check digit for the Hong Kong Identity Card (HKID) captured for a customer at the time of individual customer creation and customer tracking to determine the availability of CBRED (Customer Business Relationship End Date). The system will validate the check digit of the HKID entered by the user and if it is invalid, an error will be displayed.

Hong Kong Monetary Authority (HKMA), the regulatory authority in Hong Kong mandates the maintenance of the customer-business relationship end date (CBRED) for all customers. The CBRED date has to be updated when the relationship of a customer with the bank comes to an end.

The topic related to this feature is given below:

Infrastructure

Lending » Payment Schedule Amendments and Loans Prepayment, Payoff and Waiver

This functionality allows banks to manage payment schedule amendments and the prepayments or a payoff.

In the event that impacts the payment schedule, like prepayment or interest changes, the customer may opt to keep the original repayment amount with a different tenor, or a different repayment amount with a fix tenor. Besides the recalculation, the system also provides the option to configure a maximum and a minimum term for a product, and the same is adhered to when the system recalculates the payment schedule.

When a customer comes in to request a prepayment or a payoff, the system

verifies if the payment day is within the notice period, and if yes, the system will keep the prepayment or payoff details. If the customer obtains an automatic settlement, the system will execute the prepayment or the payoff on the settlement day. Otherwise, the customer will settle the payment manually. The bank user can also decide whether to give the customer any waivers. Charges will be reduced once the waiver is granted.

The topic related to this feature is given below:

Lending

Hungary Model Bank

Transaction Fees » Free of Charge Notification Letter

This functionality allows banks to provide different Automated Teller Machine (ATM) free transaction package discounts to their customers and handles the statutory free transaction for the bank's account.

The following items are introduced as part of this functionality.

- The `HUTXNF.MIGRATION.ACC.ACTIVITY.HIST` application is used to be updated with the ATM and teller transaction details that were done in the legacy system before migration. The source calculation routine is also modified to read the legacy transactions.
- The *Termination Reason Code* field is added to the `HUTXNF.ATM.DECLARATION.DETAILS` application. This field needs to be updated at the declaration termination.

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

India Model Bank

Structured Financial Messaging System (SFMS)

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 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 items are introduced as part of this functionality.

- The `INLEND.IFSC.UPLOAD.PARAM` application is used to hold the versions of the `CUSTOMER` and `DE.ADDRESS` applications that will be used for the automatic record creation.

> **The topic related to this feature is given below:**
>
> Structured Financial Message System (SFMS)

Netherlands Model Bank

Payment Reference and IBAN Validation » Structured Reference

This functionality allows users to validate the correctness of the payment reference number upon manually entering the payment details in the Payment Initiation screen. When a record is committed in the `PAYMENT.ORDER,NLPRIV.API.PAYMENT.INITIATE.1.0.0` version, the attached validation API will check if the payment reference is as per the ISO standard or Dutch standard. If yes, the payment will be processed as a structured payment reference. If not, then the payment will be processed as an unstructured payment reference.

The topic related to this feature is given below:

Payment Reference and IBAN Validation

Tunisia Model Bank

Foreign Currency Operations » Bank Letter of Guarantee

This functionality allows the user to link the TCE (Foreign Trade Title) or AVA (Business Travel Allowance) to the guarantee, set the claims to capture the pre-approved documents for the TCE or AVA, validate the balances and update the usage details.

When a guarantee claim is settled, the system gives the option to capture the details of the TCE and AVA to validate the available balance and update the usage details for the particular TCE or AVA.

The following items are introduced with this functionality:

- The `TNFCOP.TRADE.PARAM` application is used to store the payment guarantee types so that the fields are made mandatory according to the deal subtype of the guarantee.
- The TNFCOP.TCE.AVA.DETAILS enquiry is used to display a list of domiciled TCE or AVA numbers by the customer or joint holder.
- New fields are added to the `MD.DEAL` application to allow the update of the usage details and validate the balance of the TCE or AVA approved documents.

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

Foreign Currency Operations » Export Documentary Collection

This functionality allows banks to link the settlements for the export collection

payments based on whether the export collection payment pertains to TCE (Foreign Trade Title) or AVA (Business Travel Allowance).

Whenever there is a payment happening for an export collection, certain fields from the `DRAWINGS` application will be updated automatically based on whether the export collection payment pertains to TCE or AVA. Validations ensure that export collection payment is allowed to be created only if the available amount is greater than or equal to the payment amount in case of TCE.

In case of AVA, 25% of the export collection payment amount will be added back to the available amount subjected to the ceiling limit.

The following items are introduced as part of this functionality:

- The `DRAWINGS, OUTCOLPMT.TN` application is used for outward collection payment updated automatically based on whether the export collection payment pertains to TCE or AVA.
- The `DRAWINGS, ACEXPMAT.TN` application is used for online maturity of acceptances.

Irrespective of the fact that TCE or AVA is domiciled in the bank or not the linking will be done, the only difference is there will not be any validations in case of non-domiciliation.

The topic related to this feature is given below:

Foreign Currency Operations

United States Model Bank

ACH Framework » Procedures

This functionality allows banks to manage the matching returns with the initiated transaction based on relaxed matching criteria of the company id, trace number and amount.

The topic related to this feature is given below:

Procedures

Retail

Arrangement Architecture and Retail Lending » Tax on Advance Payments

When an interest property is subject to tax, the system can be configured to collect tax at the time of repayments against accrued balances. For example, during an advance repayment of upcoming instalments or loan payoff.

Transact is now enhanced to calculate the tax on accrued interest (both principal interest and penalty interest) at the time of repayment. At any point in the life cycle of the contract like advance payment, partial pre-closure, payoff tax can be calculated and collected proportionately for the accrued interest repaid. This accrued interest and tax collected appear in the loan statements.

- The *Tax Inclusive* attribute in `AA.PAYMENT.RULE.TYPE` has to be set as yes so that the tax can be collected during the payment of accrued interest.
- The *Make Due* attribute has to be set as Yes if *Tax Inclusive* is enabled. This field enables the system to generate a statement entry for the accrued interest and the related tax component that is repaid.
    - The *Make Due* attribute can be set to Yes even when the tax is not collected for the payment of accrued interest. In this type of repayment of accrued interest, the interest repaid appears in the account statement(Tax is not collected for this amount, as *Tax Inclusive* is not set)

The topics related to this feature are given below:

Accounting Entries and Tax on Accrued Interest

Accounting Entries, Tax on Advanced Interest

Tax on Accrued Interest

Tax on Advance Payments

Technology

Data Framework

Data Lifecycle Management » PostgreSQL

Data Lifecycle Management (DLM) supports ORACLE, MSSQL, DB2 and NUODB database. This feature extends the DLM functionality to support the PostgreSQL database.

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

Design Framework

Temenos Workbench V1 (UXP) » JWT Authentication for Design Framework Packager

This feature enables authentication support with more security to Design Framework Packager through JSON Web Tokens.

> **The topic related to this feature is given below:**
>
> JWT Authentication for Design Framework Packager

Interaction Framework

IRIS R18 » IRIS Rules Engine

Rules can now be configured in the Config Microservice against the API's operationId and domain. These rules are written and deployed in a dedicated Rules Engine server, which returns a Boolean of True or False for the rules. During Runtime, IRIS checks the API's operationID and domain, invokes the rules engine and validates the payload. Upon successful validation, IRIS sends the payload to Transact to continue business operations.

This functionality helps to:

- Validate the payload of the API with a dedicated rule engine
- Reduce the Load on Temenos Transact

The topic related to this feature is given below:

Implementing Rule Engine in IRIS R18 using Config Microservice

Technical Notes

Application Framework

Security Management System » Using Keycloak for Identity Management

Keycloak integration is not supported for Legacy Browser.

This functionality is available from R21 and above releases.

Extensibility APIs

Java Extensibility

Category: New Enhanced Existing Deprecated

Package	Class	Method name	Description	Hook*/ API
system	Session	**getExternalUserId**	Returns the Id of the external user.	API
atm	AtmMessageLifecycle	**updateRecord**	This hook enables the implementer to update records for any table after the ATM request has been processed.	Hook
accounting	AccountingEntry	**postUpdateRequest**	This Interface enables the implementer post updates to records asynchronously during the accounting phase of a transaction.	Hook
accounting	AccountingEntry	**generateStatementEntryEvent**	This interface enables the implementer to generate an Integration event for a Statement Entry.	Hook
rates	Charge	**getCommissionCondition**	Gets the customer commission condition for the LETTER.OF.CREDIT, LC.AMENDMENTS or DRAWINGS applications.	API
rates	Charge	**getFundsTransferCondition**	Gets the customer charge condition for the FUNDS.TRANSFER application.	API
rates	Charge	**getChargeCondition**	Gets the customer charge condition for the	API

Package	Class	Method name	Description	Hook*/ API
			BL.BILL, TELLER, LETTER.OF.CREDIT, LC.AMENDMENTS or DRAWINGS applications.	
rates	Charge	calculateCharges	This method enables implementer to pass customerCondition parameter while calculates the 'charge' amount in both local and deal currency for many types of transaction such as loans, deposits etc.	API
rates	Charge	calculateTax	This method enables implementer to pass customerCondition parameter while calculates the 'tax' amount in both local and deal currency for many types of transaction such as loans, deposits etc.	API
rates	Charge	calculateCommission	This method enables implementer to pass customerCondition parameter while calculates the 'commission' amount in both local and deal currency for many types of transaction such as loans, deposits etc.	API
accounting	TransactionRecycler	evaluateSettlement	This interface enables the implementer to evaluate a settlement for processing by updating the settlement details, setting an error status or handing off settlement for processing against other accounts.	Hook

Package	Class	Method name	Description	Hook*/ API
accounting	TransactionRecycler	**processSettlement**	This interface enables the implementer to process a settlement by providing FUNDS.TRANSFER(s) or PAYMENT.ORDER(s) and updating the SETTLEMENT.STATUS, alternatively settlement can be achieved by providing a SettlementHandoff within the SettlementResponse to process the settlement against other accounts.	Hook
Hooks are placeholders in Transact where routines can be attached to an application. For example, version, enquiry, delivery and so on.				