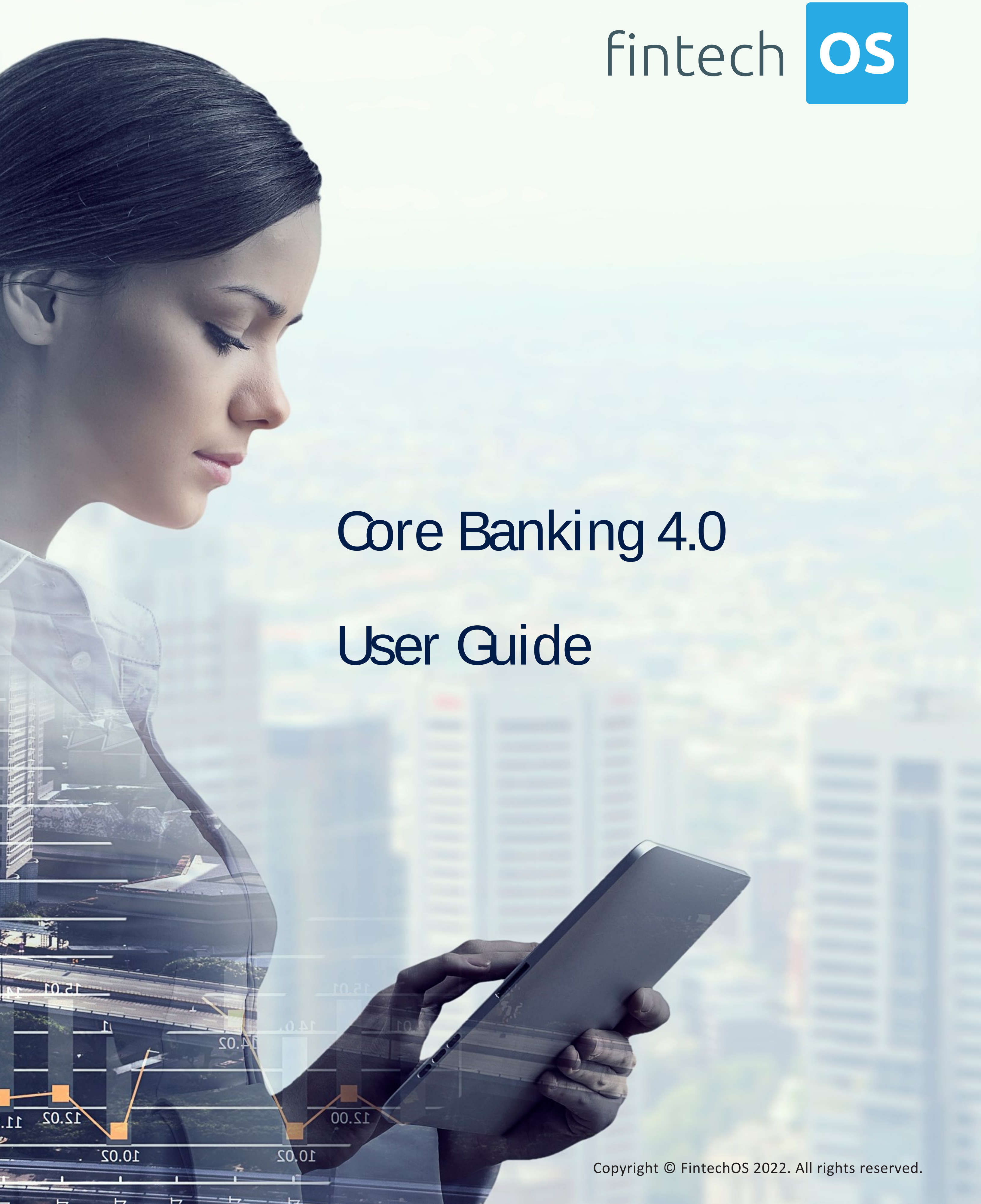


Core Banking 4.0

User Guide

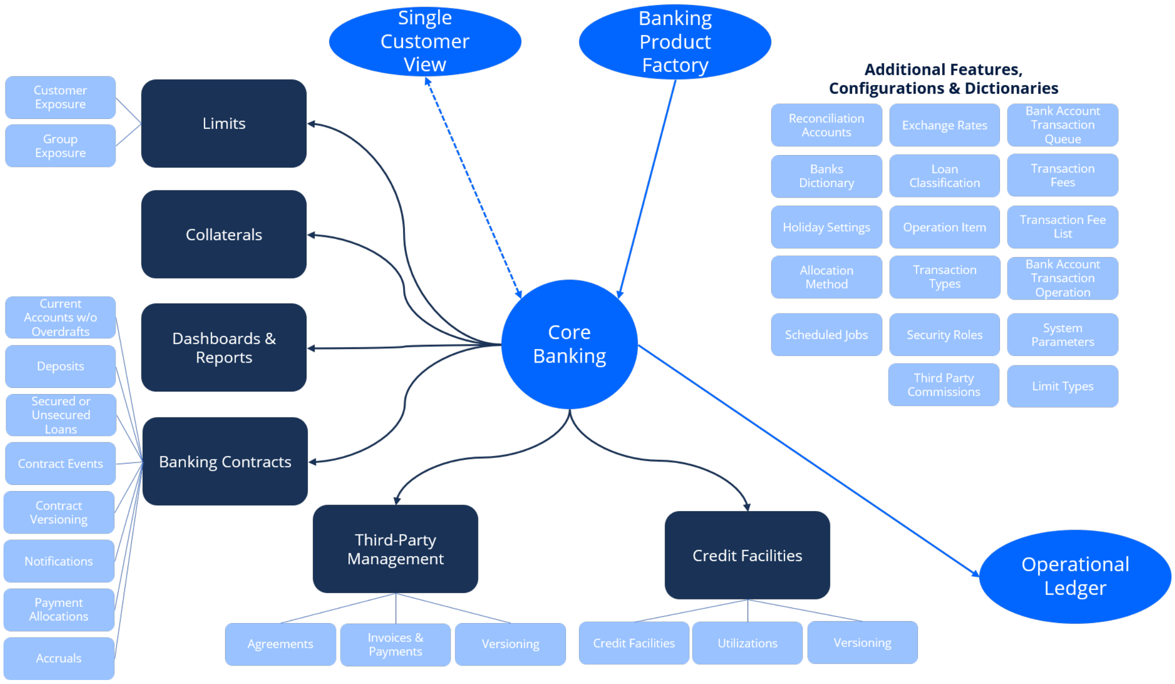
TOC

Overview

FintechOS **Core Banking** aims to help banks and/ or financial institutions with the management of records and processes during the life of the business relation with a customer, may it be on lending with underlying limits and collaterals, deposits, minimum current accounts capabilities, third-party management, or credit facilities. Its automated processes scheduled to happen during close of day or start of day calculate cost elements and keep up the correct figures driven by the contracts inserted.

All the features in Core Banking are built using the capabilities of **FintechOS Studio**, and you can access its menus and dashboards when logged in **FintechOS Portal**.

The diagram below exhibits the main features of Core Banking, along with a series of configurations and dictionaries used to automate the complex banking processes performed by the system. Core Banking uses the banking products records defined within **Banking Product Factory**, and the customer records managed by **Single Customer View**. Core Banking records are further used by **Operational Ledger** to generate ledger entries.



Banking Product Factory

This is a powerful automation processor accessible in the FintechOS Studio that builds the products to be used in a customer journey, configures the interest, commissions and the life cycle of a product. Those products are later introduced into a customer journey or, when used in conjunction with Core Banking, they associate the products with transaction types. For more information, see Banking Product Factory.

Single Customer View

Single Customer View is the central hub for collecting, aggregating, and processing banking customers’ data for customers representing legal entities or individuals.

Operational Ledger

Based on the transactions performed in Core Banking, Operational Ledger logs, along with a company’s financial transactions, details that enable the system to build ledger entries. For more information, see Operational Ledger.

Installing Core Banking

Core Banking comes with the following installation packages: **Core Banking**, containing main features and functionality, **Core Banking Corporate**, containing credit facility management features which are complementary to the Core Banking package, and **Third-Party Management**, containing third-party entities related features. This page displays step by step instructions for installing these packages.

IMPORTANT!
The **Core Banking Corporate** and **Third-Party Management** packages must be installed only after installing the **Core Banking** package with the same version!

Installing Core Banking v4.0

Follow the steps described below to perform an automatic installation of the **Core Banking v4.0**. This is a process of running a script, the `install_SysPack.bat` file, on your environment. The script automatically imports the content of the **Core Banking v4.0** into your FintechOS Studio.

IMPORTANT!
You must run the script on the machine where FintechOS Studio is installed.
Make sure you have access rights to Studio's database.

NOTE
For information about installing the **Core Banking Corporate v4.0** package on top of your Core Banking v4.0 installation, please read the Installing Core Banking Corporate section.

Dependencies

To install **Core Banking v4.0**, first you need to install the following:

- **FintechOS Studio** version **22.1.4**
- **SySDigitalSolutionPackages v22.1.4000**
- **Banking Product Factory v4.0**.

NOTE

A JobServer must be running on your FintechOS Platform in order to process any asynchronous, batch, end of day and start of day jobs.

IMPORTANT!

After performing the installation steps, make sure you complete the post-installation setup within the `vault` files.

NOTE

If there are no settings to be backed up at the Banking Product level, but there are settings to be saved at the Core Banking level, then you must import the **Backup Restore Settings v4.0** project. Decide whether you should import it or not!

The Backup Restore Settings v4.0 Project

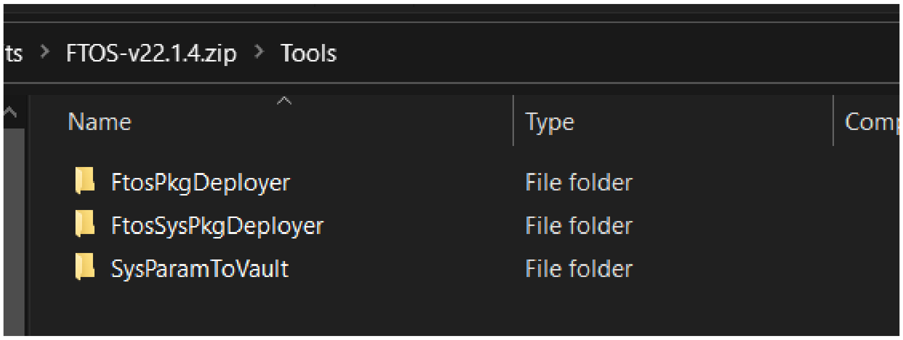
This project comes with the `FTOS_Config_bak` entity. The purpose of its script is to save the old values of the system parameters (`EbsMetadata.SystemParameter` and `Ebs.SystemParameter`), the settings within `FTOS_GL_TransactionType`, the allocation method settings, and the scheduled jobs settings.

The project has a matching script at the end of the Core Banking package, which restores the old values saved by this first script.

Installation Steps

1. Unzip your **CoreBanking_4.0.zip** archive file.

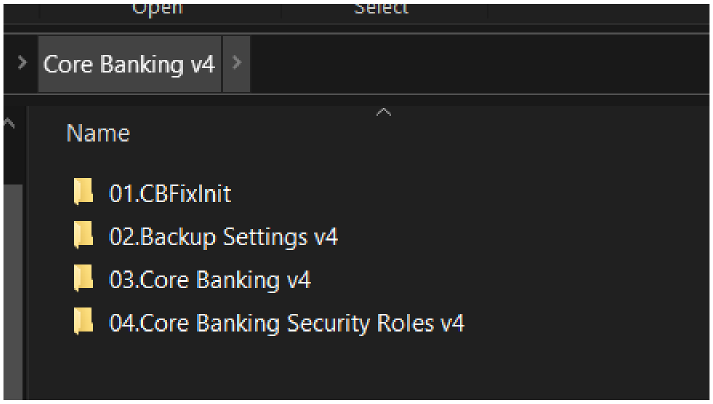
2. Locate the *FtosSysPkgDeployer* folder in the `FintechOS installation kit` (the path is *<unzipped_install_archive>\Tools\FtosSysPkgDeployer*). You need it to install the SySDigitalSolutionPackages.



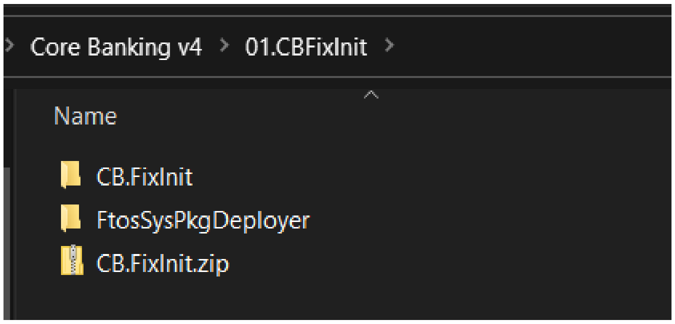
Name	Type	Comp
FtosPkgDeployer	File folder	
FtosSysPkgDeployer	File folder	
SysParamToVault	File folder	

3. Select and copy the *FtosSysPkgDeployer* folder.

4. Navigate to the location where you have unzipped the CoreBanking_4.0.zip (let's call this location *<pckg_deployer_dir>*), then paste the *FtosSysPkgDeployer* folder there, within each and every `zip` file that comes with the package.



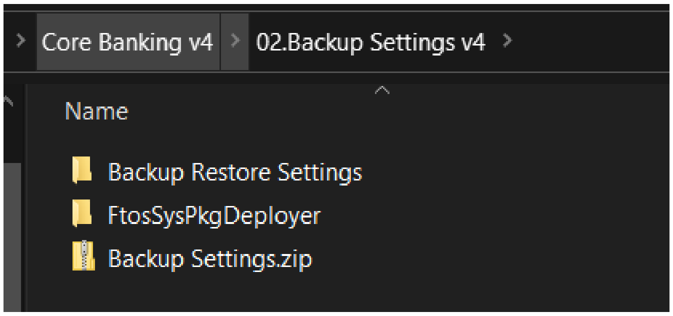
Name
01.CBFixInit
02.Backup Settings v4
03.Core Banking v4
04.Core Banking Security Roles v4



Core Banking v4 › 01.CBFixInit ›

Name

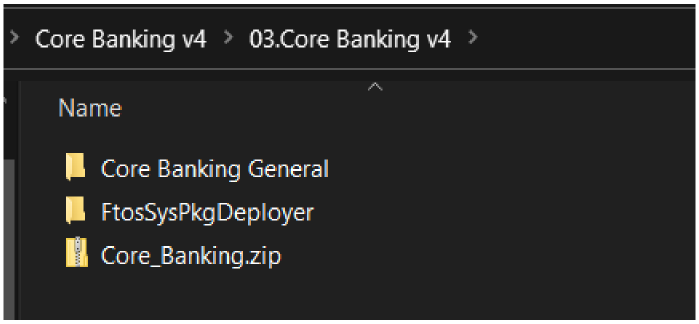
CB.FixInit
FtosSysPkgDeployer
CB.FixInit.zip



Core Banking v4 › 02.Backup Settings v4 ›

Name

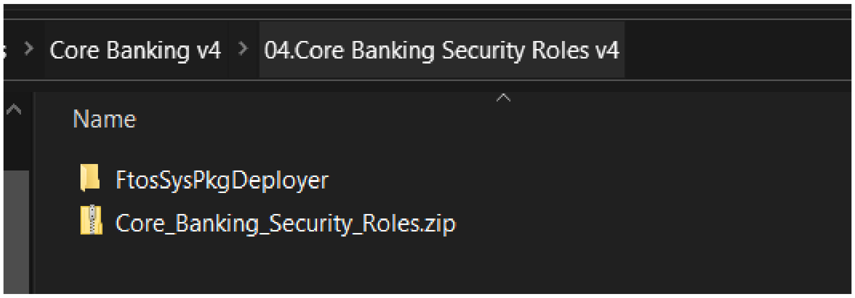
Backup Restore Settings
FtosSysPkgDeployer
Backup Settings.zip



Core Banking v4 › 03.Core Banking v4 ›

Name

Core Banking General
FtosSysPkgDeployer
Core_Banking.zip



Core Banking v4 › 04.Core Banking Security Roles v4

Name

FtosSysPkgDeployer
Core_Banking_Security_Roles.zip

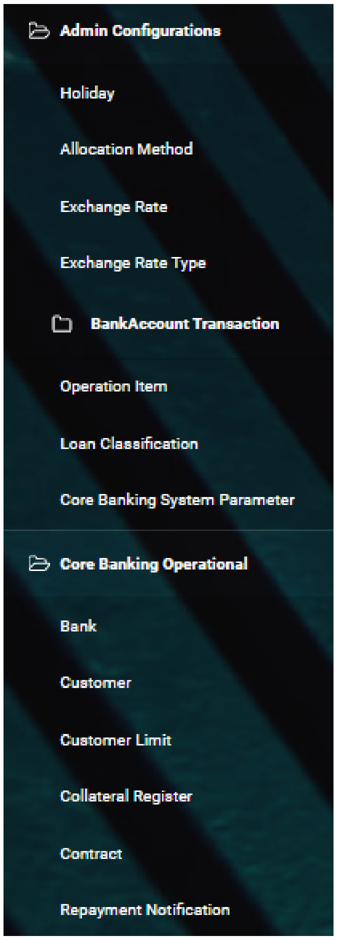
IMPORTANT!

Each `zip` file within the **CoreBanking_v4.0.zip** must be extracted

> and installed separately, in the given order!
>
> If you decide not to use the default security roles that come with the package, simply skip the Core Banking Security Roles zip file.

5. Create a new or edit a previous `install_Syspack.bat` file. Replace the parameters described in the "install_SysPack.bat Parameters Explanation" on page 18 section with your own values. Save and close the file.
6. Right-click `install_SysPack.bat` » **Run**, for each package.

The script starts running in your Windows console. Wait for it to finish. If your parameter values were correct, the FintechOS Portal has two new menus, visible after a refresh, the **Admin Configurations** and the **Core Banking Operational** menus:



The `install_SysPack.bat` file allows you to import the data model:

install_SysPack.bat syntax for **Data Model** import

```
FtosSysPkgDeployer.exe -i -s "<StudioLink>" -u
<AdminStudioUser> -p <user_password> -z <DataBaseServer> -v
<DB_user> -k <DB_user_password> -d "<TheNameOfTheDataBase>"
-r "<syspack_path>\*.zip"
```

NOTE

The syntax presented here is for information purposes only. Please run the actual `install_SysPack.bat` file.

install_SysPack.bat Parameters Explanation

- `<StudioLink>` - The web URL of the FintechOS Studio installation, for example *http://localhost/ftos_studio*.
- `<AdminStudioUser>` - The username of the FintechOS Studio user under which this import is executed. The user has to exist in FintechOS Studio prior to this operation.
- `<user_password>` - The password for the FintechOS Studio user.
- `<DataBaseServer>` - The name of the database server where the FintechOS installation database was created.
- `<DB_user>` - The username of the SQL Server user with administration rights on the FintechOS installation database.
- `<DB_user_password>` - The password for the above mentioned SQL user.
- `<TheNameOfTheDataBase>` - The name of the database where the CoreBanking_4.0 is deployed.
- `<syspack_path>` - The physical path to the unzipped CoreBanking_4.0 previously downloaded.

HINT

For more information about the script, please run `FtosSysPackageDeployer.exe` without any arguments to see the built-in help.

IMPORTANT!

If you're using **SQL Server Integrated Authentication**, make sure that the Windows user used for running the script has access to the FTOS database, with read/ write rights. Run the command without the SQL username/ password parameters.
If you're using **SQL Server Build In Authentication**, make sure that the SQL Server user has read/ write access to the FTOS database. Run the command with the SQL username/ password parameters.

Post-Installation Setup

Changes within the App-Settings JSON Files within Vault

After performing the installation steps, make sure you complete the following changes to the application keys within each of the `app-settings` json files within Vault, which come with the Core Banking package:

CoreBankingInstall Application Key

The `CoreBankingInstall` application key setting has to be configured in the Vault's `app-settings` json files.

This application key should be set as below:

app key setting in Vault

```
<add key="CoreBankingInstall" value="1" />
```

This setting performs a context switch between `EbsMetadata.SystemParameter (0)` and `ebs.SystemParameter (1)`. An entity was created to group multiple setups performed for the System Parameter by module, and where you can check the correctness of the values that are being set up by value type (Boolean, number, text, option set).

> **NOTE**
> If this key is not set up in Vault, it is treated as **0**.

Installing Core Banking Corporate v4.0

Follow the steps described below to perform an automatic installation of the **Core Banking Corporate v4.0** package. This is a process of running a script, the `install_SysPack.bat` file, on your environment. The script automatically imports the content of the **Core Banking Corporate v4.0** into your FintechOS Studio, on top of your Core Banking v4.0 installation.

Dependencies

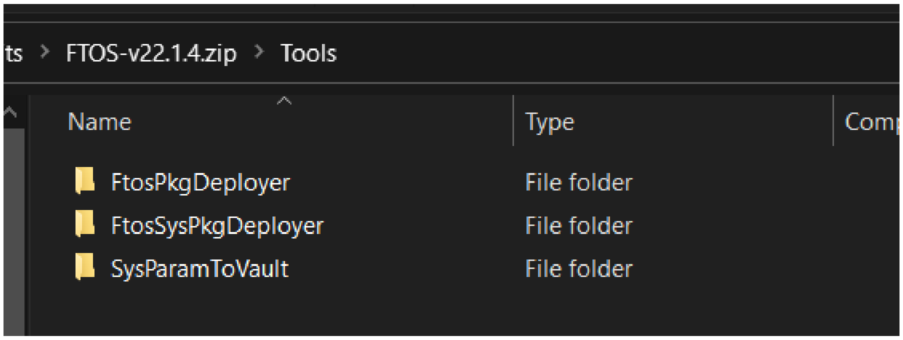
To install **Core Banking Corporate v4.0**, first you need to install the following:

- **Core Banking v4.0** package.

> **NOTE**
> If there are no settings to be backed up at the Banking Product level, but there are settings to be saved at the Core Banking Corporate level, then you must import the **Backup Restore Settings v4.0** project. Decide whether you should import it or not!

Installation Steps

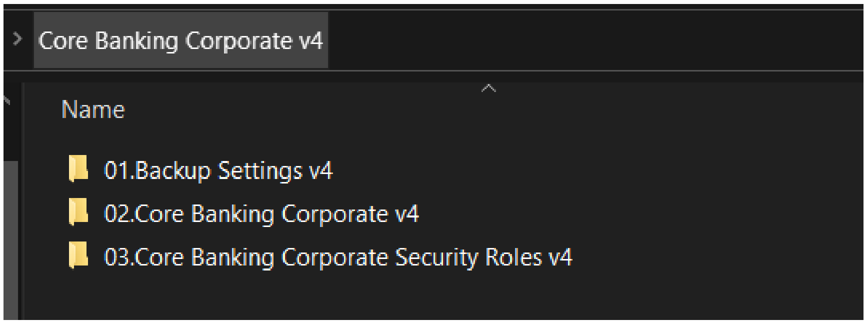
1. Unzip your **CoreBankingCorporate 4.0.zip** archive file.
2. Locate the *FtosSysPkgDeployer* folder in the `FintechOS installation kit` (the path is *<unzipped_install_ archive>\Tools\FtosSysPkgDeployer*). You need it to install the SysPack.



Name	Type	Comp
FtosPkgDeployer	File folder	
FtosSysPkgDeployer	File folder	
SysParamToVault	File folder	

3. Select and copy the *FtosSysPkgDeployer* folder.

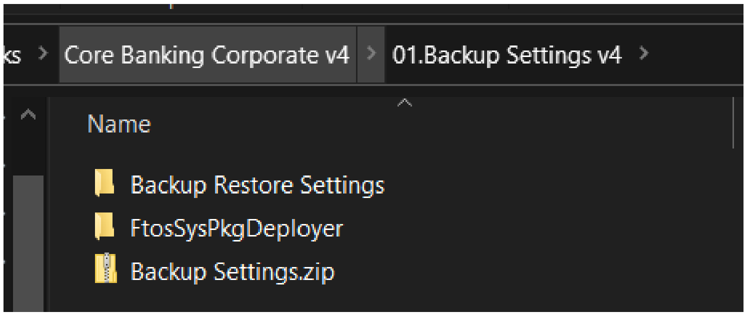
4. Navigate to the location where you have unzipped the `CoreBankingCorporate_4.0.zip` (let's call this location *<pckg_deployer_dir>*), then paste the *FtosSysPkgDeployer* folder there, within each and every `zip` file that comes with the package.



Core Banking Corporate v4

Name

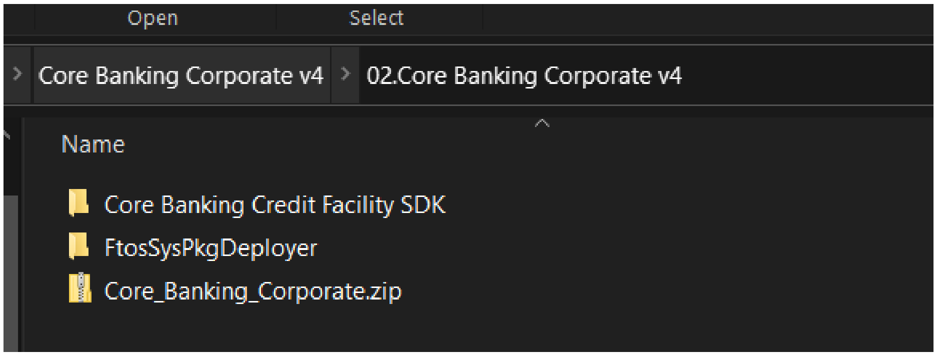
- 01.Backup Settings v4
- 02.Core Banking Corporate v4
- 03.Core Banking Corporate Security Roles v4



ks > Core Banking Corporate v4 > 01.Backup Settings v4 >

Name

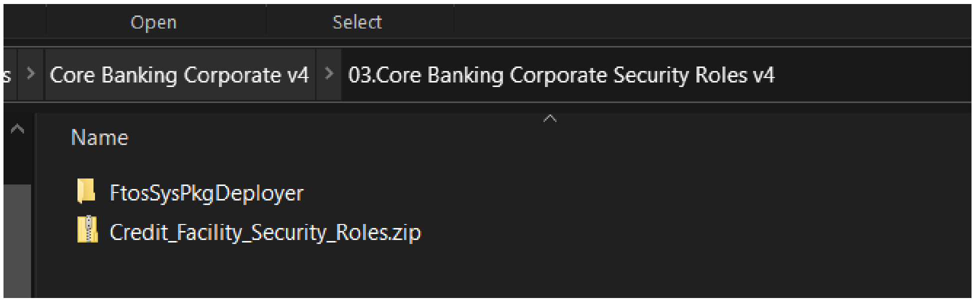
- Backup Restore Settings
- FtosSysPkgDeployer
- Backup Settings.zip



> Core Banking Corporate v4 > 02.Core Banking Corporate v4

Name

- Core Banking Credit Facility SDK
- FtosSysPkgDeployer
- Core_Banking_Corporate.zip



s > Core Banking Corporate v4 > 03.Core Banking Corporate Security Roles v4

Name

- FtosSysPkgDeployer
- Credit_Facility_Security_Roles.zip

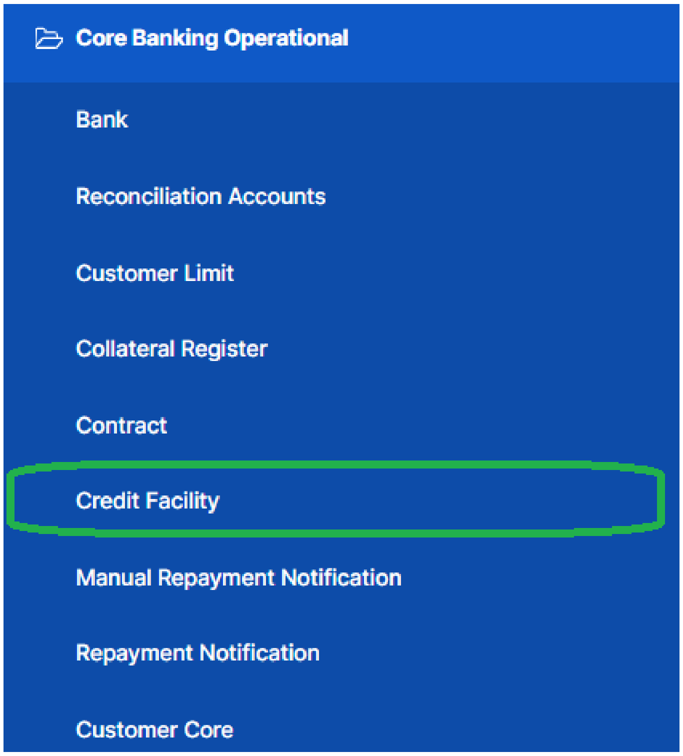
IMPORTANT!

Each `zip` file within the **CoreBankingCorporate_v4.0.zip** must be extracted and installed separately, in the given order!

If you decide not to use the default security roles that come with the package, simply skip the Core Banking Corporate Security Roles zip file.

5. Create a new or edit a previous `install_Syspack.bat` file. Replace the parameters described in the "install_SysPack.bat Parameters Explanation" on page 18 section with your own values. Save and close the file.
6. Right-click `install_SysPack.bat` » **Run**, for each package.

The script starts running in your Windows console. Wait for it to finish. If your parameter values were correct, the FintechOS Portal has one new menu, visible after refresh, the **Core Banking Operational > Credit Facility** menu:



Installing Third-Party Management v4.0

Follow the steps described below to perform an automatic installation of the **Third-Party Management v4.0** package. This is a process of running a script, the `install_SysPack.bat` file, on your environment. The script automatically imports the content of the **Third-Party Management v4.0** into your FintechOS Studio, on top of your Core Banking v4.0 installation.

Dependencies

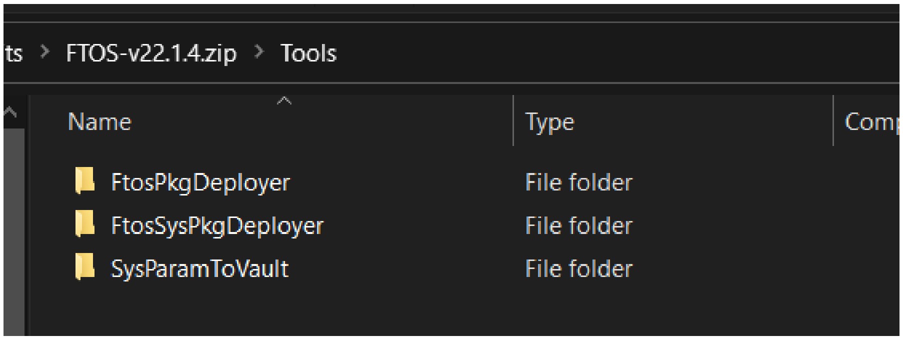
To install **Third-Party Management v4.0**, first you need to install the following:

- **Core Banking v4.0** package.

HINT
If there are no settings to be backed up at the Banking Product level, but there are settings to be saved at the Third-Party Management level, then you must import the **Backup Restore Settings v4.0** project. Decide whether you should import it or not!

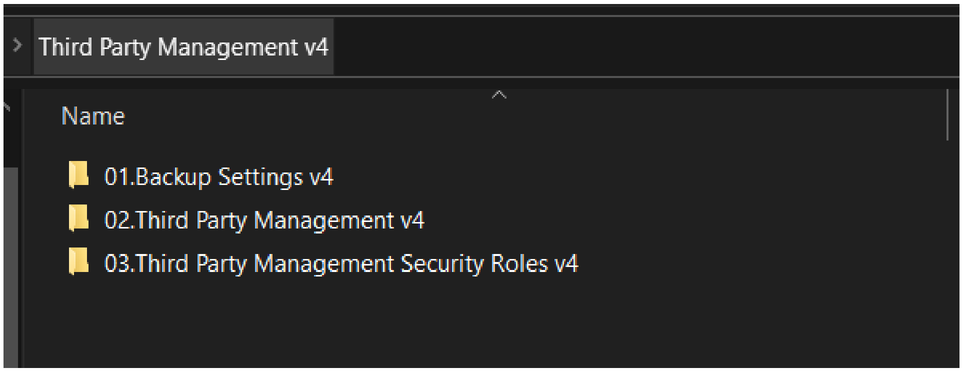
Installation Steps

1. Unzip your **ThirdPartyManagement 4.0.zip** archive file.
2. Locate the *FtosSysPkgDeployer* folder in the `FintechOS installation kit` (the path is *<unzipped_install_archive>\Tools\FtosSysPkgDeployer*). You need it to install the SysPack.



Name	Type	Comp
FtosPkgDeployer	File folder	
FtosSysPkgDeployer	File folder	
SysParamToVault	File folder	

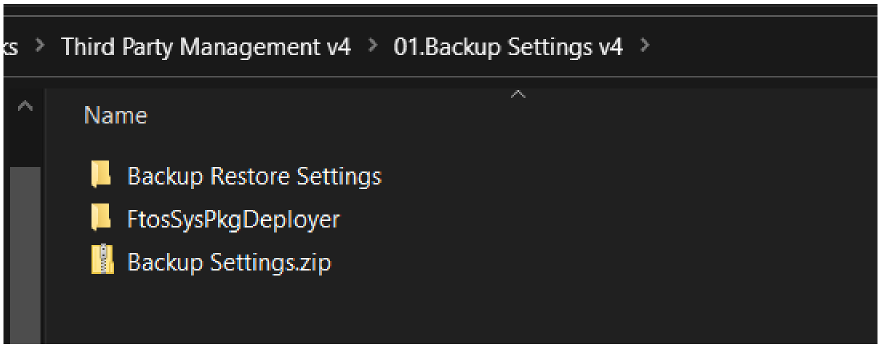
3. Select and copy the *FtosSysPkgDeployer* folder.
4. Navigate to the location where you have unzipped the `ThirdPartyManagement_4.0.zip` (let's call this location *<pckg_deployer_dir>*), then paste the *FtosSysPkgDeployer* folder there, within each and every `zip` file that comes with the package.



> Third Party Management v4

Name

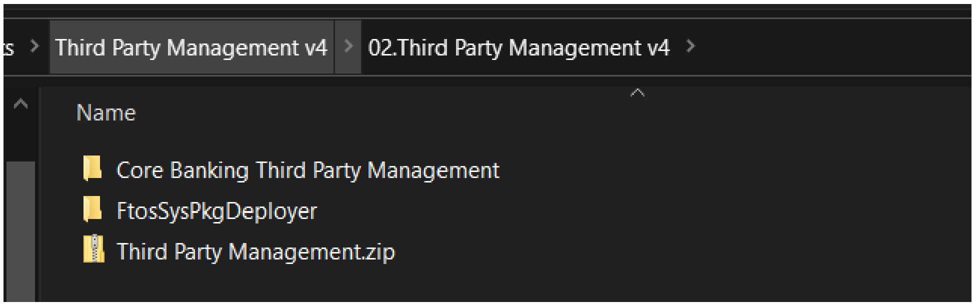
- 01.Backup Settings v4
- 02.Third Party Management v4
- 03.Third Party Management Security Roles v4



ks > Third Party Management v4 > 01.Backup Settings v4 >

Name

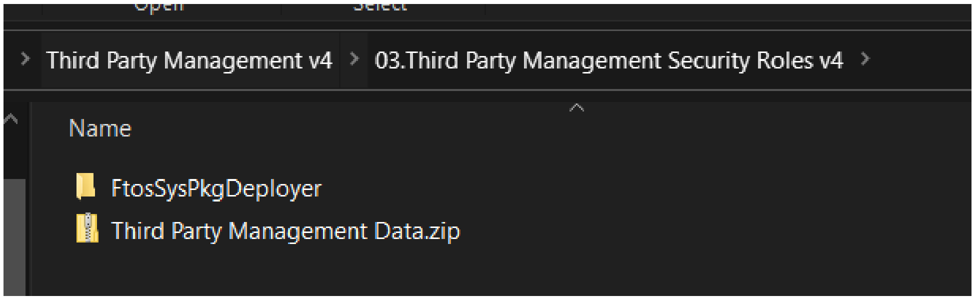
- Backup Restore Settings
- FtosSysPkgDeployer
- Backup Settings.zip



s > Third Party Management v4 > 02.Third Party Management v4 >

Name

- Core Banking Third Party Management
- FtosSysPkgDeployer
- Third Party Management.zip



> Third Party Management v4 > 03.Third Party Management Security Roles v4 >

Name

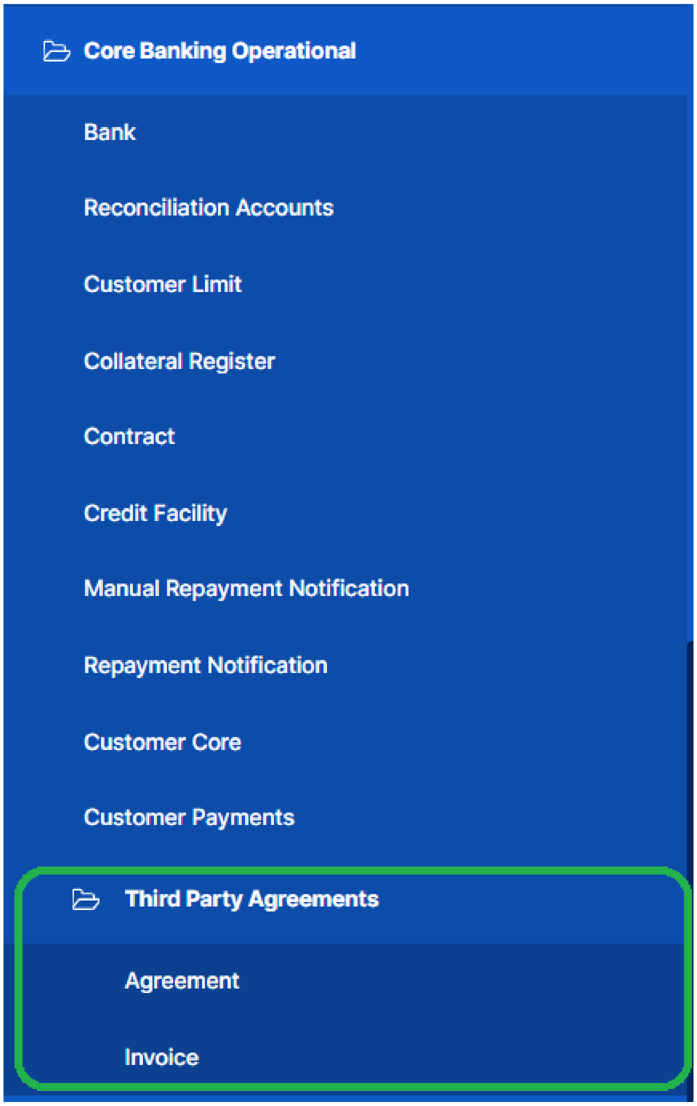
- FtosSysPkgDeployer
- Third Party Management Data.zip

IMPORTANT!

Each `zip` file within the **ThirdPartyManagement_v4.0.zip** must be extracted and installed separately, in the given order!

5. Create a new or edit a previous `install_Syspack.bat` file. Replace the parameters described in the "install_SysPack.bat Parameters Explanation" on page 18 section with your own values. Save and close the file.
6. Right-click `install_SysPack.bat` » **Run**, for each package.

The script starts running in your Windows console. Wait for it to finish. If your parameter values were correct, the FintechOS Portal has a new menu, visible after refresh, the **Core Banking Operational > Third Party Agreements** menu:


Core Banking Operational
Bank
Reconciliation Accounts
Customer Limit
Collateral Register
Contract
Credit Facility
Manual Repayment Notification
Repayment Notification
Customer Core
Customer Payments
Third Party Agreements
Agreement
Invoice

Configurations for Core Banking

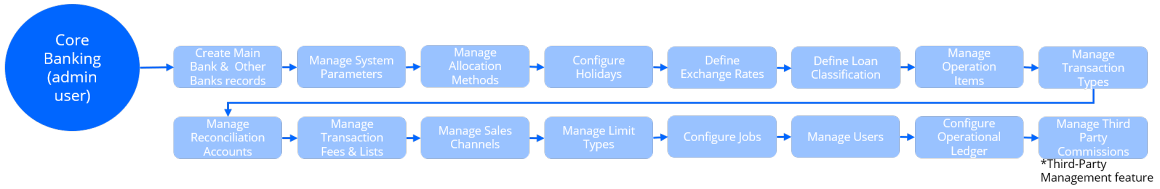
This page contains a series of topics that explain how Core Banking is configured to work and topics that assist you in configuring your Core Banking system:

Getting Started with Core Banking

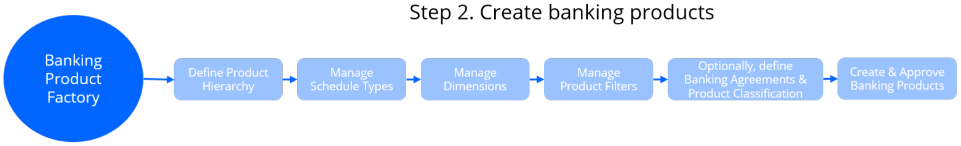
After performing the installation process, Core Banking needs a series of configurations to be put in place before being ready for production. For example, it needs records for the main bank that uses the system, reconciliation accounts to be used for transactions, exchange rates information, holidays to be declared, specific settings for the Core Banking system parameters that indicate how the system should handle different situations or perform specific calculations, and so on.

This page is a step-by-step guide about what you have to set up, with links to detailed instructional pages related to each specific step. Follow through these steps after installing Core Banking and before declaring it ready for production.

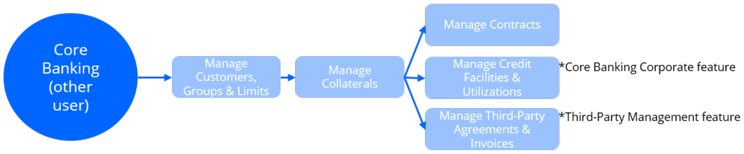
Step 1. Configure Core Banking settings


Core Banking (admin user)
Create Main Bank & Other Banks records
Manage System Parameters
Manage Allocation Methods
Configure Holidays
Define Exchange Rates
Define Loan Classification
Manage Operation Items
Manage Transaction Types
Manage Reconciliation Accounts
Manage Transaction Fees & Lists
Manage Sales Channels
Manage Limit Types
Configure Jobs
Manage Users
Configure Operational Ledger
Manage Third Party Commissions
*Third-Party Management feature

Step 2. Create banking products



Step 3. Use Core Banking features


Core Banking (other user)
Manage Customers, Groups & Limits
Manage Collaterals
Manage Contracts
Manage Credit Facilities & Utilizations
*Core Banking Corporate feature
Manage Third-Party Agreements & Invoices
*Third-Party Management feature

Step 1. Configure Core Banking settings

Follow these steps to configure the settings needed by Core Banking:

1. Log into **FintechOS Portal** using a **user with administrator rights**.
   The user credentials for an administrator user are received from your FintechOS contact person. Insert the user name and the password associated with it to log into the FintechOS Portal.
2. Define your **main bank**.
   You must create a bank record to be used by Core Banking as the main financial institution. Use the **Core Banking Operational > Bank** menu and make sure the record has the `Main Bank` checkbox selected.
3. Manage your **Core Banking system parameters**.
   The system parameters used by Core Banking determine the behavior of all the contracts, transactions, limits, and other parts that make up your Core Banking system. See here the list of system parameters used by Core Banking, along with their descriptions.
4. Manage **allocation methods**.
   Core Banking uses allocation methods to determine the order in which credit items are prioritized when repaying loans, credit accounts, etc. Read here how to create and manage allocation methods, using the

Allocation Method menu.

5. Enter **holidays** for the desired countries.
Public holidays for each country are used in the product definition for the calendar years over which your financial institution's current business is spread. Use the **Holiday** menu to create holiday records specific to your financial institution's needs, as described here.

6. Define **exchange rate types** and enter **exchange rate** records.
Exchange rates represent the value between the currencies of two countries on a given date. These rates are free-floating or fixed. Add exchange rate types using the **Exchange Rate Type** menu if you need to differentiate between exchange rates based on the currency market or business area. Read more information about creating exchange rate records and managing exchange rate types.

7. Define your **loan classification**.
Financial institutions classify their existing loan contracts based upon the days past due (DPD), the number of days passed since repayment due date without fully repaying the due amount. Since the provisions have an impact on the financial results of the bank, this is again driven by regulations and may vary in time or depending on country or region. Create loan classification records as described here.

8. Manage **operation items** specific for your business.
Operation items are those items that relate to a bank's core business, such as all types of fees, commissions, principals, interests, advances, or penalty calculations. They can also be considered as balance types that add up to a certain deal or used in tracing what happened on a particular deal. Find here examples and information on creating operation item records.

9. Manage **transaction types**.
Any transfer of funds between two bank accounts is recorded as a transaction. The transaction types are predefined for usage within Core Banking processes. Read here about different types of transactions used in Core Banking.

10. Define other **banks or financial institutions** with whom your main bank has business relations and **add external accounts**.
Create bank records for the banking institutions with whom your main

bank collaborates, using the **Core Banking Operational > Bank** menu. Add external bank accounts within these banks.

11. Define **reconciliation accounts** and default settings for the reconciliation accounts.
    Reconciliation is an accounting process that compares two sets of records to check that figures are correct and in agreement. Learn here how to manage the reconciliation accounts records. Read about setting up which reconciliation account for a specified currency should be used by Core Banking within a given period.

12. Manage **transaction fees and lists**.
    You can define different fees to be applied to bank account transactions. Using fee lists, you can attach fees with specified values to each bank account transaction operation type. When a transaction operation type is selected on a bank account transaction, Core Banking identifies the fee list and fee values and applies them considering the current date of the transaction.

13. Define **sales channels** for your contracts.
    You can create contracts through different channels:, such as the dedicated Core Banking menus in FintechOS Portal, API integration calls, or various customer journeys implemented within FintechOS accelerators. Manage the sales channels records, so that you can apply different pricing or to allow the selling a product on a specific channel.

14. Manage **limit types** for role-based limits.
    You can create new limit types that are based on roles associated to contract participants specific to your business, and use them throughout Core Banking with all the functionality of any other default limit type.

15. Make sure a **JobServer** is up and running.
    To perform the processes within Core Banking, a JobServer must be up and running. Manage server jobs as described here. Learn here about Core Banking's scheduled jobs.

16. Create **users** and allocate them appropriate **security roles**.
    For appropriate access and rights within Core Banking, create users and allocate them appropriate Core Banking security roles. The following

pages contain information related to this topic: Adding Users, Editing Users, and Security Roles.

17. Configure **Operational Ledger**. The Operational Ledger Add-On, installed over the Core Banking package, manages the accounting information needed for ledger reports and other financial statements. Access the Configurations page for information about the settings you need to perform.
18. Perform **third-party configurations**.
    If you installed the Third-Party Management package on top of the Core Banking package, you should configure the schemas, types and commissions that Core Banking should apply to the agreements recorded for third-party entities.

Step 2. Create banking products

Use **Banking Product Factory** to create the banking products that your financial institution wants to offer to their customers via contracts. Core Banking integrates directly with Banking Product Factory, thus all the banking products with `Active` status are automatically available for you to use in Core Banking, when you create contracts. Before actually creating the banking products, you should perform a series of configurations within Banking Product Factory.

NOTE
Once you install **Core Banking**, **Banking Product Factory** enhances with another section, the Lean Core Settings tab at the banking product level, that gives additional configuration ability to the banking product.

Step 3. Use Core Banking features

After configuring the Core Banking settings and creating banking products, you are ready to use the main features available in Core Banking, as described in the following steps:

1. Log into **FintechOS Portal** using a **user with an associated Core Banking security role**.
   Insert the user name and the password associated with it to log into the FintechOS Portal.

2. Add **customers** and **groups**, then set customer **limits**.
   Financial institutions deal with customers, either individuals or legal entities. Customers may be part of groups. In Core Banking, create customer records and attach them to groups. Monitor your financial institution's exposure for credit related activities by setting up limits for your customers. You can manage limits through a series of menus and reports available in Core Banking.

3. Register **collaterals**.
   Collateral management is the method of granting, verifying and managing collateral transactions in order to reduce credit risk in unsecured financial transactions. It is an essential and integral part of any financial institution's risk and regulatory compliance framework. Manage collateral records in Core Banking, as described here.

4. Manage **contracts**.
   Any agreement between a financial institution and a customer regarding the usage of a banking product is documented legally with a contract. In Core Banking, you can create contracts for your financial institution's customers based on approvals. Read about contracts in the Contracts page.

5. Manage **credit facilities**.
   Credit facilities are groupings of multiple credit products that a customer has arranged with a bank under a single credit limit. Read here how to manage credit facility records.
   The credit facility management features are available only if the Core Banking Corporate package was installed.

6. Manage **third-party agreements & invoices**.
   In Core Banking, you can register third-party entities (agents, brokers, insurers, etc.) with the financial institution to intermediate the selling of various banking products to customers. For their work, the third-party entities are compensated with fees payable for each new contract, based on a pricing agreement with the financial institution.

Read here how to manage records related to third-party entities.
The third-party management features are available only if the Third-Party Management package was installed.

Holiday

Financial institutions are usually closed and do not process payments or repayments for loans during holidays, hence the repayment schedules may be adapted to take the into consideration. In Core Banking, you can indicate the public holidays for the country used in the product definition, for the calendar years over which the financial institution's current business is spread.

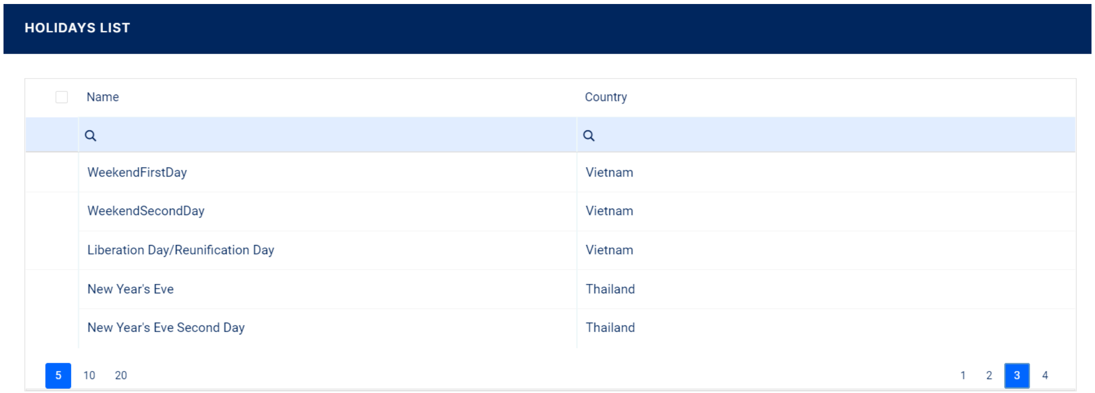
Core Banking uses two methods for loan repayment processing when the holidays are taken into consideration in the schedule projections:

- `Shift forward`: the payment date is shifted to the first working day after the usual scheduled execution date.
- `Shift backward`: the payment date is shifted to the previous working day before the usual scheduled execution date.

In order to set up specific days when payments are not processed, follow these steps:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configuration** menu.

2. Click the **Holiday** menu item to open the **Holidays List** page.



HOLIDAYS LIST

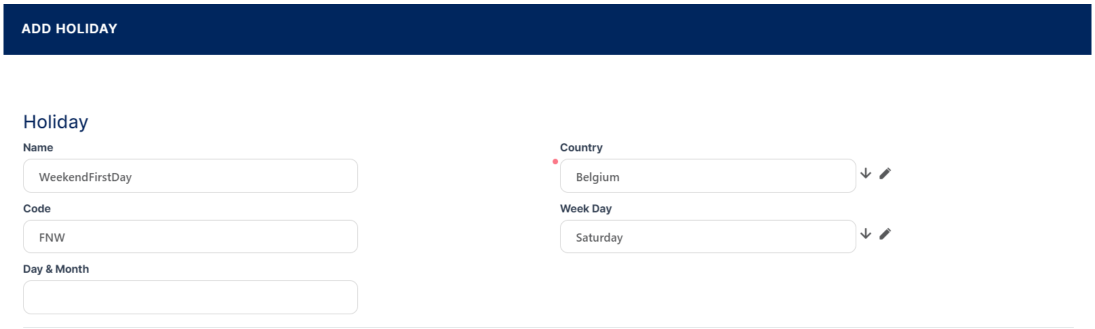
Name	Country
WeekendFirstDay	Vietnam
WeekendSecondDay	Vietnam
Liberation Day/Reunification Day	Vietnam
New Year's Eve	Thailand
New Year's Eve Second Day	Thailand

On the **Holidays List** page, you can add new holiday records or search, edit, and delete existing ones.

Creating Holiday Records

Follow these steps to create holiday records specific to your financial institution's country or organization:

1. Click the **Insert** button on the top right side of the **Holiday List** page. The **Add Holiday** page is displayed.
2. Fill in the following fields:



ADD HOLIDAY

Holiday

Name: WeekendFirstDay

Code: FNW

Day & Month:

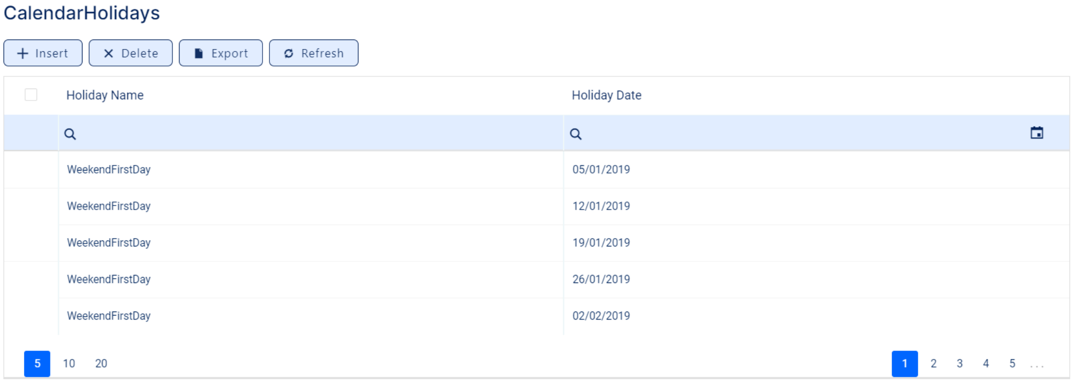
Country: Belgium

Week Day: Saturday

- **Name** - Enter the name of the holiday.
- **Code** - Enter he code of the holiday.

- **Country** - Select the country in which the holiday rule applies to.
- **Week Day** - For repetitive holidays, select the weekday on which the holidays falls on.
- **Day and Month** - For holidays with a fixed date, enter the day and month, in the `dd.mm` format.

3. Click the **Save and Reload** button at the top right corner of the page. Core Banking populates the **Calendar Holidays** section with the exact dates of the holidays.



Holiday Name	Holiday Date
WeekendFirstDay	05/01/2019
WeekendFirstDay	12/01/2019
WeekendFirstDay	19/01/2019
WeekendFirstDay	26/01/2019
WeekendFirstDay	02/02/2019

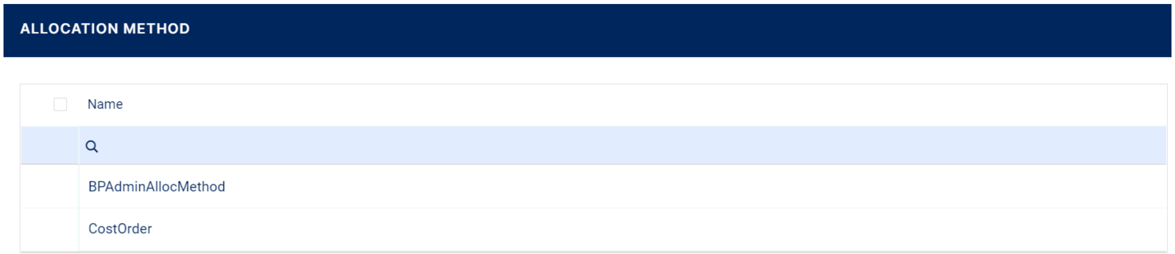
You can insert, delete, or export the calendar holiday data.

Allocation Method

Allocation methods represent the order in which a financial institution proportionally allocates a portion of the payment to either fees, commissions, interest, and other credit items associated with the account, with the aim of closing the loan principal. FintechOS uses allocation methods to determine the order in which credit items are prioritized when repaying loans, credit accounts, and so on.

You can manage allocation methods though the **Allocation Method** menu, which stores information about the details and the banking products using those specific definitions in their setup. Follow these steps to manage such records:

1. In the FintechOS Portal, click the main menu icon and expand the **Admin Configuration** menu.
2. Click the **Allocation Method** menu item to open the **Allocation Method** page.



ALLOCATION METHOD

□	Name
	🔍
	BPAdminAllocMethod
	CostOrder

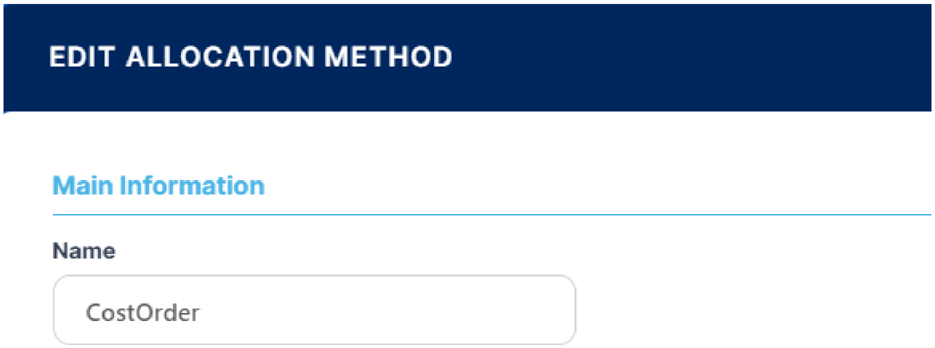
On the **Add Allocation Method** page, you can add new allocation methods or search, edit, and delete existing ones.

> **NOTE**
> The default allocation method used by Core Banking for manual repayment notifications that aren't linked to a contract is stored in the `ManualAllocationMethod` system parameter.

Creating Allocation Methods

To create a new allocation method, follow these steps:

1. Click **Insert** on the **Allocation Method** page to ope the **Add Allocation Method** page.
2. Enter a **name** for the allocation method.

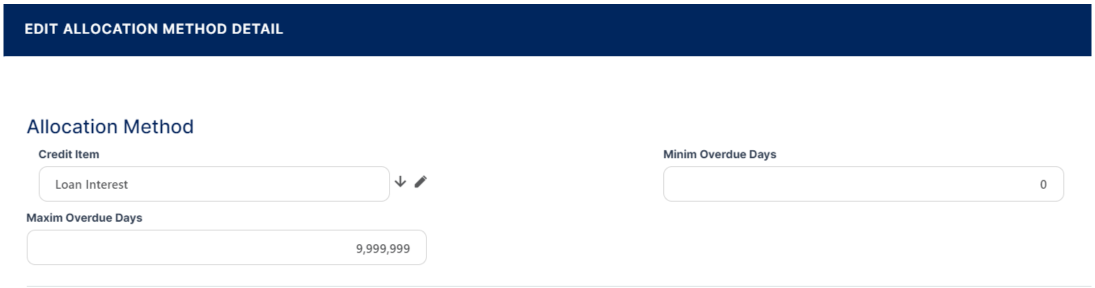


EDIT ALLOCATION METHOD

Main Information

Name: CostOrder

3. Click the **Save and Reload** button. The **Allocation Method Details** and the **Banking Products** sections are displayed.
4. In the newly displayed **Allocation Method Details** section, click **Insert** to open the **Add Allocation Method Details**.
5. Fill in the following fields:



EDIT ALLOCATION METHOD DETAIL

Allocation Method

Credit Item: Loan Interest

Minim Overdue Days: 0

Maxim Overdue Days: 9,999,999

- **Credit Item** - Select the credit item of the allocation method.
- **Minimum Overdue Days** - Enter the minimum number of overdue days for the credit item.
- **Maximum Overdue Days** - Enter the maximum number of overdue days for the credit item.

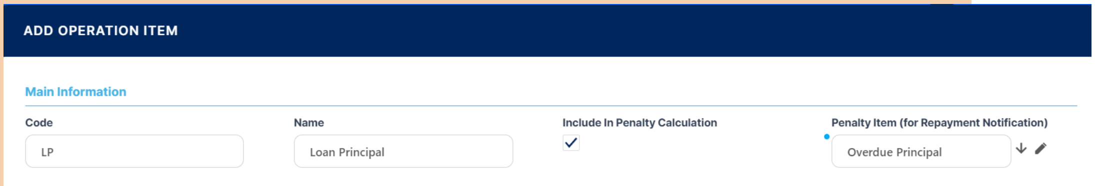
NOTE

The maximum and minimum number of overdue days is relevant when creating allocation methods as an account can have one or more loan principals. If, for example, there are two loan principals, the allocation method is applied based on the oldest one. Thus, depending on the date, the installment is allocated to the oldest loan principal and then moved to the other credit items.

IMPORTANT!

When editing credit items, the **IncludeInPenaltyCalculation** checkbox is available. If selected, the penalty amount is taken out of the account first.

For more details, see Operation Item.



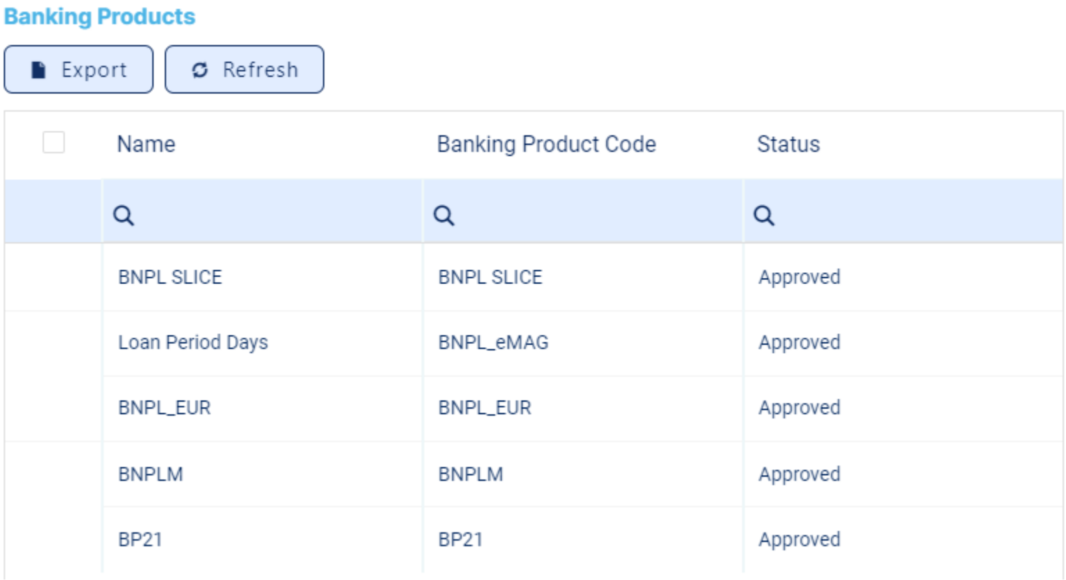
ADD OPERATION ITEM

Main Information

Code	Name	Include In Penalty Calculation	Penalty Item (for Repayment Notification)
LP	Loan Principal	✓	Overdue Principal

6. Click the **Save and Close** button at the top right corner of the page.

7. Back on the **Edit Allocation Method** page, view the banking products associated with the allocation method previously created in the **Banking Products** section.



Banking Products

□	Name	Banking Product Code	Status
	BNPL SLICE	BNPL SLICE	Approved
	Loan Period Days	BNPL_eMAG	Approved
	BNPL_EUR	BNPL_EUR	Approved
	BNPLM	BNPLM	Approved
	BP21	BP21	Approved

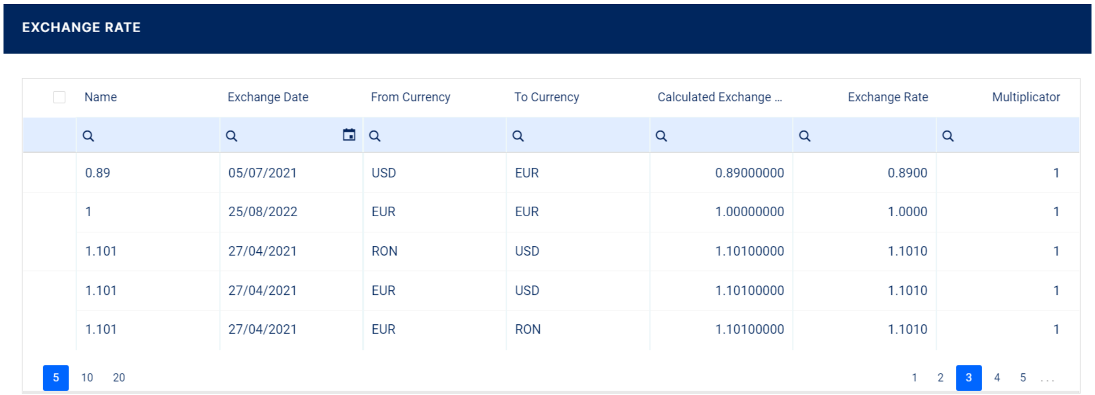
Exchange Rate

Exchange rates represent the value between the currencies of two countries on a given date. These rates are free-floating or fixed. In most cases, exchange rates are free-floating and the value can rise or fall based on market supply and demand. Fixed exchange rates have more restrictions and their value is set by the government.

Core Banking uses exchange rates in limit, collateral, credit facility, and third-party invoices calculations, when the contract and the attached limit/ collateral, the credit facility and its attached contracts, or the third-party invoice and its details are expressed in different currencies. Operational Ledger also uses exchange rates to calculate all amounts using the accounting reference currency.

To manage exchange rates needed in financial operations, follow these steps:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configuration** menu.
2. Click the **Exchange Rate** menu item to open the **Exchange Rate** page.



Name	Exchange Date	From Currency	To Currency	Calculated Exchange ...	Exchange Rate	Multiplicator
0.89	05/07/2021	USD	EUR	0.89000000	0.8900	1
1	25/08/2022	EUR	EUR	1.00000000	1.0000	1
1.101	27/04/2021	RON	USD	1.10100000	1.1010	1
1.101	27/04/2021	EUR	USD	1.10100000	1.1010	1
1.101	27/04/2021	EUR	RON	1.10100000	1.1010	1

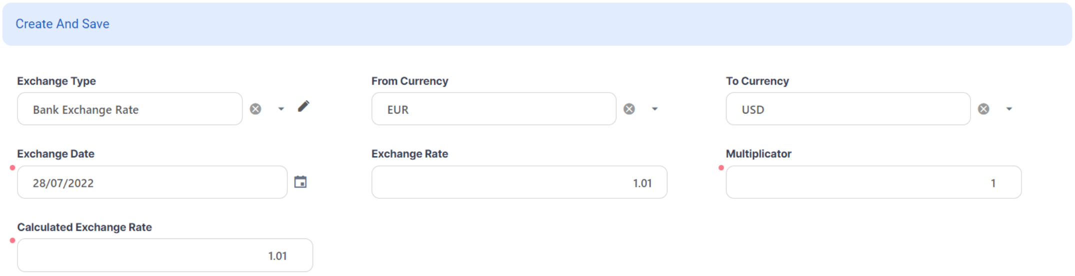
On the **Exchange Rate** page, you can add new exchange rates or search, edit, and delete existing ones.

Creating Exchange Rates

Follow these steps to create a new exchange rate:

1. Click the **Insert** button on the **Exchange Rate** page to open the **Create and Save** page.

2. Fill in the following fields:



Create And Save

Exchange Type: Bank Exchange Rate	From Currency: EUR	To Currency: USD
Exchange Date: 28/07/2022	Exchange Rate: 1.01	Multiplicator: 1
Calculated Exchange Rate: 1.01		

- **Exchange Type** - Select the exchange type rate, if more than one was created in Core Banking.
- **Exchange Date** - Select the date of the exchange rate.
- **From Currency** - Select the currency from which the exchange rate is made.
- **To Currency** - Select the currency into which the exchange is performed.
- **Exchange Rate** - Enter the exact rate for the exchange to be applied on the exchange date.
- **Multiplicator** - You can multiply the exchange rate value with the whole number that you insert here. The default value is `1`.
- **Calculated Exchange Rate** - Automatically completed with the exchange rate calculated based on the following formula: `ExchangeRate * Multiplicator`. You can edit the field.

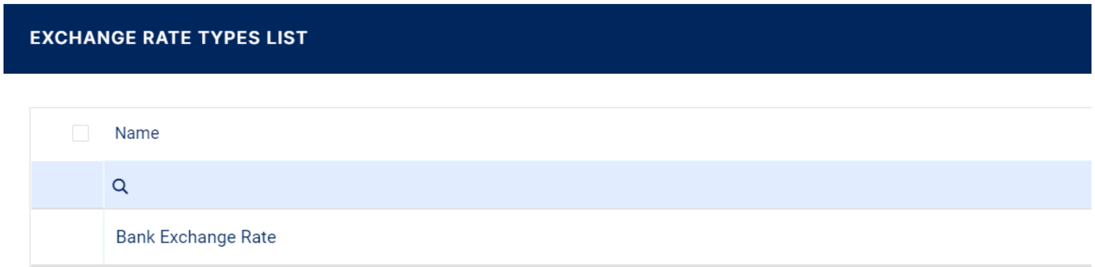
3. Click the **Save and Close** button. Core Banking saves the exchange rate record.

Exchange Rate Type

Although Core Banking uses only the BER (Bank Exchange Rate) is used when defining exchange rates, if there is a need to differentiate between exchange rates based on currency market or business areayou can create exchange rate types.

To manage exchange rate types, follow these steps:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configuration** menu.
2. Click the **Exchange Rate Type** menu item to open the **Exchange Rate Types List** page.



EXCHANGE RATE TYPES LIST

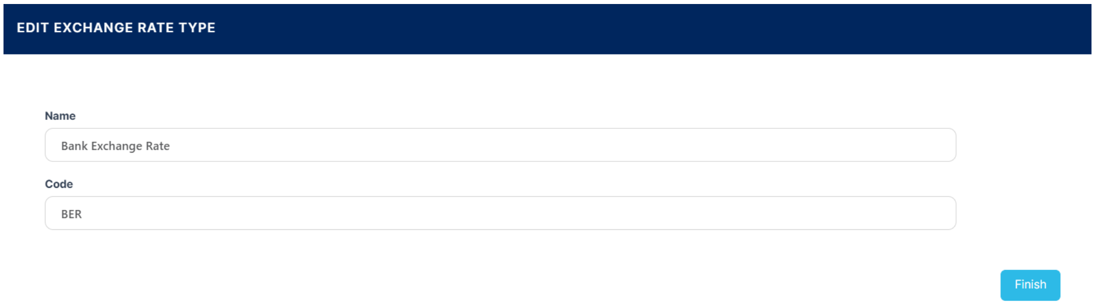
□	Name
	Bank Exchange Rate

On the **Exchange Rate Type** page, you can add new exchange rates types or search, edit, and delete existing ones.

Creating Exchange Rates Types

Follow these steps to create a new exchange rate:

1. Click the **Insert** button on the top right side of the **Exchange Rate Types List** page. The **Add Exchange Rate Type** page is displayed.
2. Fill in the following fields:



EDIT EXCHANGE RATE TYPE

Name: Bank Exchange Rate

Code: BER

   - **Name** - Enter the name of the exchange rate type.
   - **Code** - Enter the code of the exchange rate type.

3. Click **Finish** at the bottom right corner of the page.

Loan Classification

Financial institutions classify their existing loan contracts based upon the days past due (DPD), the number of days passed since repayment due date without fully repaying the due amount for the oldest unpaid repayment notification. In order to comply with the risk method calculation, the DPD (days past due) value is calculated as the number of days between the contract's due date and the current system date of Core Banking.

Banking being a highly regulated sector such requirements are usually enforced either with regional or local rules. The financial institutions can apply different provision percentages for principal or for interest for each contract, based on this classification: the higher the delay period, the higher the provision percentage applicable and the risk classification. Since the provisions have an impact on the financial results of the institution, this is again driven by regulations and may vary in time or depending on country or region.

IMPORTANT!

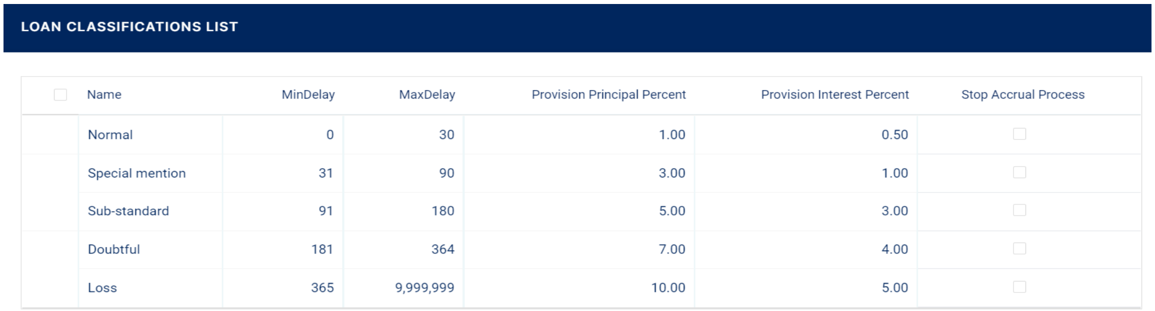
Loan classification works by risk contamination at the customer and the group levels. This means that if a loan contract belonging to a customer is classified as one of a higher risk due to delays in the repayment process, all the other loans of the customer and of the group where the customer is a member are further classified into that high-risk classification.

The `UseContaminationForDPDCategory` Core Banking system parameter specifies whether Core Banking should use the risk contamination for loan classification or not.

The risk classification of loan contracts is automatically performed by the `Update Loan Classification (CB)` scheduled job based on the loan classification records' definition.

To manage loan classification records:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Click **Loan Classification** menu item to open the **Loan Classifications List** page.



LOAN CLASSIFICATIONS LIST

□	Name	MinDelay	MaxDelay	Provision Principal Percent	Provision Interest Percent	Stop Accrual Process
	Normal	0	30	1.00	0.50	□
	Special mention	31	90	3.00	1.00	□
	Sub-standard	91	180	5.00	3.00	□
	Doubtful	181	364	7.00	4.00	□
	Loss	365	9,999,999	10.00	5.00	□

On the **Loan Classifications List** page, you can add new classification records or search, edit, and delete existing ones. You can also:

- Stop the accrual process for contracts that fall under a specific classification. Select the **Stop Accrual Process** checkbox next to a record to except all contracts within that category from the accrual calculation processes. All the following categories are automatically excepted from the accrual calculation processes.
- Include the contracts within a loan category into the accrual processes calculation by deselecting the **Stop Accrual Process** checkbox next to a record. You can do this only after deselecting the **Stop Accrual Process** checkboxes next to each of the lower categories.

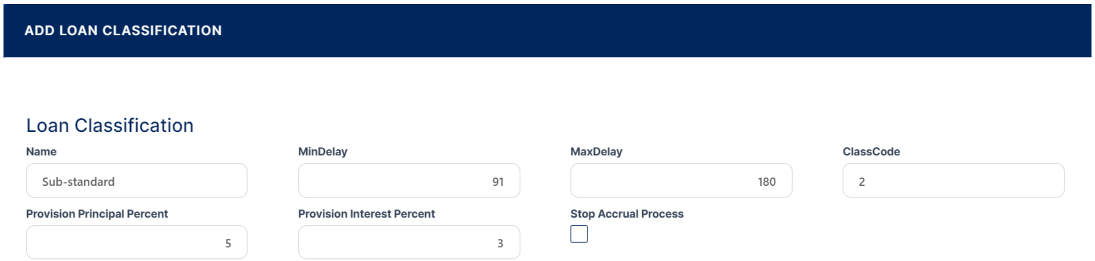
IMPORTANT!
You must have the **Loan Admin Officer** security role to select or deselect the **Stop Accrual Process** checkboxes.

Creating Loan Classification Records

Follow these steps to create new loan risk classification records:

1. Click **Insert** button on the **Loan Classifications List** page to display the **Add Loan Classification** page.

2. Fill in the following fields:



ADD LOAN CLASSIFICATION

Loan Classification

Name: Sub-standard

MinDelay: 91

MaxDelay: 180

ClassCode: 2

Provision Principal Percent: 5

Provision Interest Percent: 3

Stop Accrual Process: □

- **Name** - Enter the name of the risk classification record.
- **MinDelay/ MaxDelay**- Enter the minimum/ maximum number of days past since a repayment due date without performing the repayment for a loan contract in order for the contract to be classified in this risk classification.
- **ClassCode** - Enter a code for this risk classification. This code is used in automatic calculations for contracts classified in one of the risk categories.
- **Provision Principal Percent/ Provision Interest Percent** - Enter the provision percentage applicable to the principal/ interest amount of contracts falling into this loan risk classification.
- **Stop Accrual Process** - If you select the checkbox, then the contracts that fall within this loan classification delay category are excluded from the accrual calculation processes. If a category is marked as true, all the following categories are automatically marked as true and excepted from the accrual calculation processes.
  You can include the contracts within a loan category into the accrual processes calculation by deselecting the **Stop Accrual Process** checkbox next to a record, within the **Loan Classifications List** page. You can do this only after deselecting the **Stop Accrual Process** checkboxes next to each of the lower categories.

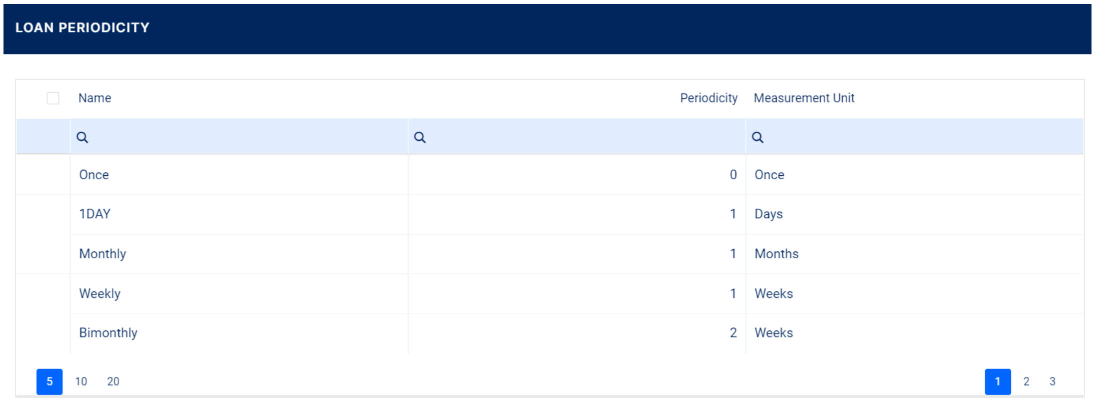
3. Click the **Save and Close** button.

Loan Periodicity

Core Banking uses the loan periodicity dictionary used to define the regularity of payments. For example, payments related to loan contracts, commissions, or installments can be performed once, daily, monthly, yearly, and so on.

To manage loan periodicity records:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Click the **Loan Periodicity** menu item to open the **Loan Periodicity** page.



LOAN PERIODICITY

Name	Periodicity	Measurement Unit
Once	0	Once
1DAY	1	Days
Monthly	1	Months
Weekly	1	Weeks
Bimonthly	2	Weeks

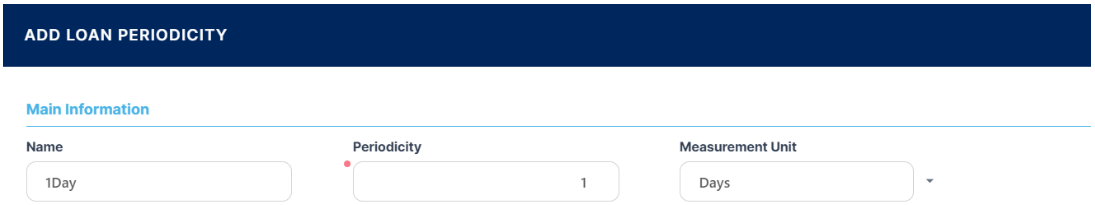
On the **Loan Periodicity** page, you can add new loan periodicity records or search, edit, and delete existing ones.

Creating Loan Periodicity Records

Follow these steps to create new loan periodicity records:

1. Click **Insert** on the **Loan Periodicity** page. The **Add Loan Periodicity** page is displayed.

2. Fill in the following fields:



ADD LOAN PERIODICITY

Main Information

Name	Periodicity	Measurement Unit
1Day	1	Days

- **Name** - Enter the name of the periodicity.
- **Periodicit**y - Enter the number of measurement units for the periodicity.
- **Measurement Unit** - Select the measurement unit applicable for the periodicity from the drop-down. Possible values: `Days, Weeks, Months, Years`, and `Once`.

3. Click the **Save and Reload** button. The new loan periodicity is created and ready to be used.

Operation Item

Operation items are those items that relate to a bank's core business, such as all types of fees, commissions, principals, interests, advances or penalty calculations. You can also consider them as balance types that add up to a certain deal or used in tracing what happened on a particular deal. For instance, on the first day of using a new loan, there is only the Loan Principal (LP) on that deal, or it can also have an Advance (ADV) in some particular cases or even a Frond-End Fee (FEF). As the deal progresses, depending on the definition and costs, as well as on repayments, the loan principal can become Paid Principal (PP) or Overdue Principal (OVP) if due amounts are not paid.

Core Banking uses operation items in the calculation processes of payment and repayment notifications, due amounts, accounting entries, and others.

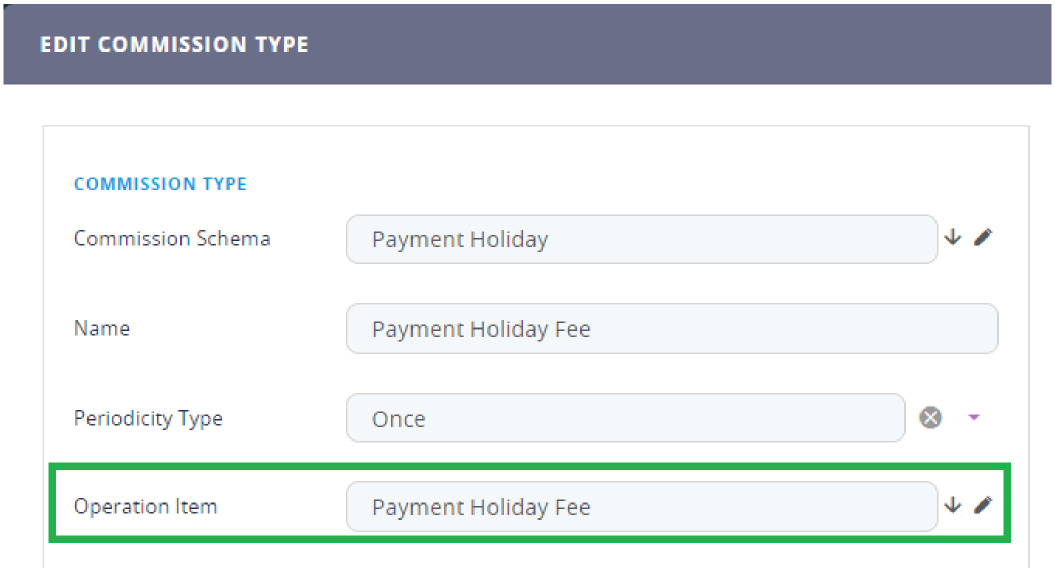
NOTE

If a repayment notification is not linked to a contract, then Core Banking takes the

> operation item value from the allocation method configured within the `ManualAllocationMethod` system parameter.
> If a repayment notification is created for a contract with `Closed` status, then Core Banking takes the operation item value from the allocation method selected at the banking product level.

Examples of Using Operation Items

Example of using an operation item within a commission type definition:

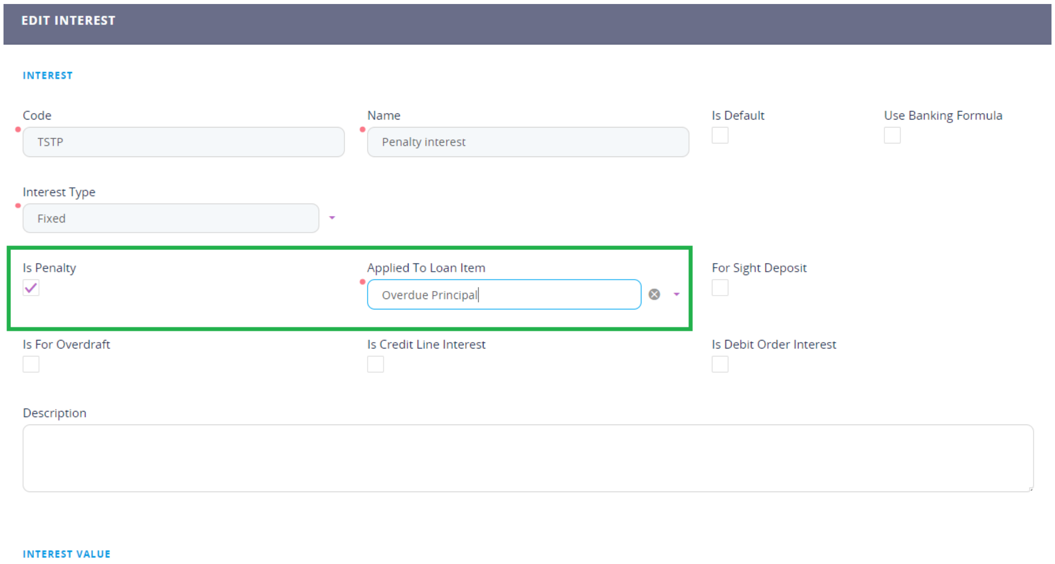


EDIT COMMISSION TYPE

COMMISSION TYPE

Commission Schema	Payment Holiday
Name	Payment Holiday Fee
Periodicity Type	Once
Operation Item	Payment Holiday Fee

Example of using an operation item within an interest definition:



EDIT INTEREST

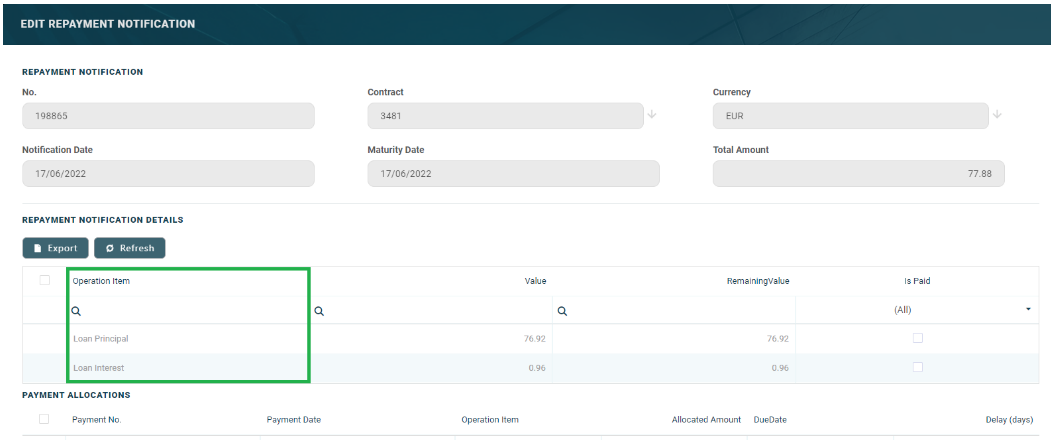
INTEREST

Code TSTP	Name Penalty interest	Is Default ☐	Use Banking Formula ☐
Interest Type Fixed			
Is Penalty ☑	Applied To Loan Item Overdue Principal	For Sight Deposit ☐	
Is For Overdraft ☐	Is Credit Line Interest ☐	Is Debit Order Interest ☐	

Description

INTEREST VALUE

Example of using an operation item within a repayment notification's details:



EDIT REPAYMENT NOTIFICATION

REPAYMENT NOTIFICATION

No. 198865	Contract 3481	Currency EUR
Notification Date 17/06/2022	Maturity Date 17/06/2022	Total Amount 77.88

REPAYMENT NOTIFICATION DETAILS

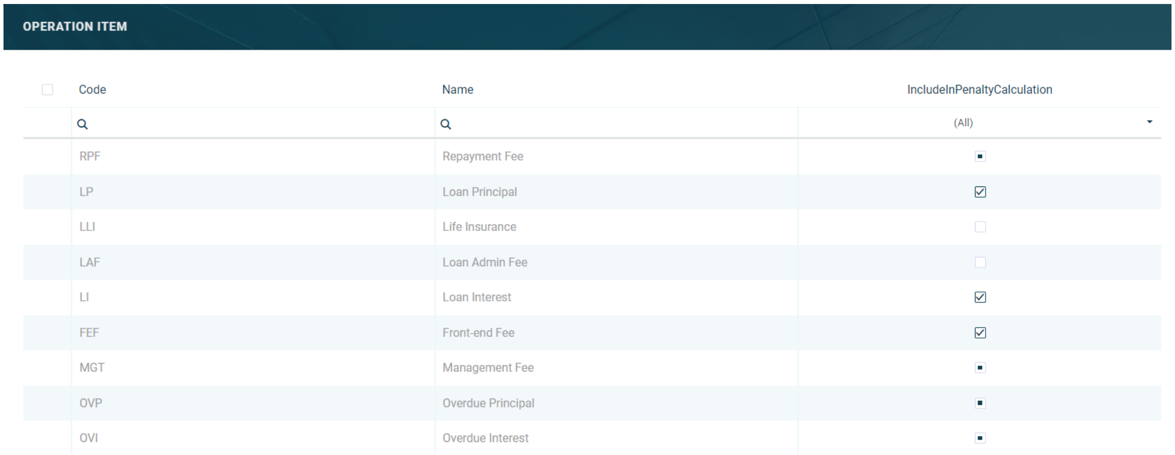
☐	Operation Item	Value	RemainingValue	Is Paid
				(All)
	Loan Principal	76.92	76.92	☐
	Loan Interest	0.96	0.96	☐

PAYMENT ALLOCATIONS

☐	Payment No.	Payment Date	Operation Item	Allocated Amount	DueDate	Delay (days)

To manage operation item records:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Click the **Operation Item** menu to open the **Operation Item** page.



OPERATION ITEM

□	Code	Name	IncludeInPenaltyCalculation
	🔍	🔍	(All)
	RPF	Repayment Fee	■
	LP	Loan Principal	☑
	LLI	Life Insurance	□
	LAF	Loan Admin Fee	□
	LI	Loan Interest	☑
	FEF	Front-end Fee	☑
	MGT	Management Fee	■
	OVP	Overdue Principal	■
	OVI	Overdue Interest	■

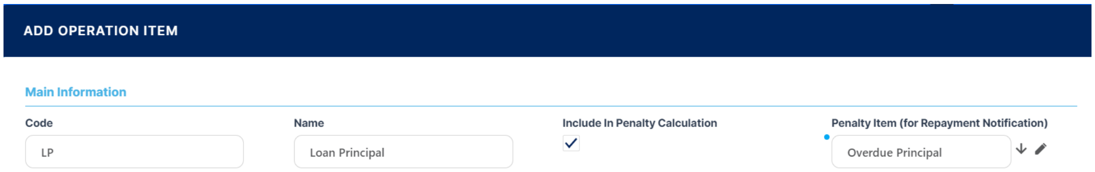
On the **Operation Item** page, you can add new operation item records or search, edit, and delete existing ones.

Creating Operation Item Records

Follow these steps to create new operation item records:

1. In the FintechOS Portal, click the **Insert** button on the top right side of the **Operation Item** page. The **Add Operation Item** page is displayed.

2. Fill in the following fields:



ADD OPERATION ITEM

Main Information

Code	Name	Include In Penalty Calculation	Penalty Item (for Repayment Notification)
LP	Loan Principal	✓	Overdue Principal

- **Code** - Enter the unique code of the operation item.

- **Name** - Enter the name of the operation item.

- **Include In Penalty Calculation** - Select the checkbox to mark this new item as an operation item used for penalty calculation.

> **NOTE**
>
> If a banking product has in its attached interests list an interest with

> **Is General = True**, then at the contract level the penalty percent is applied to all operation items that are overdue and are marked with **Include In Penalty Calculation = True**. Read more information about interests and how to define them on the **Interests** page within the Banking Product User Guide.

- **Penalty Item (for Repayment Notification)** - If `Include In Penalty Calculation = True`, select from the list an existing operation item in whose penalty calculation this new item must participate.

3. Click the **Save and Close** button.

Core Banking System Parameters

The system parameters used by Core Banking determine the behavior of all the contracts, transactions, limits, and other parts that make up your Core Banking system.

> **NOTE**
> Do not confuse the Core Banking system parameters with the FintechOS system parameters, stored in the `systemparameter` and `systemParameterOnPortalProfile` entities!

Predefined Core Banking System Parameters

Here's the list of system parameters used by Core Banking, along with their description:

AccountingAnalyticChar

It represents the analytic character used when displaying decimal numbers.

Module that uses the system parameter: Loan Admin

Parameter type: Text

Default value: **.**

AccountingRealTime

It specifies if all accounting entries are generated real-time (for `True` value) or on demand (for `False` value).

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: **`False`**

AdvanceNotification

It specifies if the advance to be paid in a contract is displayed in a new repayment notification record (for `False` value) or included in the front-end fee repayment notification (for `True` value).

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: **`False`**

AsyncContractApproval

When set to `True`, the approval of a contract only switches the change of business status of the contract to `Approved`, and the following approval processes, such as generating a main bank account, updating the contract with the main bank account number, if the `Auto Disbursement = True` then perform the disbursement event, generate a repayment schedule, generate and then process repayment notifications, are written to a queue and then are treated asynchronously by the `Async Contract Approval (CB) scheduled job`. When set to `False`, the approval processes are all synchronous, at the moment when you trigger the approval.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: **`False`**

BankAccountTransactionFeeMarkDown

This parameter instructs the system how to process bank account transaction operations. Possible values:

- `Total` - the system creates 4 operations – 2 for debit and 2 for credit for the transaction value and sum(fees)
- `Individual` - the system creates 2 * (1+NoFees) operations – debit and credit for the transaction value and each fee.

Module that uses the system parameter: Loan Admin

Parameter type: Text

Default value: `Total`

CalculateAccrualEarlyRepayment

It specifies whether the accrual and provision should be calculated for early repayments with the event value equal to a part of contract's unpaid amount (partial early repayments) or only for full early repayments.

- For `True` value, the accrual and provision is calculated for any early repayment event value.

- For `False` value, the accrual and provision is calculated only for full early repayment event value.

For each early repayment event, the accrual and provision is calculated only if it was not calculated before for the current system date.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: Set it according to the bank's policy.

CalendarYearEnd

The maximum year in the calendar to be used when generating holidays for calendars. Format: YYYY.

Module that uses the system parameter: Loan Admin

Parameter type: Whole Number

Default value: `2100`.

CalendarYearStart

The minimum year in the calendar to be used when generating holidays for calendars. Format: YYYY

Module that uses the system parameter: Loan Admin

Parameter type: Whole Number

Default value: `2019`.

CreditFacilityLimitPercent

It represents the default limit of credit facility records.

Module that uses the system parameter: Loan Admin

Parameter type: Whole Number

Default value: `30`.

CurrentAccount_WithOverdraft_DaysBeforeExpire

It represents the number of days before the overdraft feature's expiration date of a current account when the contract based on that banking product gets displayed in the **Soon to Expire Ovedrafts** dashboard.

Module that uses the system parameter: Loan Admin

Parameter type: Whole Number

Default value: `30`.

CustomerToContractDirectDebitSettlementAcc

It handles the change on a customer's contracts once the `Direct Debit Settlement Account` attribute at the customer level is switched to true or false.

- If `CustomerToContractDirectDebitSettlementAcc = False`, the changes from the customer level for direct debit settlement do not impact existing contracts, and only the manual repayment notifications of the affected customer change their status accordigly.
- If `CustomerToContractDirectDebitSettlementAcc = True`, the changes at the customer level for direct debit settlement impact current contracts. All the customer's existing contracts' Direct Debit Settlement Account settings are changed according to the setting at the customer level, and all the repayment notifications associated to the customer change their status accordingly.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: Set it according to the bank's policy.

DaysBeforePurge

It represents the default number of calendar days that a record will be kept in `Draft` status before it is purged. The records that are due to be purged on the current day and have their transaction type's **To Be Purged** field marked as `True` are displayed in the Records To Be Purged Dashboard, within the section specific to the record's transaction type. The job performing the deletion is `Delete Purged Entries` and it should be scheduled at the bank's level.

The custom job error records are also purged at the interval given by this parameter.

Module that uses the system parameter: Loan Admin

Parameter type: Whole Number

Default value: Set it according to the bank's policy.

DaysFutureInstallmentsReport

It represents the default number of days before an installment's due date in order for that installment to be included in the **Future Installments** report within the Reports Dashboard.

Module that uses the system parameter: Loan Admin

Parameter type: Whole Number

Default value: 15.

DaysPastDueInstallmentsReport

It represents the default number of days after an unpaid installment's due date in order for that installment to be included in the **Past Due Installments** report within the Reports Dashboard.

Module that uses the system parameter: Loan Admin

Parameter type: Whole Number

Default value: 25.

DefaultIntervalLimitsReport

It represents the default number of months considered when running the reports within the Limit Report dashboard.

Module that uses the system parameter: Loan Admin

Parameter type: Whole Number

Default value: 12

DefaultSalesChannelAPI

It represents the default sales channel for contracts defined via API integration.

Module that uses the system parameter: Loan Admin

Parameter type: Lookup. To entity `SalesChannel`

Default value: Set it according to the bank's policy.

DefaultSalesChannelBackOffice

It represents the default sales channel for contracts defined through the Core Banking user interface.

Module that uses the system parameter: Loan Admin

Parameter type: Lookup. To entity `SalesChannel`

Default value: Set it according to the bank's policy.

DelayDaysForBlockNewContractApproval

It represents the default number of delay days for blocking the approval of new loan contracts for customers who have overdue payments. New contract approval is blocked by Core Banking if the customer has overdue days >= the value of the `DelayDaysForBlockNewContractApproval` parameter.

Module that uses the system parameter: Collection

Parameter type: Whole Number

Default value: `0`

DepositAggregateItemValues

It specifies if the deposit interest is split in two lines or displayed in one line.

- For `False` value, the system splits the **Deposit interest to recover** in two lines (- paid interest -> recover all; sight interest to pay, pay all).
- For `True` value, the system displays the **Deposit interest to recover** in one line with the aggregate value.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `False`.

EarlyRepaymentFee_IndividualNotification

It specifies whether to generate a separate repayment notification for the early repayment fee of a contract (for `True` value) or include the fee into the repayment notification containing the actual early repayment amount (for `False` value).

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `False`.

FrontEndFee

It specifies the commission type used for automatic notification on contract approval (Inclusion)/ or notification daily process (Exclusion).

Module that uses the system parameter: Loan Admin

Parameter type: Lookup. To entity `CommissionType`

Default value: `Front-end Fee`.

CalculatedProvisions

It specifies whether Core Banking should calculate (for `True` value) or not (for `False` value) the provisions in the accruals and provisions processes.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `False`.

DashboardCurrency

It specifies the currency in which all the amounts are displayed within the **Contracts Overview** section of the Loan Admin Officer Dashboard.

Module that uses the system parameter: Loan Admin

Parameter type: Lookup. To entity: `Currency`

Default value: EUR

DashboardDefaultLastXDays

It represents the default number of days considered when running the reports within the Loan Admin Officer Dashboard.

Module that uses the system parameter: Loan Admin

Parameter type: Numeric

Default value: 365

ExchangeRate_UseLatest

It specifies whether Core Banking should use the latest available exchange rates for calculations or not.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: True.

IncludeDAEIntoScheduleCalculation

It specifies whether Core Banking should include APRC (annual percentage rate of charge) for repayment schedule calculations or not.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: True.

LimitMandatoryForIndividuals

It specifies whether Core Banking should validate the limits for individual customers or only validate them for legal entity customers.

- For False value, Core Banking does not validate any limits for the individual customers.
- For True value, Core Banking validates all the limits for the individual customers the same way it does for legal entity customers.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `True`.

LogScheduleJobError

It specifies whether job errors should be logged (for `True` value) as custom job error records or not (for `False` value). The custom job error records are purged at the interval given by the `DaysBeforePurge` parameter.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `False`.

ManualAllocationMethod

The default allocation method used by Core Banking for manual repayment notifications that aren't linked to a contract.

Module that uses the system parameter: Collection

Parameter type: Lookup. To entity: `AllocationMethod`

Default value: `CostOrder`

ManualGraceRepayment

The parameter is used to set up the maturity date on manual repayment notification, if the notification is not linked to a contract.

Module that uses the system parameter: Collection

Parameter type: Whole Number

Default value: Set it according to the bank's policy.

ManualPenaltyInterestList

The parameter holds the penalty interest list used for penalty calculation for manual repayment notifications that are not linked to a contract.

Module that uses the system parameter: Banking Product

Parameter type: Lookup. To entity: `InterestList`

Default value: `ManualPenaltyInterestList`

ManualRepaymentFee

It specifies whether a banking product can have only one **Repayment Fee** type commission on its **Commission List** or more. This parameter affects the **Contract Event** page.

- For `False` value, the banking product has only one Repayment Fee commission type on its commission list.
- For `True` value, the banking product's commission list displays all the commissions stored in the `Commission` entity with type Repayment Fee.

Read more information about the effects of this parameter's value in the Transaction Fees section.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `True`.

PurgeScheduleJobLogDays

It specifies the number of days used to select the old data from the schedule job log to be purged.

Module that uses the system parameter: Loan Admin

Parameter type: Whole Number

Default value: 1.

ReconciliationAccountTreatment

Specifies how Core Banking treats situations when the funds of the reconciliation account associated with the banking product used in the contract would go below zero if a disbursement event would be approved.

- For NoMessage value, there is no error or warning message displayed if the disbursement event that is being approved would result in a negative balance of the associated reconciliation account. The event can be approved and the balance can go below zero.
- For Warning value, there is a warning message displayed if the disbursement event that is being approved would result in a negative balance of the associated reconciliation account. The event can be approved and the balance can go below zero.
- For Error value, there is an error message displayed if the disbursement event that is being approved would result in a negative balance of the associated reconciliation account. The event can't be approved and the balance can't go below zero.

This is a system-wide setting, applicable to events for contracts based on all banking products without a specified Negative balance treatment value. Core Banking also takes into consideration the settings used at the banking product level (the Negative balance treatment field's value next to Reconciliation Account). Thus, if the value is specified at the banking product level, then that value takes precedence over the system parameter's setting.

Module that uses the system parameter: Banking Product

Parameter type: Option Set. Values from option set: `WarningErrorTreatment`

Default value: `Warning`.

RepaymentFee

The commission type used for notification daily process (Exclusion).

Module that uses the system parameter: Loan Admin

Parameter type: Lookup. To entity: `CommissionType`

Default value: `Repayment Fee`

ThirdPartyPaymentIsNet

It specifies whether Core Banking should generate one or two bank account transactions and payments for a third-party agreement invoice when the invoice's status is changed from **Approved** to **Unpaid**.

For `False` value, two bank account transactions are generated with two payments:

- One transaction with **source** account = `Settlement Account` and **destination** account = `Reconciliation Account` with the value of `Total Amount To Recover`;
- Another transaction with **source** account = `Reconciliation Account` and **destination** account = `Settlement Account` with the value of `Total Amount To Pay.`

For `True` value, Core Banking calculates the difference between `Total Amount To Recover` and `Total Amount To Pay`. Only one bank account transaction is generated and only one payment, representing the non-zero value between the `Total Amount To Recover` and the `Total Amount To Pay`, as follows:

- If `Total Amount To Recover - Total Amount To Pay > 0`, a new bank account transaction is generated with **source** account = `Settlement Account` and **destination** account = `Reconciliation Account`, and a payment is generated for the invoice.
- If `Total Amount To Recover - Total Amount To Pay = 0`, a bank account transaction is generated, and the transaction's status changes to **Paid**.
- If `Total Amount To Recover - Total Amount To Pay < 0`, a new bank account transaction is generated with **source** account = `Reconciliation Account` and **destination** account = `Settlement Account`, and a payment is generated for the invoice.

When the payments are approved, the invoice's status becomes **Paid**.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `False`

ThirdPartyRole

It contains the list of allowed roles to choose from in the third-party agreement form.

Module that uses the system parameter: Banking Product

Parameter type: Text

Default value: `Merchant,Insurer,Broker,Agent`

Unusage

It specifies the commission for not using the funds. The commission type used for Credit Facility accrual daily process.

Module that uses the system parameter: Loan Admin

Parameter type: Lookup. To entity: `CommissionType`

Default value: `False`.

Usage

It specifies the commission for usage of funds. The commission type used for Credit Facility accrual daily process.

Module that uses the system parameter: Loan Admin

Parameter type: Lookup. To entity: `CommissionType`

Default value: `Commission Usage Monthly`

UseCF

It specifies whether your installation uses the Credit Facility module for Core Banking Corporate or not.

- For `True` value, the Credit Facility module is used, the **Credit Facility** menu item is displayed within the Core Banking Operational menu, and the credit facility features are available in the Loan Admin Officer Dashboard.
- For `False` value, the Credit Facility module isn't used, the **Credit Facility** menu item is not displayed within the Core Banking Operational menu, and the credit facility features are not available in the Loan Admin Officer Dashboard.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `True`

UseContaminationForDPDCategory

Loan classification works by risk contamination at the customer and the group levels. This means that if a loan contract belonging to a customer is classified as one of a higher risk due to delays in the repayment process, all the other loans of the customer and of the group where the customer is a member are further classified into that high-risk classification. Read more about loan classification in this dedicated page.

This parameter specifies whether Core Banking should use the risk contamination for loan classification or not.

- For `True` value, risk contamination is used for loan classification, thus one unpaid contract affecting all the loan contracts of that customer.
- For `False` value, risk contamination is not used for loan classification, thus unpaid contracts don't affect other loan contracts of the same customer.

The parameter affects only the EOD and SOD jobs.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `True`

UseGLModule

It specifies whether your installation uses the Operational Ledger module or not. The Operational Ledger module comes within a different digital asset than Core Banking, thus its use is optional.

- For `True` value, the GL module is used and the **GL Settings** tab is displayed at banking product level.

- For `False` value, the GL module is not used and the **GL Settings** tab does not display at banking product level.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

Default value: `True`

UseTPM

It specifies if the Third-Party Management package is installed on your system. If `UseTPM` = `True`, the system triggers the queueing of the transactions based on their contract and event ids. Also:

- For `True` value, the third-party management related features are available in the Loan Admin Officer Dashboard.
- For `False` value, the third-party management related features are not available in the Loan Admin Officer Dashboard.

Module that uses the system parameter: Loan Admin

Parameter type: Boolean

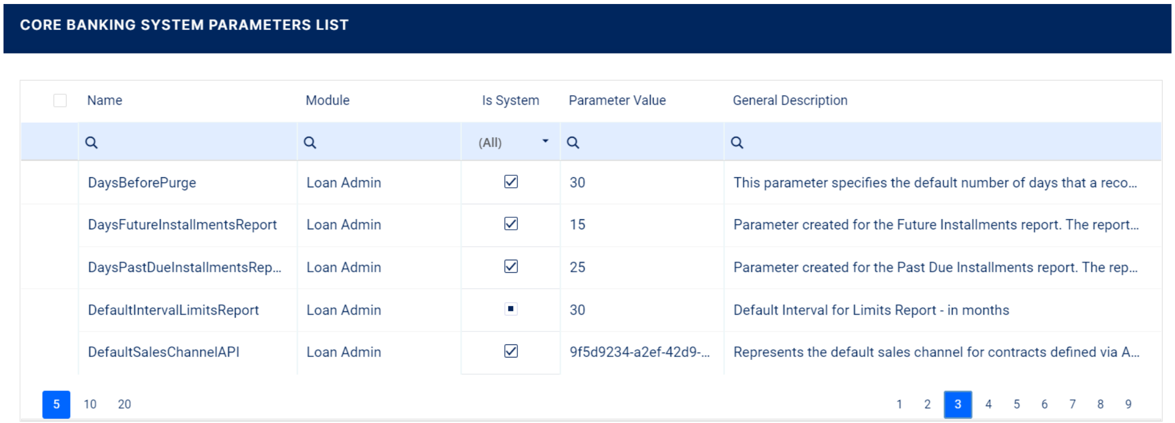
Default value: `False`. It is automatically updated to `True` when the TPM package is installed.

Managing Core Banking System Parameters

IMPORTANT!
You must have the `system administrator` user right to view and manage the Core Banking system parameters.

In order to manage the system parameters used by your FintechOS Core Banking installation, follow these steps:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Click **Core Banking System Parameter** menu item to open the **Core Banking System Parameters List** page.



CORE BANKING SYSTEM PARAMETERS LIST

□	Name	Module	Is System	Parameter Value	General Description
			(All)		
	DaysBeforePurge	Loan Admin	☑	30	This parameter specifies the default number of days that a reco...
	DaysFutureInstallmentsReport	Loan Admin	☑	15	Parameter created for the Future Installments report. The report...
	DaysPastDueInstallmentsRep...	Loan Admin	☑	25	Parameter created for the Past Due Installments report. The rep...
	DefaultIntervalLimitsReport	Loan Admin	■	30	Default Interval for Limits Report - in months
	DefaultSalesChannelAPI	Loan Admin	☑	9f5d9234-a2ef-42d9-...	Represents the default sales channel for contracts defined via A...

On the **Core Banking System Parameters List** page, you can add new system parameters or search, edit, and delete existing ones.

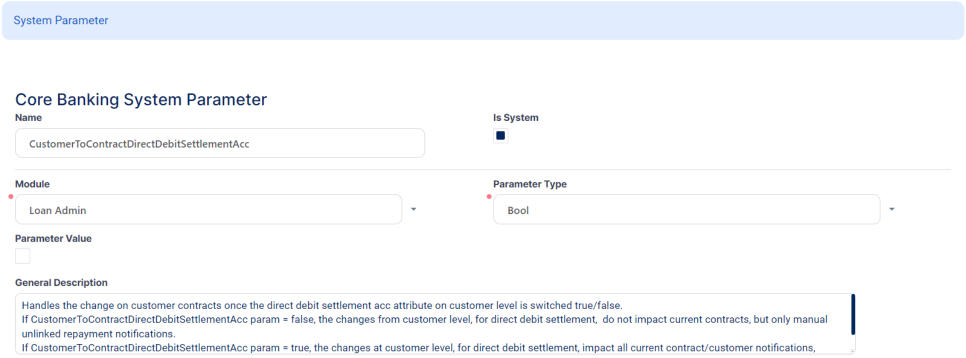
IMPORTANT!
You can't delete parameters marked as **Is System** or edit anything else except their value.

Creating Core Banking System Parameters

Follow these steps to create new system parameters to be used with Core Banking:

1. Click **Insert** button on the **Core Banking System Parameters List** page to display the **System Parameter** page.

2. Fill in the following fields:



System Parameter

Core Banking System Parameter

Name: CustomerToContractDirectDebitSettlementAcc

Is System: ■

Module: Loan Admin

Parameter Type: Bool

Parameter Value: □

General Description:
Handles the change on customer contracts once the direct debit settlement acc attribute on customer level is switched true/false.
If CustomerToContractDirectDebitSettlementAcc param = false, the changes from customer level, for direct debit settlement, do not impact current contracts, but only manual unlinked repayment notifications.
If CustomerToContractDirectDebitSettlementAcc param = true, the changes at customer level, for direct debit settlement, impact all current contract/customer notifications,

- **Name** - Enter a suggestive name for the parameter.
- **Is System** - Select the checkbox to specify that the parameter cannot deleted or edited, except its value. Leave the checkbox empty if this parameter can be changed or deleted.
- **Module** - Select the Core Banking module that uses the system parameter.
- **General Description** - Enter a detailed description for the system parameter.
- **Parameter Type** - Select the data type of the parameter. Possible values: `Text, Date, Date Time, Invariant Date, Whole Number, Numeric, Option Set` and `Entity`.

3. Fill in the rest of the fields, depending on the selected data type:

   - **Entity** - For Lookup parameter type, select the entity from where you need to pick a record as parameter value.
   - **Option Set** - For Option Set parameter type, select the option set from where you need to pick a value as parameter value.
   - **Parameter Value** - Enter the value of the default parameter. Depending on the selected parameter type, you can either enter a value, select the checkbox or select record:

- For `Text, Date, Date Time, Invariant Date, Whole Number, Numeric` parameter types, enter the desired value taking in consideration the data type's format.
- For `Boolean` parameter types, select the checkbox to specify a `True` value, or deselect for a `False` value.
- For `Lookup` parameter type, select the desired record from the previously selected entity that acts as parameter value.
- For `Option Set` parameter types, select the desired value from the previously selected option set that acts as parameter value.

4. Click the **Save and Reload** button.

Transaction Types Used in Core Banking

Any transfer of funds between two bank accounts is recorded as a transaction. There are different types of transactions used in the financial world.

You can manage the transaction types in the FintechOS Portal's **Admin Configurations -> Transaction Type** or **General Ledger Configurations -> Transaction Type** menu. See more details about managing transaction types in the **Operational LedgerUser Guide**. You can also manage transaction type records in the FintechOS Studio's **Product Factory > Banking Product Dictionaries > Transaction Type** menu.

Before being approved and used within contracts, each banking product must have its allowed transaction types specified in the **Associated Transaction** tab. For more information, see Banking Product Factory.

Predefined Transaction Types

You can use the following transaction types are predefined in Core Banking processes:

- **Accruals and Provisions** - It represents the funds set aside to cover future expenses. A provision is aimed at covering a probable future expense, or reduction in the value of an asset. An accrual is a type of provision where revenue or expenses are recorded when a transaction occurs rather than when payment is received or made. Can't be purged.
- **Agreement** - It represents a binding contract between the bank and a third-party entity (agent, broker, insurer, etc.) to formalize an agreement to financially compensate the third-party for the intermediation of selling banking products or services to customers, or compensate the bank for the inter-mediation of selling the third-party's products or services to customers, and to compensate the bank for managing the contract with the third-party. Can be purged.
- **Deposit Liquidation** - It represents the way of closing the deposit account, so the entire amount is transferred in the current account and the deposit account is closed. If the liquidation occurs at the maturity date, the interest will also be paid. If the liquidation occurs on any other day except the maturity date, the customer will receive the sight interest (if a sight interest is configured). Can't be purged.
- **Disbursement** - It represents the actual delivery of funds from a bank account to the customer. The repayment schedule gets calculated or recalculated. Can be purged.
- **Early Repayment** - It represents the early return of funds previously borrowed from a lender. The repayment schedule is updated. Can be purged.
- **Early Termination Deposit** - It represents the way of closing the deposit account applicable when the deposit is terminated before schedule. Can be purged.
- **Interest Capitalization** - It represents the addition of the unpaid interest value to the principal balance. Can't be purged.
- **Loan Contract** - It represents a binding contract between two or more parties to formalize a loan process. Can be purged.

- **Overdraft Payment** - It represents an amount of money that a customer with a bank account is temporarily allowed to owe to the bank. Can't be purged.
- **Payment Deposit** - It represents an amount of money paid into an account as part of a payment schedule. Can't be purged.
- **Payment Holiday** - It represents taking a break of any number of installments for the generated schedule. Can be purged.
- **Repayment** - It represents the act of paying back money previously borrowed from a lender by manually repaying an installment from the schedule. Can't be purged.
- **Repayment Notification** - It represents a notification sent for when a repayment is received. At the due date of every installment, an automatic notification is generated by Core Banking. Can't be purged.
- **Reschedule Overdues** - It represents an operation where overdue installments are merged to the following installments and they are no longer collecting penalties. The repayments schedule gets updated. Can be purged.
- **Reschedule Debt** - It represents an operation that updates the balance with the amount rescheduled. Can't be purged.
- **Returned Amount or Goods** - It represents the transaction through which a customer returns all or part of a loan or mortgage in a short while after contract creation, if the banking product was defined to allow such transactions, and the commissions already paid by the customer as front-end fees marked as returnable are paid back. This transaction type only accepts Return Fee commission types. Upon transaction approval, a new contract version is automatically created. Can be purged.
- **Third-Party Invoice** - It represents the invoice through which the amounts automatically calculated based on an agreement are recorded in Core Banking.
- **Top-Up Account** - It represents adding amounts to the account before the value drains down to zero. Can be purged.

- **Transfer between my bank accounts** - It represents the process of moving funds between the same customer's bank accounts. Can be purged.
- **Withdraw** - It represents removing funds from a bank account. Can be purged.

IMPORTANT!

If a transaction type is marked as an automatic transaction (`Is Automatic Transaction = True`), then that transaction type cannot be selected in the **Events** page when creating contract events. Check the **Operational LedgerUser Guide** for more information about defining transaction types.

The transaction types that cannot be purged cannot be deleted from the system. Their **To Be Purged** field within the **Transaction Type** page is marked as `False`, cannot be edited and is hidden.

For each transaction type that can be purged, Core Banking displays a tab in the **Records To Be Purged dashboard** only if their **To Be Purged** field is marked as `True`.

Read about which transaction types are typically used for each type of banking products in the Banking Product Factory user guides, within each banking product's **Associated Transactions** section.

Current Account Contracts-Specific Transactions

When you add events for contracts created based on current account banking products, the following transaction types can be selected, assuming that they were added previously at banking product level: **Top-Up Account**, **Transfer between my bank accounts**, **Withdraw**.

NOTE

The transactions can be performed only in the same currency.

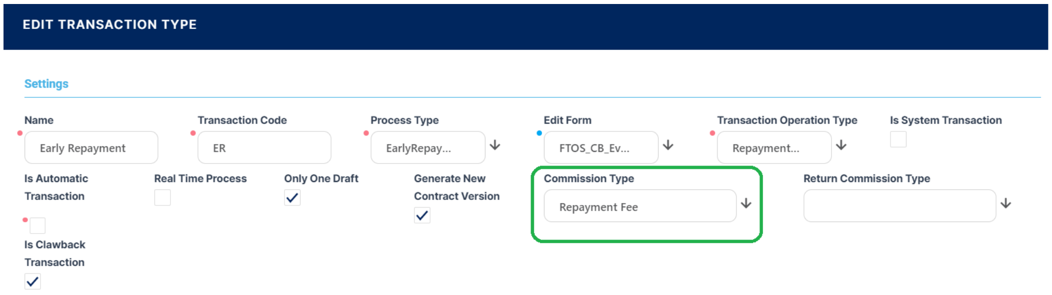
Term Loan Contracts-Specific Transactions

When you add events for contracts created based on term loan banking products, the following transaction types can be selected, assuming that they were added previously at banking product level: **Disbursement**, **Early Repayment**, **Payment Holiday**, **Repayment Notification**, **Reschedule Overdues**, **Reschedule Debt**.

Transaction Fees

Some transactions have a fee collected at the event validation for each contract. For these transactions, repayment notifications for those fees are automatically generated when an event gets to the **Approved** status. For Early Repayment transaction there is a repayment fee, and for Payment Holiday transactions there is a payment holiday fee. These fees are automatically selected from the banking product.

When defining the transaction type, you can select the commission type for the fee:



EDIT TRANSACTION TYPE

Settings

Name: Early Repayment

Transaction Code: ER

Process Type: EarlyRepay...

Edit Form: FTOS_CB_Ev...

Transaction Operation Type: Repayment...

Is System Transaction: □

Is Automatic Transaction: □

Real Time Process: □

Only One Draft: ☑

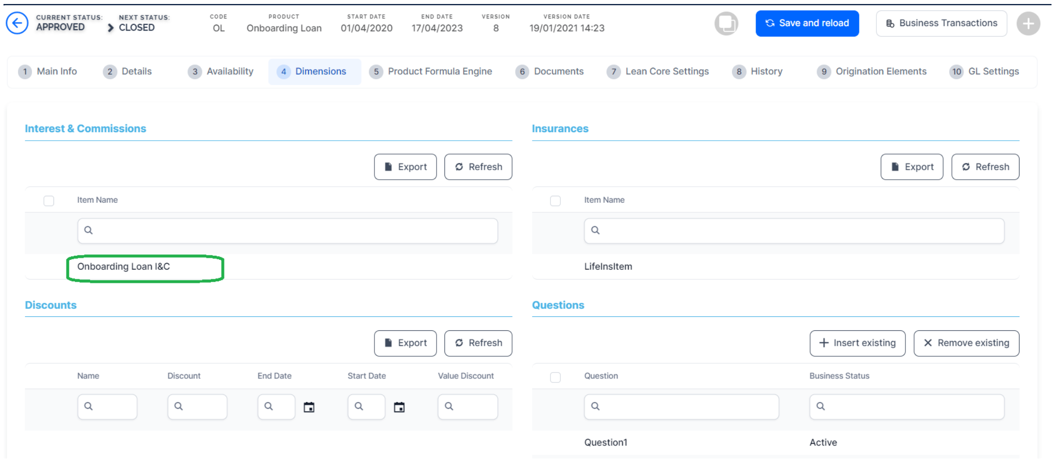
Generate New Contract Version: ☑

Commission Type: Repayment Fee

Return Commission Type:

Is Clawback Transaction: ☑

Let's say your contract uses a banking product that has this type of fee attached to it:



CURRENT STATUS: APPROVED
NEXT STATUS: CLOSED

CODE	PRODUCT	START DATE	END DATE	VERSION	VERSION DATE
OL	Onboarding Loan	01/04/2020	17/04/2023	8	19/01/2021 14:23

Interest & Commissions

□	Item Name
	Onboarding Loan I&C

Insurances

□	Item Name
	LifeInsItem

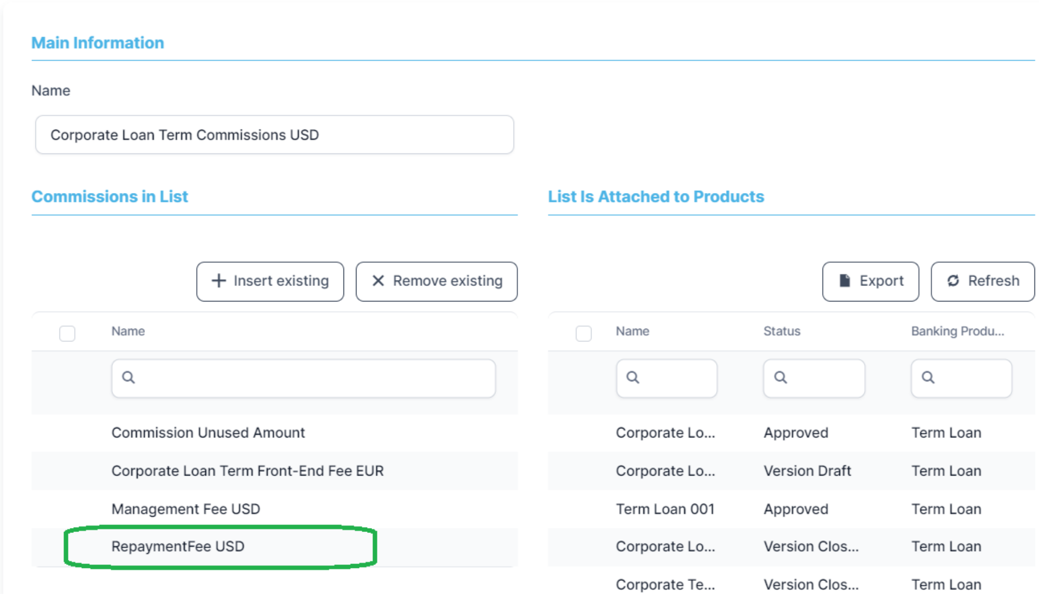
Discounts

Name	Discount	End Date	Start Date	Value Discount

Questions

□	Question	Business Status
	Question1	Active

Edit Commission List



Main Information

Name: Corporate Loan Term Commissions USD

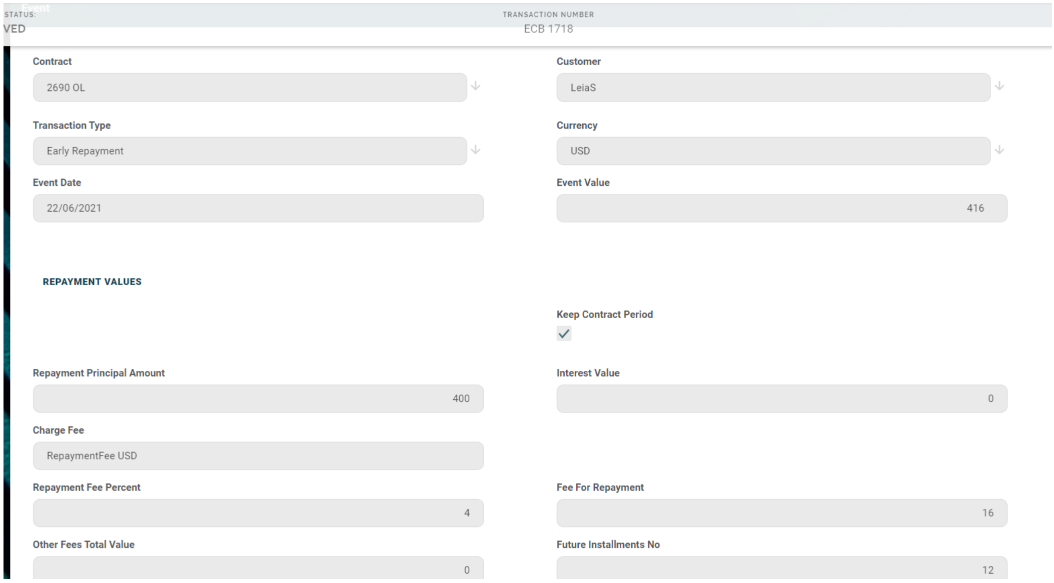
Commissions in List

□	Name
	Commission Unused Amount
	Corporate Loan Term Front-End Fee EUR
	Management Fee USD
	RepaymentFee USD

List Is Attached to Products

□	Name	Status	Banking Produ...
	Corporate Lo...	Approved	Term Loan
	Corporate Lo...	Version Draft	Term Loan
	Term Loan 001	Approved	Term Loan
	Corporate Lo...	Version Clos...	Term Loan
	Corporate Te...	Version Clos...	Term Loan

Core Banking uses that fee for collection at the event level, for example 4% out of 400 USD, thus the customer must pay 416 USD in order to make an early repayment. This amount is notified at the approval of the event.



Event

STATUS:
VED

TRANSACTION NUMBER
ECB 1718

Contract	2690 OL	Customer	LeiaS
Transaction Type	Early Repayment	Currency	USD
Event Date	22/06/2021	Event Value	416

REPAYMENT VALUES

		Keep Contract Period	☑
Repayment Principal Amount	400	Interest Value	0
Charge Fee	RepaymentFee USD		
Repayment Fee Percent	4	Fee For Repayment	16
Other Fees Total Value	0	Future Installments No	12

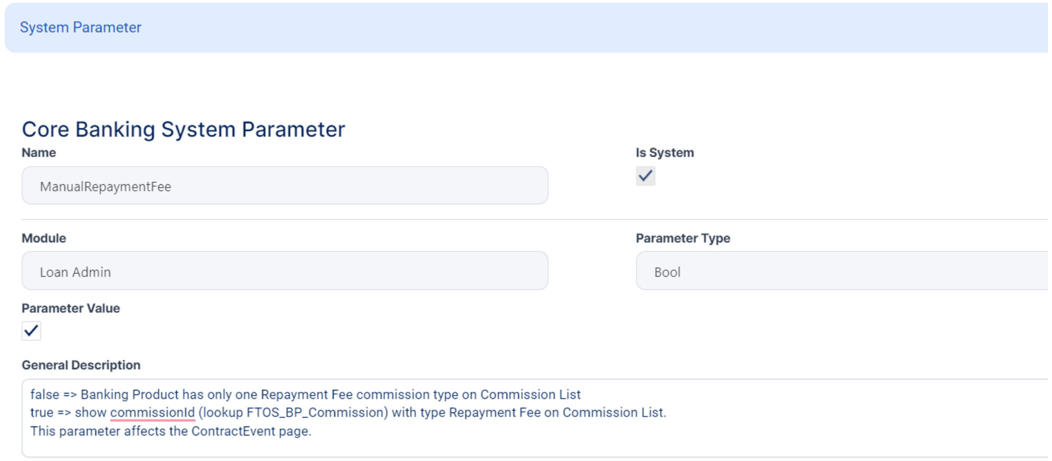
For a payment holiday that affects future installments, only the payment holiday fee gets notified.

The transaction types used for loan contracts that collect a fee at event approval are the following:

- **Payment Holiday** transactions, with an associated commission type of **Payment Holiday Fee**.
- **Reschedule Overdues** transactions, with an associated commission type of **Repayment Fee**.
- **Early Repayment** transactions, with an associated commission type of **Repayment Fee**.

NOTE
Disbursements don't have this setup for collecting a fee at event approval.

The Core Banking system parameter `ManualRepaymentFee`, having a default value `False`, is used mostly for early repayment.



System Parameter

Core Banking System Parameter

Name: ManualRepaymentFee

Is System: ☑

Module: Loan Admin

Parameter Type: Bool

Parameter Value: ☑

General Description:

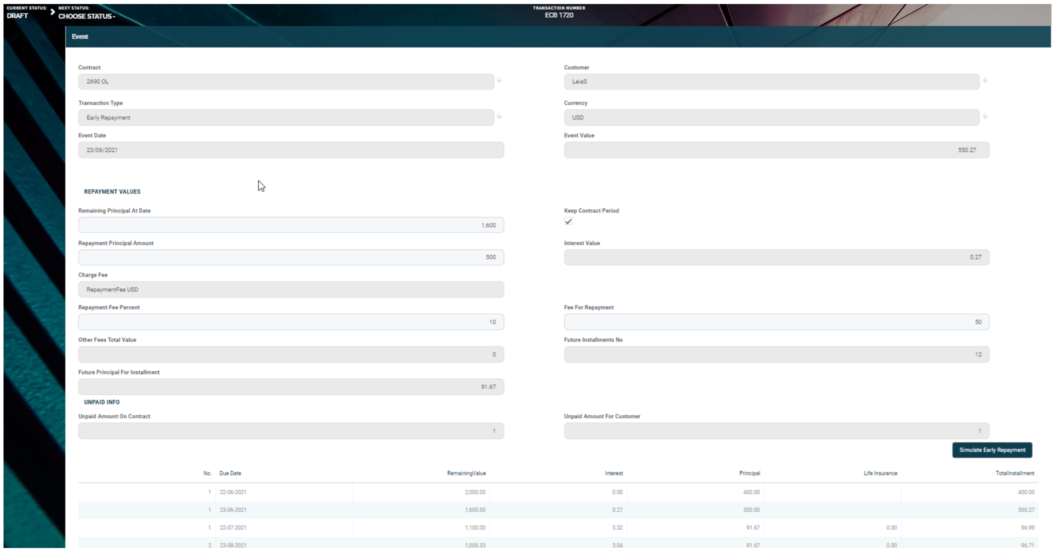
false => Banking Product has only one Repayment Fee commission type on Commission List
true => show commissionId (lookup FTOS_BP_Commission) with type Repayment Fee on Commission List.
This parameter affects the ContractEvent page.

IMPORTANT!

When the value of the `ManualRepaymentFee` parameter is `False`, the early repayment fee is not negotiable, and the fee values are selected exactly as they are defined in the banking product.

When the value of the `ManualRepaymentFee` parameter is **True**, the early repayment fee is negotiable, and the credit officer that is operating the contract event can change the default value that is coming out of the banking product. If the fee is a percentage, then they can change the fee percentage or the fee value. If the fee is not a percentage, then they can change only the fee value. Other related values are automatically updated.

In the example below, having a `ManualRepaymentFee` parameter set on `True`, Core Banking allows changing the default repayment fee percentage of 3.5% out of 500 USD to 10%, resulting in a fee for repayment amount of 50 USD.



CURRENT STATUS: DRAFT
NEXT STATUS: CHOOSE STATUS
TRANSACTION NUMBER ECB 1720

Event

Contract: 2690 OL
Customer: LeiaS
Transaction Type: Early Repayment
Currency: USD
Event Date: 23/06/2021
Event Value: 550.27

REPAYMENT VALUES

Remaining Principal At Date: 1,600
Keep Contract Period: ✓
Repayment Principal Amount: 500
Interest Value: 0.27
Charge Fee: RepaymentFee USD
Repayment Fee Percent: 10
Fee For Repayment: 50
Other Fees Total Value: 0
Future Installments No: 12
Future Principal For Installment: 91.67

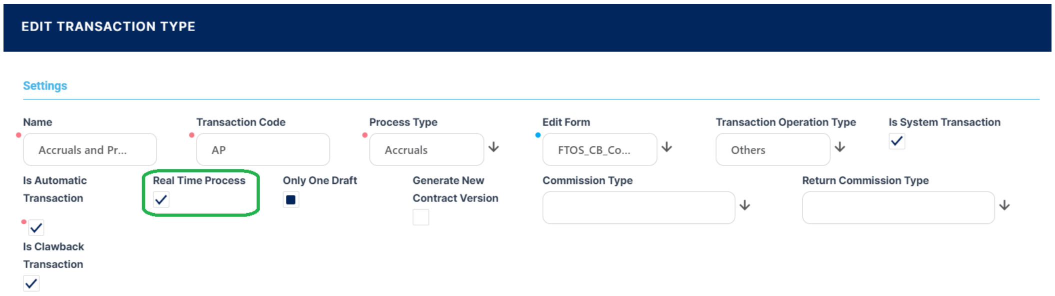
UNPAID INFO

Unpaid Amount On Contract: 1
Unpaid Amount For Customer: 1

No.	Due Date	RemainingValue	Interest	Principal	Life Insurance	TotalInstallment
1	22-06-2021	2,000.00	0.00	400.00		400.00
1	23-06-2021	1,600.00	0.27	500.00		500.27
1	22-07-2021	1,100.00	5.32	91.67	0.00	96.99
2	23-08-2021	1,008.33	5.04	91.67	0.00	96.71

Real-Time or Queued Transaction Processing

The transactions made on bank accounts can be processed in real-time, when the transaction is approved, or at a later time, after being placed in a queue and taken for processing by a specialized scheduled job. The real-time processing depends on the **Real Time Process** checkbox being selected or not at every transaction type's level:



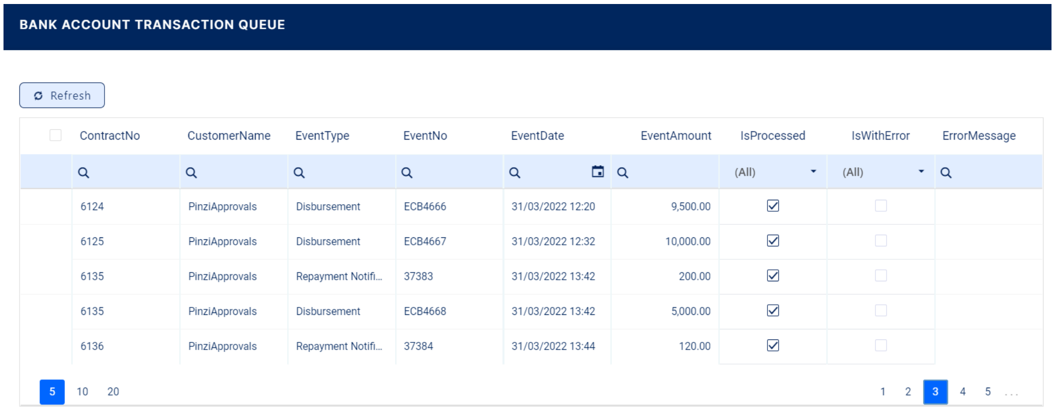
EDIT TRANSACTION TYPE

Settings

Name: Accruals and Pr...
Transaction Code: AP
Process Type: Accruals
Edit Form: FTOS_CB_Co...
Transaction Operation Type: Others
Is System Transaction: ✓
Is Automatic Transaction: ✓
Real Time Process: ✓
Only One Draft: ■
Generate New Contract Version: □
Commission Type:
Return Commission Type:
Is Clawback Transaction: ✓

Each time a transaction is performed on a bank account, the system verifies its transaction type's **Real Time Process** field. If the value is `True`, then the transaction is processed right away. If the value is `False`, then the transaction is inserted as a record in the `BankAccountTransactionQueue` entity, with the `isProcessed` attribute set to `False` and `isWithError` set to `False`. The `Bank Account Transaction Queue Processing` scheduled job runs every 1 minute, taking the top 10 records from the entity with the attribute `isProcessed = False`, and processing the transactions. Any errors encountered on processing are logged in the `errorMessage` attribute. The `Bank Account Transaction Queue Cleanup` scheduled job runs once each night and cleans up the already processed transaction records with `isWithError = False`.

As a user with admin rights, you can view the transactions within the queue in the **Bank Account Transaction Queue** menu:

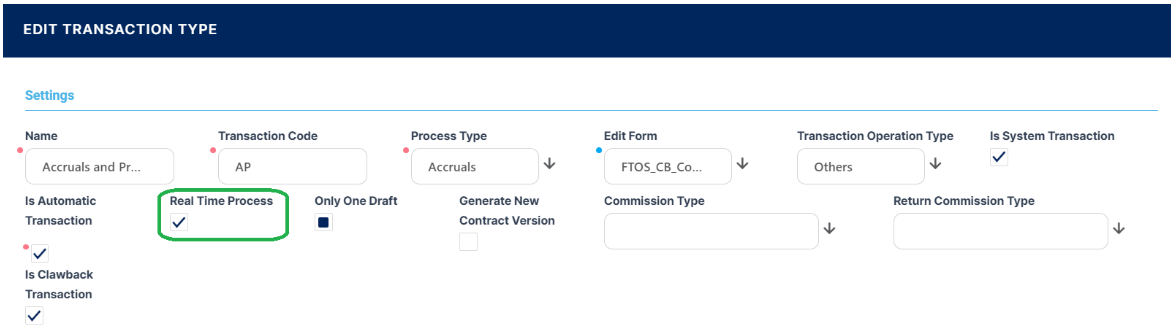


BANK ACCOUNT TRANSACTION QUEUE

□	ContractNo	CustomerName	EventType	EventNo	EventDate	EventAmount	IsProcessed	IsWithError	ErrorMessage
							(All)	(All)	
	6124	PinziApprovals	Disbursement	ECB4666	31/03/2022 12:20	9,500.00	☑	□	
	6125	PinziApprovals	Disbursement	ECB4667	31/03/2022 12:32	10,000.00	☑	□	
	6135	PinziApprovals	Repayment Notifi...	37383	31/03/2022 13:42	200.00	☑	□	
	6135	PinziApprovals	Disbursement	ECB4668	31/03/2022 13:42	5,000.00	☑	□	
	6136	PinziApprovals	Repayment Notifi...	37384	31/03/2022 13:44	120.00	☑	□	

Bank Account Transaction Queue

Core Banking processes transactions made on bank accounts in real-time, when the transaction is approved, or at a later time, after placing the transactions in a queue and being taken for processing by a specialized scheduled job. The real-time processing depends on the **Real Time Process** checkbox being selected or not at every transaction type's level:



EDIT TRANSACTION TYPE

Settings

Name: Accruals and Pr...
Transaction Code: AP
Process Type: Accruals
Edit Form: FTOS_CB_Co...
Transaction Operation Type: Others
Is System Transaction: ☑
Is Automatic Transaction: ☑
Real Time Process: ☑
Only One Draft: ■
Generate New Contract Version: □
Commission Type:
Return Commission Type:
Is Clawback Transaction: ☑

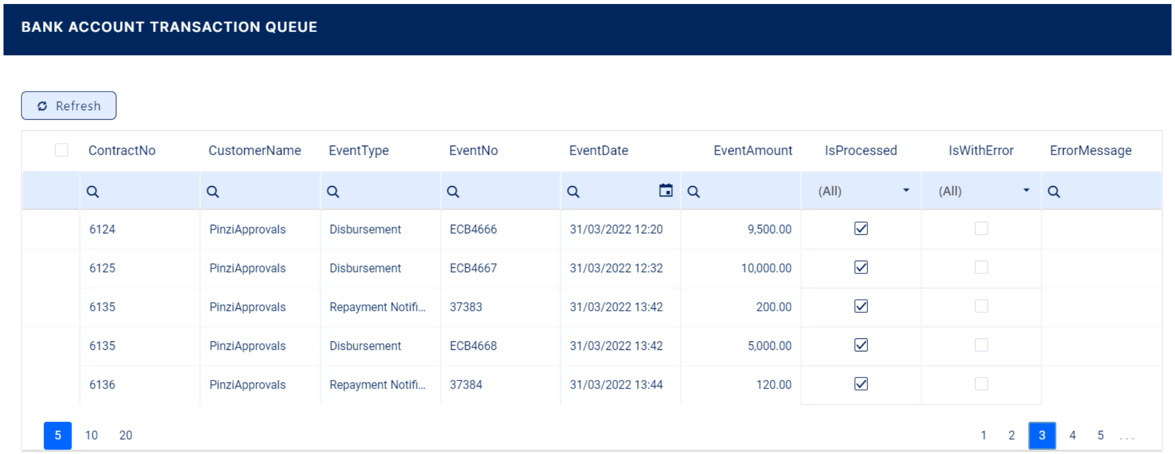
Each time a transaction is performed on a bank account, the system verifies its transaction type's **Real Time Process** field. If the value is `True`, then the transaction is processed right away. If the value is `False`, then the transaction is inserted as a record in the `BankAccountTransactionQueue` entity, with the `isProcessed` attribute set to `False` and `isWithError` set to `False`. The `Bank Account Transaction Queue Processing` scheduled job runs every 1 minute, taking the top 10 records from the entity with the attribute `isProcessed = False`, and processing the transactions. Any errors encountered on processing are logged in the `errorMessage` attribute. The `Bank Account Transaction Queue Cleanup` scheduled job runs once each night and cleans up the already processed transaction records with `isWithError = False`.

NOTE

You can view the transactions within the queue if you have the **Loan Admin Officer** security role.

To view the bank account transactions within the queue, follow these steps:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Click the **Bank Account Transaction Queue** menu to open the **Bank Account Transaction Queue** page.



BANK ACCOUNT TRANSACTION QUEUE

□	ContractNo	CustomerName	EventType	EventNo	EventDate	EventAmount	IsProcessed	IsWithError	ErrorMessage
							(All)	(All)	
	6124	PinziApprovals	Disbursement	ECB4666	31/03/2022 12:20	9,500.00	☑	□	
	6125	PinziApprovals	Disbursement	ECB4667	31/03/2022 12:32	10,000.00	☑	□	
	6135	PinziApprovals	Repayment Notifi...	37383	31/03/2022 13:42	200.00	☑	□	
	6135	PinziApprovals	Disbursement	ECB4668	31/03/2022 13:42	5,000.00	☑	□	
	6136	PinziApprovals	Repayment Notifi...	37384	31/03/2022 13:44	120.00	☑	□	

Here you can view all the bank account level transactions that were placed in the queue, no matter their processing status. The columns of the table contain the following information:

- **Contract No** - The contract on which the transaction was performed.
- **Customer Name** - The name of the customer on whose contract the transaction was performed.
- **Event Date** - The date when the transaction event occured.
- **Event Type** - The type of the transaction event.
- **Event No** - The number of the transaction event.
- **Event Amount** - The amount of the transaction event.
- **Is Processed** - The checkbox specifies whether the transaction was already processed by the Bank Account Transaction Queue Processing scheduled job or not.
- **Is With Error** -The checkbox specifies whether there was an error when processing the transaction or not.
- **Error Message** - The text of the error encountered when processing the job if such an error was encountered during processing.

On the **Bank Account Transaction Queue** page, you can search for a specific transaction by filling in any or all the column headers of the displayed records list.

Bank Account Transaction Configurations

Transactions between bank accounts generate debit operations on a source bank account and credit operations on a destination bank account. The bank accounts can be reconciliation accounts (accounts defined at the banking product level serving as source for disbursements or accounts defined at the transaction fee level for collecting fees), user bank accounts (current, deposit or credit accounts), or external bank accounts (accounts from other banks).

In Core Banking, the transactions between bank accounts are created in `Draft` status. When you change a transaction's status changes to `Approved`, Core Banking automatically generates bank account operations: Debit Operations for the Source

Account, and Credit Operations for the Destination Account. It also updates the balance for the source or the destination accounts if they are bank accounts defined within Core Banking.

You can define fees to be added to bank account transactions. Using fee lists, you can attach fees with specified values to each bank account transaction type. The lists can further be filtered. When you select a transaction operation type on a bank account transaction, Core Banking identifies the fee list and fee values and applies them considering the data of the transaction. Core Banking creates operations of debit and credit for both transaction value and fees. The number of credit and debit operations created by Core Banking is managed through the `BankAccountTransactionFeeMarkDown` system parameter.

You can configure the bank account transaction operations and fees by managing the records within FintechOS Portal's dedicated menu, **Admin Configurations > Bank Account Transactions**.

This page contains a series of topics that assist you in configuring how Core Banking manages transactions between bank accounts:

Transaction Types Covered Through Bank Account Transaction Operation Types in Core Banking

Core Banking currently covers within its automated processes the following transaction types through the bank account transaction operation types:

Transaction	Code	Usage	Generates Accounting Entry	Is Return Transaction	Is System Transaction	Is Automatic	New Contract Version	Source Entity	Bank Account Transaction Operation Type
Disbursement	DSB	Loan Account	yes	no	no	no	no	Contract Event	Disbursement

Transaction	Code	Usage	Generates Accounting Entry	Is Return Transaction	Is System Transaction	Is Automatic	New Contract Version	Source Entity	Bank Account Transaction Operation Type
Revert Disbursement	RDSB	Loan Account	yes	no	no	yes	no	Contract Event	Disbursement
Repayment	RP	Loan Account	yes	no	no	yes	no	Payment	PaymentIn
Top-Up Account	TPCA	Current Account	yes	no	no	no	no	Contract Event	PaymentIn
Payment Deposit	PD	Deposit Account	yes	no	no	yes	no	Payment Notification	PaymentIn
Withdraw	W	Current/Deposit Account	yes	no	no	no	no	Contract Event	Payment Out
Transfer between my bank accounts	TR	Current Account	no	no	no	no	no		Payment Out

Transaction	Code	Usage	Generates Accounting Entry	Is Return Transaction	Is System Transaction	Is Automatic	New Contract Version	Source Entity	Bank Account Transaction Operation Type
Early Termination Deposit	RPD	Deposit Account	yes	no	no	yes	no	Payment Notification	Payment Out
Revert Transfer between my bank accounts	RTR	Current Account	yes	no	no	yes	no	Contract Event	Payment Out
Deposit Liquidation	DLQ	Deposit Account	yes	no	no	no	no	Contract Event	Payment Out
Reschedule Overdues	RO	Loan Account	no	no	no	no	yes		RecoverDebt
Repayment Notification	RN	Loan Account	yes	no	no	yes	no	Repayment Notification	RepaymentContract
Early Repayment	ER	Loan Account	yes	no	no	no	yes	Contract Event	RepaymentContract

Transaction	Code	Usage	Generates Accounting Entry	Is Return Transaction	Is System Transaction	Is Automatic	New Contract Version	Source Entity	Bank Account Transaction Operation Type
Overdraft Payment	ODP	Loan Account	yes	no	no	no	no	`Contract Event`	RepaymentContract
Returned Amount or Goods	RG	Loan Account	yes	yes	no	no	yes	`Contract Event`	RepaymentContract

Usually, these transactions are operated behind the scenes, on the server-side, on a higher-order entity like `Contract` (once a credit contract changes its state to `Approved` for auto disbursement) or `ContractEvent` (when the initiated event of transferring money from a current bank account to a deposit bank account of the same user is approved and the selected `Transaction Type = Transfer between my bank accounts`).

Transaction Operation Type

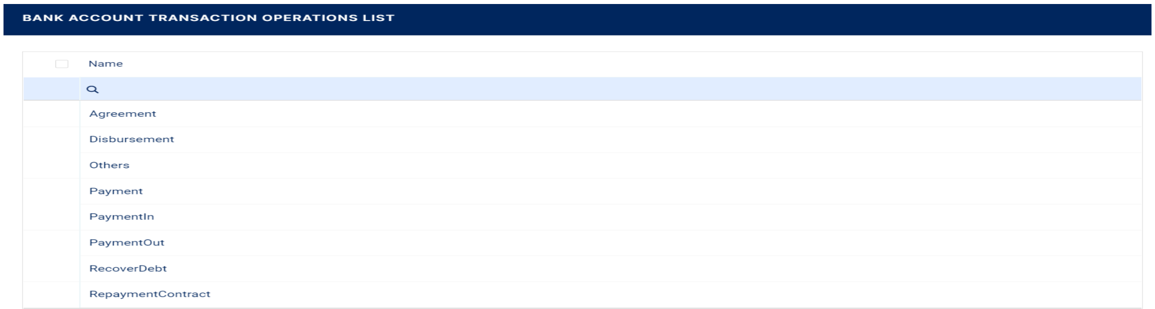
A bank account transaction is any amount that moves in or out of a bank account. There are different types of operations that affect bank account transactions. Core Banking uses the following types of bank account transaction operations:

- `Payment` – usual transaction operation for a bank account transaction;
- `PaymentIn` – transaction operated into a bank account;
- `PaymentOut` – transaction operated from a bank account;

- `RepaymentContract` – transaction operation type used when a contract repayment is registered. In this case, Core Banking debits the current account of the customer and credits the reconciliation account allocated to the banking product. This is an internal type of bank account transactions operation.
- `Disbursement` – transaction operation type used when a credit contract disbursement is registered. In this case, Core Banking debits the reconciliation account allocated to the banking product and credits the current account of the customer. This is an internal type of bank account transactions operation.
- `RecoverDebt` – transaction operation type used for direct debit in case of loan credit. Core Banking automatically registers a debt for an installment for which the amount in the current account associated to the loan credit doesn't cover the debt amount. This is an internal type of bank account transactions operation.

To manage bank account transaction operation types in Core Banking, follow these steps:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Expand **Bank Account Transaction** menu and click **Bank Account Transaction Operation** menu item to open the **Bank Account Transaction Operations List** page.



BANK ACCOUNT TRANSACTION OPERATIONS LIST

	Name
	Agreement
	Disbursement
	Others
	Payment
	PaymentIn
	PaymentOut
	RecoverDebt
	RepaymentContract

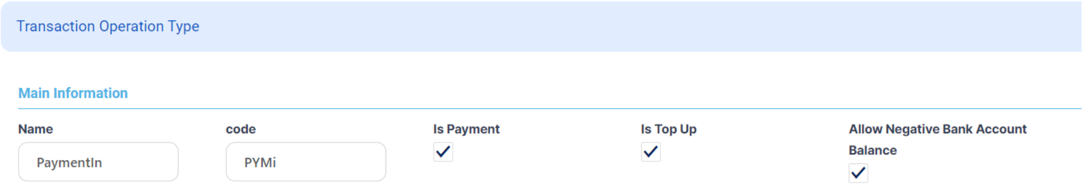
On the **Bank Account Transaction Operations List** page, you can add new bank account transaction operation types or search, edit, and delete existing ones.

Creating Bank Account Transaction Operation Types

Follow these steps to create new bank account transaction operation type records:

1. Click **Insert** on the **Bank Account Transaction Operations List** page to display the **Transaction Operation Type** page.

2. Fill in the following fields:



Transaction Operation Type

Main Information

Name	code	Is Payment	Is Top Up	Allow Negative Bank Account Balance
PaymentIn	PYMi	✓	✓	✓

- **Name** - Enter the name of the bank account transaction operation record.

- **Code** - Enter a code for this transaction operation record.

- **Is Payment** - Select this checkbox if the bank account transaction operation record represents a payment within Core Banking.

3. If you marked `Is Payment` as `True`, then fill in these newly displayed fields:

   - **Is Top-Up** - Select this checkbox if the bank account transaction operation record represents a top-up type payment. This field is displayed only if the `Is Payment` field is selected.

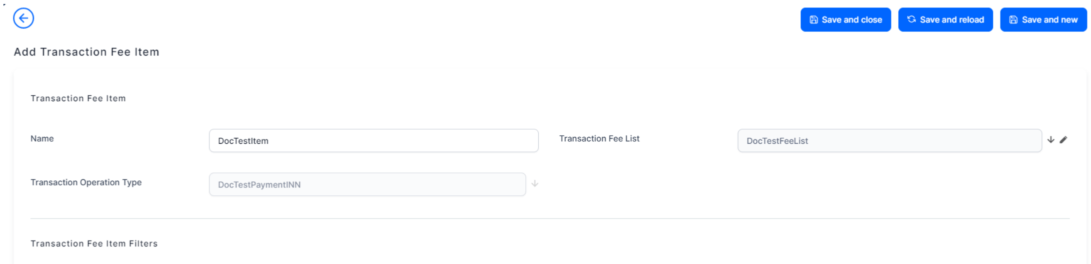
   - **Allow Negative Bank Account Balance** - Select this checkbox if the bank account allows the existence of a negative balance. This field is displayed only if the `Is Payment` field is selected.

4. Click the **Save and Reload** button.

   In the **Transaction Fee Items** section displayed after saving the record, you can attach multiple transaction fee items, each serving a different purpose through filters (fees for payment to a specific country, fees made in a specific currency, fees for transfers having a certain minimum or maximum amount). Note that fees can also be combined in fee lists. You can add as many items as you need.

5. To add a new item, click the **Insert** button within the **Transaction Fee Items** section.

6. On the displayed **Add Transaction Fee Item** page, fill in the following fields:



Add Transaction Fee Item

Transaction Fee Item

Name: DocTestItem

Transaction Fee List: DocTestFeeList

Transaction Operation Type: DocTestPaymentINN

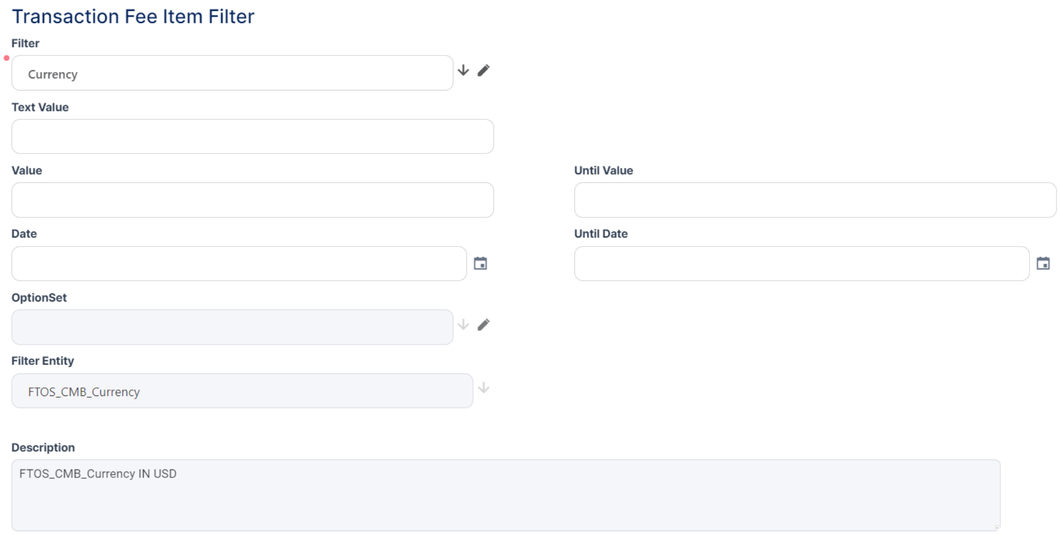
Transaction Fee Item Filters

- **Name** - Enter the name of the transaction fee item record.
- **Transaction Fee List** - Select the transaction fee list associated to the transaction fee item.
- **Transaction Operation Type** - Automatically completed with the bank account transaction operation record being edited and it cannot be changed.

7. Click the **Save and Reload** button.
In the **Transaction Fee Item Filters** section displayed after saving the record, you can add filters for the transaction fee item. You can add as many item filters as you need.

8. To add a new item filter, click the **Insert** button within the **Transaction Fee Item Filters** section.

9. On the newly displayed **Add Transaction Fee Item Filter**, fill in the following fields to specify the filtering criteria for the transaction fee item filter:



Transaction Fee Item Filter

Filter: Currency

Text Value:

Value:

Until Value:

Date:

Until Date:

OptionSet:

Filter Entity: FTOS_CMB_Currency

Description: FTOS_CMB_Currency IN USD

- **Filter** - Select the filter for the transaction fee item filter.
- **Description** - Enter a description for the transaction fee item filter.

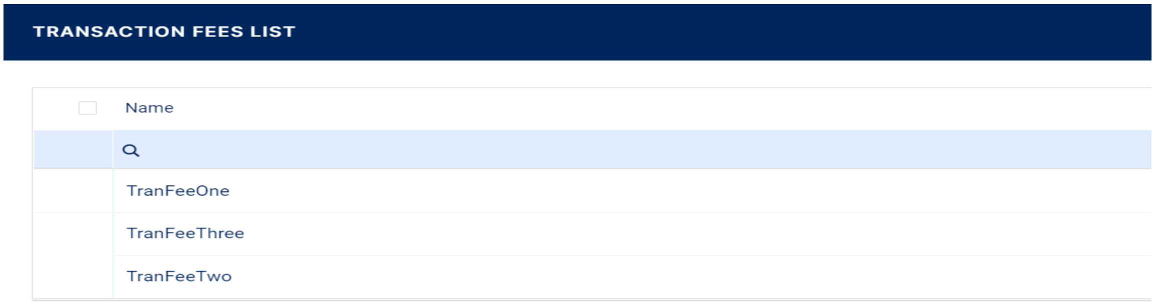
10. Optionally, fill in the following fields:
    - **Text Value** - Enter the text value of the filter, if applicable.
    - **Value/ Until Value** - Enter the starting/ ending value of the interval for the filter if applicable.
    - **Date/ Until Date** - Enter the starting/ ending date for the filter if applicable.
    - **OptionSet** - This field is automatically completed with the option set of the filter previously selected in the `Filter` field if that filter is of option set type.
    - **Filter Entity** - This field is automatically completed with the entity of the filter previously selected in the `Filter` field if that filter is of entity type.
11. Click the **Save and Close** button.

Transaction Fee

You can define different fees to be applied to bank account transactions. Using fee lists, you can attach fees with specified values to each bank account transaction operation type. When you select a transaction operation type on a bank account transaction, Core Banking identifies the fee list and fee values and applies them considering the current date of the transaction.

To manage transaction fee records:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Expand **Bank Account Transaction** menu and click **Transaction Fee** menu item to open the **Transaction Fees List** page.



TRANSACTION FEES LIST

□	Name
	TranFeeOne
	TranFeeThree
	TranFeeTwo

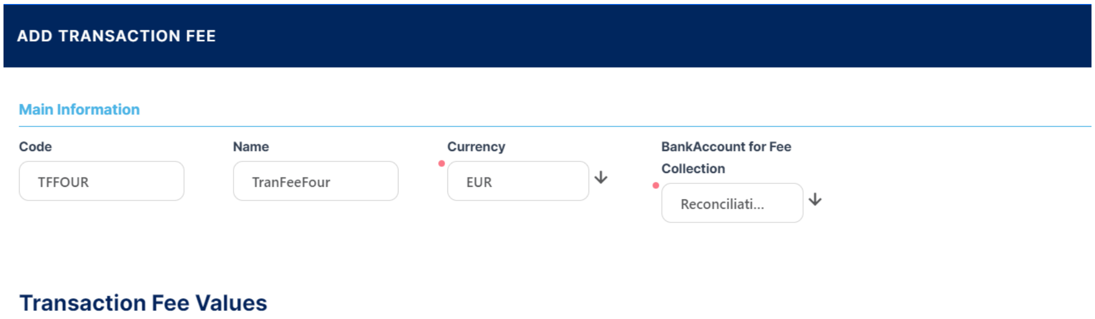
On the **Transaction Fees List** page, you can add new transaction fee records or search, edit, and delete existing ones.

Creating Transaction Fee Records

Follow these steps to create new transaction fee records:

1. Click **Insert** on the **Transaction Fees List** page to display the **Add Transaction Fee** page.

2. Fill in the following fields:



ADD TRANSACTION FEE

Main Information

Code	Name	Currency	BankAccount for Fee Collection
TFFOUR	TranFeeFour	EUR	Reconciliati...

Transaction Fee Values

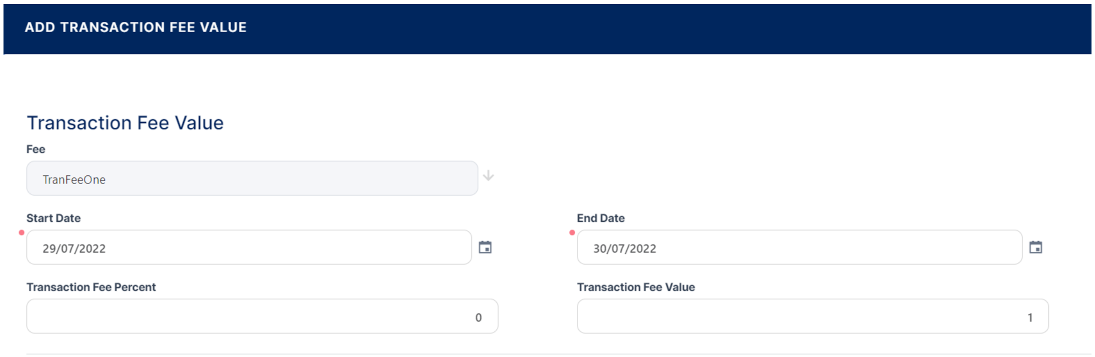
- Code - Enter a code for this transaction fee record.
- Name - Enter the name of the transaction fee record.
- Currency - Select the currency of the fee.
- Bank Account for Fee Collection - Select the bank account for the fee collection.

3. Click the **Save and Reload** button.

   You can manage the values of the transaction fee within the newly displayed **Transaction Fee Values** section.

4. Click **Insert** within the **Transaction Fee Values** section to add a new value for the fee. The **Add Transaction Fee Value** page is displayed.

5. Fill in the following fields:



ADD TRANSACTION FEE VALUE

Transaction Fee Value

Fee: TranFeeOne

Start Date	End Date
29/07/2022	30/07/2022

Transaction Fee Percent	Transaction Fee Value
0	1

- **Fee** - Automatically completed with the transaction fee for which you are inserting values.
- **Start Date/ End Date** - Select the interval when the value is active.

- **Transaction Fee Percent** - Enter the percent from the bank account transaction applied as fee value if the value is defined as a percentage.

  OR

- **Transaction Fee Value** - The value of the transaction fee, expressed in the transaction fee currency if the value is not defined as percentage.

6. Click the **Save and Close** button. The new value for the transaction fee is saved.

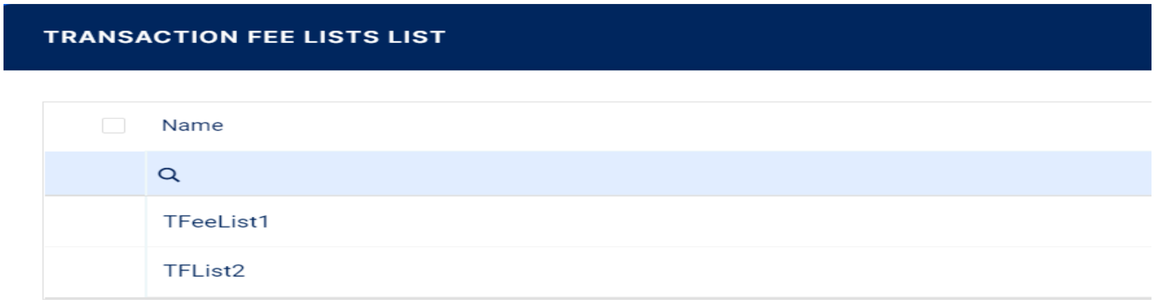
> **NOTE**
>
> You can add as many values as needed, as long as the validity periods of the value don't overlap. The fee values are identified and applied considering the current date of the transaction.

Transaction Fee List

Core Banking uses lists to group previously defined transaction fees. The transaction fee lists are attached to each bank account transaction type. The lists can further be filtered. When you select a transaction operation type on a bank account transaction, Core Banking identifies the fee list and fee values and applies them considering the current date of the transaction.

To manage transaction fee list records:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Expand **Bank Account Transaction** menu and click **Transaction Fee List** menu item to open the **Transaction Fees Lists List** page.



TRANSACTION FEE LISTS LIST

□	Name
	TFeeList1
	TFList2

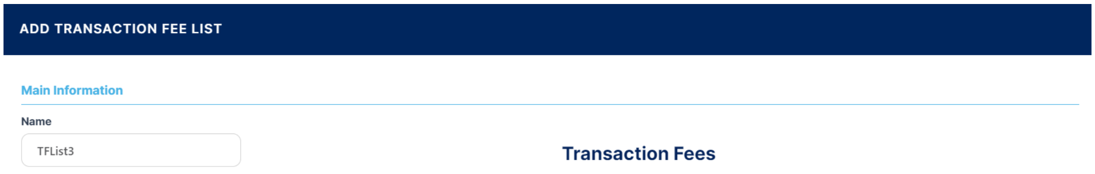
On the **Transaction Fees Lists List** page, you can add new transaction fee list records or search, edit, and delete existing ones.

Creating Transaction Fee List Records

Follow these steps to create new transaction fee list records:

1. Click the **Insert** button on the **Transaction Fees Lists List** page to open the **Add Transaction Fee List** page.

2. Fill in the name of the transaction fee list record.



ADD TRANSACTION FEE LIST

Main Information

Name: TFList3

Transaction Fees

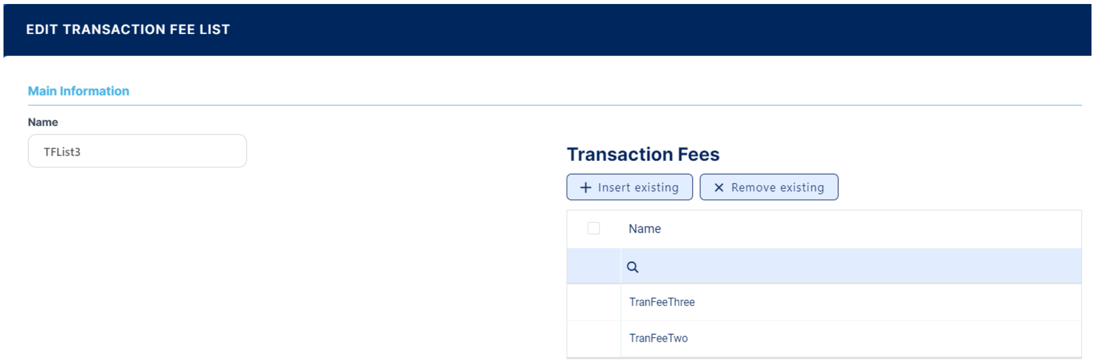
3. Click the **Save and Reload** button.

   A new section, **Transaction Fees**, is displayed after saving the record. You can manage the actual transaction fees of the list within this section.

4. Click **Insert existing** in the **Transaction Fees** section to add a new transaction fee to the list.

5. In the newly displayed pop-up window, select one or more transaction fees and

click **OK** to attach them to your list.



EDIT TRANSACTION FEE LIST

Name: TFList3

Transaction Fees

Name
TranFeeThree
TranFeeTwo

6. Click the **Save and Close** button. You can add as many transaction fees as needed to your list.

Jobs

Jobs are automated procedures that perform certain tasks, running at a specific time or on a recurring schedule. Read detailed information about scheduling jobs in the FintechOS Studio User Guide's dedicated page.

Core Banking comes with the following scheduled jobs that perform repetitive banking procedures for the purpose of closing one day and opening the next one, or for processing or cleaning up queued transactions:

Start Of Day (SOD) Job

The **Core Banking Start Of Day** job is made up of a series of services, which are run one by one each day before the banking day is initiated.

The following services run as part of this job, in this order:

1. **Start Job Log**

   If another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `ScheduleJobLog` entity, containing information about the job starting time.

2. **Disburse Contracts With Approved Tranches In Current Date**
   The service performs the disbursements of contract tranches approved on the current date (the day that is about to be opened/ initiated).
3. **Set Limit Available Amount Due To FX Change**
   The service recalculates the available amount on limits depending on the currency's exchange rate on a specific day. The service does not take into consideration past versions of the limit up to a given day. It only takes into consideration the current limit version and uses those results for calculating the limit available value.
4. **Set Collateral Available Amount And Contract Collateral Value Due To FX Change**
   The service recalculates the available amount on collaterals and the collateral value on contracts depending on the currency's exchange rate on a specific day.
5. **Set Contract Amount (Overdraft) Due To Plan Due Date Reached (Increase/ Decrease)**
   The service increases/ decreases the limit amount on overdraft contracts that reached their reevaluation plan due date.
6. **Set Credit Facility Amount Due To Plan DueDate Reached (Increase/ Decrease)**
   The service increases/ decreases the limit amount on credit facilities that reached their reevaluation plan due date.
7. **Set Credit Facility Available Amount Due To FX Change**
   The service recalculates the available amount on credit facilities depending on the currency's exchange rate on a specific day.
8. **Set Contract Covenant Status Due To Review Date Reached**

   The service changes the status of covenants on contracts that reached their review date.
9. **Set Contract Category Based on Overdue Days**
   The service changes the category of contracts based on overdue days.
10. **Schedule versioning after stop accrual**
    The service creates new schedule versions for the contracts that were marked for stopping the accrual process calculation. The new version

of the schedule has the `Process of Loss` reason and all the un-notified installments are updated.

11. **Calculate Accrual For Overdraft Contracts and Current Accounts With Overdraft Contracts**
The service recalculates the accrual for utilization and for unusage for overdraft contracts and for current account with overdraft contracts.

12. **Calculate Accrual For Credit Facility**
The service recalculates the accrual for utilization and for unusage for credit facilities.

13. **Calculate Accrual And Provisions For Loan Contracts**
The service recalculates the accrual and provisions for loan contracts.

14. **Calculate Overdraft Debt to recover**
The service recalculates the overdraft debt still to recover from contracts.

15. **Calculate Penalties for Contracts and Credit Facility**
The service recalculates the penalties for contracts and for credit facilities.

16. **Calculate Interests For Deposit Contracts**
The service recalculates the interests for deposit contracts.

17. **End Job Log**
The service updates the same record that the **Start Job Log** service inserted within the `ScheduleJobLog` entity, writing information about the job ending time.

End Of Day (EOD) Job

The **Core Banking End Of Day** job is made up of a series of services, which are run one by one each day after the banking day is closed.

The following services run as part of this job, in this order:

1. **Start Job Log**

   If another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `ScheduleJobLog` entity, containing information about the job starting time.

2. **Set Limit Expired**
   The service sets the limits which are about to expire in the current day as Expired.

3. **Set Accrual Amounts on Repayment Schedule for Overdraft Contract and Current Account with Overdraft**
   The service recalculates the accrual for utilization on repayment schedules for overdraft contracts and for current account with overdraft contracts.

4. **Run Recover Debts**
   The service performs the direct debit transactions to recover all debts at that point in process.

5. **Set Accrual Amounts Unusage Commission Values on Repayment Schedule for Contracts**
   The service recalculates the accrual for unusage commissions on repayment schedules for contracts.

6. **Update Expiry Date for Overdraft installment**
   The service updates all the expiry dates for overdraft installments for the current account with overdraft contracts.

7. **Generate Repayment Notifications**
   The service generates the repayment notifications for all the contracts with due amounts on schedule on that day.

8. **Recover Debts After Generate Notification**
   The service performs the direct debit transactions to recover all debts after generating the repayment notifications.

9. **Run Payment Allocation**
   The service performs the payment allocation operations for unallocated or partially allocated payments.

10. **Generate Accounting Entries**
    The service generates the accounting entries for all transactions performed on that day.
11. **Set Limit Available Amount Due To FX Changes**
    The service sets the limit amounts available to all contracts due to exchange rates changes.
12. **End Job Log**
    The service updates the same record that the **Start Job Log** service inserted within the `ScheduleJobLog` entity, writing information about the job ending time.

Bank Account Transaction Queue Processing (CB) Job

The **Bank Account Transaction Queue Processing** scheduled job processes all the bank account transactions that were placed in a queue instead of being processed in real-time at transaction approval. Each time a transaction is performed on a bank account, the system verifies its transaction type's **Real Time Process** field. If the value is `True`, then the transaction is processed right away. If the value is `False`, then the transaction is inserted as a record in the `BankAccountTransactionQueue` entity, with the `isProcessed` attribute set to `False` and `isWithError` set to `False`. The **Bank Account Transaction Queue Processing** scheduled job runs every 1 minute, taking the top 10 records from the entity with the attribute `isProcessed = False`, and processing the transactions. Any errors encountered on processing are logged in the `errorMessage` attribute.

The following service runs as part of this job, in this order:

1. **Start Job Log**

   If another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `ScheduleJobLog` entity, containing information about the job starting time.
2. **BankAccountTransactionQueue_Process**
   The service takes the top 10 records from the bank account transactions queue (the `BankAccountTransactionQueue` entity)

with the attribute isProcessed = False, and processes the transactions. After each processing, the isProcessed, isWithError, and errorMessage attributes are updated.

3. **End Job Log**
The service updates the same record that the **Start Job Log** service inserted within the ScheduleJobLog entity, writing information about the job ending time.

Bank Account Transaction Queue Cleanup (CB) Job

The **Bank Account Transaction Queue Cleanup** scheduled job runs once each night and deletes the already processed transaction records with the isWithError attribute value False.

The following service runs as part of this job:

1. **BankAccountTransactionQueue_Cleanup**
The service deletes the records from the bank account transactions queue (the BankAccountTransactionQueue entity) with the attribute isProcessed = True and isWithError = False.

Close Contracts (CB) Job

The **Close Contracts** scheduled job closes automatically all contracts with Automatic Closure = True and Real Time Closure = False, with zero available amount and with no further amounts to be recovered, that have Balance Off Date filled in and Closure Date = Current Date. The job runs by default at 11:00 PM system time.

The following services run as part of this job, in this order:

1. **Start Job Log**

   If another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the ScheduleJobLog entity, containing information about the job starting time.

2. **CloseContract**
   The service closes all contracts with `Automatic Closure = True` and `Real Time Closure = False`, with zero available amount and with no further amounts to be recovered, that have `Balance Off Date` filled in and `Closure Date = Current Date`.
3. **End Job Log**
   The service updates the same record that the **Start Job Log** service inserted within the `ScheduleJobLog` entity, writing information about the job ending time.

Close Contracts RealTime(CB) Job

The **Close Contracts RealTime** scheduled job closes automatically all contracts with `Automatic Closure = True` and `Real Time Closure = True`, with zero available amount and with no further amounts to be recovered. The job runs by default every 5 seconds, between 06:00 AM and 07:59 PM system time.

The following services run as part of this job, in this order:

1. **Start Job Log**

   If another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `ScheduleJobLog` entity, containing information about the job starting time.
2. **CloseContractRealTime**
   The service closes all contracts with `Automatic Closure = True` and `Real Time Closure = True`, with zero available amount and with no further amounts to be recovered.
3. **End Job Log**
   The service updates the same record that the **Start Job Log** service inserted within the `ScheduleJobLog` entity, writing information about the job ending time.

Run Loan Payment Allocation (CB) Job

The **Run Loan Payment Allocation** scheduled job processes almost in real-time the payment allocation operations for payments with **Unallocated** or **Partially Allocated** statuses. The job runs by default every 5 seconds, between 06:00 AM and 07:59 PM system time.

The following services run as part of this job, in this order:

1. **Start Job Log**

   If another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `ScheduleJobLog` entity, containing information about the job starting time.

2. **Debt_to_Payment**
   The service processes the payment allocation operations for unallocated or partially allocated payments.

Auto Process Manual Repayment Notifications (CB)

The **Auto Process Manual Repayment Notifications (CB)** scheduled job facilitates the automatic transition of manual repayment notifications from the **Approved** status into **Pending Recover** or **In Recovery** statuses, thus allowing manual notifications to be automatically processed for payment allocation. The job runs by default at 7:00 PM system time.

The following service runs as part of this job:

1. **Auto Process Manual Repayment Notifications**
   The service processes the manual repayment notification record in **Approved** status created on the current date of the system, changing their status depending on the direct debit setting at the customer level. If the `Direct Debit Settlement Account` field at the contract level = `True`, then the manual notification's status changes to **In Recovery**, otherwise it changes to **Pending Recover**.

Async Contract Approval (CB)

The **Async Contract Approval (CB)** scheduled job performs all the contract approval-related activities, such as generating a main bank account, updating the contract with the main bank account number, if the `Auto`

Disbursement = True then perform the disbursement event, generate a repayment schedule, generate and then process repayment notifications, when the AsyncContractApproval Core Banking system parameter is set to True. The job runs by default every 5 seconds.

The following service runs as part of this job:

1. **Async Contract Approval Queue Processing**
   The service processes the records from the Async Contracts Approval Queue entity, performing every task related to a contract approval, except the change of business status of the contract to Approved, which happened already.

TPM Invoices (TPM) Job

The **TPM Invoices (TPM)** scheduled job runs once each night and creates third-party invoices and payments, for the combination of third-party entity/ agreements currency, during the validity of the agreement, on the Payment Day of each agreement, as defined in the third-party agreement's Payment Periodicity (daily, monthly, or weekly).

The following services run as part of this job, in this order:

1. **Generate Invoices Automatically**
   The service generates third-party invoices based on the created pre-invoice details as mentioned above, for the combination of third-party entity/ agreements currency, during the validity of the agreement, on the Payment Day of each agreement, as defined in the third-party agreement's Payment Periodicity (daily, monthly, or weekly). If pre-invoice details were already added on a manual invoice, then these details are excluded from the automatic process.
2. **Charge Not Paid Invoices**
   The service creates the bank account transactions for the due payments for invoices with **Not Paid** status.

Pre Invoice Commission Processing (TPM) Job

The **Pre Invoice Commission Processing (TPM)** scheduled job processes the record within the Third-Party Management Queue, calculates the commission according to the settings at the agreement pricing, and adds the results as pre-invoice detail records. The job runs by default every 5 seconds.

The following service runs as part of this job, in this order:

1. **Process Commissions Queue**
   The service takes each third-party queue record previously unprocessed, calculates the due commission according to the settings at the agreement pricing, and generates third-party pre-invoice detail records as mentioned above. The third-party management queue record is marked with `Processed = True`, so that it doesn't get processed again, and its Process Details field is completed with the processing result.

Security Roles for Core Banking

A security role is a set of privileges and levels of access to various actions/ functions within the FintechOS Platform. Read the Security Roles topic for detailed information.

Core Banking has a set of predefined security roles specific for banking-related business needs. Financial institutions can use these security roles to grant their employees access rights within its systems. Read the Users topic for information about associating security roles to users in FintechOS Studio.

You can also create new security roles to fit your financial institution's business needs.

Predefined Core Banking Security Roles

Core Banking comes with the following predefined security roles that grant specific access rights to the users associated with one or more of these roles to the FintechOS Platform's actions and functions:

- **Loan Admin Officer** - Users with this security role have `read, write` and `authorize` access rights to the **Loans** and **Accounting** records in **all modules** of Core Banking within **their organization**.
- **Accounting Read** - Users with this security role have `read` access rights to the **Accounting** module of Core Banking within **their organization**.
- **Corporate Credit Officer** - Users with this security role have access rights to `read` and `write` access rights to the **Contract**, **Contract Version**, **Contract Event**, **Limits**, **Collateral Register**, **Credit Facility** and **Credit Facility Version** records of Core Banking within **their organization**.
- **Retail Credit Officer** - Users with this security role have access rights to `read` and `write` access rights to the **Contract**, **Contract Version**, **Contract Event**, **Collateral Type** and **Collateral Register** records of Core Banking within **their organization**.
- **Accounting Officer** - Users with this security role have `read` and `write` access rights to the **Accounting** module of Core Banking within **their organization**.
- **Supervisor Risk Officer** - Users with this security role have `read` access rights to the **Contracts**, **Collateral Register** and **Credit Facility** records of Core Banking within **their organization**, and `authorization` rights to the **Limits** records, all within **their organization**.
- **Risk Officer** - Users with this security role have `read` access rights to the **Contracts**, **Collateral Register** and **Credit Facility** records, and `write` access rights to the **Limits** records of Core Banking within **their organization**.

IMPORTANT!
If your user has more than one role, then your access rights are cumulative and you are granted the highest access right.

Read the following sections for detailed information about each security role's access rights to entities and endpoints within the FintechOS Platform:

Loan Admin Officer

A user with this security role has the following access rights to records in the FintechOS Platform's entities within **their organization**:

Entity	Insert	Read	Update	Delete
Account	No	Yes	Yes	Yes
AccountRelOwnership	No	Yes	No	Yes
Address	No	Yes	No	Yes
approvalTask	No	Yes	No	Yes
businessunit	Yes	Yes	Yes	Yes
BWstatus	Yes	Yes	Yes	Yes
entity	Yes	Yes	Yes	No
entitystatus	Yes	Yes	Yes	Yes
Division	No	Yes	No	Yes
Document	No	Yes	No	Yes
GroupAccount	Yes	Yes	Yes	Yes
GroupMember	No	Yes	No	Yes
UnitType	No	Yes	No	Yes
BandedInterest	No	Yes	No	Yes
BankingProduct	No	Yes	No	Yes
BankingProductAgreement	No	Yes	No	Yes
BankingProductDiscount	No	Yes	No	Yes
BankingProductDocument	No	Yes	No	Yes
BankingProductMandatoryRoles	Yes	Yes	Yes	Yes
BankingProductType	No	Yes	No	No
ClassificationType	No	Yes	No	Yes
CollateralType	Yes	Yes	Yes	Yes
Commission	Yes	Yes	Yes	Yes
CommissionSchema	Yes	Yes	Yes	Yes
CommissionType	Yes	Yes	Yes	Yes
CommissionValue	Yes	Yes	Yes	Yes
Covenant	Yes	Yes	Yes	Yes
Feature	No	Yes	No	Yes
Formula	No	Yes	No	Yes
FormulaType	Yes	Yes	Yes	Yes
GLAccounts	Yes	Yes	Yes	Yes
InsuranceItem	No	Yes	No	Yes
Interest	No	Yes	No	Yes
InterestCommissionItem	Yes	Yes	Yes	Yes
InterestCommissionItemFilter	Yes	Yes	Yes	Yes
InterestRateMatrix	No	Yes	No	Yes
InterestValue	No	Yes	No	Yes
PaymentScheduleType	No	Yes	No	Yes

Entity	Insert	Read	Update	Delete
ProductAvailabilityItemFilter	No	Yes	No	Yes
ProductClassification	No	Yes	No	Yes
ProductCovenant	No	Yes	No	Yes
ProductDestinationType	No	Yes	No	Yes
ProductDisbursement	No	Yes	No	Yes
ProductGuaranteeStructure	No	Yes	No	Yes
ProductQuestion	No	Yes	No	Yes
TestScenario	No	Yes	No	Yes
BankAccount	Yes	Yes	Yes	Yes
BankAccountOperation	Yes	Yes	Yes	Yes
CollateralRegister	Yes	Yes	Yes	Yes
CollateralRegister_BW	Yes	No	Yes	Yes
CollateralRegisterDocuments	Yes	Yes	Yes	Yes
CollateralRegisterOwner	Yes	Yes	Yes	Yes
CollateralRegisterParticipants	Yes	Yes	Yes	Yes
CollateralRegisterRank	Yes	Yes	Yes	Yes
Contract	Yes	Yes	Yes	Yes
Contract_BW	Yes	Yes	Yes	Yes
ContractAccrualAndProvision	Yes	Yes	Yes	Yes
ContractBorrowers	Yes	Yes	Yes	Yes
ContractClassification	Yes	Yes	Yes	Yes
ContractCollateral	Yes	Yes	Yes	Yes
ContractCorrectionEntry	Yes	Yes	Yes	Yes
ContractCorrectionEntry_BW	Yes	No	Yes	Yes
ContractCorrectionEntryDetail	Yes	Yes	Yes	Yes
ContractCovenant	Yes	Yes	Yes	Yes
ContractCovenant_BW	Yes	Yes	Yes	Yes
ContractDisbursement	Yes	Yes	Yes	Yes
ContractDisbursementTranche	Yes	Yes	Yes	Yes
ContractDisbursementTranche_BW	Yes	Yes	Yes	Yes
ContractDiscount	Yes	Yes	Yes	Yes
ContractDocument	Yes	Yes	Yes	Yes
ContractDocument_BW	Yes	Yes	No	Yes
ContractEvent	Yes	Yes	Yes	Yes
ContractEvent_BW	Yes	No	Yes	Yes
ContractExtended	Yes	Yes	Yes	Yes
ContractFee	Yes	Yes	Yes	Yes

Entity	Insert	Read	Update	Delete
ContractGuarantor	Yes	Yes	Yes	Yes
ContractInterestRate	Yes	Yes	Yes	Yes
ContractParticipant	Yes	Yes	Yes	Yes
ContractParticipant_BW	Yes	Yes	Yes	Yes
ContractPenalty	Yes	Yes	Yes	Yes
ContractReevaluation	Yes	Yes	Yes	Yes
ContractRepaymentSchedule	Yes	Yes	Yes	Yes
ContractRepaymentScheduleDetail	Yes	Yes	Yes	Yes
ContractRepaymentScheduleDisb	Yes	Yes	Yes	Yes
ContractRepaymentScheduleDisbDet	Yes	Yes	Yes	Yes
ContractRepaymentScheduleVersion	Yes	Yes	Yes	Yes
ControlPanel	No	Yes	No	No
CovenantResolution	Yes	Yes	Yes	Yes
CreditFacility	No	Yes	No	Yes
CreditFacilityAccrual	No	Yes	No	Yes
CreditFacilityDetail	Yes	Yes	Yes	Yes
CreditFacilityFee	No	Yes	No	Yes
CreditFacilityFeeValue	No	Yes	No	Yes
CreditFacilityParticipant	No	Yes	No	Yes
CreditFacilityPlan	No	Yes	No	Yes
CreditFacilityProduct	No	Yes	No	Yes
CustomerLimit	Yes	Yes	Yes	Yes
CustomerLimit_BW	Yes	Yes	Yes	Yes
CustomerLimitType	Yes	Yes	Yes	Yes
DailyContractInterest	Yes	Yes	Yes	Yes
DelayCategory	Yes	Yes	Yes	Yes
DepositValueCalculation	Yes	Yes	Yes	Yes
Holiday	Yes	Yes	Yes	Yes
OperationItem	No	Yes	No	Yes
Payment	Yes	Yes	Yes	Yes
PaymentAllocation	Yes	Yes	Yes	Yes
PaymentNotification	Yes	Yes	Yes	Yes
PeriodicityType	Yes	Yes	Yes	Yes
ReconciliationAccountSettings	Yes	Yes	Yes	Yes
RepaymentNotification	No	Yes	No	Yes
RepaymentNotificationDetail	No	Yes	No	Yes

Entity	Insert	Read	Update	Delete
SalesChannel	No	Yes	No	No
SystemParameter	Yes	Yes	Yes	Yes
TransactionOperationType	Yes	Yes	Yes	Yes
VersioningReason	No	Yes	No	No
WeekDay	Yes	Yes	Yes	Yes
AccountType	No	Yes	No	Yes
Action	No	Yes	No	Yes
Activity	No	Yes	No	Yes
Country	No	Yes	No	Yes
Currency	Yes	Yes	Yes	Yes
EntityStatusSettings	Yes	Yes	Yes	Yes
AccountingChart	Yes	Yes	Yes	Yes
AccountingEntry	Yes	Yes	Yes	Yes
AccountingJournal	Yes	Yes	Yes	Yes
AccountingScope	Yes	Yes	Yes	Yes
AccountingSystem	Yes	Yes	Yes	Yes
Journal	Yes	Yes	Yes	Yes
LegalEntity	Yes	Yes	Yes	Yes
LegalEntitySystem	Yes	Yes	Yes	Yes
OperationTransaction	Yes	Yes	Yes	Yes
OperationTransactionValue	Yes	Yes	Yes	Yes
TransactionAccountingModel	Yes	Yes	Yes	Yes
TransactionItemAccountingConfig	Yes	Yes	Yes	Yes
TransactionType	Yes	Yes	Yes	Yes
TransactionValueType	Yes	Yes	Yes	Yes
Activity	No	Yes	No	Yes
Agreement	Yes	Yes	Yes	Yes
Agreement_BW	Yes	Yes	Yes	Yes
AgreementPricing	Yes	Yes	Yes	Yes
Invoice	Yes	Yes	Yes	Yes
Invoice_BW	Yes	Yes	Yes	Yes
InvoiceDetail	Yes	Yes	Yes	Yes
VersionSettings	Yes	Yes	Yes	Yes
optionset	No	Yes	No	Yes
optionsetitem	No	Yes	No	Yes
systemuser	Yes	Yes	Yes	Yes

A user with this security role can access the following endpoints:

Endpoint
FTOS_BP_CheckFromToDates
FTOS_BP_CheckMandatoryRoleXLimitType
FTOS_BP_CommissionSchemaDetail
FTOS_BP_GetBankingProductDefaultValues
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetBankingProductPeriod
FTOS_BP_GetBankingProductTypeValues
FTOS_BP_GetCommissionInfo
FTOS_BP_GetCommissionTypeInfo
FTOS_BP_GetInterestCommissionItem
FTOS_BP_GetPeriodicityTypeInfo
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_AddUpdateContractPaymentHoliday
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateContractCustomValues_ForDisbursement
FTOS_CB_CalculateInvoiceAmounts
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckInvoiceHasDetails
FTOS_CB_CheckLimitTypeRole
FTOS_CB_CheckScheduleImported
FTOS_CB_ContractCommissionAmountCalc
FTOS_CB_CountContractInterests
FTOS_CB_DeleteDocument
FTOS_CB_DeleteRepaymentSchedule
FTOS_CB_Disbursement_WarningInsuficientFunds
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EditContractPenaltyInterestRate
FTOS_CB_EntityVersion_Agreement
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetClosureOfContracts
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractCollateralInfo
FTOS_CB_GetContractEventEditUrl
FTOS_CB_GetContractEventRepaymentScheduleIds

Endpoint
FTOS_CB_GetContractExtendedData
FTOS_CB_GetContractInfo
FTOS_CB_GetContractInterestRates
FTOS_CB_GetContractPeriodicity
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetContractsWithPaymentHolidayPossibility
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetDataSourceChartAgreement
FTOS_CB_GetDataSourceChartContractOverview
FTOS_CB_GetDataSourceChartCreditFacility_LoanOfficerAdminRetail
FTOS_CB_GetDataSourceClosingContractsChart
FTOS_CB_GetDataSourceFutureInstallmentsReport
FTOS_CB_GetDataSourceNewContractsChart
FTOS_CB_GetDataSourcePastDueInstallmentsReport
FTOS_CB_GetDisbursementRepaymentSchedule
FTOS_CB_GetEarlyRepaymentValues
FTOS_CB_GetExchangeRate
FTOS_CB_GetExchangeRateOfCollateralRegisterToContract
FTOS_CB_GetFixedVariableInterest
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetInterestReferencePeriod
FTOS_CB_GetInvoiceDetails
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductDetails
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetPurgeableRecordsByCode
FTOS_CB_GetReasonDetails
FTOS_CB_GetRemainingNotifications
FTOS_CB_GetSalesChannelByName
FTOS_CB_GetScheduleColumns
FTOS_CB_GetSoonToExpireCurrentAccountWithOverdrafts
FTOS_CB_GetSystemInvariantDate

Endpoint
FTOS_CB_GetSystemParameter
FTOS_CB_GetTransactionTypeByCode
FTOS_CB_GetWorkingDate
FTOS_CB_PaymentHolidaySchedule
FTOS_CB_PaymentScheduleFields
FTOS_CB_PaymentScheduleFieldsDisb
FTOS_CB_PeriodicityType
FTOS_CB_ProcessAccrualsAndProvisions
FTOS_CB_RecalculateEarlyRepaymentSchedule
FTOS_CB_RecalculateSchedule
FTOS_CB_RecalculateScheduleOnDemand
FTOS_CB_releaseCollaterals
FTOS_CB_SetInterestRate
FTOS_CB_UpdateActivationDate
FTOS_CB_UpdateTranche
FTOS_CB_ValidateOverdraftExpireFields
FTOS_CB_VerifyInsertedContractInterestRates
FTOS_CheckLicense
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_GL_CheckToBePurgedTransaction
FTOS_GL_GenerateAccountingEntry
FTOS_GL_GetTransactionTypeDetails
FTOS_GL_GetTransactionTypeDetailsBulk
FTOS_TPM_CalculateCommissionAppliedTo
FTOS_TPM_CallFormula
FTOS_TPM_GetAgreementBusinessStatusDisplayName
FTOS_TPM_GetAgreementCommissionsDetails
FTOS_TPM_GetAgreementDetails
FTOS_TPM_GetInvoiceDetailContracts
FTOS_TPM_GetTransactionTypesForClawback
FTOS_VerifyUsersCompetence

Accounting Read

A user with this security role has the following access rights to records in the FintechOS Platform's entities within **their organization**:

Entity	Insert	Read	Update	Delete
Account	No	Yes	No	No
approvalTask	No	Yes	No	No
businessunit	No	Yes	No	No
entity	No	Yes	No	No
entitystatus	No	Yes	No	No
GroupMember	No	Yes	No	No
BankingProduct	No	Yes	No	No
BankingProductType	No	Yes	No	No
Commission	No	Yes	No	No
CommissionSchema	No	Yes	No	No
CommissionType	No	Yes	No	No
CommissionValue	No	Yes	No	No
FormulaType	No	Yes	No	No
GLAccounts	No	Yes	No	No
Interest	No	Yes	No	No
PaymentScheduleType	No	Yes	No	No
ProductClassification	No	Yes	No	No
BankAccount	No	Yes	No	No
BankAccountOperation	No	Yes	No	No
Contract	No	Yes	No	No
ContractAccrualAndProvision	No	Yes	No	No
ContractClassification	No	Yes	No	No
ContractCollateral	No	Yes	No	No
ContractCovenant	No	Yes	No	No
ContractDisbursementTranche	No	Yes	No	No
ContractDocument	No	Yes	No	No
ContractEvent	No	Yes	No	No
ContractFee	No	Yes	No	No
ContractGuarantor	No	Yes	No	No
ContractParticipant	No	Yes	No	No
ContractPenalty	No	Yes	No	No
ContractReevaluation	No	Yes	No	No
ContractRepaymentSchedule	No	Yes	No	No
ContractRepaymentScheduleDetail	No	Yes	No	No
ContractRepaymentScheduleVersion	No	Yes	No	No
CreditFacility	No	Yes	No	No
CreditFacilityAccrual	No	Yes	No	No

Entity	Insert	Read	Update	Delete
CreditFacilityDetail	No	Yes	No	No
CreditFacilityFee	No	Yes	No	No
CreditFacilityFeeValue	No	Yes	No	No
CreditFacilityParticipant	No	Yes	No	No
CreditFacilityPlan	No	Yes	No	No
CreditFacilityProduct	No	Yes	No	No
CustomerLimit	No	Yes	No	No
CustomerLimit_BW	No	Yes	No	No
CustomerLimitType	No	Yes	No	No
OperationItem	No	Yes	No	No
Payment	No	Yes	No	No
PaymentNotification	No	Yes	No	No
PeriodicityType	No	Yes	No	No
RepaymentNotification	No	Yes	No	No
TransactionOperationType	No	Yes	No	No
VersioningReason	No	Yes	No	No
WeekDay	No	Yes	No	No
AccountType	No	Yes	No	No
Currency	No	Yes	No	No
EntityStatusSettings	No	Yes	No	No
AccountingChart	No	Yes	No	No
AccountingEntry	No	Yes	No	No
AccountingJournal	No	Yes	No	No
AccountingScope	No	Yes	No	No
AccountingSystem	No	Yes	No	No
Journal	No	Yes	No	No
LegalEntity	No	Yes	No	No
LegalEntitySystem	No	Yes	No	No
OperationTransaction	No	Yes	No	No
OperationTransactionValue	No	Yes	No	No
TransactionAccountingModel	No	Yes	No	No
TransactionItemAccountingConfig	No	Yes	No	No
TransactionType	No	Yes	No	No
TransactionValueType	No	Yes	No	No
Agreement	No	Yes	No	No
Agreement_BW	No	Yes	No	No
AgreementPricing	No	Yes	No	No
Invoice	No	Yes	No	No

Entity	Insert	Read	Update	Delete
Invoice_BW	No	Yes	No	No
InvoiceDetail	No	Yes	No	No
optionset	No	Yes	No	No
optionsetitem	No	Yes	No	No

A user with this security role can access the following endpoints:

Endpoint
FTOS_BP_CheckFromToDates
FTOS_BP_CheckMandatoryRoleXLimitType
FTOS_BP_CommissionSchemaDetail
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetCommissionInfo
FTOS_BP_GetCommissionTypeInfo
FTOS_BP_GetPeriodicityTypeInfo
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateInvoiceAmounts
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckInvoiceHasDetails
FTOS_CB_CheckLimitTypeRole
FTOS_CB_EditContractPenaltyInterestRate
FTOS_CB_EntityVersion_Agreement
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetClosureOfContracts
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractEventEditUrl
FTOS_CB_GetContractInfo
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetDataSourceChartAgreement
FTOS_CB_GetDataSourceChartContractOverview
FTOS_CB_GetDataSourceChartCreditFacility_LoanOfficerAdminRetail
FTOS_CB_GetDataSourceClosingContractsChart

Endpoint
FTOS_CB_GetDataSourceNewContractsChart
FTOS_CB_GetExchangeRate
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetInterestReferencePeriod
FTOS_CB_GetInvoiceDetails
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetSalesChannelByName
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
FTOS_CB_GetTransactionTypeByCode
FTOS_CB_PeriodicityType
FTOS_CB_UpdateActivationDate
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_GL_GenerateAccountingEntry
FTOS_TPM_CalculateCommissionAppliedTo
FTOS_TPM_CallFormula
FTOS_TPM_GetAgreementBusinessStatusDisplayName
FTOS_TPM_GetAgreementCommissionsDetails
FTOS_TPM_GetAgreementDetails
FTOS_TPM_GetInvoiceDetailContracts
FTOS_TPM_GetTransactionTypesForClawback
FTOS_VerifyUsersCompetence

The following dashboards can be viewed by a user with this security role:

Dashboards
RequestContractEvent
CustomerLimit

Corporate Credit Officer

A user with this security role has the following access rights to records in the FintechOS Platform's entities within **their organization**:

Entity	Insert	Read	Update	Delete
Account	No	Yes	Yes	No
AccountRelOwnership	No	Yes	No	No
approvalTask	No	Yes	No	No
attribute	No	Yes	No	No
businessunit	No	Yes	No	No
BWstatus	No	Yes	No	No
entity	No	Yes	No	No
entitystatus	No	Yes	No	No
Document	No	Yes	Yes	No
GroupAccount	No	Yes	No	No
GroupMember	No	Yes	No	No
BankingProduct	No	Yes	No	No
BankingProductType	No	Yes	No	No
CollateralType	No	Yes	Yes	No
Commission	No	Yes	No	No
Covenant	No	Yes	No	No
Interest	No	Yes	No	No
InterestCommissionItem	No	Yes	No	No
InterestCommissionItemFilter	No	Yes	No	No
PaymentScheduleType	No	Yes	No	No
ProductClassification	No	Yes	No	No
BankAccount	No	Yes	No	No
BankAccountOperation	No	Yes	No	No
CollateralRegister	Yes	Yes	Yes	No
CollateralRegister_BW	Yes	Yes	No	No
CollateralRegisterDocuments	Yes	Yes	Yes	No
CollateralRegisterOwner	Yes	Yes	Yes	No
CollateralRegisterParticipants	Yes	Yes	Yes	No
CollateralRegisterRank	Yes	Yes	Yes	No
Contract	Yes	Yes	Yes	No
Contract_BW	Yes	Yes	No	No
ContractAccrualAndProvision	Yes	Yes	Yes	No
ContractBorrowers	Yes	Yes	Yes	No
ContractClassification	No	Yes	No	No
ContractCollateral	Yes	Yes	Yes	No

Entity	Insert	Read	Update	Delete
ContractCorrectionEntry	Yes	Yes	Yes	No
ContractCorrectionEntryDetail	Yes	Yes	Yes	No
ContractCovenant	Yes	Yes	Yes	Yes
ContractDisbursement	Yes	Yes	Yes	No
ContractDisbursementTranche	Yes	Yes	Yes	Yes
ContractDiscount	Yes	Yes	Yes	No
ContractDocument	Yes	Yes	Yes	Yes
ContractDocument_BW	Yes	Yes	No	Yes
ContractEvent	Yes	Yes	Yes	No
ContractEvent_BW	Yes	Yes	No	No
ContractFee	Yes	Yes	Yes	Yes
ContractGuarantor	Yes	Yes	Yes	No
ContractParticipant	Yes	Yes	Yes	Yes
ContractParticipant_BW	Yes	Yes	Yes	Yes
ContractPenalty	Yes	Yes	Yes	No
ContractPenaltyDetail	Yes	Yes	Yes	No
ContractReevaluation	Yes	Yes	Yes	No
ContractRepaymentSchedule	Yes	Yes	Yes	No
ContractRepaymentScheduleDetail	Yes	Yes	Yes	No
ContractRepaymentScheduleDisb	Yes	Yes	Yes	No
ContractRepaymentScheduleDisbDet	Yes	Yes	Yes	No
ContractRepaymentScheduleVersion	Yes	Yes	Yes	No
ControlPanel	No	Yes	No	No
CreditFacility	Yes	Yes	Yes	No
CreditFacility_BW	Yes	Yes	No	No
CreditFacility_BWA	Yes	Yes	No	No
CreditFacilityAccrual	Yes	Yes	Yes	No
CreditFacilityDetail	Yes	Yes	Yes	No
CreditFacilityDetail_BW	Yes	Yes	No	No
CreditFacilityDetail_BWA	Yes	Yes	No	No
CreditFacilityFee	Yes	Yes	Yes	No
CreditFacilityFeeValue	Yes	Yes	Yes	No
CreditFacilityParticipant	Yes	Yes	Yes	No
CreditFacilityPlan	Yes	Yes	Yes	No
CreditFacilityProduct	Yes	Yes	Yes	No
CustomerLimit	Yes	Yes	Yes	Yes

Entity	Insert	Read	Update	Delete
CustomerLimit_BW	Yes	Yes	Yes	Yes
CustomerLimitType	Yes	Yes	Yes	Yes
DailyContractInterest	Yes	Yes	Yes	No
DelayCategory	No	Yes	No	No
DepositValueCalculation	Yes	Yes	Yes	No
OperationItem	No	Yes	No	No
PaymentAllocation	Yes	Yes	Yes	No
PaymentNotification	Yes	Yes	Yes	No
PeriodicityType	No	Yes	No	No
RepaymentNotification	Yes	Yes	Yes	No
VersioningReason	No	Yes	No	No
AccountType	No	Yes	No	No
Currency	No	Yes	No	No
EntityStatusSettings	No	Yes	No	No
AccountingEntry	No	Yes	No	No
TransactionType	No	Yes	No	No
VersionSettings	No	Yes	No	No
systemuser	No	Yes	No	No

A user with this security role can access the following endpoints:

Endpoint
FTOS_BP_CheckFromToDates
FTOS_BP_CheckMandatoryRoleXLimitType
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetBankingProductsForCreditFacility
FTOS_BP_GetCommissionInfo
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateContractCustomValues_ForDisbursement
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckLimitTypeRole
FTOS_CB_ContractCommissionAmountCalc
FTOS_CB_DeleteDocument
FTOS_CB_DeleteRepaymentSchedule
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EditContractPenaltyInterestRate
FTOS_CB_EntityVersion_Agreement

Endpoint
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CreditFacility
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetClosureOfContracts
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractCollateralInfo
FTOS_CB_GetContractEventEditUrl
FTOS_CB_GetContractExtendedData
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityInfo
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetCreditFacilityParticipantInfo
FTOS_CB_GetDataSourceChartAgreement
FTOS_CB_GetDataSourceChartContractOverview
FTOS_CB_GetDataSourceChartCreditFacility_LoanOfficerAdminRetail
FTOS_CB_GetDataSourceClosingContractsChart
FTOS_CB_GetDataSourceFutureInstallmentsReport
FTOS_CB_GetDataSourceNewContractsChart
FTOS_CB_GetDataSourcePastDueInstallmentsReport
FTOS_CB_GetEarlyRepaymentValues
FTOS_CB_GetExchangeRate
FTOS_CB_GetExchangeRateOfCollateralRegisterToContract
FTOS_CB_GetFixedVariableInterest
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetInterestReferencePeriod
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetPeriodicity
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetRecoverInterest

Endpoint
FTOS_CB_GetRemainingNotifications
FTOS_CB_GetSalesChannelByName
FTOS_CB_GetSoonToExpireCurrentAccountWithOverdrafts
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
FTOS_CB_GetTransactionTypeByCode
FTOS_CB_PaymentHolidaySchedule
FTOS_CB_PaymentScheduleFieldsDisb
FTOS_CB_PeriodicityType
FTOS_CB_ProcessAccrualsAndProvisions
FTOS_CB_RecalculateEarlyRepaymentSchedule
FTOS_CB_RecalculateRescheduleOverduesSchedule
FTOS_CB_RecalculateSchedule
FTOS_CB_releaseCollaterals
FTOS_CB_SelectNotificationForReschedule
FTOS_CB_UpdateActivationDate
FTOS_CB_UpdateContractDelayCategory_Filtered
FTOS_CB_UpdateTranche
FTOS_CB_ValidateOverdraftExpireFields
FTOS_GetCustomersAvailableForCreditFacility
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartCreditFacility
FTOS_TPM_GetTransactionTypesForClawback
FTOS_VerifyUsersCompetence

Retail Credit Officer

A user with this security role has the following access rights to records in the FintechOS Platform's entities within **their organization**:

Entity	Insert	Read	Update	Delete
Account	No	Yes	No	No
AccountRelOwnership	No	Yes	No	No
Address	No	Yes	No	No
approvalTask	No	Yes	No	No
businessunit	Yes	Yes	Yes	No
BWstatus	Yes	Yes	Yes	No
entity	Yes	Yes	Yes	No

Entity	Insert	Read	Update	Delete
entitystatus	Yes	Yes	Yes	No
Division	No	Yes	No	No
Document	No	Yes	No	No
GroupAccount	Yes	Yes	Yes	No
GroupMember	No	Yes	No	No
UnitType	No	Yes	No	No
BandedInterest	No	Yes	No	No
BankingProduct	No	Yes	No	No
BankingProductAgreement	No	Yes	No	No
BankingProductDiscount	No	Yes	No	No
BankingProductDocument	No	Yes	No	No
BankingProductType	No	Yes	No	No
ClassificationType	No	Yes	No	No
CollateralType	Yes	Yes	Yes	No
Commission	Yes	Yes	Yes	No
CommissionSchema	Yes	Yes	Yes	No
CommissionType	Yes	Yes	Yes	No
CommissionValue	Yes	Yes	Yes	No
Covenant	Yes	Yes	Yes	No
Feature	No	Yes	No	No
Formula	No	Yes	No	No
FormulaType	Yes	Yes	Yes	No
GLAccounts	No	Yes	No	No
InsuranceItem	No	Yes	No	No
Interest	No	Yes	No	No
InterestCommissionItem	Yes	Yes	Yes	No
InterestCommissionItemFilter	Yes	Yes	Yes	No
InterestRateMatrix	No	Yes	No	No
InterestValue	No	Yes	No	No
PaymentScheduleType	No	Yes	No	No
ProductAvailabilityItemFilter	No	Yes	No	No
ProductClassification	No	Yes	No	No
ProductCovenant	No	Yes	No	No
ProductDestinationType	No	Yes	No	No
ProductDisbursement	No	Yes	No	No
ProductGuaranteeStructure	No	Yes	No	No
ProductQuestion	No	Yes	No	No
TestScenario	No	Yes	No	No

Entity	Insert	Read	Update	Delete
BankAccount	Yes	Yes	Yes	No
BankAccountOperation	Yes	Yes	Yes	No
CollateralRegister	Yes	Yes	Yes	No
CollateralRegister_BW	Yes	Yes	Yes	No
CollateralRegisterDocuments	Yes	Yes	Yes	No
CollateralRegisterOwner	Yes	Yes	Yes	No
CollateralRegisterParticipants	Yes	Yes	Yes	No
CollateralRegisterRank	Yes	Yes	Yes	No
Contract	Yes	Yes	Yes	No
Contract_BW	Yes	Yes	Yes	No
ContractAccrualAndProvision	Yes	Yes	Yes	No
ContractBorrowers	Yes	Yes	Yes	No
ContractClassification	Yes	Yes	Yes	No
ContractCollateral	Yes	Yes	Yes	No
ContractCorrectionEntry	Yes	Yes	Yes	No
ContractCorrectionEntry_BW	Yes	Yes	Yes	No
ContractCorrectionEntryDetail	Yes	Yes	Yes	No
ContractCovenant	Yes	Yes	Yes	No
ContractCovenant_BW	Yes	Yes	Yes	No
ContractDisbursement	Yes	Yes	Yes	No
ContractDisbursementTranche	Yes	Yes	Yes	No
ContractDisbursementTranche_BW	Yes	Yes	Yes	No
ContractDiscount	Yes	Yes	Yes	No
ContractDocument	Yes	Yes	Yes	Yes
ContractDocument_BW	Yes	Yes	No	Yes
ContractEvent	Yes	Yes	Yes	No
ContractEvent_BW	Yes	Yes	Yes	No
ContractFee	Yes	Yes	Yes	No
ContractGuarantor	Yes	Yes	Yes	No
ContractParticipant	Yes	Yes	Yes	No
ContractParticipant_BW	Yes	Yes	Yes	No
ContractPenalty	Yes	Yes	Yes	No
ContractReevaluation	Yes	Yes	Yes	No
ContractRepaymentSchedule	Yes	Yes	Yes	No
ContractRepaymentScheduleDetail	Yes	Yes	Yes	No
ContractRepaymentScheduleDisb	Yes	Yes	Yes	No

Entity	Insert	Read	Update	Delete
ContractRepaymentScheduleDisbDet	Yes	Yes	Yes	No
ContractRepaymentScheduleVersion	Yes	Yes	Yes	No
ControlPanel	No	Yes	No	No
CovenantResolution	Yes	Yes	Yes	No
CreditFacility	No	Yes	No	No
CreditFacilityAccrual	No	Yes	No	No
CreditFacilityDetail	Yes	Yes	Yes	No
CreditFacilityFee	No	Yes	No	No
CreditFacilityFeeValue	No	Yes	No	No
CreditFacilityParticipant	No	Yes	No	No
CreditFacilityPlan	No	Yes	No	No
CreditFacilityProduct	No	Yes	No	No
CustomerLimit	Yes	Yes	Yes	Yes
CustomerLimit_BW	Yes	Yes	Yes	Yes
CustomerLimitType	Yes	Yes	Yes	Yes
DailyContractInterest	Yes	Yes	Yes	No
DepositValueCalculation	Yes	Yes	Yes	No
OperationItem	No	Yes	No	No
Payment	Yes	Yes	Yes	No
PaymentAllocation	Yes	Yes	Yes	No
PaymentNotification	Yes	Yes	Yes	No
PeriodicityType	Yes	Yes	Yes	No
RepaymentNotification	No	Yes	No	No
RepaymentNotificationDetail	No	Yes	No	No
VersioningReason	No	Yes	No	No
WeekDay	Yes	Yes	No	No
AccountType	No	Yes	No	No
Action	No	Yes	No	No
Activity	No	Yes	No	No
Country	No	Yes	No	No
Currency	Yes	Yes	Yes	No
EntityStatusSettings	Yes	Yes	Yes	No
AccountingEntry	No	Yes	No	No
TransactionType	No	Yes	No	No
Activity	No	Yes	No	No
Agreement	Yes	Yes	Yes	No

Entity	Insert	Read	Update	Delete
Agreement_BW	Yes	Yes	Yes	No
AgreementPricing	Yes	Yes	Yes	No
Invoice	Yes	Yes	Yes	No
Invoice_BW	Yes	Yes	Yes	Yes
InvoiceDetail	Yes	Yes	Yes	No
VersionSettings	Yes	Yes	Yes	No
systemuser	Yes	Yes	Yes	No

A user with this security role can access the following endpoints:

Endpoint
FTOS_BP_CheckFromToDates
FTOS_BP_CheckMandatoryRoleXLimitType
FTOS_BP_CommissionSchemaDetail
FTOS_BP_GetBankingProductDefaultValues
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetCommissionInfo
FTOS_BP_GetCommissionTypeInfo
FTOS_BP_GetPeriodicityTypeInfo
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_AddUpdateContractPaymentHoliday
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateContractCustomValues_ForDisbursement
FTOS_CB_CalculateInvoiceAmounts
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckInvoiceHasDetails
FTOS_CB_CheckLimitTypeRole
FTOS_CB_ContractCommissionAmountCalc
FTOS_CB_DeleteDocument
FTOS_CB_DeleteRepaymentSchedule
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EditContractPenaltyInterestRate
FTOS_CB_EntityVersion_Agreement
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetClosureOfContracts

Endpoint
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractCollateralInfo
FTOS_CB_GetContractEventEditUrl
FTOS_CB_GetContractExtendedData
FTOS_CB_GetContractInfo
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetContractsWithPaymentHolidayPossibility
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetDataSourceChartAgreement
FTOS_CB_GetDataSourceChartContractOverview
FTOS_CB_GetDataSourceChartCreditFacility_LoanOfficerAdminRetail
FTOS_CB_GetDataSourceClosingContractsChart
FTOS_CB_GetDataSourceFutureInstallmentsReport
FTOS_CB_GetDataSourceNewContractsChart
FTOS_CB_GetDataSourcePastDueInstallmentsReport
FTOS_CB_GetEarlyRepaymentValues
FTOS_CB_GetExchangeRate
FTOS_CB_GetExchangeRateOfCollateralRegisterToContract
FTOS_CB_GetFixedVariableInterest
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetInterestReferencePeriod
FTOS_CB_GetInvoiceDetails
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetRemainingNotifications
FTOS_CB_GetSalesChannelByName
FTOS_CB_GetSoonToExpireCurrentAccountWithOverdrafts
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
FTOS_CB_GetTransactionTypeByCode
FTOS_CB_GetWorkingDate

Endpoint
FTOS_CB_PaymentHolidaySchedule
FTOS_CB_PaymentScheduleFields
FTOS_CB_PaymentScheduleFieldsDisb
FTOS_CB_PeriodicityType
FTOS_CB_ProcessAccrualsAndProvisions
FTOS_CB_RecalculateEarlyRepaymentSchedule
FTOS_CB_RecalculateSchedule
FTOS_CB_releaseCollaterals
FTOS_CB_SetInterestRate
FTOS_CB_UpdateActivationDate
FTOS_CB_UpdateContractDelayCategory_Filtered
FTOS_CB_UpdateTranche
FTOS_CB_ValidateOverdraftExpireFields
FTOS_CheckLicense
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_TPM_CalculateCommissionAppliedTo
FTOS_TPM_CallFormula
FTOS_TPM_GetAgreementBusinessStatusDisplayName
FTOS_TPM_GetAgreementCommissionsDetails
FTOS_TPM_GetAgreementDetails
FTOS_TPM_GetInvoiceDetailContracts
FTOS_TPM_GetTransactionTypesForClawback
FTOS_VerifyUsersCompetence

Accounting Officer

A user with this security role has the following access rights to records in the FintechOS Platform's entities within **their organization**:

Entity	Insert	Read	Update	Delete
Account	No	Yes	No	No
approvalTask	No	Yes	No	No
businessunit	No	Yes	No	No
entity	No	Yes	No	No
entitystatus	Yes	Yes	Yes	No
GroupMember	No	Yes	No	No

Entity	Insert	Read	Update	Delete
BankingProduct	No	Yes	No	No
BankingProductType	No	Yes	No	No
Commission	No	Yes	No	No
CommissionSchema	No	Yes	No	No
CommissionType	Yes	Yes	Yes	No
CommissionValue	No	Yes	No	No
FormulaType	No	Yes	No	No
GLAccounts	Yes	Yes	Yes	No
Interest	No	Yes	No	No
PaymentScheduleType	No	Yes	No	No
ProductClassification	No	Yes	No	No
BankAccount	No	Yes	No	No
BankAccountOperation	No	Yes	No	No
Contract	No	Yes	No	No
ContractAccrualAndProvision	No	Yes	No	No
ContractClassification	No	Yes	No	No
ContractCollateral	No	Yes	No	No
ContractCovenant	No	Yes	No	No
ContractDisbursementTranche	No	Yes	No	No
ContractDocument	No	Yes	No	No
ContractEvent	No	Yes	No	No
ContractFee	No	Yes	No	No
ContractParticipant	No	Yes	No	No
ContractPenalty	No	Yes	No	No
ContractReevaluation	No	Yes	No	No
ContractRepaymentSchedule	No	Yes	No	No
ContractRepaymentScheduleDetail	No	Yes	No	No
ContractRepaymentScheduleVersion	No	Yes	No	No
CreditFacility	No	Yes	No	No
CreditFacilityAccrual	No	Yes	No	No
CreditFacilityDetail	No	Yes	No	No
CreditFacilityFee	No	Yes	No	No
CreditFacilityFeeValue	No	Yes	No	No
CreditFacilityParticipant	No	Yes	No	No
CreditFacilityPlan	No	Yes	No	No
CreditFacilityProduct	No	Yes	No	No
CustomerLimit	No	Yes	No	No

Entity	Insert	Read	Update	Delete
CustomerLimit_BW	No	Yes	No	No
CustomerLimitType	No	Yes	No	No
OperationItem	No	Yes	No	No
Payment	No	Yes	No	No
PaymentNotification	No	Yes	No	No
PeriodicityType	No	Yes	No	No
RepaymentNotification	No	Yes	No	No
TransactionOperationType	Yes	Yes	Yes	No
VersioningReason	No	Yes	No	No
WeekDay	No	Yes	No	No
AccountType	No	Yes	No	No
Currency	No	Yes	No	No
EntityStatusSettings	No	Yes	No	No
AccountingChart	Yes	Yes	Yes	No
AccountingEntry	Yes	Yes	Yes	No
AccountingJournal	Yes	Yes	Yes	No
AccountingScope	Yes	Yes	Yes	No
AccountingSystem	Yes	Yes	Yes	No
Journal	Yes	Yes	Yes	No
LegalEntity	Yes	Yes	Yes	No
LegalEntitySystem	Yes	Yes	Yes	No
OperationTransaction	Yes	Yes	Yes	No
OperationTransactionValue	Yes	Yes	Yes	No
TransactionAccountingModel	Yes	Yes	Yes	No
TransactionItemAccountingConfig	Yes	Yes	Yes	No
TransactionType	Yes	Yes	Yes	No
TransactionValueType	Yes	Yes	Yes	No
Agreement	No	Yes	No	No
Agreement_BW	No	Yes	No	No
AgreementPricing	No	Yes	No	No
Invoice	No	Yes	No	No
Invoice_BW	No	Yes	No	No
InvoiceDetail	No	Yes	No	No
optionset	No	Yes	No	No
optionsetitem	No	Yes	No	No

A user with this security role can access the following endpoints:

Endpoint
FTOS_BP_CheckFromToDates
FTOS_BP_CheckMandatoryRoleXLimitType
FTOS_BP_CommissionSchemaDetail
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetCommissionInfo
FTOS_BP_GetCommissionTypeInfo
FTOS_BP_GetPeriodicityTypeInfo
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateInvoiceAmounts
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckInvoiceHasDetails
FTOS_CB_CheckLimitTypeRole
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EditContractPenaltyInterestRate
FTOS_CB_EntityVersion_Agreement
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetClosureOfContracts
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractEventEditUrl
FTOS_CB_GetContractInfo
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetDataSourceChartAgreement
FTOS_CB_GetDataSourceChartContractOverview
FTOS_CB_GetDataSourceChartCreditFacility_LoanOfficerAdminRetail
FTOS_CB_GetDataSourceClosingContractsChart
FTOS_CB_GetDataSourceNewContractsChart
FTOS_CB_GetExchangeRate
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetInterestReferencePeriod

Endpoint
FTOS_CB_GetInvoiceDetails
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetSalesChannelByName
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
FTOS_CB_GetTransactionTypeByCode
FTOS_CB_PeriodicityType
FTOS_CB_UpdateActivationDate
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_GL_GenerateAccountingEntry
FTOS_TPM_CalculateCommissionAppliedTo
FTOS_TPM_CallFormula
FTOS_TPM_GetAgreementBusinessStatusDisplayName
FTOS_TPM_GetAgreementCommissionsDetails
FTOS_TPM_GetAgreementDetails
FTOS_TPM_GetInvoiceDetailContracts
FTOS_TPM_GetTransactionTypesForClawback
FTOS_VerifyUsersCompetence

Supervisor Risk Officer

A user with this security role has the following access rights to records in the FintechOS Platform's entities within **their organization**:

Entity	Insert	Read	Update	Delete
Account	No	Yes	Yes	No
AccountRelOwnership	No	Yes	No	No
approvalTask	No	Yes	Yes	No
businessunit	No	Yes	No	No
entity	No	Yes	No	No
entitystatus	No	Yes	No	No
GroupAccount	No	Yes	No	No

Entity	Insert	Read	Update	Delete
GroupMember	No	Yes	No	No
BankingProductType	No	Yes	No	No
CollateralType	No	Yes	No	No
Commission	No	Yes	No	No
CommissionSchema	No	Yes	No	No
CommissionType	No	Yes	No	No
CommissionValue	No	Yes	No	No
Covenant	No	Yes	No	No
FormulaType	No	Yes	No	No
Interest	No	Yes	No	No
PaymentScheduleType	No	Yes	No	No
ProductClassification	No	Yes	No	No
BankAccount	No	Yes	No	No
BankAccountOperation	No	Yes	No	No
CollateralRegister	No	Yes	No	No
CollateralRegisterDocuments	No	Yes	No	No
CollateralRegisterOwner	No	Yes	No	No
CollateralRegisterParticipants	No	Yes	No	No
CollateralRegisterRank	No	Yes	No	No
Contract	No	Yes	No	No
ContractAccrualAndProvision	No	Yes	No	No
ContractClassification	No	Yes	No	No
ContractCollateral	No	Yes	No	No
ContractCorrectionEntry	No	Yes	No	No
ContractCorrectionEntryDetail	No	Yes	No	No
ContractCovenant	No	Yes	No	No
ContractDisbursementTranche	No	Yes	No	No
ContractDocument	No	Yes	No	No
ContractEvent	No	Yes	No	No
ContractFee	No	Yes	No	No
ContractGuarantor	No	Yes	No	No
ContractParticipant	No	Yes	No	No
ContractPenalty	No	Yes	No	No
ContractPenaltyDetail	No	Yes	No	No
ContractReevaluation	No	Yes	No	No
ContractRepaymentSchedule	No	Yes	No	No
ContractRepaymentScheduleDetail	No	Yes	No	No
ContractRepaymentScheduleDisb	No	Yes	No	No

Entity	Insert	Read	Update	Delete
ContractRepaymentScheduleVersion	No	Yes	No	No
CreditFacility	No	Yes	No	No
CreditFacility_BW	No	Yes	No	No
CreditFacilityAccrual	No	Yes	No	No
CreditFacilityDetail	No	Yes	No	No
CreditFacilityFee	No	Yes	No	No
CreditFacilityFeeValue	No	Yes	No	No
CreditFacilityParticipant	No	Yes	No	No
CreditFacilityPlan	No	Yes	No	No
CreditFacilityProduct	No	Yes	No	No
CustomerLimit	Yes	Yes	Yes	Yes
CustomerLimit_BW	Yes	Yes	Yes	Yes
CustomerLimitType	Yes	Yes	Yes	Yes
OperationItem	No	Yes	No	No
Payment	No	Yes	No	No
PaymentAllocation	No	Yes	No	No
PaymentNotification	No	Yes	No	No
PeriodicityType	No	Yes	No	No
RepaymentNotification	No	Yes	No	No
RepaymentNotificationDetail	No	Yes	No	No
VersioningReason	No	Yes	No	No
WeekDay	No	Yes	No	No
AccountType	No	Yes	No	No
Currency	No	Yes	No	No
EntityStatusSettings	No	Yes	No	No
AccountingEntry	No	Yes	No	No
TransactionType	No	Yes	No	No
Agreement	No	Yes	No	No
Agreement_BW	No	Yes	No	No
AgreementPricing	No	Yes	No	No
Invoice	No	Yes	No	No
Invoice_BW	No	Yes	No	No
InvoiceDetail	No	Yes	No	No
VersionSettings	No	Yes	No	No
userCompetence	No	Yes	No	No

A user with this security role can access the following endpoints:

Endpoint
FTOS_BP_CheckFromToDates
FTOS_BP_CheckMandatoryRoleXLimitType
FTOS_BP_CommissionSchemaDetail
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetCommissionInfo
FTOS_BP_GetCommissionTypeInfo
FTOS_BP_GetPeriodicityTypeInfo
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateInvoiceAmounts
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckInvoiceHasDetails
FTOS_CB_CheckLimitTypeRole
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EditContractPenaltyInterestRate
FTOS_CB_EntityVersion_Agreement
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetClosureOfContracts
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractEventEditUrl
FTOS_CB_GetContractEventFee
FTOS_CB_GetContractInfo
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityInfo
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetDataSourceChartAgreement
FTOS_CB_GetDataSourceChartContractOverview
FTOS_CB_GetDataSourceChartCreditFacility_LoanOfficerAdminRetail
FTOS_CB_GetDataSourceClosingContractsChart
FTOS_CB_GetDataSourceFutureInstallmentsReport
FTOS_CB_GetDataSourceNewContractsChart
FTOS_CB_GetDataSourcePastDueInstallmentsReport
FTOS_CB_GetEarlyRepaymentValues

Endpoint
FTOS_CB_GetExchangeRate
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetInterestReferencePeriod
FTOS_CB_GetInvoiceDetails
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetSalesChannelByName
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
FTOS_CB_GetTransactionTypeByCode
FTOS_CB_PaymentHolidaySchedule
FTOS_CB_PaymentScheduleFields
FTOS_CB_PaymentScheduleFieldsDisb
FTOS_CB_PeriodicityType
FTOS_CB_ScheduleVersionFields
FTOS_CB_UpdateActivationDate
FTOS_Entity Version
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_TPM_CalculateCommissionAppliedTo
FTOS_TPM_CallFormula
FTOS_TPM_GetAgreementBusinessStatusDisplayName
FTOS_TPM_GetAgreementCommissionsDetails
FTOS_TPM_GetAgreementDetails
FTOS_TPM_GetInvoiceDetailContracts
FTOS_TPM_GetTransactionTypesForClawback
FTOS_VerifyUsersCompetence

Risk Officer

A user with this security role has the following access rights to records in FintechOS Platform's entities:

Entity	Insert	Read	Update	Delete
Account	No	Yes	Yes	No
AccountRelOwnership	No	Yes	No	No
Address	No	Yes	No	No
approvalTask	No	Yes	No	No
businessunit	No	Yes	No	No
entity	No	Yes	No	No
entitystatus	No	Yes	No	No
Division	No	Yes	No	No
Document	No	Yes	No	No
GroupAccount	No	Yes	No	No
GroupMember	No	Yes	No	No
UnitType	No	Yes	No	No
BankingProductType	No	Yes	No	No
CollateralType	No	Yes	No	No
Commission	No	Yes	No	No
CommissionSchema	No	Yes	No	No
CommissionType	No	Yes	No	No
CommissionValue	No	Yes	No	No
Covenant	No	Yes	No	No
FormulaType	No	Yes	No	No
Interest	No	Yes	No	No
PaymentScheduleType	No	Yes	No	No
ProductClassification	No	Yes	No	No
BankAccount	No	Yes	No	No
BankAccountOperation	No	Yes	No	No
CollateralRegister	No	Yes	No	No
CollateralRegisterDocuments	No	Yes	No	No
CollateralRegisterOwner	No	Yes	No	No
CollateralRegisterParticipants	No	Yes	No	No
CollateralRegisterRank	No	Yes	No	No
Contract	Yes	Yes	No	No
ContractAccrualAndProvision	No	Yes	No	No
ContractClassification	No	Yes	No	No
ContractCollateral	No	Yes	No	No
ContractCorrectionEntry	No	Yes	No	No

Entity	Insert	Read	Update	Delete
ContractCorrectionEntryDetail	No	Yes	No	No
ContractCovenant	No	Yes	No	No
ContractDisbursementTranche	No	Yes	No	No
ContractDocument	No	Yes	No	No
ContractEvent	No	Yes	No	No
ContractFee	No	Yes	No	No
ContractGuarantor	No	Yes	No	No
ContractParticipant	No	Yes	No	No
ContractPenalty	No	Yes	No	No
ContractReevaluation	No	Yes	No	No
ContractRepaymentSchedule	No	Yes	No	No
ContractRepaymentScheduleDetail	No	Yes	No	No
ContractRepaymentScheduleDisb	No	Yes	No	No
ContractRepaymentScheduleVersion	No	Yes	No	No
CreditFacility	No	Yes	No	No
CreditFacility_BW	No	Yes	No	No
CreditFacilityAccrual	No	Yes	No	No
CreditFacilityDetail	No	Yes	No	No
CreditFacilityFee	No	Yes	No	No
CreditFacilityFeeValue	No	Yes	No	No
CreditFacilityParticipant	No	Yes	No	No
CreditFacilityPlan	No	Yes	No	No
CreditFacilityProduct	No	Yes	No	No
CustomerLimit	Yes	Yes	Yes	Yes
CustomerLimit_BW	Yes	Yes	Yes	Yes
CustomerLimitType	Yes	Yes	Yes	Yes
OperationItem	No	Yes	No	No
Payment	No	Yes	No	No
PaymentAllocation	No	Yes	No	No
PaymentNotification	No	Yes	No	No
PeriodicityType	No	Yes	No	No
RepaymentNotification	No	Yes	No	No
RepaymentNotificationDetail	No	Yes	No	No
VersioningReason	No	Yes	No	No
WeekDay	No	Yes	No	No
AccountType	No	Yes	No	No
Action	No	Yes	No	No

Entity	Insert	Read	Update	Delete
Activity	No	Yes	No	No
Currency	No	Yes	No	No
EntityStatusSettings	No	Yes	No	No
AccountingEntry	No	Yes	No	No
TransactionType	No	Yes	No	No
Activity	No	Yes	No	No
Agreement	No	Yes	No	No
Agreement_BW	No	Yes	No	No
AgreementPricing	No	Yes	No	No
Invoice	No	Yes	No	No
Invoice_BW	No	Yes	No	No
InvoiceDetail	No	Yes	No	No
VersionSettings	Yes	Yes	Yes	No

A user with this security role can access the following endpoints:

Endpoints
FTOS_BP_CheckFromToDates
FTOS_BP_CheckMandatoryRoleXLimitType
FTOS_BP_CommissionSchemaDetail
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetCommissionInfo
FTOS_BP_GetCommissionTypeInfo
FTOS_BP_GetPeriodicityTypeInfo
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateInvoiceAmounts
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckInvoiceHasDetails
FTOS_CB_CheckLimitTypeRole
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EditContractPenaltyInterestRate
FTOS_CB_EntityVersion_Agreement
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetClosureOfContracts

Endpoints
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractEventEditUrl
FTOS_CB_GetContractEventFee
FTOS_CB_GetContractInfo
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityInfo
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetDataSourceChartAgreement
FTOS_CB_GetDataSourceChartContractOverview
FTOS_CB_GetDataSourceChartCreditFacility_LoanOfficerAdminRetail
FTOS_CB_GetDataSourceClosingContractsChart
FTOS_CB_GetDataSourceFutureInstallmentsReport
FTOS_CB_GetDataSourceNewContractsChart
FTOS_CB_GetDataSourcePastDueInstallmentsReport
FTOS_CB_GetEarlyRepaymentValues
FTOS_CB_GetExchangeRate
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetInterestReferencePeriod
FTOS_CB_GetInvoiceDetails
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetSalesChannelByName
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
FTOS_CB_GetTransactionTypeByCode
FTOS_CB_PaymentHolidaySchedule
FTOS_CB_PaymentScheduleFields
FTOS_CB_PaymentScheduleFieldsDisb
FTOS_CB_PeriodicityType
FTOS_CB_ScheduleVersionFields
FTOS_CB_UpdateActivationDate

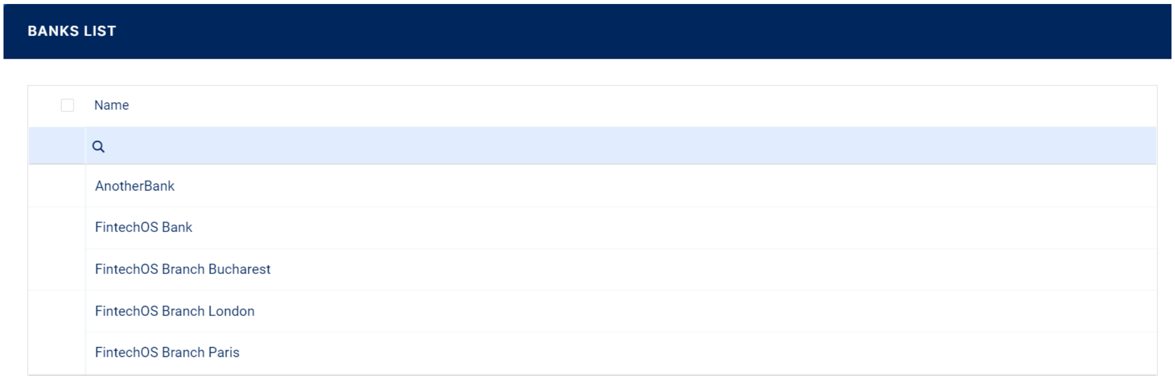
Endpoints
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_TPM_CalculateCommissionAppliedTo
FTOS_TPM_CallFormula
FTOS_TPM_GetAgreementBusinessStatusDisplayName
FTOS_TPM_GetAgreementCommissionsDetails
FTOS_TPM_GetAgreementDetails
FTOS_TPM_GetInvoiceDetailContracts
FTOS_TPM_GetTransactionTypesForClawback
FTOS_VerifyUsersCompetence

Banks

A bank is a financial institution licensed to receive deposits and make loans. Core Banking needs to have some basic information about your main bank or financial institution and your branches network, as well as about other banks or financial institutions with whom you are in a business relationship. Such information includes name, bank identification, branches, and bank accounts.

To manage bank records in Core Banking:

1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click **Bank** menu item to open the **Banks List** page.



BANKS LIST

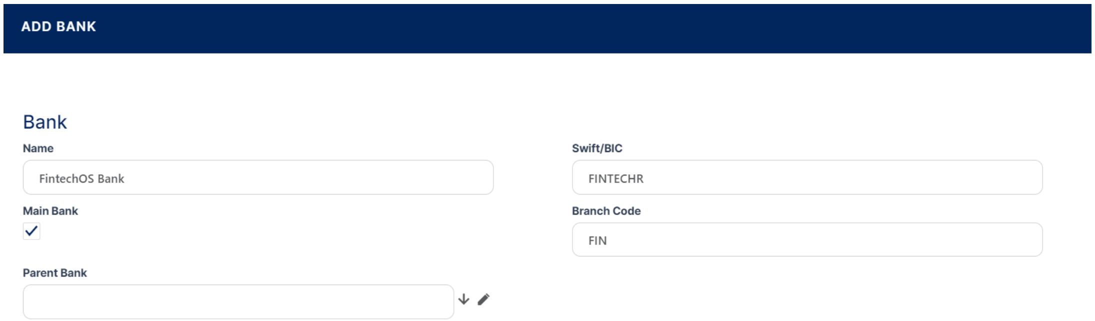
□	Name
	AnotherBank
	FintechOS Bank
	FintechOS Branch Bucharest
	FintechOS Branch London
	FintechOS Branch Paris

On the **Banks List** page, you can add new bank records or search, edit, and delete existing ones. You can also create external bank accounts for customers.

Creating Bank Records

Follow these steps to create new bank records:

1. Click **Insert** on the **Banks List** page to display the **Add Bank** page.
2. Fill in the following fields:



ADD BANK

Bank

Name: FintechOS Bank

Swift/BIC: FINTECHR

Main Bank: ☑

Branch Code: FIN

Parent Bank:

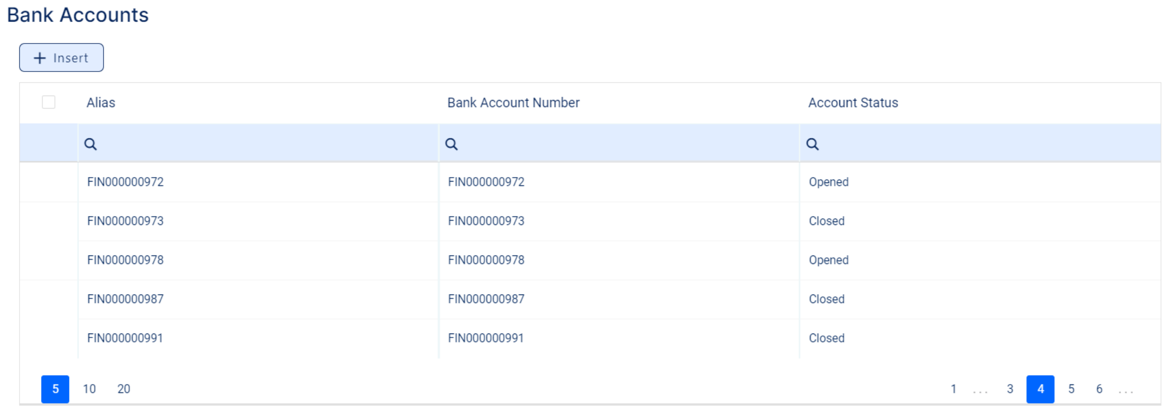
   - **Name** - Enter the name of the bank/ financial institution.
   - **Main Bank** - If the checkbox to mark this record as the main bank, the one where all bank accounts are created when a new contract is approved.

3. Optionally, insert the following information:
   - **Swift/BIC** - Enter the SWIFT / BIC codes of the bank (maximum length 11 characters).

    - First 4 characters - Represent the bank code (alphabetic)
    - Next 2 characters - ISO 3166-1 alpha-2 country code (alphabetic)
    - Next 2 characters - Location code (alphanumeric) (passive participants have 1 in the second character)
    - Last 3 characters - Determine the branch code, optional (XXX for main branch/ office) (alphanumeric)
  - **Parent Bank** - Select the parent bank of the new record if the newly entered bank is a branch.
  - **Branch Code** - Enter the code of the branch (maximum length 4 characters).

4. Click the **Save and Reload** button. The bank record is saved and the **Bank Accounts** section is displayed.

For an existent bank record, view all the accounts opened for that bank record in your system within the **Bank Accounts** section. If the bank is marked as `Main Bank`, then all the accounts created for customers when approving a new contract are listed here. Each account shows the alias, the number, and the status of the bank account.



Bank Accounts

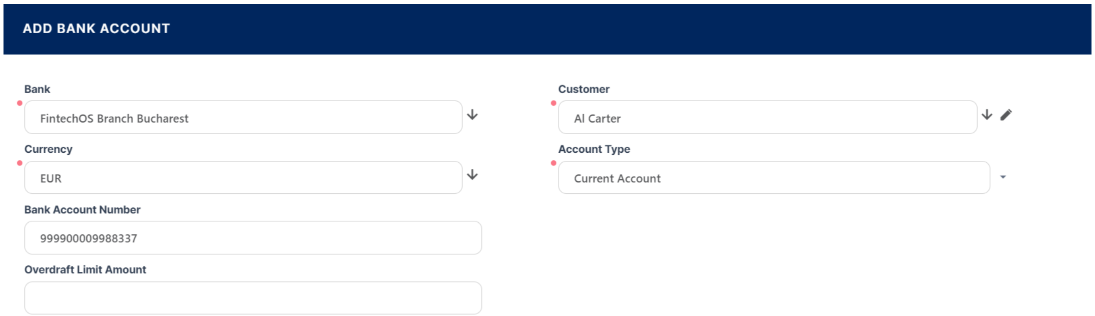
□	Alias	Bank Account Number	Account Status
	FIN000000972	FIN000000972	Opened
	FIN000000973	FIN000000973	Closed
	FIN000000978	FIN000000978	Opened
	FIN000000987	FIN000000987	Closed
	FIN000000991	FIN000000991	Closed

Creating External Bank Accounts

You can create bank accounts opened at banks other than your main bank. These accounts are known as `external accounts`, being marked with attribute `isExtern = True`, and they are created within your system, without interfering with the other bank's accounts.

Follow these steps to create new external bank accounts:

1. On the **Banks List** page, double-click the desired bank record to edit it.
2. On the newly displayed **Edit Bank** page, make sure the bank is not marked as `Main Bank`.
3. Under the **Bank Account** section, click the **Insert** button to open the **Add Bank Account** page.
4. Fill in the following fields:

   ADD BANK ACCOUNT

   Bank: FintechOS Branch Bucharest

   Customer: Al Carter

   Currency: EUR

   Account Type: Current Account

   Bank Account Number: 999900009988337

   Overdraft Limit Amount:

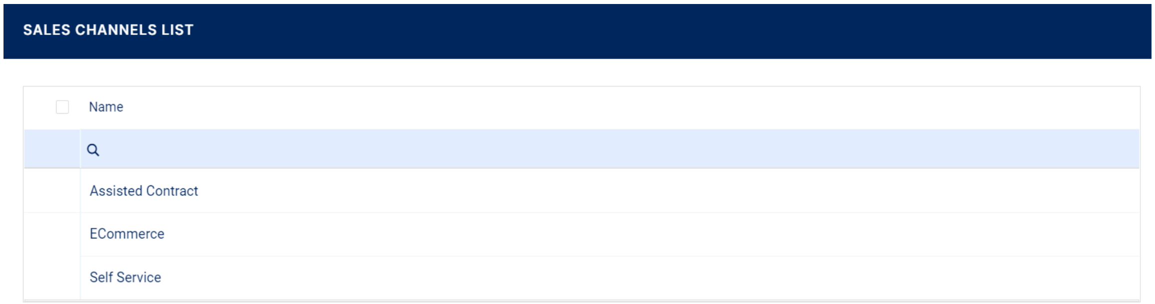
   - **Bank** - This field is automatically completed with the bank where you are opening the external bank account.
   - **Customer** - Select the customer for whom you are opening the account.
   - **Currency** - Select the currency of the account.
   - **Account Type** - Select the type of the account. Possible values are current, savings, fixed deposit, term deposit, and loan term account.
5. Optionally, insert the following information:
   - **Bank Account Number** - Enter the bank account number recorded within the external bank's systems. This is not the bank account number in Core Banking, which is automatically generated when you save the record.
   - **Overdraft Limit Amount** - Enter an overdraft limit amount, if applicable.
6. Click the **Save and Close** button. The external bank account record is saved in the **Opened** status and is ready to be used for referencing in bank documents.

Sales Channels

In Core Banking, you can create contracts through different channels: the dedicated Core Banking menus in FintechOS Portal, API integration calls, or various customer journeys implemented within FintechOS accelerators. The information about the sales channel for each contract is stored at the contract level, so it can be used by financial institutions, for example for different pricing or for selling a product on a specific channel.

To manage the sales channel that your financial institution uses:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Click **Sales Channels** menu item to open the **Sales Channels List** page.



SALES CHANNELS LIST

□	Name
	🔍
	Assisted Contract
	ECommerce
	Self Service

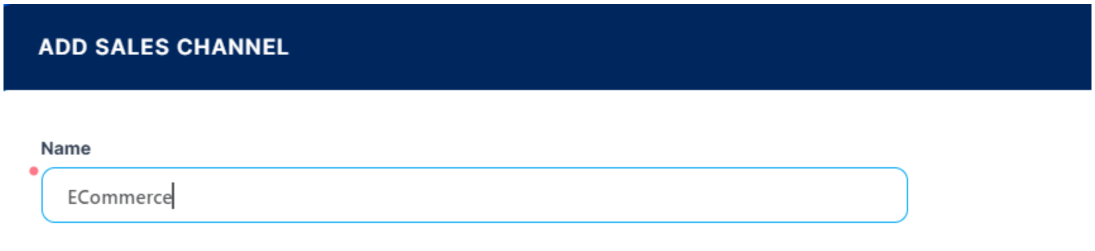
On the **Sales Channels List** page, you can create a new sales channel record, edit an record from the list by double-clicking it, delete, export or find a record.

IMPORTANT!
You need to have the **Loan Admin Officer** security role attached to your user to access the **Sales Channel** menu.

Creating Sales Channel Records

Follow these steps to create new sales channel records:

1. Click the **Insert** button on the **Sales Channels List** page to open the **Add Sales Channel** page is displayed.
2. Fill in the **Name** field with the new sales channel's desired name.



ADD SALES CHANNEL

Name

ECommerce

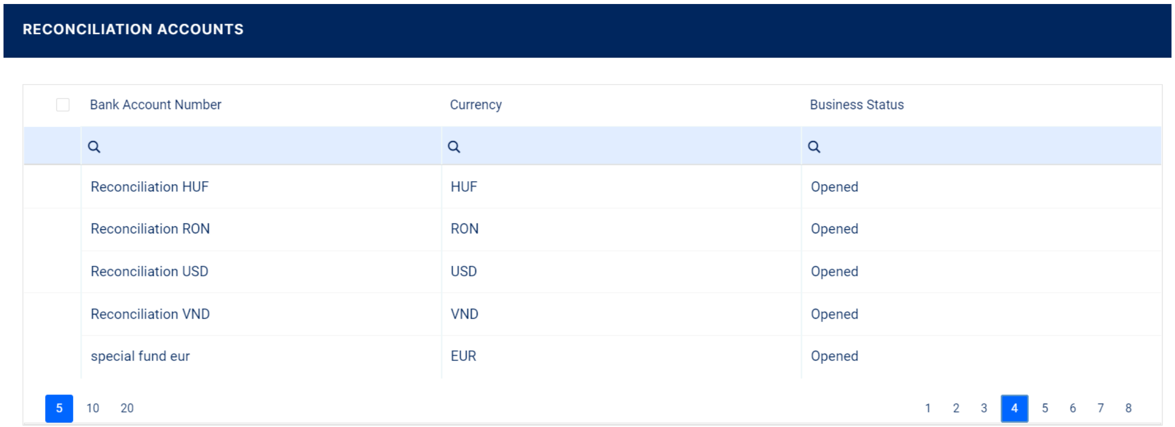
3. Click the **Save and Close** button. The record is now saved and you can use it to specify a contract's origin.

Reconciliation Accounts

Reconciliation is an accounting process that compares two sets of records to check that figures are correct and in agreement. Reconciliation also confirms that accounts in the general ledger are consistent, accurate, and complete. Core Banking uses reconciliation accounts in its accounting processes and in the product definition itself as tools for monitoring the activity for a specific product or groups of products. When creating a banking product, you must choose a reconciliation account within the **Associated Transactions** tab of the banking product. These accounts are later used by the contracts based on those banking products when performing debit or credit transactions. Reconciliation accounts are also known as "self-bank accounts" or "internal bank accounts".

To manage reconciliation accounts:

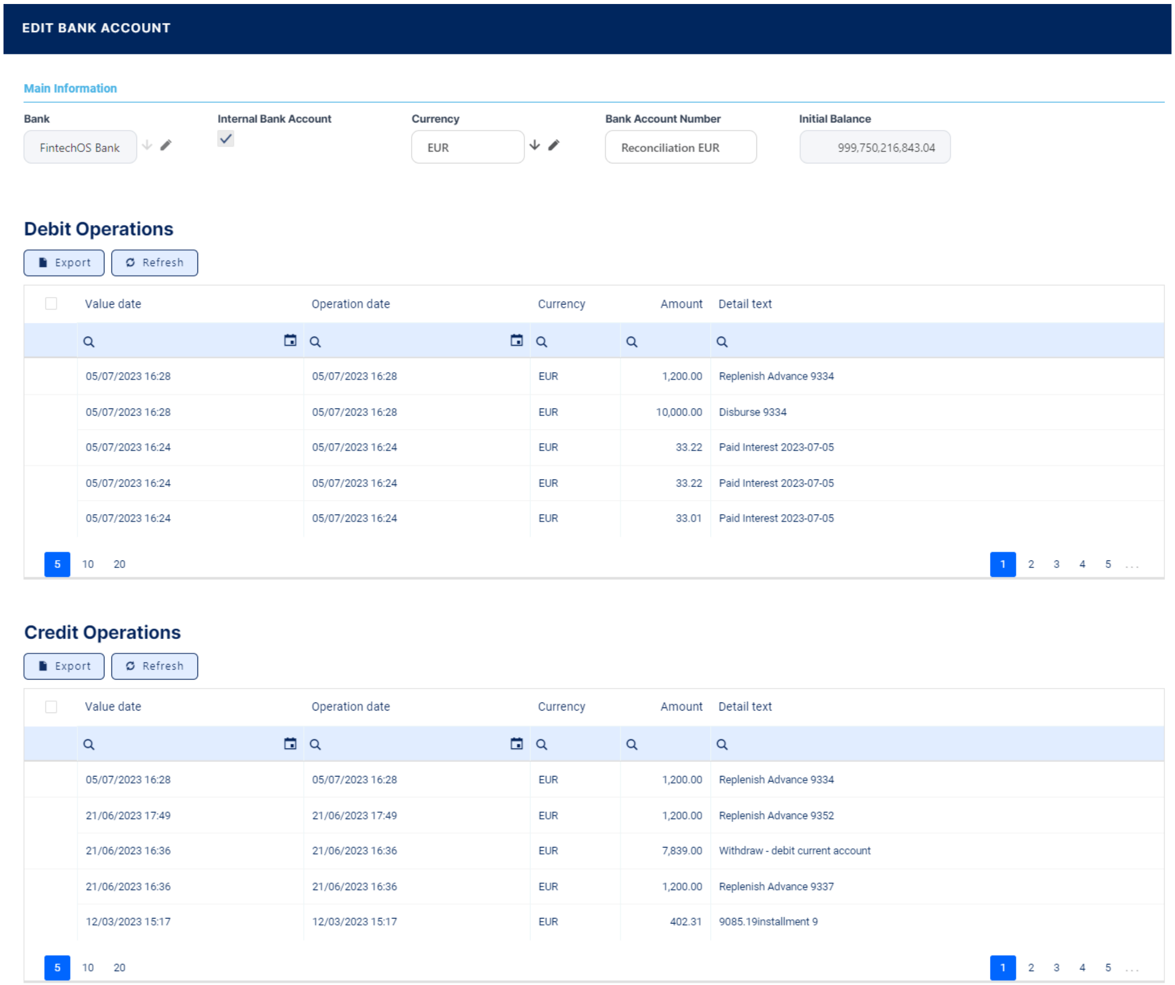
1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click **Reconciliation Accounts** to open the **Reconciliation Accounts** page.



RECONCILIATION ACCOUNTS

Bank Account Number	Currency	Business Status
Reconciliation HUF	HUF	Opened
Reconciliation RON	RON	Opened
Reconciliation USD	USD	Opened
Reconciliation VND	VND	Opened
special fund eur	EUR	Opened

On the **Reconciliation Accounts** page, you can create a new reconciliation account record, edit an record from the list by double-clicking it, delete, export or find a record. You can also view the debit and credit operations performed through each reconciliation account by double-clicking the desired account and observing the **Debit Operations** and **Credit Operations** sections.



Bank	Internal Bank Account	Currency	Bank Account Number	Initial Balance
FintechOS Bank	☑	EUR	Reconciliation EUR	999,750,216,843.04

Debit Operations

Value date	Operation date	Currency	Amount	Detail text
05/07/2023 16:28	05/07/2023 16:28	EUR	1,200.00	Replenish Advance 9334
05/07/2023 16:28	05/07/2023 16:28	EUR	10,000.00	Disburse 9334
05/07/2023 16:24	05/07/2023 16:24	EUR	33.22	Paid Interest 2023-07-05
05/07/2023 16:24	05/07/2023 16:24	EUR	33.22	Paid Interest 2023-07-05
05/07/2023 16:24	05/07/2023 16:24	EUR	33.01	Paid Interest 2023-07-05

Credit Operations

Value date	Operation date	Currency	Amount	Detail text
05/07/2023 16:28	05/07/2023 16:28	EUR	1,200.00	Replenish Advance 9334
21/06/2023 17:49	21/06/2023 17:49	EUR	1,200.00	Replenish Advance 9352
21/06/2023 16:36	21/06/2023 16:36	EUR	7,839.00	Withdraw - debit current account
21/06/2023 16:36	21/06/2023 16:36	EUR	1,200.00	Replenish Advance 9337
12/03/2023 15:17	12/03/2023 15:17	EUR	402.31	9085.19installment 9

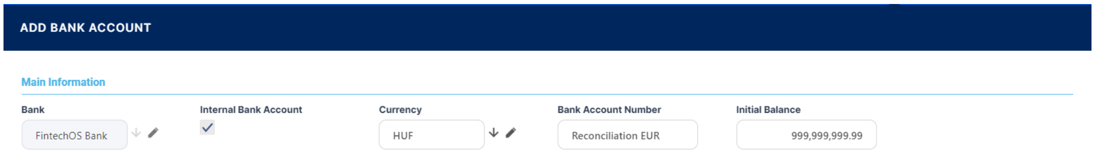
NOTE

You can open reconciliation accounts in every currency, but for the sake of automating some processes, Core Banking allows you to define which reconciliation account opened in a specific currency should be used within a period of time. Thanks to these settings, Core Banking determines automatically the reconciliation account to be used for a currency at a specific date. Read about these settings on the "Reconciliation Account Settings" on page 151 page.

Creating Reconciliation Accounts

Follow these steps to create reconciliation accounts:

1. In the FintechOS Portal, click the **Insert** button on the top right side of the **Reconciliation Accounts** page. The **Add Bank Account** page is displayed.
2. Fill in the following fields:



ADD BANK ACCOUNT

Main Information

Bank	Internal Bank Account	Currency	Bank Account Number	Initial Balance
FintechOS Bank	☑	HUF	Reconciliation EUR	999,999,999.99

- **Bank** - Automatically completed with the bank or financial institution marked as `Main Bank` in the system. You can't change this value.
- **Internal Bank Account** - This checkbox specifies that the account is an internal bank account, used for reconciliation. Automatically checked as `True`. You can't change this value.
- **Currency** - Select from the list the currency of the reconciliation account.
- **Bank Account Number** - Enter the bank account number for the reconciliation account.
- **Initial Balance** - Edit the reconciliation account's initial amount, which is automatically completed with the value of 999,999,999.00. You need the initial balance especially for those accounts that are used for debit purposes, representing the source for some transactions.

3. Click the **Save and Reload** button. The reconciliation account is saved and its status becomes **Opened**, ready to be used.

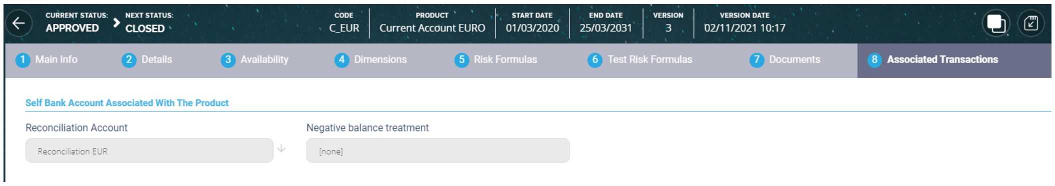
The **Debit Operations** and **Credit Operations** sections are now displayed, still empty. You can see new records in these two sections when transactions are performed for contracts based on banking products that use this reconciliation account. The following information is displayed about each transaction:

- **Value Date** - The date when the transaction was requested in the system.
- **Operation Date** - The date when the transaction was operated by the system.
- **Currency** - The currency of the transaction.
- **Amount** - The amount of the transaction.

- **Detail Text** - The text representing information about the transaction, such as event type, repayment notification number, due date, and so on.

Example of Reconciliation Accounts Usage in Core Banking

Let's consider the product definition of the `Current Account EURO` banking product, where the value selected for the **Reconciliation Account** field = `Reconciliation EUR`:



CURRENT STATUS: APPROVED
NEXT STATUS: CLOSED

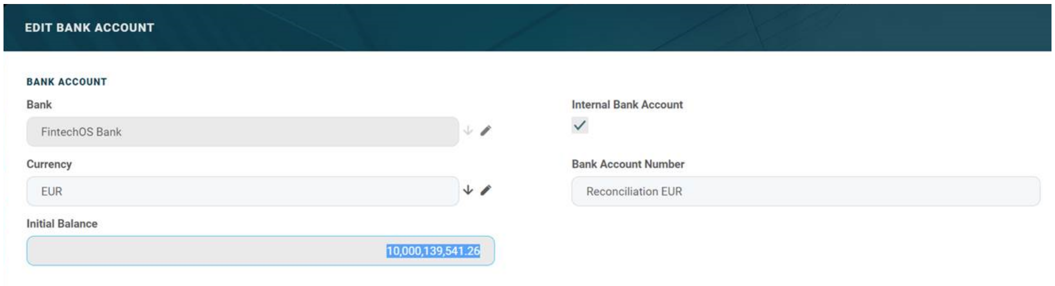
CODE	PRODUCT	START DATE	END DATE	VERSION	VERSION DATE
C_EUR	Current Account EURO	01/03/2020	25/03/2031	3	02/11/2021 10:17

Self Bank Account Associated With The Product

Reconciliation Account: Reconciliation EUR

Negative balance treatment: [none]

Checking the balance of the `Reconciliation EUR` account in the Reconciliation Accounts menu, we see the **Initial Balance** = 10,000,139,541.26:



EDIT BANK ACCOUNT

BANK ACCOUNT

Bank: FintechOS Bank

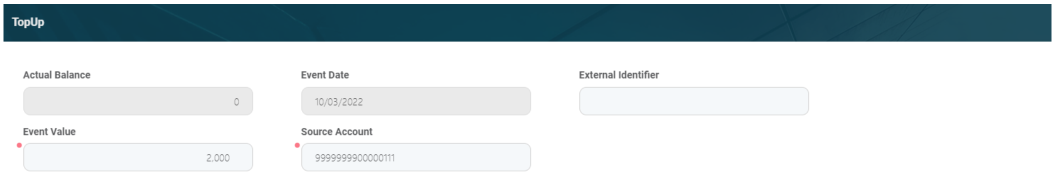
Currency: EUR

Initial Balance: 10,000,139,541.26

Internal Bank Account: ✓

Bank Account Number: Reconciliation EUR

Using an approved contract based on the `Current Account EURO` banking product, we inserted and approved a **Top-Up Account** transaction type, with an **Event Value** = 300:



TopUp

Actual Balance: 0

Event Date: 10/03/2022

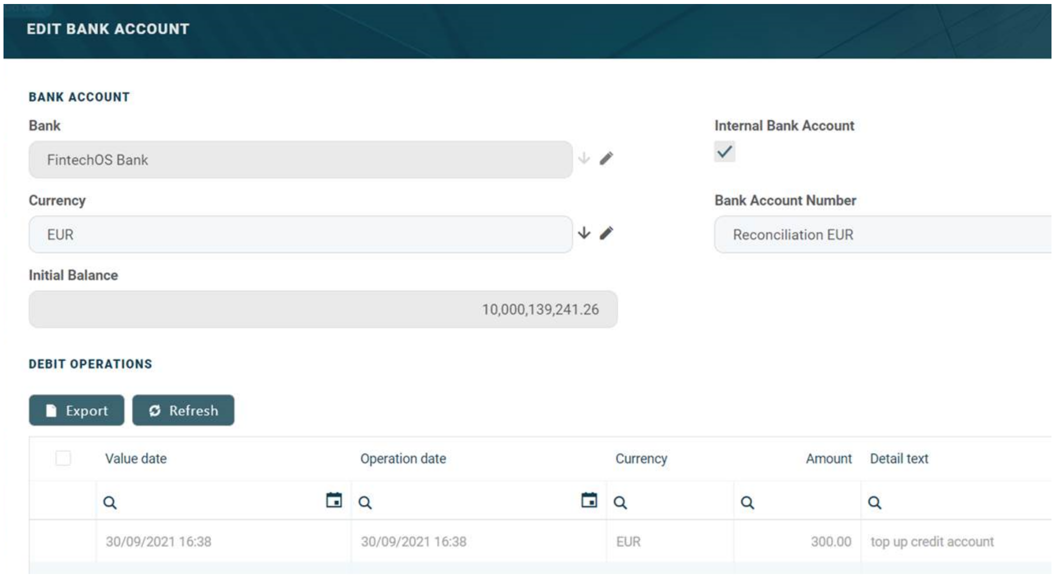
External Identifier:

Event Value: 2,000

Source Account: 9999999900000111

Checking back to the `Reconciliation EUR` account in the Reconciliation Accounts menu, the balance of the reconciliation account is updated to reflect the transaction just inserted above. The new balance value is

`10,000,139,241.26`, with a difference of -300 from the previous value. Observe that the same debit transaction is listed in the **Debit Operations** section:



EDIT BANK ACCOUNT

BANK ACCOUNT

Bank: FintechOS Bank

Internal Bank Account: ✓

Currency: EUR

Bank Account Number: Reconciliation EUR

Initial Balance: 10,000,139,241.26

DEBIT OPERATIONS

Value date	Operation date	Currency	Amount	Detail text
30/09/2021 16:38	30/09/2021 16:38	EUR	300.00	top up credit account

Reconciliation Account Settings

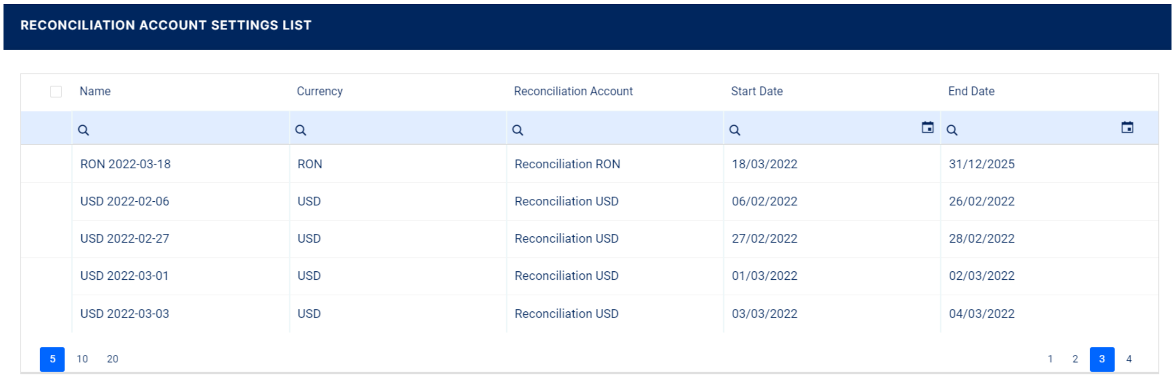
Reconciliation accounts can be opened in every currency, but for the sake of automating some processes, Core Banking allows you to define which reconciliation account opened in a specific currency should be used within a period of time. Thanks to these settings, Core Banking determines automatically the reconciliation account to be used for a currency at a specific date. For example, it validates the existence of a setting for a reconciliation account for a specific currency upon third-party agreement or agreement version approval. Core Banking also checks whether the reconciliation account setting has continuity for the entire validity period of the agreement. The reconciliation account is then automatically determined for usage within the third-party invoicing process.

The **Reconciliation Account Settings** menu item, accessible within the Portal's **Admin Configurations** menu, allows you to .

IMPORTANT!
You must have the associated role of Loan Admin Officer to view, insert, update, or delete reconciliation account settings records.

To configure the default settings of reconciliation accounts:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Click the **Reconciliation Account Settings** menu item to open the **Reconciliation Account Settings List** page.



RECONCILIATION ACCOUNT SETTINGS LIST

□	Name	Currency	Reconciliation Account	Start Date	End Date
	RON 2022-03-18	RON	Reconciliation RON	18/03/2022	31/12/2025
	USD 2022-02-06	USD	Reconciliation USD	06/02/2022	26/02/2022
	USD 2022-02-27	USD	Reconciliation USD	27/02/2022	28/02/2022
	USD 2022-03-01	USD	Reconciliation USD	01/03/2022	02/03/2022
	USD 2022-03-03	USD	Reconciliation USD	03/03/2022	04/03/2022

On the **Reconciliation Account Settings List** page, you can create a new reconciliation account setting, edit an record from the list by double-clicking it, delete, export or find a record.

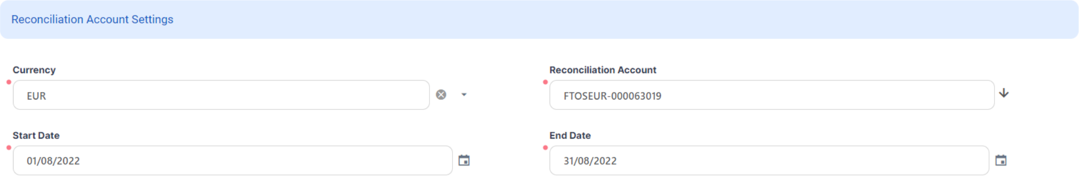
NOTE
You can only delete a setting if the reconciliation account associated to it is not part of a third-party invoice.
You can only edit the `End Date` of a setting if the reconciliation account associated to it is part of a third-party invoice. The `End Date` must be >= than the current system date.

Creating Reconciliation Account Settings

Follow these steps to create reconciliation account settings:

1. Click **Insert** on the **Reconciliation Account Settings List** page to open the **Reconciliation Account Settings** page.

2. Fill in the following fields:



Reconciliation Account Settings

Currency	Reconciliation Account
EUR	FTOSEUR-000063019
Start Date	End Date
01/08/2022	31/08/2022

- **Currency** - Select from the list the currency of the reconciliation account.
- **Reconciliation Account** - Select the reconciliation account that Core Banking should automatically use for operations in the specified currency.
- **Start Date** - Select the starting date for Core Banking to use this reconciliation account for operations in the specified currency.
- **End Date** - Select the ending date for Core Banking to use this reconciliation account for operations in the specified currency. Make sure that `End Date>= Start Date`.

3. Click the **Save and Reload** button.

   Core Banking checks whether the start dates and end dates don't overlap for reconciliation accounts defined for the same currency. If the validation passes, the reconciliation account setting is saved with a unique name in the form of `Currency Code + Start Date`.

Customers, Groups and Limits

Financial institutions deal with customers, either individuals or legal entities. Customers may be part of groups. Core Banking enables you to manage customers and groups with the aid of dedicated menus.

To perform credit related activities, financial institutions can monitor their exposure by setting up limits for their customers. You can manage limits through a series of menus and reports available in Core Banking.

NOTE
You must record customers, groups (if applicable), and limits (depending on your system's configuration) to Core Banking before creating loan contracts for those customers.

This page contains a series of topics that explain how Core Banking is configured to work with customers, groups, and limits:

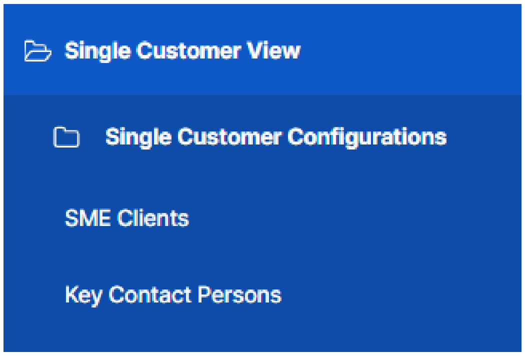
Customers

A customer is an individual or a legal entity who has an account with a bank. Opening an account is the crucial element in establishing the bank-customer relationship. You must create a record for each of your financial institution's customers in Core Banking. The customer records are stored in the `Account` entity.

IMPORTANT!
Perform complex customer management operations using the **Single Customer View** solutions, as described here.
You can also manage customers and their relevant information from Core Banking.

Creating Customers Using the Single Customer View Menus

You can manage customers via the **Single Customer View** dedicated menus: **SME Clients**, **Banking Retail Clients** and **Key Contact Person**.



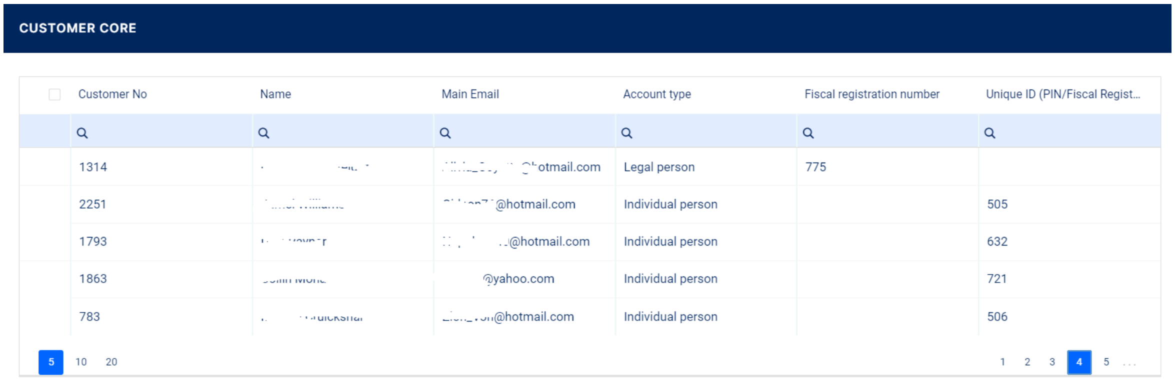
Create new customer records for customers following the steps described in the Adding Companies page.

After creating a record for a customer, proceed to filling in their details as described in the Managing Detailed Company Information page.

NOTE
A customer has to be in the `Prospect` or `Customer` status to be selected when creating contracts.

Alternatively, follow these steps to manage customers in Core Banking:

1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click **Customer Core** menu item to open the **Customer Core** page.



CUSTOMER CORE

□	Customer No	Name	Main Email	Account type	Fiscal registration number	Unique ID (PIN/Fiscal Regist...
	1314	[illegible]	[illegible]otmail.com	Legal person	775	
	2251	[illegible]	[illegible]@hotmail.com	Individual person		505
	1793	[illegible]	[illegible]@hotmail.com	Individual person		632
	1863	[illegible]	@yahoo.com	Individual person		721
	783	[illegible]	[illegible]@hotmail.com	Individual person		506

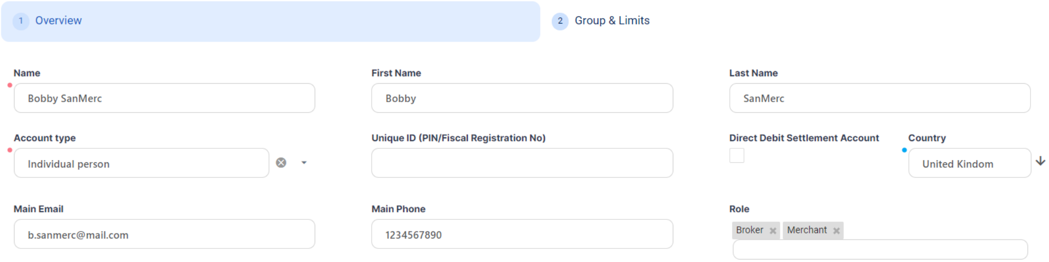
On the **Customer Core** page, you can add new customer records or search, edit, and delete existing ones.

Creating Customers

Follow these steps to create new customer records:

1. Click **Insert** on the **Customer Core** page to open the **Overview** page, the first in the customer creation process.

2. Fill in the following fields:



Name: Bobby SanMerc
First Name: Bobby
Last Name: SanMerc
Account type: Individual person
Unique ID (PIN/Fiscal Registration No):
Direct Debit Settlement Account: □
Country: United Kindom
Main Email: b.sanmerc@mail.com
Main Phone: 1234567890
Role: Broker Merchant

- **Name** - Enter the name of the customer.

- **Account Type** - Select the customer type from the possible options: `Legal person`, `Individual person` or `Self-employed individual`.

3. Optionally, fill in the following fields:

- **First Name** - Enter the first name of the customer, if this is not a legal person.
- **Last Name** - Enter the last name of the customer, if this is not a legal person.
- **Unique ID (PIN/Fiscal Registration No)** - Enter the customer's unique ID:
  - For an `Individual customer` enter their personal identification number (PIN).
  - For a `Legal person` or a `Self employed individual` customer enter their fiscal registration number.
- **Direct Debit Settlement Account** - Select this checkbox if the direct debit settlement for repayment notifications should be turned on for this customer, regardless of the settings at the contracts level.
  You can choose whether this setting should impact all the customer's existing contracts or not with the aid of a Core Bankingsystem parameter.
- **Country** - Select the country of the customer. This can affect `Country Exposure` limits for customers part of groups.
- **Main Email** - Enter the email address of the customer.

- **Main Phone** - Enter the phone number of the customer.

- **Role** - Select as many roles as you wish for this customer to be able to have within contracts. The values are displayed from the `Contract Role` option set.

  > **NOTE** Roles can affect the limits that can be set up for a customer. If a customer has a role, then they can have role-based limits that are configured with a limit type associated to the same role. For example, if the customer is declared as Merchant, they can have a limit based on a limit type with the associated Merchant role.

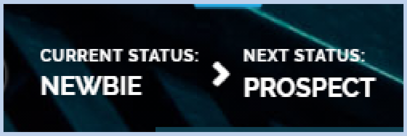
4. Click the **Save and Reload** button.

   The customer is saved in **Newbie** status, with minimum information, such as an auto-generated customer number, but you can now add more information about the customer in the following sections: **Company Representatives**, **Products**, **Bank Accounts** and **Collateral Register**. The **Groups & Limits** tab helps you with the configuration of group membership and limits for this customer.

5. Scroll through each of the newly displayed sections and fill in the necessary information, as described within the sections.

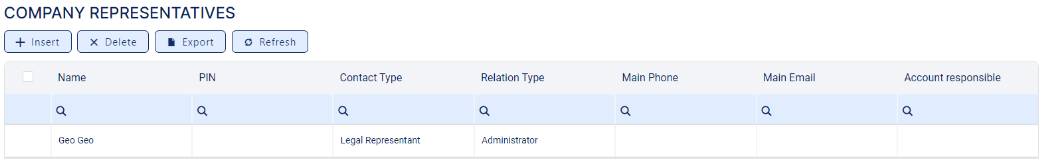
6. Select the **Groups & Limits** tab and fill in the necessary information, as described here.

> **NOTE**
> Change the customer's status `Prospect` or `Customer` to select that customer when you create contracts, as pictured here:



Manage Company Representatives

This section lists the customer’s legal representatives, such as administrators, affiliates, owners, or other key contact persons.



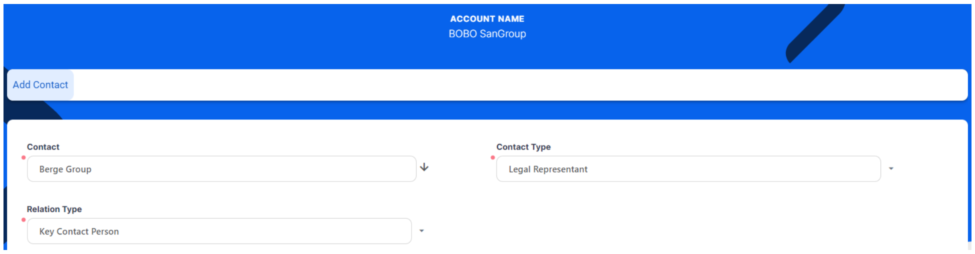
COMPANY REPRESENTATIVES

Name	PIN	Contact Type	Relation Type	Main Phone	Main Email	Account responsible
Geo Geo		Legal Representant	Administrator			

In this section, you can add new representatives, view the existing ones by clicking the desired record from the list, delete records from the list and export the list.

To add a new representative to the customer, follow these steps:

1. Click the **Insert** button within the **Company Representatives** section to open the **Add Contact** page.
2. Fill in the following fields:



ACCOUNT NAME
BOBO SanGroup

Contact: Berge Group

Contact Type: Legal Representant

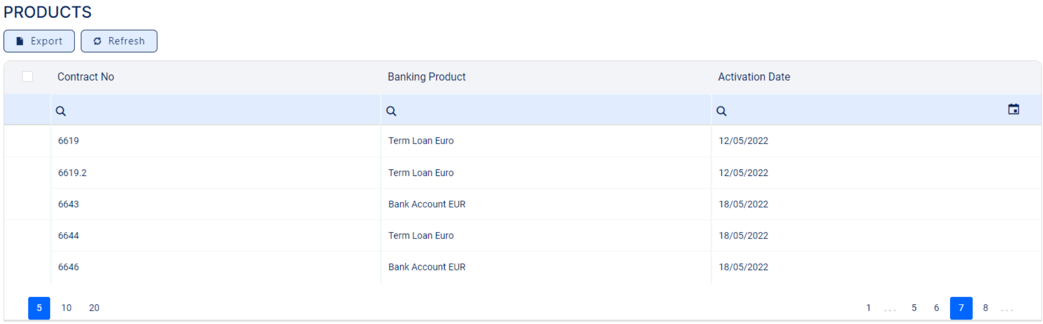
Relation Type: Key Contact Person

- **Contact** - Select an existing customer from the database as your new customer's representative.
- **Contact Type** - Select the contact type from the drop-down list.
- **Account Relation Type** - Select the representative's type of relation with the customer from the drop-down list of possible values.

3. Click the **Save and Close** button.

View Products

View the contracts opened for the customer in the **Products** section. The list displays information about the number of the contract, the banking product, and the activation date.



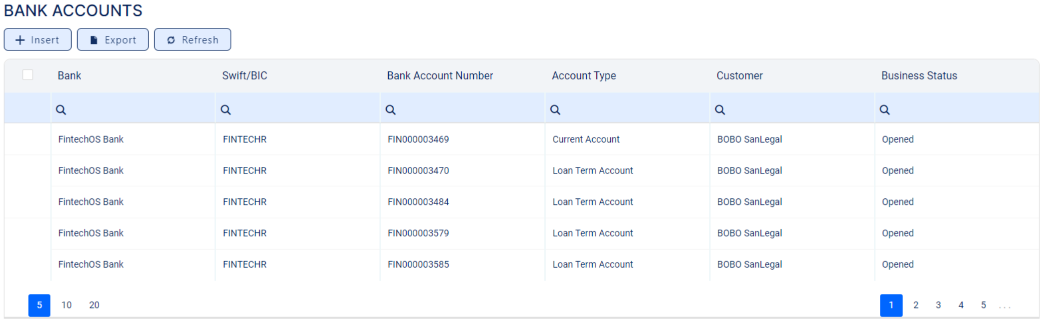
PRODUCTS

Contract No	Banking Product	Activation Date
6619	Term Loan Euro	12/05/2022
6619.2	Term Loan Euro	12/05/2022
6643	Bank Account EUR	18/05/2022
6644	Term Loan Euro	18/05/2022
6646	Bank Account EUR	18/05/2022

Click the desired record from the list to open the **Contract** page with the selected contract's information.

View Bank Accounts

View the customer’s bank accounts in the **Bank Accounts** section, with details such as name of the bank, Swift/BIC, account number and type, customer, and business status.



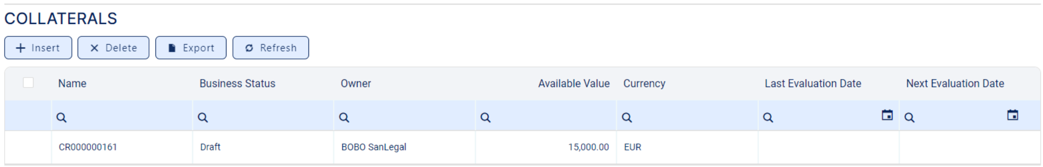
BANK ACCOUNTS

Bank	Swift/BIC	Bank Account Number	Account Type	Customer	Business Status
FintechOS Bank	FINTECHR	FIN000003469	Current Account	BOBO SanLegal	Opened
FintechOS Bank	FINTECHR	FIN000003470	Loan Term Account	BOBO SanLegal	Opened
FintechOS Bank	FINTECHR	FIN000003484	Loan Term Account	BOBO SanLegal	Opened
FintechOS Bank	FINTECHR	FIN000003579	Loan Term Account	BOBO SanLegal	Opened
FintechOS Bank	FINTECHR	FIN000003585	Loan Term Account	BOBO SanLegal	Opened

Click the desired record from the list to open the **Bank Account** page with the selected bank account's information.

Manage Collateral Register

Manage the customer’s registered collaterals in the **Collaterals** section, displaying details such as name, business status, owner, available value, currency, last and next evaluation dates.



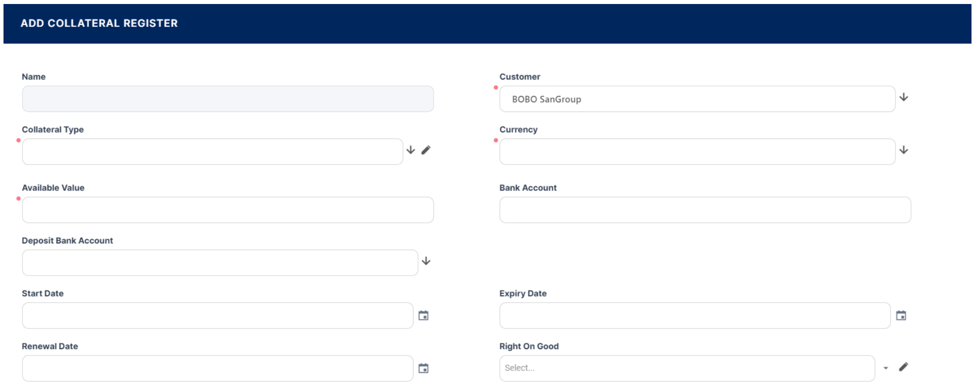
COLLATERALS

Name	Business Status	Owner	Available Value	Currency	Last Evaluation Date	Next Evaluation Date
CR000000161	Draft	BOBO SanLegal	15,000.00	EUR		

In this section, you can add new collateral register records, view the existing ones by clicking the desired record from the list, delete records from the list and export the list.

To add a new collateral register record to the customer, follow these steps:

1. Click the **Insert** button within the **Collateral Register** section to display the **Add Collateral Register** page, with the `Customer` field automatically completed with the current customer's name.



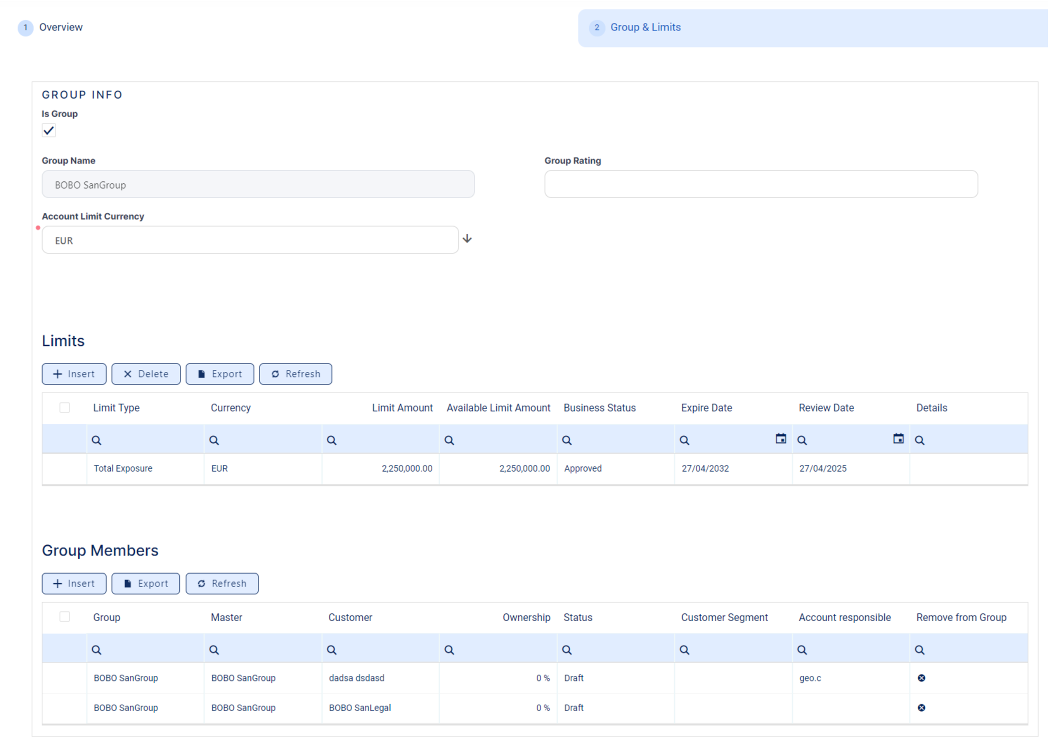
ADD COLLATERAL REGISTER

Name	Customer: BOBO SanGroup
Collateral Type	Currency
Available Value	Bank Account
Deposit Bank Account	
Start Date	Expiry Date
Renewal Date	Right On Good: Select...

2. Follow the steps described in the Registering Collaterals page of this guide.

Manage Groups & Limits

Access the **Group & Limits** tab to manage the limits set for the customer. If the customer is a group, then all the limits applicable for the group members are listed here, as well as details about the group members. To learn more about how limits and groups work, see the Limits page.



GROUP INFO

Is Group

☑

Group Name: BOBO SanGroup

Group Rating:

Account Limit Currency: EUR

Limits

Limit Type	Currency	Limit Amount	Available Limit Amount	Business Status	Expire Date	Review Date	Details
Total Exposure	EUR	2,250,000.00	2,250,000.00	Approved	27/04/2032	27/04/2025	

Group Members

Group	Master	Customer	Ownership	Status	Customer Segment	Account responsible	Remove from Group
BOBO SanGroup	BOBO SanGroup	dadsa dsdasd	0 %	Draft		geo.c	⊗
BOBO SanGroup	BOBO SanGroup	BOBO SanLegal	0 %	Draft			⊗

NOTE

You can add both legal entity and individual customers to groups. This can be helpful if you need to monitor group exposure for a household or a company and its shareholders together.

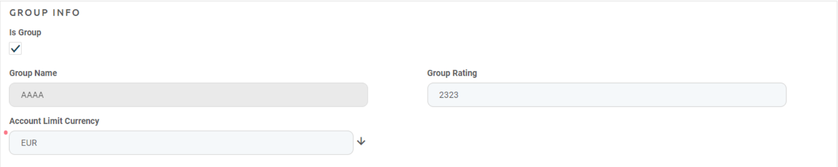
When the `LimitMandatoryForIndividuals` system parameter is set to `True`, Core Banking performs limit validations for a group containing individual customers the same way as for groups composed solely of legal persons.

Go through the sections available within this tab to perform the following tasks:

Configure Group Info

You can specify whether a customer represents a group of companies in the **Group Info** section.

1. Fill in the following information within this section:



GROUP INFO

Is Group

✓

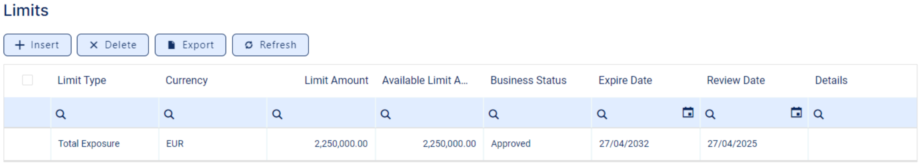
Group Name	Group Rating
AAAA	2323
Account Limit Currency	
EUR	

- **Is Group** - Select the checkbox if the customer represents a group.
- **Group Name** - This field is displayed only if the customer represents a group and it is automatically completed with the current customer's name.
- **Account Limit Currency** - Select the currency of the customer limit.

2. If the customer is a group, fill in the **Group Rating** by entering the rating of the group.
3. Click the **Save and Reload** button.

Set Limits

Set the customer's limits in the **Limits** section. If the customer is a group, then all the limits applicable for the group, coming from group members, are listed here.

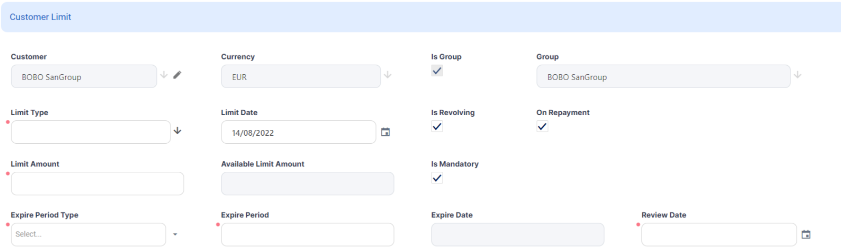


Limits

□	Limit Type	Currency	Limit Amount	Available Limit A...	Business Status	Expire Date	Review Date	Details
	Total Exposure	EUR	2,250,000.00	2,250,000.00	Approved	27/04/2032	27/04/2025	

To add a new limit record to the customer, follow these steps:

1. Click the **Insert** button within the **Limits** section to display the **Customer Limit** page, with the customer, the group and the currency automatically completed with the current customer's values.



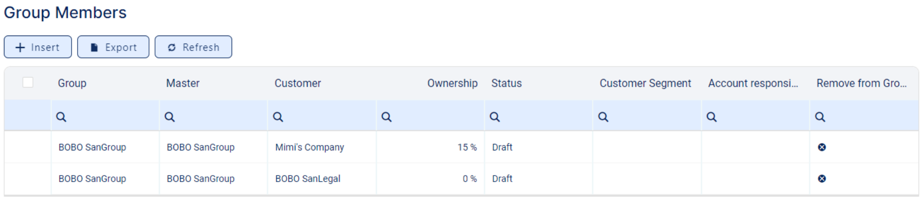
Customer Limit

Customer: BOBO SanGroup	Currency: EUR	Is Group: ☑	Group: BOBO SanGroup
Limit Type:	Limit Date: 14/08/2022	Is Revolving: ☑	On Repayment: ☑
Limit Amount:	Available Limit Amount:	Is Mandatory: ☑	
Expire Period Type: Select...	Expire Period:	Expire Date:	Review Date:

2. Follow the steps described in the Creating Limits page of this guide.

Manage Members/ Group Members Section

Manage the members/ group members' details in the **Members** or **Group Members** section. Here you can add new member records, view the existing ones by clicking the desired record from the list, and export the list.

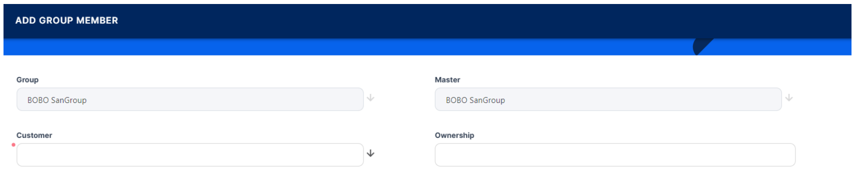


Group Members

□	Group	Master	Customer	Ownership	Status	Customer Segment	Account responsi...	Remove from Gro...
	BOBO SanGroup	BOBO SanGroup	Mimi's Company	15 %	Draft			⊗
	BOBO SanGroup	BOBO SanGroup	BOBO SanLegal	0 %	Draft			⊗

To add a new member or group member to the customer, follow these steps:

1. Click the **Insert** button within the **Members/Group Members** section to display the **Add Member/ Add Group Member** page, with the master and the group automatically completed with the current customer's values.



ADD GROUP MEMBER

Group: BOBO SanGroup	Master: BOBO SanGroup
Customer:	Ownership:

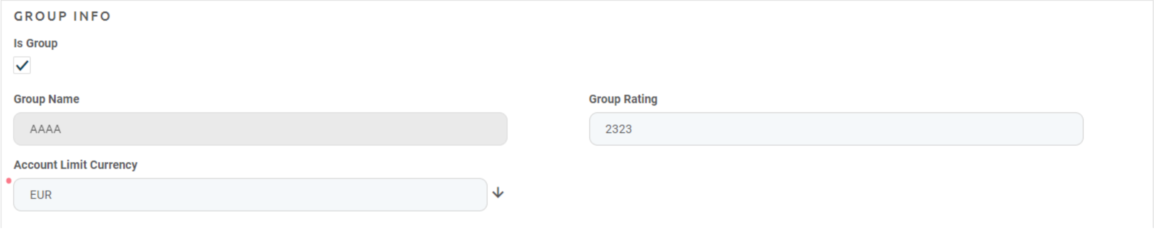
2. Follow the instructions from the Groups page of this guide, selecting a customer to add as a member, and entering an ownership percentage.

Groups

Core Banking allows you to define not only customers, but groups of customers as well. A corporate group or group of companies is a collection of parent and subsidiary corporations that function as a single economic entity through a common source of control. You can add both legal entity and individual customers to groups, or you can create groups of individual customers. This can be helpful if you need to monitor group exposure for a household or a company and its shareholders together.

IMPORTANT!
Complex group management operations are performed by the **Single Customer View** apps. For detailed information, see the **Groups Info** section within the Single Customer View Legal Entities user guide.
You can also manage customers groups' relevant information from Core Banking.

To define a group, select the checkbox **Is Group** from the **Group&Limits** tab of the **Customer** page, accessible through the **Core Banking Operational > Customer Core** menu. After you select the checkbox, the group name is automatically populated with the customer’s name and you can insert a rating and a limit currency for that group.



GROUP INFO

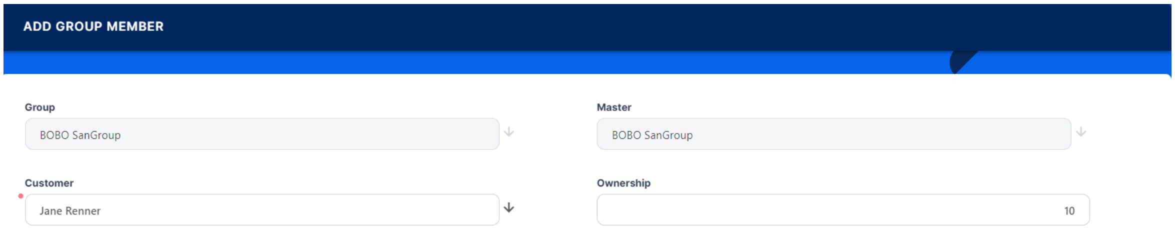
Is Group
☑

Group Name: AAAA

Group Rating: 2323

Account Limit Currency: EUR

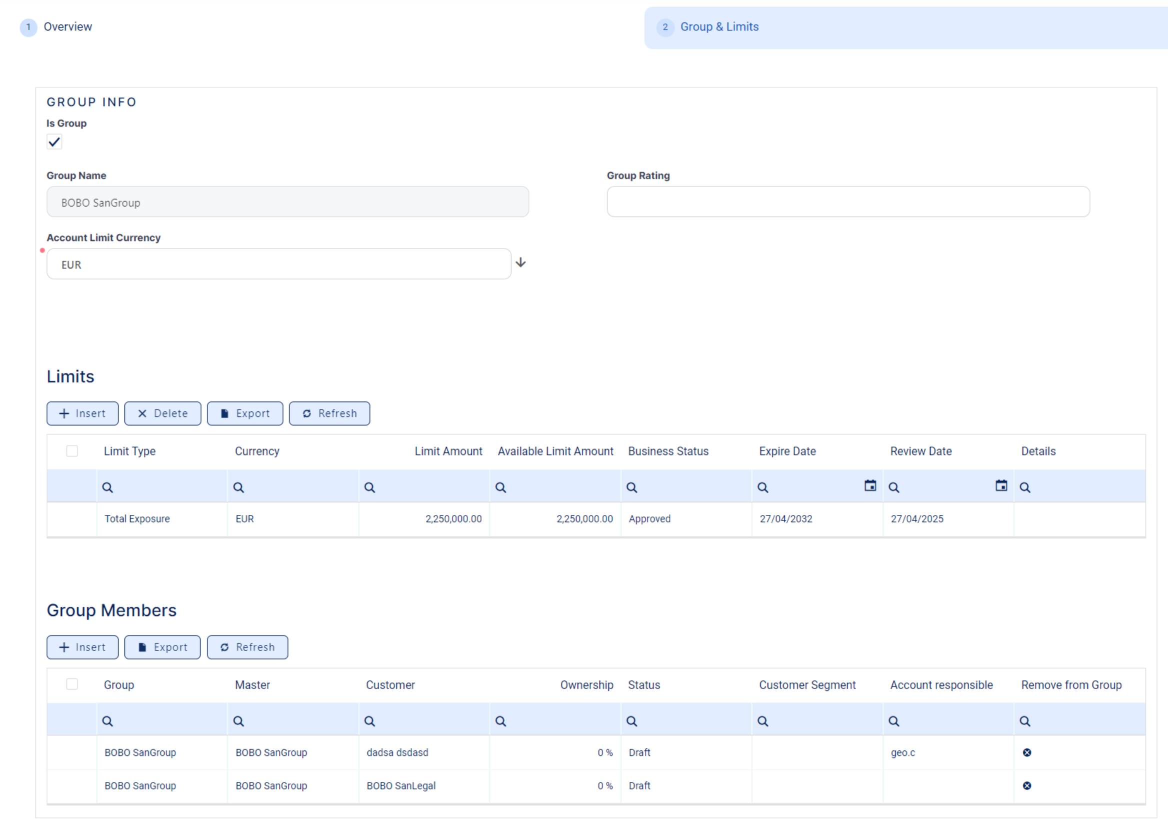
Add new members to the group by clicking the **Insert** button from the **Group Members** section. If a member has other members associated with it, they are all displayed in the same section. For a more clear picture of the group, you can insert an ownership percent, determined by dividing the number of shares they own by the number of outstanding shares.



ADD GROUP MEMBER

Group: BOBO SanGroup	Master: BOBO SanGroup
Customer: Jane Renner	Ownership: 10

You can add subsidiary companies (sometimes referred to as child companies) to a company by clicking the **Insert** button from the **Group Members** tab. Therefore, a customer's child company is displayed in the **Group Members** tab.



GROUP INFO

Is Group: ☑

Group Name: BOBO SanGroup	Group Rating:
Account Limit Currency: EUR	

Limits

Limit Type	Currency	Limit Amount	Available Limit Amount	Business Status	Expire Date	Review Date	Details
Total Exposure	EUR	2,250,000.00	2,250,000.00	Approved	27/04/2032	27/04/2025	

Group Members

Group	Master	Customer	Ownership	Status	Customer Segment	Account responsible	Remove from Group
BOBO SanGroup	BOBO SanGroup	dadsa dsdasd	0 %	Draft		geo.c	⊗
BOBO SanGroup	BOBO SanGroup	BOBO SanLegal	0 %	Draft			⊗

If a customer is a child company for more than one company part of different groups, it impacts the available limit amount of the group to which it was first added.

NOTE
When a member is added to or deleted from a group, Core Banking automatically recalculates the limits of the group. The limits of the deleted member become as they were before entering the group.
If a member is moved from one group to another via API integration, the limits of both affected groups are automatically recalculated in real time.

Limits

The exposure is the risk a financial institution is taking on for writing the loan. Every time a financial institution grants any type of credit facility to a customer (a loan), the financial institution monitors its exposure to various financial indicators, which can negatively affect the customer and the institution itself. The financial institution uses various algorithms to calculate their exposure to the risks, but this calculation simply adds up to their exposure.

When referring to a loan, this page refers to all types of loans: unsecured loan, secured loan, overdraft, promissory note, working capital loan, and so on.

In FintechOSCore Banking an exposure can be related to a group or to a customer.

The approval of limits is subject to validation, depending on the type of customer. These validations are detailed below.

Group Exposure Types

- **Total Exposure** - the sum of the aggregate principal amount of the loans of a lender.
- **Country Exposure** - the limit placed by a financial institution on the number of loans that can be given to borrowers in a particular country. They are used to control the financial institution' risk exposure to particular regions.
- **Company Exposure** - the banks' exposure to a single non-banking financial company (NBFC).

- **Product Type Exposure** - the maximum amount of credit an institution extends to the group for a specific type of product.
- **Product Exposure** - the maximum amount of credit an institution extends to the group for a specific product.
- **Exchange Exposure** - the risk a company undertakes when making financial transactions in foreign currencies. All currencies can experience periods of high volatility which can adversely affect profit margins, if suitable strategies are not in place to protect cash flow from sudden currency fluctuations.

Customer Exposure Types

- **Total Exposure** - the sum of the aggregate principal amount of the loans of a lender.
- **Product Type Exposure** - the maximum amount of credit a financial institution extends to the customer for a specific type of product.
- **Product Exposure** - the maximum amount of credit a financial institution extends to the customer for a specific product.
- **Exchange Exposure** - the risk a company undertakes when making financial transactions in foreign currencies. All currencies can experience periods of high volatility which can adversely affect profit margins, if suitable strategies are not in place to protect cash flow from sudden currency fluctuations.

NOTE

You can define new limit types that are based on roles associated to contract participants specific to your business, and use them throughout Core Banking with all the functionality of any other default limit type. Read the dedicated page to learn how to manage limit type records.

Validations

IMPORTANT!
The `LimitMandatoryForIndividual` Core Banking system parameter allows banks to specify whether their system should validate limits for individual customer, the same way it validates limits for legal entity customers. The limits for legal entities and groups are validated by Core Banking by default.

For Customers Not Belonging to Groups

- **Total Exposure** is validated to be unique.
- **Product Type Exposure** is validated against the approved and active total exposure set on the customer.
- **Product Exposure** is validated against the Product Type Exposure if exists. If a Product Type Exposure does not exist, it is validated against the Total Exposure.
- **Exchange Exposure** is validated against Total Exposure.

For Customers Belonging to Groups

- **Total Exposure** is validated to be unique and it is validated against the Total Exposure set on the group.
- When a group defines a Company Exposure, a Total Exposure is automatically created for that company.
- All the other limits are validated against their correspondent set on the customer’s group, if exists. If the correspondent does not exist, there are validated against Total Exposure from the group.
- The account limit currency is automatically filled in with the group limit currency.

NOTE
Both legal entity and individual customers can be added to groups. This can be helpful if you need to monitor group exposure for a household or a

company and its shareholders together.
When `LimitMandatoryForIndividual` = `True`, limit validations for a group containing individual customers happen the same way as for groups composed solely of legal persons.

For Groups

- **Total Exposure** is validated to be unique.
- **Product Type Exposure** is validated against the approved and active Total Exposure set on the group.
- **Product Exposure** is validated against the Product Type Exposure if it exists. If a Product Type exposure does not exist, it is validated against the Total Exposure.
- **Company Exposure** is validated against the approved and active total exposure set on the group.
- **Country Exposure** is validated against the approved and active total exposure set on that group.
- **Exchange Exposure** is validated against Total Exposure.
- You can define as many limits with the same Type (on Group or on Customer) as long as only one Limit (Type) is in **Approved** status.
  After setting the limits, the loan approval is validated against those limits, as detailed below:
  - If there is not at least one limit set at the customer or group level, the approval of the loan is not possible and an explicit error is displayed.
  - Contract maturity date cannot exceed the limit's expiry date and an explicit error is displayed.
  - The loan amount cannot exceed the corresponding limit amount. If not, an explicit error is displayed.

NOTE
When a member is added to or deleted from a group, Core Banking

automatically recalculates the limits of the group. The limits of the deleted member become as they were before entering the group.
If a member is moved from one group to another via API integration, the limits of both affected groups are automatically recalculated in real time.

For Role-Based Limits

Role-based limits have all the functionality of any other system limit type. The limits defined for participants at the contract level can be updated according to the contract's value. If a limit is set as revolving, it is replenished with capital repayments.

For contracts based on a banking product with a mandatory role configured at the product level, Core Banking checks whether the contract contains a participant with the same role. For example, for a banking product with `Merchant` mandatory role, if Core Banking doesn't find a participant with this `Merchant` role on the contract, then an error message informs you that "*Contract participants are blocking disbursement (Merchant)!*". In this case, add a participant with the `Merchant` role to the contract.

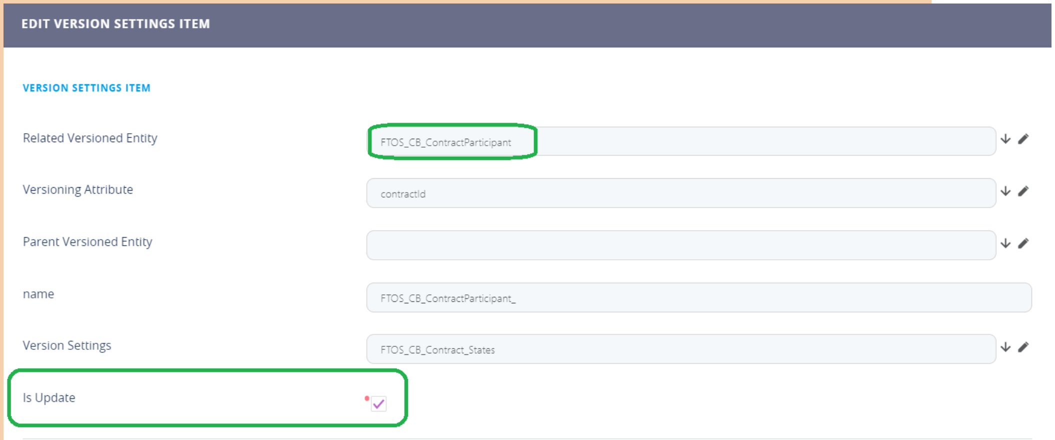
If the `Search Limit` checkbox was selected for the mandatory role at the banking product level, then Core Banking checks whether there is a contract participant whose limit is of the limit type associated with the same role. In the example above, Core Banking checks the existence of a participant who has a `Merchant Exposure` type limit.

If the existing limit's available amount is smaller than the value of the contract, then Core Banking checks the limit's `Is Mandatory` field. If `Is Mandatory = True`, then an error is raised that the limit is reached and the contract cannot be approved, otherwise, a warning is presented but the contract can be approved.

NOTE
The `Is Mandatory` field's value cannot be changed from `False` to `True` when versioning a limit until Available Limit Amount >= 0.

IMPORTANT!

The way the system is configured by default, there are no validations at **Contract Version** approval for contract participants' limits. If this is desired, the version settings for `Contract Participants` need to be changed from `IsUpdate= true` to `IsUpdate = false`.



EDIT VERSION SETTINGS ITEM

VERSION SETTINGS ITEM

Related Versioned Entity	FTOS_CB_ContractParticipant
Versioning Attribute	contractId
Parent Versioned Entity	
name	FTOS_CB_ContractParticipant_
Version Settings	FTOS_CB_Contract_States
Is Update	☑

Calculation of Available Limit Amount

After loan approval, the available amount for each corresponding limit is recalculated by subtracting the loan amount from the limit amount. When calculating the group limit available amount, the application takes into account all group members. If the limit currency and loan currency are different, the application automatically converts the loan amount using the current exchange rate.

All group and customer limits are updated daily in accordance with the exchange rate. This is done via a job called `Daily Limit Recalculation`.

If a limit is revolving (`Is Revolving = True` at the limit level), then the limit is a revolving limit, meaning that the Available Amount of the limit is replenished either on each repayment of the principal or on loan contract closure, depending on the `On Repayment` field's value. If `Is Revolving = False`, then the limit is not revolving in any circumstances.

At a revolving limit's level, if `On Repayment = True`, then the Available Amount of the limit is replenished on each repayment of the principal with the repayment value. If `On Repayment = False`, then the limit amount is replenished on loan contract closure with the amount of the contract.

If a customer that already has approved contracts becomes a member of a group, all its active limits are suspended. The same applies when excluding a customer from a group.

If a customer is a child company for more than one company which are part of different groups, it should have impact on the available limit amount on the group to which it was first added, unless if it was already part of a group.

Limits Lifecycle

Limit Statuses

The four-eyes principle is applicable for limits in FintechOSCore Banking, meaning that a record should be approved by a second bank employee, with higher authorization rights. This is enabled via approval task FintechOS Platform capabilities and thus it is also a bank's responsibility to set proper security roles and access rights to its users, in order to make sure that the same user can't insert and also authorize the same record.

A limit record has the following business workflow statuses:

- **Draft** - the status of a newly created limit record that was not yet sent for approval. While in this status, you can edit some fields, but you can't use it in contracts. Send the record to approval after editing all the necessary details.
- **Pending** - this is a system status applied to limits or limit versions sent for approval, but not yet approved. No updates of the records are available in this system status.
- **LimitApproved** - the status of a limit record after being authorized for use throughout Core Banking by a user with customer limits approval competencies. While in this status, you cannot edit the record's details. If you need to alter the limit's details, create a new version based on the current limit.
- **Closed** - the last status of a limit, after manually closing it or after creating a new version based on the current version. No updates are allowed on the record. The limit record cannot be used anymore.

- **Suspended** - the status of limit records which are suspended at the moment and cannot be used. If a customer is introduced into a group, the customer's limits are all suspended automatically until the limit records are reviewed and new versions are created for them with updated information.
- **Expired** - the status of limits whose availability has expired, thus the record cannot be used anymore. You can edit a limit's expiration date to a future date by creating a new version.

IMPORTANT!
For the limit to be applied, it must be in **Approved** status.

Limit Versioning

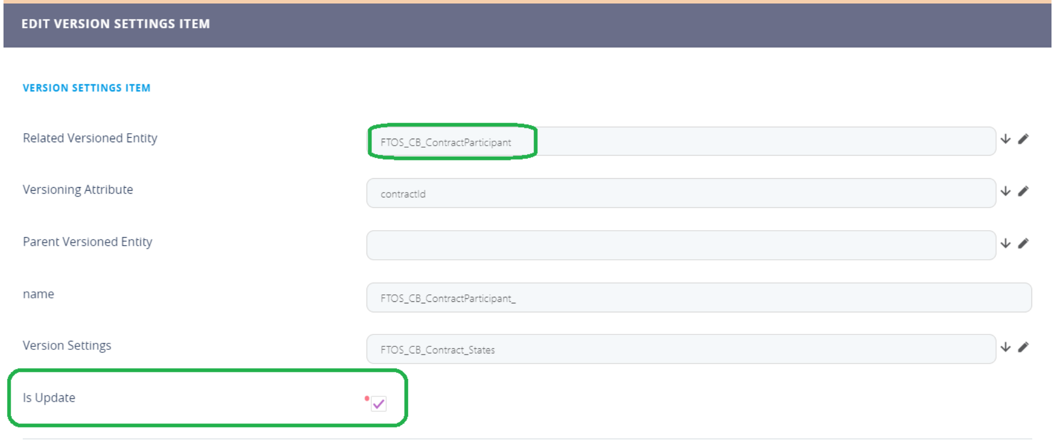
Core Banking allows you to create new versions for an existing limit if you need to modify an existing approved limit.

A limit version can have the following statuses:

- **Version Draft** - the status of a newly created limit version record that was not yet sent for approval. While in this status, you can edit some fields. Send the record to approval after editing all the necessary details.
- **Approved** - the status of a limit version record after being authorized by a user with customer limits approval competencies. While in this status, you cannot edit the record's details.
- **Version Closed** - the last status of a limit version, after manually closing it or after creating another new version based on the current version. No updates are allowed on the record.

IMPORTANT!
The way the system is configured by default, there are no validations at **Contract Version** approval for contract participants' limits. If this is desired, the version settings for `Contract Participants` needs to be

changed from `IsUpdate= true` to `IsUpdate = false`.



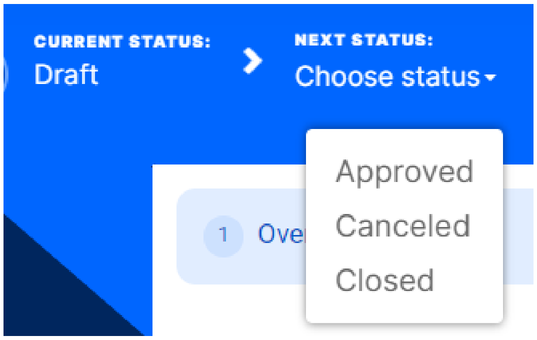
EDIT VERSION SETTINGS ITEM

VERSION SETTINGS ITEM

Related Versioned Entity	FTOS_CB_ContractParticipant
Versioning Attribute	contractId
Parent Versioned Entity	
name	FTOS_CB_ContractParticipant_
Version Settings	FTOS_CB_Contract_States
Is Update	☑

Changing Limit Statuses

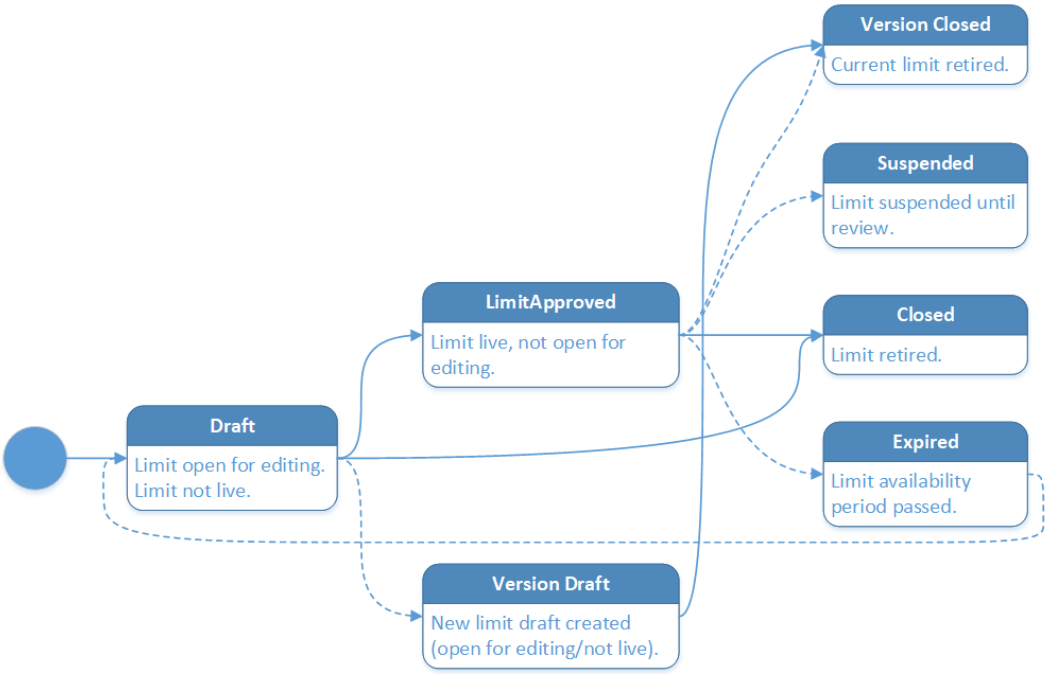
You can manage a limit's life cycle by changing its status from the top right corner of the screen.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

The limit status transitions are illustrated below:


Version Closed
Current limit retired.
Suspended
Limit suspended until review.
LimitApproved
Limit live, not open for editing.
Closed
Limit retired.
Draft
Limit open for editing. Limit not live.
Expired
Limit availability period passed.
Version Draft
New limit draft created (open for editing/not live).

Note that:

- Once a record is live, its settings can no longer be modified.
- If you want to update the details of a live limit, you must create a new limit version.
- When you create a new limit version, the current version is retired and moved to history; no updates are allowed on the retired version.
- Every limit version starts in a draft state and must go through an approval process before going live.
- Only one version of a limit can be live at one time.

NOTE

As a best practice, new records or new versions of existing records created on a specific day should be approved on the same day.

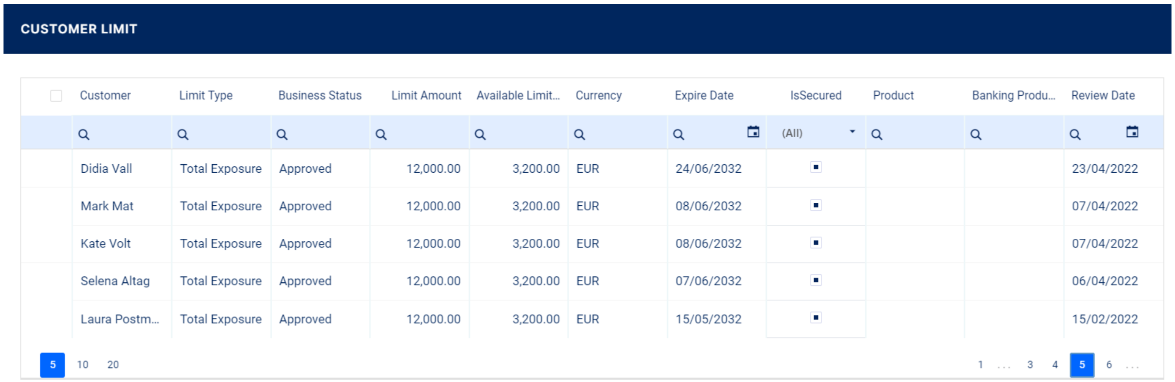
Managing Limits

NOTE

You must have the **Corporate Credit Officer**, **Retail Credit Officer**, or **Risk Officer** security roles to add and update limits. Other associated roles allow you only to read limits information.

To manage limit records:

1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click **Customer Limit** menu item to open the **Customer Limits List** page.



CUSTOMER LIMIT

□	Customer	Limit Type	Business Status	Limit Amount	Available Limit...	Currency	Expire Date	IsSecured	Product	Banking Produ...	Review Date
								(All)			
	Didia Vall	Total Exposure	Approved	12,000.00	3,200.00	EUR	24/06/2032	■			23/04/2022
	Mark Mat	Total Exposure	Approved	12,000.00	3,200.00	EUR	08/06/2032	■			07/04/2022
	Kate Volt	Total Exposure	Approved	12,000.00	3,200.00	EUR	08/06/2032	■			07/04/2022
	Selena Altag	Total Exposure	Approved	12,000.00	3,200.00	EUR	07/06/2032	■			06/04/2022
	Laura Postm...	Total Exposure	Approved	12,000.00	3,200.00	EUR	15/05/2032	■			15/02/2022

On the **Customer Limits List** page, you can create a new limit record for a customer, delete records in Draft status, and search for a specific record. You can also edit the information for limits in **Draft** or **Version Draft** status, or create new versions for approved limits to change their information.

Alternatively, you can also manage limits at a customer level from the **Customer Core** menu, by selecting a customer from the list and managing their limit records within the **Groups & Limits** tab.

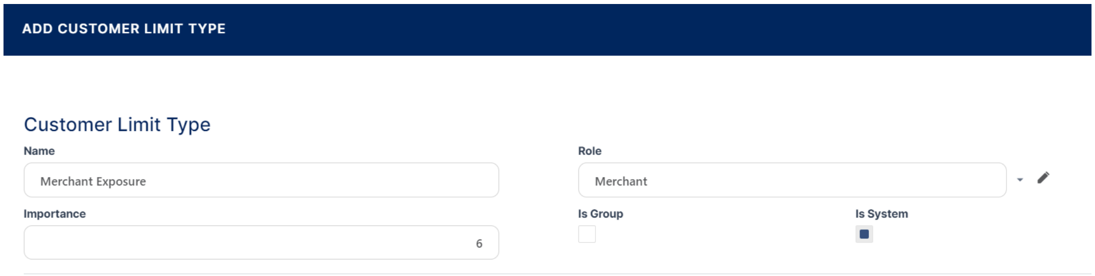
Role-Based Limits

Role-based limit capabilities allow you to manage limits for different customer types, such as merchants. Using role-based limits, the limit for a customer who is a merchant within several contracts can be configured properly, allowing the customer to take loans until they reach their set limit.

To use role-based limits within your contracts, follow these steps:

1. Define new limit types that are based on roles associated with contract participants specific to your business.

   You can use these new limit types throughout Core Banking with all the functionality of any other default limit type. For example, you can configure a `Merchant Exposure` limit type, to enable the creation of limits for customers who have the `Merchant` role associated at a customer level.



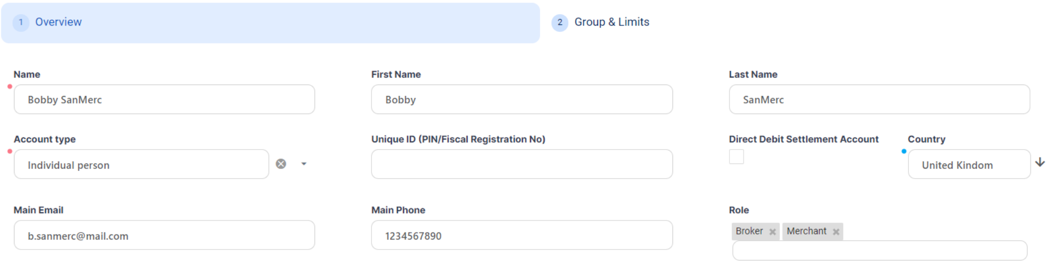
ADD CUSTOMER LIMIT TYPE

Customer Limit Type

Name Merchant Exposure	Role Merchant	
Importance 6	Is Group ☐	Is System ☑

2. Associate the same role to the customer.

   You can associate as many roles as you need for a customer to be able to have within contracts, using the `Role` field added to the **Customer** page accessible through the **Customer Core** menu.
   Limits defined for roles at a customer level are treated as system limits and they are affected by contracts where that specific customer plays that role. For example, if the customer has a `Merchant` role, you can define them a `Merchant Exposure` type limit.

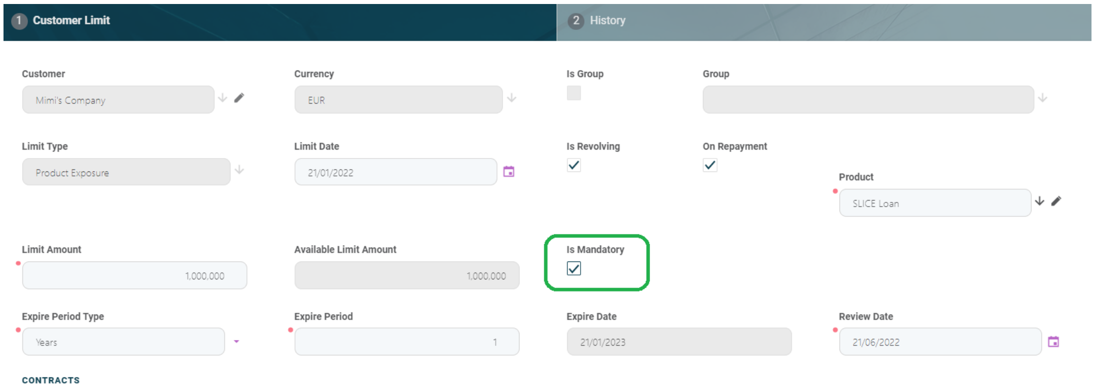


1 Overview
2 Group & Limits

Name: Bobby SanMerc
First Name: Bobby
Last Name: SanMerc
Account type: Individual person
Unique ID (PIN/Fiscal Registration No):
Direct Debit Settlement Account: ☐
Country: United Kindom
Main Email: b.sanmerc@mail.com
Main Phone: 1234567890
Role: Broker, Merchant

3. Decide whether a customer limit is a mandatory limit or not.

   The Is Mandatory field's value within the **Customer Limit** page configures the limit validation at the contract level. When the existing limit's available amount is smaller than the value of the contract, Core Banking checks the limit's Is Mandatory field. If Is Mandatory = True, then an error is raised that the limit is reached and the contract cannot be approved, otherwise, if Is Mandatory = False, a warning is presented but the contract can be approved. The default value is True.



1 Customer Limit
2 History

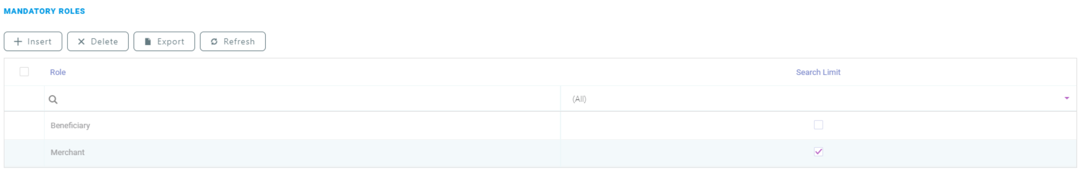
Customer: Mimi's Company
Currency: EUR
Is Group: ☐
Group:
Limit Type: Product Exposure
Limit Date: 21/01/2022
Is Revolving: ☑
On Repayment: ☑
Product: SLICE Loan
Limit Amount: 1,000,000
Available Limit Amount: 1,000,000
Is Mandatory: ☑
Expire Period Type: Years
Expire Period: 1
Expire Date: 21/01/2023
Review Date: 21/06/2022

CONTRACTS

4. Configure mandatory roles at the banking products level.

   The **Mandatory Roles** section within the **Availability** tab at the banking product level allows you to add the roles of the participants that are mandatory to exist at the contract level for contracts based on this banking product. In other words, when creating contracts based on banking products with the Merchant role in this section, you must add a customer with the same Merchant role as a contract participant, otherwise, the contract cannot be approved.

   When Search Limit is selected for a role on a banking product, Core Banking checks if the contract participant with this role has an attached limit configured with a limit type associated with the same role.



□	Role	Search Limit
		(All)
	Beneficiary	□
	Merchant	☑

NOTE

Verify the access rights for users with Corporate Credit Officer, Retail Credit Officer, and Risk Officer security roles. The out-of-the-box settings for these security roles allow users to add and update limits, while users with other associated roles can only read limit information. Update the access rights according to your financial institution's needs.

Role-Based Limits Validations

Role-based limits have all the functionality of any other system limit type. The limits defined for participants at the contract level can be updated according to the contract's value. If a limit is set as revolving, it is replenished with capital repayments.

For contracts based on a banking product with a mandatory role configured at the product level, Core Banking checks whether the contract contains a participant with the same role. For example, for a banking product with `Merchant` mandatory role, if Core Banking doesn't find a participant with this `Merchant` role on the contract, then an error message informs you that "*Contract participants are blocking disbursement (Merchant)!*". In this case, add a participant with the `Merchant` role to the contract.

If the `Search Limit` checkbox was selected for the mandatory role at the banking product level, then Core Banking checks whether there is a contract participant whose limit is of the limit type associated with the same role. In the example above, Core Banking checks the existence of a participant who has a `Merchant Exposure` type limit.

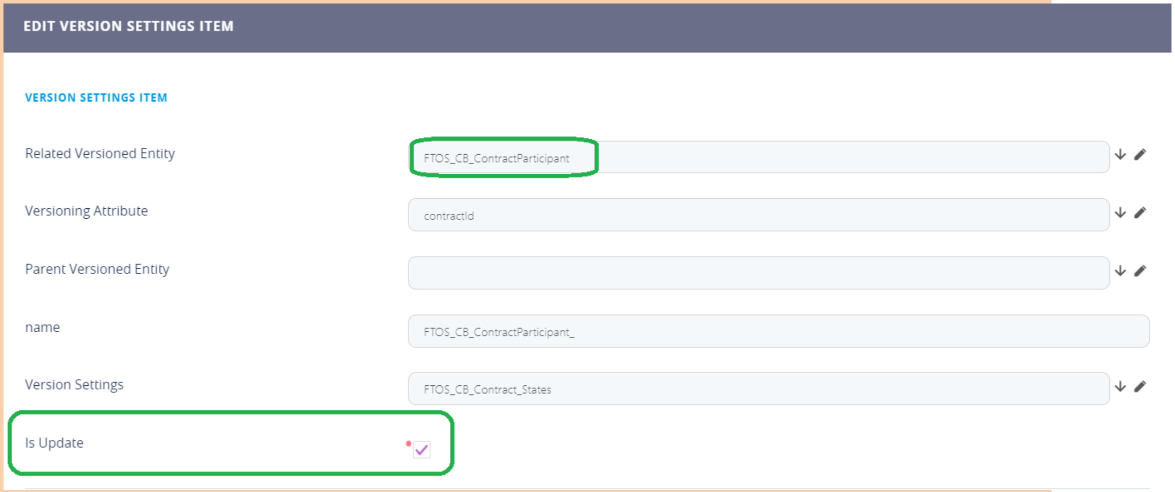
If the existing limit's available amount is smaller than the value of the contract, then Core Banking checks the limit's `Is Mandatory` field. If `Is Mandatory = True`, then an error is raised that the limit is reached and the contract cannot be approved, otherwise, a warning is presented but the contract can be approved.

NOTE

The Is Mandatory field's value cannot be changed from False to True when versioning a limit until Available Limit Amount >= 0.

IMPORTANT!

The way the system is configured by default, there are no validations at **Contract Version** approval for contract participants' limits. If this is desired, the version settings for Contract Participants need to be changed from IsUpdate= true to IsUpdate = false.



EDIT VERSION SETTINGS ITEM

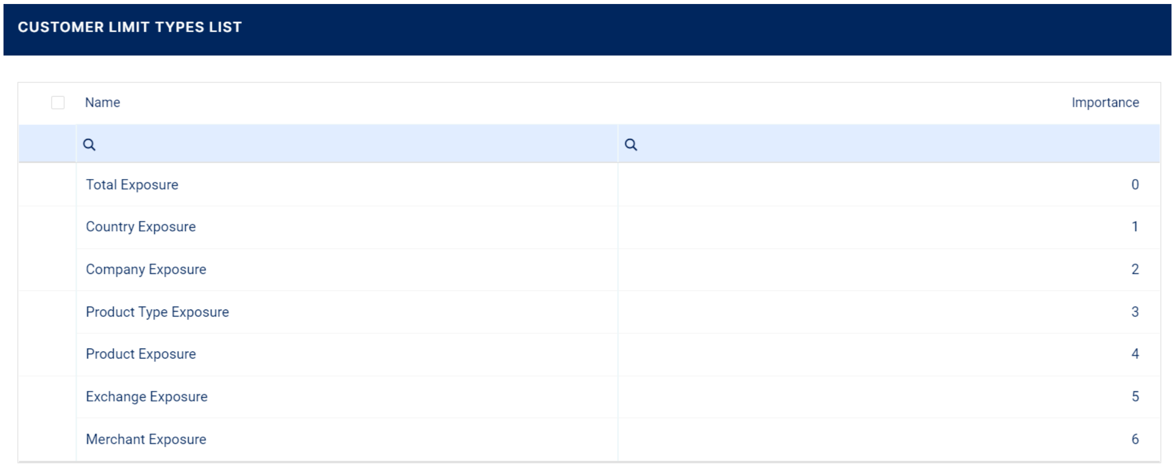
VERSION SETTINGS ITEM

Related Versioned Entity	FTOS_CB_ContractParticipant
Versioning Attribute	contractId
Parent Versioned Entity	
name	FTOS_CB_ContractParticipant_
Version Settings	FTOS_CB_Contract_States
Is Update	☑

Managing Limit Types

You can define new limit types that are based on roles associated to contract participants specific to your business, and use them throughout Core Banking with all the functionality of any other default limit type. To manage limit type records:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Click **Customer Limit Type** menu item to open the **Customer Limit Types List** page.



CUSTOMER LIMIT TYPES LIST

□	Name	Importance
	Total Exposure	0
	Country Exposure	1
	Company Exposure	2
	Product Type Exposure	3
	Product Exposure	4
	Exchange Exposure	5
	Merchant Exposure	6

On the **Customer Limit Types List** page, you can add new limit type records or search, edit, and delete existing ones.

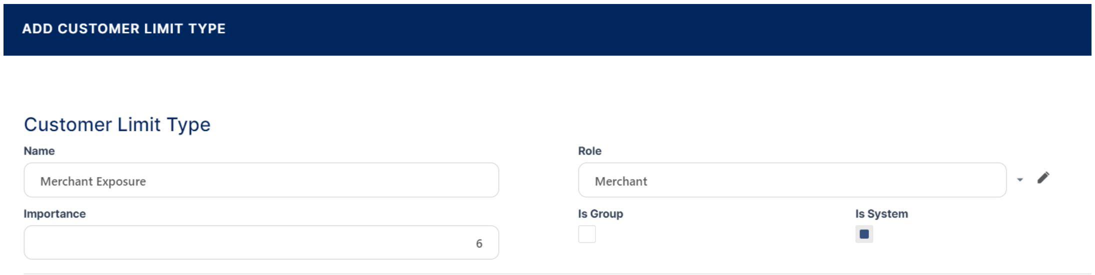
> **IMPORTANT!**
> You can only edit or delete limit types that are not marked as `Is System`. Limit types that come with the Core Banking packages are considered system limit types and they are applicable to the customer of a contract.

Creating Limit Types

To create a new limit record for a customer, follow these steps:

1. Click **Insert** on the **Customer Limit Types List** page to open the **Add Customer Limit Type** page.

2. Fill in the following fields:



ADD CUSTOMER LIMIT TYPE

Customer Limit Type

Name: Merchant Exposure

Role: Merchant

Importance: 6

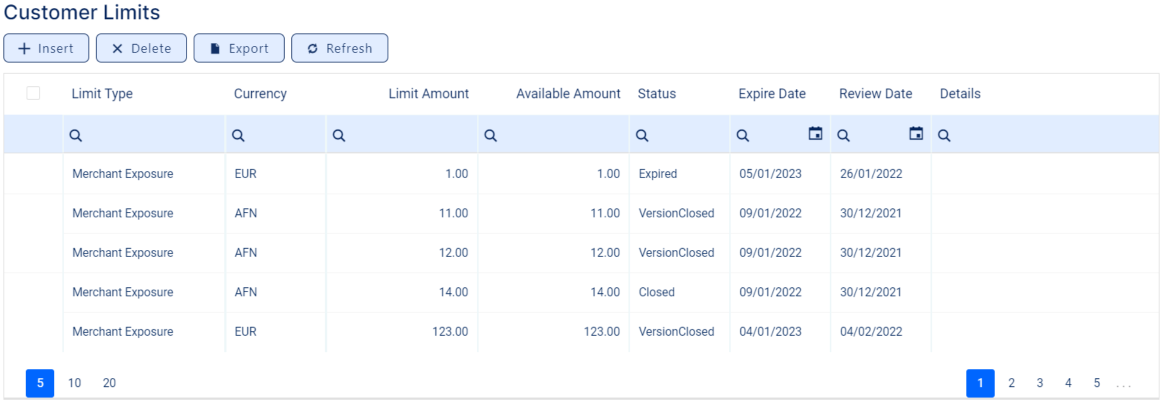
Is Group: □

Is System: ☑

- **Name** - Enter the name of the limit type.
- **Role** - Select the role of the contract participant for which this limit type can be used.
- **Importance** - Enter the order in which this limit is considered by the system. The lower the number, the higher the limit type's importance during the limit calculations.
- **Is Group** - Select this checkbox if the limit type is applicable to groups.
- **Is System** - This read-only field marks a record as system limit type, and only the limit types that come within the Core Banking packages are marked as system limit types and they are applicable to the customer of a contract. You can only edit or delete limit types that are not marked as `Is System`.

3. Click the **Save and Reload** button.

You can view the existing customer limits affected by this limit type in the **Customer Limits** section. Only customers with the same role selected on their customer record have their customer limit displayed here.



□	Limit Type	Currency	Limit Amount	Available Amount	Status	Expire Date	Review Date	Details
	Merchant Exposure	EUR	1.00	1.00	Expired	05/01/2023	26/01/2022	
	Merchant Exposure	AFN	11.00	11.00	VersionClosed	09/01/2022	30/12/2021	
	Merchant Exposure	AFN	12.00	12.00	VersionClosed	09/01/2022	30/12/2021	
	Merchant Exposure	AFN	14.00	14.00	Closed	09/01/2022	30/12/2021	
	Merchant Exposure	EUR	123.00	123.00	VersionClosed	04/01/2023	04/02/2022	

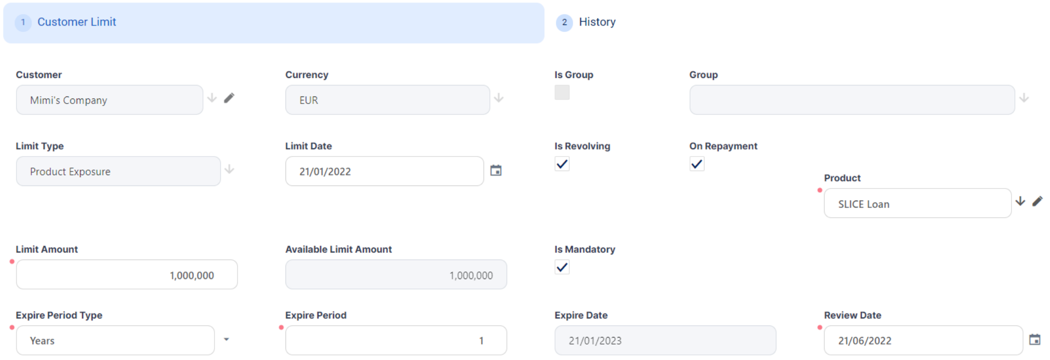
Creating Limits

IMPORTANT!
The `LimitMandatoryForIndividual` Core Banking system parameter allows

financial institutions to specify whether their system should validate limits for individual customer, the same way it validates limits for legal entity customers. The limits for legal entities and groups are validated by Core Banking by default.

To create a new limit record for a customer, follow these steps:

1. In the FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click **Customer Limit** menu item to open the **Customer Limits List** page.
3. Click the **Insert** button to display the **Customer Limit** page.



Customer: Mimi's Company
Currency: EUR
Is Group: □
Group:
Limit Type: Product Exposure
Limit Date: 21/01/2022
Is Revolving: ✓
On Repayment: ✓
Product: SLICE Loan
Limit Amount: 1,000,000
Available Limit Amount: 1,000,000
Is Mandatory: ✓
Expire Period Type: Years
Expire Period: 1
Expire Date: 21/01/2023
Review Date: 21/06/2022

Alternatively, click the **Add New Customer Limit** button in the **Customer Limits** dashboard to display the same **Customer Limit** page.

Or you can manage limits at a customer level from the **Customer Core** menu, by selecting a customer from the list and managing their limit records within the **Groups & Limits** tab.

4. Fill in the following fields:

- **Customer** - Select the customer to whom the limit is associated.
- **Currency** - Select the currency for this limit.
- **Is Group** - Select the checkbox if the customer represents a group.
- **Group** - If the customer is not a group, this field is read-only. If the customer is a legal entity that is also a group, the name of the group is automatically filled in.

- **Limit Type** - Select the type from the list `Total Exposure, Product Type Exposure, Product Exposure, Exchange Exposure, Country Exposure, Company Exposure`, each predefined type explained in the Limits page, or `Role-based limits` (such as `Merchant Exposure`) associated with the same role that the customer has in its record.

  If a customer has a role, then they can have role-based limits configured with a limit type associated to the same role. For example, if the customer is declared as Merchant, they can have a limit based on a limit type with the associated Merchant role.

  > **IMPORTANT!**
  >
  > The correlation between the limits and group is important as the limits on the parent entity affect the child entities. If the customer is a group, two additional types of exposures are available: country and company exposure.

- **Limit Date** - Enter the date when the limit becomes active. It is automatically completed with the current date, but it can be changed.

- **Is Revolving** - If you select this checkbox, then the limit is a revolving limit, meaning that the Available Amount of the limit is replenished either on each repayment of the principal or on loan contract closure, depending on the `On Repayment` field's value. If the checkbox is not selected, then the limit is not revolving in any circumstances. The default value is `True`.

- **On Repayment** - You can only select this if `Is Revolving = True`. If selected, then the Available Amount of the limit is replenished on each repayment of the principal with the repayment value. If the checkbox is not selected for a revolving limit, then the limit amount is replenished on contract closure with the amount of the contract. The default value is `True`.

NOTE

You can't modify the `On Repayment` and `Is Revolving` fields after limit approval. If you must change these properties, close the limit and open a new limit with the required setup.

- **Limit Amount** - Select the amount representing the limit for the credit.
- **Available Limit Amount** - This field is automatically completed by Core Banking with the remaining amount, e.g. if the total exposure was $5 million, a credit was given for $3 million, $2 million is still available.
- **Is Mandatory** - Selected by default. At limit validation at the contract level, when the existing limit's available amount is smaller than the value of the contract, then Core Banking checks the limit's `Is Mandatory` field. If `Is Mandatory = True`, then an error is raised that the limit is reached and the contract cannot be approved, otherwise, if `Is Mandatory = False`, a warning is presented but the contract can be approved.

NOTE

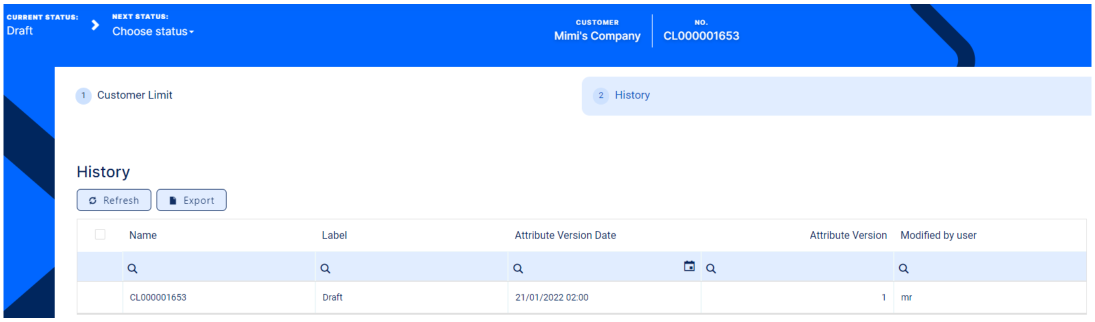
The `Is Mandatory` field's value cannot be changed from `False` to `True` when versioning a limit until Available Limit Amount >= 0.

- **Expire Period Type** - Select from the list the period type applicable for this limit: `Days, Weeks, Months, Years`, or `Once`.
- **Expire Period** - Insert the number for the period, e.g. 4., i.e. 4 months.
- **Expire Date** - This field is automatically completed with the date when the limit expires, as calculated based on the values entered in the previous fields.
- **Review Date** - Select a date when the limit is reviewed.

5. Depending on the type of exposure selected, fill in these additional fields:

- For `Exchange exposure`, select the **Exchange currency limit** from the list.
- For `Product Exposure`, select the **Product** from the list. From the total exposure amount, you can set a limited amount to be given on a certain product. For example, for a corporate term loan to give only $2 million dollars while the total exposure is $3 million.
- For `Product Type Exposure`, select the **Product Type** from the list. If the type is secured by an asset, then select the **Product type is secured** checkbox.
- For `Country Exposure`, select the **Country** where the limit is available.
- For `Company Limit`, select the **Company** for which the limit applies from the list of group members. See Groups for details about groups.

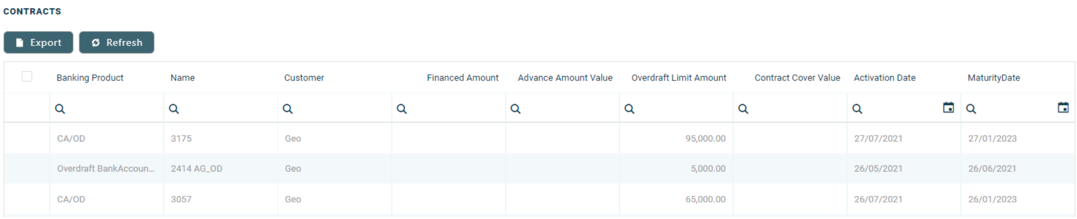
6. Click the **Save and Reload** button. Core Banking saves the limit and generates a number for a record, then displays it at the top of the page along with the name of the customer. The **History** tab is also displayed, containing information about each version of the record.



History

	Name	Label	Attribute Version Date	Attribute Version	Modified by user
	CL000001653	Draft	21/01/2022 02:00	1	mr

The existing contracts affected by this limit are displayed in the **Contracts** section.



CONTRACTS

	Banking Product	Name	Customer	Financed Amount	Advance Amount Value	Overdraft Limit Amount	Contract Cover Value	Activation Date	MaturityDate
	CA/OD	3175	Geo			95,000.00		27/07/2021	27/01/2023
	Overdraft BankAccoun...	2414 AG_OD	Geo			5,000.00		26/05/2021	26/06/2021
	CA/OD	3057	Geo			65,000.00		26/07/2021	26/01/2023

7. Repeat to add as many limits as needed.

> **IMPORTANT!**
>
> For the same customer, only one limit exposure can be added.

8. Send the limit record to approval by changing its status into **Send to Approved**.

9. As a user with customer limits approval rights, approve the record, so that it becomes active in the system. Approve the limit from the **Customer Limits** dashboard **>Customer Limits Approval Requests** tab or from the **Approval Tasks** menu.

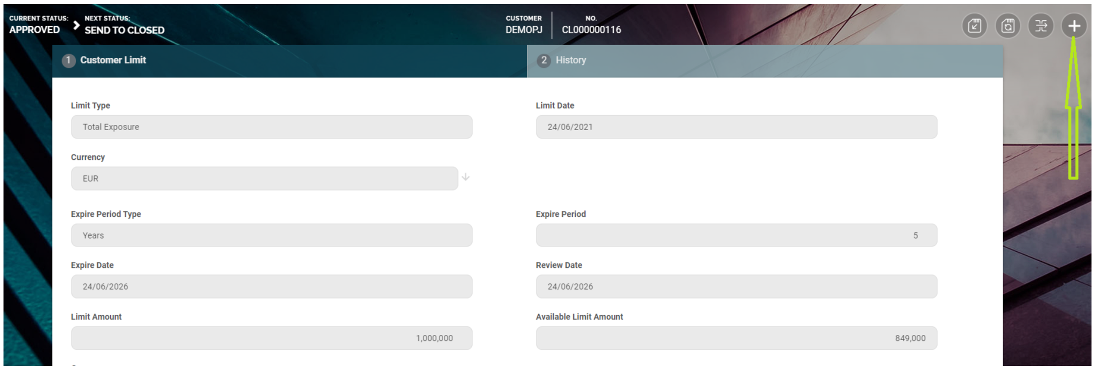
Creating New Versions of Existing Limits

The limits are set up for versioning. Thus, if the details of an approved limit have to be updated, a new version of the record must be created.

To create a new version for a record with the **Approved** status, follow these steps:

1. Double-click the limit record selected for updates.

2. Click the **New Version** button in the top right corner of the page.



CURRENT STATUS: APPROVED

NEXT STATUS: SEND TO CLOSED

CUSTOMER: DEMOPJ

NO.: CL000000116

Limit Type: Total Exposure

Limit Date: 24/06/2021

Currency: EUR

Expire Period Type: Years

Expire Period: 5

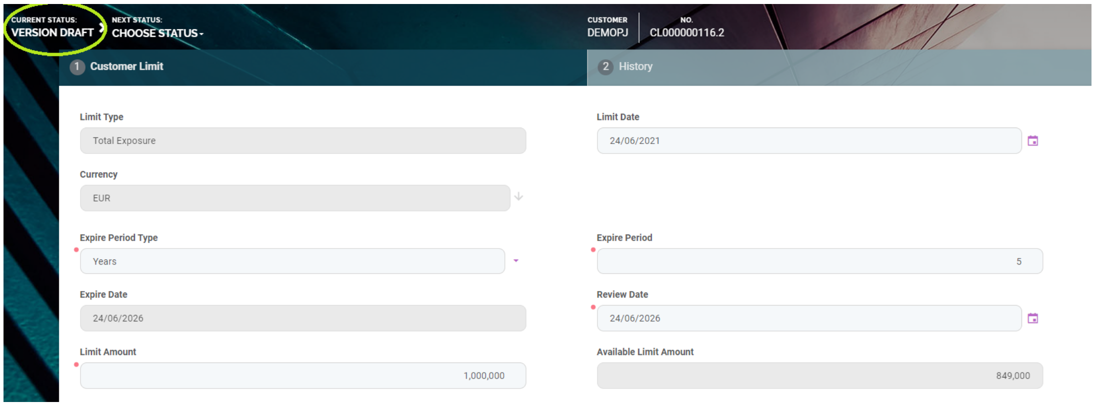
Expire Date: 24/06/2026

Review Date: 24/06/2026

Limit Amount: 1,000,000

Available Limit Amount: 849,000

A new version of the limit is created, with **Version Draft** status.


CURRENT STATUS: VERSION DRAFT

NEXT STATUS: CHOOSE STATUS

CUSTOMER DEMOPJ

NO. CL000000116.2

1 Customer Limit

2 History

Limit Type: Total Exposure

Limit Date: 24/06/2021

Currency: EUR

Expire Period Type: Years

Expire Period: 5

Expire Date: 24/06/2026

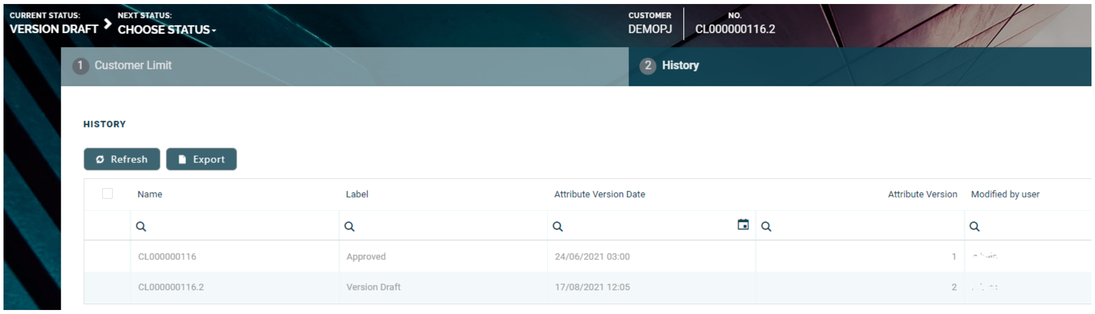
Review Date: 24/06/2026

Limit Amount: 1,000,000

Available Limit Amount: 849,000

3. Edit the desired fields in the **Customer Limit** tab. You cannot edit the limit type, currency, group and available limit amount.

4. Click the **Save and Reload** button. The number of the record is automatically updated and displayed at the top of the page. The **History** tab is also displayed, containing information about each version of the record.


CURRENT STATUS: VERSION DRAFT

NEXT STATUS: CHOOSE STATUS

CUSTOMER DEMOPJ

NO. CL000000116.2

1 Customer Limit

2 History

HISTORY

Name	Label	Attribute Version Date	Attribute Version	Modified by user
CL000000116	Approved	24/06/2021 03:00	1	[redacted]
CL000000116.2	Version Draft	17/08/2021 12:05	2	[redacted]

If the version draft record is approved, then the original record transitions into the **Version Closed** status and the secondary version becomes the **Approved** currently active limit record.

Read more details about versioning a record on the How to Version an Entity Record page.

Collaterals

A collateral is a property, such as securities, items of value, pledged by a borrower to protect the interests of the lender. A lender can seize the collateral from a borrower if the latter fails to repay a loan according to the agreed terms. A collateral acts as a guarantee that the lender receives the amount lent even if the borrower does not repay the loan as agreed. For example, when contracting a mortgage, the bank asks the customer to provide their house as collateral. If the customer fails to meet the repayment terms of their mortgage, the bank has the right to take ownership of the house. The bank can then sell the house in order to recoup the money that it lent to the customer.

Collateral management is the method of granting, verifying and managing collateral transactions in order to reduce credit risk in unsecured financial transactions. It is an essential and integral part of any financial institution's risk and regulatory compliance framework.

There is a wide range of possible collaterals used to hedge credit exposure with various degrees of risk:

- Cash Collateral: Fixed Deposit, Stocks, etc.
- Real estate: Property, Land
- Other: metals, commodities, etc.

Collateral System Statuses

In Core Banking, a registered collateral has the following statuses:

- **Draft** - the status of a newly created collateral registration record that was not yet cleared to be used. While in this status, you can edit its fields. Change the status of the record to **Active** after editing all the necessary details in order to use it later in contracts.
- **Active** - the status of a collateral registration record after being authorized for usage in contracts.

- **Owned** - the collateral is being used by a contract. It is linked to a loan or any other secured product (overdraft, bank guarantee, etc).
- **Released** - the status of a collateral after closing the contract to which it was attached.

IMPORTANT!
In order to use the collateral as a guarantee for covering a secured loan contract, it must have the **Active** status.

Managing Collaterals

Perform the following steps to manage collaterals in FintechOS Core Banking:

1. Add new guarantee types, if your financial institutions wishes to work with guarantee types other than the default ones. If not, skip to Registering Collaterals.
2. Create collateral types based on the newly added guarantee types, if applicable. If not, skip to Registering Collaterals.
3. Register a collateral before using it within a contract. Registration is performed based on a collateral type.

The first two steps are usually performed during Core Banking configuration, while the 3rd step is performed each time you must register an asset as a collateral, to be later on used to cover a contract.

IMPORTANT!
You must first register a collateral so that you can use it as a guarantee for covering a secured loan contract.

Setting Guarantee Types

There are two guarantee types defined by default in the `GuaranteeTypes` option set that cover most of the business requirements: `Real Estate` and `Cash Collateral`.

if your financial institutions wishes to work with guarantee types other than the default ones, add new guarantee types following these steps:

1. In FintechOS Studio, click the main menu icon, expand the **Admin** menu, and click **Option Sets** to open the **Option Sets List** page.
2. Find the `GuaranteeTypes` option set, storing the guarantee types, and double-click it to open the **Edit Option Set** page.
3. In the **Option Set Items** section, click the **Insert** button to open the **Add Option Set Item** page.
4. Add the details of the new guarantee type by filling in the following fields:

- **Name** - Enter the name of the guarantee type.
- **Display Name** - Enter the display name of the guarantee type.
- **Value** - Enter the value of the guarantee type.
- **Status Id** - Select the status of the item within the option set: active or inactive. Default value: `Active`.

5. Click the **Save and Close** button. The id of the option set item is automatically generated when saving the record.

Guarantee types are further used to define collateral types.

Creating Collateral Types

In FintechOS Core Banking there is a large range of predefined collateral types:

- Predefined collaterals for Cash Collateral guarantee: Fixed Deposit, Stock, Bonds.
- Predefined collaterals for Real Estate guarantee: Land and Property.

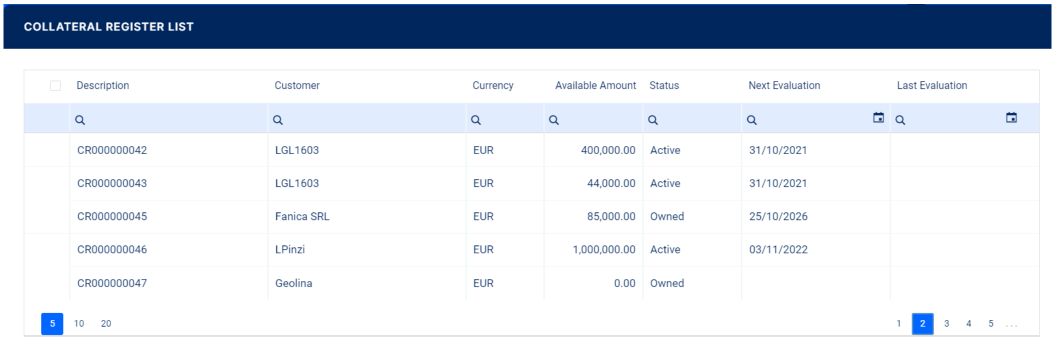
You can create new ones for your business specific needs. To add new collateral types, follow the steps described in the Collateral Type page within the Banking Product Factory user guide.

Registering Collaterals

You should register a collateral to support managing secured loans. You can attach a registered collateral to multiple contracts if the contracts total amount does not exceed the collateral available amount.

In order to use the collateral as a guarantee for covering a secured loan contract, you must first insert it in the collateral register. Follow these steps to register a collateral:

1. In the FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click **Collateral Register** menu item to open the **Collateral Register List** page. On the **Collateral Register List** page, you can add new collateral records or search, edit, and delete existing ones.



COLLATERAL REGISTER LIST

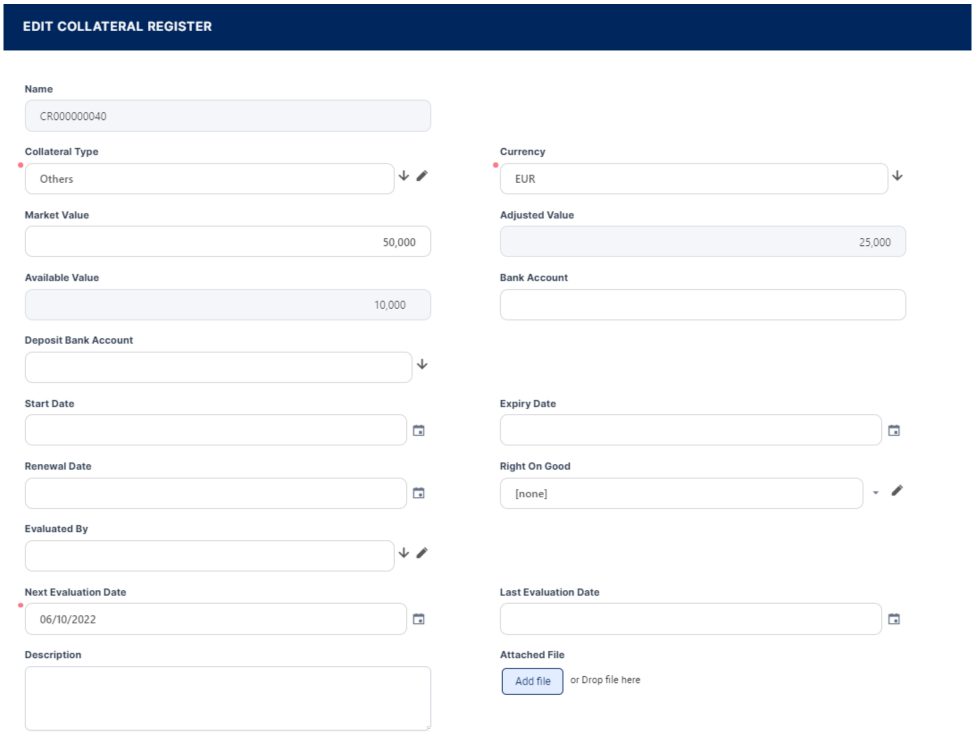
□	Description	Customer	Currency	Available Amount	Status	Next Evaluation	Last Evaluation
	CR000000042	LGL1603	EUR	400,000.00	Active	31/10/2021	
	CR000000043	LGL1603	EUR	44,000.00	Active	31/10/2021	
	CR000000045	Fanica SRL	EUR	85,000.00	Owned	25/10/2026	
	CR000000046	LPinzi	EUR	1,000,000.00	Active	03/11/2022	
	CR000000047	Geolina	EUR	0.00	Owned		

NOTE

Collateral register records with an Owned status cannot be deleted. See Collateral System Statuses for more details.

3. Click the **Insert** button on the **Collateral Register List** page to add a new collateral register.

4. In the newly displayed **Add Collateral Register** page, fill in the following fields:



EDIT COLLATERAL REGISTER

Name: CR000000040

Collateral Type: Others

Currency: EUR

Market Value: 50,000

Adjusted Value: 25,000

Available Value: 10,000

Bank Account:

Deposit Bank Account:

Start Date:

Expiry Date:

Renewal Date:

Right On Good: [none]

Evaluated By:

Next Evaluation Date: 06/10/2022

Last Evaluation Date:

Description:

Attached File

- **Name** - Automatically completed by Core Banking after saving the record, it displays the id of the collateral.
- **Customer** - Select the customer who owns the collateral. A collateral may have many owners. If this is your case, enter the rest of the owners in the **Collateral Owners** section as guarantors.
  Only displayed when registering a new collateral.

- **Collateral Type** - Select the type of the collateral from the drop-down list.
- **Currency** - Select the currency of the collateral. It can be different from the currency of the contract which uses this collateral as a guarantee.
- **Next Evaluation Date** - For Real Estate collaterals, you can insert the next evaluation date. Only displayed when editing an existing collateral register.

5. Optionally, fill in the following fields:
    - **Market Value** - Enter the market value of the collateral which is taken into consideration. Only applicable for Real Estate and Others collateral types.
    - **Adjusted Value** - The percent that should be covered by the collateral is set in at the banking product level, in the `Collateral Cover Percent` field. Only applicable for Real Estate and Others collateral types, it is automatically calculated by Core Banking.
    - **Available Value** - If the collateral is used to cover other loans, Core Banking automatically calculates the remaining value and displays it in this read-only field.
    - **Bank Account** - Enter the customer's current account so that the funds within the account can serve as a guarantee.
    - **Deposit Bank Account** - Select the deposit bank account of the customer from the list of accounts with Open status and type different than Loan Term Account. Only applicable for Cash collateral types.
    - **Start Date** - Select the start date for the collateral registration.
    - **Expiry Date** - Select the end date for the collateral registration.
    - **Renewal Date** - Select the date when the collateral registration is renewed.
    - **Evaluated By** - Select the customer who evaluated the collateral.

- **Right On Good** - Select the type of rights held on the collateral goods. Possible values: `Full Property`, `Naked Property` and `Usufruct`.
- **Last Evaluation Date** - For Real Estate collaterals, you can insert the previous evaluation date. Only displayed when editing an existing collateral register.
- **Description** - Enter a suggestive description for the collateral.
- **Attached File** - Attach files relevant for the collateral.

6. Click the **Save and Reload** button.

After saving the record, fill in the new sections displayed in the page, with specific information:

Add Collateral Register Rank

In the **Collateral Register Rank** section, you can insert, delete or export collateral register ranks.

To add a rank:

1. Click **Insert** and fill in the following fields:
   - **Parity On Rank** - Select the checkbox to mark the collateral with parity on rank.
   - **Rank** - Select the rank of the collateral.
   - **Owner** - Select the customer who owns the collateral.
2. Click the **Save and Close** button.

View Contract Collaterals

The list within the **Contract Collateral** section is automatically generated, displaying the contracts where the current collateral is used as guarantee, if such contracts exist. The following information is displayed:

- **Contract** - The id of the contract where the collateral is attached.
- **Status** - The status of the contract.
- **Collateral Register Value** - The value of the registered collateral.
- **Collateral Register Value Usage (%)** - The percent from the collateral used for coverage within the contract.
- **Value in Contract Currency** - The value of the collateral expressed in the currency of the contract.

To edit a collateral attached to a contract from this list:

1. Double-click the record and perform the desired updates in the **Edit Contract Collateral** page.
2. Click the **Save and Close** button.

Manage Collateral Owners

A collateral may have multiple owners. The customer whom you previously entered before saving the collateral register record becomes the main owner. To add other registered customers who partially own the collateral, use the **Collateral Owners** section of the **Edit Collateral Register** page. The other owners of the collateral are considered guarantors of the contract, and they should consent on this. They are stored in the `Collateral Register Owner` entity.

To add an owner:

1. Click **Insert** and fill in the following fields:
    - **Collateral** - Automatically filled in by Core Banking with the id of the collateral register record.

- **Customer** - Select the customer who partially owns the collateral and becomes a guarantor for contracts where the collateral is used.

2. Click the **Save and Close** button.

Manage Collateral Register Participants

In the **Collateral Register Participants** section, you can insert, delete or export customers who participate to the collateral in a specific role such as notary, valuer, etc.

To add a participant:

1. Click **Insert** and fill in the following fields:
   - **Participant** - Select the customer who is a participant to the collateral.
   - **Participant Role** - Select the role of the customer in this collateral.
2. Click the **Save and Close** button.

Manage Collateral Register Documents

In the **Collateral Register Documents** section, you can insert, delete or export collateral documents.

To add a document:

1. Click **Insert** and fill in the following fields:
   - **Document Type** - Select the type of the document that is uploaded for the collateral.
   - **Collateral File** - Attach the file to be uploaded.
2. Click the **Save and Close** button.

Contracts

Any agreement between a bank or a financial institution and a customer regarding the usage of a banking product is documented legally with a contract.

FintechOS Core Banking allows financial institutions to create banking product agreements (contracts) for their customers based on approvals. This is how Core Banking indicates the selling of a banking product, recording a contract to reflect the product and negotiated details within the origination process.

Contract Implementation Notes

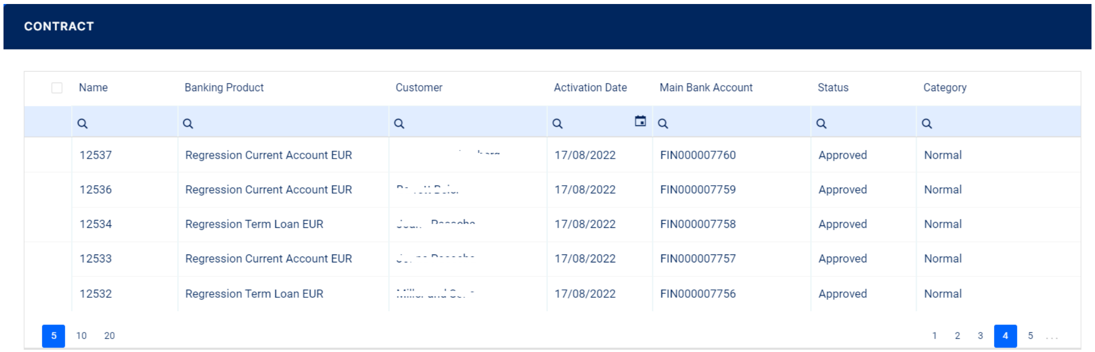
- The contract approval is made according to the specifications of the financial institution set during the implementation process.
- The integration is done according to the financial institution's requirements.
- The contract should be approved only after the advance is paid. This should be applicable for loan contracts with a stipulated advance amount or percent to be paid on the first disbursement day (for merchant loans), in order to avoid having to close newly created contracts if the process of collecting the advance and potential fees fails.

Managing Contracts

NOTE
Core Banking enables you to manage contracts via the user interface or via integration through APIs. For information about the available endpoints, please visit the Core Banking Developer Guide.
For information about managing contracts via the user interface, continue reading this page.

To manage contracts:

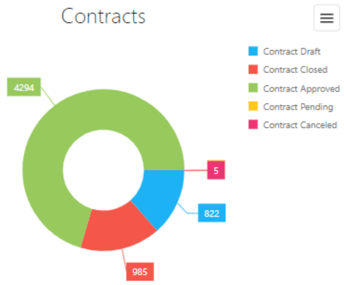
1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click **Contract** menu item to open the **Contracts** page.

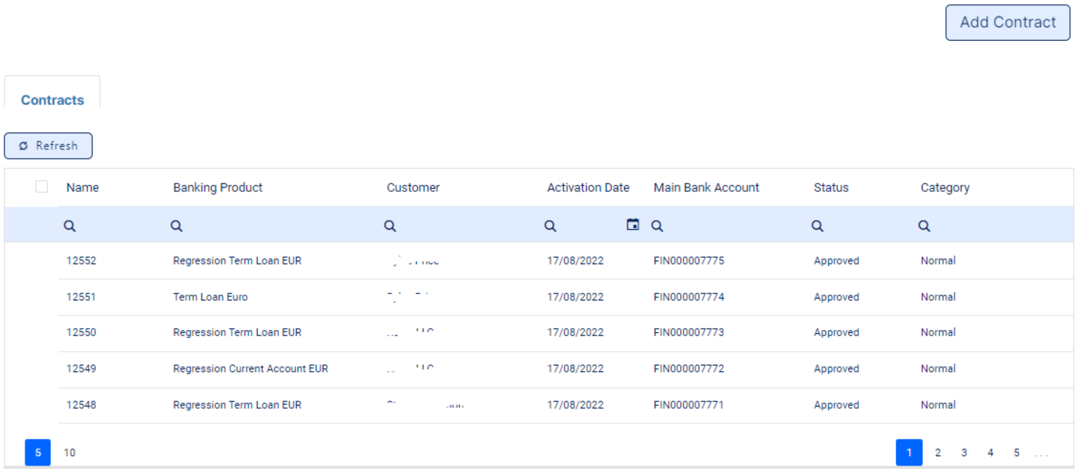


CONTRACT

☐	Name	Banking Product	Customer	Activation Date	Main Bank Account	Status	Category
	12537	Regression Current Account EUR	[redacted]	17/08/2022	FIN000007760	Approved	Normal
	12536	Regression Current Account EUR	[redacted]	17/08/2022	FIN000007759	Approved	Normal
	12534	Regression Term Loan EUR	[redacted]	17/08/2022	FIN000007758	Approved	Normal
	12533	Regression Current Account EUR	[redacted]	17/08/2022	FIN000007757	Approved	Normal
	12532	Regression Term Loan EUR	[redacted]	17/08/2022	FIN000007756	Approved	Normal

Alternatively, you can select the **Contracts dashboard**.

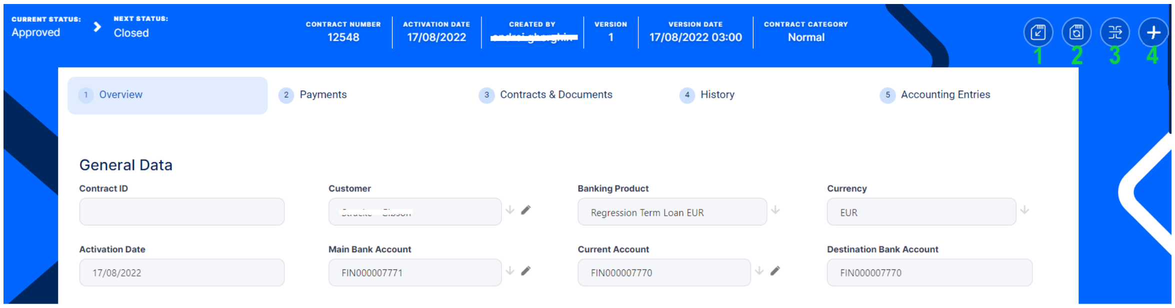




☐	Name	Banking Product	Customer	Activation Date	Main Bank Account	Status	Category
	12552	Regression Term Loan EUR	[redacted]	17/08/2022	FIN000007775	Approved	Normal
	12551	Term Loan Euro	[redacted]	17/08/2022	FIN000007774	Approved	Normal
	12550	Regression Term Loan EUR	[redacted]	17/08/2022	FIN000007773	Approved	Normal
	12549	Regression Current Account EUR	[redacted]	17/08/2022	FIN000007772	Approved	Normal
	12548	Regression Term Loan EUR	[redacted]	17/08/2022	FIN000007771	Approved	Normal

On the **Contracts** page, you can add new contract records or search, edit, and delete existing ones in Draft status.

Core Banking has a series of buttons that help shorten the processes of managing contracts. Such actions aid you quickly streamline several processes. In the selected contract's page, in the top right corner, a series of buttons (depicted below in green) trigger different actions.



CURRENT STATUS: Approved > NEXT STATUS: Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12548	17/08/2022	[redacted]	1	17/08/2022 03:00	Normal

General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	Regression Term Loan EUR	EUR
Activation Date	Main Bank Account	Current Account	Destination Bank Account
17/08/2022	FIN000007771	FIN000007770	FIN000007770

- Button 1 is the **Save and close** button.
- Button 2 is the **Save and reload** button.
- Button 3 opens the **Contract Business Workflow Transitions List**.
- Button 4 creates a **new version of the existing contract**. The new version has to be approved before the customer starts using it. If it is NOT approved, then the initial version can still be used.

Loans

A loan is a banking product which defines a loan for a specific amount, that has a specified repayment schedule and either a fixed or floating interest rate. Core Banking enables you to create contracts based on term loan products and to manage such contracts. Read about the operations that you can perform for the various types of loans: revolving loans, unsecured personal loans, secured loans, credit facility, SME loans.

Loan Contract Life Cycle and States

The four-eyes principle is applicable for all contracts in FintechOSCore Banking, meaning that a record should be approved by a second financial institution employee, with higher authorization rights. This is enabled via approval task FintechOS Platform capabilities and thus it is also a financial institution's responsibility to set proper security roles and access rights to its users, in order to make sure that the same user can't insert and also authorize the same record.

A contract record has the following business workflow statuses:

- **Draft** - the status of a newly created contract record that was not yet sent for approval. While in this status, you can edit some fields, but you can't add events (payments) to it. Send the record to approval after editing all the necessary details.
- **Pending** - this is a system status applied to contracts sent for approval, but not yet approved. No updates are available in this system status.
- **Approved** - the status of a contract record after being authorized by a user with contract approval competencies. While in this status, you cannot edit the record's details, but you can add events to it within the **Payments** tab. If you need to alter the contract's details, create a new version based on the current contract.

  > **NOTE**
  >
  > Each event must also be approved by a user with contract approval competencies, otherwise, the transaction is not performed by the system. New contract approval is blocked by Core Banking if the customer has overdue days >= the value of the `DelayDaysForBlockNewContractApproval` parameter.

- **Closed** - the last status of a contract, after manually closing it or after creating a new version based on the current version. No updates are allowed on the record.
- **Canceled** - the status of a contract after manually canceling it straight from the **Draft** status. No updates are allowed on the record.

> **NOTE**
>
> Change the contract's status to **Approved** so that the customer can use the contract and in order to apply transactions to it.

Contract Versioning

Core Banking allows you to create new versions for an existing contract if you need to modify an existing approved contract. New versions are automatically created when the payment schedule is modified - that implies any increase/ decrease, change of costs, reschedule or payment holiday transactions.

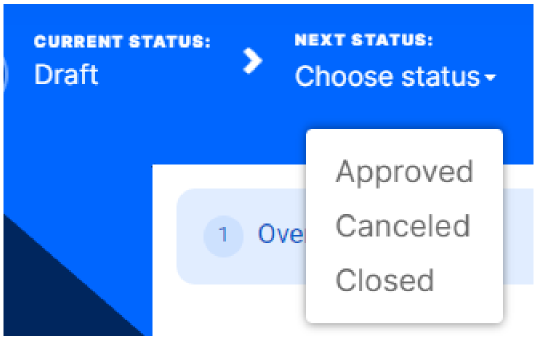
A contract version can have the following statuses:

- **Contract Version Draft** - the status of a newly created contract version record that was not yet sent for approval. While in this status, you can edit some fields, but you can't add events (payments) to it. Send the record to approval after editing all the necessary details.
- **Approved** - the status of a contract version record after being authorized by a user with contract approval competencies. While in this status, you cannot edit the record's details, but you can add events to it within the **Payments** tab.
- **Contract Version Closed** - the last status of a contract version, after manually closing it or after creating another new version based on the current version. No updates are allowed on the record.

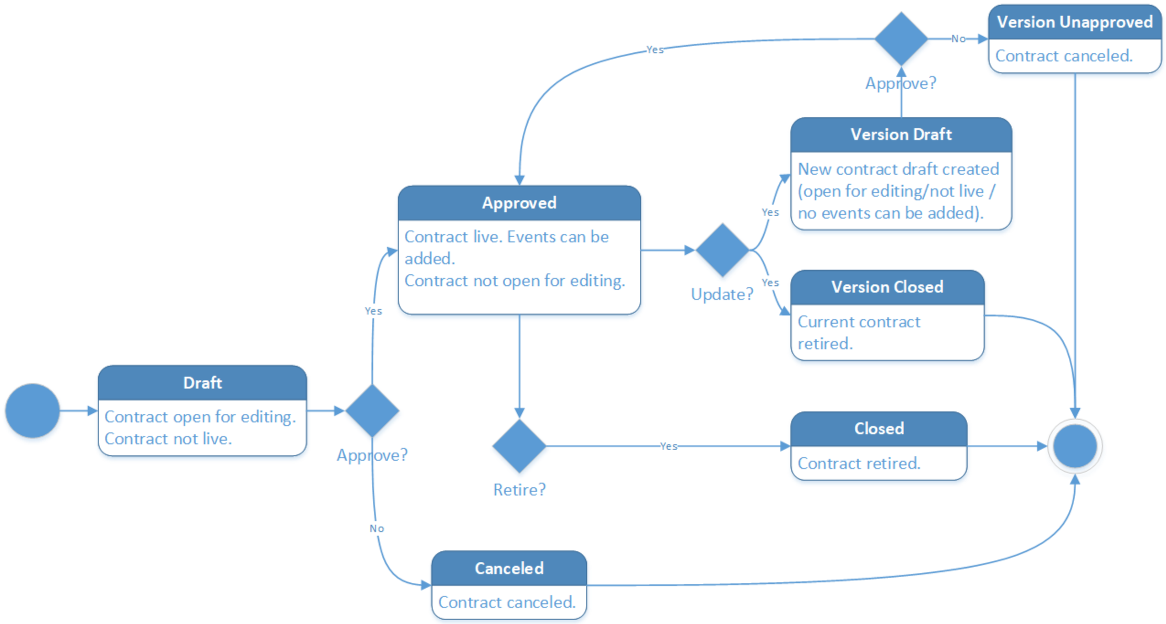
> **NOTE**
> All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event outside regular schedule is approved for that contract.

Changing Contract Statuses

You can manage a contract's life cycle by changing its status from the top right corner of the screen.



The contract status transitions are illustrated below:


Draft
Contract open for editing.
Contract not live.
Approve?
Yes
No
Approved
Contract live. Events can be added.
Contract not open for editing.
Canceled
Contract canceled.
Update?
Yes
Version Draft
New contract draft created (open for editing/not live / no events can be added).
Approve?
Yes
No
Version Unapproved
Contract canceled.
Version Closed
Current contract retired.
Retire?
Yes
Closed
Contract retired.

Note that:

- Once a record is live, its settings can no longer be modified.
- If you want to update the details of a live contract, you must create a new contract version.
- When you create a new contract version, the current version is retired and moved to history; no updates are allowed on the retired version.
- Every contract version starts in a draft state and must go through an approval process before going live.
- Only one version of a contract can be live at one time.

NOTE

As a best practice, new records or new versions of existing records created on a specific day should be approved on the same day.

Creating A New Unsecured Loan

An unsecured loan is a loan that doesn't require any type of collateral. Instead of relying on a borrower's assets as security, financial institutions approve unsecured loans based on a borrower’s creditworthiness.

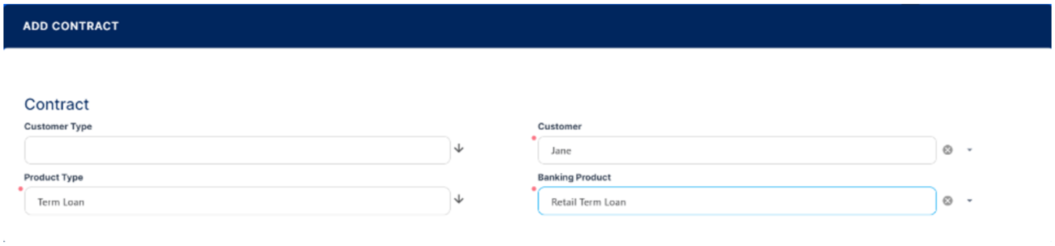
Before creating a unsecured term loan contract, make sure that:

- the customer is recorded in Core Banking,
- a settlement account (a current account contract for the same customer) is set up for the desired currency,
- and the limits are configured according to Core Banking's setup.

To create a new contract:

1. Add Minimum Contract Data

1. Open the **Contracts** page as described in the Managing Contracts section.
2. Click the **Insert** button to display the **Add Contract** page, the initial page when you insert any type of contract.



ADD CONTRACT

Contract

Customer Type:

Customer: Jane

Product Type: Term Loan

Banking Product: Retail Term Loan

3. Fill in the following fields:

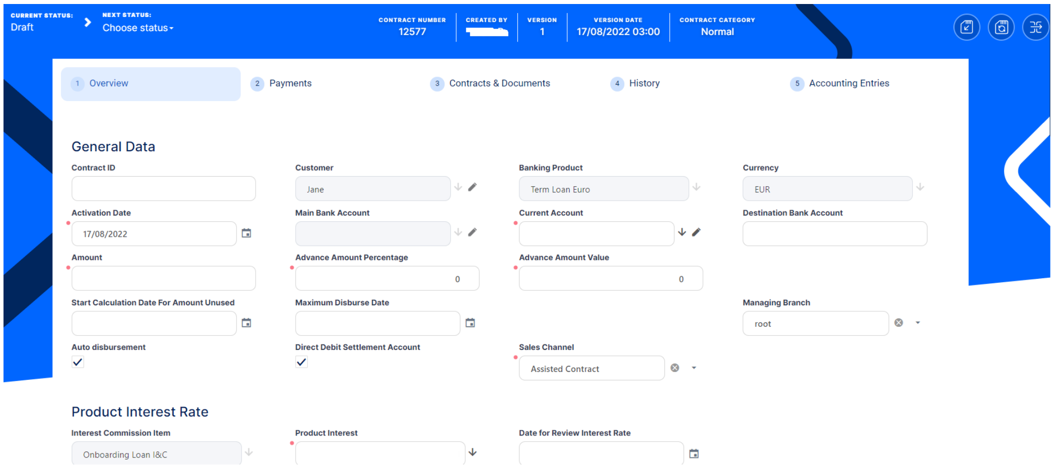
- **Customer Type** - Optionally, select the type of the customer for the contract, to filter the displayed customers in the next field.
- **Customer** - Select from the list the customer for whom you are creating a contract.

- **Product Type** - Select from the list the product type to filter the list of banking products accordingly.
- **Banking Product** - Select from the list the desired banking product.

> **NOTE**
> Be careful when choosing the values for the previously mentioned fields because you can't modify them after saving the contract!
> Make sure that you select `Term Loan` in the Product Type field and an `Unsecured Loan` banking product in the Banking Product field.

4. Click the **Save and Reload** button.

Core Banking saves the contract in **Draft** status, with minimum default information, such as an auto-generated contract number, created by, version and version number. The previously provided details are kept on screen in the **General Data** section, but they are no longer available for update. The **Currency** has been updated from the banking product level.



CURRENT STATUS: Draft
NEXT STATUS: Choose status
CONTRACT NUMBER: 12577
CREATED BY: [redacted]
VERSION: 1
VERSION DATE: 17/08/2022 03:00
CONTRACT CATEGORY: Normal

General Data

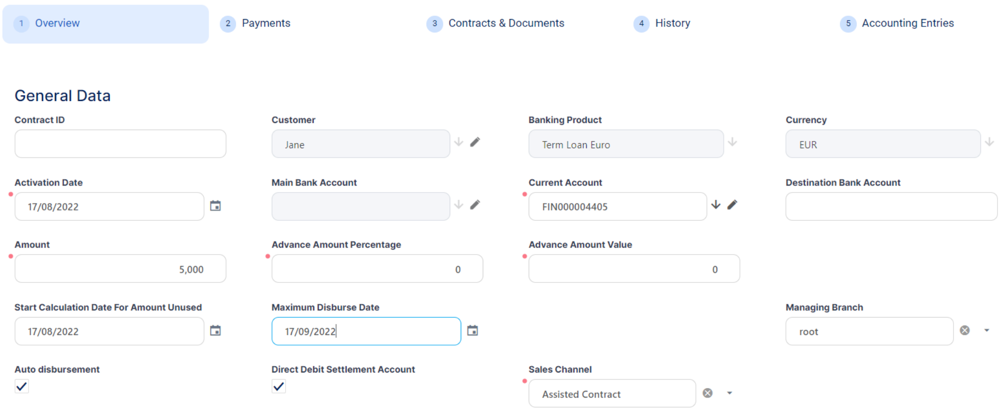
Contract ID:	Customer: Jane	Banking Product: Term Loan Euro	Currency: EUR
Activation Date: 17/08/2022	Main Bank Account:	Current Account:	Destination Bank Account:
Amount:	Advance Amount Percentage: 0	Advance Amount Value: 0	
Start Calculation Date For Amount Unused:	Maximum Disburse Date:		Managing Branch: root
Auto disbursement: ✓	Direct Debit Settlement Account: ✓	Sales Channel: Assisted Contract	

Product Interest Rate

Interest Commission Item: Onboarding Loan I&C	Product Interest:	Date for Review Interest Rate:

Proceed to the next steps where the details about the contract are captured and validated against the underlying product, setting the basic elements for the creation of a contract such as customer, banking product, account, interest rate, participants, tranches, fees, and contract covenants, within the newly displayed **Overview** tab.

2. Add General Data to the Contract



General Data

Contract ID	Customer	Banking Product	Currency
	Jane	Term Loan Euro	EUR
Activation Date	Main Bank Account	Current Account	Destination Bank Account
17/08/2022		FIN000004405	
Amount	Advance Amount Percentage	Advance Amount Value	
5,000	0	0	
Start Calculation Date For Amount Unused	Maximum Disburse Date		Managing Branch
17/08/2022	17/09/2022		root
Auto disbursement	Direct Debit Settlement Account	Sales Channel	
✓	✓	Assisted Contract	

1. Fill in or modify the following information:
   - **Current Account** - Select the current account to be used for settlement.
   - **Destination Bank Account** - Enter the destination bank account number, an account where the disbursements should be performed, if it's different from the current account selected previously. If the destination bank account belongs to a different customer than the one owning the contract, then any disbursement event happens in that customer's account, and the operation transaction record at the Operational Ledger level mentions the name of that customer in the **Destination Partner** field. For example, if you input the bank account of a merchant, then the disbursement happens in the merchant's account and the operation transaction record mentions the merchant's name in the **Destination Partner** field.
   - **Amount** - Enter the actual amount of credit for the contract.
   - **Advance Amount Percentage** & **Advance Amount Value** - Use these in case the product requires a first installment to be claimed on granting the loan itself, or as approval condition - used for orchestrating BNPL where the customer needs to provide a certain amount before benefiting from the loan; requires orchestration of the payment and the approval of such contract should happen only on instruction that payment for

advance has been supplied. The 2 fields change one based on the value inserted in the other, so if you insert a percentage the amount is updated based on loan amount.

> **NOTE** Limit validations for contracts with advance amount >0 are performed for Amount - Advance Amount. When the contract is activated, the available limit amount is decreased with the (Amount - Advance Amount) value. `Auto Disbursement = True` and cannot be changed for contracts with advance amount >0.
>
> If the advance amount is changed back to zero, then the value of the `Auto Disbursement` checkbox becomes the default value set at the banking product level and can be edited.

- **Sales Channel** - Select the channel through which the contract is created.

2. Optionally, fill in or modify the following information:
    - **Contract ID** - Enter a contract ID other than the contract number generated automatically by Core Banking when you saved the contract.
    - **Activation Date** - Modify the date when the contract is activated. It is automatically completed with the system date.
    - **Start Calculation Date For Amount Unused** - Enter the date when commitment fee starts being applied. There are instances when, because the loan is granted, the financial institution needs to reserve those funds and make sure they are available when the customer asks for a disbursement, provided all other conditions are met. For such cases, when the financial institution does not generate income from interest, they might want to have a minimum income and thus the commitment fee (commissions

with `Commission Unsuage` type). They can also allow for an interval for the amounts to be used and start applying such commissions post that interval.

- **Maximum Disburse Date** - Select the maximum date by which the loan should be used for the approved contract. It can be that it is required because of internal policies or legislation – such in case of an investment or a mortgage, if you do not use the funds for 6 months, there might be a need for a reassessment. If not selected, this date is calculated based on the `Maximum Period Disburse After Activation (Months)` from the banking product level, and `Maximum Disburse Date = Maturity Date - 1`.
- **Managing Branch** - This represents the branch of the organization where the contract was created. Suppose you work in a branch or credit center, and you need cases to be linked to a specific location so that you can properly allocate them for further actions. It is automatically completed at contract saving time, but you can select another branch from the list.
- **Auto disbursement** - Select this checkbox if the financed amount must be automatically disbursed on the approval of the contract. If selected, Core Banking performs the disbursement transaction immediately after contract approval, and the funds are moved to the settlement account or destination account as per instructions. The auto disbursement property is set at banking product level, but it can be modified at the contract level. The following validations are performed for this checkbox:
    - If the contract has multiple tranches, then `Auto disbursement = False` and it cannot be edited.
    - If `Auto disbursement = True` and the contract approval date = activation date, then Core Banking does not generate a new version for the contract.

    - If `Auto disbursement = True` and the contract approval date > activation date, then Core Banking generates a new version for the contract.

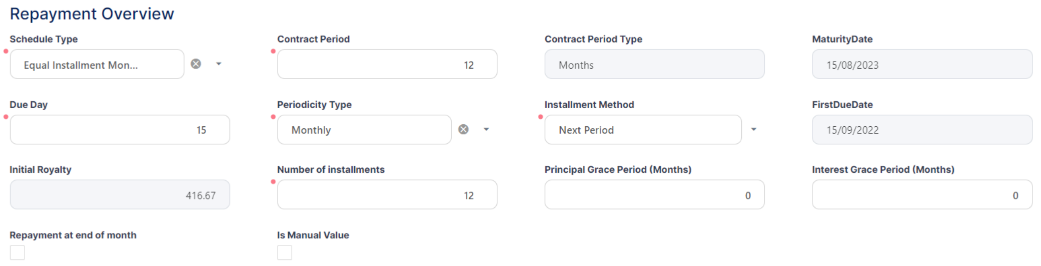
- **Direct Debit Settlement Account** - Select this checkbox if the automated settlement of repayment notifications (the direct debit settlement account) functionality is turned on at the contract level. The value of the checkbox was set at the banking product level, but it can be modified at the contract level. The checkbox can be edited in all the statuses of a contract except `Version Closed`, `Closed`, and `Canceled`.

> **NOTE** The `Direct Debit Settlement Account` setting at the customer level takes precedence over the setting at the contract level when creating new contracts. For existing contracts, Core Banking applies the setting configured within the `CustomerToContractDirectDebitSettlementAcc` system parameter.

3. Click the **Save and Reload** button.

3. Enter Repayment Information for the Contract

In the **Repayment Overview** section you should enter term, schedule type and first due date so that Core Banking can properly build the repayment schedule. Optionally you can set a grace period, mention if the due date should always be on the last day of the month and if there is any manual value for the installment.



Repayment Overview

Schedule Type	Contract Period	Contract Period Type	MaturityDate
Equal Installment Mon...	12	Months	15/08/2023
Due Day	Periodicity Type	Installment Method	FirstDueDate
15	Monthly	Next Period	15/09/2022
Initial Royalty	Number of installments	Principal Grace Period (Months)	Interest Grace Period (Months)
416.67	12	0	0
Repayment at end of month	Is Manual Value		
□	□		

1. Fill in or modify the following information specific to the contract's repayment schedule:
   - **Schedule Type** - Select the payment schedule type to be used to calculate the installments of this contract. You can select one of the payment schedule types associated to the underlying banking product in the **Details** tab > **Associated Payment Schedule Types** list. Core Banking uses the schedule type to build the repayment plan with equal instalments or liniar payments, include fees on the schedule and arrive to the day basis to be used for interest calculation (30/360).
   - **Contract Period** - Edit the term of the loan that was automatically completed with the number of contract period of contract period type as it was defined at banking product level, according to your needs. The contract period is used together with Contract Period Type and Periodicity Type. They all need to be in sync and also in sync with the schedule definition itself, and if there are multiple definitions allowed on the product, make sure to pick those working together.
   - **Contract Period Type** - This field is automatically completed with the contract period type as it was defined at banking product level. You can't edit this value.
   - **Maturity Date** - This field is automatically completed with the contract maturity date, calculated based on the values of the Contract Period, Contract Period Type, Due Date and Activation Date.

- **Due Day** - Enter the exact day of month for installment repayment. If it is set to 31, then the system takes the last day of month. If you manually select the `First Due Date`, then this field is automatically completed and not editable. If the periodicity and the repayments are set to every 30 days, Core Banking defaults the due date based on the activation date.
- **Periodicity Type** - Select the time interval for the repayment schedule. Possible values are set at the banking product level. If the periodicity is set to `Once`, then the payment happens one time, at loan maturity. You can only select from periodicity types with the same measurement unit as the selected schedule type's contract period type. For example, if the value in the `Contract Period Type` is `Days`, you can only select a periodicity type whose measurement unit is in days.
- **Installment Method** - Select the installment method to calculate if the first due date is set into the current month or in the next month. Possible values:
  - `Actual Period`, with the first installment's due date calculated within the same calendar month;
  - `Next Period`, with the first installment's due date calculated within the next calendar month after contract approval.
- **First Due Date** - Select the date of the first due installment. If you manually select the `Due Day`, then this field is automatically completed as calculated based on the information within the Due Date, Periodicity Type and Installment Method, and it is not editable.
- **Initial Royalty** - This field is automatically completed with the value of an installment. The field is displayed and can be filled in if the selected schedule type is of type `Equal Installment`. You can edit this value. If at the selected payment schedule type's level the `Installment Value Custom` field is `False`, then the `Initial Royalty` field at the contract level is read only.

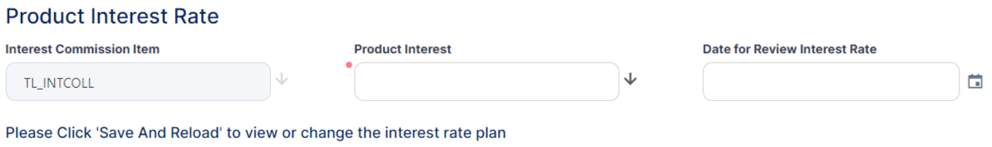
- **Initial Principal Value** - This field is automatically completed with the value of the principal within an installment. The field is displayed and can be filled in if the selected schedule type is of type `Equal Principal`. You can edit this value. If at the selected payment schedule type's level the `Installment Value Custom` field is `False`, then the `Initial Principal Value` field at the contract level is read only.
- **Number of installments** - This field is automatically completed with the number of installments to be paid for this contract, calculated based on previously defined values.
- **Principal Grace Period (Months)** - This field is displayed only if the banking product allows a principal grace period. Enter a value in months for the grace period allowed for principal repayment for this contract. The value inserted in this field should be between the minimum and maximum grace period set at the banking product level.
- **Interest Grace Period (Months**) - This field is displayed only if the banking product allows an interest grace period. Enter a value in months for the grace period allowed for interest repayment for this contract. The value inserted in this field should be between minimum and maximum grace period set at the banking product level.
- **Repayment at end of month** - If you select this checkbox, then the due day of the contract is automatically set to the last day of the month, and the repayment schedule is calculated with an installment in the last day of month.
- **Is Manual Value** - If you select this checkbox, then you can manually enter the value for royalty or principal, thus overriding the values automatically calculated by Core Banking.
  - If `Is Manual Value = False`, then the `Initial Royalty` and the `Initial Principal Value` fields are read-onlyand cannot be modified.

- If at the selected payment schedule type's level the `Installment Value Custom` field is `False`, then the `Is Manual Value` field at the contract level is read only.
- If `Installment Value Custom = True`, then the `Is Manual Value` field at the contract level is editable, with `False` default value.

2. Click the **Save and Reload** button.

4. Manage Product Interest Rate for the Contract

Enter the details about the Product Interest Rate applied to the loan. Depending on the product definition again, you have a list of interest definitions that you can bring along to the contract.



Product Interest Rate

Interest Commission Item	Product Interest	Date for Review Interest Rate
TL_INTCOLL		

Please Click 'Save And Reload' to view or change the interest rate plan

To manage the product interest rate as it must be applied to this contract:

1. Fill in or modify the following fields:

- **Interest Commission Item** - This field is automatically completed with the interest & commission item defined at the product level, if only one item is found at the product level. If the selected product has more items, you must select one from the list.
- **Product Interest** - Select from the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Penalty interests cannot be selected here.
- **Date for Review Interest Rate** - Enter the date for reviewing the interest rate applicable for the remaining amount. This date must be between `Activation Date` and `Maturity Date`, otherwise, an error is displayed.
  For variable interest, this field is automatically completed with the

`Reference Rate Date` + `Reference Interest Period` of the underlying interest definition, from the base type interest attached to variable interest. You can edit this field. For months where the date is over lapsed, the last day of the month is used for the calculation (for example, if you specify 30, then in February the system takes the last day, which can be the 28th or the 29th).

2. If the underlying interest definition has referenced a variable interest rate, the details included other fields for you to complete:

- **Margin** – The margin applicable on top of the variable interest rate.
- **Reference Rate Date** – The date to be considered in order to arrive to the applicable rate for the underlying variable interest (EURIBOR as of 30th June 2022).
- **Reference Rate** – The underlying rate for the variable interest as captured in Core Banking for the date above.

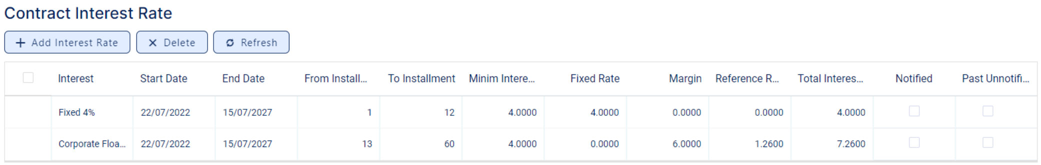
3. Click the **Save and Reload** button.

> **NOTE**
> Fill in any other mandatory fields from the **General Data** and **Repayment Overview** sections, otherwise you can't successfully save the contract.

5. Manage Contract Level Interest & Penalty Interest Rate

Define the information about the contract interest rate (or rates, if you selected a `Collection` type interest rate in the previous **Product Interest Rate** section) in a table format, in the section **Contract Interest Rate** section, which appears only after saving the selected product interest rates.

You can edit the tables cells, so you can customize the interest rates selected at the product level, if the interest and commission list was defined as `negotiable`, to obtain the desired interest rates configuration at the contract level. You can also add or delete interest rates, using the **Add Interest Rate**, respectively the **Delete** buttons above the tables. Thus, the tables enables you to work with multiple interest rates at the contract level.



□	Interest	Start Date	End Date	From Install...	To Installment	Minim Intere...	Fixed Rate	Margin	Reference R...	Total Interes...	Notified	Past Unnotifi...
	Fixed 4%	22/07/2022	15/07/2027	1	12	4.0000	4.0000	0.0000	0.0000	4.0000	□	□
	Corporate Floa...	22/07/2022	15/07/2027	13	60	4.0000	0.0000	6.0000	1.2600	7.2600	□	□

NOTE

The information disappears if you change the product interest, tenor, first due date, maturity date, contract period, or activation date. In this case, save the contract again to display the updated information.

To customize the information specific to each of the contract's **interest rates**:

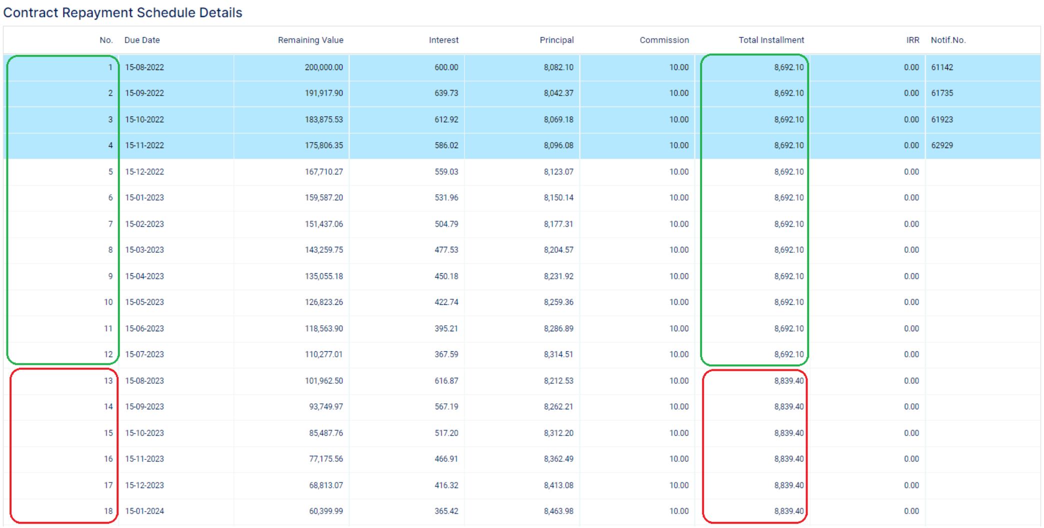
1. In the **Contract Interest Rate** section, edit the existing information that was automatically completed based on your product interest rate selections:

- **Interest** - Automatically completed with the interest (or interests, for `Collection` type product interest rate) selected in the previous **Product Interest Rate** section. You can select from the drop-down list the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Penalty and overdraft interests cannot be selected here. Depending on the selected interest, other fields can be displayed to be filled in.
- **Start Date** - The interest's start date, automatically completed with the contract's activation date.
- **End Date** - The interest's end date, automatically completed with the contract's maturity date.
- **From Installment** - The first installment for which this interest is applied to the contract.
- **To Installment** - The last installment for which this interest is applied to the contract.
- **Minimum Interest Rate** - This read-only cell is automatically completed with the minimum interest rate applicable for the contract, defined at the banking product level.

- **Fixed Rate** - The fixed rate of the interest. You can only change it if the interest at the banking product level was marked as `Is Negociable`.
- **Margin** - This cell is automatically completed with the margin of the previously selected product interest. You can only change it if the interest at the banking product level was marked as `Is Negociable`. If the product interest was not selected, you can manually enter the margin.
- **Reference Rate** - This read-only cell is automatically completed with the interest type's definition's reference rate valid at the previously selected date.
- **Total Interest Rate** - This read-only cell is automatically completed with the calculated total interest rate of the previously selected product interest and any values entered for margin and reference rate. If the product interest was not selected or if the interest at the banking product level was marked as `Is Negociable`, you can manually enter the interest rate.
- **Notified** - This is a read-only checkbox. For contracts in `Version Draft` status, it shows you whether the installments range shown on this table line was already notified or not.
- **Past Unnotified** - This is read-only cell read-only checkbox. For contracts in `Version Draft` status, it shows whether there are days that already passed from the current month's not yet notified installment, days for which you can't change the interest rate.

2. After performing the desired changes, make sure that the interest rate (s) cover the entire tenor of the contract, from activation date until maturity date, and there are no overlapping intervals, otherwise an error prevents you from approving the contract.
3. Click the **Save and Reload** button.

Later, after contract approval, the contract repayment schedule is calculated taking into consideration the contract interest rates as defined in this section. For example, for a multiple interest rates, the installment amounts differ depending on the interest rate applicable for those installment numbers. The picture below shows different values calculated for the repayment schedule of a loan with multiple interest rates, where an interest rate was applied for the first 12 installments, and another interest rate was applied for the rest of the installments.



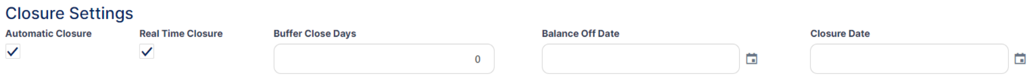
Contract Repayment Schedule Details

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR	Notif.No.
1	15-08-2022	200,000.00	600.00	8,082.10	10.00	8,692.10	0.00	61142
2	15-09-2022	191,917.90	639.73	8,042.37	10.00	8,692.10	0.00	61735
3	15-10-2022	183,875.53	612.92	8,069.18	10.00	8,692.10	0.00	61923
4	15-11-2022	175,806.35	586.02	8,096.08	10.00	8,692.10	0.00	62929
5	15-12-2022	167,710.27	559.03	8,123.07	10.00	8,692.10	0.00	
6	15-01-2023	159,587.20	531.96	8,150.14	10.00	8,692.10	0.00	
7	15-02-2023	151,437.06	504.79	8,177.31	10.00	8,692.10	0.00	
8	15-03-2023	143,259.75	477.53	8,204.57	10.00	8,692.10	0.00	
9	15-04-2023	135,055.18	450.18	8,231.92	10.00	8,692.10	0.00	
10	15-05-2023	126,823.26	422.74	8,259.36	10.00	8,692.10	0.00	
11	15-06-2023	118,563.90	395.21	8,286.89	10.00	8,692.10	0.00	
12	15-07-2023	110,277.01	367.59	8,314.51	10.00	8,692.10	0.00	
13	15-08-2023	101,962.50	616.87	8,212.53	10.00	8,839.40	0.00	
14	15-09-2023	93,749.97	567.19	8,262.21	10.00	8,839.40	0.00	
15	15-10-2023	85,487.76	517.20	8,312.20	10.00	8,839.40	0.00	
16	15-11-2023	77,175.56	466.91	8,362.49	10.00	8,839.40	0.00	
17	15-12-2023	68,813.07	416.32	8,413.08	10.00	8,839.40	0.00	
18	15-01-2024	60,399.99	365.42	8,463.98	10.00	8,839.40	0.00	

6. Amend Closure Settings

If allowed from the product definition, you can amend the closure settings of the contract, the way Core Banking should behave once the loan is repaid and the contract can be closed. Most of the times this is not something that you have to access, but it adds extra flexibility at the contract level. This may prove useful if you suspect there may be reasons to keep a contract open for some time post recovering all amounts for instances when there may appear claims of funds (SEPA DD) or other similar cases.

The **Closure Settings** section is only displayed for contracts based on banking products having the `Closing Is Flexible = True` setting.



Closure Settings

Automatic Closure	Real Time Closure	Buffer Close Days	Balance Off Date	Closure Date
✓	✓	0		

To amend the closure settings brought from product level here at the contract level:

1. Fill in or modify the following fields:
    - **Automatic Closure** – If selected, Core Banking automatically closes the contract once all other conditions are met. This field is automatically completed with the value defined at the banking product level, but you can modify it.
        - Select this checkbox to instruct Core Banking to close the contract automatically when the available amount becomes zero and there are no further amounts to be recovered, and after the number of days set as buffer before closure pass and `Closure Date = Current Date`.
        - Deselect it to instruct Core Banking to keep the contract open, regardless of the fulfillment of its maturity and balance criteria, waiting to be manually closed by changing its status to `Closed`.

        > **NOTE**
        >
        > Revolving loans are closed only after maturity. In this case, the available loan amount is considered as balance.
        >
        > You can perform contracts events as specified in the **Allowed Transactions** section of the banking product, plus manual closure while the contract is pending closure. Performing any other transactions displays an error message.

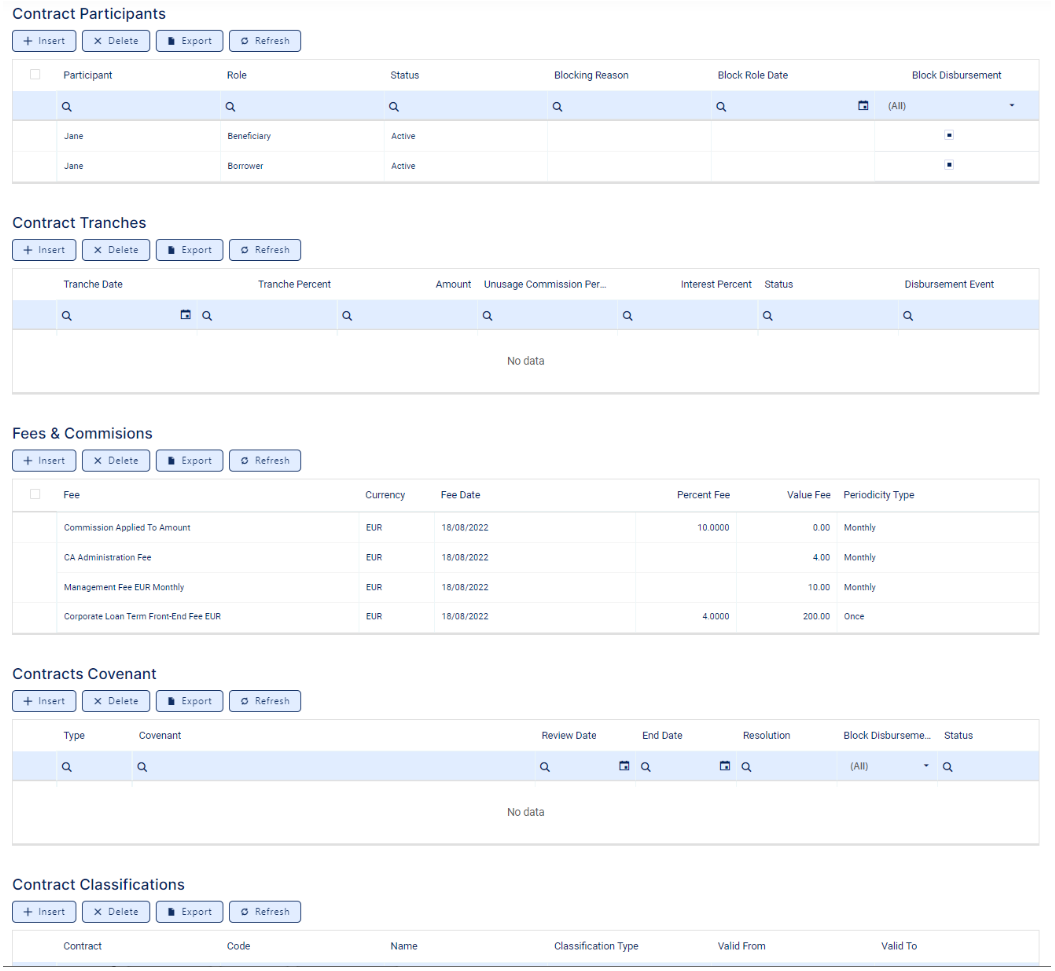
    - **Real Time Closure** – If you select this checkbox, when the amounts become zero and the loan is not a revolving one, the contract is closed automatically. If `Real Time Closure = True`, then `Buffer Close Days = 0` and `Automatic Closure = True`. For more details about the real-time closure, see Close Contracts RealTime(CB) Job.

- **Buffer Close Days** - Enter the number of days used as buffer before automatically closing the contract. If `Buffer Close Days > 0`, then `Real Time Closure = False`. Core Banking waits the entered number of days after the contract's balances reach zero, and at the end of that day the contract is closed.
- **Balance Off Date** – This is a system maintained field and it is populated with the date on top of which Core Banking adds the Buffer Close Days to arrive to the Closure Date.
- **Closure Date** – This is a system maintained field and holds the date when the contract is closed. For automatic closure, the date is calculated by Core Banking as Balance Off Date + Buffer Close Days.

2. Click the **Save and Reload** button.

7. Check Other Details Pre-Filled Based on Product Definition

Once you defined the mandatory details, then saved and reloaded the contract, Core Banking updates some of the next sections on the page, based on product definitions:



Contract Participants

Participant	Role	Status	Blocking Reason	Block Role Date	Block Disbursement
					(All)
Jane	Beneficiary	Active			■
Jane	Borrower	Active			■

Contract Tranches

Tranche Date	Tranche Percent	Amount	Unusage Commission Per...	Interest Percent	Status	Disbursement Event

No data

Fees & Commisions

Fee	Currency	Fee Date	Percent Fee	Value Fee	Periodicity Type
Commission Applied To Amount	EUR	18/08/2022	10.0000	0.00	Monthly
CA Administration Fee	EUR	18/08/2022		4.00	Monthly
Management Fee EUR Monthly	EUR	18/08/2022		10.00	Monthly
Corporate Loan Term Front-End Fee EUR	EUR	18/08/2022	4.0000	200.00	Once

Contracts Covenant

Type	Covenant	Review Date	End Date	Resolution	Block Disburseme...	Status
					(All)	

No data

Contract Classifications

Contract	Code	Name	Classification Type	Valid From	Valid To

Core Banking brings the **Contract Participants**, the Borrower being also Beneficiary of the funds and the Customer who is granted the loan. If needed, you can add other participants to the contract, like Guarantors, Co-Debtors, etc. There may be cases when some roles are mandatory for a product. Those are detailed in a separate section. If there is a mandatory role defined in the banking product definition, Core Banking displays an error on trying to approve the contract.

Contract Tranches is a section where you can implement progressive access to the funds. This is valuable in case of loans granted for investment projects where you can know upfront that there is a plan for the project and payments need to happen for each stage of the project, those stages being known from the start.

Another important section brought from the product definition is the **Fees & Commissions**. Depending on the system setup, you are allowed or not to amend fees and commissions in this section.

Contract Covenants section displays the covenants that applicants must abide by after getting the loan, configured at the product level. Such conventions are usually applicable for corporate clients that must meet certain requirements in order to continue to receive disbursements and not only: submit balance sheet every x months, have account turnover of at least x percent from average monthly turnover, provide other relevant documents from authorities. In this section, you can manage covenants for the contract. These covenants would need to be monitored procedurally; Core Banking doesn't have the logic in place to implement automated processes.

You can use the **Contract Classifications** section to capture various classifications that might be relevant for the financial institution for that loan at a moment in time. It is a placeholder for such details and there is no automated logic in place to update them. In implementation this can be used for other developments if required.

After defining the relevant details of the contract, proceed to **contract approval**.

Creating A New Secured Loan

Secured loans are business or personal loans that require some type of collateral as a condition of borrowing. A financial institution can request collateral for large loans for which the funds are used to purchase a specific asset or in cases where the customer's credit scores aren’t sufficient to qualify for an unsecured loan.

Before creating a secured term loan contract, make sure that:

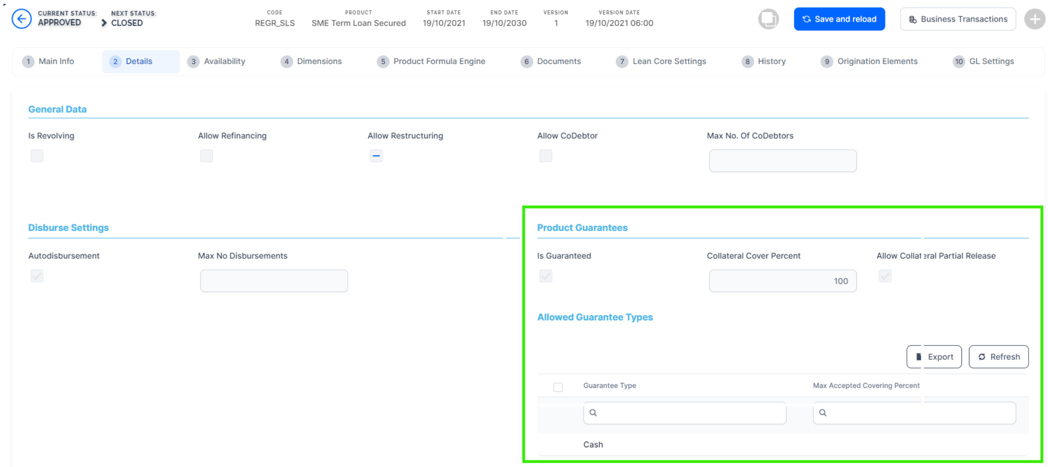
- the customer is recorded in Core Banking,
- a settlement account (a current account contract for the same customer) is set up for the desired currency,

- the collateral is registered in Core Banking,
- and the limits are configured according to Core Banking's setup.

To create a new secured loan contract:

1. Follow the Same Steps as for Creating an Unsecured Loan Contract

The process of creating an secured loan contract is similar to that of creating an unsecured loan contract. The difference is that you must choose a banking product that is **secured** when creating the contract.



CURRENT STATUS: APPROVED
NEXT STATUS: CLOSED
CODE: REGR_SLS
PRODUCT: SME Term Loan Secured
START DATE: 19/10/2021
END DATE: 19/10/2030
VERSION: 1
VERSION DATE: 19/10/2021 06:00

General Data

Is Revolving □
Allow Refinancing □
Allow Restructuring ⊟
Allow CoDebtor □
Max No. Of CoDebtors

Disburse Settings

Autodisbursement ☑
Max No Disbursements

Product Guarantees

Is Guaranteed ☑
Collateral Cover Percent: 100
Allow Collateral Partial Release ☑

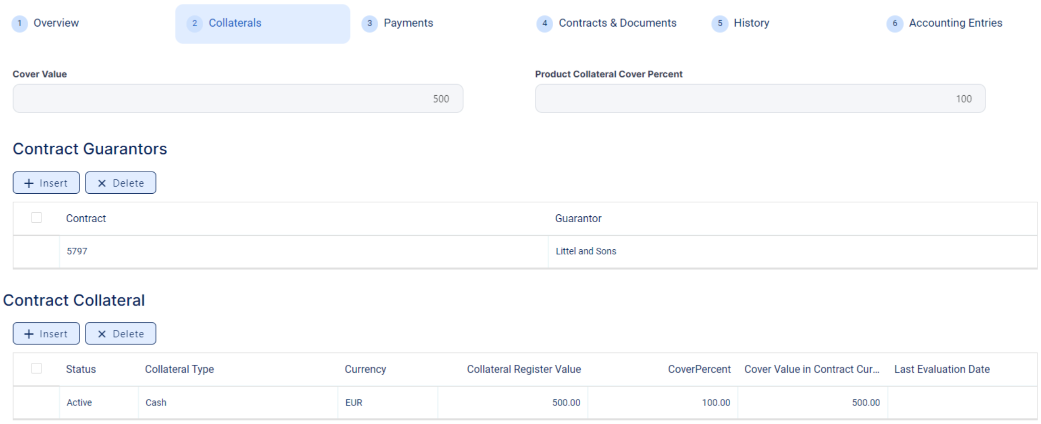
Allowed Guarantee Types

□	Guarantee Type	Max Accepted Covering Percent
	Cash	

After performing the steps described in the "Creating A New Unsecured Loan" on page 206 page, perform the actions required to link collaterals to the contract.

2. Link Collaterals to the Loan

You can set collaterals as guarantees for secured loan contracts in the **Collaterals** tab. This tab is displayed only for contracts based on **secured** products.



Cover Value	Product Collateral Cover Percent
500	100

Contract Guarantors

□	Contract	Guarantor
	5797	Littel and Sons

Contract Collateral

□	Status	Collateral Type	Currency	Collateral Register Value	CoverPercent	Cover Value in Contract Cur...	Last Evaluation Date
	Active	Cash	EUR	500.00	100.00	500.00	

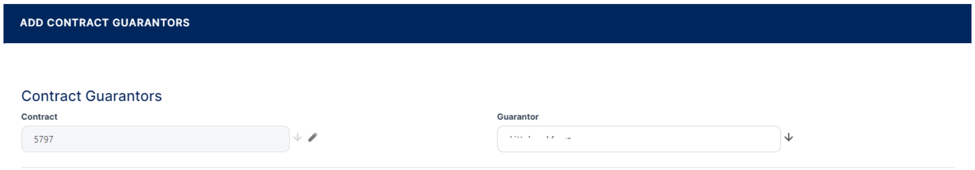
The fields **Cover Value** and **Product Collateral Cover Percent** are automatically populated from product level.

> **NOTE**
>
> You can send a contract for approval only if `Cover Value = Financed Amount * Product Collateral Cover Percent / 100`.

You can use collaterals not owned by the customer, but by a guarantor to cover the contract risk. To add guarantors to the contract, follow these steps:

1. Click the **Insert** button within the **Contract Guarantor** section.

2. In the newly displayed **Add Contract Guarantors** page, fill in the **Guarantor** field by selecting the customer who acts as a guarantor for the contract.



ADD CONTRACT GUARANTORS

Contract Guarantors

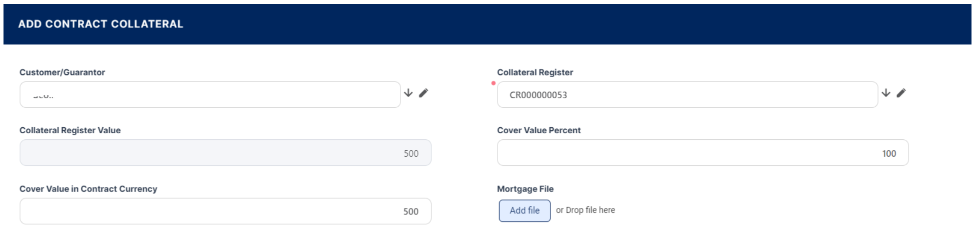
Contract	Guarantor
5797	[illegible]

3. Click the **Save and Close** button.

To link a collateral to the contract, follow these steps:

1. Click the **Insert** button from the **Contract Collateral** section.

2. In the newly displayed **Add Contract Collateral** page, fill in or modify the following fields:



ADD CONTRACT COLLATERAL

Customer/Guarantor: [illegible]

Collateral Register: CR000000053

Collateral Register Value: 500

Cover Value Percent: 100

Cover Value in Contract Currency: 500

Mortgage File

- **Customer / Guarantor** - Select the customer who acts as guarantor for the contract. The field is automatically completed with the customer selected in the contract, but you can select any of the customers already added as guarantors for this contract.
- **Collateral Register** - Select a collateral registered to the current customer. When selecting a collateral, the `Cover Register Value`, `Cover Register Value Usage` and `Cover Value in Contract Currency` fields are automatically calculated.

NOTE

Make sure that the collateral you are planning to use for the secured loan contract is previously registered, otherwise you can't use it for covering the contract.

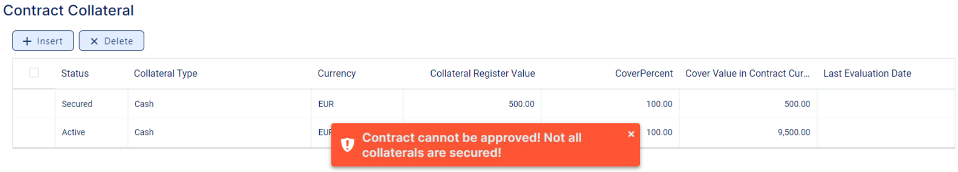
You can link a registered collateral to multiple contracts if the contracts total amount does not exceed the collateral available amount.

When selecting a **Fixed deposit** collateral, the status of the associated bank account becomes `Blocked`.
If the contract's status changes from `Owned` or `Active` into `Released`, the status of the bank account becomes `Opened`.

- **Collateral Register Value Usage (%)** - Edit the percentage to be used from the registered collateral's total value. It was set at banking product level, in the `Collateral Cover Percent` field. As a result, the `Collateral Register Value` and the `Cover Value in Contract Currency` values are automatically recalculated by Core Banking.
- **Cover Register Value** - The value is taken from collateral, expressed in the collateral's currency. If the collateral is in a different currency than the contract currency, the exchange rate is automatically applied in order to have the available amount correctly calculated. Further, a job runs daily in order to recalculate the available amount for each collateral.
- **Cover Value in Contract Currency** - This is the cover value converted in the contract's currency at the exchange rate defined in Core Banking.
- **Mortgage File** - Attach a file relevant for the mortgage.

3. Click the **Save and close** button.

4. Change the status of the collateral to **Secured** before approving the contract, otherwise Core Banking triggers an error.



Contract Collateral

□	Status	Collateral Type	Currency	Collateral Register Value	CoverPercent	Cover Value in Contract Cur...	Last Evaluation Date
	Secured	Cash	EUR	500.00	100.00	500.00	
	Active	Cash	EUR		100.00	9,500.00	

Contract cannot be approved! Not all collaterals are secured!

After defining the relevant details of the contract, proceed to **contract approval**.

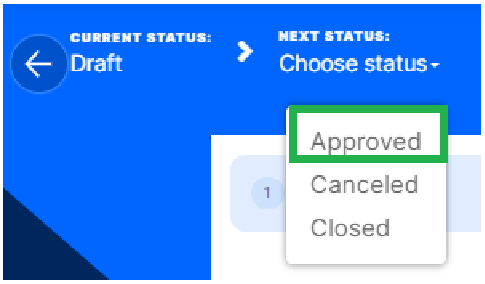
Approving a Loan

You can perform the approval either from a customer journey flow via API integration or from the Core Banking user interface.

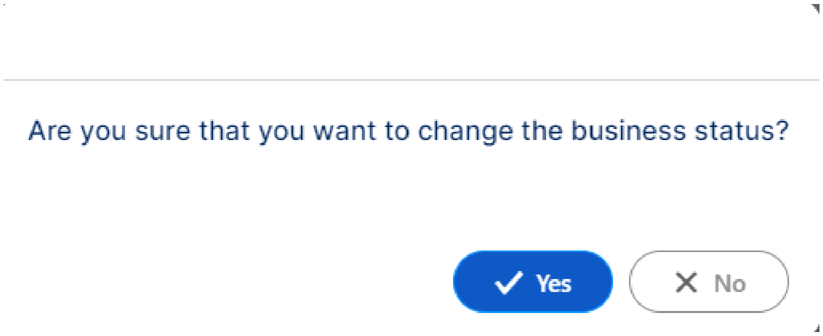
After defining the relevant details of the contract, proceed to contract approval:

1. Select a contract in **Draft** (or **Version Draft**) status.

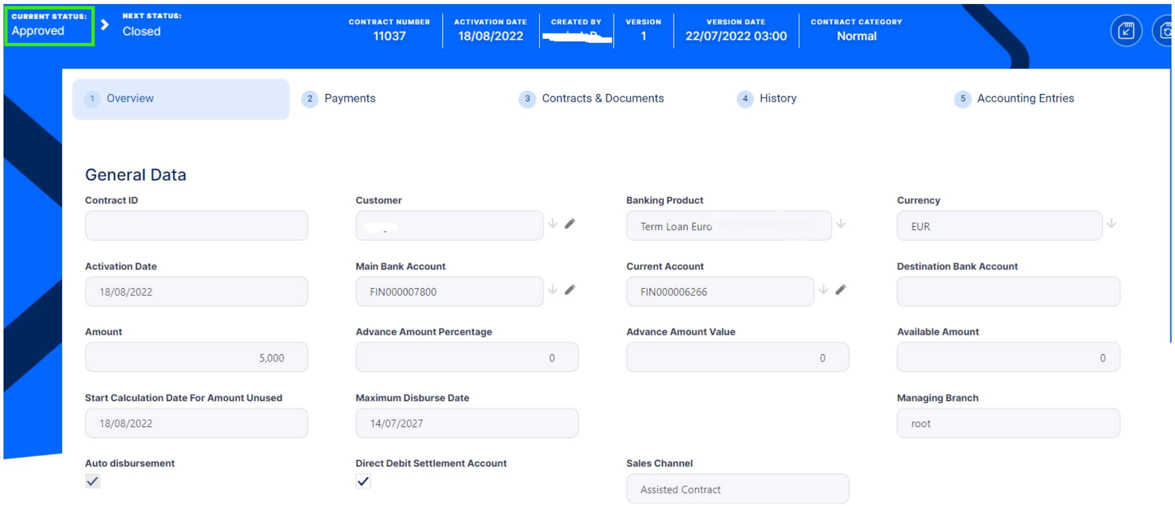
2. Change its status into **Approved**.



3. Click **Yes** to confirm your action.


Are you sure that you want to change the business status?

If Core Banking performs all the validations successfully, then the current status of the contract changes to **Approved**.



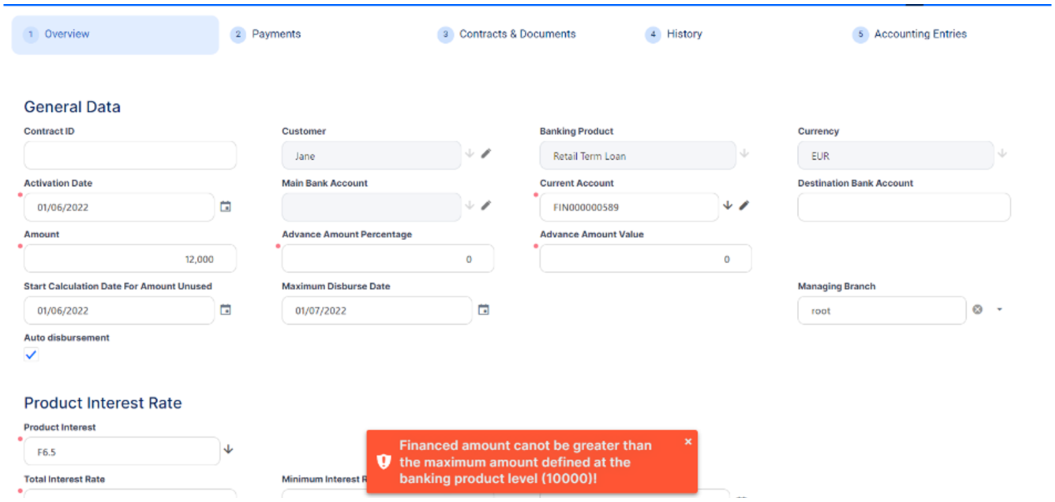
CONTRACT NUMBER: 11037
ACTIVATION DATE: 18/08/2022
CREATED BY: [redacted]
VERSION: 1
VERSION DATE: 22/07/2022 03:00
CONTRACT CATEGORY: Normal

General Data

Contract ID:
Customer: [redacted]
Banking Product: Term Loan Euro [redacted]
Currency: EUR
Activation Date: 18/08/2022
Main Bank Account: FIN000007800
Current Account: FIN000006266
Destination Bank Account:
Amount: 5,000
Advance Amount Percentage: 0
Advance Amount Value: 0
Available Amount: 0
Start Calculation Date For Amount Unused: 18/08/2022
Maximum Disburse Date: 14/07/2027
Managing Branch: root
Auto disbursement: ☑
Direct Debit Settlement Account: ☑
Sales Channel: Assisted Contract

Example of error displayed by Core Banking if the validations are not met

If you try to approve a contract for the value of 12000, but the maximum amount allowed at the product level is only 10000, then Core Banking triggers an error because this value is beyond the product setup.



General Data

Contract ID:

Customer: Jane

Banking Product: Retail Term Loan

Currency: EUR

Activation Date: 01/06/2022

Main Bank Account:

Current Account: FIN000000589

Destination Bank Account:

Amount: 12,000

Advance Amount Percentage: 0

Advance Amount Value: 0

Start Calculation Date For Amount Unused: 01/06/2022

Maximum Disburse Date: 01/07/2022

Managing Branch: root

Auto disbursement: ✓

Product Interest Rate

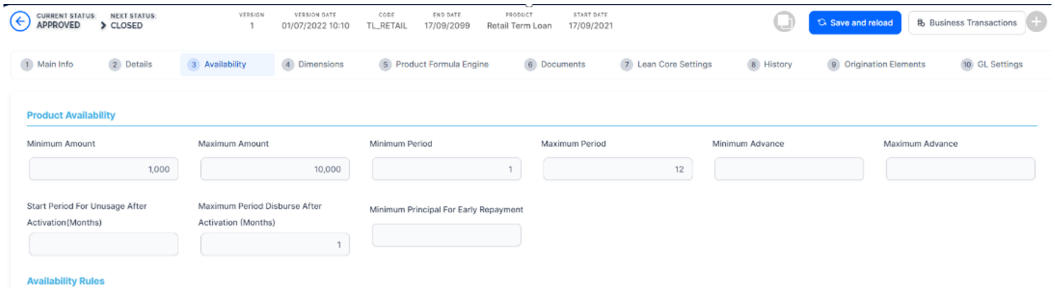
Product Interest: F6.5

Total Interest Rate

Minimum Interest R

Financed amount canot be greater than the maximum amount defined at the banking product level (10000)!

Similarly, Core Banking triggers errors if there are specific limits imposed from product level regarding minimum and maximum term, advance or amount itself. Below is how those limits are captured on product definition.



CURRENT STATUS:	NEXT STATUS:	VERSION	VERSION DATE	CODE	END DATE	PRODUCT	START DATE
APPROVED	CLOSED	1	01/07/2022 10:10	TL_RETAIL	17/09/2099	Retail Term Loan	17/09/2021

Product Availability

Minimum Amount	Maximum Amount	Minimum Period	Maximum Period	Minimum Advance	Maximum Advance
1,000	10,000	1	12		

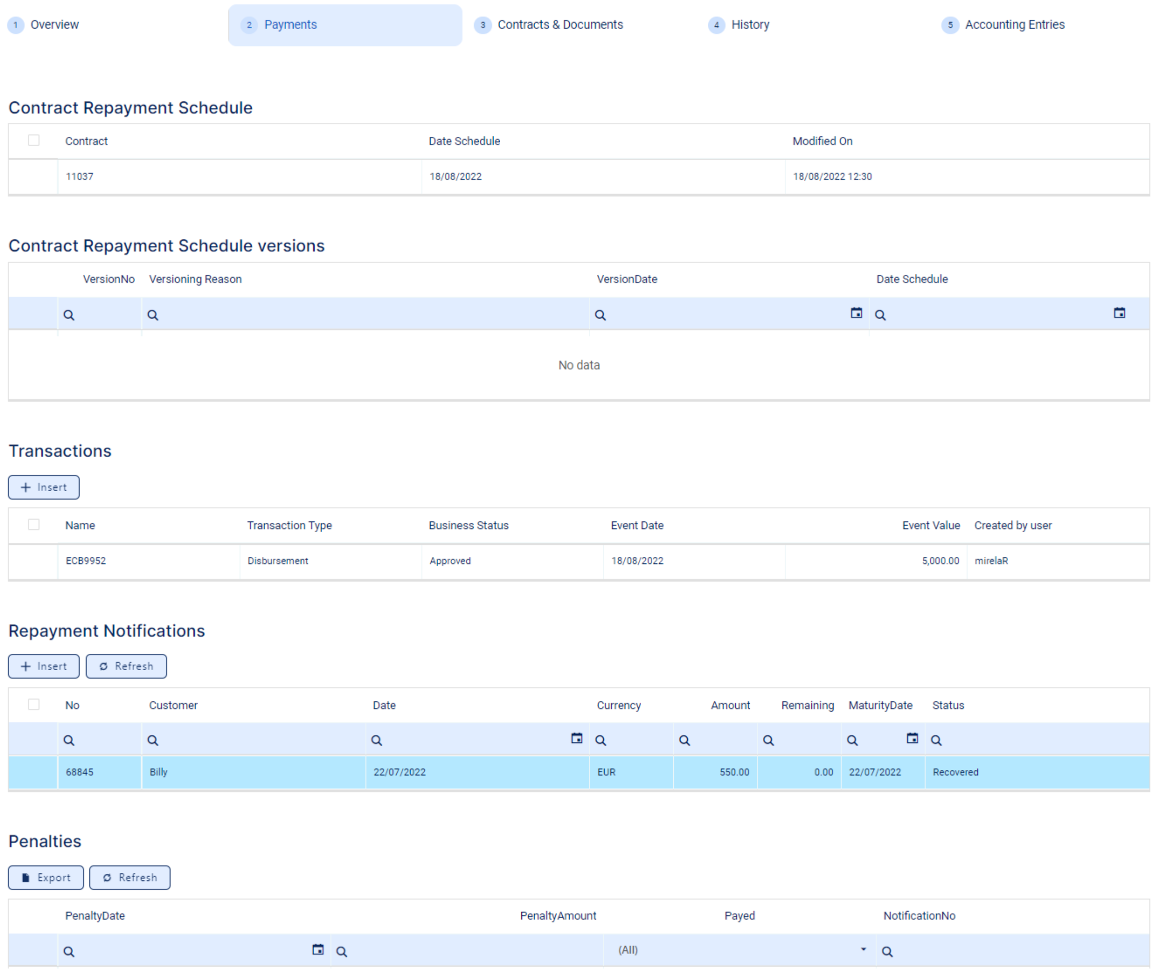
Start Period For Unusage After Activation(Months)	Maximum Period Disburse After Activation (Months)	Minimum Principal For Early Repayment
	1	

Availability Rules

Automated Actions After Contract Approval

The **Main Bank Account** is created automatically for the bank defined as Main within the **Core Banking Operational > Bank** menu. In order for Core Banking to generate an account number, a rule must be defined during the implementation phase (example: branch code + incremental sequence number).

On the **Payments** tab you can see the repayment schedule that was generated following the disbursement (the auto disbursement functionality was selected), the disbursement transaction itself, the notification that was created for the flat upfront fee. Not only it got created but it is also settled from funds on the Current Account selected for settlement purposes, the same where funds were disbursed.



Contract Repayment Schedule

Contract	Date Schedule	Modified On
11037	18/08/2022	18/08/2022 12:30

Contract Repayment Schedule versions

VersionNo	Versioning Reason	VersionDate	Date Schedule

No data

Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB9952	Disbursement	Approved	18/08/2022	5,000.00	mirelaR

Repayment Notifications

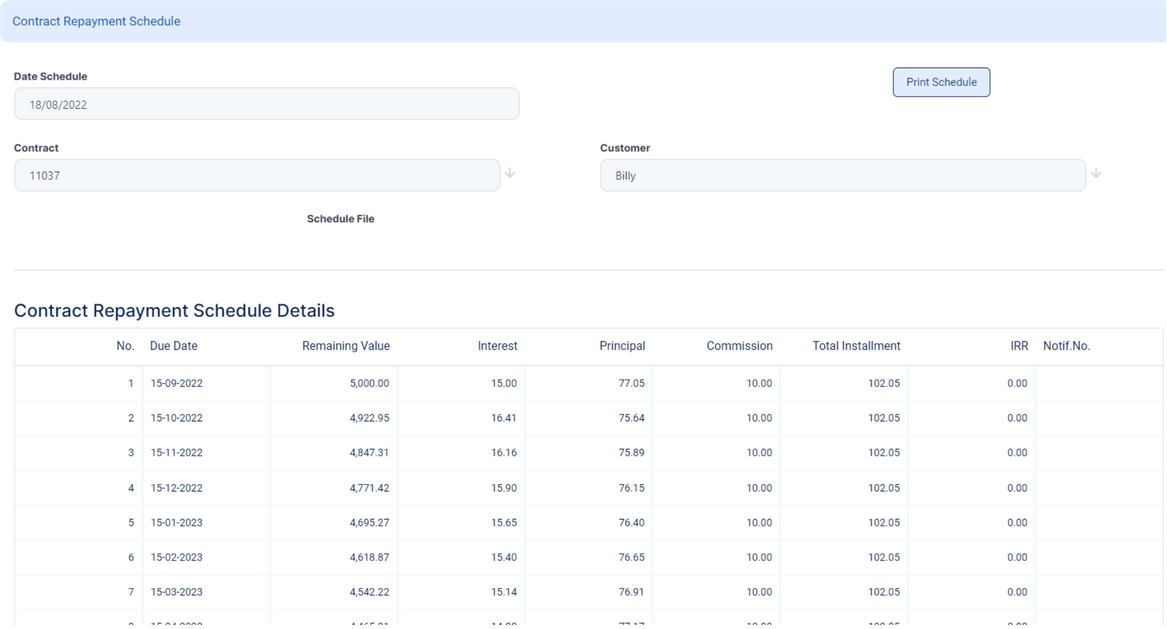
No	Customer	Date	Currency	Amount	Remaining	MaturityDate	Status
68845	Billy	22/07/2022	EUR	550.00	0.00	22/07/2022	Recovered

Penalties

PenaltyDate	PenaltyAmount	Payed	NotificationNo
		(All)	

NOTE The tab **Payments** has no information to display while the contract is in the **Draft** status. You must approve the contract to perform any contract event. Meaningful payment information is displayed in this tab only after performing transactions on the contract.

The **Contract Repayment Schedule** shows the equal installments, on top of which the Administration fee is added on contracts where applied.



Contract Repayment Schedule

Date Schedule: 18/08/2022

Contract: 11037

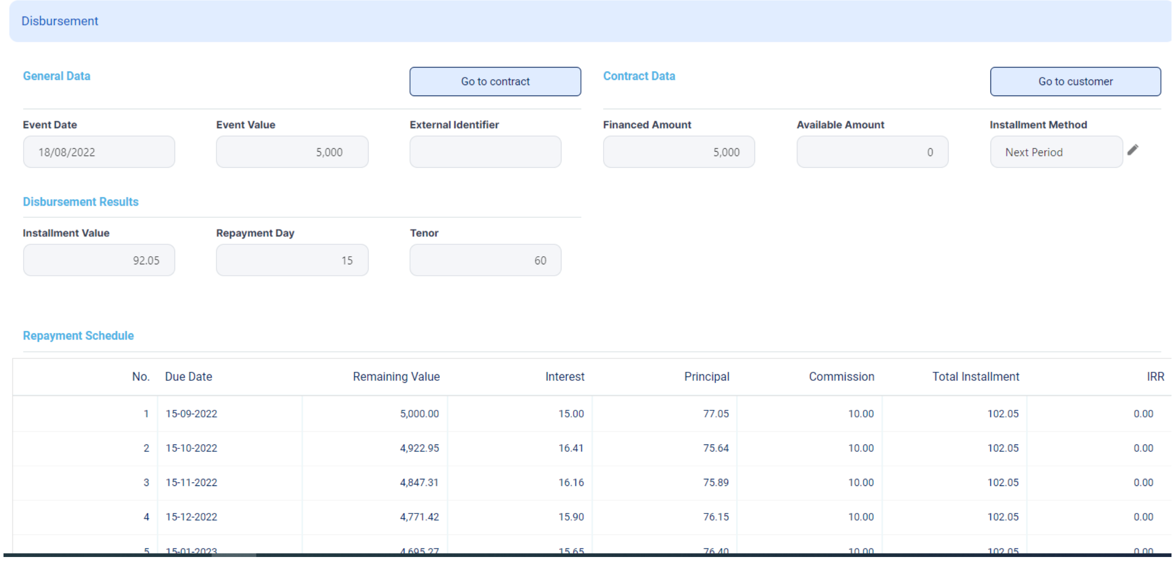
Customer: Billy

Schedule File

Contract Repayment Schedule Details

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR	Notif.No.
1	15-09-2022	5,000.00	15.00	77.05	10.00	102.05	0.00	
2	15-10-2022	4,922.95	16.41	75.64	10.00	102.05	0.00	
3	15-11-2022	4,847.31	16.16	75.89	10.00	102.05	0.00	
4	15-12-2022	4,771.42	15.90	76.15	10.00	102.05	0.00	
5	15-01-2023	4,695.27	15.65	76.40	10.00	102.05	0.00	
6	15-02-2023	4,618.87	15.40	76.65	10.00	102.05	0.00	
7	15-03-2023	4,542.22	15.14	76.91	10.00	102.05	0.00	

The **Disbursement** transaction includes the repayments schedule that was generated with that disbursement.



Disbursement

General Data

Contract Data

Event Date	Event Value	External Identifier	Financed Amount	Available Amount	Installment Method
18/08/2022	5,000		5,000	0	Next Period

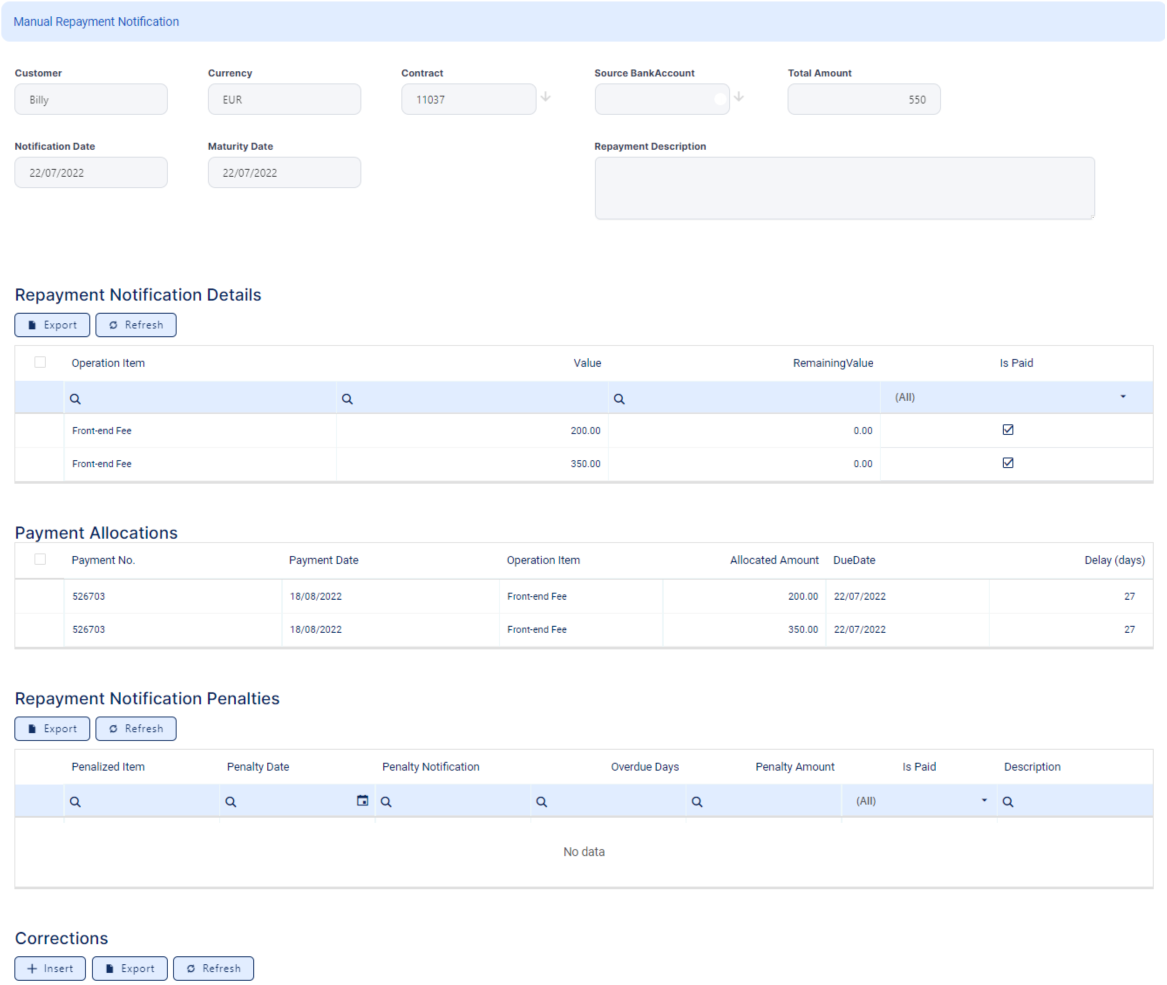
Disbursement Results

Installment Value	Repayment Day	Tenor
92.05	15	60

Repayment Schedule

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR
1	15-09-2022	5,000.00	15.00	77.05	10.00	102.05	0.00
2	15-10-2022	4,922.95	16.41	75.64	10.00	102.05	0.00
3	15-11-2022	4,847.31	16.16	75.89	10.00	102.05	0.00
4	15-12-2022	4,771.42	15.90	76.15	10.00	102.05	0.00
5	15-01-2023	4,695.27	15.65	76.40	10.00	102.05	0.00

The **Repayment Notification** shows what was made due, when, how much, what type of amount and when/if amounts were recovered.



Manual Repayment Notification

Customer	Currency	Contract	Source BankAccount	Total Amount
Billy	EUR	11037		550

Notification Date	Maturity Date	Repayment Description
22/07/2022	22/07/2022	

Repayment Notification Details

□	Operation Item	Value	RemainingValue	Is Paid
				(All)
	Front-end Fee	200.00	0.00	☑
	Front-end Fee	350.00	0.00	☑

Payment Allocations

□	Payment No.	Payment Date	Operation Item	Allocated Amount	DueDate	Delay (days)
	526703	18/08/2022	Front-end Fee	200.00	22/07/2022	27
	526703	18/08/2022	Front-end Fee	350.00	22/07/2022	27

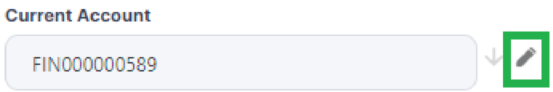
Repayment Notification Penalties

Penalized Item	Penalty Date	Penalty Notification	Overdue Days	Penalty Amount	Is Paid	Description
					(All)	

No data

Corrections

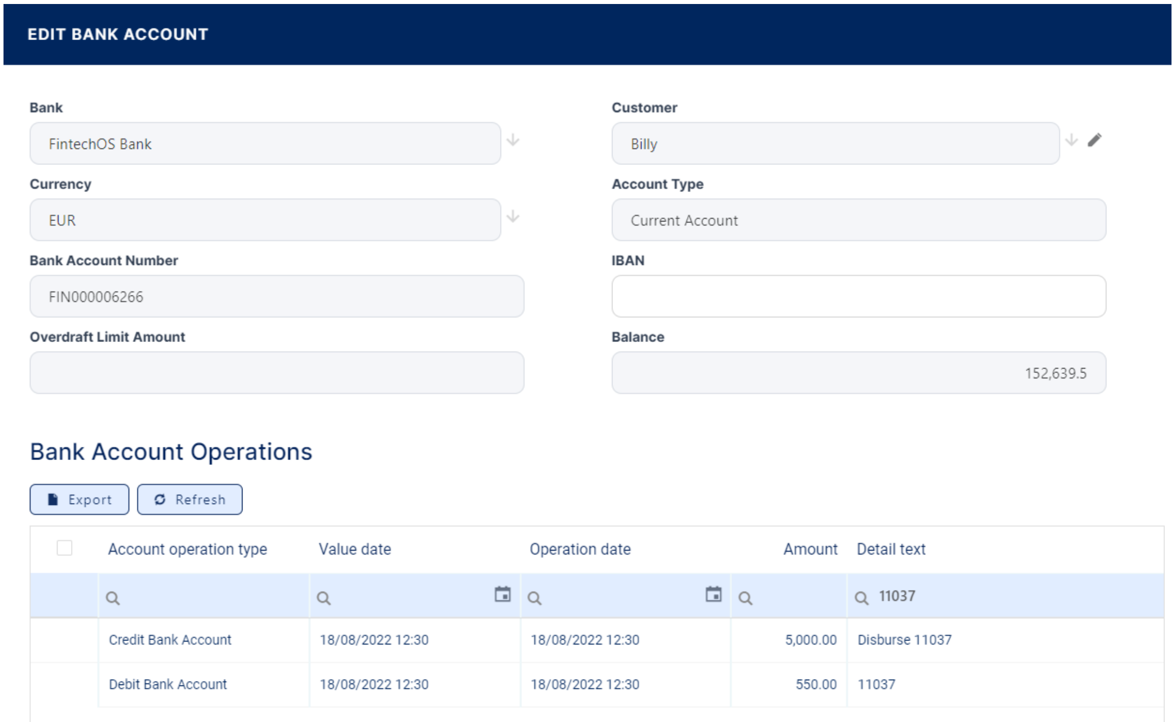
You can also check the **Current Account** transaction. On the contract's **Overview** tab, click on the pencil next to the `Current Account`:



Current Account

FIN000000589

In the displayed window, filter by your contract number and get the amounts posted to the account following our contract processing.



EDIT BANK ACCOUNT

Bank	Customer
FintechOS Bank	Billy
Currency	Account Type
EUR	Current Account
Bank Account Number	IBAN
FIN000006266	
Overdraft Limit Amount	Balance
	152,639.5

Bank Account Operations

□	Account operation type	Value date	Operation date	Amount	Detail text
					11037
	Credit Bank Account	18/08/2022 12:30	18/08/2022 12:30	5,000.00	Disburse 11037
	Debit Bank Account	18/08/2022 12:30	18/08/2022 12:30	550.00	11037

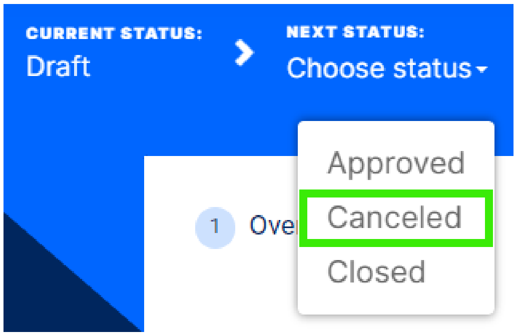
Rejecting a Loan

You can reject a loan, canceling it, when the deal with the customer drops. You can perform the cancellation either from a customer journey flow via API integration or from the Core Banking user interface.

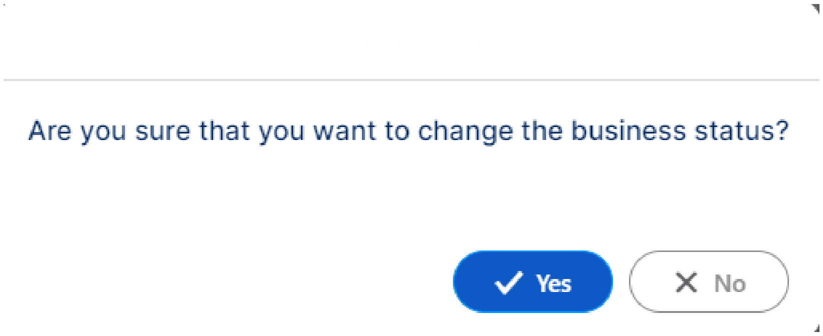
Follow these steps to cancel the contract:

1. Select a contract in **Draft** (or **Version Draft**) status.

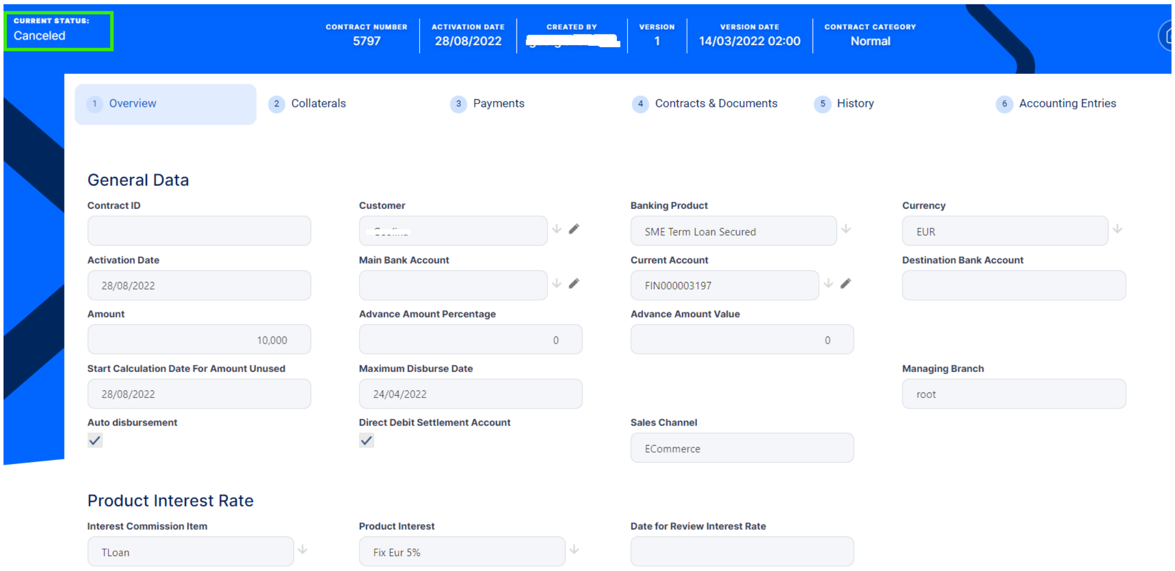
2. Change its status into **Canceled**.



3. Click **Yes** to confirm your action.


Are you sure that you want to change the business status?

If Core Banking performs all the validations successfully, then the current status of the contract changes to **Canceled**.


CURRENT STATUS: Canceled

CONTRACT NUMBER 5797

ACTIVATION DATE 28/08/2022

CREATED BY [redacted]

VERSION 1

VERSION DATE 14/03/2022 02:00

CONTRACT CATEGORY Normal

General Data

Contract ID:

Customer: [redacted]

Banking Product: SME Term Loan Secured

Currency: EUR

Activation Date: 28/08/2022

Main Bank Account:

Current Account: FIN000003197

Destination Bank Account:

Amount: 10,000

Advance Amount Percentage: 0

Advance Amount Value: 0

Start Calculation Date For Amount Unused: 28/08/2022

Maximum Disburse Date: 24/04/2022

Managing Branch: root

Auto disbursement: ☑

Direct Debit Settlement Account: ☑

Sales Channel: ECommerce

Product Interest Rate

Interest Commission Item: TLoan

Product Interest: Fix Eur 5%

Date for Review Interest Rate:

NOTE You can't further use a canceled contract. Create a new contract, if you need to.

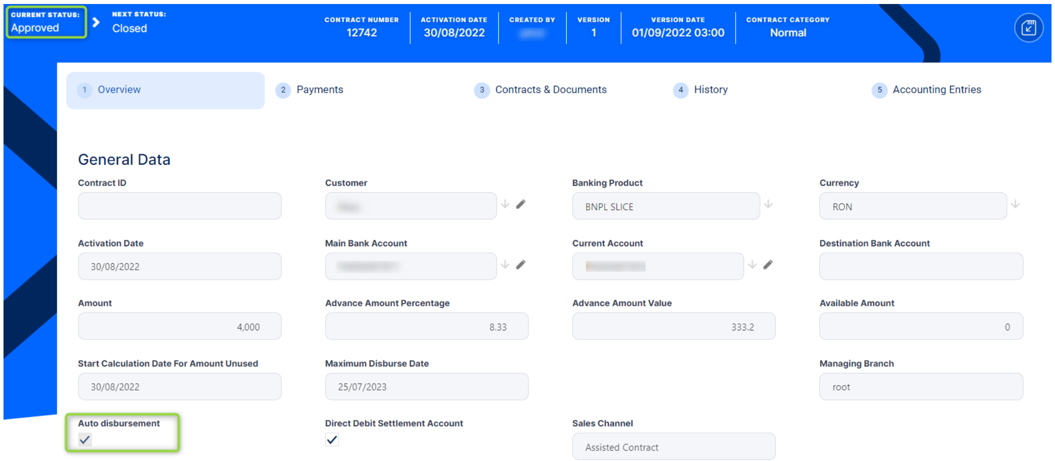
Disbursing a Loan

A disbursement represents the actual delivery of funds from a bank account to the customer. The repayment schedule of the loan contract is automatically calculated or recalculated as a result of performing a disbursement.

In Core Banking, you can choose between a disbursement performed automatically when the contract gets approved, or manually triggering the disbursement by performing a disbursement transaction, for cases when you need a request for disbursement from the customer, or other details are pending before you can release the funds, such as registering the collaterals with a certain authority.

Automatic Disbursement at Contract Approval

You can instruct Core Bankingto automatically perform the disbursement of funds for a loan contract during contract creation, if the auto disbursement property was set at banking product level. To do this, select the **Auto disbursement** checkbox in the contract's **Overview** tab, thus marking the financed amount to be automatically disbursed on the approval of the contract.



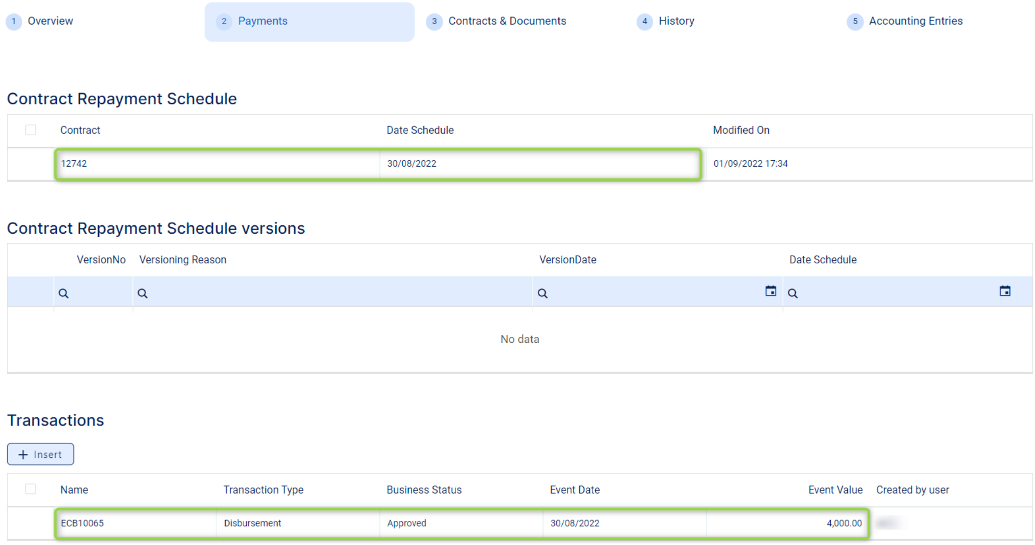
CURRENT STATUS: Approved
NEXT STATUS: Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12742	30/08/2022	[redacted]	1	01/09/2022 03:00	Normal

General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	BNPL SLICE	RON
Activation Date	Main Bank Account	Current Account	Destination Bank Account
30/08/2022	[redacted]	[redacted]	
Amount	Advance Amount Percentage	Advance Amount Value	Available Amount
4,000	8.33	333.2	0
Start Calculation Date For Amount Unused	Maximum Disburse Date		Managing Branch
30/08/2022	25/07/2023		root
Auto disbursement	Direct Debit Settlement Account	Sales Channel	
☑	☑	Assisted Contract	

If selected, Core Banking performs the disbursement transaction immediately after contract approval, and the funds are moved to the settlement account or destination account as per instructions. The contract repayment schedule is also calculated:



Contract Repayment Schedule

□	Contract	Date Schedule	Modified On
	12742	30/08/2022	01/09/2022 17:34

Contract Repayment Schedule versions

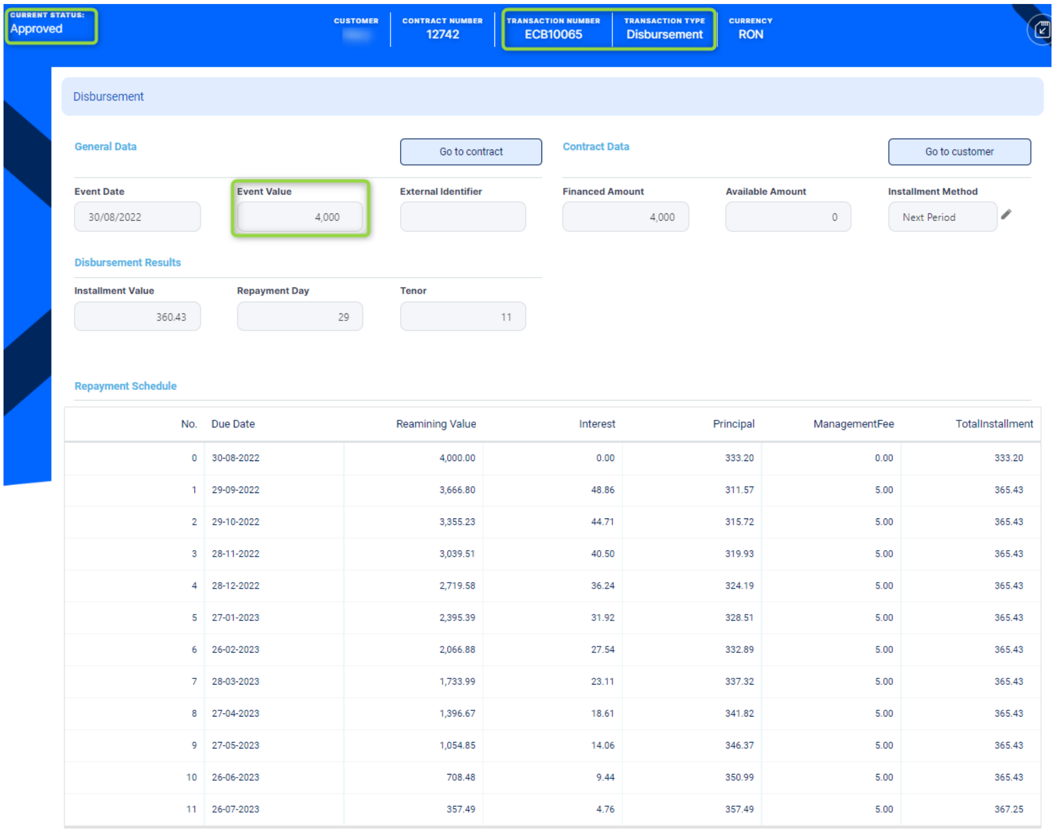
VersionNo	Versioning Reason	VersionDate	Date Schedule

No data

Transactions

□	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB10065	Disbursement	Approved	30/08/2022	4,000.00	[redacted]

You can see the disbursement transaction's details and the calculated repayment schedule by double-clicking the transaction.



CURRENT STATUS: Approved

CUSTOMER [redacted]

CONTRACT NUMBER 12742

TRANSACTION NUMBER ECB10065

TRANSACTION TYPE Disbursement

CURRENCY RON

Disbursement

General Data

Event Date: 30/08/2022

Event Value: 4,000

External Identifier:

Contract Data

Financed Amount: 4,000

Available Amount: 0

Installment Method: Next Period

Disbursement Results

Installment Value: 360.43

Repayment Day: 29

Tenor: 11

Repayment Schedule

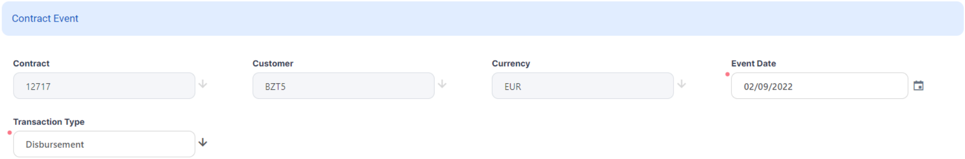
No.	Due Date	Reamining Value	Interest	Principal	ManagementFee	TotalInstallment
0	30-08-2022	4,000.00	0.00	333.20	0.00	333.20
1	29-09-2022	3,666.80	48.86	311.57	5.00	365.43
2	29-10-2022	3,355.23	44.71	315.72	5.00	365.43
3	28-11-2022	3,039.51	40.50	319.93	5.00	365.43
4	28-12-2022	2,719.58	36.24	324.19	5.00	365.43
5	27-01-2023	2,395.39	31.92	328.51	5.00	365.43
6	26-02-2023	2,066.88	27.54	332.89	5.00	365.43
7	28-03-2023	1,733.99	23.11	337.32	5.00	365.43
8	27-04-2023	1,396.67	18.61	341.82	5.00	365.43
9	27-05-2023	1,054.85	14.06	346.37	5.00	365.43
10	26-06-2023	708.48	9.44	350.99	5.00	365.43
11	26-07-2023	357.49	4.76	357.49	5.00	367.25

Adding a Disbursement Transaction To an Approved Contract

You can add disbursement transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a disbursement transaction to a loan contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



Contract Event

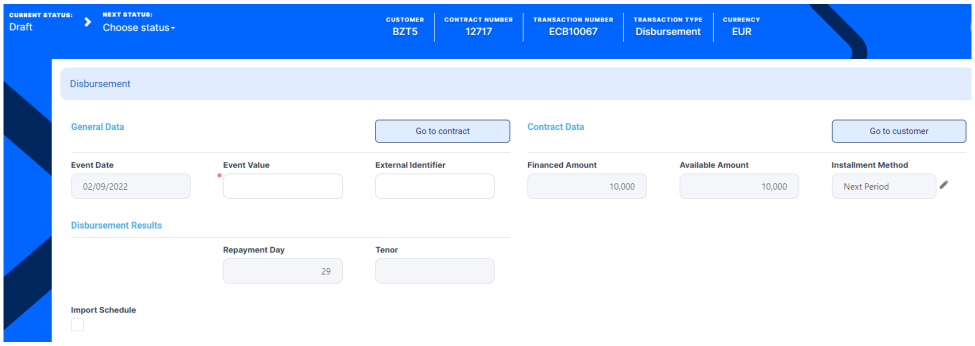
Contract	Customer	Currency	Event Date
12717	BZT5	EUR	02/09/2022
Transaction Type			
Disbursement			

3. Fill in the following fields:

   - **Event Date** - This is pre-filled with current date.
   - **Transaction Type** - Select from the list the **Disbursement** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

   Other values are automatically completed: contract, customer, and currency.

4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. A series of value fields are automatically calculated, their values are displayed, and you can't edit them: the contract's financed and available amounts, the selected installment calculation method, the repayment day ant the contract's tenor.



CURRENT STATUS:	NEXT STATUS:	CUSTOMER	CONTRACT NUMBER	TRANSACTION NUMBER	TRANSACTION TYPE	CURRENCY
Draft	Choose status	BZT5	12717	ECB10067	Disbursement	EUR

Disbursement

General Data

Event Date	Event Value	External Identifier
02/09/2022		

Contract Data

Financed Amount	Available Amount	Installment Method
10,000	10,000	Next Period

Disbursement Results

Repayment Day	Tenor
29	

Import Schedule

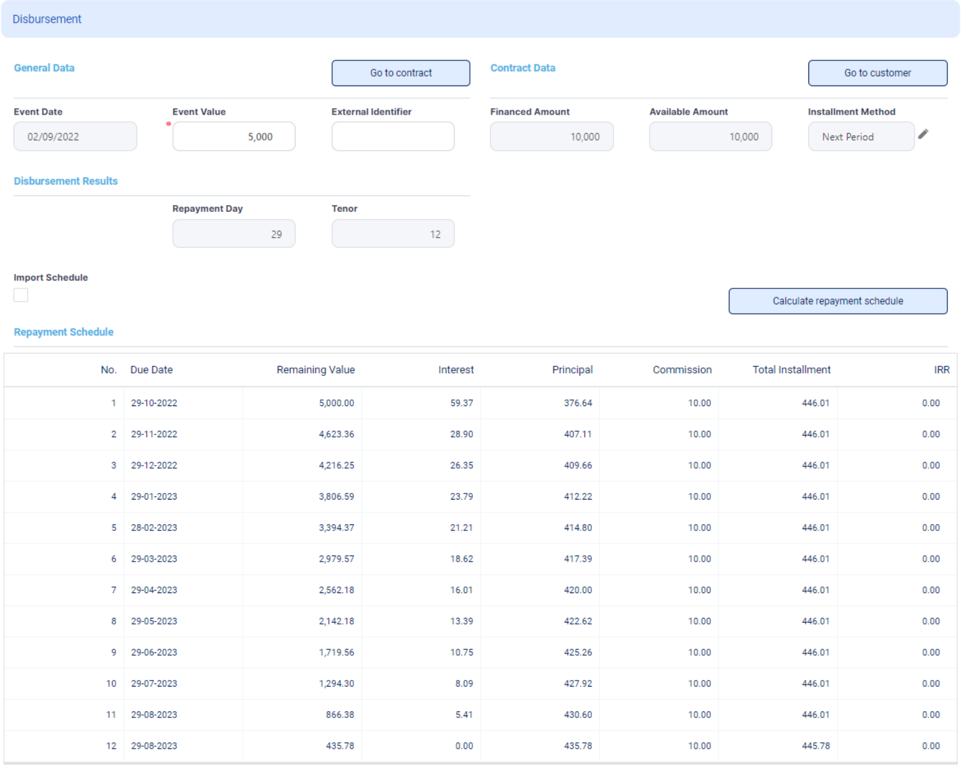
□

5. Fill in the **Event Value** with the value of the transaction, and enter an **external identifier** of the transaction, if available.

6. Decide whether you want to use the repayment schedule calculated by Core Banking through automatic processes, or you want to import a custom schedule. For custom schedule, select the **Import Schedule** checkbox. Read more about importing a custom schedule file in the Manually Upload Repayment Schedules section of the user guide.

7. Click the **Save and Reload** button.
   If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
   While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

8. Click the **Calculate repayment schedule** button to view the details of each installment of the calculated repayment schedule.

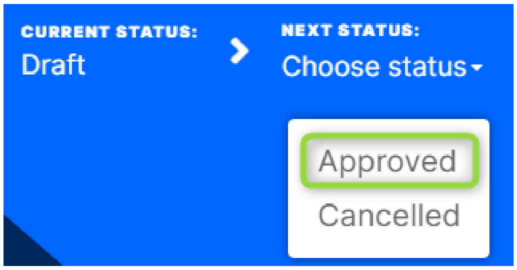


Event Date	Event Value	External Identifier	Financed Amount	Available Amount	Installment Method
02/09/2022	5,000		10,000	10,000	Next Period
	Repayment Day	Tenor			
	29	12			

Import Schedule
□

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR
1	29-10-2022	5,000.00	59.37	376.64	10.00	446.01	0.00
2	29-11-2022	4,623.36	28.90	407.11	10.00	446.01	0.00
3	29-12-2022	4,216.25	26.35	409.66	10.00	446.01	0.00
4	29-01-2023	3,806.59	23.79	412.22	10.00	446.01	0.00
5	28-02-2023	3,394.37	21.21	414.80	10.00	446.01	0.00
6	29-03-2023	2,979.57	18.62	417.39	10.00	446.01	0.00
7	29-04-2023	2,562.18	16.01	420.00	10.00	446.01	0.00
8	29-05-2023	2,142.18	13.39	422.62	10.00	446.01	0.00
9	29-06-2023	1,719.56	10.75	425.26	10.00	446.01	0.00
10	29-07-2023	1,294.30	8.09	427.92	10.00	446.01	0.00
11	29-08-2023	866.38	5.41	430.60	10.00	446.01	0.00
12	29-08-2023	435.78	0.00	435.78	10.00	445.78	0.00

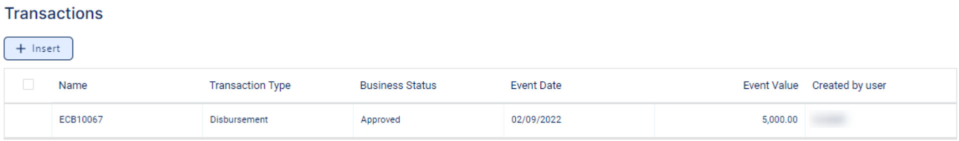
9. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



IMPORTANT! A Disbursement event can't be approved if the current system date > the minimum between Maximum Disburse Date and Maturity Date-1.

10. Confirm the change of status in the **Confirmation** window, clicking **Yes**. The event is now in **Approved** status and Core Banking transfers the funds to the configured settlement account.

The event value is now applied and visible in the contract's **Payments** tab -> **Transactions** section.



Transactions

+ Insert

□	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB10067	Disbursement	Approved	02/09/2022	5,000.00	[redacted]

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

Processing Loan Repayments

Based on defined product pricing and established parameters, financial institutions can manage the billing and collection process on a loan contract fully automatically. Once the disbursement is performed, Core Banking generates the repayment schedule and sends the payment notifications to the customer on the due date. Automated collection is triggered via integration with 3rd party payments engine or from the customer's settlement account. If funds are not available, overdue amounts and days are calculated and penalties applied.

Once a loan approved and disbursed, you can check the repayment schedule built based on contract details, on the **Payments** tab, in the designated section, as described in the Viewing a Contract's Repayment Schedule topic. If there are front-end fees, they are notified automatically by Core Banking and you can check them on the **Payments** tab, in the **Repayment Notifications** section (even without disbursing the funds). Read about repayment notifications in the Managing Repayment Notifications topic.

When the system reaches the dates that appear on schedule projections, the amounts resulting are made due, and Core Banking automatically triggers the notifications. Depending on the availability of funds in the settlement account and the direct debit setup, Core Banking settles those notifications, marking them with the **Recovered** status. Any amount that is not recovered on due date stays on the notification, and when funds become available, Core Banking automatically recovers and allocates them to the pending notifications based on the **Payment Allocation Method** setup at the product level, in the Lean Core tab. When the notifications are recovered, you can see the underlying debit transactions on the settlement account – there is always such traceability of the funds. You can also see the automatic payments performed by Core Banking either at contract level or in a dedicated menu, as described in the Viewing Customer Payments topic.

Payment Schedule Types, defined at the Banking Product Factory level, define how Core Banking handles the following:

- How the interest is calculated (day basis: 30/360, actual/ 360, etc).
- If the capital repayment is linear or annuity type (same principal for every installment or increasing principal and decreasing interest resulting in a constant amount being due for every installment).
- Fees you want to include in the repayment schedule.
- If you allow for manual installment amount to be provided and overwrite automatically calculated one.
- Frequency of the installment (monthly, every 30 days, etc).

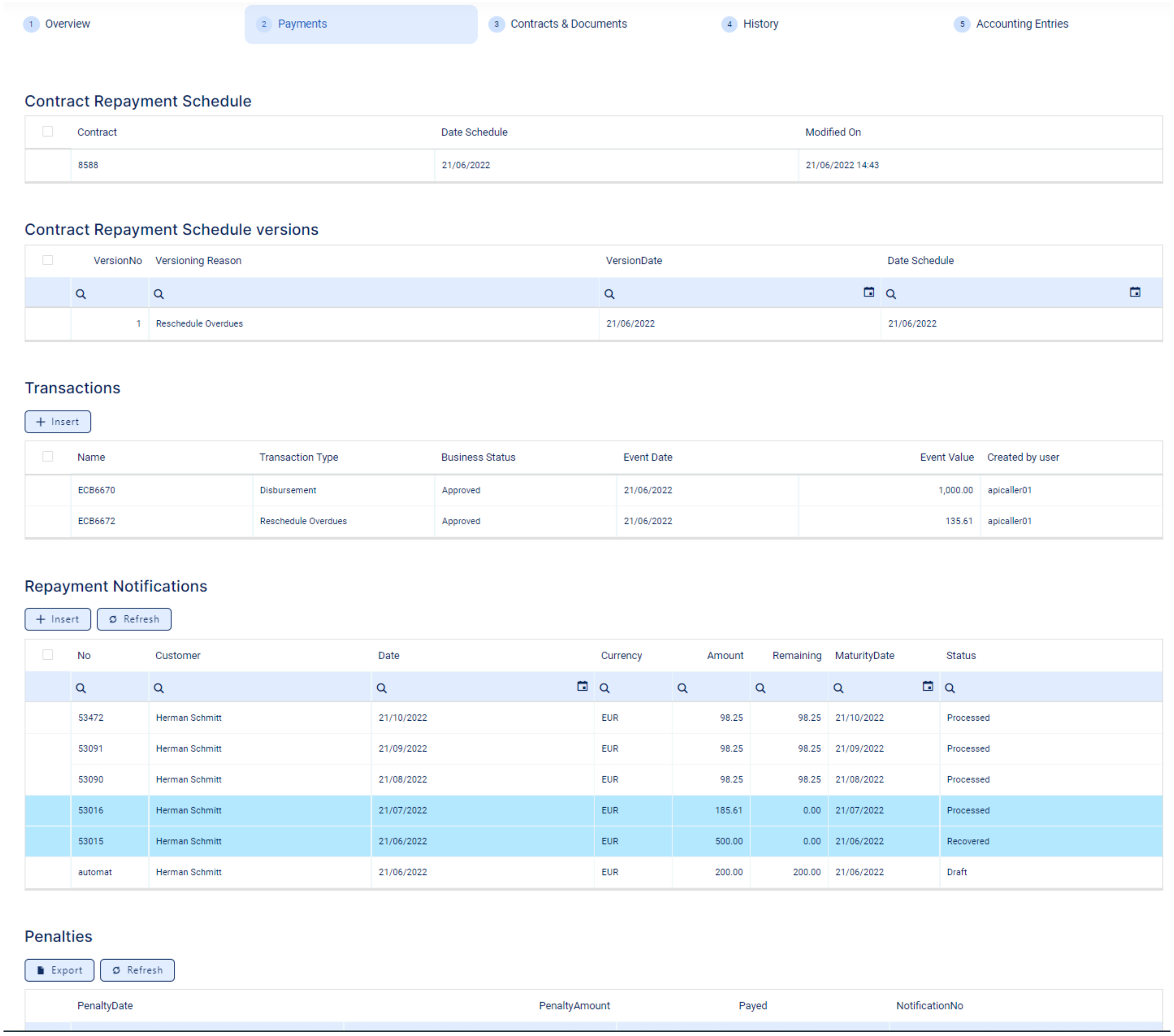
When amounts are not available to cover notified amounts and there is a penalty interest defined for the product, the missed amounts are subject to automatic penalty calculation. Core Banking calculates and notifies the penalty interest daily. All the penalties applied by automated processes at the contract level are visible on the **Payments** tab, in the **Penalties** section, as described in the Viewing a Contract's Penalties topic. When the penalty interest is defined, there are specific Operation Items linked to it so that the system knows what types of amounts are subject to penalty: overdue principal, interest, commissions. Alternatively, the penalty interest can be applied to all missed payments. Penalty interest is defaulted from the product level and, if allowed, it can also be amended at contract level.

Is Penalty ☑

Is General □

Applied To Loan Item (If Overdue): Loan Principal

You can find all the existing transactions, payments, penalties, bank account operations, repayment schedules, schedule versions, repayment notifications for a contract on the **Payments** tab. The tab has no information to display for contracts in **Draft** status. Approve the contract to perform any transactions on the contract. Meaningful payment information is displayed here only after performing a disbursement.



Contract Repayment Schedule

Contract	Date Schedule	Modified On
8588	21/06/2022	21/06/2022 14:43

Contract Repayment Schedule versions

VersionNo	Versioning Reason	VersionDate	Date Schedule
1	Reschedule Overdues	21/06/2022	21/06/2022

Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB6670	Disbursement	Approved	21/06/2022	1,000.00	apicaller01
ECB6672	Reschedule Overdues	Approved	21/06/2022	135.61	apicaller01

Repayment Notifications

No	Customer	Date	Currency	Amount	Remaining	MaturityDate	Status
53472	Herman Schmitt	21/10/2022	EUR	98.25	98.25	21/10/2022	Processed
53091	Herman Schmitt	21/09/2022	EUR	98.25	98.25	21/09/2022	Processed
53090	Herman Schmitt	21/08/2022	EUR	98.25	98.25	21/08/2022	Processed
53016	Herman Schmitt	21/07/2022	EUR	185.61	0.00	21/07/2022	Processed
53015	Herman Schmitt	21/06/2022	EUR	500.00	0.00	21/06/2022	Recovered
automat	Herman Schmitt	21/06/2022	EUR	200.00	200.00	21/06/2022	Draft

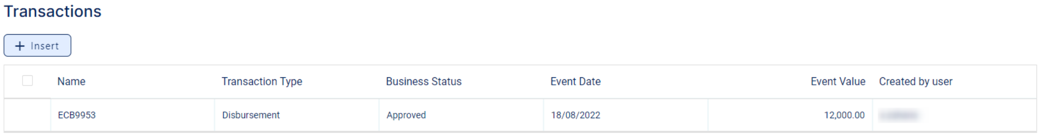
Penalties

PenaltyDate	PenaltyAmount	Payed	NotificationNo

Managing a Contract's Transactions

Contract transactions are events/ changes performed at the **Approved** contract's level. Such events are disbursements, reschedule overdues, early repayments, applying payment holidays, returning of amounts, and so on. Read more information about the available transaction types in the "Transaction Types Used in Core Banking" on page 72 topic.

The **Transactions** section within the **Payments** tab holds all the transactions performed at the contract level, in any status. This section only has information if the contract is in **Approved** status and transactions were already created.



Transactions

	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
□	ECB9953	Disbursement	Approved	18/08/2022	12,000.00	[redacted]

Event Statuses

An event record has the following statuses, visible in the top left corner of any **Event** page:

- **Draft** - the status of a newly created event record that was not yet sent for approval. The event value is not applied to the contract while the event is still in this status. While in this status, you can edit some fields. Approve after editing all the necessary details.
- **Approved** - the status of an event record after being authorized. The event value is applied to the contract and you cannot edit any of the event's details. There is no further transition from this status.
- **Canceled** - the status of an event record after being canceled. The event value is not applied to the contract and you cannot edit any of the event's details. There is no further transition from this status.

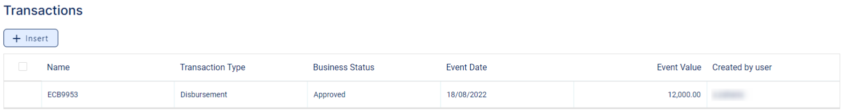
NOTE
As a best practice, new records or new versions of existing records created on a specific day should be approved on the same day.

Viewing Existing Events

To view the events on a contract, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.

2. Navigate to the contract's **Payments** tab and view the list of events displayed in the **Transactions** section.

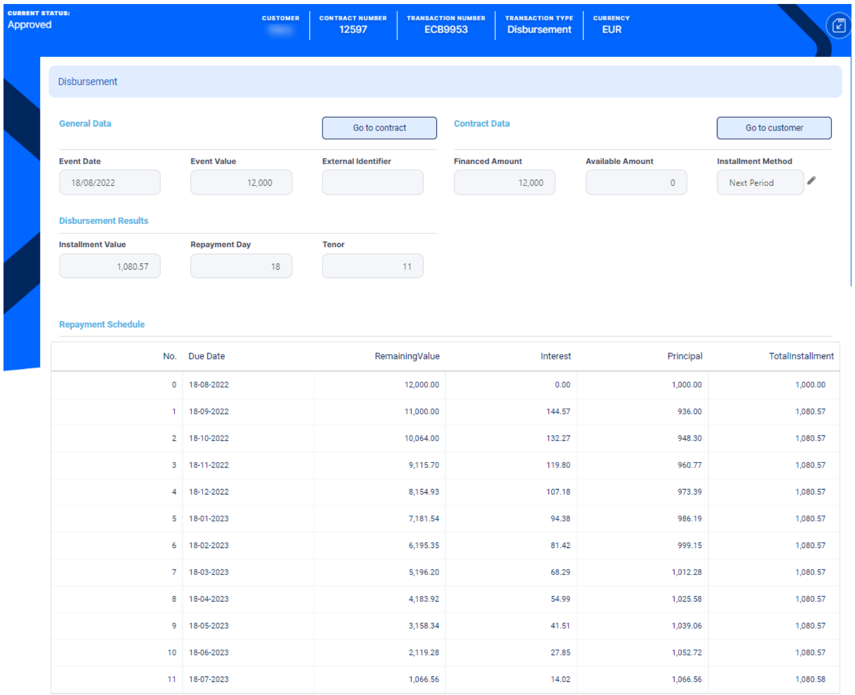


Transactions

	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
□	ECB9953	Disbursement	Approved	18/08/2022	12,000.00	[redacted]

Here you can see only basic information about the transactions, such as event number, status, date, transaction type, value and the user who created it.

3. To view detailed information about the transaction and the repayment schedule generated for the **Approved** event, double-click the event record to open the **Event** page:



CURRENT STATUS:	CUSTOMER	CONTRACT NUMBER	TRANSACTION NUMBER	TRANSACTION TYPE	CURRENCY
Approved	[redacted]	12597	ECB9953	Disbursement	EUR

Disbursement

General Data

Event Date	Event Value	External Identifier
18/08/2022	12,000	

Contract Data

Financed Amount	Available Amount	Installment Method
12,000	0	Next Period

Disbursement Results

Installment Value	Repayment Day	Tenor
1,080.57	18	11

Repayment Schedule

No.	Due Date	RemainingValue	Interest	Principal	TotalInstallment
0	18-08-2022	12,000.00	0.00	1,000.00	1,000.00
1	18-09-2022	11,000.00	144.57	936.00	1,080.57
2	18-10-2022	10,064.00	132.27	948.30	1,080.57
3	18-11-2022	9,115.70	119.80	960.77	1,080.57
4	18-12-2022	8,154.93	107.18	973.39	1,080.57
5	18-01-2023	7,181.54	94.38	986.19	1,080.57
6	18-02-2023	6,195.35	81.42	999.15	1,080.57
7	18-03-2023	5,196.20	68.29	1,012.28	1,080.57
8	18-04-2023	4,183.92	54.99	1,025.58	1,080.57
9	18-05-2023	3,158.34	41.51	1,039.06	1,080.57
10	18-06-2023	2,119.28	27.85	1,052.72	1,080.57
11	18-07-2023	1,066.56	14.02	1,066.56	1,080.58

You can't edit the information displayed on this page.

4. View the following information displayed about each event, with some variations depending on the event type:

- Transaction status, contract number, customer name, transaction number, type, and currency, all displayed in the header of the page.

The following details are displayed in the body of the page:

- Event date and value. Contract events added through API integration also contain an external identifier.
- Contract's financed and available amounts, and the installment method used for calculating the schedule.
- The event's results, in this example, the results of a disbursement event: amount of the installments, repayment day and tenor of the contract in months.

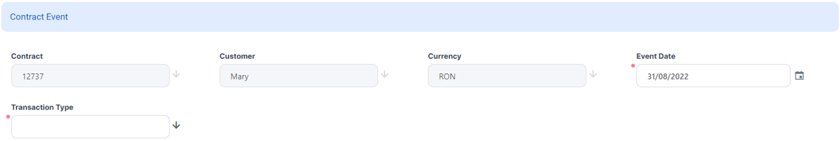
5. In the **Contract Repayment Schedule** section, view the information about each of the installments that are part of the repayment scheduled calculated as a result of performing the transaction:
    - Number of the repayment schedule version detail, date when the installment must be paid, value remaining to be repaid from the contract value at the moment of this installment, value of the interest and of the principal calculated for this installment, and total value of the installment to be paid.

Adding Events To Approved Contracts (General Steps)

You can add events to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add events to a contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



Contract Event

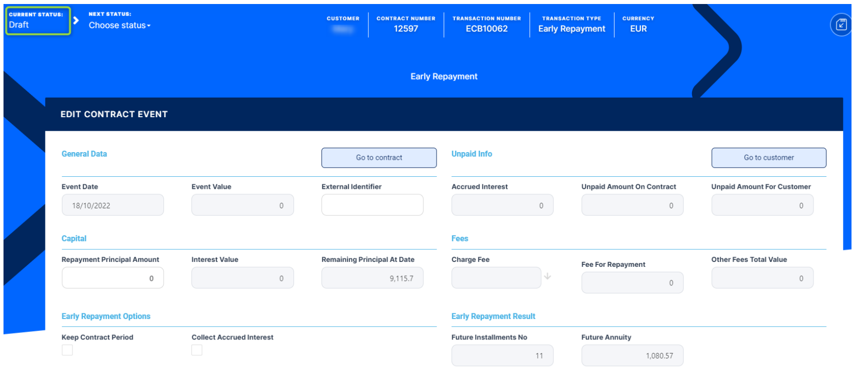
Contract	Customer	Currency	Event Date
12737	Mary	RON	31/08/2022
Transaction Type			

3. Fill in the following fields, common to every transaction type:
   - **Event Date** - This is pre-filled with current date.
   - **Transaction Type** - Select from the list the transaction type. Only the transaction types associated with the banking product which is at the base of the contract are displayed here.

   Other values are automatically completed: contract, customer, and currency.
4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. A series of value fields are automatically calculated and their values are displayed.
5. Depending on the selected transaction type, follow the instructions for each event type as defined in the corresponding topics:
   - Disbursement - described in the "Disbursing a Loan" on page 235 topic
   - Early repayment - described in the "Refinancing a Loan By Performing an Early Repayment" on page 307 topic

- Reschedule Overdues - described in the "Rescheduling the Overdue Amounts for a Contract" on page 303 topic
- Payment Holiday - described in the "Applying Payment Holiday to a Loan" on page 273 topic
- Returned Amount or Goods - described in the "Working with Returns" on page 288 topic.

6. After defining the event as described in the corresponding page, save it.
   If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
   While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CUSTOMER [redacted]

CONTRACT NUMBER 12597

TRANSACTION NUMBER ECB10062

TRANSACTION TYPE Early Repayment

CURRENCY EUR

Early Repayment

EDIT CONTRACT EVENT

General Data

Event Date: 18/10/2022

Event Value: 0

External Identifier:

Unpaid Info

Accrued Interest: 0

Unpaid Amount On Contract: 0

Unpaid Amount For Customer: 0

Capital

Repayment Principal Amount: 0

Interest Value: 0

Remaining Principal At Date: 9,115.7

Fees

Charge Fee:

Fee For Repayment: 0

Other Fees Total Value: 0

Early Repayment Options

Keep Contract Period ☐

Collect Accrued Interest ☐

Early Repayment Result

Future Installments No: 11

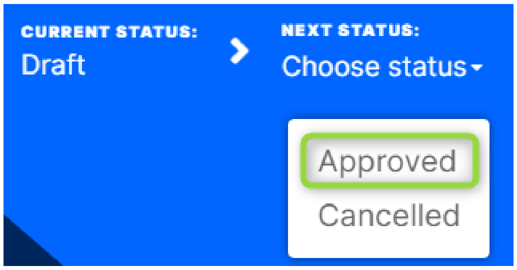
Future Annuity: 1,080.57

   Depending on the selected transaction type, new sections are displayed at the bottom of the page, containing the contract repayment schedule for the event and any generated notifications.

7. If it appears, click the **Calculate/ Simulate Early repayment/ Simulate repayment schedule/ Simulate reschedule overdues** buttons (the displayed button depends on the selected transaction type) to view the details of each installment.

For **Reschedule Overdue** transaction type, select from the list the overdue payment notifications that you wish to reschedule.

8. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



9. Confirm the change of status in the **Confirmation** window, clicking **Yes**. The event is now in **Approved** status.

   The event value is now applied and visible in the contract's **Payments** tab -> **Transactions** section.

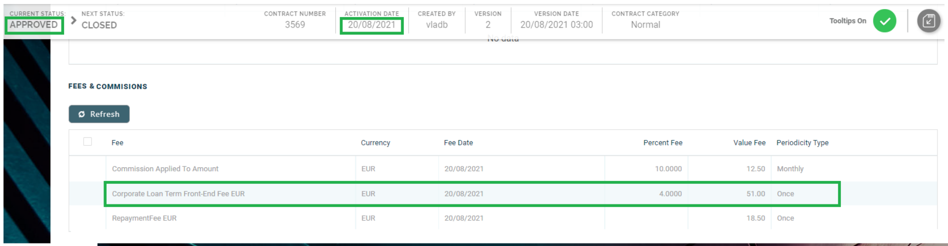
> **NOTE**
> All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

Managing Repayment Notifications

Core Banking automatically generates notifications for each installment that has to be paid for existing contracts that disbursed various amounts to customers. There can be various types of notifications generated for fees, commissions, payment holidays, and so on. Core Banking also assists you reconcile wrongly processed cases and other situations resulted from delayed processing/ wrong updates. Thus, depending on your user rights, you can manually add notifications for an active contract based on lending product types, term loans, and mortgages, or add notifications for amounts to be recovered even if there is no active contract. Core Banking includes all such manual notifications in the recovery processes.

All the repayment notifications that are not paid in full after their maturity dates are subject to automated penalty calculation processes performed by Core Banking. Thus, for repayment notifications linked to a contract, Core Banking uses the penalty interests defined within the interests list attached at the banking product level, and for repayment notifications not linked to a contract, it uses the penalty interest list specified in a `system parameter`.

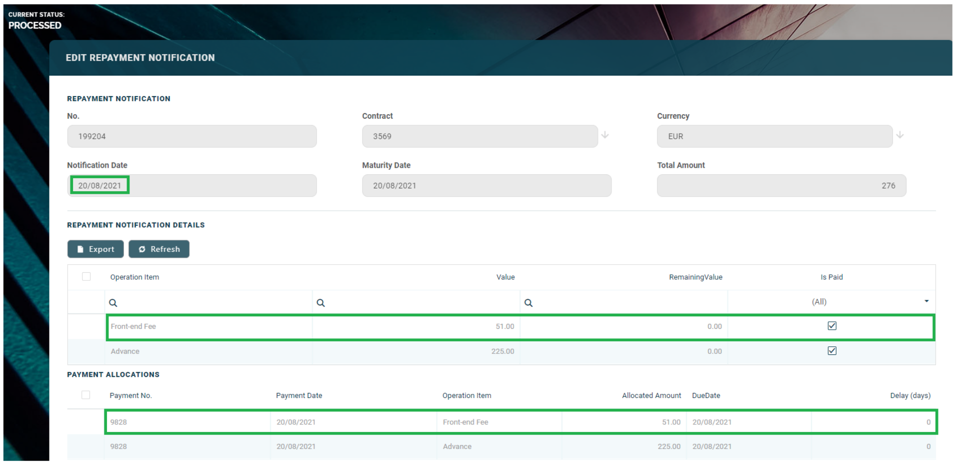
> **NOTE**
> All the `Front-End Fee` commission types with `Once` periodicity type applied to a contract are notified and must be paid when the contract is approved. The Core Banking system parameter `FrontEndFee` defines the type of commission that is automatically notified at the contract approval.



CURRENT STATUS:	NEXT STATUS:	CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
APPROVED	CLOSED	3569	20/08/2021	vladb	2	20/08/2021 03:00	Normal

FEES & COMMISIONS

□	Fee	Currency	Fee Date	Percent Fee	Value Fee	Periodicity Type
	Commission Applied To Amount	EUR	20/08/2021	10.0000	12.50	Monthly
	Corporate Loan Term Front-End Fee EUR	EUR	20/08/2021	4.0000	51.00	Once
	RepaymentFee EUR	EUR	20/08/2021		18.50	Once



CURRENT STATUS:
PROCESSED

EDIT REPAYMENT NOTIFICATION

REPAYMENT NOTIFICATION

No.: 199204
Contract: 3569
Currency: EUR
Notification Date: 20/08/2021
Maturity Date: 20/08/2021
Total Amount: 276

REPAYMENT NOTIFICATION DETAILS

□	Operation Item	Value	RemainingValue	Is Paid
				(All)
	Front-end Fee	51.00	0.00	☑
	Advance	225.00	0.00	☑

PAYMENT ALLOCATIONS

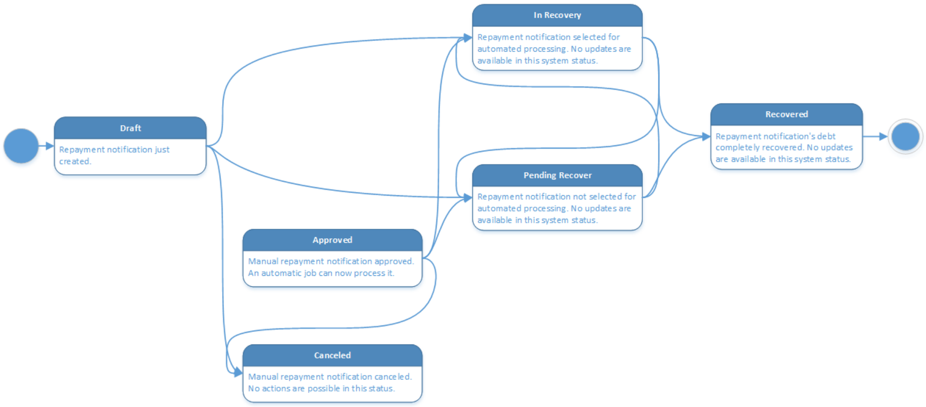
□	Payment No.	Payment Date	Operation Item	Allocated Amount	DueDate	Delay (days)
	9828	20/08/2021	Front-end Fee	51.00	20/08/2021	0
	9828	20/08/2021	Advance	225.00	20/08/2021	0

Repayment Notification Statuses

A repayment notification record has the following business workflow statuses:

- **Draft** - the status of a newly created repayment notification record, either automatic or manual.
- **Approved** - the status of a manual repayment notification record after being authorized by a user with notification approval competencies. While in this status, you cannot edit the record's details. From this status, the record is picked up by a scheduled job and its status is automatically changed, depending on the direct debit settlement settings. If the `Direct Debit Settlement Account` field at the contract level = `True`, then the manual notification's status changes to **In Recovery**, otherwise it changes to **Pending Recover**.
- **Canceled** - the status of a manual repayment notification after canceling it straight from the **Draft** status. You can only cancel a manual notification if its `Total Amount` = `Remaining Value`.
- **Pending Recover** - this is a system status applied to repayment notification when `Direct Debit Settlement Account` at the contract level is set to `False`. No updates are available in this system status.
- **In Recovery** - this is a system status applied to repayment notification when `Direct Debit Settlement Account` at the contract level is set to `True`. No updates are allowed on the record.
- **Recovered** - the last status of a repayment notification, after the complete recovery of the notification's debt. No updates are allowed on the record.

The repayment notification status transitions are illustrated below:


In Recovery
Repayment notification selected for automated processing. No updates are available in this system status.
Draft
Repayment notification just created.
Recovered
Repayment notification's debt completely recovered. No updates are available in this system status.
Pending Recover
Repayment notification not selected for automated processing. No updates are available in this system status.
Approved
Manual repayment notification approved. An automatic job can now process it.
Canceled
Manual repayment notification canceled. No actions are possible in this status.

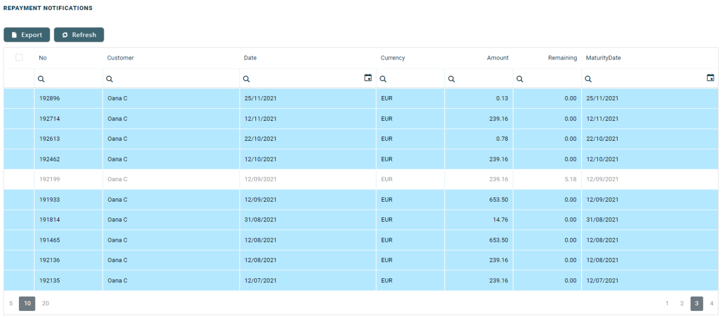
Accessing Repayment Notifications

Core Banking enables you to access notifications in several places, for your convenience.

Accessing a contract's repayment notifications

To view the notifications generated for a specific contract, follow these steps:

1. On the **Contract** page, navigate to the **Payments** tab > **Repayment Notifications** section.
2. View all the repayment notifications generated for the contract. This section only has information if the contract is in **Approved** status and disbursements were already performed.



REPAYMENT NOTIFICATIONS

□	No	Customer	Date	Currency	Amount	Remaining	MaturityDate
	192896	Oana C	25/11/2021	EUR	0.13	0.00	25/11/2021
	192714	Oana C	12/11/2021	EUR	239.16	0.00	12/11/2021
	192613	Oana C	22/10/2021	EUR	0.78	0.00	22/10/2021
	192462	Oana C	12/10/2021	EUR	239.16	0.00	12/10/2021
	192199	Oana C	12/09/2021	EUR	239.16	5.18	12/09/2021
	191933	Oana C	12/09/2021	EUR	653.50	0.00	12/09/2021
	191814	Oana C	31/08/2021	EUR	14.76	0.00	31/08/2021
	191465	Oana C	12/08/2021	EUR	653.50	0.00	12/08/2021
	192136	Oana C	12/08/2021	EUR	239.16	0.00	12/08/2021
	192135	Oana C	12/07/2021	EUR	239.16	0.00	12/07/2021

Repayment notifications highlighted in blue are already paid, allocated or closed to payment, while the ones not highlighted remain to be paid.

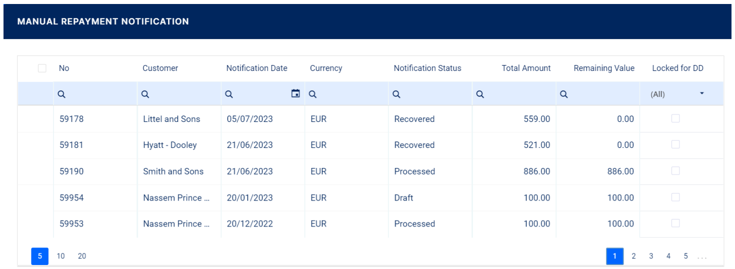
3. View the information is displayed about each notification:

    - Number, date, and status of the notification
    - Customer and currency of the contract
    - Amount of the installment for which the notification was generated
    - Remaining amount from the installment to be paid
    - Maturity date of the notification, automatically calculated adding the value of the `Grace period for repayment` field at the banking product level to the notification date.

Accessing all the repayment notifications generated by Core Banking

To access all the notifications created in Core Banking, follow these steps:

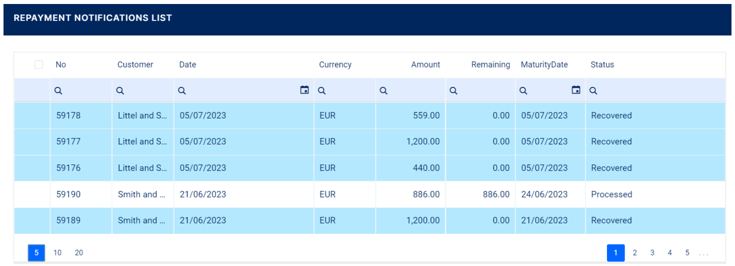
1. In the FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. To access only manually captured notifications, click **Manual Repayment Notification** menu item to open the **Manual Repayment Notifications** page.



MANUAL REPAYMENT NOTIFICATION

☐	No	Customer	Notification Date	Currency	Notification Status	Total Amount	Remaining Value	Locked for DD
								(All)
	59178	Littel and Sons	05/07/2023	EUR	Recovered	559.00	0.00	☐
	59181	Hyatt - Dooley	21/06/2023	EUR	Recovered	521.00	0.00	☐
	59190	Smith and Sons	21/06/2023	EUR	Processed	886.00	886.00	☐
	59954	Nassem Prince ...	20/01/2023	EUR	Draft	100.00	100.00	☐
	59953	Nassem Prince ...	20/12/2022	EUR	Processed	100.00	100.00	☐

3. To access automatic and manual notifications, click **Repayment Notification** menu item to open the **Repayment Notifications List** page.

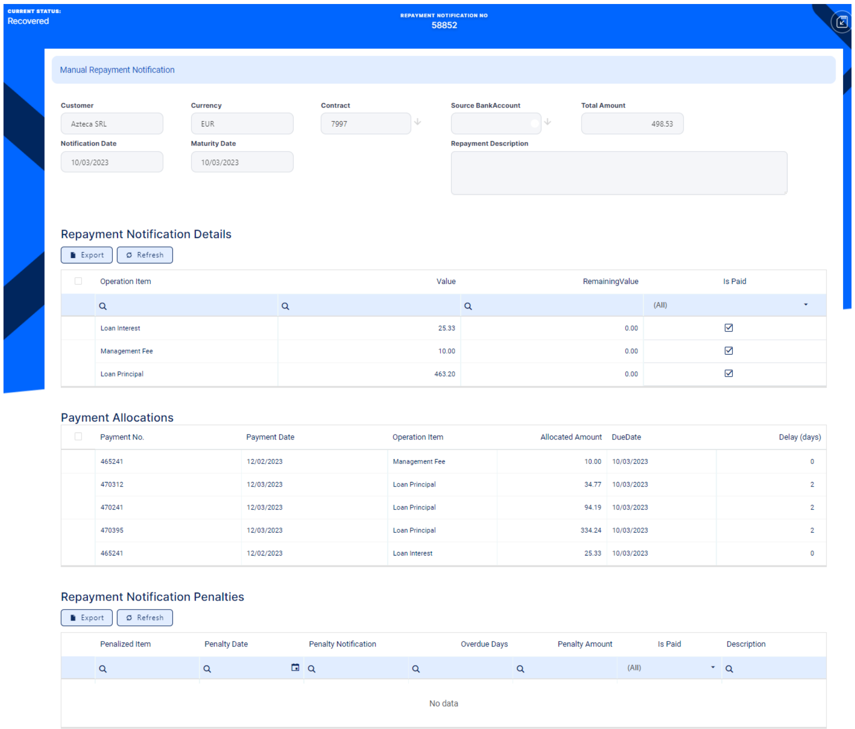


REPAYMENT NOTIFICATIONS LIST

☐	No	Customer	Date	Currency	Amount	Remaining	MaturityDate	Status
	59178	Littel and S...	05/07/2023	EUR	559.00	0.00	05/07/2023	Recovered
	59177	Littel and S...	05/07/2023	EUR	1,200.00	0.00	05/07/2023	Recovered
	59176	Littel and S...	05/07/2023	EUR	440.00	0.00	05/07/2023	Recovered
	59190	Smith and ...	21/06/2023	EUR	886.00	886.00	24/06/2023	Processed
	59189	Smith and ...	21/06/2023	EUR	1,200.00	0.00	21/06/2023	Recovered

Viewing Repayment Notifications

1. To view the details of a repayment notification, double-click the desired record. The **Edit Repayment Notification** page is displayed for automatically generated notifications, or the **Edit Manual Repayment Notification** page for manual notifications, both presenting the repayment notification details.



CURRENT STATUS:
Recovered

REPAYMENT NOTIFICATION NO
58852

Manual Repayment Notification

Customer	Currency	Contract	Source BankAccount	Total Amount
Azteca SRL	EUR	7997		498.53
Notification Date	Maturity Date		Repayment Description	
10/03/2023	10/03/2023			

Repayment Notification Details

□	Operation Item	Value	RemainingValue	Is Paid
				(All)
	Loan Interest	25.33	0.00	☑
	Management Fee	10.00	0.00	☑
	Loan Principal	463.20	0.00	☑

Payment Allocations

□	Payment No.	Payment Date	Operation Item	Allocated Amount	DueDate	Delay (days)
	465241	12/02/2023	Management Fee	10.00	10/03/2023	0
	470312	12/03/2023	Loan Principal	34.77	10/03/2023	2
	470241	12/03/2023	Loan Principal	94.19	10/03/2023	2
	470395	12/03/2023	Loan Principal	334.24	10/03/2023	2
	465241	12/02/2023	Loan Interest	25.33	10/03/2023	0

Repayment Notification Penalties

Penalized Item	Penalty Date	Penalty Notification	Overdue Days	Penalty Amount	Is Paid	Description
					(All)	

No data

NOTE

Automatically generated notifications can't be edited!

You can only edit the details of manual notifications in `Draft` status.

2. View notification specific data in the **Repayment Notification** section:

    - **Repayment Notification No.** - The number of the repayment notification record.
    - **Customer** - The customer for whom the notification was generated.
    - **Currency** - The currency of the notification.

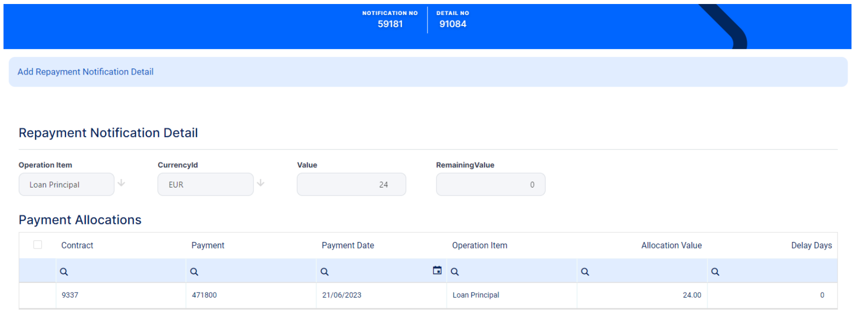
- **Contract** - The number of the contract for which the notification was generated.
- **Notification Date** - The date when the notification was generated.
- **Maturity Date** - The maturity date of the notification. This is calculated by adding the value of the `Grace period for repayment` field at the banking product level to the notification date.
- **Source Bank Account** - The bank account from where the notified amount should be allocated.
- **Total Amount** - The total amount to be paid within the notification (the sum of all the details' values).
- **Repayment Description** - A description of the manual notification.

3. View details (lines) of the notification in the **Repayment Notification Details** section:
   - **Operation Item** - The operation item for which the notification detail is generated.
   - **Value** - The value of the notification detail.
   - **Remaining Value** - The remaining value still to be paid from the notification value.
   - **Is Paid** - This checkbox is automatically marked as true when the full amount is allocated to the detail value. You cannot change this value.

> **NOTE**
>
> Notification details are automatically marked as paid when a repayment transaction performed

> and approved for the contract is allocated by the system to cover the value of the notification detail.

4. To view more information about a notification detail, double-click it to open the **Repayment Notification Details** page:



NOTIFICATION NO 59181 | DETAIL NO 91084

Add Repayment Notification Detail

Repayment Notification Detail

Operation Item: Loan Principal

CurrencyId: EUR

Value: 24

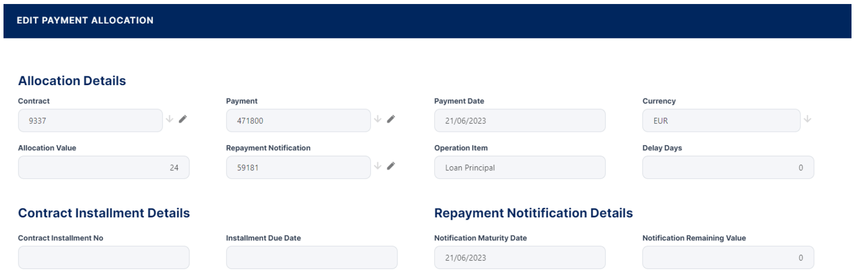
RemainingValue: 0

Payment Allocations

□	Contract	Payment	Payment Date	Operation Item	Allocation Value	Delay Days
	9337	471800	21/06/2023	Loan Principal	24.00	0

5. View information about the payments allocated for the notification details in the **Payment Allocation** section:
   - **Payment No.** - The number of the payment.
   - **Payment Date** - The date when the payment was performed.
   - **Operation Item** - The operation item from the notification for which the payment was allocated.
   - **Allocated Amount** - The amount allocated from the payment.
   - **Due Date** - The due date of the notification.
   - **Delays (days)** - The number of days passed since the notification's due date.

6. To view more information about a payment allocation, double-click it to open the **Edit Payment Allocation** page:



EDIT PAYMENT ALLOCATION

Allocation Details

Contract	Payment	Payment Date	Currency
9337	471800	21/06/2023	EUR
Allocation Value	Repayment Notification	Operation Item	Delay Days
24	59181	Loan Principal	0

Contract Installment Details

Repayment Notitification Details

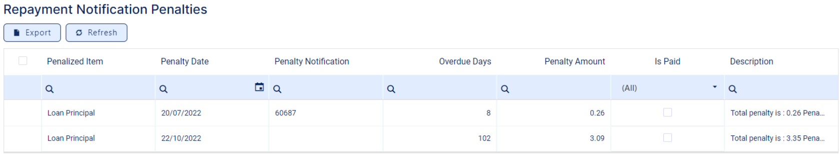
Contract Installment No	Installment Due Date	Notification Maturity Date	Notification Remaining Value
		21/06/2023	0

You cannot edit any of the fields from this page.

NOTE

The operation item is used in the payment allocation process. If the repayment notification is not linked to contract, then Core Banking takes the operation item value from the allocation method configured within the `ManualAllocationMethod` system parameter. If a repayment notification is created for a contract with `Closed` status, then Core Banking takes the operation item value from the allocation method selected at the banking product level.

7. View information about the penalties calculated for the manual repayment notifications that were not paid in full until their maturity date in the **Viewing Notification Penalties** section:



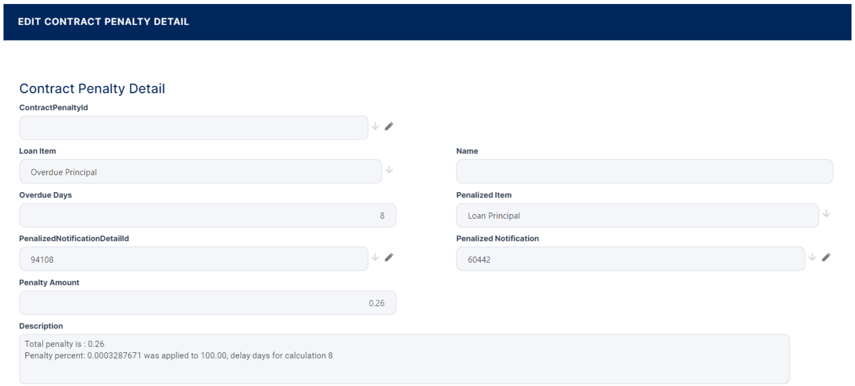
Repayment Notification Penalties

□	Penalized Item	Penalty Date	Penalty Notification	Overdue Days	Penalty Amount	Is Paid	Description
						(All)	
	Loan Principal	20/07/2022	60687	8	0.26	□	Total penalty is : 0.26 Pena...
	Loan Principal	22/10/2022		102	3.09	□	Total penalty is : 3.35 Pena...

All the repayment notifications that are not paid in full after their maturity dates are subject to automated penalty calculation processes performed by Core Banking. Thus, for repayment notifications linked to a contract, Core Banking uses the penalty interests defined within the interests list attached at the banking product level. For repayment notifications which are not linked to a contract, Core Banking uses the penalty interest list specified in the `ManualPenaltyInterestList` system parameter.

Each penalty displays information about the penalized item, the penalty date, the number of penalty notification, the number of overdue days after the repayment notification's maturity date, the penalty amount, a description, and whether the penalty was pad or not.

8. To view more information about a correction entry, double-click it to open the **Edit Contract Penalty Detail** page:



EDIT CONTRACT PENALTY DETAIL

Contract Penalty Detail

ContractPenaltyId:	
Loan Item: Overdue Principal	Name:
Overdue Days: 8	Penalized Item: Loan Principal
PenalizedNotificationDetailId: 94108	Penalized Notification: 60442
Penalty Amount: 0.26	

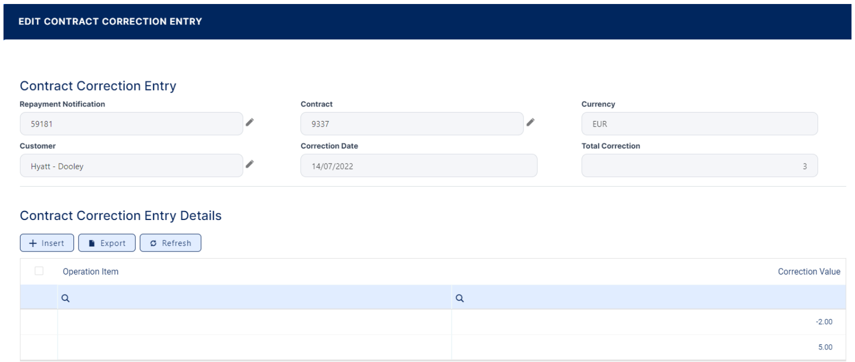
Description:
Total penalty is : 0.26
Penalty percent: 0.0003287671 was applied to 100.00, delay days for calculation 8

You can't edit any of the fields from this page.

9. View information about any correction entries created for the notification in the **Viewing Corrections** section. Contract correction entries are automatically generated, for notifications that are overdue, when creating a **Reschedule Overdue** transaction type contract event. Here you can see information about the customer of the contract, the date and

currency of the correction entry, and the total amount of the correction (the sum of all the correction details' values).

10. To view more information about a correction entry, double-click it to open the **Edit Contract Correction Entry** page:



EDIT CONTRACT CORRECTION ENTRY

Contract Correction Entry

Repayment Notification	Contract	Currency
59181	9337	EUR
Customer	Correction Date	Total Correction
Hyatt - Dooley	14/07/2022	3

Contract Correction Entry Details

□	Operation Item	Correction Value
		-2.00
		5.00

- **Repayment Notification** - The repayment notification number.
- **Contract** - The contract number associated with the notification.
- **Currency** - The currency of the notification.
- **Customer** - The customer associated with the notification.
- **Correction Date** - The date when the correction was created.
- **Total Correction** - The sum of all correction entry detail records associated with the current correction entry.

11. Additionally, you can view information about each detail within the correction:

    - **Operation Item** - The operation item of the transaction for which the correction entry detail was inserted.
    - **Correction Value** - The value of the correction entry detail, in the correction entry's currency.

Understanding Automated Settlement of Repayment Notifications (Direct Debit Settlement Account)

The automated settlement of repayment notification, or direct debit settlement account, is the functionality whereby, if funds are available on the settlement account and the contract has repayment notifications pending for recovery, Core Banking automatically uses the available balance up to full settlement of repayment notifications.

When you have restrictions of any kind on the settlement account or the allocation simply needs to be done as per a legal authority instructions, you can turn off the automated settlement of `Installment` type repayment notifications functionality (the payment allocation) at the **contract level** using the `Direct Debit Settlement Account` checkbox. De-selecting the checkbox leads to the underlying amounts on notifications pending recovery not being retrieved automatically even if there are available funds in settlement account. Thus, financial institution can manage the contracts in case of blocked accounts and control the allocation of funds to outstanding `Installment` type notifications in case of need to impose a block on the settlement account, or manage the settlement of multiple loans from the same settlement account when short on funds and exceptional rules might apply.

This parametrization is available at product level, you can it amended at the contract level, and it is also available at customer level with a system parameter to instruct Core Banking if the customer level setup should impact underlying contracts or not. Thus, you can manage the `Direct Debit Settlement Account` setting at the **customer level**. The customer level setting takes precedence over the setting at the contract level when creating new contracts. For existing contracts, Core Banking applies the setting configured within the `CustomerToContractDirectDebitSettlementAcc` system parameter.

If the automated settlement of repayment notification functionality is turned off, the contract is pending for manual repayment. You can turn it back on as required, when required, and allow Core Banking to allocate the funds according to its automated processes, using any funds that become available in the settlement account in order to cover pending notifications. When the functionality is turned on or off, the notifications already processed remain unchanged. You can turn the automated settlement functionality on or off even after the maturity of a loan, as long as the contract is not closed.

The following validations are performed for the `Direct Debit Settlement Account` field at the contract level:

- If `Direct Debit Settlement Account` = `True` and new `Installment` type repayment notifications are generated, the system automatically tries to recover the values from Settlement Amount. When the repayment notification is fully paid, Core Banking automatically changes the `Installment` type repayment notification's status to `Recovered`.
- If `Direct Debit Settlement Account` = `True` and old unpaid `Installment` type repayment notifications already exist, the system tries to create recover debt records for the remaining amount for all unpaid `Installment` type repayment notifications, and changes their status to `In recovery`.
- If `Direct Debit Settlement Account` = `False` and new `Installment` type repayment notifications are generated, the system doesn't register any debt to recover, and changes the notification's status to `Pending Recover`.
- if `Direct Debit Settlement Account` = `False` and old `Installment` type repayment notifications are generated, the

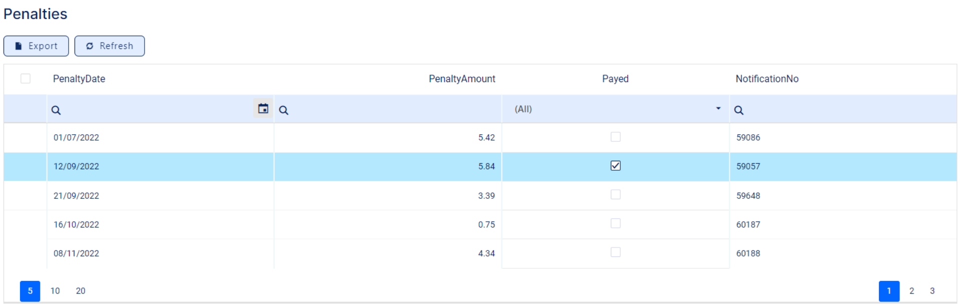
system removes debts to recover from the Settlement Account, and changes the status to `Pending Recover`.

Viewing a Contract's Penalties

You can view the penalty interest already notified for the contract in the **Penalties** section of the **Payments** tab. These penalties are automatically calculated by Core Banking for an approved contract based on all the interests with selected **Is Penalty** checkbox that are applied to this contract.

To view the penalties applied to a contract, follow these steps:

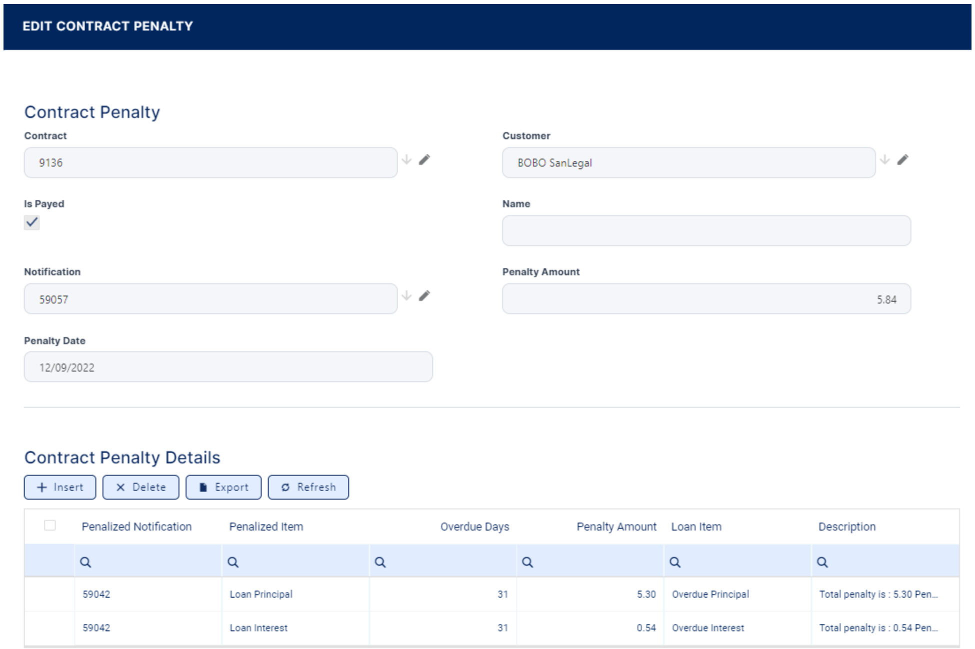
1. On an approved contract's **Payments** tab, navigate to the **Penalties** section. If any penalty interest was calculated for the contract, they are displayed here:



Penalties

□	PenaltyDate	PenaltyAmount	Payed	NotificationNo
			(All)	
	01/07/2022	5.42	□	59086
	12/09/2022	5.84	☑	59057
	21/09/2022	3.39	□	59648
	16/10/2022	0.75	□	60187
	08/11/2022	4.34	□	60188

2. View basic information about the penalties in the list, such as penalty date, amount, notification number and whether it was paid or not. Payed penalties are also highlighted in blue, for your convenience.
3. To see detailed information about one of the applied penalties, double-click on the desired penalty record. The **Contract Penalty** page is displayed with the selected penalty's details:



Contract Penalty

Contract: 9136	Customer: BOBO SanLegal
Is Payed: ☑	Name:
Notification: 59057	Penalty Amount: 5.84
Penalty Date: 12/09/2022	

Contract Penalty Details

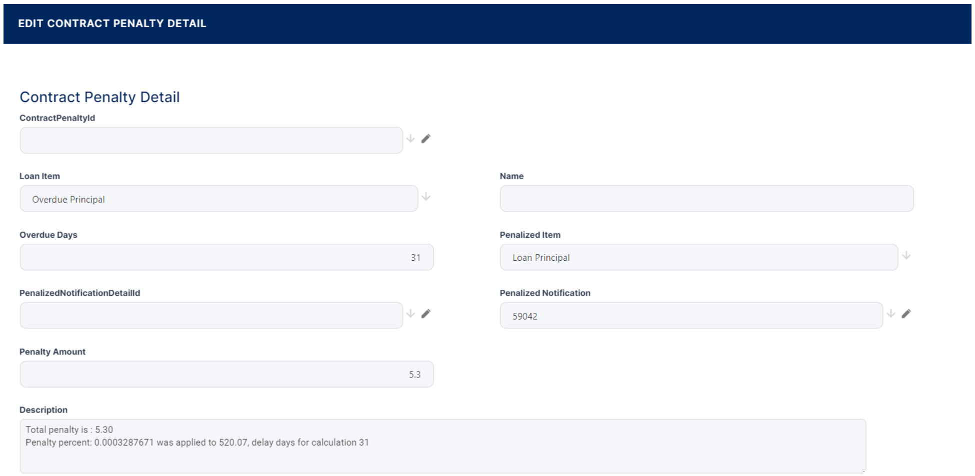
Penalized Notification	Penalized Item	Overdue Days	Penalty Amount	Loan Item	Description
59042	Loan Principal	31	5.30	Overdue Principal	Total penalty is : 5.30 Pen...
59042	Loan Interest	31	0.54	Overdue Interest	Total penalty is : 0.54 Pen...

You can't edit the information displayed on this page.

4. View the information in the **Contract Penalty** section, as displayed:
    - **Contract** - The number of the contract for which the penalty is applied.
    - **Customer** - The customer for whom the contract was created.
    - **Is Paid** - A checkbox indicating whether the penalty was already paid through a payment allocation or not.
    - **Name** - The name of the penalty.
    - **Notification** - The number of the notification where the penalty is included.
    - **Penalty Amount** - The amount of the penalty expressed in the contract's currency.
    - **Penalty Date** - The date when the penalty was calculated.
5. View the information in the **Contract Penalty Details** section, as displayed:

- **Penalized Notification** - The notification which was not paid in time and for which the penalty is calculated.
- **Penalized Item** - The item to which the penalty interest was applied.
- **Overdue Days** - The number of days since the notification was overdue for payment.
- **Penalty Amount** - The calculated amount of the penalty.
- **Loan Item** - The loan item which is used to calculate the penalty interest.
- **Description** - The description of the contract penalty detail. It contains the total penalty value, the penalty percent or value applied to the number of overdue, and the delay days for calculation.

6. Double-click a detail record to view the details of the penalty on a separate page, **Edit Contract Penalty Detail**:



EDIT CONTRACT PENALTY DETAIL

Contract Penalty Detail

ContractPenaltyId:

Loan Item: Overdue Principal

Name:

Overdue Days: 31

Penalized Item: Loan Principal

PenalizedNotificationDetailId:

Penalized Notification: 59042

Penalty Amount: 5.3

Description:
Total penalty is : 5.30
Penalty percent: 0.0003287671 was applied to 520.07, delay days for calculation 31

You can't edit the information displayed on this page.

Viewing Customer Payments

Core Banking processes payments automatically, so you can't insert payment records manually. Payment information is displayed at the contract level, within the **Payments** tab. For convenience, you can also view each performed payment, along with its allocation details, on the **Customer Payments** page.

Payment Statuses

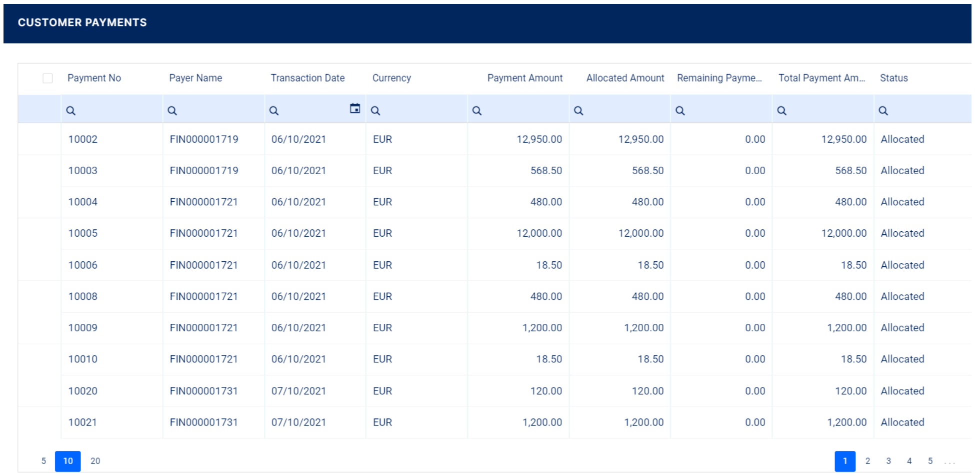
A payment record has the following statuses, visible next to the payment number on the **Payment** page:

- **Draft** - the status of a newly created record that was not yet sent for allocation. The payment amount is not allocated yet as repayment for the contract's repayment notification. You can delete records with this status.
- **Unallocated** - the status of a payment record before its amount gets allocated as payment for a repayment notification.
- **Partially Allocated** - the status of a record after some of its amount gets allocated as payment for a repayment notification.
- **Allocated** - the status of a record after its entire amount gets allocated as payment for a repayment notification. There is no further transition from this status.

IMPORTANT!
Only payments with **Allocated** status operate changes at the contract repayment notification level.

To view a specific payment, follow these steps:

1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click **Customer Payments** menu item to open the **Customer Payments** page.

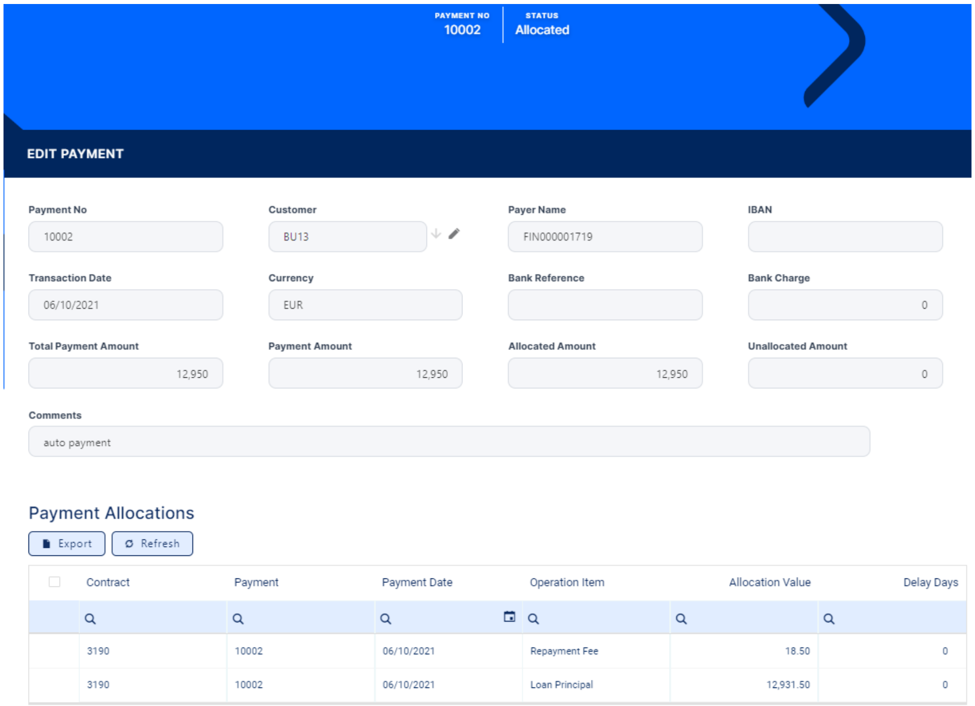


CUSTOMER PAYMENTS

Payment No	Payer Name	Transaction Date	Currency	Payment Amount	Allocated Amount	Remaining Payme...	Total Payment Am...	Status
10002	FIN000001719	06/10/2021	EUR	12,950.00	12,950.00	0.00	12,950.00	Allocated
10003	FIN000001719	06/10/2021	EUR	568.50	568.50	0.00	568.50	Allocated
10004	FIN000001721	06/10/2021	EUR	480.00	480.00	0.00	480.00	Allocated
10005	FIN000001721	06/10/2021	EUR	12,000.00	12,000.00	0.00	12,000.00	Allocated
10006	FIN000001721	06/10/2021	EUR	18.50	18.50	0.00	18.50	Allocated
10008	FIN000001721	06/10/2021	EUR	480.00	480.00	0.00	480.00	Allocated
10009	FIN000001721	06/10/2021	EUR	1,200.00	1,200.00	0.00	1,200.00	Allocated
10010	FIN000001721	06/10/2021	EUR	18.50	18.50	0.00	18.50	Allocated
10020	FIN000001731	07/10/2021	EUR	120.00	120.00	0.00	120.00	Allocated
10021	FIN000001731	07/10/2021	EUR	1,200.00	1,200.00	0.00	1,200.00	Allocated

On the **Customer Payments** page, you can search for records, delete a payment in **Draft** status, or open a specific a payment for viewing.

3. Double-click the desired payment on the **Customer Payments** page. The **Edit Payment** page is displayed.



PAYMENT NO 10002 | STATUS Allocated

EDIT PAYMENT

Payment No 10002	Customer BU13	Payer Name FIN000001719	IBAN
Transaction Date 06/10/2021	Currency EUR	Bank Reference	Bank Charge 0
Total Payment Amount 12,950	Payment Amount 12,950	Allocated Amount 12,950	Unallocated Amount 0

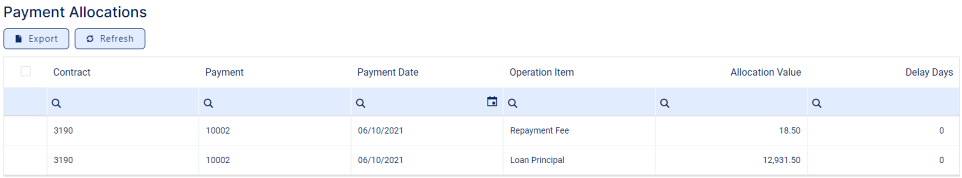
Comments: auto payment

Payment Allocations

Contract	Payment	Payment Date	Operation Item	Allocation Value	Delay Days
3190	10002	06/10/2021	Repayment Fee	18.50	0
3190	10002	06/10/2021	Loan Principal	12,931.50	0

You can only view a payment record, but you can't edit any of the fields of a payment.

4. View the following information about the selected payment:
    - **Payment No** - The number of the payment, as generated by Core Banking.
    - **Customer** - The name of the customer associated with the payment.
    - **Payer Name** - The bank account number from where the payment was performed.
    - **IBAN** - The IBAN of the account where the money is being paid.
    - **Transaction Date** - The date of the payment transaction.
    - **Currency** - The currency of the payment.
    - **Bank Reference** - The bank reference for the payment.
    - **Bank Charge** - The amount charged by the bank for performing this transaction.
    - **Total Payment Amount** - The sum of the payment amount and the bank charge value.
    - **Payment Amount** - The amount of the payment.
    - **Allocated Amount** - The amount that was already allocated as a contract's repayment for a notification for the selected customer.
    - **Unallocated Amount** - The amount that remains to be allocated as a contract's repayment for a notification for the selected customer.
    - **Comments** - Any comments referring to the payment.
5. View the payment allocation information, displayed in the **Payment Allocation** section.

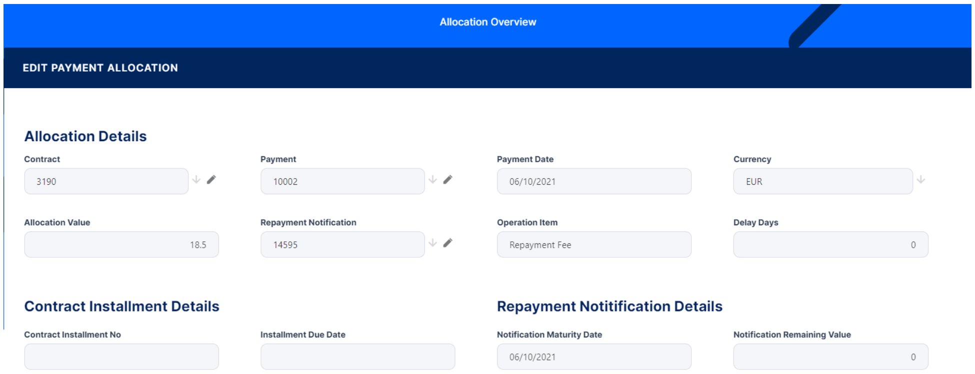


Payment Allocations

□	Contract	Payment	Payment Date	Operation Item	Allocation Value	Delay Days
	3190	10002	06/10/2021	Repayment Fee	18.50	0
	3190	10002	06/10/2021	Loan Principal	12,931.50	0

This section is empty for payments in **Draft** or **Unallocated** status. The payment allocations for due repayment notifications are automatically calculated by Core Banking and they are displayed after the record reaches the **Allocated** or **Partially Allocated** status.

6. View more details about each allocation by double-clicking it. he payment allocation record opens in the **Allocation Overview** page, displaying the following information:



Allocation Overview

EDIT PAYMENT ALLOCATION

Allocation Details

Contract	Payment	Payment Date	Currency
3190	10002	06/10/2021	EUR
Allocation Value	Repayment Notification	Operation Item	Delay Days
18.5	14595	Repayment Fee	0

Contract Installment Details

Contract Installment No	Installment Due Date

Repayment Notitification Details

Notification Maturity Date	Notification Remaining Value
06/10/2021	0

- **Contract Id** - The contract for which the payment was allocated.
- **Payment** - The number of the payment.
- **Payment Date** - The date of the payment.
- **Currency Id** - The currency of the payment.
- **Allocation Value** - The value of the allocation.
- **Repayment Notification** - The repayment notification for which the payment was allocated.
- **Operation Item** - The operation item which was repaid with this allocation.
- **Delay Days** - The days passed since the due date.
- **Contract Installment No** - The number of the contract installment.
- **Installment Due Date** - The due date of the installment.

- **Notification Maturity Date** - The notification's maturity date.
- **Notification Remaining Value** - The notification's remaining value to be paid.

> **NOTE**
>
> You can't edit any of the fields of a payment allocation record.

Working with Overdue Loans

Financial institutions classify their existing loan contracts based upon the days past due (DPD), the number of days passed since repayment due date without fully repaying the due amount for the oldest unpaid repayment notification. In order to comply with the risk method calculation, the DPD (days past due) value is calculated as the number of days between the contract's due date and the current system date of Core Banking. The financial institutions can apply different provision percentages for principal or for interest for each contract, based on this classification: the higher the delay period, the higher the provision percentage applicable and the risk classification.

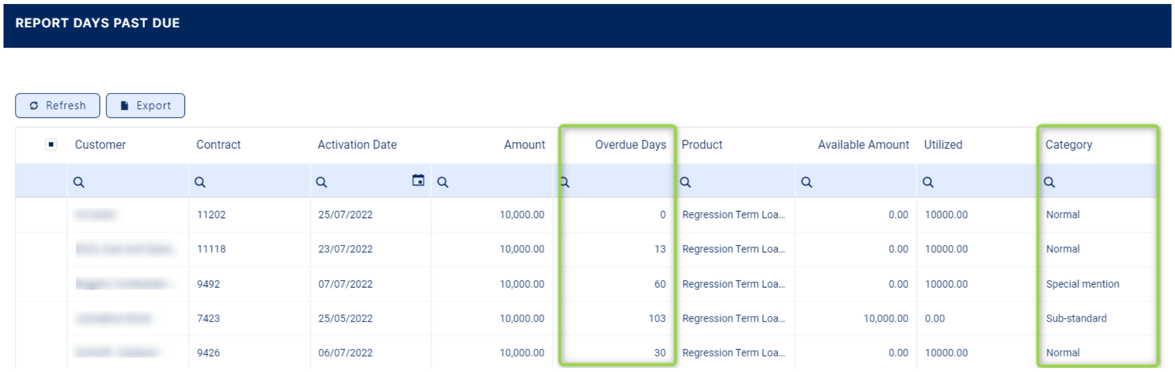
In Core Banking, the loan classification works by risk contamination at the customer and the group levels. This means that if a loan contract belonging to a customer is classified as one of a higher risk due to delays in the repayment process, all the other loans of the customer and of the group where the customer is a member are further classified into that high-risk classification. The risk classification of loan contracts is automatically performed by the `Update Loan Classification (CB)` scheduled job based on the loan classification records' definition. Read about managing loan classification records in the Loan Classification topic.

Core Banking uses two system parameters that help you manage contracts with DPD:

- `UseContaminationForDPDCategory` - this parameter specifies whether Core Banking should use the risk contamination for loan classification or not;

- DelayDaysForBlockNewContractApproval - this parameter controls the default number of delay days for blocking the approval of new loan contracts for customers who have overdue payments.

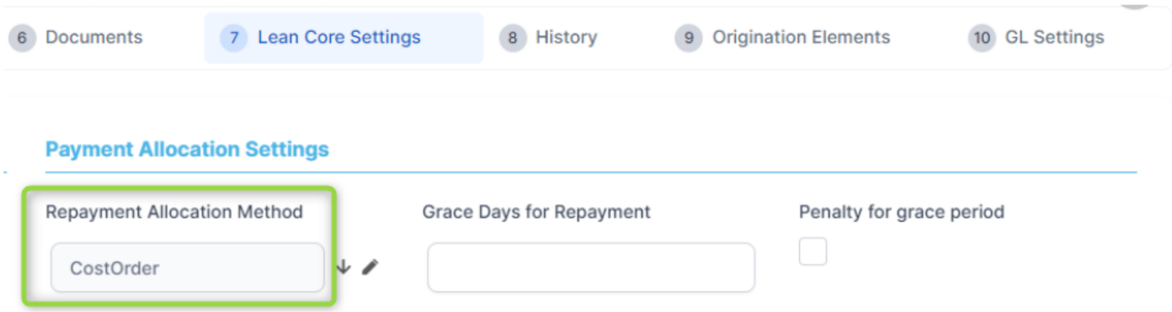
You can view the contracts with DPD in the dedicated **Days Past Due** report, accessible through Core Banking's **Reports** menu. Double-click any of the contracts from the report to open it for editing. The report displays the contracts with overdue repayment notifications, along with information about the number of overdue days and the contract's classification based on the DPD:


REPORT DAYS PAST DUE

Customer	Contract	Activation Date	Amount	Overdue Days	Product	Available Amount	Utilized	Category
[redacted]	11202	25/07/2022	10,000.00	0	Regression Term Loa...	0.00	10000.00	Normal
[redacted]	11118	23/07/2022	10,000.00	13	Regression Term Loa...	0.00	10000.00	Normal
[redacted]	9492	07/07/2022	10,000.00	60	Regression Term Loa...	0.00	10000.00	Special mention
[redacted]	7423	25/05/2022	10,000.00	103	Regression Term Loa...	10,000.00	0.00	Sub-standard
[redacted]	9426	06/07/2022	10,000.00	30	Regression Term Loa...	0.00	10000.00	Normal

You can also extract the information about overdue repayment notifications through API integration, using the GetDataSourcePastDueInstallmentsReport endpoint.

The allocation of funds for repayment notification is performed according to the cost allocation method defined at the banking product definition level, in the product's **Lean Core Setting**s tab -> **Payment Allocation Settings** section, as described in the Banking Product Factory user guide:

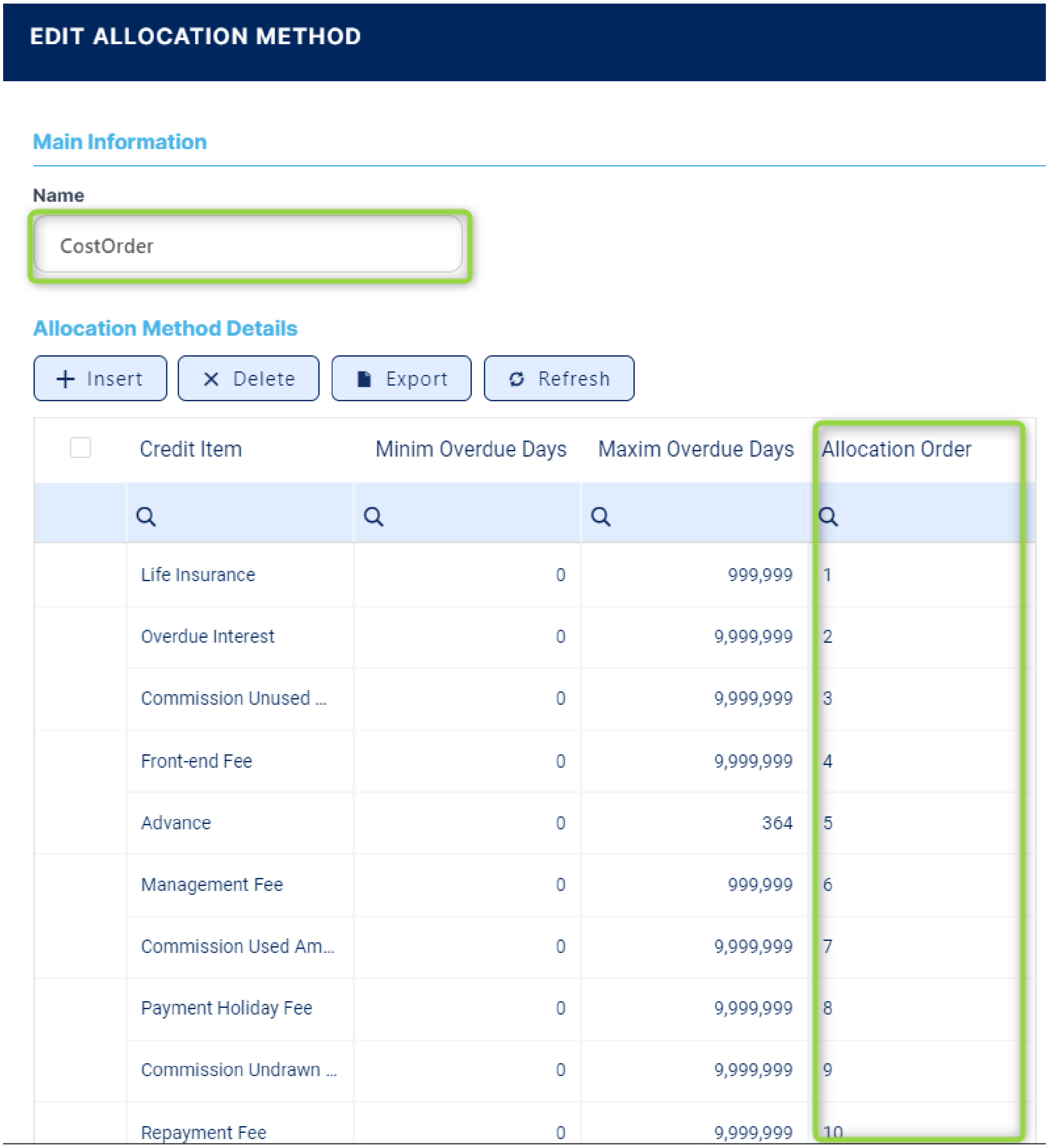


Payment Allocation Settings

Repayment Allocation Method: CostOrder

Grace Days for Repayment:

Penalty for grace period: □



EDIT ALLOCATION METHOD

Main Information

Name

CostOrder

Allocation Method Details

□	Credit Item	Minim Overdue Days	Maxim Overdue Days	Allocation Order
	Life Insurance	0	999,999	1
	Overdue Interest	0	9,999,999	2
	Commission Unused ...	0	9,999,999	3
	Front-end Fee	0	9,999,999	4
	Advance	0	364	5
	Management Fee	0	999,999	6
	Commission Used Am...	0	9,999,999	7
	Payment Holiday Fee	0	9,999,999	8
	Commission Undrawn ...	0	9,999,999	9
	Repayment Fee	0	9,999,999	10

NOTE

In order to avoid having to deal with overdues, you can perform payment holiday transactions. If you already have overdues, then perform reschedule overdues transactions on the contracts. Both transactions are usually part of the risk management/ collection departments' policies and can be proactively implemented by the bank, or on the customer's demand.

Applying Payment Holiday to a Loan

The payment holiday represents taking a break of any number of installments for the generated repayment schedule of a loan. You can apply payment holiday for the principal alone or for both interest and principal of a loan contract. This has been a functionality in demand lately during the COVID pandemic, being a regulatory requirement for financial institutions. After applying a payment holiday transaction to a loan contract, Core Banking recalculates the repayment schedule, rebuilding the schedule projection automatically based on the instructions you provided.

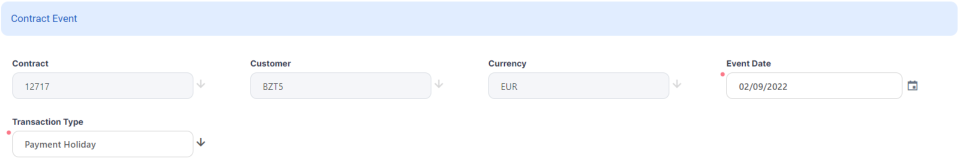
> **NOTE** If you are referring to payment holiday as a grace period, then you should read the "Working with Grace" on page 277 topic. For that sort of grace, after the initial granting of the loan, Core Banking has dedicated a transaction that can be enabled via product definition. It does pretty much the same just during the life of the loan, not at the very beginning of it.

Adding a Payment Holiday Transaction To an Approved Contract

You can add payment holiday transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a payment holiday transaction to a loan contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



Contract Event

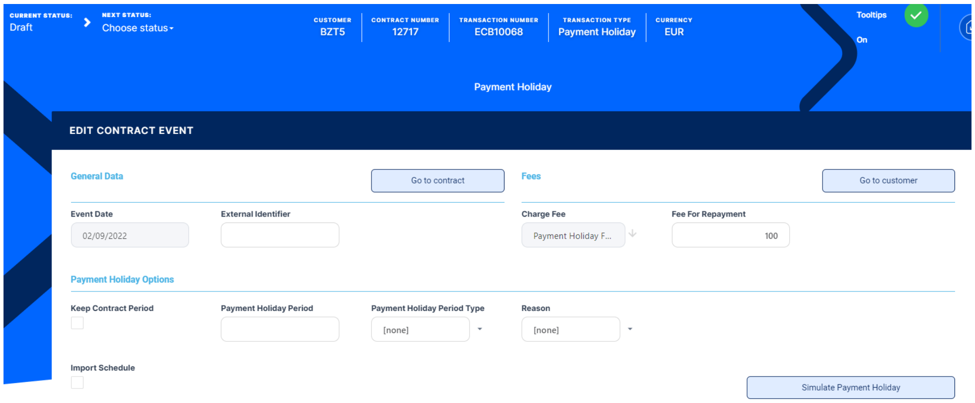
Contract	Customer	Currency	Event Date
12717	BZT5	EUR	02/09/2022

Transaction Type: Payment Holiday

3. Fill in the following fields:
   - **Event Date** - This is pre-filled with current date.
   - **Transaction Type** - Select from the list the **Payment Holiday** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

   Other values are automatically completed: contract, customer, and currency.

4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. A series of value fields are automatically calculated, their values are displayed, and you can't edit them: the contract's financed and available amounts, the selected installment calculation method, the repayment day ant the contract's tenor.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CUSTOMER	CONTRACT NUMBER	TRANSACTION NUMBER	TRANSACTION TYPE	CURRENCY
BZT5	12717	ECB10068	Payment Holiday	EUR

Tooltips: On

Payment Holiday

EDIT CONTRACT EVENT

General Data

Event Date: 02/09/2022

External Identifier:

Fees

Charge Fee: Payment Holiday F...

Fee For Repayment: 100

Payment Holiday Options

Keep Contract Period: □

Payment Holiday Period:

Payment Holiday Period Type: [none]

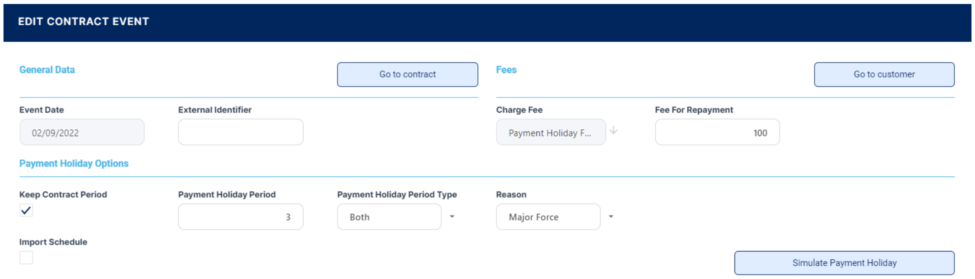
Reason: [none]

Import Schedule: □

5. Fill in the **external identifier** of the transaction, if available.

6. View the **fee for repayment** or the **repayment fee percent**, depending on which is displayed. The fee value or the percentage are pre-filled by Core Banking according to the **Charge Fee** defined for this transaction type. Depending on the `ManualRepaymentFee`Core Banking system parameter's value, the system may allow you to change the fee or the percentage. See Transaction Fees for more details.

7. Set the payment holiday options:
    - **Keep Contract Period** - Select this checkbox to instruct Core Banking to keep the period of the contract. If left unselected, the contract period is recalculated.
    - **Payment Holiday Period** - Enter the number of months for which you request a break from the payments.
    - **Payment Holiday Period Type** - Select the type of payment holiday to be applied for the contract:
        - `Both` - take a break from paying the principal and interest amounts of the installments.
        - `Principal` - take a break from paying the principal amount of the installments.
    - **Reason** - Select the reason for requesting the event: activity suspended, major force, or financial restructuring.


EDIT CONTRACT EVENT

General Data

Event Date: 02/09/2022

External Identifier:

Fees

Charge Fee: Payment Holiday F...

Fee For Repayment: 100

Payment Holiday Options

Keep Contract Period: ☑

Payment Holiday Period: 3

Payment Holiday Period Type: Both

Reason: Major Force

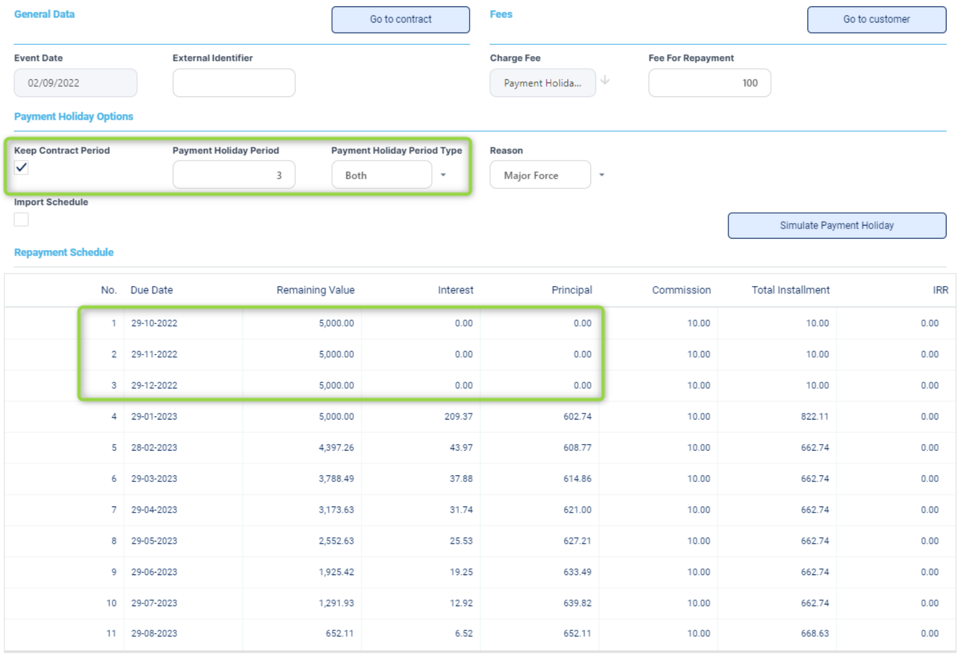
Import Schedule: □

8. Decide whether you want to use the repayment schedule calculated by Core Banking through automatic processes, or you want to import a custom schedule. For custom schedule, select the **Import Schedule** checkbox. Read more about importing a custom schedule file in the Manually Upload Repayment Schedules section of the user guide.

9. Click the **Save and Reload** button.
If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract

while the event is still in this status.

10. Click the **Simulate Payment Holiday** button to view the details of each installment of the calculated repayment schedule.



Event Date: 02/09/2022

External Identifier:

Charge Fee: Payment Holida...

Fee For Repayment: 100

Keep Contract Period: ☑

Payment Holiday Period: 3

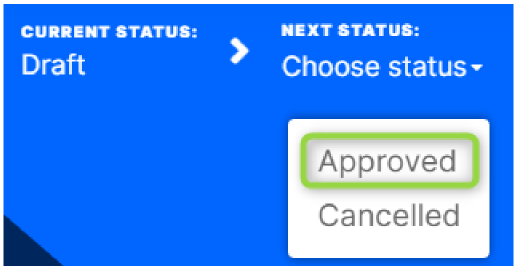
Payment Holiday Period Type: Both

Reason: Major Force

Import Schedule: □

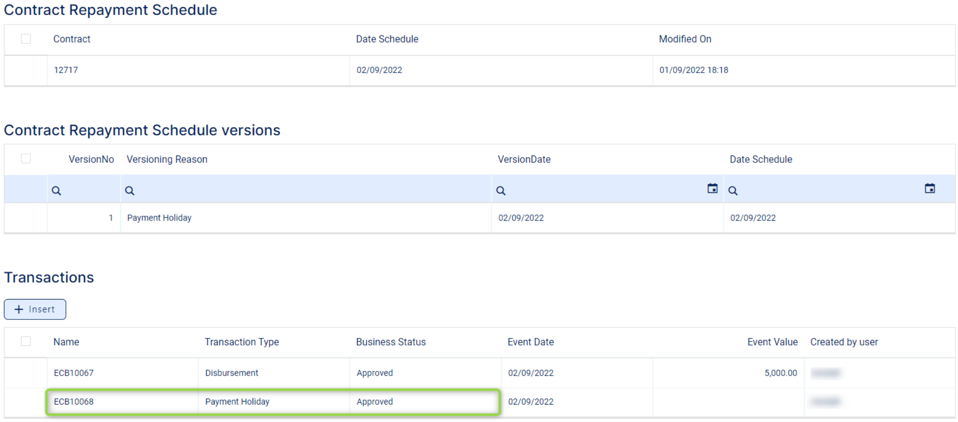
No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR
1	29-10-2022	5,000.00	0.00	0.00	10.00	10.00	0.00
2	29-11-2022	5,000.00	0.00	0.00	10.00	10.00	0.00
3	29-12-2022	5,000.00	0.00	0.00	10.00	10.00	0.00
4	29-01-2023	5,000.00	209.37	602.74	10.00	822.11	0.00
5	28-02-2023	4,397.26	43.97	608.77	10.00	662.74	0.00
6	29-03-2023	3,788.49	37.88	614.86	10.00	662.74	0.00
7	29-04-2023	3,173.63	31.74	621.00	10.00	662.74	0.00
8	29-05-2023	2,552.63	25.53	627.21	10.00	662.74	0.00
9	29-06-2023	1,925.42	19.25	633.49	10.00	662.74	0.00
10	29-07-2023	1,291.93	12.92	639.82	10.00	662.74	0.00
11	29-08-2023	652.11	6.52	652.11	10.00	668.63	0.00

11. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



12. Confirm the change of status in the **Confirmation** window, clicking **Yes**. The event is now in **Approved** status and Core Banking applies the recalculated repayment schedule to the contract, displaying the previous schedule version in the **Contract Repayment Schedule Versions** section of the contract's **Payments** tab.

    The transaction is visible in the **Transactions** section.



Contract Repayment Schedule

□	Contract	Date Schedule	Modified On
	12717	02/09/2022	01/09/2022 18:18

Contract Repayment Schedule versions

□	VersionNo	Versioning Reason	VersionDate	Date Schedule
	1	Payment Holiday	02/09/2022	02/09/2022

Transactions

□	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB10067	Disbursement	Approved	02/09/2022	5,000.00	[redacted]
	ECB10068	Payment Holiday	Approved	02/09/2022		[redacted]

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

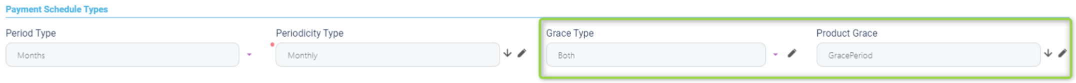
Working with Grace

You can apply a grace period to a loan contract, so that the customer starts repaying the loan later, effectively moving the due installments in the future with a number of months (or as per periodicity). You can set the grace period to apply for the loan's principal, the loan's interest, or both.

NOTE If you wish to apply a grace period during the life of the contract, then you should read the "Applying Payment Holiday to a Loan" on page 273 topic.

Core Banking uses the grace concept in two different contexts, at the loan level or the installment level. The grace period settings must be applied at the banking product definition level, as follows:

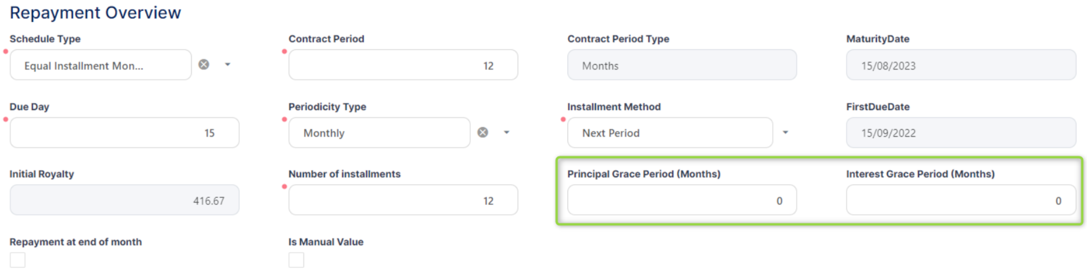
- **Loan grace** - This is negotiated as part of the approval of a loan contract and is granted at the beginning of the loan, for a given number of installments during which the borrower pays only interest or nothing at all. This one has an impact on the schedule projection. Set the loan grace at the banking product definition level, in the **Details** tab's **Payment Schedule Types** section, as described in the Banking Product Factory user guide.



Payment Schedule Types

Period Type	Periodicity Type	Grace Type	Product Grace
Months	Monthly	Both	GracePeriod

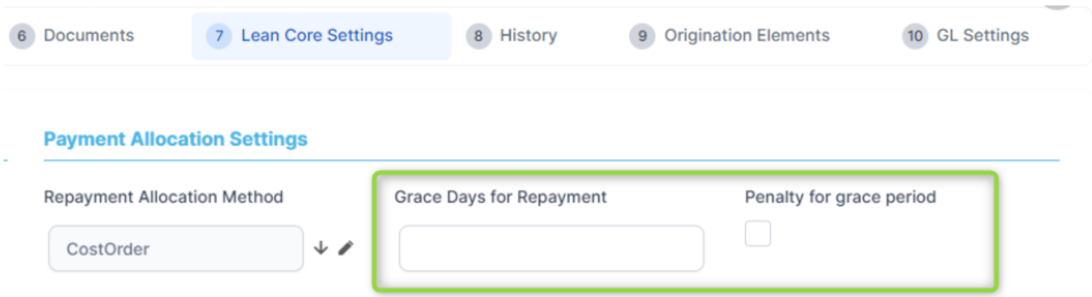
The loan grace setting are exposed at contract definition level for you to customize according to the customer's needs, within the Repayment Overview section:



Repayment Overview

Schedule Type	Contract Period	Contract Period Type	MaturityDate
Equal Installment Mon...	12	Months	15/08/2023
Due Day	Periodicity Type	Installment Method	FirstDueDate
15	Monthly	Next Period	15/09/2022
Initial Royalty	Number of installments	Principal Grace Period (Months)	Interest Grace Period (Months)
416.67	12	0	0
Repayment at end of month	Is Manual Value		
□	□		

- **Installment grace** - This is when you set a number of days allowed for the borrower to settle their notified amounts. Suppose the contract's schedule has its due date every month on the 15th and you want to allow for 5 days for the amounts to be recovered. If the amounts are not recovered in the 5 days, you also have the option to recalculate the penalty interest, if such interests exist on the contract, starting from the initial due date of 15th, or start applying it starting from 20th of the month. This one does not have an impact on the schedule projection, but on how and when to consider the amounts as overdue, and it relates to the notifications processing. These settings must be set at the banking product level, within the **Lean Core Settings**' tab **Payment Allocation Settings** section, as described in the in the Banking Product Factory user guide.



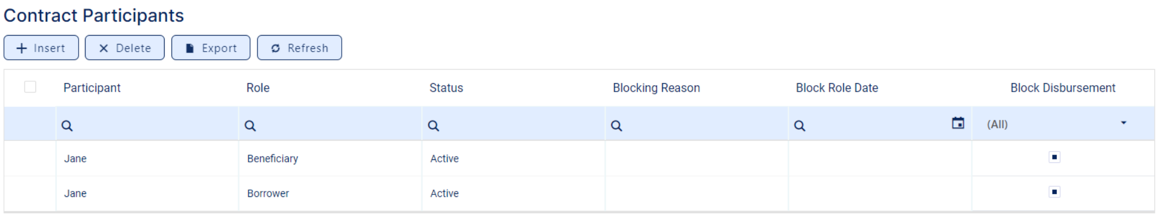
Payment Allocation Settings

Repayment Allocation Method	Grace Days for Repayment	Penalty for grace period
CostOrder		□

Working with Participants

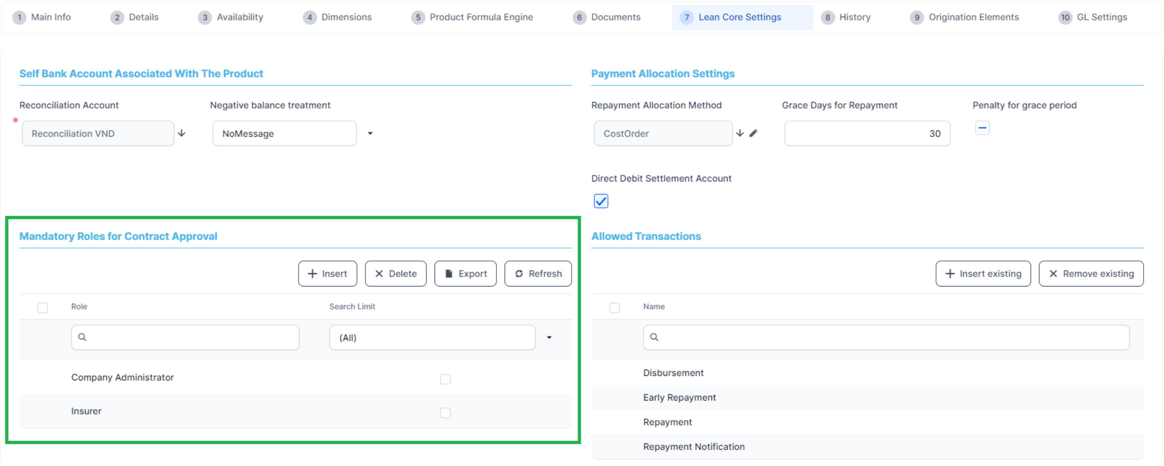
The participants to a contract are those legal or individual persons who have a role to play during the life-cycle of the contract. They can be the person who borrows the funds, the actual beneficiary of the funds, the company administrator of the legal person, a notary, and so on. Another example are the agents, brokers, insurers, or merchants who participate in contracts as third-party entities, and they may get commissions according to third-party agreements. They must be recorded in contracts as contract participant with the specified role in order to qualify for the commissions stated in the agreement pricing records added to an agreement.

While creating a contract, Core Banking automatically populates the **Contract Participants** section within the **Overview** tab of the contract with the customer's information as both Borrower and Beneficiary of the funds, for loan contracts. If the customer is a legal entity, all the company’s already entered legal representatives such as administrators, affiliates, owners, or other key contact persons are displayed in this list. In the **Contract Participants** section, you can add other participants to the contract, like Guarantors, Co-Debtors, etc, even after approval, delete, block, or export customers who participate in a contract.



Participant	Role	Status	Blocking Reason	Block Role Date	Block Disbursement
Jane	Beneficiary	Active			■
Jane	Borrower	Active			■

There may be cases when some roles are mandatory for a product. If there is a mandatory role defined in the banking product definition, Core Banking displays an error on trying to approve the contract without a customer mentioned in the contract with that specific role.



Self Bank Account Associated With The Product

Reconciliation Account: Reconciliation VND

Negative balance treatment: NoMessage

Payment Allocation Settings

Repayment Allocation Method: CostOrder

Grace Days for Repayment: 30

Penalty for grace period: −

Direct Debit Settlement Account: ☑

Mandatory Roles for Contract Approval

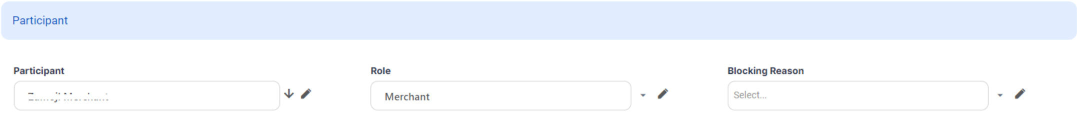
Role	Search Limit
Company Administrator	□
Insurer	□

Allowed Transactions

Name
Disbursement
Early Repayment
Repayment
Repayment Notification

Adding Participants

1. To add a participant, click **Insert** in the **Contract Participants** section of contract in `Draft, Version Draft`, or `Approved` status.
2. On the newly displayed **Participant** page, fill in the following fields:



Participant

Participant: [redacted]

Role: Merchant

Blocking Reason: Select...

- **Participant** - Select from the list the name of the customer who can access the contract.
- **Role** - Select from the list the role in the contract of the previously selected customer.
- **Blocking Reason** - Leave this empty if you don't want to limit the customer's access to the contract.

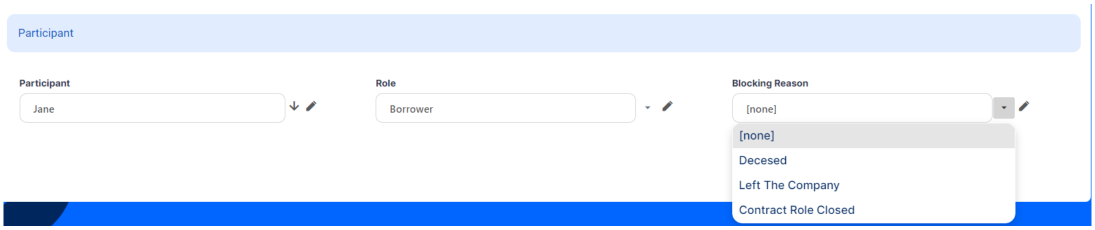
3. Click the **Save and Close** button.

> **IMPORTANT!**
> For legal entity customers, add the participant with the `Company Administrator` role, otherwise, the loan contracts cannot be approved. This is not the case for current account contracts.

Blocking Participants

If you need to block an existing participant's access to the contract for various reasons, such as the person left the company who is the beneficiary of the contract, follow these steps:

1. Double-click an existing participant in the **Contract Participants** section of contract in `Draft, Version Draft`, or `Approved` status.
2. On the displayed **Participant** page, in the **Blocking Reason** field, choose the reason for blocking the selected participant from accessing the contract.



Participant

Participant: Jane

Role: Borrower

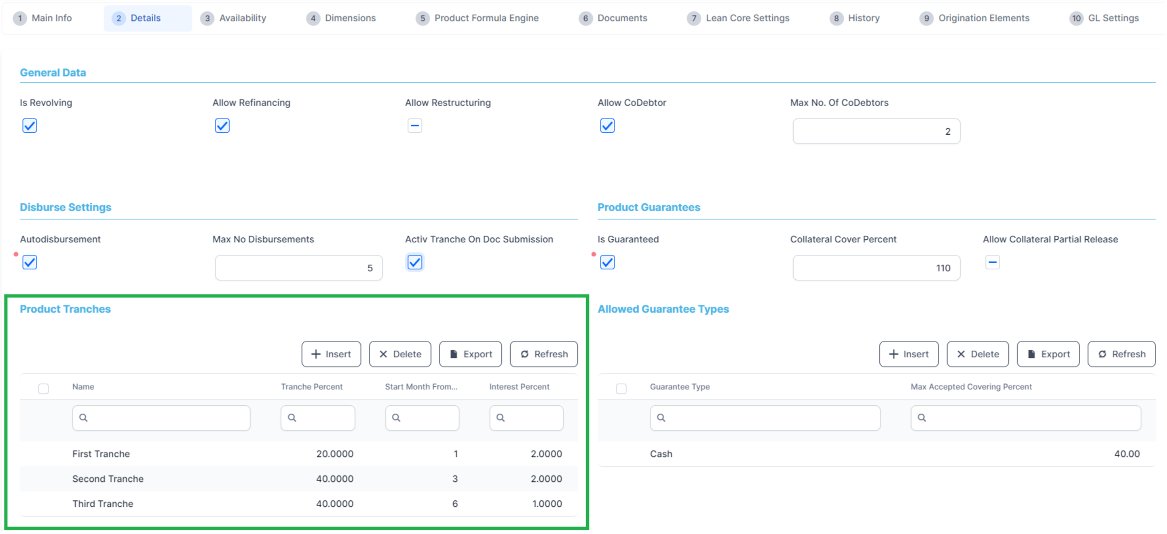
Blocking Reason: [none]

3. In the **Block Role Date** field, select the starting date for blocking the participant's access to the contract.
4. Select the **Block Disbursement** checkbox to instruct Core Banking to stop disbursements on the contract, if needed.
5. Click the **Save and Close** button.

Working with Tranches

Tranches represent multiple disbursements performed from a loan's financed amount, which allow you to implement progressive access to the funds. This is valuable in case of loans granted for investment projects where you can know upfront that there is a plan for the project and payments need to happen for each stage of the project, those stages being known from the start. Tranches are usually used for corporate loans, such dividend payments or cash outflows are not done in equal amounts and usually trigger a recalculation in terms of interest.

The disbursement tranches are configured at the product level.



General Data

Is Revolving	Allow Refinancing	Allow Restructuring	Allow CoDebtor	Max No. Of CoDebtors
☑	☑	⊟	☑	2

Disburse Settings

Autodisbursement	Max No Disbursements	Activ Tranche On Doc Submission
☑	5	☑

Product Guarantees

Is Guaranteed	Collateral Cover Percent	Allow Collateral Partial Release
☑	110	⊟

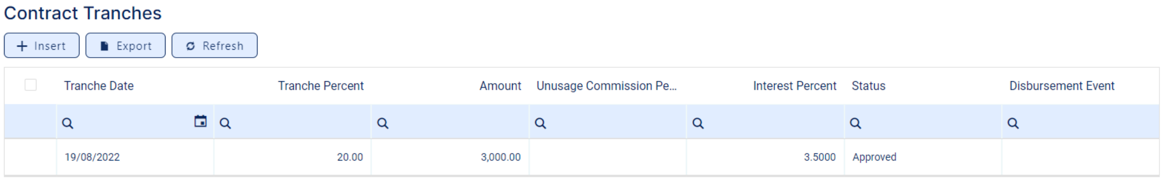
Product Tranches

Name	Tranche Percent	Start Month From...	Interest Percent
First Tranche	20.0000	1	2.0000
Second Tranche	40.0000	3	2.0000
Third Tranche	40.0000	6	1.0000

Allowed Guarantee Types

Guarantee Type	Max Accepted Covering Percent
Cash	40.00

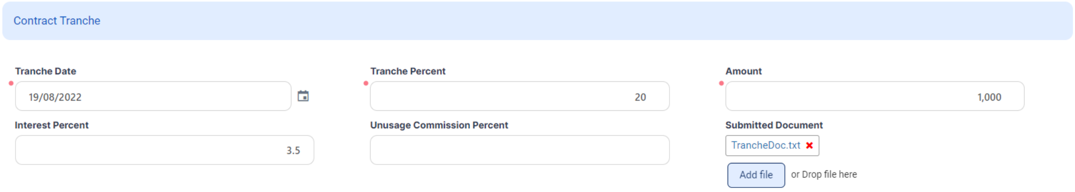
At contract creation, Core Banking brings the tranche information from the product level. In the **Contract Tranches** section of the contract's **Overview** tab, you can also insert, delete or export disbursement tranches for the contract.


Contract Tranches

Tranche Date	Tranche Percent	Amount	Unusage Commission Pe...	Interest Percent	Status	Disbursement Event
19/08/2022	20.00	3,000.00		3.5000	Approved	

Adding Tranches to a Contract

1. To add a tranche in a contract based on a product that has a disbursement matrix set up, click **Insert** and fill in the following fields:


Contract Tranche

Tranche Date	Tranche Percent	Amount
19/08/2022	20	1,000

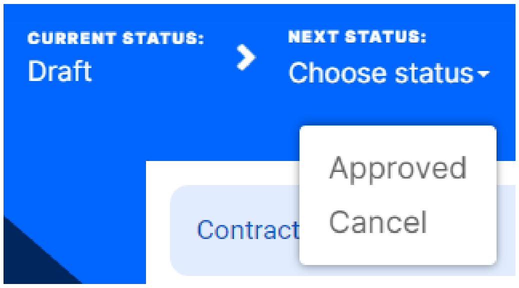
Interest Percent	Unusage Commission Percent	Submitted Document
3.5		TrancheDoc.txt

- **Tranche Date** - Select the date of the disbursement tranche.

- **Tranche Percent** - Enter the percentage from the contract value that has to be disbursed with this tranche, or allow Core Banking to calculate it based on the **Amount** value.

- **Amount** - Enter the amount from the contract value that has to be disbursed with this tranche, or allow Core Banking to calculate it based on the **Tranche Percent** value.
- **Interest Percent** - Enter the interest percent applicable for this tranche if it must be different from the interest rate applicable for the entire contract.
- **Unusage Commission Percent** - Enter the commission percent applicable for the unused loan amount from this tranche.
- **Submitted Document** - Upload the documents related to the tranche disbursement.

2. Click the **Save and Reload** button. If the product has no disbursement matrix, then Core Banking triggers an error. If Core Banking performs all validations successfully, then the tranche record is saved in **Draft** status.
3. To activate the tranche, change the tranche's status to **Approved**. Note that you can't modify the details of an approved tranche.



4. Click the **Save and Close** button.

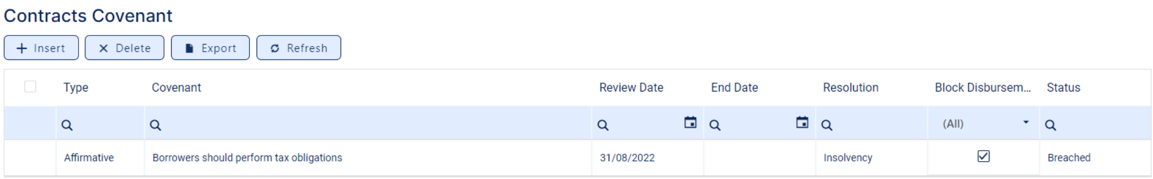
   Each day, Core Banking runs a specialized job to disburse Approved tranches, and the amount recorded in the tranche is disbursed in the contract's destination account. Alternatively, if you want to process the disbursement right-away, you can run the `Activate Tranche (CB)` job.

Working with Covenants

The covenants are conventions that applicants must abide by after the approval of a contract. Such conventions are usually applicable for corporate clients that must meet certain requirements in order to continue to receive disbursements and not only:

submit balance sheet every x months, have account turnover of at least x percent from average monthly turnover, provide other relevant documents from authorities. Covenants are configured at the product level.

While creating a contract, Core Banking brings the covenants to the contract level, in the **Contract Covenant** section of the **Overview** tab. There you also add, delete or export covenants for the contract.



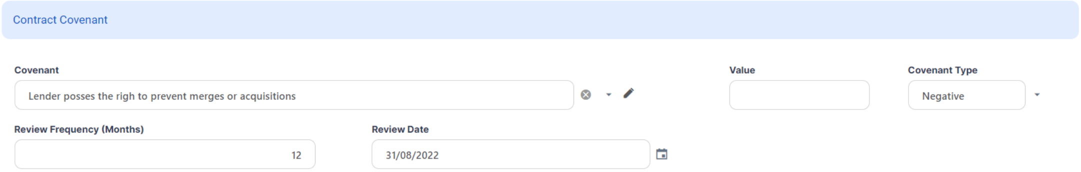
Contracts Covenant

□	Type	Covenant	Review Date	End Date	Resolution	Block Disbursem...	Status
						(All)	
	Affirmative	Borrowers should perform tax obligations	31/08/2022		Insolvency	☑	Breached

Upon adding a covenant to a contract, you must activate it. After approving the contract, when it reaches the covenant's review date, you must perform the review of the covenant. If the conditions are not met, then you can mark the covenant for blocking further disbursements of the contract. Further implementation is needed if you want automatic processes to take care of contracts with breached covenants.

Adding & Activating Covenants

1. To add a covenant to a contract, click **Insert** in the **Contracts Covenant** section of a contract in `Draft` or `Version Draft` status.
2. On the newly displayed **Contract Covenant** page, fill in the following fields:



Contract Covenant

Covenant: Lender posses the righ to prevent merges or acquisitions

Value:

Covenant Type: Negative

Review Frequency (Months): 12

Review Date: 31/08/2022

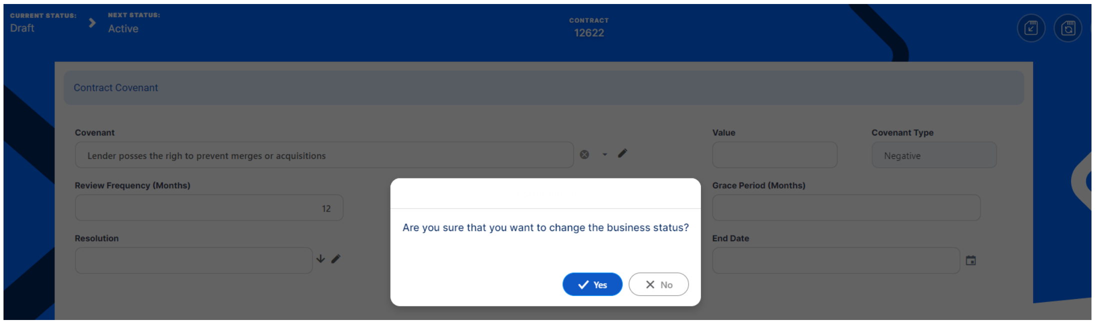
- **Covenant** - Select the desired covenant from the list of possible values:
  - `Borrowers should perform tax obligations`: the lenders expect the borrowers to perform their tax obligations to both the business and towards their employees. This covenant is of type affirmative.

    - `Lender can monitor borrower's current ratio`: the lender may continuously monitor the borrower's current ratio to ensure it stays relatively attractive and promising. This covenant is of type financial.
    - `Lender posses the right to prevent merges or acquisitions`: a clear stipulation that the lender possesses the right to prevent merges of acquisitions without proper notification or full knowledge of the process. This covenant is of type negative.

    Core Banking automatically fills in the covenant type.

  - **Value** - Enter the numeric value of the covenant, if applicable.
  - **Review Frequency (Months)** - Enter the number of months after which the covenant has to be reviewed.
  - **Review Date** - Enter the date when the covenant has to be reviewed.

3. Click the **Save and Reload** button. The covenant is displayed in the list of covenants in the **Contracts Covenant** section, in `Draft` status.
4. Activate the covenant record by changing its status to **Active** and confirming your action.



CURRENT STATUS: Draft
NEXT STATUS: Active
CONTRACT 12622

Contract Covenant

Covenant: Lender posses the righ to prevent merges or acquisitions
Value:
Covenant Type: Negative
Review Frequency (Months): 12
Grace Period (Months):
Resolution:
End Date:

Are you sure that you want to change the business status?

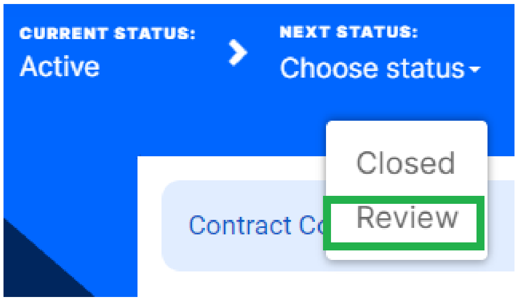
5. Click the **Save and Close** button. The covenant's status changes to `Active`.

Reviewing Covenants

Core Banking allows you to add details about the process of reviewing a covenant for an approved contract.

1. To review an active covenant for an approved contract, double-click the desired covenant in the **Contracts Covenant** section of the contract's Overview tab.

2. On the newly displayed **Contract Covenant** page, change the covenant's status to **Review** and confirm your action.

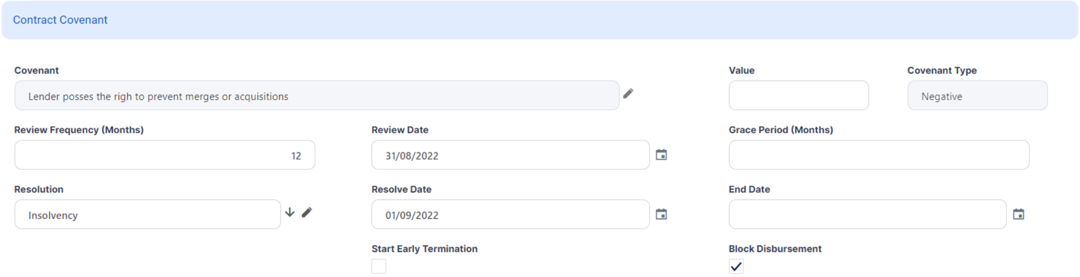


CURRENT STATUS: Active

NEXT STATUS: Choose status

The covenant's status changes to Review and the page reloads with new fields.

3. Fill in the following fields with the results of the covenant review process:



Contract Covenant

Covenant: Lender posses the righ to prevent merges or acquisitions

Value:

Covenant Type: Negative

Review Frequency (Months): 12

Review Date: 31/08/2022

Grace Period (Months):

Resolution: Insolvency

Resolve Date: 01/09/2022

End Date:

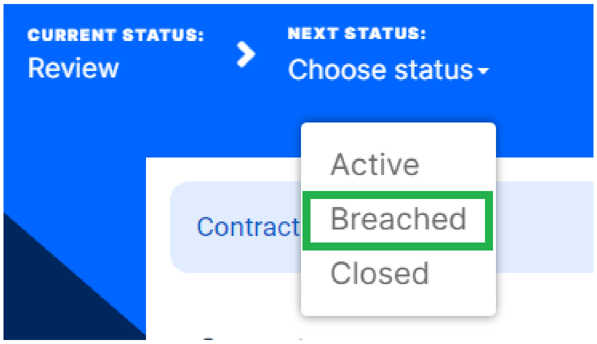
Start Early Termination: □

Block Disbursement: ☑

- **Grace Period (Months)** - Enter a grace period in month for the fulfillment of the covenant, if needed.
- **Resolution** - Select from the list the actual resolution of the covenant. Add a new covenant resolution, if you can't find a match in the list.
- **Resolve Date** - Enter the date when the covenant is considered as resolved.
- **End Date** - Enter an end date for the covenant, if needed.
- **Start Early Termination** - If the covenant's terms are not met, then you can check this field to mark the covenant for contract early termination.
- **Block Disbursement** - If the covenant's terms are not met, then you can check this field to mark the covenant for blocking further disbursements of the contract.

4. Click the **Save and Reload** button.

5. If the covenant's terms are met, change the covenant's status to **Active** and confirm your action.
   If the covenant's terms are not met, change the covenant's status to **Breached** and confirm your action.

6. Click the **Save and Close** button. The covenant's status changes to `Active` or `Breached`, according to your previous choice.

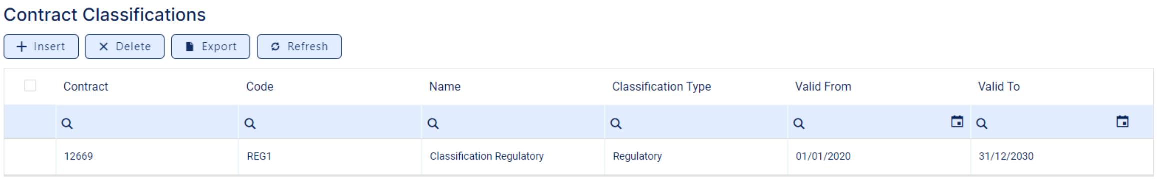
NOTE Further implementations are needed in order for Core Banking to manage contracts with breached covenants if you need actions enforced at the contract level.

Working with Contract Classification

Financial institutions may classify their contracts for organization purposes, or to mark some contracts as to belonging to a specific category or another. Core Banking brings the classifications defined at the product level to the contract level when creating a contract.

NOTE
For information about the **automatic loan classification** performed by Core Banking based on DPD, please read the "Loan Classification" on page 44 topic.

You can manage a contract's classification within the **Contract Classifications** section on the **Overview** tab. Here you can insert, delete or export classifications for the contract.

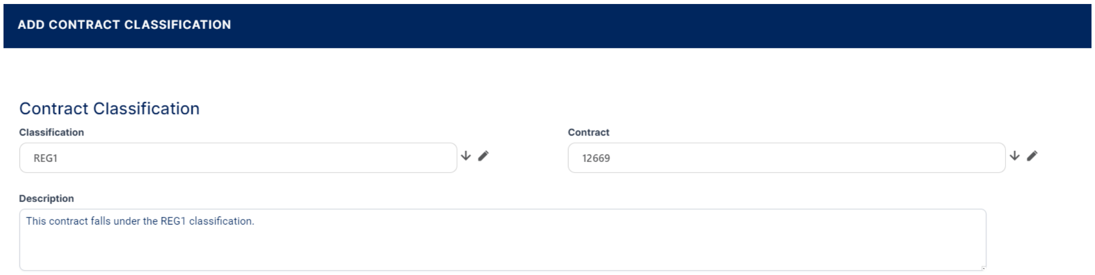


Contract Classifications

Contract	Code	Name	Classification Type	Valid From	Valid To
12669	REG1	Classification Regulatory	Regulatory	01/01/2020	31/12/2030

Adding Classifications to a Contract

1. To add a classification to a contract, click **Insert** in the **Contract Classifications** section of a contract.
2. On the newly displayed **Add Contract Classification** page, fill in the following fields:

   ADD CONTRACT CLASSIFICATION

   Contract Classification

   Classification: REG1

   Contract: 12669

   Description: This contract falls under the REG1 classification.

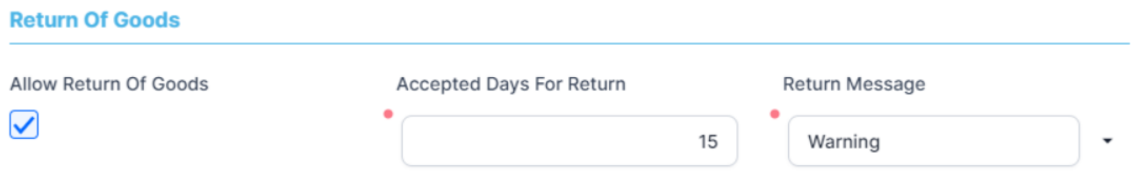
   - **Classification** - Select the desired classification for the contract from the list of classifications associated with the banking product.
   - **Description** - Enter a description for the contract classification.
3. Click the **Save and Close** button.

Working with Returns

To manage merchandise return in a contract based on a BNPL-type banking product or even a return of funds in a different kind of loan, no matter if the return is partial or full, Core Banking allows you to perform an early repayment and decide if the repayment amount is excluded from interest calculation, as well as decide how to treat potentially claimed interest at the moment of performing the early repayment. This feature was created in context of BNPL where you can return goods but can also apply for mortgages when the deal drops and the solicitor returns the funds.

The Returned Amounts or Goods transaction triggers an early repay and reconciles/ gives back any interest if collected for that specific amount so far, as well as all or part of the upfront fee. The recalculation of the repayment schedule covers the recalculation of interest and the mitigation of potentially already charged/ notified interest amounts. Core Banking can capture the return for any amount no matter if the disbursement of the loan was done in one or multiple transactions. Even if there are overdue payments on the contract, the principal can be decreased and also the overdue notifications overdue are adjusted to reflect the early repayment, if the date of processing is before the notification date. The transaction only accepts `Return Fee` commission types. Upon transaction approval, a new contract version is automatically created.

Whether a contract allows or not Returned Amounts or Goods transactions must be defined at the banking product level, within the **Lean Core Setting**s' tab **Return of Goods** section, as described in the Banking Product Factory user guide.


Return Of Goods

Allow Return Of Goods: ☑

Accepted Days For Return: 15

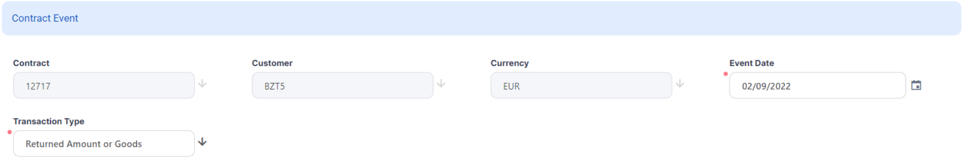
Return Message: Warning

Adding a Returned Amount or Goods Transaction To an Approved Contract

You can add Returned Amounts or Goods transactions to an approved and disbursed contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a Returned Amounts or Goods transaction to a loan contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.

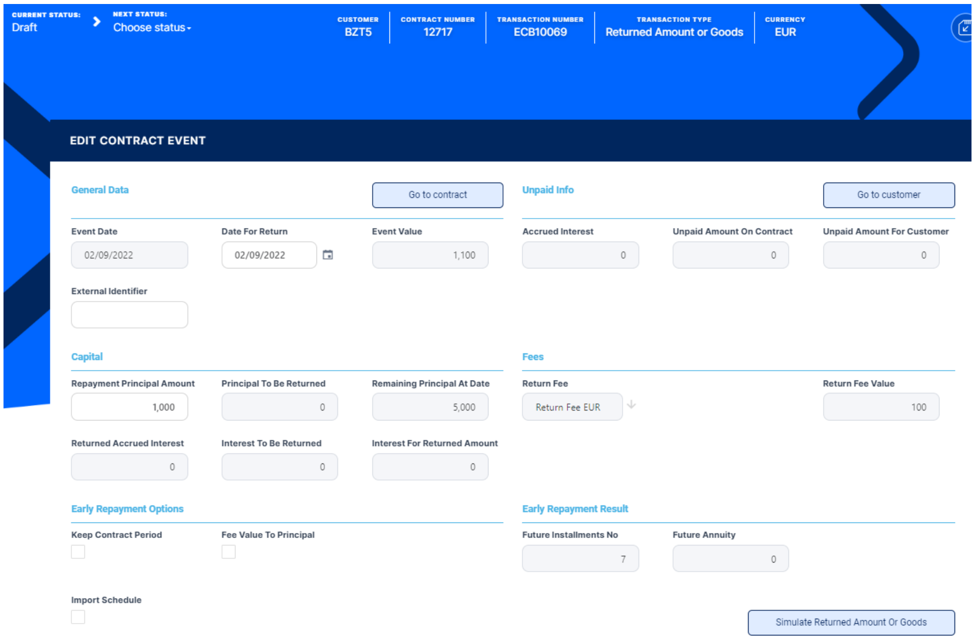


Contract Event

Contract	Customer	Currency	Event Date
12717	BZT5	EUR	02/09/2022
Transaction Type			
Returned Amount or Goods			

3. Fill in the following fields:
   - **Event Date** - This is pre-filled with current date.
   - **Transaction Type** - Select from the list the **Returned Amounts or Goods** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

   Other values are automatically completed: contract, customer, and currency.
4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. A series of value fields are automatically calculated, their values are displayed, and you can't edit them: the contract's financed and available amounts, the selected installment calculation method, the repayment day ant the contract's tenor.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CUSTOMER	CONTRACT NUMBER	TRANSACTION NUMBER	TRANSACTION TYPE	CURRENCY
BZT5	12717	ECB10069	Returned Amount or Goods	EUR

EDIT CONTRACT EVENT

General Data

Go to contract

Event Date: 02/09/2022

Date For Return: 02/09/2022

Event Value: 1,100

External Identifier:

Unpaid Info

Go to customer

Accrued Interest: 0

Unpaid Amount On Contract: 0

Unpaid Amount For Customer: 0

Capital

Repayment Principal Amount: 1,000

Principal To Be Returned: 0

Remaining Principal At Date: 5,000

Returned Accrued Interest: 0

Interest To Be Returned: 0

Interest For Returned Amount: 0

Fees

Return Fee: Return Fee EUR

Return Fee Value: 100

Early Repayment Options

Keep Contract Period □

Fee Value To Principal □

Import Schedule □

Early Repayment Result

Future Installments No: 7

Future Annuity: 0

Simulate Returned Amount Or Goods

5. In the **General Data** section, fill in the **external identifier** of the transaction, if available.
   The **date for return** is pre-filled and it can't be before `Activation Date` and after `Current Date`.
   The **event value** represents value of the transaction, calculated and displayed after saving the record, based on the information filled in a series of other fields: `Event Value = Repayment Principal Amount + Commission Value + Interest To Be Returned`.

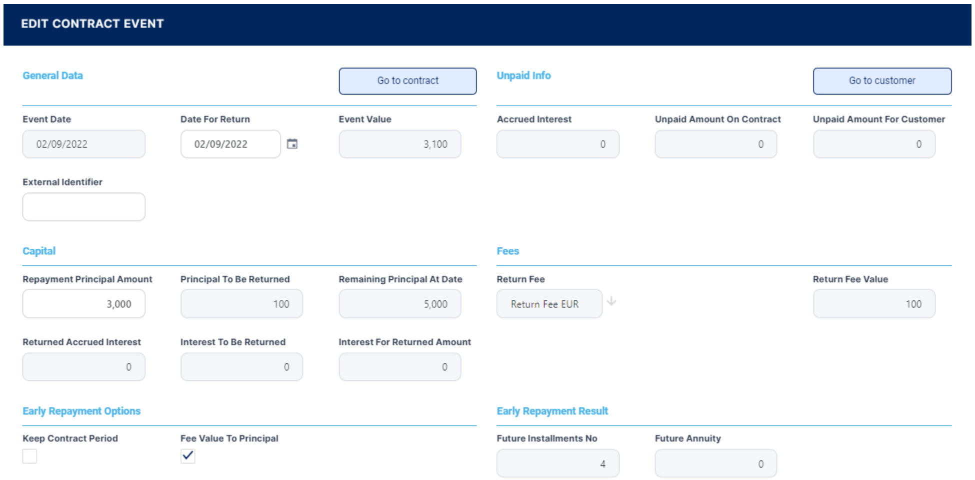
6. In the **Unpaid Info** section, you can only view the information about:
   - **Accrued Interest** - The interest accrued up until the event date for an early repayment contract event.
   - **Unpaid Amount On Contract** - The value of the unpaid amount still on the contract.
   - **Unpaid Amount For Customer** - The value of the unpaid amount for the customer.

7. In the **General Data** section, fill in the **Repayment Principal Amount** with the amount from the Principal that the customer wishes to return. You can only view the following information:

- **Remaining Principal At Date** - The remaining value of the principal at the current date.
- **Returned Accrued Interest** - The returned accrued interest.
- **Interest For Returned Amount** - The interest for the returned amount.
- **Interest To Be Returned** - The interest to be returned with this event.

8. In the **Fees** section, you can only view the information about:
    - **Return Fee** - The transaction fee applicable for a Returned Amount or Goods transaction on this contract. See Transaction Fees for more details.
    - **Return Fee Percent** - The return fee percentage applicable for the contract, if the return fee is set up as a percentage.
    - **Return Fee Value** - The return fee value applicable for the contract.
9. In the **Early Repayment Options** section, select the **Keep Contract Period** checkbox if Core Banking should keep the period of the contract.
10. Select the **Fee Value To Principal** checkbox to indicate that the value of the return fee should be applied to the principal, using its value to include it in the repayment amount and diminishing the outstanding principal.
11. In the **Early Repayment Result** section, you can only view the information about:
    - **Future Installments No** - the number of installments to be paid in the future. This depends on whether you opted to keep the contract period as it was or not.
    - **Future Annuity** - the future value of the installment as recalculated after this payment.

- **Future Principal For Installment** - the future value of the principal as recalculated after this payment.



EDIT CONTRACT EVENT

General Data

Event Date	Date For Return	Event Value
02/09/2022	02/09/2022	3,100
External Identifier		

Unpaid Info

Accrued Interest	Unpaid Amount On Contract	Unpaid Amount For Customer
0	0	0

Capital

Repayment Principal Amount	Principal To Be Returned	Remaining Principal At Date
3,000	100	5,000
Returned Accrued Interest	Interest To Be Returned	Interest For Returned Amount
0	0	0

Fees

Return Fee	Return Fee Value
Return Fee EUR	100

Early Repayment Options

Keep Contract Period	Fee Value To Principal
☐	☑

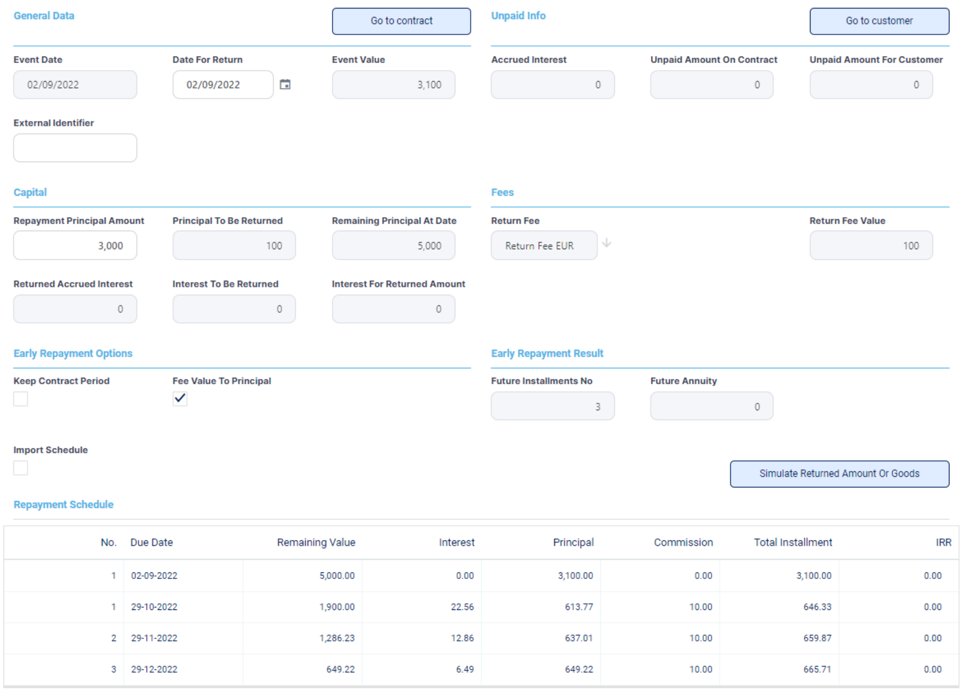
Early Repayment Result

Future Installments No	Future Annuity
4	0

12. Decide whether you want to use the repayment schedule calculated by Core Banking through automatic processes, or you want to import a custom schedule. For custom schedule, select the **Import Schedule** checkbox. Read more about importing a custom schedule file in the Manually Upload Repayment Schedules section of the user guide.

13. Click the **Save and Reload** button.
If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

14. Click the **Simulate Returned Amounts or Goods** button to view the details of each installment of the calculated repayment schedule.



General Data

Event Date: 02/09/2022
Date For Return: 02/09/2022
Event Value: 3,100
External Identifier:

Unpaid Info

Accrued Interest: 0
Unpaid Amount On Contract: 0
Unpaid Amount For Customer: 0

Capital

Repayment Principal Amount: 3,000
Principal To Be Returned: 100
Remaining Principal At Date: 5,000
Returned Accrued Interest: 0
Interest To Be Returned: 0
Interest For Returned Amount: 0

Fees

Return Fee: Return Fee EUR
Return Fee Value: 100

Early Repayment Options

Keep Contract Period: □
Fee Value To Principal: ☑
Import Schedule: □

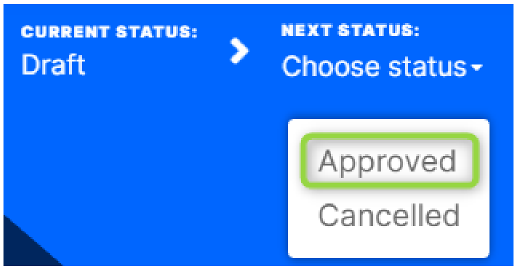
Early Repayment Result

Future Installments No: 3
Future Annuity: 0

Repayment Schedule

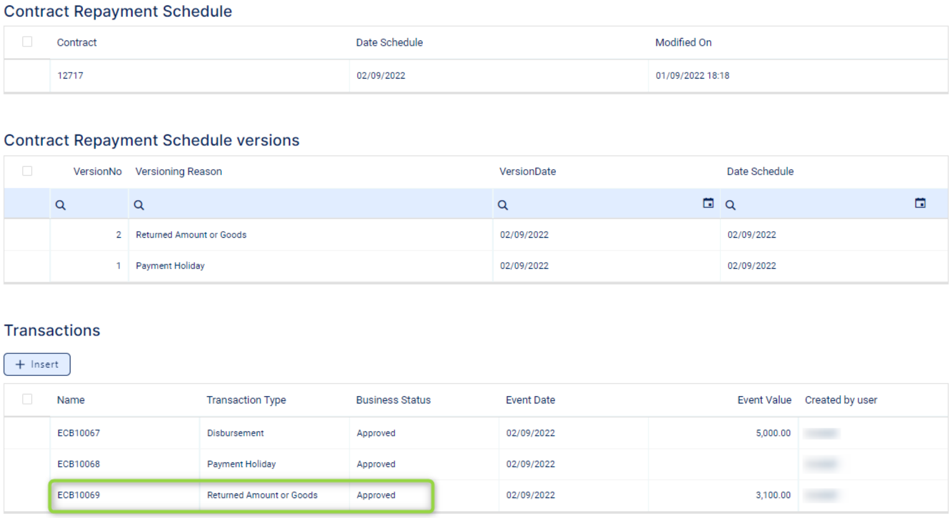
No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR
1	02-09-2022	5,000.00	0.00	3,100.00	0.00	3,100.00	0.00
1	29-10-2022	1,900.00	22.56	613.77	10.00	646.33	0.00
2	29-11-2022	1,286.23	12.86	637.01	10.00	659.87	0.00
3	29-12-2022	649.22	6.49	649.22	10.00	665.71	0.00

15. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



16. Confirm the change of status in the **Confirmation** window, clicking **Yes**. The event is now in **Approved** status and Core Banking applies the recalculated repayment schedule to the contract, displaying the previous schedule version in the **Contract Repayment Schedule Versions** section of the contract's **Payments** tab.

    The transaction is visible in the **Transactions** section.



Contract Repayment Schedule

□	Contract	Date Schedule	Modified On
	12717	02/09/2022	01/09/2022 18:18

Contract Repayment Schedule versions

□	VersionNo	Versioning Reason	VersionDate	Date Schedule
	2	Returned Amount or Goods	02/09/2022	02/09/2022
	1	Payment Holiday	02/09/2022	02/09/2022

Transactions

□	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB10067	Disbursement	Approved	02/09/2022	5,000.00	[redacted]
	ECB10068	Payment Holiday	Approved	02/09/2022		[redacted]
	ECB10069	Returned Amount or Goods	Approved	02/09/2022	3,100.00	[redacted]

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

Automatic Calculations of Value Fields

Legend:

- *RA* = Returned amount/ Returned value of the goods
- *IFRV* = Interest for remaining value after returning the amount/ returning the value of the goods
- *IFRA* = Interest for returned amount starting from return date
- *RVA* = Remaining value after returned amount/ returned value of the good
- *RVBA* = Remaining value before returned amount/ return value of the good

`Principal To Be Returned` = if *RA* > *RVBA* => *RA* - *RVBA*, else 0.

`Interest To Be Returned` = if *IFRA* > *IFRV*=>*IFRA* -*IFRV*, else 0.

Interest on the first installment generated by the transaction: if *IFRV > IFRA => IFRV - IFRA*, else 0.

Returned Amount Or Goods Event Validations

On event approval, Core Banking verifies if `Event Date` respects the formula: `Activation Date + Accepted Days For Return >= Current Date`. If the formula is not respected, Core Banking returns:

- an error message, if `Return Message = Error` on the banking product definition;
- a warning message, if `Return Message = Warning` on the banking product definition;
- nothing, if `Return Message = NoMessage` on the banking product definition.

Core Banking also checks on event approval if the `Return Fee` is not greater that the sum of commissions with type `Front-End Fee` with `Is Returnable = True` on the contract level.

There is no validation of the event amount on this transaction related to balance of current account.

After Event Validation

After event validation, Core Banking creates a new version of the contract. The contract's current account (customer casa account) is topped-up TOP Up with the `Event Value = Amount + Return Fee`. The return fee is added to the contract's **Fees & Commissions** section with a negative value that can't be modified.

In the Contract Repayment Schedule, Core Banking creates an installment with all columns = 0, except Principal, Remaining Value and Total Installment, with `Is Early Repayment = True` and `Is Return = True`. The Principal amount is:

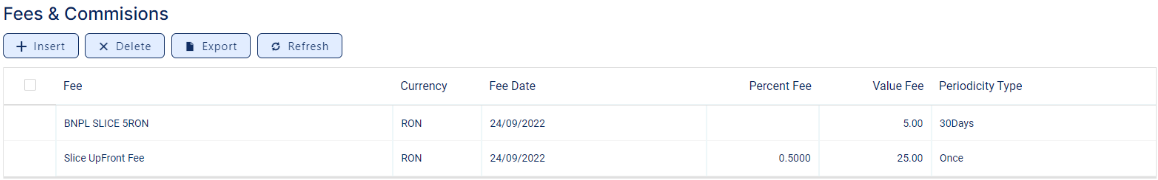
- the principal amount saved on the transaction if `Fee Value To Principal = False`;
- the event amount saved on transaction if `Fee Value To Principal = True`.

Core Banking generates a notification for this installment and performs the allocation. The allocation process affects the main bank account balance as it is now, all the limits with `Is Revolving = True` and `On Repayment = True` affected by this contract, and the available amount on the contract if `Is Revolving = True` at the product level.

Applying Fees and Commissions

The financial institutions take commissions and fees for offering a product or service such as opening an account, for cash withdrawals, for transfers, for making payments in certain countries, for exchanging currencies, for emitting debit cards, for handling documents etc. These commissions are set at the product level and vary from institution to institution, based on their policy.

In the **Fees & Commissions** section within the **Overview** tab of the contract, you can view all the fees and commissions configured at the product level that have the `Automatic Load on Contract` checkbox set to `True`. After the first saving operation, Core Banking display all the fees that are defined as values. The fees defined as percentages are displayed after completing all the values of the contract. Read more about the commissions automatically inserted and calculated in the below section. You can also add, delete or export fees and commissions for the contract.



□	Fee	Currency	Fee Date	Percent Fee	Value Fee	Periodicity Type
	BNPL SLICE 5RON	RON	24/09/2022		5.00	30Days
	Slice UpFront Fee	RON	24/09/2022	0.5000	25.00	Once

Automatic Insertion and Calculation of Commissions

Core Banking automatically inserts/ updates commissions in the **Fees & Commissions** section depending on the life cycle and status of the contract:

- **Creating a new contract**: Core Banking automatically inserts active commissions associated to the banking product, within their defined validity period, with `Automatically load on contract = True`, with `Is For Unusage = False`, and `Commission value is percentage = False`.
  If `Commission value is percentage = True`, then the commission is only inserted if the amount value was previously inserted.
- **Updating a contract in `Draft` status**: Core Banking automatically inserts active commissions associated to the banking product, within their defined validity period, with `Automatically load on contract = True`, with `Is For Unusage = False`. If a commission with `Commission value is percentage = True` was already inserted, then the commission's value is updated according to the contract's financed amount. If the value of a commission with `Commission value is percentage = True` was manually modified (for negotiable commissions), then the new value is calculated based on the modified percentage.
- **Creating a new version for a contract**: Core Banking automatically inserts all the commissions already present in the contract. Additionally, all commissions specifically created for contract version (`Is For Contract Version = True`) are added as well.

NOTE

If a version for a contract is created more than once on the same day, then all commissions with `Is For Contract Version = True` that were not notified yet for each previous version are deleted. At the end of the day, there is only one commission for the latest version.

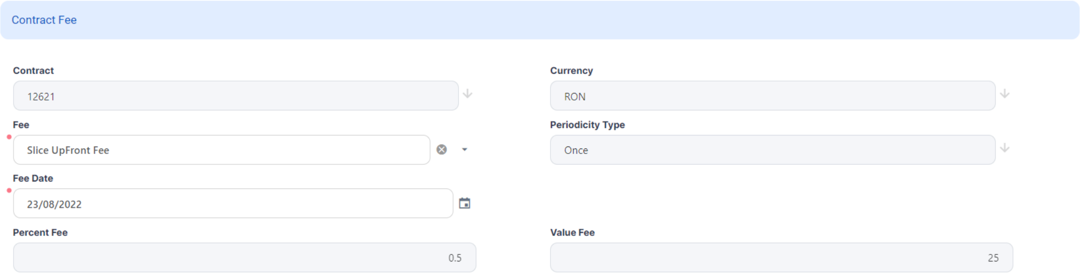
- **Updating a contract in `Contract Version Draft` status**: Core Banking only updates the percentage commissions that are not already notified.

For percentage commissions (with `Commission value is percentage = True`), the financed amount of the contract is used to calculate the commission value based on the percentage. The calculation method differs depending on the contract type:

- For contracts based on **Term Loan,Mortgage** or **Overdraft** banking products:
  - If the commission is applied to amount, then the financed amount = amount due;
  - If the commission is applied to financed amount, then the financed amount = amount due - advance amount;
  - If the commission is applied to remaining value and the contract is in `Contract Version Draft` status, then financed amount = (-1) * main bank account balance. If the result is a negative value, then financed amount = null. In all the other cases, financed amount = null, which is the default value.
- For contracts based on **Bank Account with Overdraft** banking products:
  - If the commission is applied to overdraft limit amount, then the financed amount = overdraft limit amount;
  - If the commission is applied to used amount and the commission's period type is `Once`, then the financed amount = overdraft limit amount - available amount for overdraft. In all the other cases, financed amount = null, which is the default value.

Adding Fees

1. To add a fee for this contract, click **Insert** in the **Fees & Commissions** section of a contract in `Draft` or `Version Draft` status.
2. On the newly displayed **Contract Fee** page, fill in the following fields:



Contract Fee

Contract: 12621

Currency: RON

Fee: Slice UpFront Fee

Periodicity Type: Once

Fee Date: 23/08/2022

Percent Fee: 0.5

Value Fee: 25

- **Fee** - Select a commission from the list of commissions defined for the banking product used when creating the contract.
- **Fee Date** - Specify which value of the commission is to be used by selecting the date of the commission.

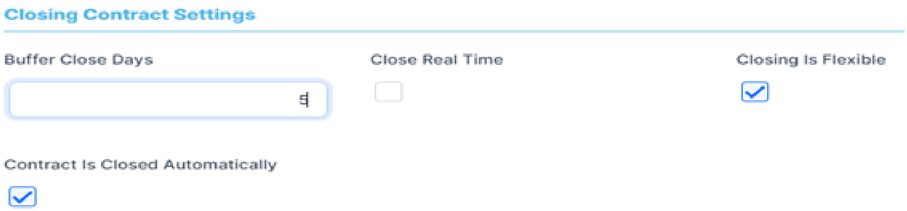
3. Optionally, check the rest of the fields, automatically filled in by Core Banking: contract number, currency, periodicity type of the selected fee, the fee percentage or value applicable for the selected date. You can't change these values.
4. Click the **Save and Close** button.

Closing a Loan With All Obligations Met

Loan contracts with all their financial obligations met can be closed. Core Banking enables you to close these contracts automatically through scheduled jobs or manually, according to a series of settings defined at the banking product and at the contract level.

There are cases when you might expect the loan to get closed once all amounts recovered and the loan is not revolving, or you might want such contracts to be closed after a certain number of days, allowing for possible reconciliations, or even leave them to be manually closed or with a localized job. All this is enabled from product level and, if set as negotiable, you can also change the default at contract level. You might need such settings if you work with direct debit and need to allow for the number of days the direct debit can bounce to pass before you really close the deal.

You can configure the closure settings during product definition, in the **Lean Contract Settings**' tab -> **Closing Contract Settings** section, as described in the Banking Product Factory user guide:



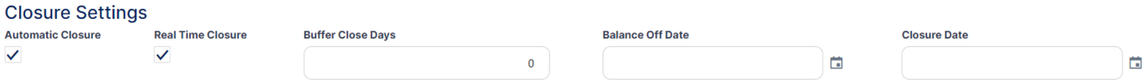
Closing Contract Settings

Buffer Close Days	Close Real Time	Closing Is Flexible
5	□	☑

Contract Is Closed Automatically

☑

If allowed from the product definition, you can amend the closure settings of the contract, the way Core Banking should behave once the loan is repaid and the contract can be closed. Perform these configurations in the **Closure Settings** section of the **Overview** tab, during contract creation, for contracts based on banking products having the `Closing Is Flexible = True` setting:



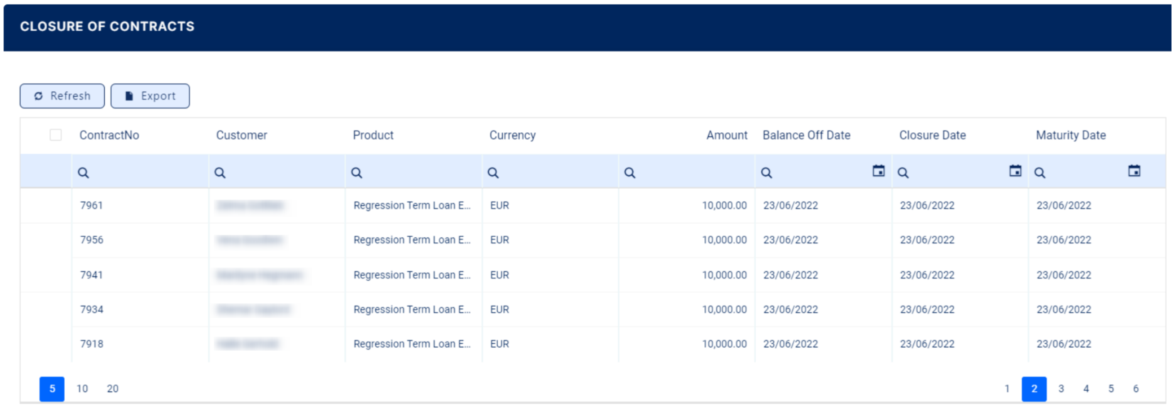
Closure Settings

Automatic Closure	Real Time Closure	Buffer Close Days	Balance Off Date	Closure Date
✓	✓	0		

Depending on the real time closure setting, Core Banking uses the one following scheduled jobs to close the contracts automatically:

- `Close Contracts (CB) Job` - this job closes automatically all contracts with `Automatic Closure = True` and `Real Time Closure = False`, with zero available amount and with no further amounts to be recovered, that have `Balance Off Date` filled in and `Closure Date = Current Date`.
- `Close Contracts RealTime(CB) Job` - this job closes automatically all contracts with `Automatic Closure = True` and `Real Time Closure = True`, with zero available amount and with no further amounts to be recovered.

You can see the list of contracts that are ready to be closed in the **Closure of Contracts** report:



CLOSURE OF CONTRACTS

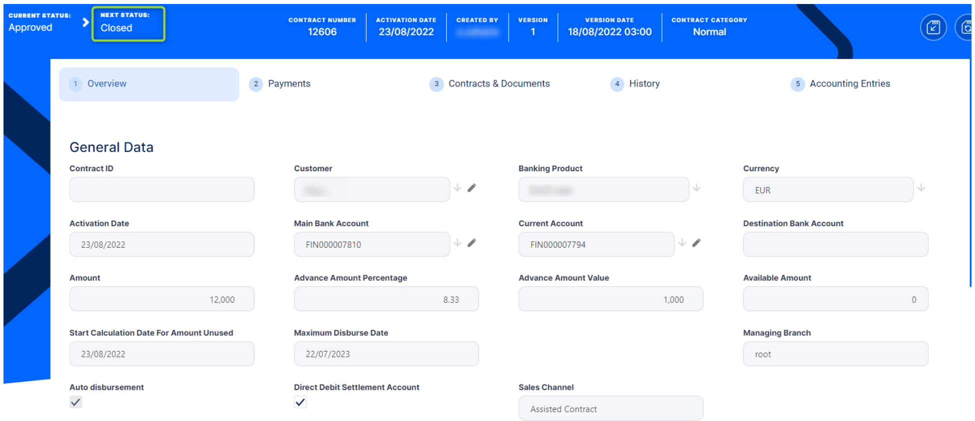
□ ContractNo	Customer	Product	Currency	Amount	Balance Off Date	Closure Date	Maturity Date
7961	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
7956	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
7941	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
7934	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
7918	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022

You can also use the `GetClosureOfContracts` endpoint to fetch the same information within your own API integration.

Manually Closing a Contract

If you opted to close a contract with all the obligations met manually, and not automatically, then follow these steps:

1. Double-click an approved contract with zero amounts to be recovered, opening it for editing.
2. Change the contract's **Next Status** into **Closed**.

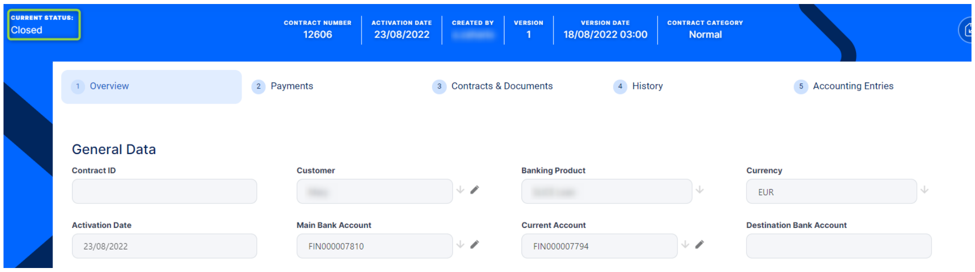


CURRENT STATUS: Approved
NEXT STATUS: Closed
CONTRACT NUMBER 12606
ACTIVATION DATE 23/08/2022
CREATED BY [redacted]
VERSION 1
VERSION DATE 18/08/2022 03:00
CONTRACT CATEGORY Normal

General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	[redacted]	EUR
Activation Date	Main Bank Account	Current Account	Destination Bank Account
23/08/2022	FIN000007810	FIN000007794	
Amount	Advance Amount Percentage	Advance Amount Value	Available Amount
12,000	8.33	1,000	0
Start Calculation Date For Amount Unused	Maximum Disburse Date		Managing Branch
23/08/2022	22/07/2023		root
Auto disbursement	Direct Debit Settlement Account	Sales Channel	
☑	☑	Assisted Contract	

If Core Banking performs all the validations and finds that the financial obligations are met and there are no more amount to be recovered, then the contract's status becomes **Closed**. You can't perform any other operations on this contract.

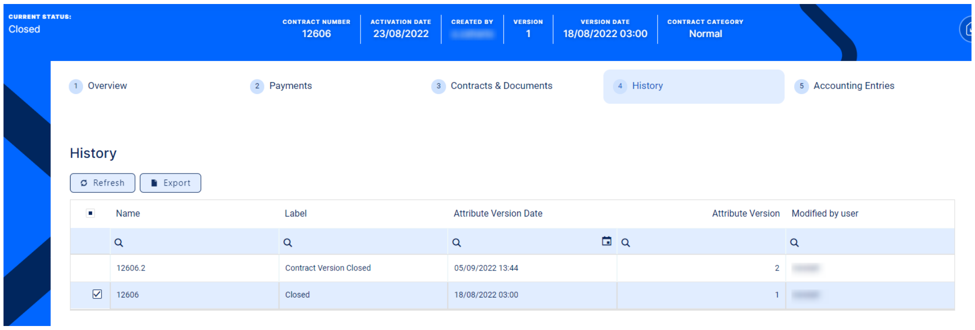


CURRENT STATUS: Closed
CONTRACT NUMBER 12606
ACTIVATION DATE 23/08/2022
CREATED BY [redacted]
VERSION 1
VERSION DATE 18/08/2022 03:00
CONTRACT CATEGORY Normal

General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	[redacted]	EUR
Activation Date	Main Bank Account	Current Account	Destination Bank Account
23/08/2022	FIN000007810	FIN000007794	

Any existing versions of the contract are also automatically closed, as you can see in the **History** tab.



CURRENT STATUS: Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12606	23/08/2022	[redacted]	1	18/08/2022 03:00	Normal

History

■	Name	Label	Attribute Version Date	Attribute Version	Modified by user
	12606.2	Contract Version Closed	05/09/2022 13:44	2	[redacted]
☑	12606	Closed	18/08/2022 03:00	1	[redacted]

Rescheduling and Refinancing Loans

Core Banking allows you to reschedule the overdue amounts of a loan contract, or to perform an early repayment of the due amounts, effectively refinancing the loan. This page covers the steps you must follow when performing these transactions on a loan contract.

Rescheduling the Overdue Amounts for a Contract

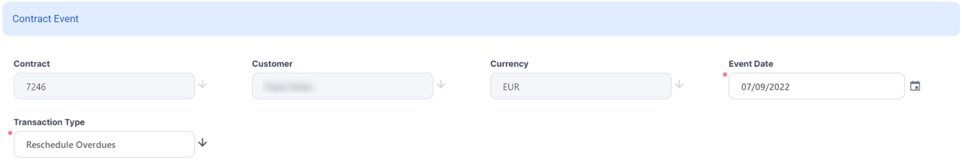
A reschedule overdues transaction represents an operation where overdue installments are merged to the following installments, turning the remaining amounts on the notifications into capital, and they are no longer collecting penalties. Core Banking also recalculates the repayments schedule.

You can add reschedule overdues transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a reschedule overdues transaction to a loan contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status with notified overdue amounts and double-click to open it.

2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



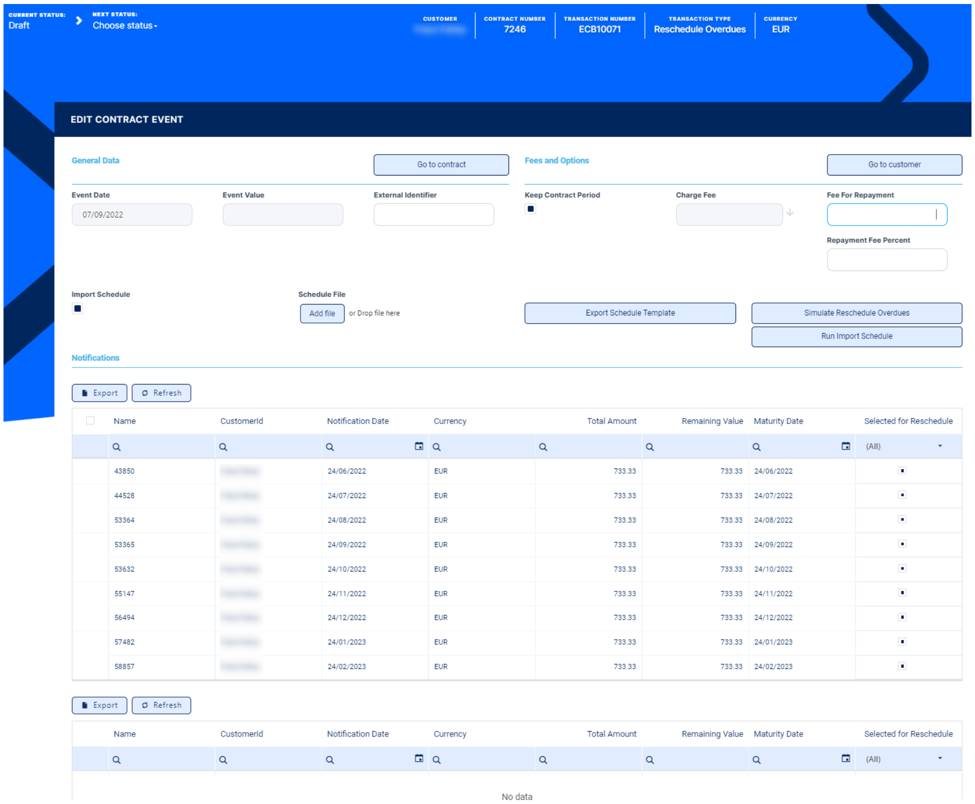
Contract Event

Contract	Customer	Currency	Event Date
7246	[redacted]	EUR	07/09/2022
Transaction Type			
Reschedule Overdues			

3. Fill in the following fields:
    - **Event Date** - This is pre-filled with current date.
    - **Transaction Type** - Select from the list the **Reschedule Overdues** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

    Other values are automatically completed: contract, customer, and currency.

4. Click the **Save and Reload** button.
    The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CUSTOMER [redacted]

CONTRACT NUMBER 7246

TRANSACTION NUMBER ECB10071

TRANSACTION TYPE Reschedule Overdues

CURRENCY EUR

EDIT CONTRACT EVENT

General Data

Event Date: 07/09/2022

Event Value:

External Identifier:

Fees and Options

Keep Contract Period: ■

Charge Fee:

Fee For Repayment:

Repayment Fee Percent:

Import Schedule: ■

Schedule File: Add file or Drop file here

Notifications

	Name	CustomerId	Notification Date	Currency	Total Amount	Remaining Value	Maturity Date	Selected for Reschedule
								(All)
	43850	[redacted]	24/06/2022	EUR	733.33	733.33	24/06/2022	■
	44528	[redacted]	24/07/2022	EUR	733.33	733.33	24/07/2022	■
	53364	[redacted]	24/08/2022	EUR	733.33	733.33	24/08/2022	■
	53365	[redacted]	24/09/2022	EUR	733.33	733.33	24/09/2022	■
	53632	[redacted]	24/10/2022	EUR	733.33	733.33	24/10/2022	■
	55147	[redacted]	24/11/2022	EUR	733.33	733.33	24/11/2022	■
	56494	[redacted]	24/12/2022	EUR	733.33	733.33	24/12/2022	■
	57482	[redacted]	24/01/2023	EUR	733.33	733.33	24/01/2023	■
	58857	[redacted]	24/02/2023	EUR	733.33	733.33	24/02/2023	■

Name	CustomerId	Notification Date	Currency	Total Amount	Remaining Value	Maturity Date	Selected for Reschedule
							(All)

No data

5. Fill in the **external identifier** of the transaction, if available.

6. Decide whether to keep the period of the contract or recalculate it. Select the **Keep Contract Period** checkbox to keep the period.

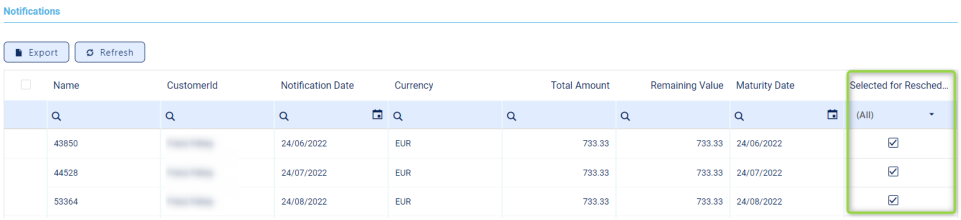
7. View the transaction fee applicable for the transaction, if it was defined, displayed in the **Charge Fee** field.

8. View the **fee for repayment** or the **repayment fee percent**, depending on which is displayed. The fee value or the percentage are pre-filled by Core Banking according to the **Charge Fee** defined for this transaction type. Depending on the `ManualRepaymentFee`Core Banking system parameter's value, the system may allow you to change the fee or the percentage. See Transaction Fees for more details.

9. Decide whether you want to use the repayment schedule calculated by Core Banking through automatic processes, or you want to import a custom schedule. For custom schedule, select the **Import Schedule** checkbox. Read more about importing a custom schedule file in the

Manually Upload Repayment Schedules section of the user guide.

10. Select from the **Notifications** list the overdue payment notifications that you wish to reschedule.



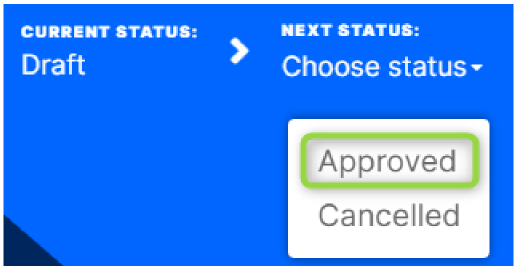
Notifications

□	Name	CustomerId	Notification Date	Currency	Total Amount	Remaining Value	Maturity Date	Selected for Resched...
								(All)
	43850	[redacted]	24/06/2022	EUR	733.33	733.33	24/06/2022	☑
	44528	[redacted]	24/07/2022	EUR	733.33	733.33	24/07/2022	☑
	53364	[redacted]	24/08/2022	EUR	733.33	733.33	24/08/2022	☑

11. Click the **Save and Reload** button.
If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

12. Click the **Simulate Reschedule Overdues** button to view the details of each installment of the calculated repayment schedule.

13. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

14. Confirm the change of status in the **Confirmation** window, clicking **Yes**.
The event is now in **Approved** status and Core Banking applies the recalculated repayment schedule to the contract, displaying the previous schedule version in the **Contract Repayment Schedule Versions** section of the contract's **Payments** tab.

The transaction becomes visible in the **Transactions** section.

NOTE
All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

Refinancing a Loan By Performing an Early Repayment

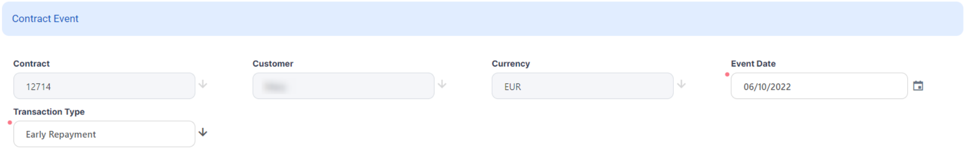
An early repayment transaction represents the early return of funds previously borrowed from a lender. Core Banking also recalculates the repayments schedule. Early repayments can result in a decrease of term while keeping the monthly installment, or a decrease of installment amount while keeping the term. You can also perform early repayments with the collection of interest accrued to date or leaving it until the next regular due date. When you insert the early repayment principal amount, make sure that you also have available funds for the interest accrued to date in case you want to collect it, as well as any transactional fee, for cases when you have an early repayment fee.

NOTE
Various activities can be orchestrated according to the internal procedures of the financial institution. If the refinancing takes place in another bank, then it's possible that the amounts are released only after the proof of closing the other loan. Some financial institutions may refinance Principal + Costs, others only Principal and so the customer must cover from their own funds the interests and potential fees.
All these must be orchestrated during the implementation process, before actually starting to use Core Banking, if they must be automated, otherwise they can be implemented as internal procedures.

You can add early repayment transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add an early repayment transaction to a loan contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status, already disbursed, and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.

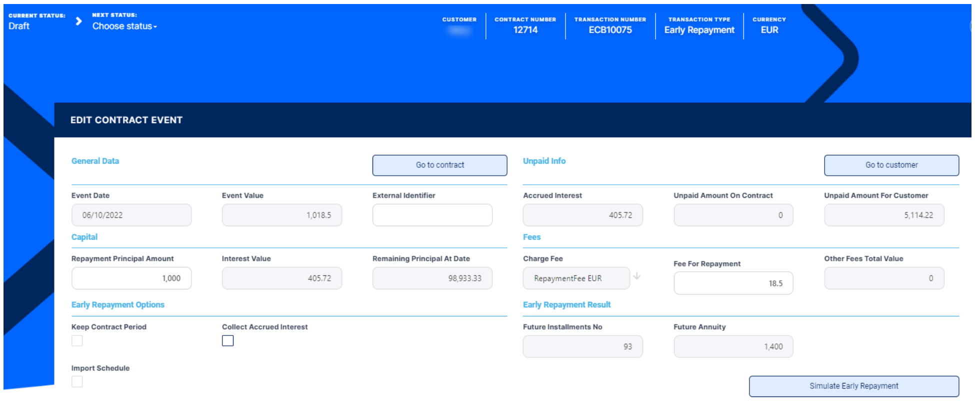


Contract Event

Contract	Customer	Currency	Event Date
12714	[redacted]	EUR	06/10/2022
Transaction Type			
Early Repayment			

3. Fill in the following fields:
   - **Event Date** - This is pre-filled with current date.
   - **Transaction Type** - Select from the list the **Early Repayment** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

   Other values are automatically completed: contract, customer, and currency.
4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. A series of value fields are automatically calculated, their values are displayed, and you can't edit them: the contract's unpaid information such as accrued interest, unpaid amount on contract or on customer, interest value for capital, remaining principal at date, future installments number and future annuity.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CUSTOMER [redacted]

CONTRACT NUMBER 12714

TRANSACTION NUMBER ECB10075

TRANSACTION TYPE Early Repayment

CURRENCY EUR

EDIT CONTRACT EVENT

General Data

Event Date: 06/10/2022

Event Value: 1,018.5

External Identifier:

Capital

Repayment Principal Amount: 1,000

Interest Value: 405.72

Remaining Principal At Date: 98,933.33

Early Repayment Options

Keep Contract Period □

Collect Accrued Interest □

Import Schedule □

Unpaid Info

Accrued Interest: 405.72

Unpaid Amount On Contract: 0

Unpaid Amount For Customer: 5,114.22

Fees

Charge Fee: RepaymentFee EUR

Fee For Repayment: 18.5

Other Fees Total Value: 0

Early Repayment Result

Future Installments No: 93

Future Annuity: 1,400

5. Fill in the **external identifier** of the transaction, if available.

6. View the **interest accrued** up until the event date, the **unpaid amount on the contract** , and the **unpaid amount for the customer**. The values are pre-filled by Core Banking and you can't change them.

7. Edit the principal amount to be repaid with this event, in the **Repayment Principal Amount** field.

8. View the **interest value** applicable to the payment and the **remaining value of the principal** at the current date, as calculated by Core Banking.

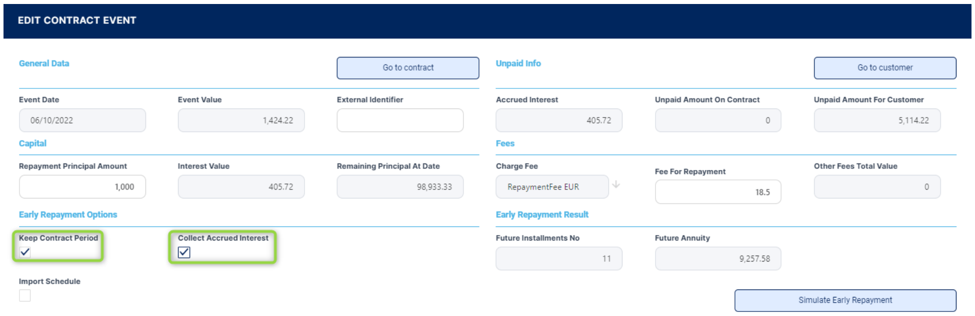
9. View the transaction fee applicable for the transaction, if it was defined, displayed in the **Charge Fee** field.

10. View the **fee for repayment** or the **repayment fee percent**, depending on which is displayed. The fee value or the percentage are pre-filled by Core Banking according to the **Charge Fee** defined for this transaction type. Depending on the `ManualRepaymentFee`Core Banking system parameter's value, the system may allow you to change the fee or the percentage. See Transaction Fees for more details.

11. View the **total value of other fees** applicable for the transaction, if any.

12. Set the early repayment options:

- **Keep Contract Period** - Select this checkbox to instruct Core Banking to keep the period of the contract. If left unselected, the contract period is recalculated.
- **Collect accrued interest** - Select this checkbox to instruct Core Banking to collect the interest accrued up to date. If the checkbox is not selected, then the `Accrued Interest` = 0.00, if it's selected, then `Accrued Interest` = the value of accrued interest until the event's date. The payment schedule projection takes into consideration both the payment schedule type defined at the banking product level, and whether to collect the interest accrued on the contract until the date of an early repayment event, thus repaying the accrued interest, or not, thus adding the accrued interest to the next installment due after the early repayment event.
  The `CalculateAccrualEarlyRepayment` Core Banking system parameter specifies whether the accrual and provision should be calculated for early repayments with the event value equal to a part of contract's unpaid amount (partial early repayments) or only for full early repayments.
- **Accrued interest** - View the interest accrued up until the event date, as calculated by Core Banking.



EDIT CONTRACT EVENT

General Data

Event Date	Event Value	External Identifier
06/10/2022	1,424.22	

Capital

Repayment Principal Amount	Interest Value	Remaining Principal At Date
1,000	405.72	98,933.33

Early Repayment Options

Keep Contract Period ☑

Collect Accrued Interest ☑

Import Schedule □

Unpaid Info

Accrued Interest	Unpaid Amount On Contract	Unpaid Amount For Customer
405.72	0	5,114.22

Fees

Charge Fee	Fee For Repayment	Other Fees Total Value
RepaymentFee EUR	18.5	0

Early Repayment Result

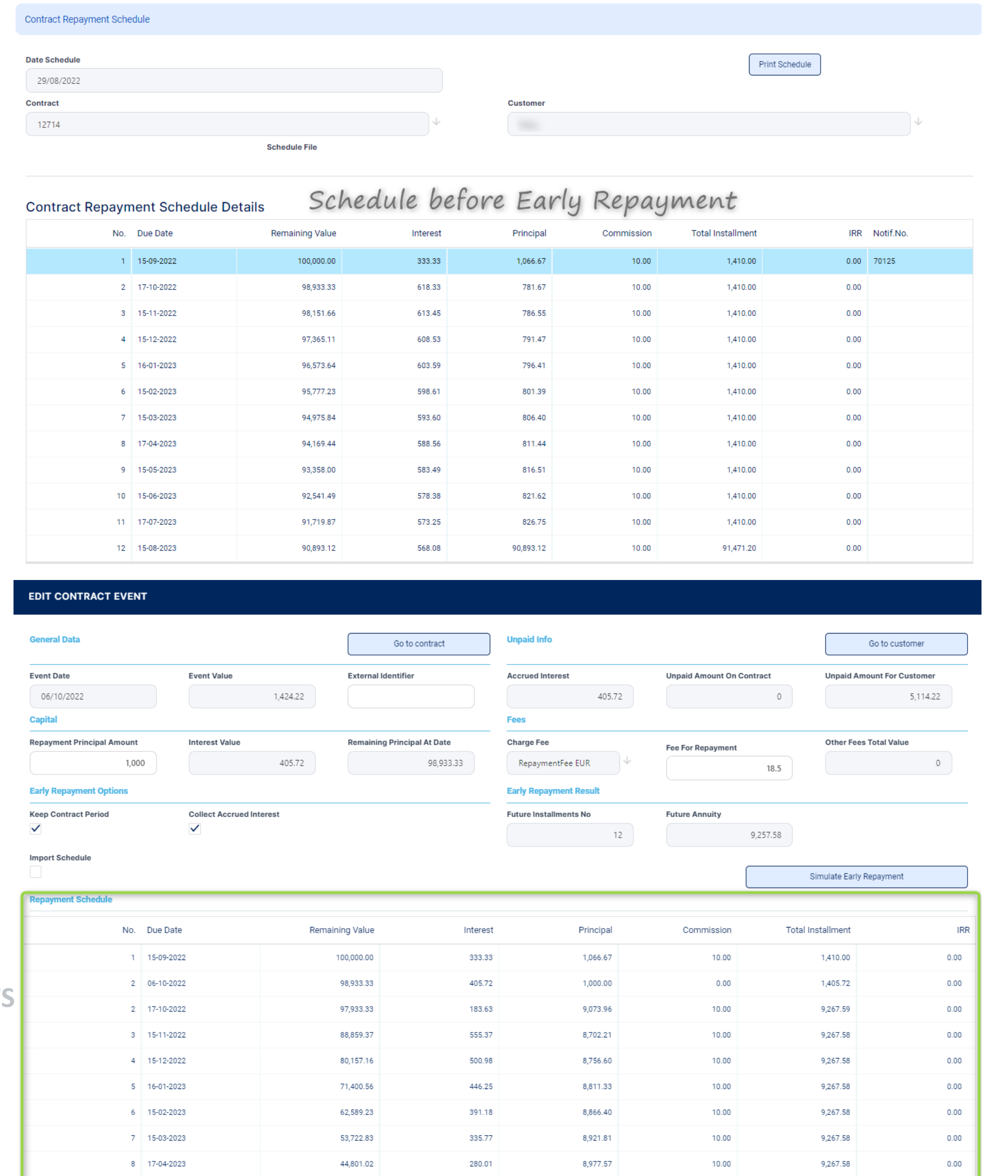
Future Installments No	Future Annuity
11	9,257.58

13. View the early repayment results, with the **number of installments** to be paid in the future, and either the future value of the installment as recalculated after this payment in the **Future Annuity** field, or the future value of the principal in the **Future Principal For Installment** field.

14. Decide whether you want to use the repayment schedule calculated by Core Banking through automatic processes, or you want to import a custom schedule. For custom schedule, select the **Import Schedule** checkbox. Read more about importing a custom schedule file in the Manually Upload Repayment Schedules section of the user guide.

15. Click the **Save and Reload** button.
If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

16. Click the **Simulate Early Repayment** button to view the details of each installment of the calculated repayment schedule.



Contract Repayment Schedule

Date Schedule: 29/08/2022

Contract: 12714

Customer: [redacted]

Schedule File

Contract Repayment Schedule Details

Schedule before Early Repayment

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR	Notif.No.
1	15-09-2022	100,000.00	333.33	1,066.67	10.00	1,410.00	0.00	70125
2	17-10-2022	98,933.33	618.33	781.67	10.00	1,410.00	0.00	
3	15-11-2022	98,151.66	613.45	786.55	10.00	1,410.00	0.00	
4	15-12-2022	97,365.11	608.53	791.47	10.00	1,410.00	0.00	
5	16-01-2023	96,573.64	603.59	796.41	10.00	1,410.00	0.00	
6	15-02-2023	95,777.23	598.61	801.39	10.00	1,410.00	0.00	
7	15-03-2023	94,975.84	593.60	806.40	10.00	1,410.00	0.00	
8	17-04-2023	94,169.44	588.56	811.44	10.00	1,410.00	0.00	
9	15-05-2023	93,358.00	583.49	816.51	10.00	1,410.00	0.00	
10	15-06-2023	92,541.49	578.38	821.62	10.00	1,410.00	0.00	
11	17-07-2023	91,719.87	573.25	826.75	10.00	1,410.00	0.00	
12	15-08-2023	90,893.12	568.08	90,893.12	10.00	91,471.20	0.00	

EDIT CONTRACT EVENT

General Data

Event Date: 06/10/2022
Event Value: 1,424.22
External Identifier:

Unpaid Info

Accrued Interest: 405.72
Unpaid Amount On Contract: 0
Unpaid Amount For Customer: 5,114.22

Capital

Repayment Principal Amount: 1,000
Interest Value: 405.72
Remaining Principal At Date: 98,933.33

Fees

Charge Fee: RepaymentFee EUR
Fee For Repayment: 18.5
Other Fees Total Value: 0

Early Repayment Options

Keep Contract Period ☑
Collect Accrued Interest ☑
Import Schedule ☐

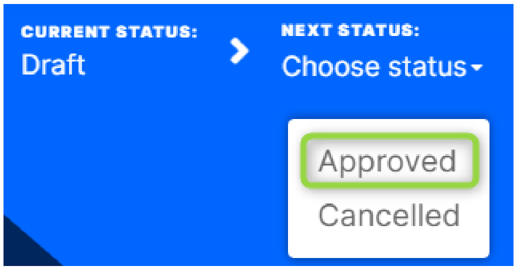
Early Repayment Result

Future Installments No: 12
Future Annuity: 9,257.58

Repayment Schedule

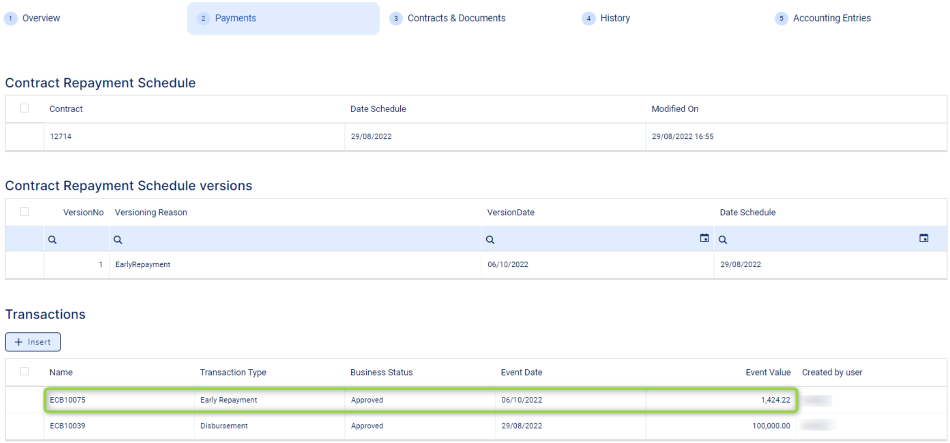
No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR
1	15-09-2022	100,000.00	333.33	1,066.67	10.00	1,410.00	0.00
2	06-10-2022	98,933.33	405.72	1,000.00	0.00	1,405.72	0.00
2	17-10-2022	97,933.33	183.63	9,073.96	10.00	9,267.59	0.00
3	15-11-2022	88,859.37	555.37	8,702.21	10.00	9,267.58	0.00
4	15-12-2022	80,157.16	500.98	8,756.60	10.00	9,267.58	0.00
5	16-01-2023	71,400.56	446.25	8,811.33	10.00	9,267.58	0.00
6	15-02-2023	62,589.23	391.18	8,866.40	10.00	9,267.58	0.00
7	15-03-2023	53,722.83	335.77	8,921.81	10.00	9,267.58	0.00
8	17-04-2023	44,801.02	280.01	8,977.57	10.00	9,267.58	0.00

17. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



18. Confirm the change of status in the **Confirmation** window, clicking **Yes**. The event is now in **Approved** status and Core Banking applies the recalculated repayment schedule to the contract, displaying the previous schedule version in the **Contract Repayment Schedule Versions** section of the contract's **Payments** tab.

    The transaction is visible in the **Transactions** section.



Contract Repayment Schedule

	Contract	Date Schedule	Modified On
	12714	29/08/2022	29/08/2022 16:55

Contract Repayment Schedule versions

	VersionNo	Versioning Reason	VersionDate	Date Schedule
	1	EarlyRepayment	06/10/2022	29/08/2022

Transactions

+ Insert

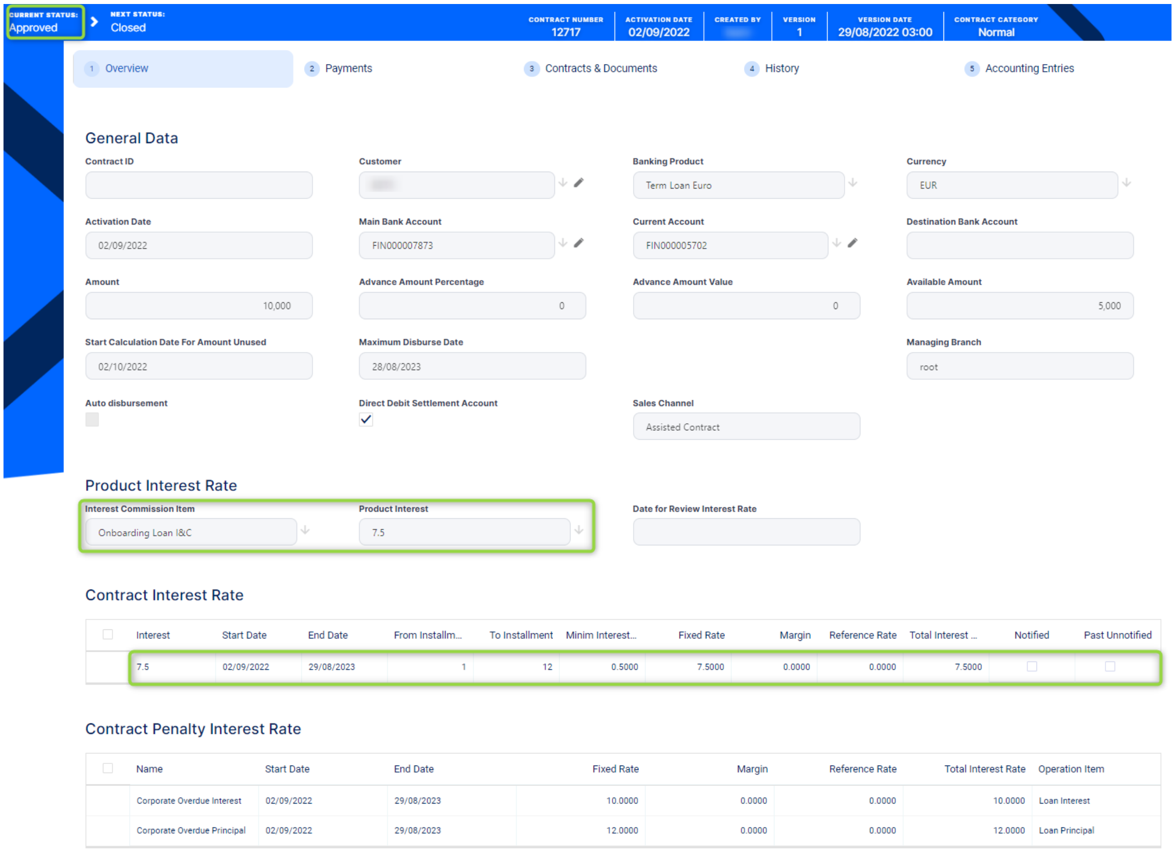
	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB10075	Early Repayment	Approved	06/10/2022	1,424.22	[redacted]
	ECB10039	Disbursement	Approved	29/08/2022	100,000.00	[redacted]

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

Changing the Interest Rate

During the life-cycle of a contract, there may be situations when you need to change the interest rates applicable to the contract.



CURRENT STATUS: Approved
NEXT STATUS: Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12717	02/09/2022	[redacted]	1	29/08/2022 03:00	Normal

General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	Term Loan Euro	EUR
Activation Date	Main Bank Account	Current Account	Destination Bank Account
02/09/2022	FIN000007873	FIN000005702	
Amount	Advance Amount Percentage	Advance Amount Value	Available Amount
10,000	0	0	5,000
Start Calculation Date For Amount Unused	Maximum Disburse Date		Managing Branch
02/10/2022	28/08/2023		root
Auto disbursement	Direct Debit Settlement Account	Sales Channel	
□	☑	Assisted Contract	

Product Interest Rate

Interest Commission Item	Product Interest	Date for Review Interest Rate
Onboarding Loan I&C	7.5	

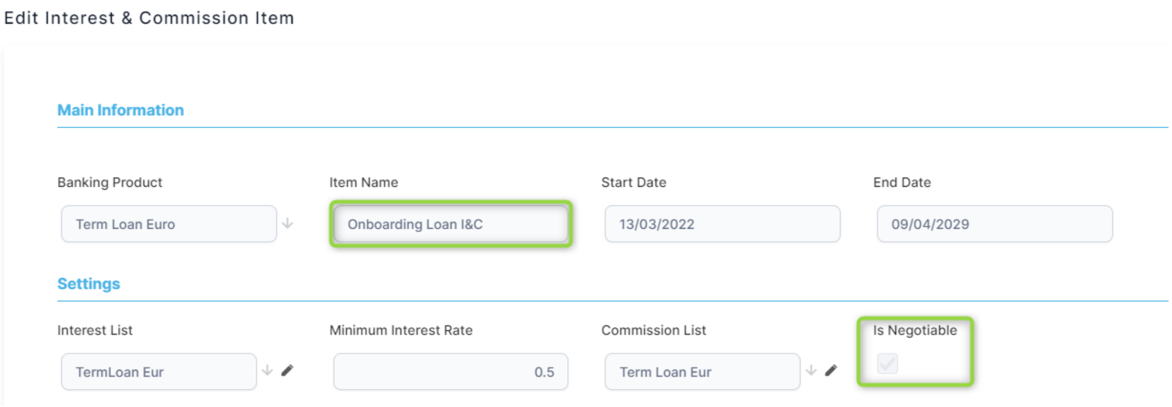
Contract Interest Rate

	Interest	Start Date	End Date	From Installm...	To Installment	Minim Interest...	Fixed Rate	Margin	Reference Rate	Total Interest ...	Notified	Past Unnotified
	7.5	02/09/2022	29/08/2023	1	12	0.5000	7.5000	0.0000	0.0000	7.5000	□	□

Contract Penalty Interest Rate

	Name	Start Date	End Date	Fixed Rate	Margin	Reference Rate	Total Interest Rate	Operation Item
	Corporate Overdue Interest	02/09/2022	29/08/2023	10.0000	0.0000	0.0000	10.0000	Loan Interest
	Corporate Overdue Principal	02/09/2022	29/08/2023	12.0000	0.0000	0.0000	12.0000	Loan Principal

You can do this if the interest is defined as negotiable:



Edit Interest & Commission Item

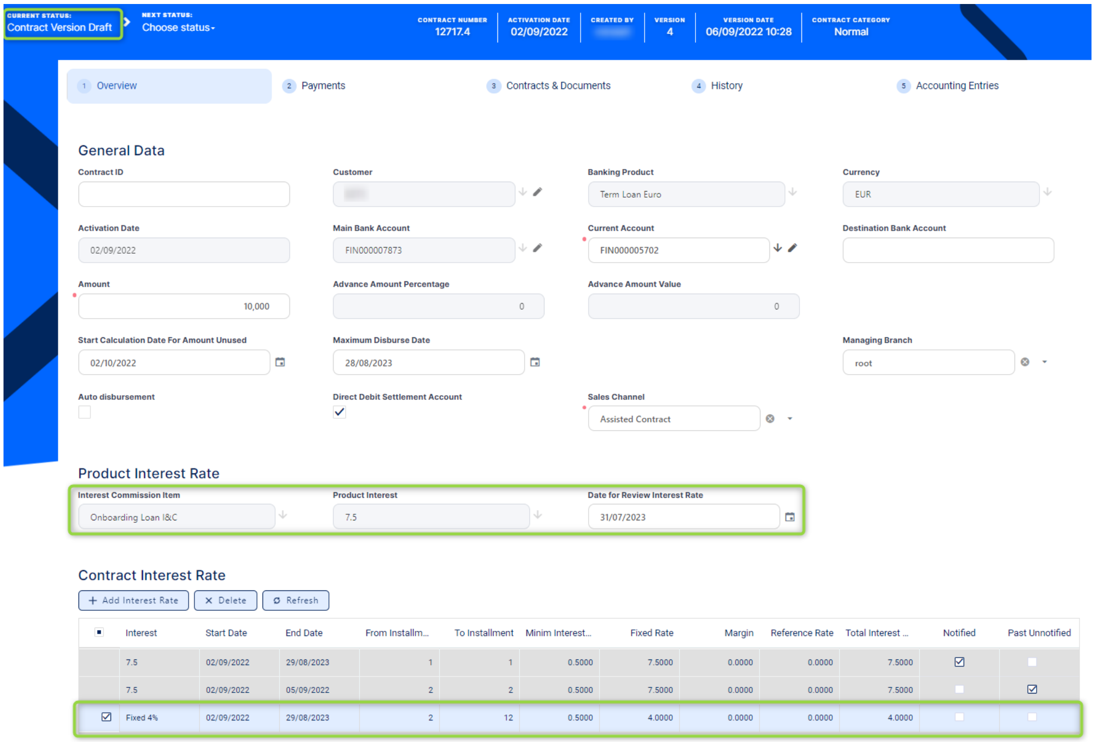
Main Information

Banking Product	Item Name	Start Date	End Date
Term Loan Euro	Onboarding Loan I&C	13/03/2022	09/04/2029

Settings

Interest List	Minimum Interest Rate	Commission List	Is Negotiable
TermLoan Eur	0.5	Term Loan Eur	☑

1. To modify an approved contract's interest, you must first create a new version as described in the dedicated topic.
2. In the contract with `Version Draft` status, you can change the interest rates either using another definition of interest from those listed in product setup, or modifying the fixed rate, margin, or minimum interest rate, in the **Overview** tab's **Product Interest Rate** and **Contract Interest Rate** sections.



CURRENT STATUS:	NEXT STATUS:	CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
Contract Version Draft	Choose status	12717.4	02/09/2022	[redacted]	4	06/09/2022 10:28	Normal

General Data

Contract ID:

Customer: [redacted]

Banking Product: Term Loan Euro

Currency: EUR

Activation Date: 02/09/2022

Main Bank Account: FIN000007873

Current Account: FIN000005702

Destination Bank Account:

Amount: 10,000

Advance Amount Percentage: 0

Advance Amount Value: 0

Start Calculation Date For Amount Unused: 02/10/2022

Maximum Disburse Date: 28/08/2023

Managing Branch: root

Auto disbursement: □

Direct Debit Settlement Account: ✓

Sales Channel: Assisted Contract

Product Interest Rate

Interest Commission Item: Onboarding Loan I&C

Product Interest: 7.5

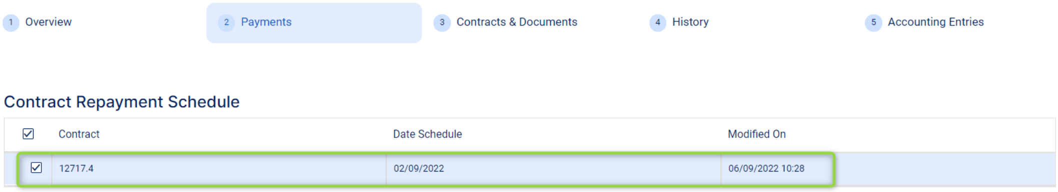
Date for Review Interest Rate: 31/07/2023

Contract Interest Rate

■	Interest	Start Date	End Date	From Installm...	To Installment	Minim Interest...	Fixed Rate	Margin	Reference Rate	Total Interest ...	Notified	Past Unnotified
	7.5	02/09/2022	29/08/2023	1	1	0.5000	7.5000	0.0000	0.0000	7.5000	☑	□
	7.5	02/09/2022	05/09/2022	2	2	0.5000	7.5000	0.0000	0.0000	7.5000	□	☑
☑	Fixed 4%	02/09/2022	29/08/2023	2	12	0.5000	4.0000	0.0000	0.0000	4.0000	□	□

For contracts in `Version Draft` status, you can't perform any changes to the contract interest rates for notified installments or for days that have elapsed already from the current month's installment (if either the **Notified** or the **Past Unnotified** checkboxes are selected).

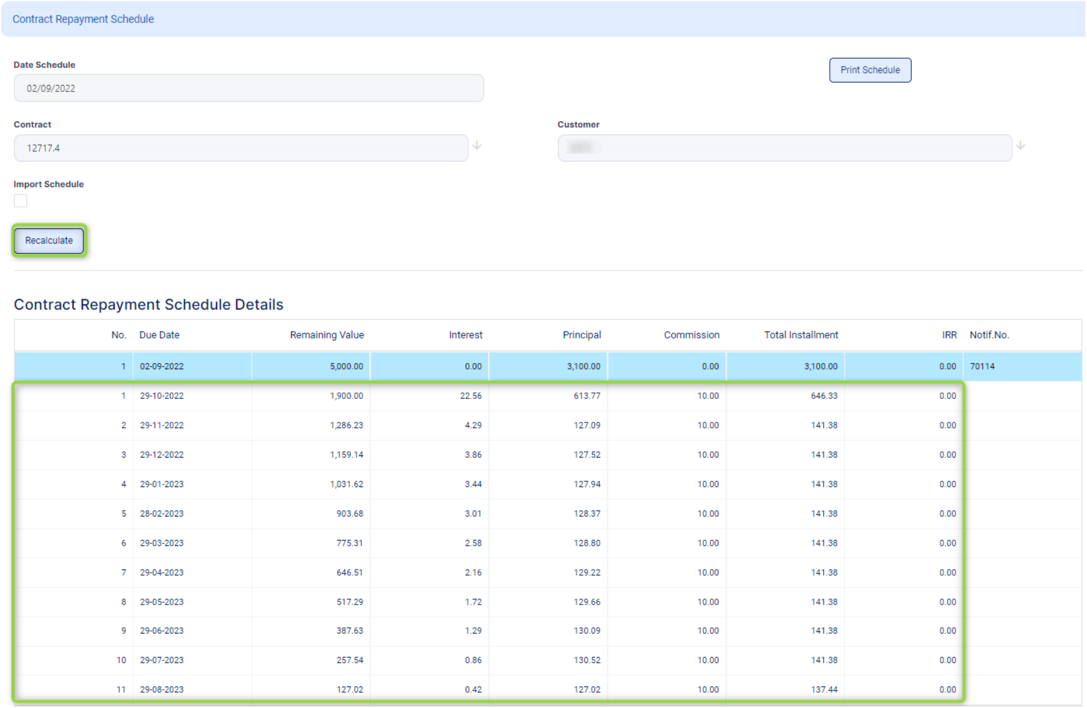
3. Remember to recalculate the repayment schedule before approving a contract in `Version Draft` status for which you performed interest rate changes, otherwise an error prevents you from approving the contract!
Navigate to the **Payments** tab -> **Contract Repayment Schedule** section and double-click the repayment schedule generated for contract version.



Contract Repayment Schedule

☑	Contract	Date Schedule	Modified On
☑	12717.4	02/09/2022	06/09/2022 10:28

4. On the displayed **Contract Repayment Schedule** page, click **Recalculate**. Core Banking recalculates the repayment schedule for the remaining installments, using the changed interest rates.



Date Schedule: 02/09/2022

Contract: 12717.4

Customer: [redacted]

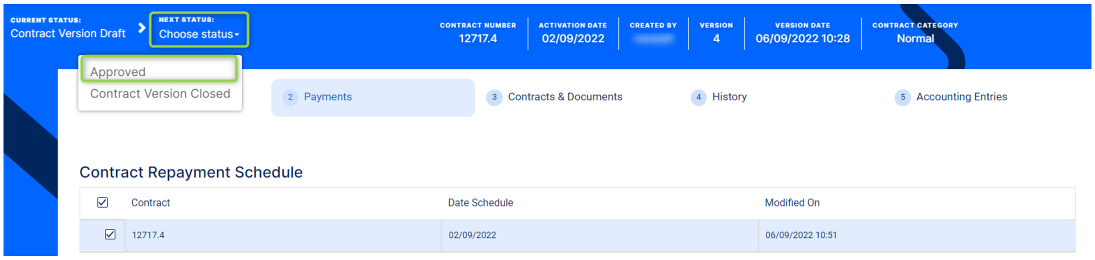
Import Schedule: □

Contract Repayment Schedule Details

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR	Notif.No.
1	02-09-2022	5,000.00	0.00	3,100.00	0.00	3,100.00	0.00	70114
1	29-10-2022	1,900.00	22.56	613.77	10.00	646.33	0.00	
2	29-11-2022	1,286.23	4.29	127.09	10.00	141.38	0.00	
3	29-12-2022	1,159.14	3.86	127.52	10.00	141.38	0.00	
4	29-01-2023	1,031.62	3.44	127.94	10.00	141.38	0.00	
5	28-02-2023	903.68	3.01	128.37	10.00	141.38	0.00	
6	29-03-2023	775.31	2.58	128.80	10.00	141.38	0.00	
7	29-04-2023	646.51	2.16	129.22	10.00	141.38	0.00	
8	29-05-2023	517.29	1.72	129.66	10.00	141.38	0.00	
9	29-06-2023	387.63	1.29	130.09	10.00	141.38	0.00	
10	29-07-2023	257.54	0.86	130.52	10.00	141.38	0.00	
11	29-08-2023	127.02	0.42	127.02	10.00	137.44	0.00	

5. Click the **Save and Close** button.

6. Approve the contract in `Version Draft` status, changing its status to Approved and then confirming your action. Thus, Core Banking applies the new recalculated repayment schedule to the contract.



CURRENT STATUS: Contract Version Draft

NEXT STATUS: Choose status

CONTRACT NUMBER: 12717.4

ACTIVATION DATE: 02/09/2022

CREATED BY: [redacted]

VERSION: 4

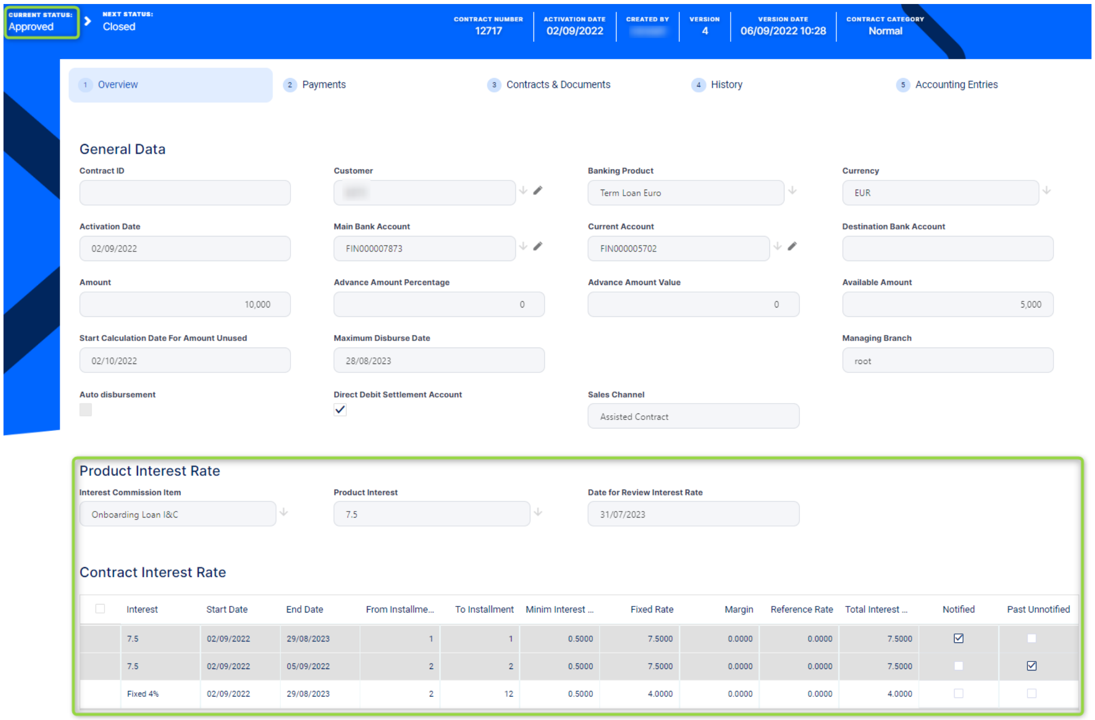
VERSION DATE: 06/09/2022 10:28

CONTRACT CATEGORY: Normal

Contract Repayment Schedule

☑	Contract	Date Schedule	Modified On
☑	12717.4	02/09/2022	06/09/2022 10:51

7. View the approved contract's changed interest rates in the **Overview** tab.



CURRENT STATUS: Approved

NEXT STATUS: Closed

CONTRACT NUMBER: 12717

ACTIVATION DATE: 02/09/2022

CREATED BY: [redacted]

VERSION: 4

VERSION DATE: 06/09/2022 10:28

CONTRACT CATEGORY: Normal

General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	Term Loan Euro	EUR
Activation Date	Main Bank Account	Current Account	Destination Bank Account
02/09/2022	FIN000007873	FIN000005702	
Amount	Advance Amount Percentage	Advance Amount Value	Available Amount
10,000	0	0	5,000
Start Calculation Date For Amount Unused	Maximum Disburse Date		Managing Branch
02/10/2022	28/08/2023		root
Auto disbursement	Direct Debit Settlement Account	Sales Channel	
□	☑	Assisted Contract	

Product Interest Rate

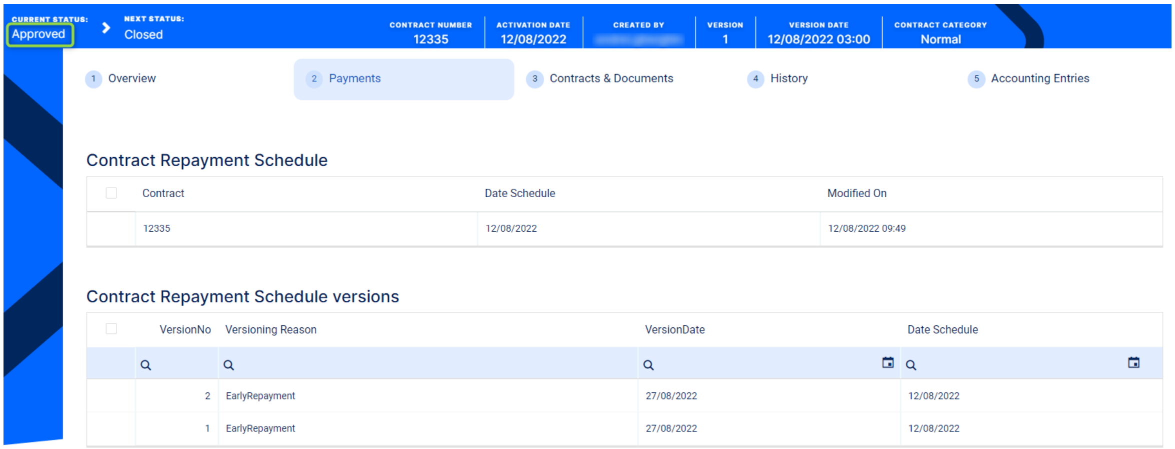
Interest Commission Item	Product Interest	Date for Review Interest Rate
Onboarding Loan I&C	7.5	31/07/2023

Contract Interest Rate

□	Interest	Start Date	End Date	From Installme...	To Installment	Minim Interest ...	Fixed Rate	Margin	Reference Rate	Total Interest ...	Notified	Past Unnotified
	7.5	02/09/2022	29/08/2023	1	1	0.5000	7.5000	0.0000	0.0000	7.5000	☑	□
	7.5	02/09/2022	05/09/2022	2	2	0.5000	7.5000	0.0000	0.0000	7.5000	□	☑
	Fixed 4%	02/09/2022	29/08/2023	2	12	0.5000	4.0000	0.0000	0.0000	4.0000	□	□

Editing and Customizing Repayment Schedules

Once a loan approved and disbursed, you can check the repayment schedule built based on the contract's details in the **Payments** tab. You can also view the versions of the repayment schedules automatically generated by Core Banking when the schedule is recalculated due to specific contract events.



CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12335	12/08/2022	[redacted]	1	12/08/2022 03:00	Normal

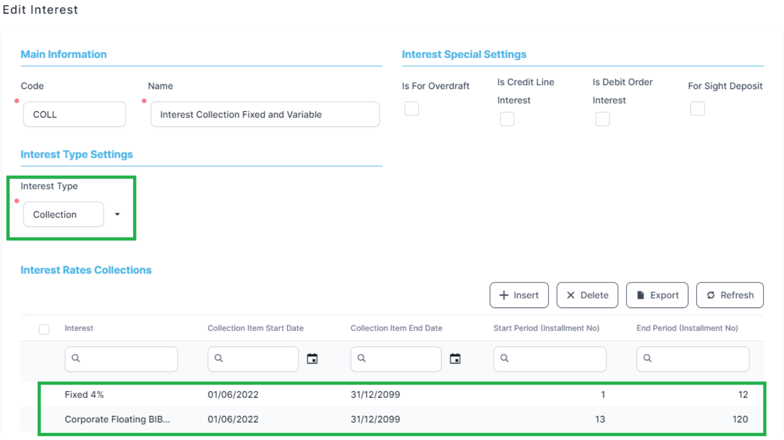
Contract Repayment Schedule

□	Contract	Date Schedule	Modified On
	12335	12/08/2022	12/08/2022 09:49

Contract Repayment Schedule versions

□	VersionNo	Versioning Reason	VersionDate	Date Schedule
	2	EarlyRepayment	27/08/2022	12/08/2022
	1	EarlyRepayment	27/08/2022	12/08/2022

If you need to have a schedule to reflect a product that has a fixed rate for the first x years and moving to variable afterward, use a **Collection** interest type at product definition. When creating the contract, Core Banking automatically builds the schedule projection with the 2 different rates, while the changes in amounts to be collected are visible upfront. This is sometimes referred to as fixed to variable loan, especially valid for mortgages. Read more in the Manage Contract Level Interest & Penalty Interest Rate and in the Applying Fees and Commissions sections.



Edit Interest

Main Information

Code	Name
COLL	Interest Collection Fixed and Variable

Interest Special Settings

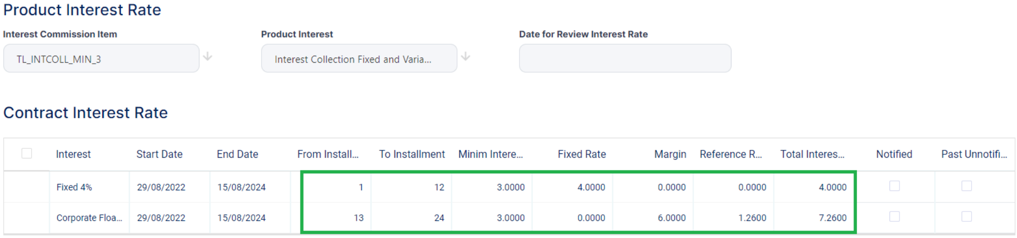
Is For Overdraft □ Is Credit Line Interest □ Is Debit Order Interest □ For Sight Deposit □

Interest Type Settings

Interest Type: Collection

Interest Rates Collections

□	Interest	Collection Item Start Date	Collection Item End Date	Start Period (Installment No)	End Period (Installment No)
	Fixed 4%	01/06/2022	31/12/2099	1	12
	Corporate Floating BIB...	01/06/2022	31/12/2099	13	120

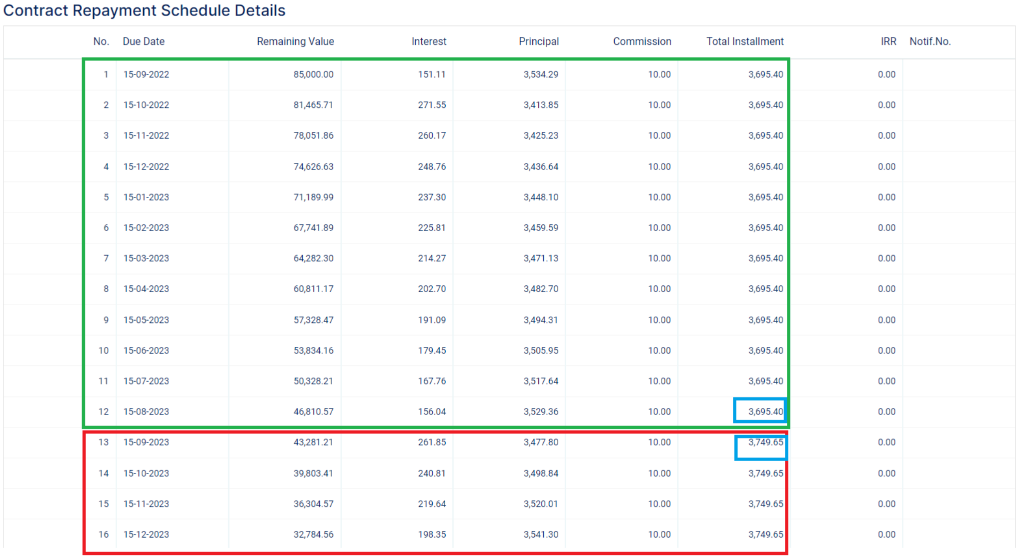


Product Interest Rate

Interest Commission Item	Product Interest	Date for Review Interest Rate
TL_INTCOLL_MIN_3	Interest Collection Fixed and Varia...	

Contract Interest Rate

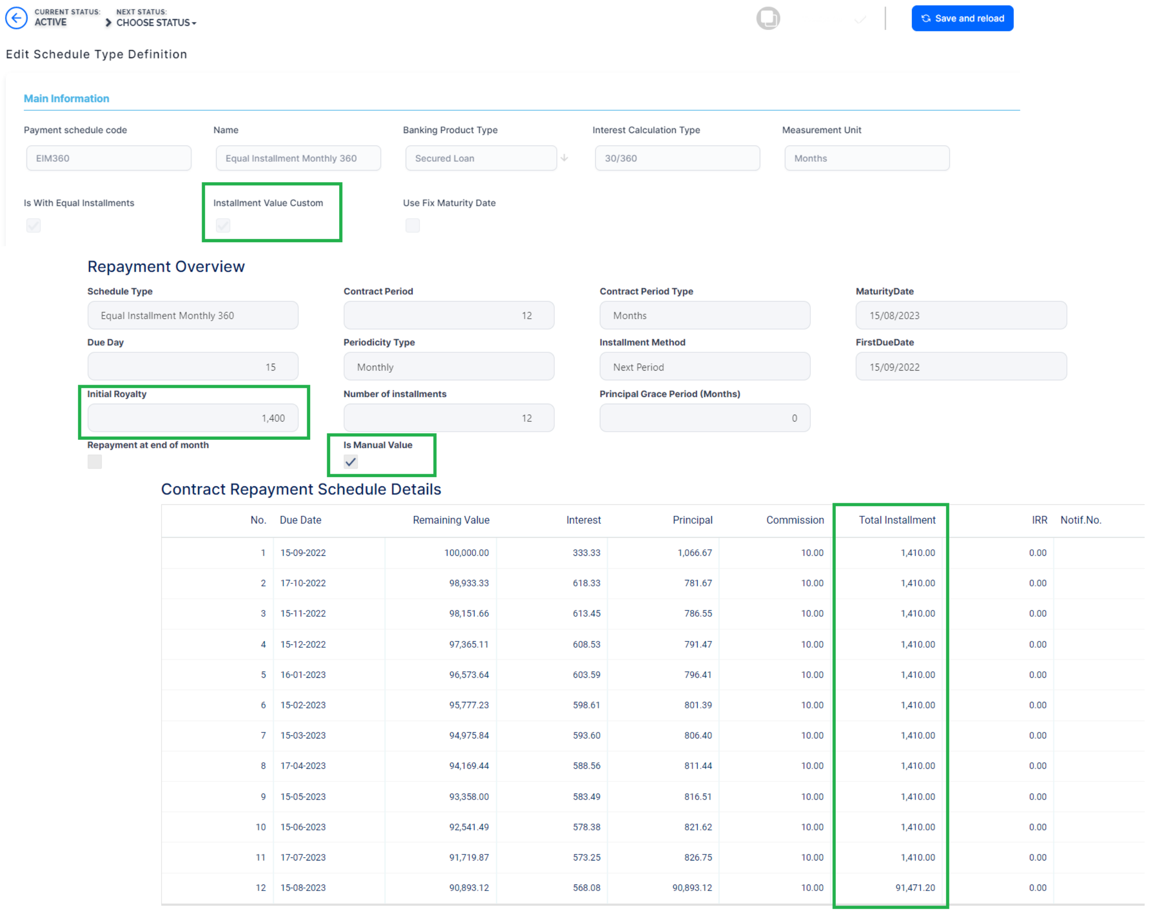
□	Interest	Start Date	End Date	From Install...	To Installment	Minim Intere...	Fixed Rate	Margin	Reference R...	Total Interes...	Notified	Past Unnotifi...
	Fixed 4%	29/08/2022	15/08/2024	1	12	3.0000	4.0000	0.0000	0.0000	4.0000	□	□
	Corporate Floa...	29/08/2022	15/08/2024	13	24	3.0000	0.0000	6.0000	1.2600	7.2600	□	□



Contract Repayment Schedule Details

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR	Notif.No.
1	15-09-2022	85,000.00	151.11	3,534.29	10.00	3,695.40	0.00	
2	15-10-2022	81,465.71	271.55	3,413.85	10.00	3,695.40	0.00	
3	15-11-2022	78,051.86	260.17	3,425.23	10.00	3,695.40	0.00	
4	15-12-2022	74,626.63	248.76	3,436.64	10.00	3,695.40	0.00	
5	15-01-2023	71,189.99	237.30	3,448.10	10.00	3,695.40	0.00	
6	15-02-2023	67,741.89	225.81	3,459.59	10.00	3,695.40	0.00	
7	15-03-2023	64,282.30	214.27	3,471.13	10.00	3,695.40	0.00	
8	15-04-2023	60,811.17	202.70	3,482.70	10.00	3,695.40	0.00	
9	15-05-2023	57,328.47	191.09	3,494.31	10.00	3,695.40	0.00	
10	15-06-2023	53,834.16	179.45	3,505.95	10.00	3,695.40	0.00	
11	15-07-2023	50,328.21	167.76	3,517.64	10.00	3,695.40	0.00	
12	15-08-2023	46,810.57	156.04	3,529.36	10.00	3,695.40	0.00	
13	15-09-2023	43,281.21	261.85	3,477.80	10.00	3,749.65	0.00	
14	15-10-2023	39,803.41	240.81	3,498.84	10.00	3,749.65	0.00	
15	15-11-2023	36,304.57	219.64	3,520.01	10.00	3,749.65	0.00	
16	15-12-2023	32,784.56	198.35	3,541.30	10.00	3,749.65	0.00	

When you need to collect amounts during the life of the loan, but also leave a balloon (residual) payment, you can use the functionality enabled via the **Is Manual Value** option on the contract, if **Installment Value Custom** is set on the schedule type definition used within the product. This allows you to overwrite the repayment amount in the **Initial Royalty** or **Initial Principal Value** field and provide a lower one, thus any capital not made due until maturity results in a balloon payment. In practice, you can also manage in this way fixed to variable loans where the business is to fix the mortgage for the x years, and you are expected either to close by the time it moves to variable, or re-fix again. Read more about setting the repayment information on contract level in the Enter Repayment Information for the Contract section.



Edit Schedule Type Definition

Main Information

Payment schedule code: EIM360

Name: Equal Installment Monthly 360

Banking Product Type: Secured Loan

Interest Calculation Type: 30/360

Measurement Unit: Months

Is With Equal Installments: ☑

Installment Value Custom: ☑

Use Fix Maturity Date: □

Repayment Overview

Schedule Type: Equal Installment Monthly 360

Contract Period: 12

Contract Period Type: Months

MaturityDate: 15/08/2023

Due Day: 15

Periodicity Type: Monthly

Installment Method: Next Period

FirstDueDate: 15/09/2022

Initial Royalty: 1,400

Number of installments: 12

Principal Grace Period (Months): 0

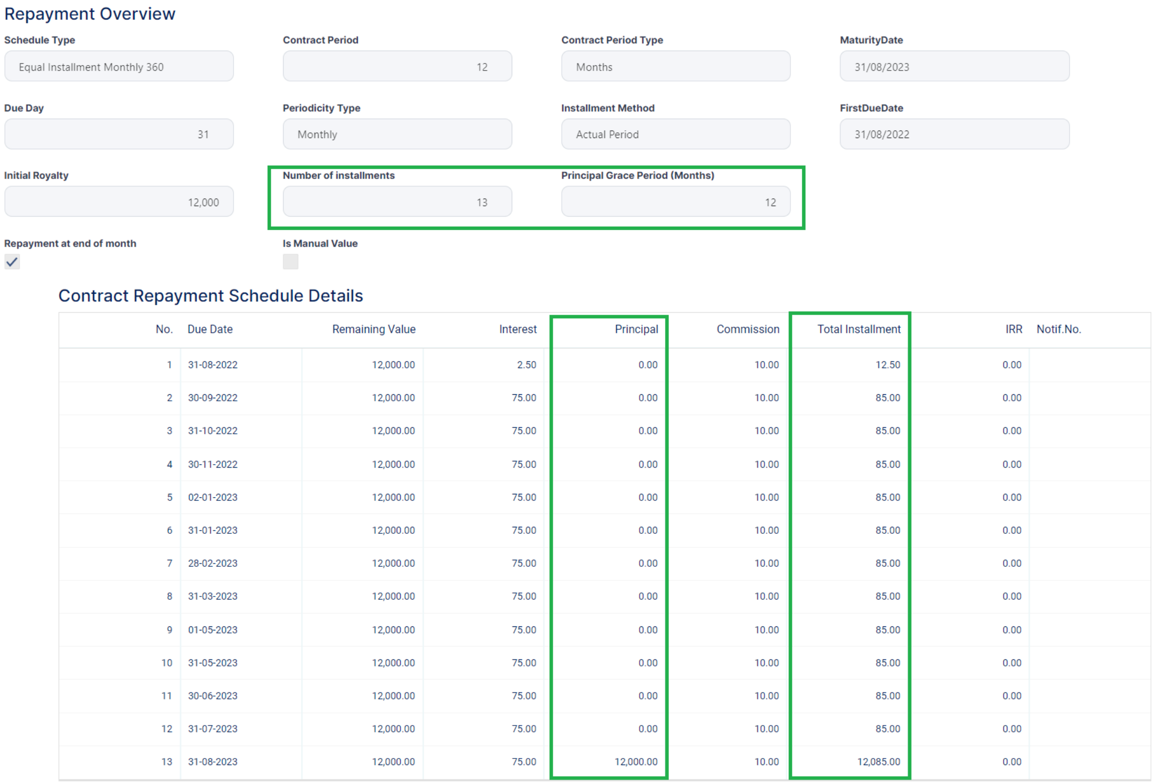
Repayment at end of month: □

Is Manual Value: ☑

Contract Repayment Schedule Details

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR	Notif.No.
1	15-09-2022	100,000.00	333.33	1,066.67	10.00	1,410.00	0.00	
2	17-10-2022	98,933.33	618.33	781.67	10.00	1,410.00	0.00	
3	15-11-2022	98,151.66	613.45	786.55	10.00	1,410.00	0.00	
4	15-12-2022	97,365.11	608.53	791.47	10.00	1,410.00	0.00	
5	16-01-2023	96,573.64	603.59	796.41	10.00	1,410.00	0.00	
6	15-02-2023	95,777.23	598.61	801.39	10.00	1,410.00	0.00	
7	15-03-2023	94,975.84	593.60	806.40	10.00	1,410.00	0.00	
8	17-04-2023	94,169.44	588.56	811.44	10.00	1,410.00	0.00	
9	15-05-2023	93,358.00	583.49	816.51	10.00	1,410.00	0.00	
10	15-06-2023	92,541.49	578.38	821.62	10.00	1,410.00	0.00	
11	17-07-2023	91,719.87	573.25	826.75	10.00	1,410.00	0.00	
12	15-08-2023	90,893.12	568.08	90,893.12	10.00	91,471.20	0.00	

A revolving line of credit might be a case where you need to enable a loan for which you collect interest and potentially some fees monthly, at end of month, and the principal at maturity. Such loan would also be a revolving one. This sort of setup can be achieved with a schedule definition that includes the fee. On the contract, you select the due date as end of month, plus a grace for principal for the number of installments of the full loan minus one, for example the loan has 13 installments, the **Principal Grace Period (Months)** has 12 installments, and thus all principal is expected to be repaid on maturity. When the funds are available, you can perform an early repayment transaction and reuse those funds again when needed since it is a revolving setup. In practice, such approvals may be extended and if this is the case you need to make sure you perform the extension one day in advance of the maturity, otherwise the jobs set at the end of the day also pick up and process such maturity. Read more about setting the repayment information on contract level in the Enter Repayment Information for the Contract section.



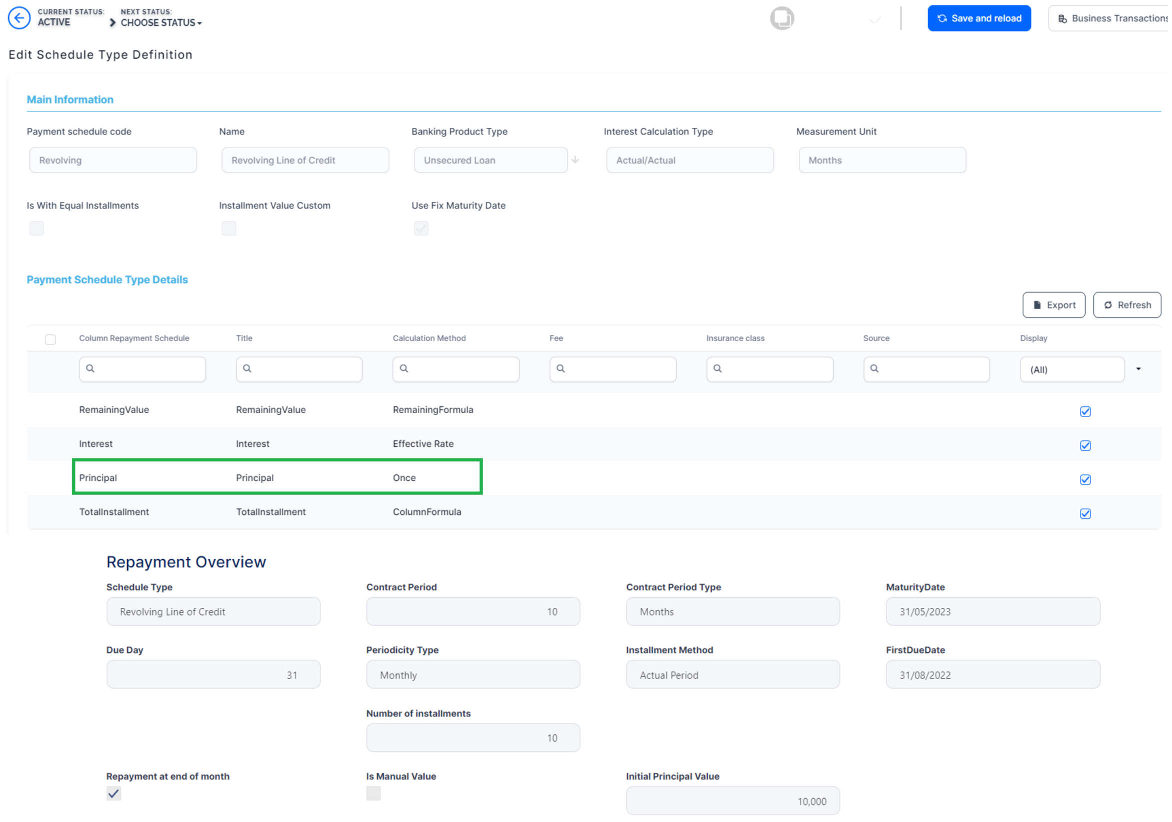
Repayment Overview

Schedule Type	Contract Period	Contract Period Type	MaturityDate
Equal Installment Monthly 360	12	Months	31/08/2023
Due Day	Periodicity Type	Installment Method	FirstDueDate
31	Monthly	Actual Period	31/08/2022
Initial Royalty	Number of installments	Principal Grace Period (Months)	
12,000	13	12	
Repayment at end of month	Is Manual Value		
☑	□		

Contract Repayment Schedule Details

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR	Notif.No.
1	31-08-2022	12,000.00	2.50	0.00	10.00	12.50	0.00	
2	30-09-2022	12,000.00	75.00	0.00	10.00	85.00	0.00	
3	31-10-2022	12,000.00	75.00	0.00	10.00	85.00	0.00	
4	30-11-2022	12,000.00	75.00	0.00	10.00	85.00	0.00	
5	02-01-2023	12,000.00	75.00	0.00	10.00	85.00	0.00	
6	31-01-2023	12,000.00	75.00	0.00	10.00	85.00	0.00	
7	28-02-2023	12,000.00	75.00	0.00	10.00	85.00	0.00	
8	31-03-2023	12,000.00	75.00	0.00	10.00	85.00	0.00	
9	01-05-2023	12,000.00	75.00	0.00	10.00	85.00	0.00	
10	31-05-2023	12,000.00	75.00	0.00	10.00	85.00	0.00	
11	30-06-2023	12,000.00	75.00	0.00	10.00	85.00	0.00	
12	31-07-2023	12,000.00	75.00	0.00	10.00	85.00	0.00	
13	31-08-2023	12,000.00	75.00	12,000.00	10.00	12,085.00	0.00	

Below is an example of an out-of-the-box setting for a repayment schedule setup, to obtain the same approach with full capital repaid on maturity. Make sure you have Once for **Principal** definition, as pictured here:



CURRENT STATUS: ACTIVE
NEXT STATUS: CHOOSE STATUS

Edit Schedule Type Definition

Main Information

Payment schedule code	Name	Banking Product Type	Interest Calculation Type	Measurement Unit
Revolving	Revolving Line of Credit	Unsecured Loan	Actual/Actual	Months

Is With Equal Installments ☐

Installment Value Custom ☐

Use Fix Maturity Date ☑

Payment Schedule Type Details

Column Repayment Schedule	Title	Calculation Method	Fee	Insurance class	Source	Display
						(All)
RemainingValue	RemainingValue	RemainingFormula				☑
Interest	Interest	Effective Rate				☑
Principal	Principal	Once				☑
TotalInstallment	TotalInstallment	ColumnFormula				☑

Repayment Overview

Schedule Type	Contract Period	Contract Period Type	MaturityDate
Revolving Line of Credit	10	Months	31/05/2023

Due Day	Periodicity Type	Installment Method	FirstDueDate
31	Monthly	Actual Period	31/08/2022

Number of installments: 10

Repayment at end of month ☑

Is Manual Value ☐

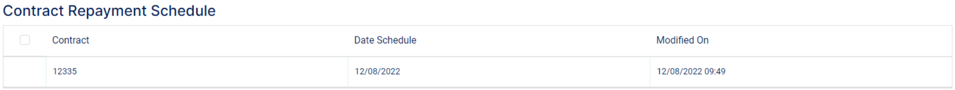
Initial Principal Value: 10,000

Apart from the standardized regular repayment schedules, there may be cases when for a specific customer or for a specific business area you need custom repayment frequencies or even amounts. For such cases, you can manually upload a repayment schedule from an excel template. There are some validations and transformation requirements, but at the end you have a repayment schedule that does not follow any of the classical definitions.

Viewing a Contract's Repayment Schedule

Follow these steps to view the repayment schedule automatically generated by Core Banking for the approved contract, after performing a disbursement:

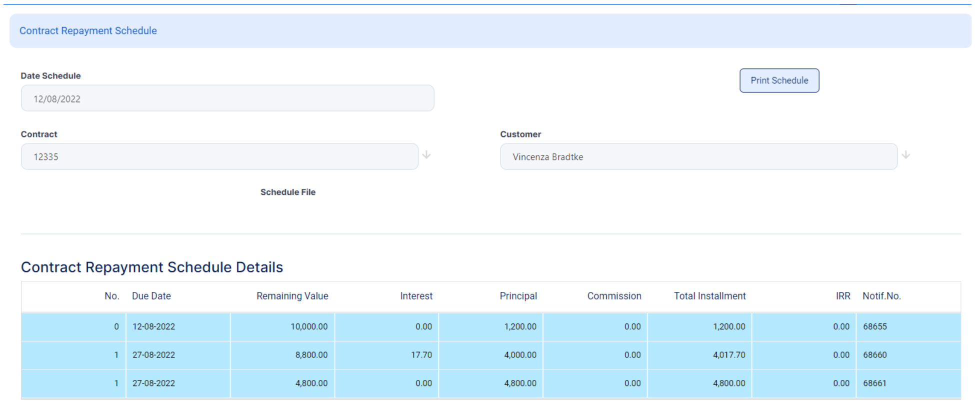
1. In the contract's **Payments** tab, go to the **Contract Repayment Schedule** section. This section displays only basic information about the generated schedule, such as contract number, schedule date and last modification date and time.



Contract Repayment Schedule

□	Contract	Date Schedule	Modified On
	12335	12/08/2022	12/08/2022 09:49

2. To see detailed information and the actual list of the installments, double-click the schedule. The **Contract Repayment Schedule** page is displayed with the selected schedule and a list with every schedule detail:



Date Schedule: 12/08/2022

Contract: 12335

Customer: Vincenza Bradtke

Schedule File

Contract Repayment Schedule Details

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR	Notif.No.
0	12-08-2022	10,000.00	0.00	1,200.00	0.00	1,200.00	0.00	68655
1	27-08-2022	8,800.00	17.70	4,000.00	0.00	4,017.70	0.00	68660
1	27-08-2022	4,800.00	0.00	4,800.00	0.00	4,800.00	0.00	68661

You can't edit the information displayed on this page, but for contracts in **Version Draft** status, you can import a custom repayment plan, if you don't want the contract to use the repayment plan automatically generated by Core Banking.

NOTE

Following an early repayment event, for contracts based on banking products with the **Is Revolving** field set to `False`, when the installments number recalculated after such an event is lower than the previous installments number, the maturity date and the contract period are updated along with the number of installments.

3. View the information displayed about each schedule detail (installment): number, due date of the installment, interest, principal and commissions calculated for this installment, the value of the

repayment notification generated for this schedule detail, and its number, if the repayment notification was already generated.

Within the list, the schedule details are color coded as follows:

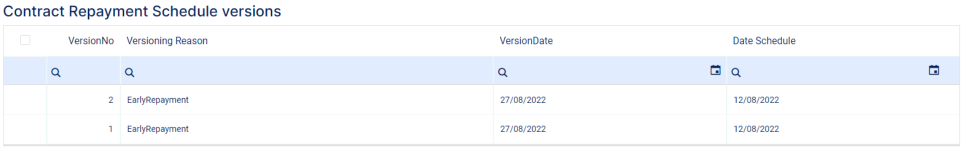
- Schedule details highlighted in blue are already paid, allocated or closed to payment.
- Schedule details not highlighted (displayed on a white background) remain to be paid.

4. To export the schedule in a `.pdf` file, click the **Print Schedule** button. Your browser automatically downloads the `PaymentScheduleFile` file, with all the information displayed within the **Contract Repayment Schedule** page.

Viewing a Contract's Repayment Schedule Versions

Follow these steps to view the versions of the repayment schedules automatically generated by Core Banking each time when a contract event that changed either the maturity date or the amount of a repayment was performed on the contract:

1. In the contract's **Payments** tab, go to the **Contract Repayment Schedule Versions** section. The section displays only basic information about the generated versions, such as version number, versioning reason, version creation date and the date of the previously active schedule.



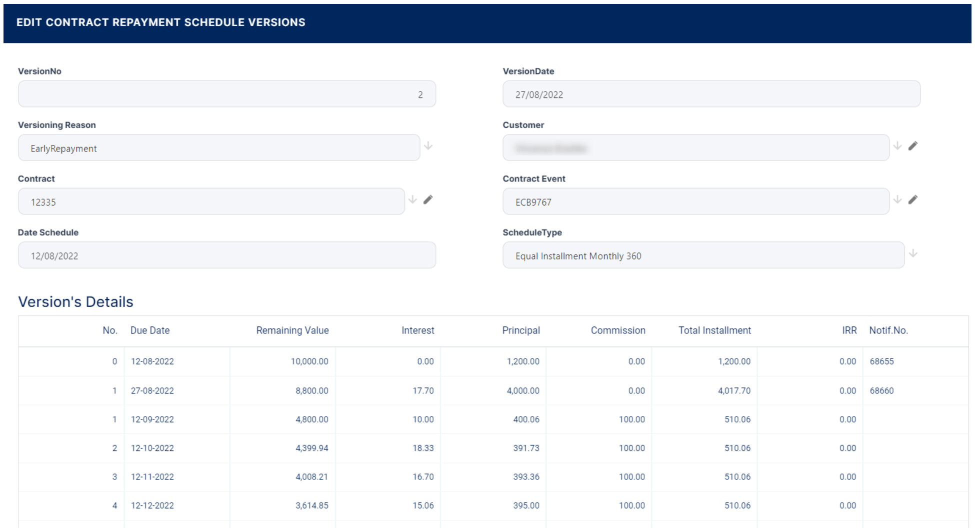
Contract Repayment Schedule versions

□	VersionNo	Versioning Reason	VersionDate	Date Schedule
	2	EarlyRepayment	27/08/2022	12/08/2022
	1	EarlyRepayment	27/08/2022	12/08/2022

NOTE

The most recent repayment schedule version is considered active by Core Banking, while the previous schedule records are kept for historical purposes.

2. To see detailed information about the repayment schedule version, double-click on the desired record. The **Edit Contract Repayment Schedule Version** page is displayed with the selected schedule and a list with every schedule detail:



EDIT CONTRACT REPAYMENT SCHEDULE VERSIONS

VersionNo 2	VersionDate 27/08/2022
Versioning Reason EarlyRepayment	Customer [redacted]
Contract 12335	Contract Event ECB9767
Date Schedule 12/08/2022	ScheduleType Equal Installment Monthly 360

Version's Details

No.	Due Date	Remaining Value	Interest	Principal	Commission	Total Installment	IRR	Notif.No.
0	12-08-2022	10,000.00	0.00	1,200.00	0.00	1,200.00	0.00	68655
1	27-08-2022	8,800.00	17.70	4,000.00	0.00	4,017.70	0.00	68660
1	12-09-2022	4,800.00	10.00	400.06	100.00	510.06	0.00	
2	12-10-2022	4,399.94	18.33	391.73	100.00	510.06	0.00	
3	12-11-2022	4,008.21	16.70	393.36	100.00	510.06	0.00	
4	12-12-2022	3,614.85	15.06	395.00	100.00	510.06	0.00	

You can't edit the information displayed on this page.

3. View the information displayed about each schedule version: its number and date, the versioning reason specifying the type of contract event that triggered the generation of the version, the customer, contract and event information, as well as the date of the previous repayment schedule and the type of schedule selected in the contract and used to generate the repayment schedule.

4. View the information displayed about each schedule detail (installment): number, due date of the installment, remaining value to be repaid from the contract value at the moment of this installment, interest, principal and commissions calculated for this installment, the value of the repayment notification generated for this schedule detail, and its number, if the repayment notification was already generated.

Manually Upload Repayment Schedules

To accommodate cases when a contract's repayment plan can't be built using any of the existing Core Banking automated logic, you can import a custom-built schedule on a contract. You can either perform the import at a contract event level (when adding a **Disbursement**, **Early Repayment**, **Payment Holiday**, or **Reschedule Overdues** transaction), or at a contract level within the **Contract Repayment Schedule** page, for contracts in **Version Draft** status. After importing a custom repayment plan on a contract through a `.xlsx` file whose template must be first exported, Core Banking validates that the total outstanding amount is matched by the principal on schedule. On due dates, the due amounts are processed properly and the notifications are generated as per the imported repayment plan.

For example, you could use such imported schedules for contracts that require seasonal repayment plans. For seasonal credits in agriculture, you could have due dates only in April or September. You could build a schedule to have installments only in these months, to accommodate such situations.

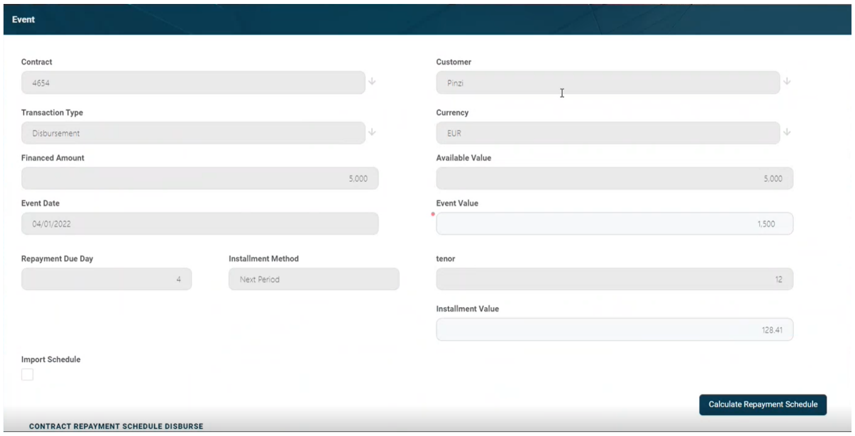
Another example is that you could use the import functionality for contracts with atypical schedules that have to be migrated into Core Banking. First, you could import the schedules as they are, then you could decide to adopt the Core Banking logic for schedule calculation, maybe change the interest rate, so you version the contract to have a repayment plan automatically calculated by the system.

Importing Repayment Plans at Contract Event Level

To import a custom repayment plan at a contract event level (when performing a transaction), for contract events in **Approved** status, perform the following steps:

1. On the **Contracts** page or in the **Contracts Dashboard**, select a contract with **Approved** status.
2. Double-click the contract to open it for editing.
3. Navigate to the contract's **Payments** tab.

4. Double-click a **Disbursement**, **Early Repayment**, **Payment Holiday**, **Returned Amount Or Goods**, or **Reschedule Overdues** transaction in **Draft** status.
   OR
   Create a new **Disbursement**, **Early Repayment**, **Payment Holiday**, **Returned Amount Or Goods**, or **Reschedule Overdues** transaction, up until saving the event in **Draft** status.

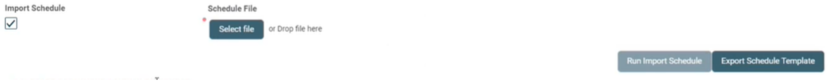


Event

Contract	4654
Customer	Pinzi
Transaction Type	Disbursement
Currency	EUR
Financed Amount	5,000
Available Value	5,000
Event Date	04/01/2022
Event Value	1,500
Repayment Due Day	4
Installment Method	Next Period
tenor	12
Installment Value	128.41
Import Schedule	☐

Calculate Repayment Schedule
CONTRACT REPAYMENT SCHEDULE DISBURSE

5. Select the **Import Schedule** checkbox. The **Schedule File** field is displayed, with the **Select file** button. The **Export Schedule Template** button is also displayed. A warning message informs you that "*The previous repayment schedule was generated by the system*".



Import Schedule ☑

Schedule File

6. Click the **Export Schedule Template** button to download a `.xslx` file with the schedule template for this specific contract.

7. Open the downloaded schedule template `.xlsx` file exported from Core Banking and make it editable.

8. Format the **Due Date** column as `Text`

9. Fill in the lines of the template file with the data needed in the contract's custom repayment plan.
   Fill in each installment's type according to the event type.

   NOTE

   Make sure you don't change the data formats within the columns, except for the **Due Date** column which needs to be `Text`. Do not change the headings. Validations are performed for the file after uploading it to Core Banking, when the record is saved, and incorrect formats or data are not accepted, then error messages are shown for such files.

   IMPORTANT!

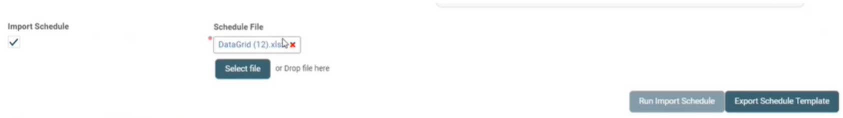
   For contracts with existing repayment notifications, these notifications are already present in the downloaded template file. Do not modify the existing notifications' data. Compose your custom schedule taking into account the already existing repayment notifications.

   Read more about the repayment plan template file and how to fill it in its dedicated section.

10. Save the file. If the file needs to be labeled according to your company's information protection policy, label it as `Public`, otherwise, Core Banking can't import it.

11. Back in Core Banking's **Contract Repayment Schedule** page, click **Select File**.

12. In the newly displayed Explorer window, browse for the `.xlsx` file that contains the custom schedule you've filled in with the contract's repayment plan, then click **Open**.
The selected file's name is displayed under the **Schedule File** field.

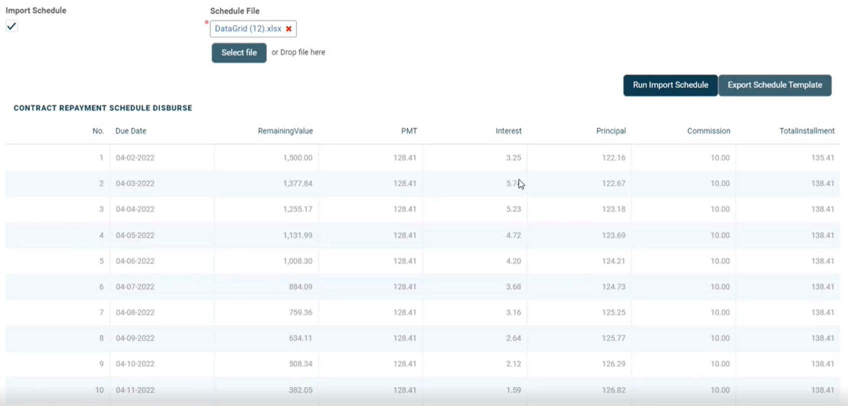


Import Schedule ☑

Schedule File: DataGrid (12).xls

13. Click the **Save and Reload** button.Core Banking performs the validations, making sure that the uploaded file meets all the criteria for a correct, functional schedule.

14. Click the **Run Import Schedule** button to perform the import of the new custom schedule to the contract. This button can be clicked only if a file was selected in the **Schedule File** field.
The **Contract Repayment Schedule Details** section now displays data contained in your custom schedule.



Import Schedule ☑

Schedule File: DataGrid (12).xlsx

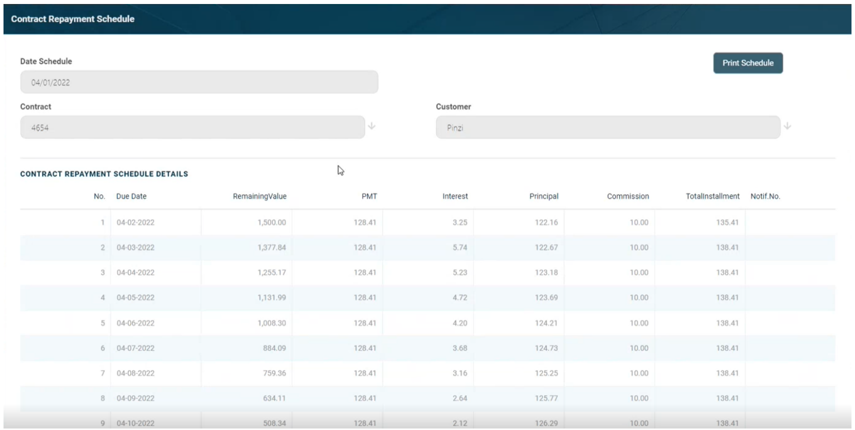
CONTRACT REPAYMENT SCHEDULE DISBURSE

No.	Due Date	RemainingValue	PMT	Interest	Principal	Commission	TotalInstallment
1	04-02-2022	1,500.00	128.41	3.25	122.16	10.00	135.41
2	04-03-2022	1,377.84	128.41	5.7	122.67	10.00	138.41
3	04-04-2022	1,255.17	128.41	5.23	123.18	10.00	138.41
4	04-05-2022	1,131.99	128.41	4.72	123.69	10.00	138.41
5	04-06-2022	1,008.30	128.41	4.20	124.21	10.00	138.41
6	04-07-2022	884.09	128.41	3.68	124.73	10.00	138.41
7	04-08-2022	759.36	128.41	3.16	125.25	10.00	138.41
8	04-09-2022	634.11	128.41	2.64	125.77	10.00	138.41
9	04-10-2022	508.34	128.41	2.12	126.29	10.00	138.41
10	04-11-2022	382.05	128.41	1.59	126.82	10.00	138.41

If you click the **Run Import Schedule** button one more time, the values within the **Contract Repayment Schedule Details** section are deleted and reinserted.

15. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.
The contract's repayment schedule, accessible through the

Contract Repayment Schedule page, now displays the custom repayment plan uploaded through the approved event.



Date Schedule: 04/01/2022

Contract: 4654

Customer: Pinzi

CONTRACT REPAYMENT SCHEDULE DETAILS

No.	Due Date	RemainingValue	PMT	Interest	Principal	Commission	TotalInstallment	Notif.No.
1	04-02-2022	1,500.00	128.41	3.25	122.16	10.00	135.41	
2	04-03-2022	1,377.84	128.41	5.74	122.67	10.00	138.41	
3	04-04-2022	1,255.17	128.41	5.23	123.18	10.00	138.41	
4	04-05-2022	1,131.99	128.41	4.72	123.69	10.00	138.41	
5	04-06-2022	1,008.30	128.41	4.20	124.21	10.00	138.41	
6	04-07-2022	884.09	128.41	3.68	124.73	10.00	138.41	
7	04-08-2022	759.36	128.41	3.16	125.25	10.00	138.41	
8	04-09-2022	634.11	128.41	2.64	125.77	10.00	138.41	
9	04-10-2022	508.34	128.41	2.12	126.29	10.00	138.41	

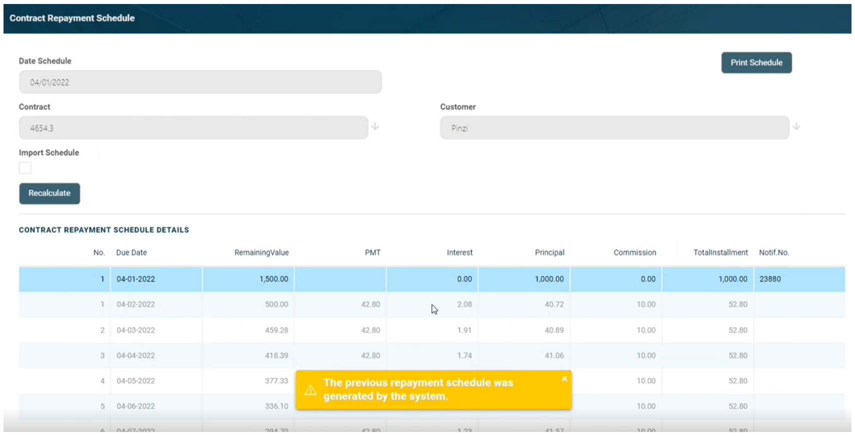
NOTE

When versioning a contract that has an imported repayment plan, the schedule recalculation is not mandatory. You can choose between recalculating and importing an updated repayment plan.

Importing Repayment Plans at Contract Level

To import a custom repayment plan directly at a contract level, for contracts in **Version Draft** status, perform the following steps:

1. On the **Contracts** page or in the **Contracts Dashboard**, select the contract for which you wish to change its schedule with a custom repayment plan. Make sure that the contract is in **Version Draft** status.
2. On the displayed contract's page, navigate to the **Payments** tab and double-click the contract displayed in the **Contract Repayment Schedule** section. The **Contract Repayment Schedule** page is displayed.



Contract Repayment Schedule

Date Schedule: 04/01/2022

Contract: 4654.3

Customer: Pinzi

Import Schedule □

CONTRACT REPAYMENT SCHEDULE DETAILS

No.	Due Date	RemainingValue	PMT	Interest	Principal	Commission	TotalInstallment	Notif.No.
1	04-01-2022	1,500.00		0.00	1,000.00	0.00	1,000.00	23880
1	04-02-2022	500.00	42.80	2.08	40.72	10.00	52.80	
2	04-03-2022	459.28	42.80	1.91	40.89	10.00	52.80	
3	04-04-2022	418.39	42.80	1.74	41.06	10.00	52.80	
4	04-05-2022	377.33				10.00	52.80	
5	04-06-2022	336.10				10.00	52.80	
6	04-07-2022	294.70	42.80	1.23	41.57	10.00	52.80	

The previous repayment schedule was generated by the system.

A warning message lets you know that "*The previous repayment schedule was generated by the system*". You can either recalculate the schedule using the Core Banking logic, or you can import a custom repayment plan which you build for this contract version.

3. On the newly opened **Contract Repayment Schedule** page, select the **Import Schedule** checkbox. The **Schedule File** field is displayed, with the **Select file** button. The **Export Schedule Template** button is also displayed. A warning message informs you that "*The previous repayment schedule was generated by the system*".

4. Click the **Export Schedule Template** button to download a `.xslx` file with the schedule template for this specific contract.

5. Open the downloaded schedule template `.xlsx` file exported from Core Banking and make it editable.

6. Format the **Due Date** column as `Text`

7. Fill in the lines of the template file with the data needed in the contract's custom repayment plan.
   Fill in each installment's type according to the event type.

NOTE

Make sure you don't change the data formats within the columns, except for the **Due Date** column which needs to be `Text`. Do not change the headings. Validations are performed for the file after uploading it to Core Banking, when the record is saved, and incorrect formats or data are not accepted, then error messages are shown for such files.

IMPORTANT!

For contracts with existing repayment notifications, these notifications are already present in the downloaded template file. Do not modify the existing notifications' data. Compose your custom schedule taking into account the already existing repayment notifications.

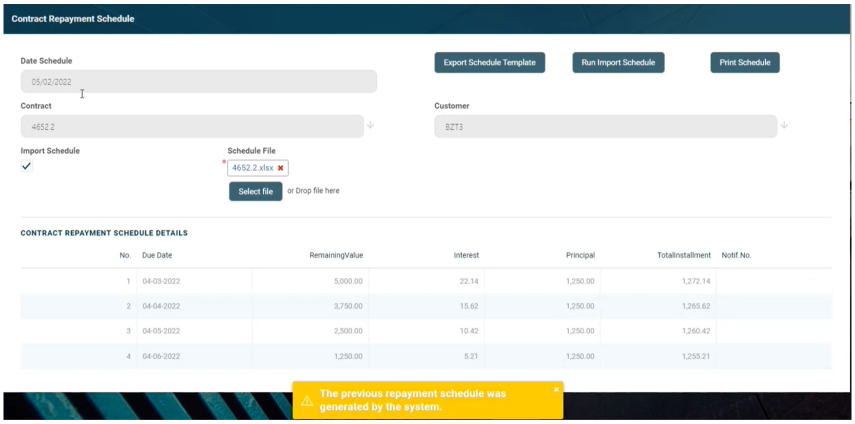
Read more about the repayment plan template file and how to fill it in its dedicated section.

8. Save the file. If the file needs to be labeled according to your company's information protection policy, label it as `Public`, otherwise, Core Banking can't import it.
9. Back in Core Banking's **Contract Repayment Schedule** page, click **Select File**.

10. In the newly displayed Explorer window, browse for the `.xlsx` file that contains the custom schedule you've filled in with the contract's repayment plan, then click **Open**.
 The selected file's name is displayed under the **Schedule File** field.

11. Click the **Save and Reload** button.Core Banking performs the validations, making sure that the uploaded file meets all the criteria for a correct, functional schedule.

12. Click the **Run Import Schedule** button to perform the import of the new custom schedule to the contract. This button can be clicked only if a file was selected in the **Schedule File** field. The **Contract Repayment Schedule Details** section now displays data contained in your custom schedule.



Date Schedule: 05/02/2022

Contract: 4652.2

Customer: BZT3

Import Schedule: ✓

Schedule File: 4652.2.xlsx

or Drop file here

CONTRACT REPAYMENT SCHEDULE DETAILS

No.	Due Date	RemainingValue	Interest	Principal	TotalInstallment	Notif.No.
1	04-03-2022	5,000.00	22.14	1,250.00	1,272.14	
2	04-04-2022	3,750.00	15.62	1,250.00	1,265.62	
3	04-05-2022	2,500.00	10.42	1,250.00	1,260.42	
4	04-06-2022	1,250.00	5.21	1,250.00	1,255.21	

⚠ The previous repayment schedule was generated by the system.

If you click the **Run Import Schedule** button one more time, the values within the **Contract Repayment Schedule Details** section are deleted and reinserted.

NOTE

When versioning a contract that has an imported repayment plan, the schedule recalculation is not mandatory. You can choose between recalculating and importing an updated repayment plan.

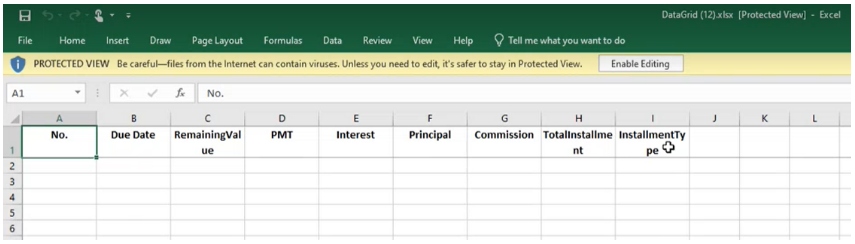
Working with a Repayment Plan Template File

Each time you need to import a custom schedule to a contract, you must export its template file first, make the needed changes, then save the file. Follow these steps to work with repayment schedule template files:

1. On the **Contract Repayment Schedule** page, or on the **Contract Event** page, click the **Export Schedule Template** button.
   A file with `.xlsx` format is downloaded to your computer. The file contains the columns that must be filled in based on the contract's schedule type definition.

   > **NOTE**
   >
   > Each contract type may have a different schedule type definition, so make sure you download the template!

   This is an example of an exported repayment plan template file:

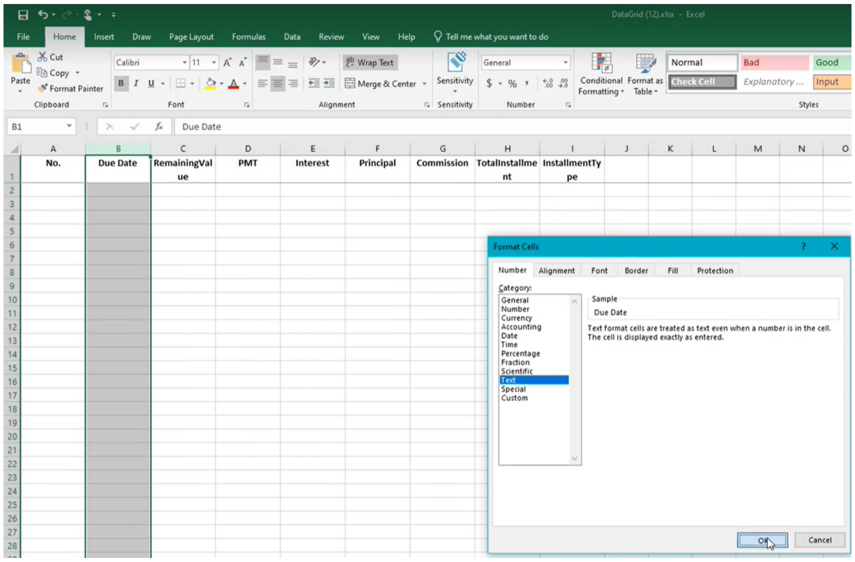
   

   PROTECTED VIEW Be careful—files from the Internet can contain viruses. Unless you need to edit, it's safer to stay in Protected View.

	A	B	C	D	E	F	G	H	I	J	K	L
1	No.	Due Date	RemainingValue	PMT	Interest	Principal	Commission	TotalInstallment	InstallmentType			
2												
3												
4												
5												
6												

2. After opening the downloaded schedule template `.xlsx` file, make it editable so that you can perform changes within its cells.

3. Format the **Due Date** column as `Text`.



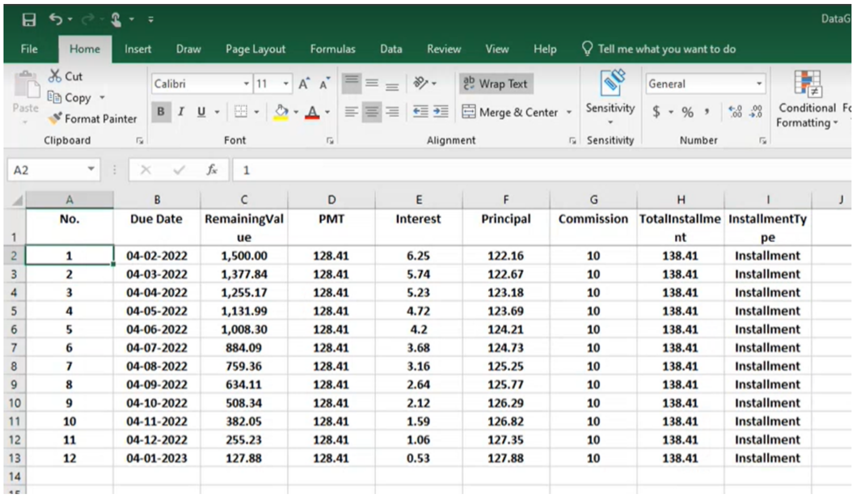
B1 Due Date

No.	Due Date	RemainingValue	PMT	Interest	Principal	Commission	TotalInstallment	InstallmentType

Sample: Due Date

Text format cells are treated as text even when a number is in the cell. The cell is displayed exactly as entered.

4. Fill in the lines of the template file with the data needed in the contract's custom repayment plan. Fill in each installment's type according to the event type. The possible values are `Installment`, `EarlyRepayment`, `DownPayment`, `PaymentHoliday`, `ReturnAmount`, or `RescheduleOverdue`.



A2 1

No.	Due Date	RemainingValue	PMT	Interest	Principal	Commission	TotalInstallment	InstallmentType
1	04-02-2022	1,500.00	128.41	6.25	122.16	10	138.41	Installment
2	04-03-2022	1,377.84	128.41	5.74	122.67	10	138.41	Installment
3	04-04-2022	1,255.17	128.41	5.23	123.18	10	138.41	Installment
4	04-05-2022	1,131.99	128.41	4.72	123.69	10	138.41	Installment
5	04-06-2022	1,008.30	128.41	4.2	124.21	10	138.41	Installment
6	04-07-2022	884.09	128.41	3.68	124.73	10	138.41	Installment
7	04-08-2022	759.36	128.41	3.16	125.25	10	138.41	Installment
8	04-09-2022	634.11	128.41	2.64	125.77	10	138.41	Installment
9	04-10-2022	508.34	128.41	2.12	126.29	10	138.41	Installment
10	04-11-2022	382.05	128.41	1.59	126.82	10	138.41	Installment
11	04-12-2022	255.23	128.41	1.06	127.35	10	138.41	Installment
12	04-01-2023	127.88	128.41	0.53	127.88	10	138.41	Installment

NOTE

Make sure you don't change the data formats within the columns, except for the **Due Date** column which needs to be `Text`. Do not change the headings. Validations are performed for the file after uploading it to Core Banking, when the record is saved, and incorrect formats or data are not accepted, then error messages are shown for such files.

IMPORTANT!

For contracts with existing repayment notifications, these notifications are already present in the downloaded template file. Do not modify the existing notifications' data. Compose your custom schedule taking into account the already existing repayment notifications.

5. Save the file after filling in the template file with the desired schedule information. If the file needs to be labeled according to your company's information protection policy, label it as `Public`, otherwise, Core Banking can't import it.

Automatic Validations Performed by Core Banking

A series of checks and validations are performed for the file after uploading it to Core Banking, when the record is saved, before being imported:

- Due Date must be of the correct `Text` format: `dd-mm-yyyy`;
- Remaining Value = previous Remaining Value - previous Principal;
- Sum(Principal) = eventValue for `Disbursement` event type;
- Sum(Principal) = outstanding amount (sum of principal for installments not notified yet) in all other cases;
- Values are not negative;
- Due Date >= Activation Date if installment type = `DownPayment`;
- Due Date >= First Due Date if installment type = `Installment`;
- Due Date <= Maturity Date;
- Total Installment respects the formula from the contract's schedule type;
- Max(InstallmentNo) <= Installment Number from the contract **Overview** tab;
- Due Date and InstallmentNo values must be different and consecutive, except for `Early Repayment` event type, where you can have 2 installments of the same number on the same day;
- If the installment is of `Early Repayment` event type, it can only be the first installment in the imported schedule;
- If the import is performed on a contract in **Version Draft** status and there are installments notified, those should not be modified and the checks should

be done over installments that were not notified yet, so sum(principal) for installments to be imported = outstanding amount. In this case, Due Date should be >= than the last notified installment and Installment Number > the last notified installment.

If any of these checks fail, then you are presented with error messages and cannot continue with the import process. For example, an error appears when you try to change an installment's Due Date (within the contract's Overview section) starting with the second disbursement.

Warning messages notify you if the previous repayment schedule was generated by the system or it was imported. These warnings are for your information and do not affect the import process. For example, whenever you opt for using the automatically generated repayment plan on a contract that already had an imported schedule, a warning message informs you that the standard system method overwrites the schedule that was imported in a previous version/ event.

IMPORTANT!

For contracts with imported schedules where the second disbursement with repayment contract was automatically generated by Core Banking, the workaround is to:

1. Create a new version of the contract.
2. Recalculate the repayment plan.
3. Approve the contract version.
4. Create a new disbursement.

Manually Capture Notifications

Apart from the notifications automatically generated by Core Banking for each installment that has to be paid for existing contracts that disbursed various amounts to customers, Core Banking also assists you reconcile wrongly processed cases and other situations resulted from delayed processing/ wrong updates. Thus, depending on your user rights, you can manually add notifications for an active contract based on lending product types, term loans, and mortgages, or add notifications for amounts to be recovered even if there is no active contract. Core Banking includes all such manual notifications in the recovery processes.

NOTE

Core Banking enables you to manage manual repayment notification via the user interface or via integration through APIs. For information about the available endpoints, please visit the Core Banking Developer Guide.

For information about managing manual repayment notification via the user interface, continue reading this page.

NOTE

You need one of the **Corporate Credit Officer**, **Retail Credit Officer**, or **Loan Admin Officer** security roles to view, create, delete, and update manual repayment notifications.

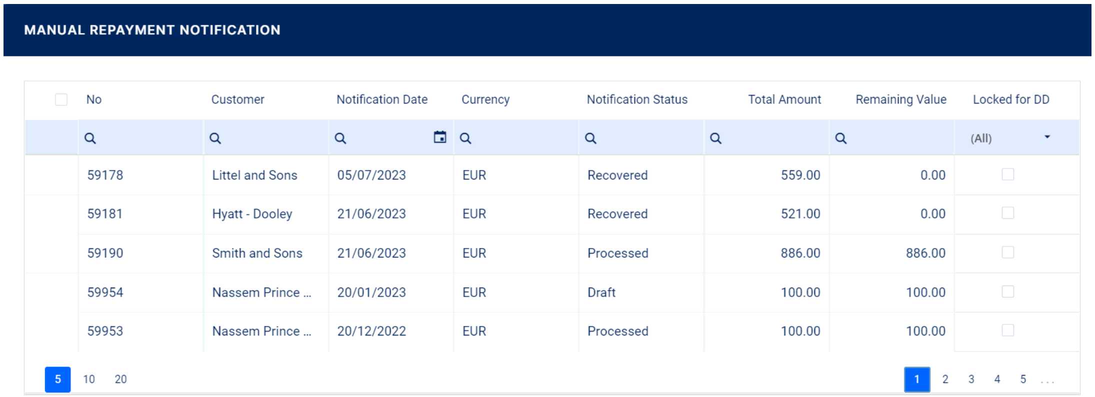
You need the **Loan Admin Officer** security role to update their status to Approved.

Adding Repayment Notifications

Follow these steps to manually add a repayment notification:

1. In the FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.

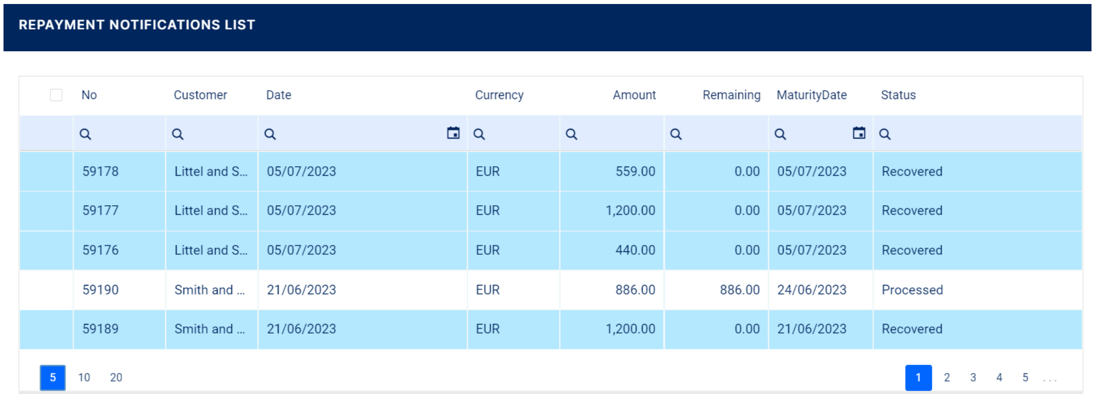
2. Click **Manual Repayment Notification** menu item to open the **Manual Repayment Notifications** page.



MANUAL REPAYMENT NOTIFICATION

□	No	Customer	Notification Date	Currency	Notification Status	Total Amount	Remaining Value	Locked for DD
								(All)
	59178	Littel and Sons	05/07/2023	EUR	Recovered	559.00	0.00	□
	59181	Hyatt - Dooley	21/06/2023	EUR	Recovered	521.00	0.00	□
	59190	Smith and Sons	21/06/2023	EUR	Processed	886.00	886.00	□
	59954	Nassem Prince ...	20/01/2023	EUR	Draft	100.00	100.00	□
	59953	Nassem Prince ...	20/12/2022	EUR	Processed	100.00	100.00	□

Or, click **Repayment Notification** menu item to open the **Repayment Notifications List** page.



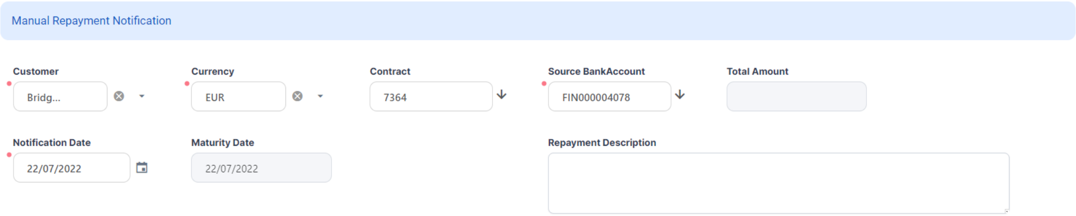
REPAYMENT NOTIFICATIONS LIST

□	No	Customer	Date	Currency	Amount	Remaining	MaturityDate	Status
	59178	Littel and S...	05/07/2023	EUR	559.00	0.00	05/07/2023	Recovered
	59177	Littel and S...	05/07/2023	EUR	1,200.00	0.00	05/07/2023	Recovered
	59176	Littel and S...	05/07/2023	EUR	440.00	0.00	05/07/2023	Recovered
	59190	Smith and ...	21/06/2023	EUR	886.00	886.00	24/06/2023	Processed
	59189	Smith and ...	21/06/2023	EUR	1,200.00	0.00	21/06/2023	Recovered

Within the list, the notifications highlighted in blue are already paid, allocated, or closed to payment, while notifications not highlighted (displayed on a white background) remain to be paid.

3. On the **Manual Repayment Notifications** page, click **Insert** to open the **Add Manual Repayment Notification** page.

4. Fill in the following details regarding the notification:



Manual Repayment Notification

Customer: Bridg...

Currency: EUR

Contract: 7364

Source BankAccount: FIN000004078

Total Amount:

Notification Date: 22/07/2022

Maturity Date: 22/07/2022

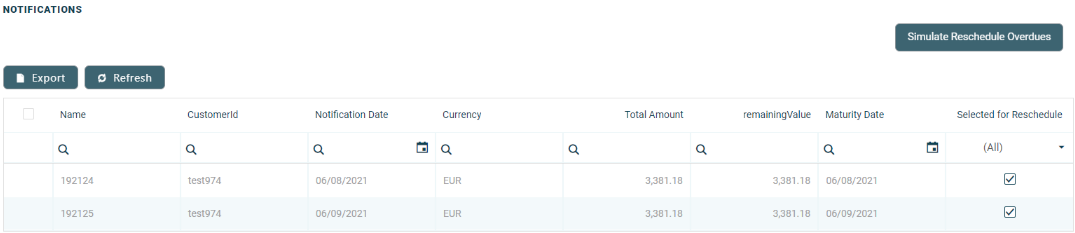
Repayment Description:

- **Customer** - Select the customer for whom the notification is created.
- **Contract** - Select the number of the contract for which the notification is generated. You can choose from the approved and closed contracts of the selected customer. The currency and the source bank account are automatically filled in using the values from the selected contract. If the notification is not linked to an active contract, you must select a source bank account.
- **Source Bank Account** - Automatically filled in if the contract was selected. Select the bank account from where the notified amount should be allocated. After selecting a source bank account, the currency is changed with the bank account's currency.
- **Notification Date** - Select the date when the notification is created.

> **NOTE**
>
> You can also add manual repayment notification from the contract level's **Payments** tab, clicking **Insert** within the **Repayment Notification** section. In the displayed **Add Manual Repayment Notification** page, some of the fields are automatically filled in based on the contract's information and can't be modified.

5. Optionally, view or edit the following details:
   - **Currency** - Automatically filled in with the currency of the notification, if the contract or the source bank account was selected.
   - **Total Amount** - This read-only field holds the total amount to be paid within the notification, calculated as the sum of all the details' values.
   - **Maturity Date** - This field is automatically filled in with the maturity date of the notification, calculated by adding the value of the `Grace period for repayment` field at the banking product level to the notification date. If no contract is selected, hence there is grace period to consider from the banking product level, then the `ManualGraceRepayment` Core Banking system parameter is used for maturity date calculation.
   - **Repayment Description** - Enter a description for the manual notification.

6. Click the **Save and Reload** button. The manual notification is saved by Core Banking in `Draft` status. You can now continue by adding repayment notification details to it.
   You can view the notifications generated for a specific contract on the **Contract** page, in the **Payments** tab > **Repayment Notifications** section:



NOTIFICATIONS

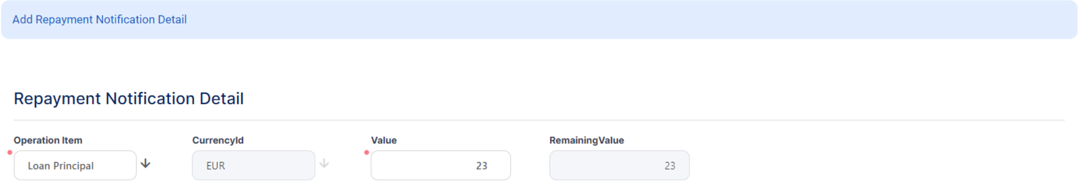
□	Name	CustomerId	Notification Date	Currency	Total Amount	remainingValue	Maturity Date	Selected for Reschedule
								(All)
	192124	test974	06/08/2021	EUR	3,381.18	3,381.18	06/08/2021	☑
	192125	test974	06/09/2021	EUR	3,381.18	3,381.18	06/09/2021	☑

> **NOTE**
> Once the repayment notification is in `Draft` status, you can edit the currency and the source bank account only if there are no notification details created for it.

Adding Repayment Notification Details

Follow these steps to manually add a repayment notification detail:

1. On the **Edit Manual Repayment Notifications** page, click **Insert** to open the **Add Manual Repayment Notification Detail** page. The page already has the currency of the notification and the remaining value still to be paid from the notification value completed. When you create the notification detail, `Remaining Value = Value`.
2. Fill in the following details regarding the notification detail:



Add Repayment Notification Detail

Repayment Notification Detail

Operation Item	CurrencyId	Value	RemainingValue
Loan Principal	EUR	23	23

- **Operation Item** - Select the operation item for which the notification detail is created.

  The operation item is used in the payment allocation process. If you select an operation item that is not included in the allocation method used for manual notifications (stored in the `ManualAllocationMethod` system parameter), then Core

Banking displays a warning message.

- **Value** - Enter the value of the notification detail. It must be must be greater than 0.

3. Click the **Save and Close** button. The notification detail is saved by Core Banking. You can add as many details as needed to a manual repayment notification in `Draft` status.

> **NOTE**
> For the payment allocation job to process the details, you must first approve the manual repayment notification record.

Approving Manual Repayment Notifications

After adding all the details you need to a manual repayment notification, make sure you approve it by changing its status to **Approved**. Otherwise, the payment allocation automated jobs don't process it.

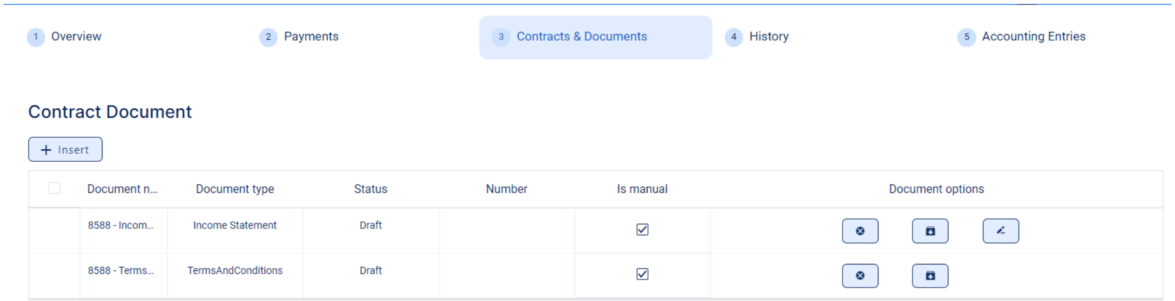
Core Banking performs the following validations before approving a manual repayment notification:

- The `Total Amount` of the repayment notification must be greater than 0;
- The `Value` fields at the details level must be greater than 0;
- The operation items selected at details level must be included in the allocation method used for manual notifications (stored in the `ManualAllocationMethod` system parameter).

After approval, Core Banking automatically transitions manual repayment notifications from the **Approved** status into **Pending Recover** or **In Recovery** statuses, using the `Auto Process Manual Repayment Notifications` scheduled job. Further, the automated settlement of repayment notification takes the notification and processes it, allocating funds from the source bank account to settle the debt.

Working with Documents

Core Banking allows you to manage all the documents related to a contract in one place, in the contract's **Contracts & Documents** tab. The tab is meant to be the electronic folder of the contract. It displays a list of the document records for the current contract, with details such as document name, type, status, number, whether the record was added through the user interface (`Is manual = True`) or through API integration (`Is manual = False`), and download options for the attached files. Contract documents have a dedicated business workflow, thus you can transition them through a series of statuses.



Contract Document

☐	Document n...	Document type	Status	Number	Is manual	Document options
	8588 - Incom...	Income Statement	Draft		☑	
	8588 - Terms...	TermsAndConditions	Draft		☑	

In the **Contracts & Documents** tab, you can: add a new contract document record, edit or delete a record in **Draft** status, view the details for records in **Signed** or **Canceled** status, or download the initial or the signed document, if it exists, by clicking the **Initial document**, respectively the **Signed document** button next to the record. Open the downloaded file to view its content.

NOTE

Users with the associated predefined security roles of Corporate Credit Officer and Retail Credit Officer can perform contract document-related operations such as adding, updating, and deleting records or changing their statuses.

Contract Document Statuses

A contract document record has the following statuses, visible in the top left corner of the **Add Contract Document** page, after saving the record:

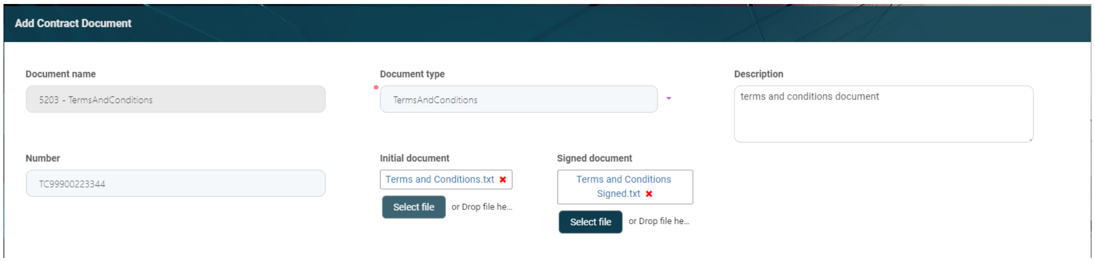
- **Draft** - the status of a newly created contract document record that was not yet authorized (marked as **Signed**). While in this status, you can edit some fields and you can delete the uploaded documents. Change its status to **Signed** after editing all the necessary details and uploading the `Signed Document` file. Change its status to **Canceled** if the document is not to be used within the contract.
- **Signed** - the status of a contract document record after being authorized. You cannot edit any of the record's details. You can change the status of the record to **Canceled**, if needed.
- **Canceled** - the status of a contract document after being canceled. Once **Signed**, a contract document should be canceled if the document is not to be used within the contract. You cannot edit any of the record's details. There is no further transition from this status. Contract document records created through integration (having their `Is manual` field = `False`) can't be canceled.

Adding Contract Documents

1. To insert a document to the contract, click the **Insert** button in the **Contract Document** section.
   The **Add Contract Document** page is displayed, with the **Document Name** field automatically completed with the name of the document.

   > **NOTE**
   >
   > You can't add documents to contracts in **Contract Closed** or **Contract Version Closed** statuses.

2. Fill in the following fields:



Add Contract Document

Document name: 5203 - TermsAndConditions

Document type: TermsAndConditions

Description: terms and conditions document

Number: TC99900223344

Initial document: Terms and Conditions.txt

Signed document: Terms and Conditions Signed.txt

- **Document type** - Select the type of the document.
- **Description** - Enter the description of the document.
- **Number** - Enter the number of the document, if the document has an external identifier number.
- **Initial document** - Insert the file containing the initial, unsigned document.
  Click the **Select file** button under this field, navigate to the desired file, select it and click **Open**. The selected file's name is displayed here. You can delete it by clicking the **x** next to the file name.
- **Signed Document** - Insert the file containing the final, signed document, if available.
  Click the **Select file** button under this field, navigate to the desired file, select it and click **Open**. The selected file's name is displayed here. You can delete it by clicking the **x** next to the file name.

  > **NOTE**
  >
  > To change the status of the contract document record to **Signed**, a signed document file must exist within the record.

3. Click the **Save and Close** button.

> **NOTE**
>
> You can also add, update, and approve contract document records through API integration, using the `AddUpdateContractDocument` and `ApproveContractDocument` endpoints. Read more details in the Core Banking Developer Guide.
>
> Contract document files added through integration cannot be deleted and those records can't be canceled!

Automatic Contract Document Validations

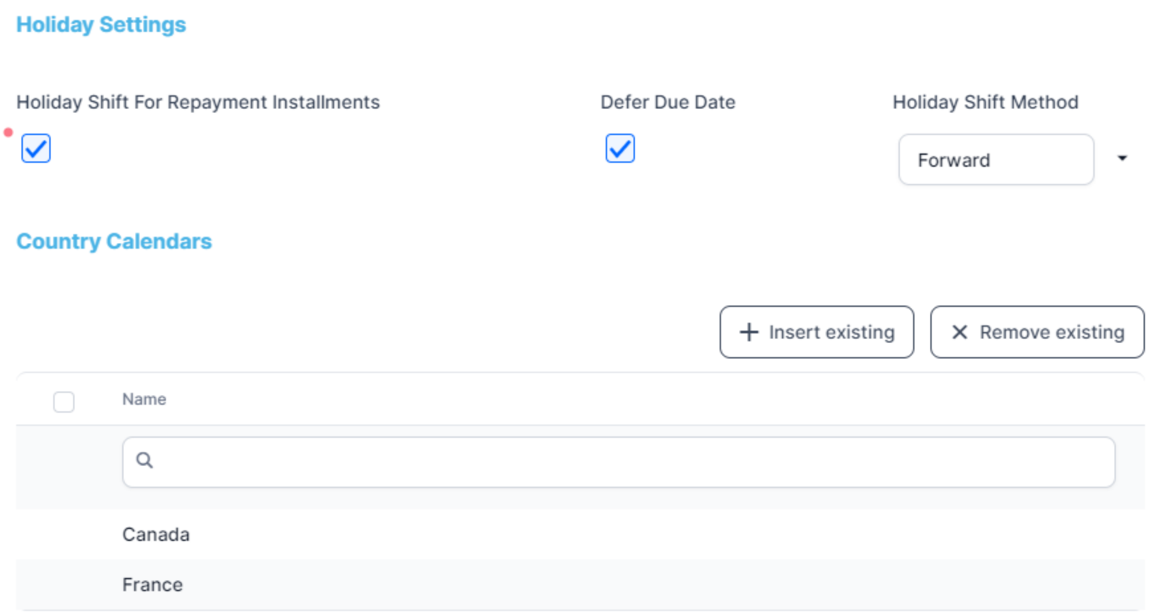
Core Banking performs the following validations for contract document records:

- The uploaded files' specifications follow FintechOS Platform's settings and restrictions regarding size and format, allowing .pdf,.doc,.docx,.els,.jpg,.jpeg,.xlsx,.dll,.ppt,.pptx,.txt,.png,.ttf,.xml file formats.
- If the contract document record is in **Signed** status, the record can't be deleted or updated, nor can its files be deleted.
- The name of the contract document record is unique, automatically generated by Core Banking. The naming convention is "the contract name + '-' + the selected document type + '-' + a unique document increment". For example, `5203 - Income Statement - 60`.
- The names of the selected files are not validated for uniqueness.

Treatment of Non Working Days for Schedule

Core Banking takes into consideration the defined non-working days when creating the repayment schedules. The calendar is the default holiday treatment for the loan contracts. In order to have flexibility on how to treat non-working days or public holidays, Core Banking uses a series of attributes and underlying logic. Thus, if the regular due date for loan repayment is defined as the 15th of every month and it falls on a non-working day according to the country calendar followed for that product, Core Banking can shift the due date backward or forward to the first working day, and then continue with the regular 15th of every month.

Manage the holiday settings during banking product definition, in the product's **Details** tab -> **Holiday Settings** and **Country Calendars** sections, as described in the Banking Product Factory user guide:



Holiday Settings

Holiday Shift For Repayment Installments ☑

Defer Due Date ☑

Holiday Shift Method: Forward

Country Calendars

□	Name
	Canada
	France

Furthermore, you also have a defer option that allows you to shift the due date without changing the amounts being collected.

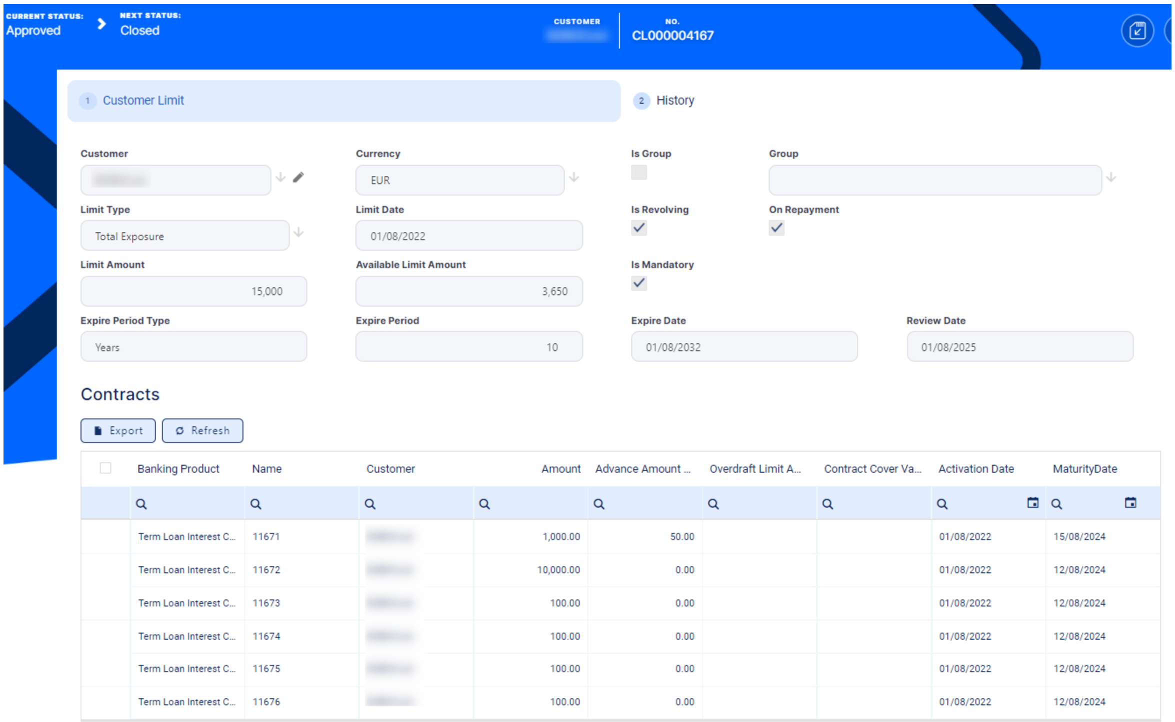
Working with Limits

Limits are used in order to have control over risk exposure. You may approve for a particular customer to take up to certain maximum amount across multiple products or you might want to approve types of products or even have a limit for a specific product alone. The granularity of control you can enforce is up to each financial institution’s way of driving the business. Limits capability supports financial institutions to properly manage the company exposure, giving control over their exposure in the market and alignment with their market strategy.

IMPORTANT!
Setting up limits is mandatory before creating loan contracts. Approved and disbursed loan contracts affect the available limit amounts, so make sure you've configured the limits settings according to your financial institution's needs.

The idea behind working with limits is that when you insert the loan contract, Core Banking performs a validation against the available limit and, if the amount exceeds the available limit, you can decide to increase the limit or decrease the loan.

Once you create a limit record, Core Banking automatically identifies it and links the relevant contracts to it, you can see them on the **Customer Limit** page's **Contracts** section.



CURRENT STATUS: Approved > NEXT STATUS: Closed

CUSTOMER [redacted] | NO. CL000004167

Customer: [redacted]	Currency: EUR	Is Group: □	Group:
Limit Type: Total Exposure	Limit Date: 01/08/2022	Is Revolving: ✓	On Repayment: ✓
Limit Amount: 15,000	Available Limit Amount: 3,650	Is Mandatory: ✓	
Expire Period Type: Years	Expire Period: 10	Expire Date: 01/08/2032	Review Date: 01/08/2025

Contracts

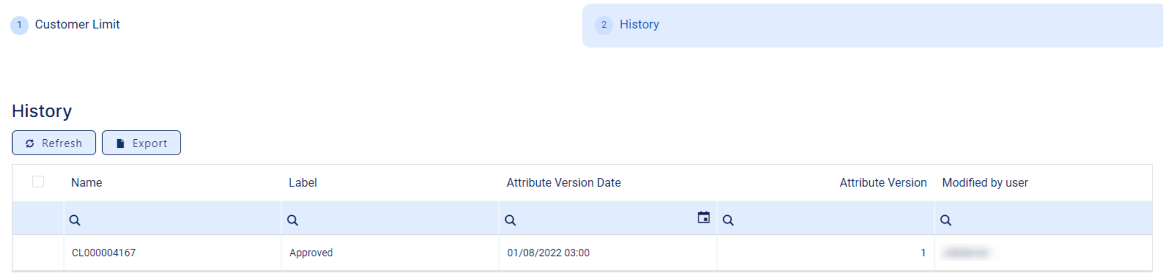
□	Banking Product	Name	Customer	Amount	Advance Amount ...	Overdraft Limit A...	Contract Cover Va...	Activation Date	MaturityDate
	Term Loan Interest C...	11671	[redacted]	1,000.00	50.00			01/08/2022	15/08/2024
	Term Loan Interest C...	11672	[redacted]	10,000.00	0.00			01/08/2022	12/08/2024
	Term Loan Interest C...	11673	[redacted]	100.00	0.00			01/08/2022	12/08/2024
	Term Loan Interest C...	11674	[redacted]	100.00	0.00			01/08/2022	12/08/2024
	Term Loan Interest C...	11675	[redacted]	100.00	0.00			01/08/2022	12/08/2024
	Term Loan Interest C...	11676	[redacted]	100.00	0.00			01/08/2022	12/08/2024

Some contracts can be linked to multiple limits if you have a complex limit structure approved: `Total Exposure` includes all contracts, then `Product Type Exposure` has also contracts that may be found under `Product Exposure`. You can only have one limit of each type of exposure valid in the system. Each exposure is limited in its own and by the higher level. If a customer that already has approved contracts becomes a member of a group, all its active limits are suspended. The same applies when excluding a customer from a group. Read more about group and customer exposure types.

Apart from the limit types available out-of-the-box, Core Banking allows you to add your own limit types based on roles associated to contract participants specific to your business, and use them throughout Core Banking with all the functionality of any other default limit type. Read more about managing limit types and role-based limits.

Similar to contracts, the limits can be revolving or not. For revolving limits, after performing a repayment, the amounts become available on the limit after closing the loan contract or after each repayment transaction.

As for contracts, the **History** tab allows you to you see when and who created each version of the limit and access the history version to spot the differences.



History

□	Name	Label	Attribute Version Date	Attribute Version	Modified by user
	CL000004167	Approved	01/08/2022 03:00	1	[redacted]

When versioning a limit, you can change certain details, while other can no longer be amended. Usually, you would change the amount and term/ review date for the limits.

You can have the limit in one currency and the underlying contracts in other currencies, unless you have product specific limits. Core Banking uses the available Exchange Rate to translate the amount into the limit currency and impact the usage and available figures.

Jobs, System Parameters, and Reports for Limits

Core Banking uses the following jobs to recalculate limits:

- `Start Of Day (SOD) Job` with the following services:
  - `Set Limit Available Amount Due To FX Change` - The service recalculates the available amount on limits depending on the currency's exchange rate on a specific day
  - `Set Contract Amount (Overdraft) Due To Plan Due Date Reached (Increase/ Decrease)` - The service increases/ decreases the limit amount on overdraft contracts that reached their reevaluation plan due date.
  - `Set Credit Facility Amount Due To Plan DueDate Reached (Increase/ Decrease)` - The service increases/

decreases the limit amount on credit facilities that reached their reevaluation plan due date.

- `End Of Day (EOD) Job` with the following services:
    - `Set Limit Expired` - The service sets the limits which are about to expire in the current day as Expired.
    - `Set Limit Available Amount Due To FX Changes` - The service sets the limit amounts available to all contracts due to exchange rates changes.

The system parameters used for limits management are listed below:

- `LimitMandatoryForIndividuals` - specifies whether Core Banking should validate the limits for individual customers or only validate them for legal entity customers.
- `DefaultIntervalLimitsReport` - represents the default number of months considered when running the reports within the **Limit Report** dashboard.
- `CreditFacilityLimitPercent` - represents the default limit of credit facility records.

Here are the reports that help you view the limits in Core Banking:

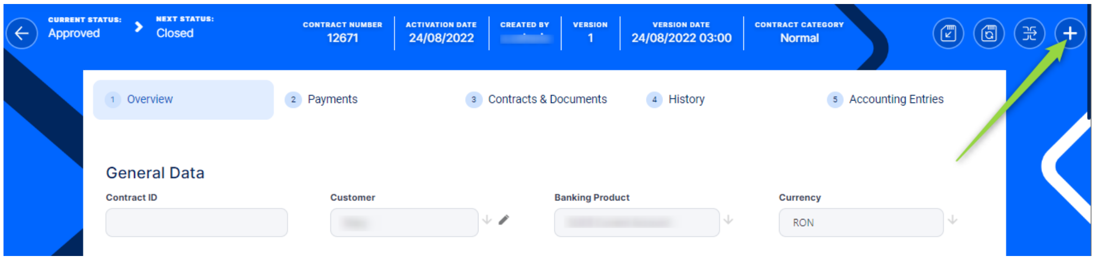
- **Customer Limits** - displays a list of the existing customer limit records, a list of the customer limit approval requests, and a button for adding new customer limits.
- **Limit Report** - displays different sections for expired limits, limits with available amount lower than 0, limits about to expire and limits to be reviewed, the latest two with the option to select the desired interval of dates.

Creating New Versions of Existing Loan Contracts

In Core Banking, the contracts are set up for versioning. Thus, if you want to update the details of an approved contract, then you must create a new version of the record.

To create a new version for a record with the **Approved** status, follow these steps:

1. While in the **Contract** page of the record selected for updates, click the **New Version** button.



CURRENT STATUS: Approved

NEXT STATUS: Closed

CONTRACT NUMBER: 12671

ACTIVATION DATE: 24/08/2022

CREATED BY: [redacted]

VERSION: 1

VERSION DATE: 24/08/2022 03:00

CONTRACT CATEGORY: Normal

General Data

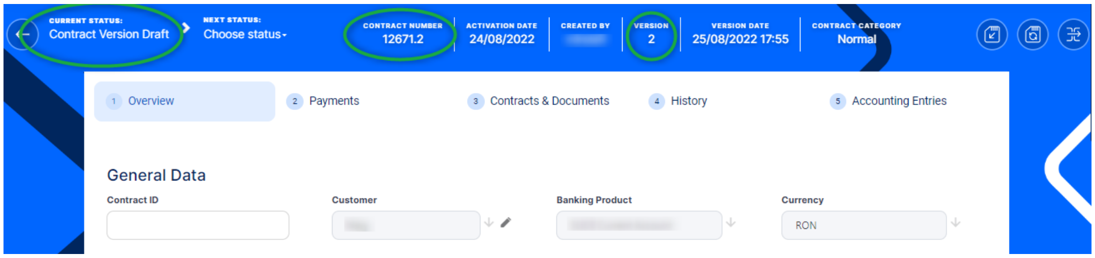
Contract ID:

Customer: [redacted]

Banking Product: [redacted]

Currency: RON

2. View the new version of the contract created by Core Banking, with **Contract Version Draft** status.



CURRENT STATUS: Contract Version Draft

NEXT STATUS: Choose status

CONTRACT NUMBER: 12671.2

ACTIVATION DATE: 24/08/2022

CREATED BY: [redacted]

VERSION: 2

VERSION DATE: 25/08/2022 17:55

CONTRACT CATEGORY: Normal

General Data

Contract ID:

Customer: [redacted]

Banking Product: [redacted]

Currency: RON

3. Edit the desired fields in the **Overview** tab. You can only edit a set of fields for contracts based on specific banking products.
4. Click the **Save and Reload** button.

If you approve the contract in **Contract Version Draft** status, then the original record transitions into the **Contract Version Closed** status and the secondary version becomes the **Approved** currently active contract record.

Read more details about versioning a record on the How to Version an Entity Record page.

NOTE

Core Banking automatically creates a new version of a contract when the payment schedule is modified.

When versioning a contract that has an imported repayment plan, the schedule recalculation is not mandatory. You can choose between recalculating and importing an updated repayment plan.

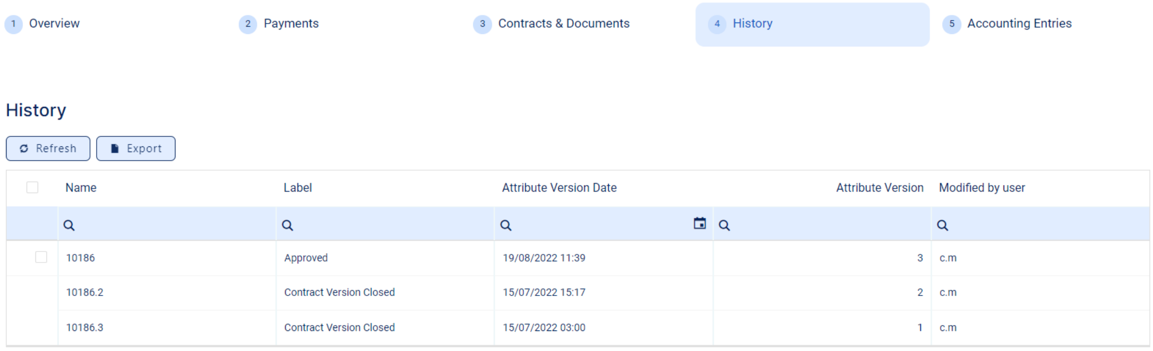
Possible Changes on New Loan Contract Versions

- The **Financed Amount** value can either be increased or decreased. The amount can be decreased with a number smaller than or equal to the **Available amount**. Financed amount can be increased up to the maximum value specified at banking product level.
- The **Current Account** attached to the loan contract can be changed to any other active account belonging to the customer.
- **Product Interest** can be changed to any other type set at banking product level.
- **Schedule Type** can be changed with any other type set at banking product level.
- **Contract Period** cannot exceed the maximum period set at banking product level.
- **Repayment Due Date** can be changed with any value between 1-31.
- **Grace Period** can be changed up to the maximum number of months set at banking product level.

After any of the above changes, in order to approve the new version of contract, the **Contract Repayment Schedule** must be recalculated.

Viewing a Contract's History

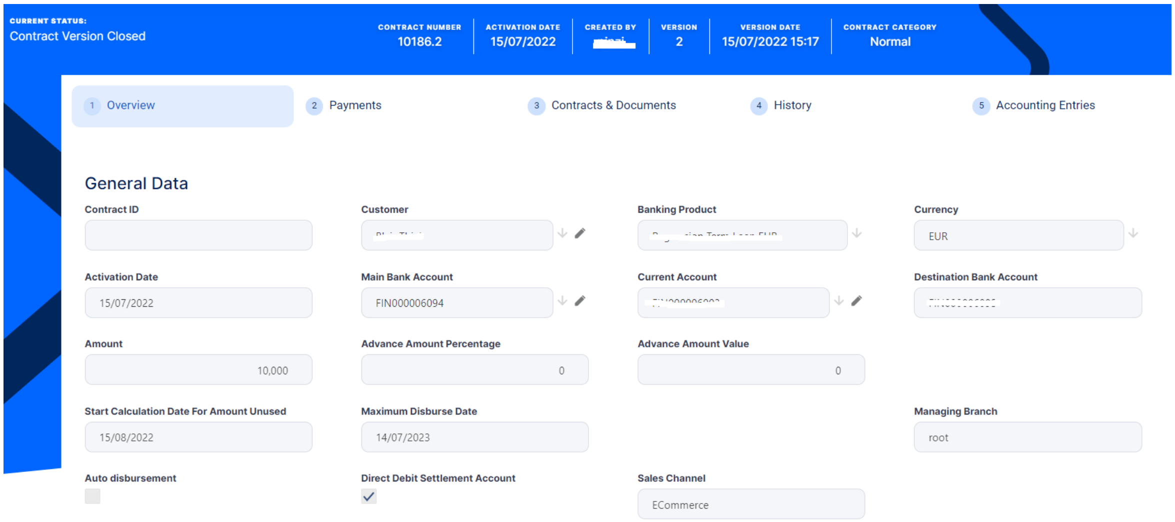
You can view the versions of the contract, along with workflow status and the user who modified the record, in the contract's **History** tab.



History

□	Name	Label	Attribute Version Date	Attribute Version	Modified by user
□	10186	Approved	19/08/2022 11:39	3	c.m
	10186.2	Contract Version Closed	15/07/2022 15:17	2	c.m
	10186.3	Contract Version Closed	15/07/2022 03:00	1	c.m

A contract can have only one **Draft** version, one **Current** version, but it may have multiple **History** versions, which are displayed in this section. Here you can track the contract's life cycle and view older versions that are no longer active. Double-click a version in the list to view its details.



CURRENT STATUS: Contract Version Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
10186.2	15/07/2022	[redacted]	2	15/07/2022 15:17	Normal

General Data

Contract ID:
Customer: [redacted]
Banking Product: [redacted]
Currency: EUR
Activation Date: 15/07/2022
Main Bank Account: FIN000006094
Current Account: [redacted]
Destination Bank Account: [redacted]
Amount: 10,000
Advance Amount Percentage: 0
Advance Amount Value: 0
Start Calculation Date For Amount Unused: 15/08/2022
Maximum Disburse Date: 14/07/2023
Managing Branch: root
Auto disbursement: □
Direct Debit Settlement Account: ☑
Sales Channel: ECommerce

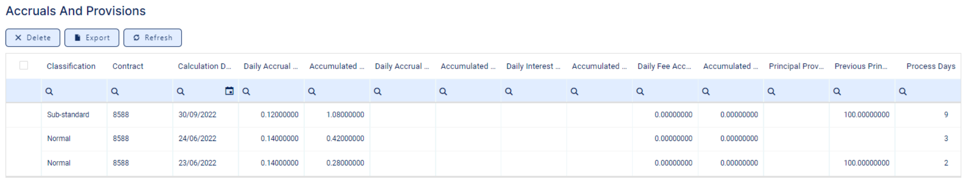
Viewing a Contract's Accounting Entries

You can view all the accounting entries, accounting totals, and accruals and provisions recorded for a contract within the **Accounting Entries** tab of the contract. These records are automatically generated by the system, after performing transactions for an approved contract.

View Accruals and Provisions

To view the records containing daily accrual and provisions, generated automatically by the system respecting the definition of the contract, product dimensions, system parameters and jobs, follow these steps:

1. Navigate to the contract's **Accounting Entries** tab > **Accruals and Provisions** section.



□	Classification	Contract	Calculation D...	Daily Accrual ...	Accumulated ...	Daily Accrual ...	Accumulated ...	Daily Interest ...	Accumulated ...	Daily Fee Acc...	Accumulated ...	Principal Prov...	Previous Prin...	Process Days
	Sub-standard	8588	30/09/2022	0.12000000	1.08000000					0.00000000	0.00000000		100.00000000	9
	Normal	8588	24/06/2022	0.14000000	0.42000000					0.00000000	0.00000000			3
	Normal	8588	23/06/2022	0.14000000	0.28000000					0.00000000	0.00000000		100.00000000	2

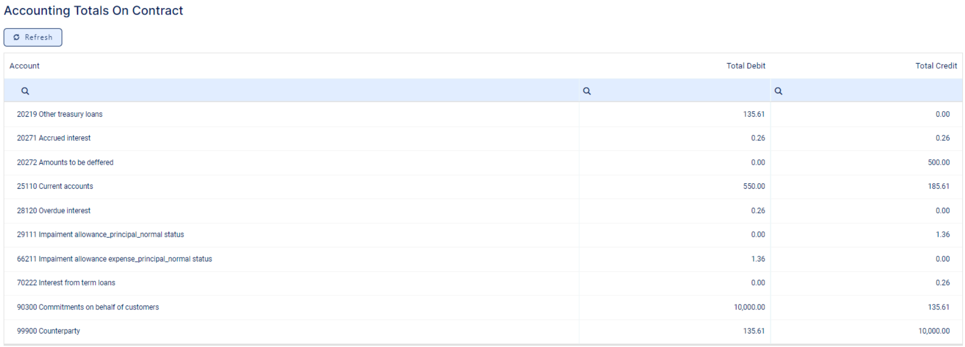
2. View the information displayed for each accrual and provision entry:

   - **Classification** - The classification of the accrual and provision entry. The classification is determined based on the records created in the **Loan Classification** menu. These records classify transactions based on the number of days since a repayment notification is overdue.
   - **Contract** - The number of the current contract.
   - **Calculation Date** - The date when the accrual and provision calculation was performed.
   - **Daily Accrual Interest** - The amount of interest accrued on that day.
   - **Accumulated Interest Accrual** - The total amount of interest accrued until that day.
   - **Daily Interest Provision** - The amount of interest provisioned on that day.
   - **Accumulated Interest Provision** - The total amount of interest provisioned until that day.
   - **Daily Fee Accrual** - The amount of fees and commissions accrued on that day.
   - **Accumulated Fee Accrual** - The total amount of fees and commissions accrued until that day.
   - **Principal Provision** - The amount of principal provisioned.
   - **Previous Principal Provision** - The previous amount of principal provisioned.
   - **Process Days** - The number of days processed.

View Accounting Totals on Contract

To view an overview of the total amounts specified in accounting records generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job, follow these steps:

1. Navigate to the contract's **Accounting Entries** tab > **Accounting Totals on Contract** section.



Accounting Totals On Contract

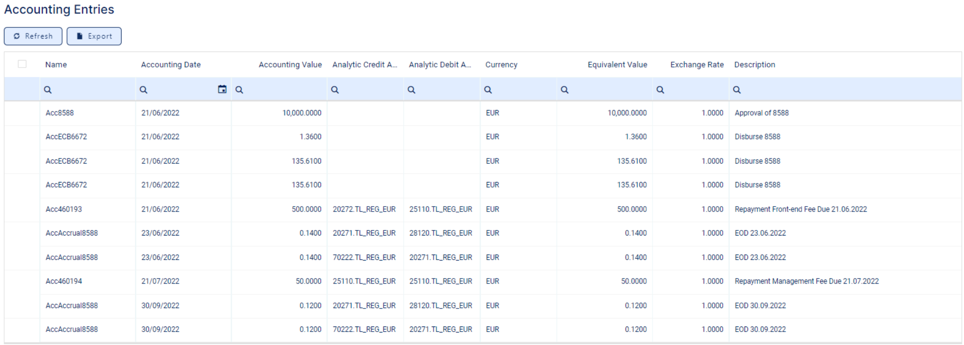
Account	Total Debit	Total Credit
20219 Other treasury loans	135.61	0.00
20271 Accrued interest	0.26	0.26
20272 Amounts to be deffered	0.00	500.00
25110 Current accounts	550.00	185.61
28120 Overdue interest	0.26	0.00
29111 Impaiment allowance_principal_normal status	0.00	1.36
66211 Impaiment allowance expense_principal_normal status	1.36	0.00
70222 Interest from term loans	0.00	0.26
90300 Commitments on behalf of customers	10,000.00	135.61
99900 Counterparty	135.61	10,000.00

2. View the information displayed for each total amount:
    - **Account** - The account where the operation was performed.
    - **Total Debit** - The amount which was debited from the account.
    - **Total Credit** - The amount which was credited to the account.

View Accounting Entries

To view the accounting for the transactions related to the loan contract generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job, follow these steps:

1. Navigate to the contract's **Accounting Entries** tab > **Accounting Entries** section.



Accounting Entries

	Name	Accounting Date	Accounting Value	Analytic Credit A...	Analytic Debit A...	Currency	Equivalent Value	Exchange Rate	Description
	Acc8588	21/06/2022	10,000.0000			EUR	10,000.0000	1.0000	Approval of 8588
	AccECB6672	21/06/2022	1.3600			EUR	1.3600	1.0000	Disburse 8588
	AccECB6672	21/06/2022	135.6100			EUR	135.6100	1.0000	Disburse 8588
	AccECB6672	21/06/2022	135.6100			EUR	135.6100	1.0000	Disburse 8588
	Acc460193	21/06/2022	500.0000	20272.TL_REG_EUR	25110.TL_REG_EUR	EUR	500.0000	1.0000	Repayment Front-end Fee Due 21.06.2022
	AccAccrual8588	23/06/2022	0.1400	20271.TL_REG_EUR	28120.TL_REG_EUR	EUR	0.1400	1.0000	EOD 23.06.2022
	AccAccrual8588	23/06/2022	0.1400	70222.TL_REG_EUR	20271.TL_REG_EUR	EUR	0.1400	1.0000	EOD 23.06.2022
	Acc460194	21/07/2022	50.0000	25110.TL_REG_EUR	25110.TL_REG_EUR	EUR	50.0000	1.0000	Repayment Management Fee Due 21.07.2022
	AccAccrual8588	30/09/2022	0.1200	20271.TL_REG_EUR	28120.TL_REG_EUR	EUR	0.1200	1.0000	EOD 30.09.2022
	AccAccrual8588	30/09/2022	0.1200	70222.TL_REG_EUR	20271.TL_REG_EUR	EUR	0.1200	1.0000	EOD 30.09.2022

2. View the information displayed for each accounting entry:
    - **Name** - The id of the accounting entry.
    - **Accounting Date** - The date when the entry was generated.
    - **Accounting Value** - The value of the accounting entry.
    - **Analytic Credit Account Code** - The code of the analytic credit account.
    - **Analytic Debit Account Code** - The code of the analytic debit account.
    - **Currency** - The currency of the accounting entry.
    - **Equivalent Value** - The equivalent value of the accounting entry expressed in the contract's currency.
    - **Exchange Rate** - The exchange rate between the accounting entry currency and the contract currency.
    - **Description** - The description of the accounting operation.

Deposits

A deposit account is a saving product that allows the customer to place funds for a period of time initially established and collect an interest for the funds. Core Banking enables you to create contracts based on deposit products and to manage such contracts. Read about the operations that you can perform for deposit contracts in the following pages:

Deposit Contract Life Cycle and States

The four-eyes principle is applicable for all contracts in FintechOSCore Banking, meaning that a record should be approved by a second financial institution employee, with higher authorization rights. This is enabled via approval task FintechOS Platform capabilities and thus it is also a financial institution's responsibility to set proper security roles and access rights to its users, in order to make sure that the same user can't insert and also authorize the same record.

A contract record has the following business workflow statuses:

- **Draft** - the status of a newly created contract record that was not yet sent for approval. While in this status, you can edit some fields, but you can't add events (payments) to it. Send the record to approval after editing all the necessary details.
- **Pending** - this is a system status applied to contracts sent for approval, but not yet approved. No updates are available in this system status.
- **Approved** - the status of a contract record after being authorized by a user with contract approval competencies. While in this status, you cannot edit the record's details, but you can add events to it within the **Payments** tab. If you need to alter the contract's details, create a new version based on the current contract.

  > **NOTE**
  >
  > Each event must also be approved by a user with contract approval competencies, otherwise, the transaction is not performed by the system. New contract approval is blocked by Core Banking if the customer has overdue days >= the value of the `DelayDaysForBlockNewContractApproval` parameter.

- **Closed** - the last status of a contract, after manually closing it or after creating a new version based on the current version. No updates are allowed on the record.
- **Canceled** - the status of a contract after manually canceling it straight from the **Draft** status. No updates are allowed on the record.

> **NOTE**
> Change the contract's status to **Approved** so that the customer can use the contract and in order to apply transactions to it.

Contract Versioning

Core Banking allows you to create new versions for an existing contract if you need to modify an existing approved contract. New versions are automatically created when the payment schedule is modified - that implies any increase/ decrease, change of costs, reschedule or payment holiday transactions.

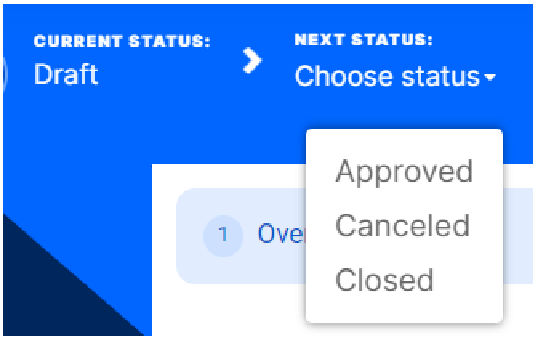
A contract version can have the following statuses:

- **Contract Version Draft** - the status of a newly created contract version record that was not yet sent for approval. While in this status, you can edit some fields, but you can't add events (payments) to it. Send the record to approval after editing all the necessary details.
- **Approved** - the status of a contract version record after being authorized by a user with contract approval competencies. While in this status, you cannot edit the record's details, but you can add events to it within the **Payments** tab.
- **Contract Version Closed** - the last status of a contract version, after manually closing it or after creating another new version based on the current version. No updates are allowed on the record.

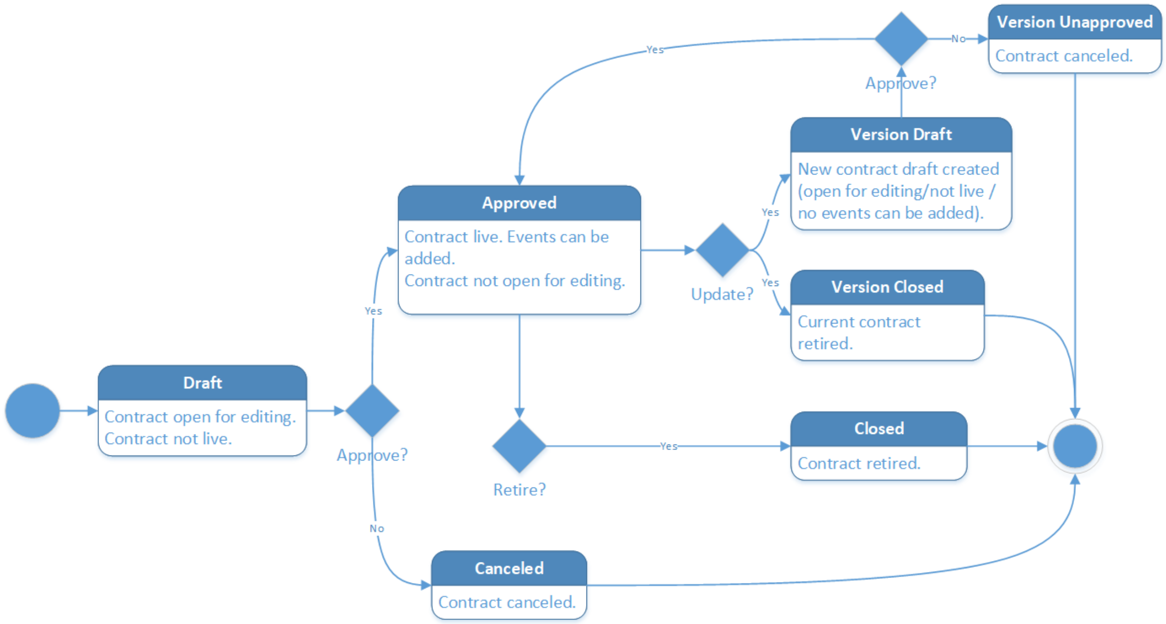
> **NOTE**
> All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event outside regular schedule is approved for that contract.

Changing Contract Statuses

You can manage a contract's life cycle by changing its status from the top right corner of the screen.



The contract status transitions are illustrated below:


Version Unapproved
Contract canceled.
No
Yes
Approve?
Version Draft
New contract draft created (open for editing/not live / no events can be added).
Approved
Contract live. Events can be added.
Contract not open for editing.
Yes
Update?
Yes
Version Closed
Current contract retired.
Yes
Draft
Contract open for editing.
Contract not live.
Approve?
Retire?
Yes
Closed
Contract retired.
No
Canceled
Contract canceled.

Note that:

- Once a record is live, its settings can no longer be modified.
- If you want to update the details of a live contract, you must create a new contract version.
- When you create a new contract version, the current version is retired and moved to history; no updates are allowed on the retired version.
- Every contract version starts in a draft state and must go through an approval process before going live.
- Only one version of a contract can be live at one time.

NOTE

As a best practice, new records or new versions of existing records created on a specific day should be approved on the same day.

Creating a Deposit Contract

A deposit account is a saving product that allows the customer to place funds for a period of time initially established and collect an interest for the funds.

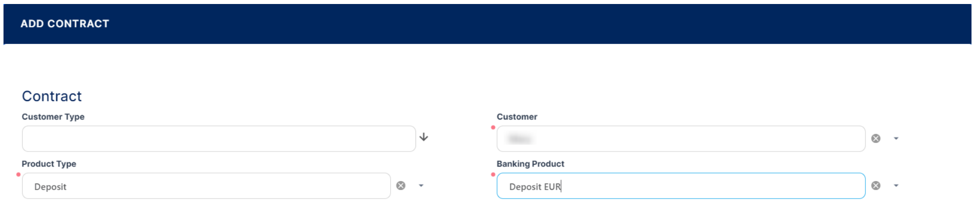
Before creating a deposit contract, make sure that:

- the customer is recorded in Core Banking,
- and a settlement account (a current account contract for the same customer) is set up for the desired currency.

To create a new contract:

1. Add Minimum Contract Data

1. Open the **Contracts** page as described in the Managing Contracts section.
2. Click the **Insert** button to display the **Add Contract** page is displayed, the initial page when you insert any type of contract.



ADD CONTRACT

Contract

Customer Type:

Customer: [redacted]

Product Type: Deposit

Banking Product: Deposit EUR

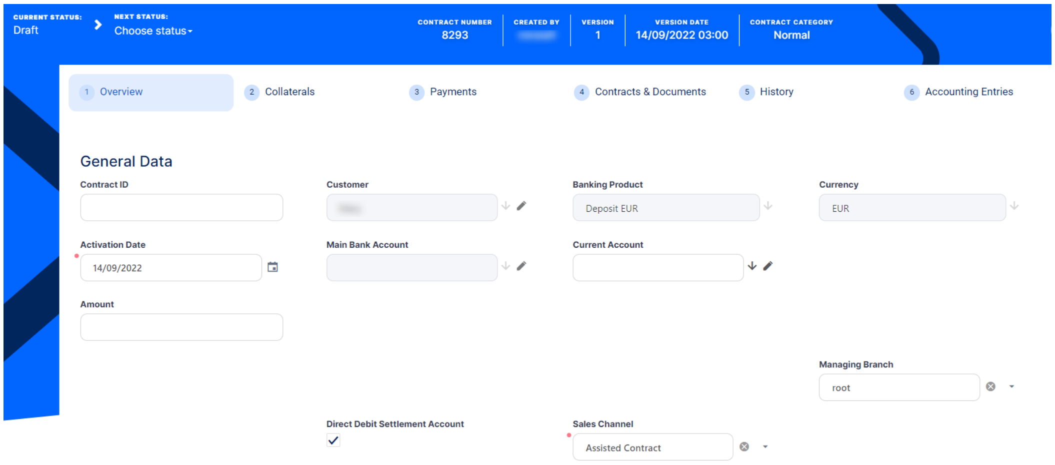
3. Fill in the following fields:

- **Customer Type** - Optionally, select the type of the customer for the contract, to filter the displayed customers in the next field.
- **Customer** - Select from the list the customer for whom you are creating a contract.
- **Product Type** - Select from the list the product type to filter the list of banking products accordingly.
- **Banking Product** - Select from the list the desired banking product.

> **NOTE**
> Be careful when choosing the values for the previously mentioned fields because you can't modify them after saving the contract!
> Make sure that you select `Deposit` in the Product Type field and a `Deposit` banking product in the Banking Product field.

4. Click the **Save and Reload** button.

Core Banking saves the contract in **Draft** status, with minimum default information, such as an auto-generated contract number, created by, version and version number. The previously provided details are kept on screen in the **General Data** section, but they are no longer available for update. The **Currency** has been updated from the banking product level.



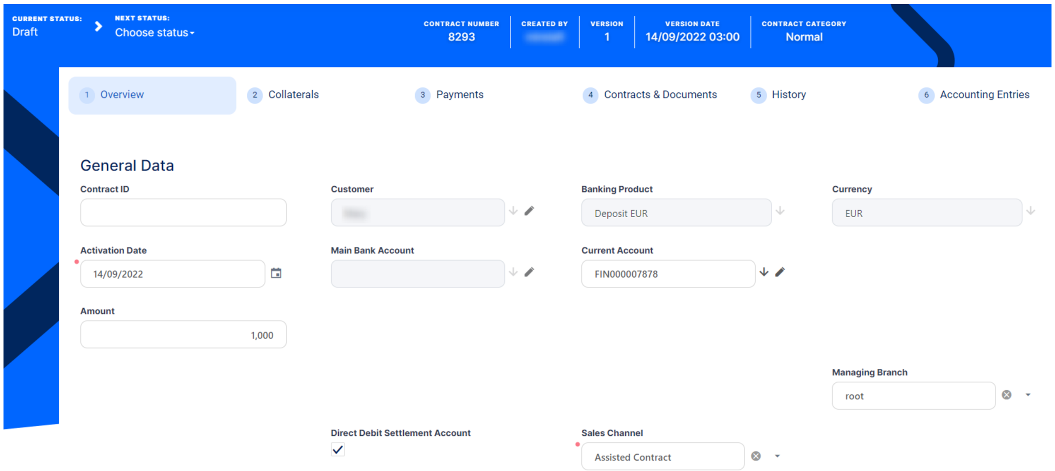
CURRENT STATUS: Draft
NEXT STATUS: Choose status
CONTRACT NUMBER 8293
CREATED BY [redacted]
VERSION 1
VERSION DATE 14/09/2022 03:00
CONTRACT CATEGORY Normal

General Data

Contract ID:
Customer: [redacted]
Banking Product: Deposit EUR
Currency: EUR
Activation Date: 14/09/2022
Main Bank Account:
Current Account:
Amount:
Managing Branch: root
Direct Debit Settlement Account: ☑
Sales Channel: Assisted Contract

Proceed to the next steps where the details about the contract are captured and validated against the underlying product, setting the basic elements for the creation of a contract such as current account, interest rate, participants, fees, and contract covenants, within the newly displayed **Overview** tab.

2. Add General Data to the Contract



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CONTRACT NUMBER	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
8293	[redacted]	1	14/09/2022 03:00	Normal

General Data

Contract ID:

Customer: [redacted]

Banking Product: Deposit EUR

Currency: EUR

Activation Date: 14/09/2022

Main Bank Account:

Current Account: FIN000007878

Amount: 1,000

Managing Branch: root

Direct Debit Settlement Account: ✓

Sales Channel: Assisted Contract

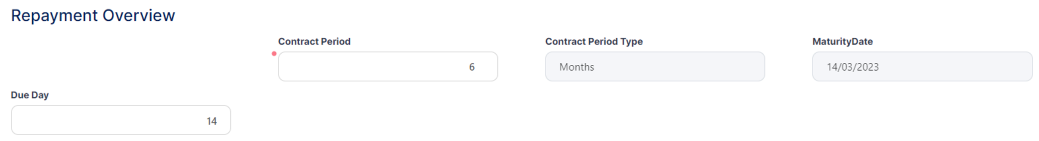
1. Fill in or modify the following information:
    - **Current Account** - Select a current account from the list of current accounts that have the same currency as the contract and belong to the customer. The selected current account is debited for constituting the deposit account. If there are not enough funds in the current account, a specific message is displayed when trying to approve the contract. The same account is used for transferring the interest if the banking product is without capitalization and, at maturity, it is automatically credited with the deposit amount if the deposit was opened without auto-rollover.
    - **Amount** - Enter the amount used to constitute the deposit. There is a validation when approving the contract, so the amount must be between the minimum and maximum values set on the banking product.
    - **Sales Channel** - Select the channel through which the contract is created.
2. Optionally, fill in or modify the following information:
    - **Contract ID** - Enter a contract ID other than the contract number generated automatically by Core Banking when you saved the contract.

- **Activation Date** - It is automatically completed with the system date.
- **Managing Branch** - This represents the branch of the organization where the contract was created. Suppose you work in a branch or credit center, and you need cases to be linked to a specific location so that you can properly allocate them for further actions. It is automatically completed at contract saving time, but you can select another branch from the list.
- **Direct Debit Settlement Account** - Select this checkbox if the direct debit settlement account functionality is turned on at the contract level. The value of the checkbox was set at the banking product level, but it can be modified at the contract level. The checkbox can be edited in all the statuses of a contract except `Version Closed`, `Closed`, and `Canceled`.

> **NOTE** The `Direct Debit Settlement Account` setting at the customer level takes precedence over the setting at the contract level when creating new contracts. For existing contracts, Core Banking applies the setting configured within the `CustomerToContractDirectDebitSettlementAcc` system parameter.

3. Enter Repayment Information for the Contract

In the **Repayment Overview** section you should enter the contract period and the first due date so that Core Banking can properly build the repayment schedule.



Repayment Overview

Contract Period: 6

Contract Period Type: Months

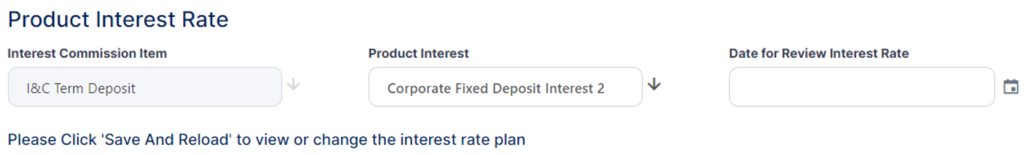
MaturityDate: 14/03/2023

Due Day: 14

1. Fill in or modify the following information specific to the contract's repayment schedule:
    - **Contract Period** - This field is automatically completed with the maximum contract period as it was defined at banking product level. Edit this value as long as it remains between the minimum and maximum limits set on the banking product. The contract period is used together with Contract Period Type and Periodicity Type.
    - **Contract Period Type** - This field is automatically completed with the contract period type as it was defined at banking product level. You can't edit this value.
    - **Maturity Date** - This field is automatically completed with the contract maturity date, calculated based on the values of the Contract Period, Contract Period Type, Due Date and Activation Date. You can't edit this value.
    - **Due Day** - Enter the exact day of month for repayment. If it is set to 31, then the system takes the last day of month. If the periodicity and the repayments are set to every 30 days, Core Banking defaults the due date based on the activation date.
2. Click the **Save and Reload** button.

4. Manage Product Interest Rate for the Contract

Enter the details about the Product Interest Rate applied to the deposit. Depending on the product definition again, you have a list of interest definitions that you can bring along to the contract.



Product Interest Rate

Interest Commission Item	Product Interest	Date for Review Interest Rate
I&C Term Deposit	Corporate Fixed Deposit Interest 2	

Please Click 'Save And Reload' to view or change the interest rate plan

To manage the product interest rate as it must be applied to this contract:

1. Fill in or modify the following fields:

- **Interest Commission Item** - This field is automatically completed with the interest & commission item defined at the product level, if only one item is found at the product level. If the selected product has more items, you must select one from the list.
- **Product Interest** - Select from the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Penalty interests cannot be selected here.
- **Date for Review Interest Rate** - Enter the date for reviewing the interest rate applicable for the remaining amount. This date must be between `Activation Date` and `Maturity Date`, otherwise, an error is displayed.
  For variable interest, this field is automatically completed with the `Reference Rate Date` + `Reference Interest Period` of the underlying interest definition, from the base type interest attached to variable interest. You can edit this field. For months where the date is overlapped, the last day of the month is used for the calculation.

2. If the underlying interest definition has referenced a variable interest rate, the details included other fields for you to complete:

- **Margin** – The margin applicable on top of the variable interest rate.
- **Reference Rate Date** – The date to be considered in order to arrive to the applicable rate for the underlying variable interest (EURIBOR as of 30th June 2022).
- **Reference Rate** – The underlying rate for the variable interest as captured in Core Banking for the date above.

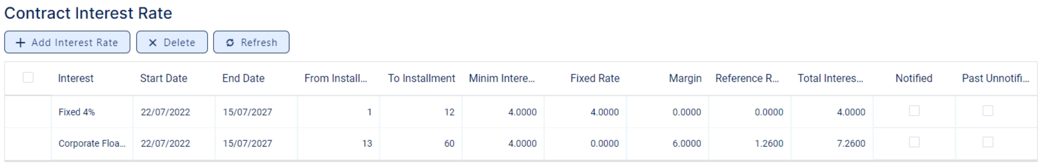
3. Click the **Save and Reload** button.

> **NOTE**
> Fill in any other mandatory fields from the **General Data** and **Repayment Overview** sections, otherwise you can't successfully save the contract.

5. Manage Contract Level Interest & Penalty Interest Rates

Define the information about the contract interest rate in a table format, in the section **Contract Interest Rate** section, which appears only after saving the selected product interest rates.

You can edit the table cells, so you can customize the interest rates selected at the product level, if the interest and commission list was defined as `negotiable`, to obtain the desired interest rates configuration at the contract level. You can also add or delete interest rates, using the **Add Interest Rate**, respectively the **Delete** buttons above the tables. Thus, the table enables you to work with multiple interest rates at the contract level.



□	Interest	Start Date	End Date	From Install...	To Installment	Minim Intere...	Fixed Rate	Margin	Reference R...	Total Interes...	Notified	Past Unnotifi...
	Fixed 4%	22/07/2022	15/07/2027	1	12	4.0000	4.0000	0.0000	0.0000	4.0000	□	□
	Corporate Floa...	22/07/2022	15/07/2027	13	60	4.0000	0.0000	6.0000	1.2600	7.2600	□	□

NOTE

The information disappears if you change the product interest, tenor, first due date, maturity date, contract period, or activation date. In this case, save the contract again to display the updated information.

To customize the information specific to each of the contract's **interest rates**:

1. In the **Contract Interest Rate** section, edit the existing information that was automatically completed based on your product interest rate selections:

- **Interest** - Automatically completed with the interest selected in the previous **Product Interest Rate** section. You can select from the drop-down list the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Penalty and overdraft interests cannot be selected here. Depending on the selected interest, other fields can be displayed to be filled in.
- **Start Date** - The interest's start date, automatically completed with the contract's activation date.

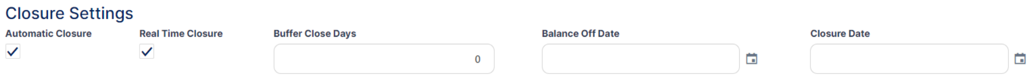
- **End Date** - The interest's end date, automatically completed with the contract's maturity date.
- **Minimum Amount** - The minimum amount of the contract for which the interest is applied.
- **Maximum Amount** - The maximum amount of the contract for which the interest is applied.
- **From Installment** - The first installment for which this interest is applied to the contract.
- **To Installment** - The last installment for which this interest is applied to the contract.
- **Minimum Interest Rate** - This read-only cell is automatically completed with the minimum interest rate applicable for the contract, defined at the banking product level.
- **Fixed Rate** - The fixed rate of the interest. You can only change it if the interest at the banking product level was marked as `Is Negociable`.
- **Margin** - This cell is automatically completed with the margin of the previously selected product interest. You can only change it if the interest at the banking product level was marked as `Is Negociable`. If the product interest was not selected, you can manually enter the margin.
- **Reference Rate** - This read-only cell is automatically completed with the interest type's definition's reference rate valid at the previously selected date.
- **Total Interest Rate** - This read-only cell is automatically completed with the calculated total interest rate of the previously selected product interest and any values entered for margin and reference rate. If the product interest was not selected or if the interest at the banking product level was marked as `Is Negociable`, you can manually enter the interest rate.
- **Past Unnotified** - This is read-only cell read-only checkbox. For contracts in `Version Draft` status, it shows whether there are days that already passed from the current month's not yet notified installment, days for which you can't change the interest rate.

2. After performing the desired changes, make sure that the interest rate (s) cover the entire tenor of the contract, from activation date until maturity date, and there are no overlapping intervals, otherwise an error prevents you from approving the contract.
3. Click the **Save and Reload** button.

6. Amend Closure Settings

If allowed from the product definition, you can amend the closure settings of the contract, the way Core Banking should behave once the deposit is liquidated and the contract can be closed. Most of the times this is not something that you have to access, but it adds extra flexibility at the contract level. This may prove useful if you suspect there may be reasons to keep a contract open for some time post recovering all amounts for instances when there may appear claims of funds (SEPA DD) or other similar cases.

The **Closure Settings** section is only displayed for contracts based on banking products having the `Closing Is Flexible = True` setting.



Closure Settings

Automatic Closure	Real Time Closure	Buffer Close Days	Balance Off Date	Closure Date
☑	☑	0		

To amend the closure settings brought from product level here at the contract level:

1. Fill in or modify the following fields:
   - **Automatic Closure** – If selected, Core Banking automatically closes the contract once all other conditions are met. This field is automatically completed with the value defined at the banking product level, but you can modify it.
     - Select this checkbox to instruct Core Banking to close the contract automatically when the available amount becomes zero and there are no further amounts to be recovered, and after the number of days set as buffer before closure pass and `Closure Date = Current Date`.

    - Deselect it to instruct Core Banking to keep the contract open, regardless of the fulfillment of its maturity and balance criteria, waiting to be manually closed by changing its status to `Closed`.

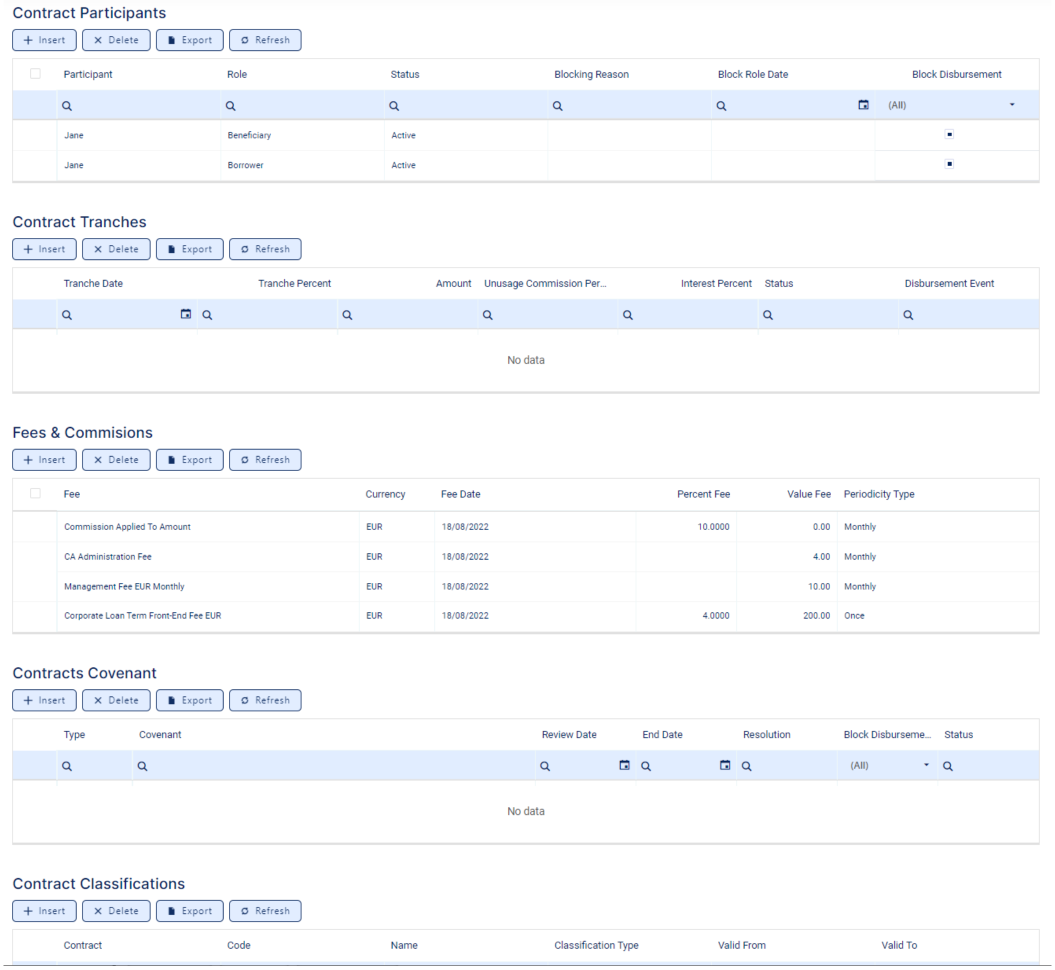
      > **NOTE**
      >
      > You can perform contracts events as specified in the **Allowed Transactions** section of the banking product, plus manual closure while the contract is pending closure. Performing any other transactions displays an error message.

  - **Real Time Closure** – If you select this checkbox, when the amounts become zero and the deposit is not a automatically renewed at maturity, the contract is closed automatically. If `Real Time Closure = True`, then `Buffer Close Days = 0` and `Automatic Closure = True`. For more details about the real-time closure, see Close Contracts RealTime(CB) Job.
  - **Buffer Close Days** - Enter the number of days used as buffer before automatically closing the contract. If `Buffer Close Days > 0`, then `Real Time Closure = False`. Core Banking waits the entered number of days after the contract's balances reach zero, and at the end of that day the contract is closed.
  - **Balance Off Date** – This is a system maintained field and it is populated with the date on top of which Core Banking adds the Buffer Close Days to arrive to the Closure Date.
  - **Closure Date** – This is a system maintained field and holds the date when the contract is closed. For automatic closure, the date is calculated by Core Banking as Balance Off Date + Buffer Close Days.

2. Click the **Save and Reload** button.

7. Check Other Details Pre-Filled Based on Product Definition

Once you defined the mandatory details, then saved and reloaded the contract, Core Banking updates some of the next sections on the page, based on product definitions:



Contract Participants

Participant	Role	Status	Blocking Reason	Block Role Date	Block Disbursement
Jane	Beneficiary	Active			■
Jane	Borrower	Active			■

Contract Tranches

Tranche Date	Tranche Percent	Amount	Unusage Commission Per...	Interest Percent	Status	Disbursement Event

No data

Fees & Commisions

Fee	Currency	Fee Date	Percent Fee	Value Fee	Periodicity Type
Commission Applied To Amount	EUR	18/08/2022	10.0000	0.00	Monthly
CA Administration Fee	EUR	18/08/2022		4.00	Monthly
Management Fee EUR Monthly	EUR	18/08/2022		10.00	Monthly
Corporate Loan Term Front-End Fee EUR	EUR	18/08/2022	4.0000	200.00	Once

Contracts Covenant

Type	Covenant	Review Date	End Date	Resolution	Block Disburseme...	Status

No data

Contract Classifications

Contract	Code	Name	Classification Type	Valid From	Valid To

Core Banking brings the **Contract Participants**, the Borrower being also Beneficiary of the funds. If needed, you can add other participants to the contract, like Guarantors, Co-Debtors, etc. There may be cases when some roles are mandatory for a product. Those are detailed in a separate section. If there is a mandatory role defined in the banking product definition, Core Banking displays an error on trying to approve the contract.

Another important section brought from the product definition is the **Fees & Commissions**. Depending on the system setup, you are allowed or not to amend fees and commissions in this section.

Contract Covenants section displays the covenants that applicants must abide by after approving the contract, configured at the product level. Such conventions are usually applicable for corporate clients that must meet certain requirements in order to continue to receive disbursements and not only: submit balance sheet every x months, have account turnover of at least x percent from average monthly turnover, provide other relevant documents from authorities. In this section, you can manage covenants for the contract. These covenants would need to be monitored procedurally; Core Banking doesn't have the logic in place to implement automated processes.

You can use the **Contract Classifications** section to capture various classifications that might be relevant for the financial institution for that contract at a moment in time. It is a placeholder for such details and there is no automated logic in place to update them. In implementation this can be used for other developments if required.

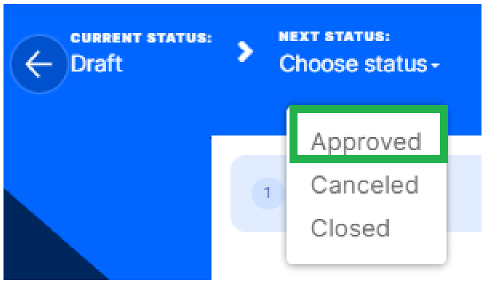
After defining the relevant details of the contract, proceed to **contract approval**.

Approving a Deposit

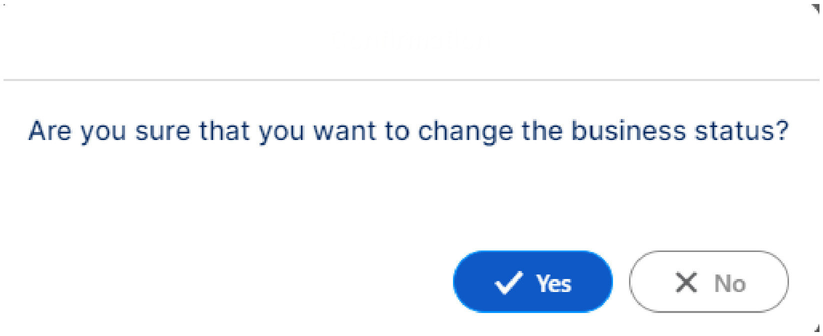
You can perform the approval either from a customer journey flow via API integration or from the Core Banking user interface.

After defining the relevant details of the contract, proceed to contract approval:

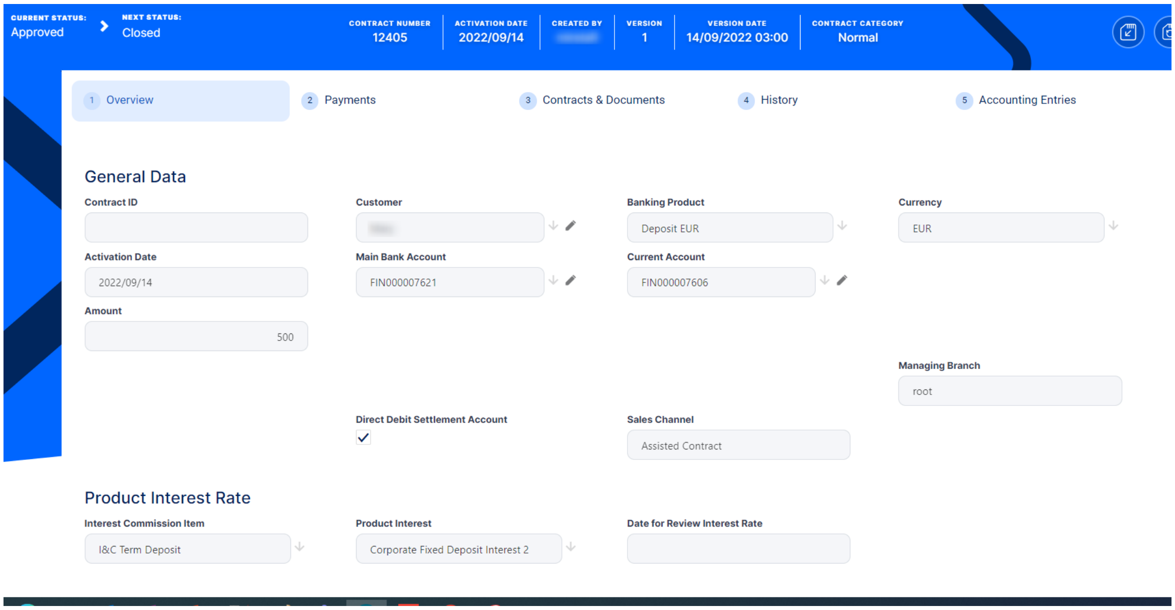
1. Select a contract in **Draft** (or **Version Draft**) status.
2. Change its status into **Approved**.



3. Click **Yes** to confirm your action.


Are you sure that you want to change the business status?

If Core Banking performs all the validations successfully, then the current status of the contract changes to **Approved**.



CURRENT STATUS: Approved
NEXT STATUS: Closed
CONTRACT NUMBER 12405
ACTIVATION DATE 2022/09/14
CREATED BY [redacted]
VERSION 1
VERSION DATE 14/09/2022 03:00
CONTRACT CATEGORY Normal

General Data

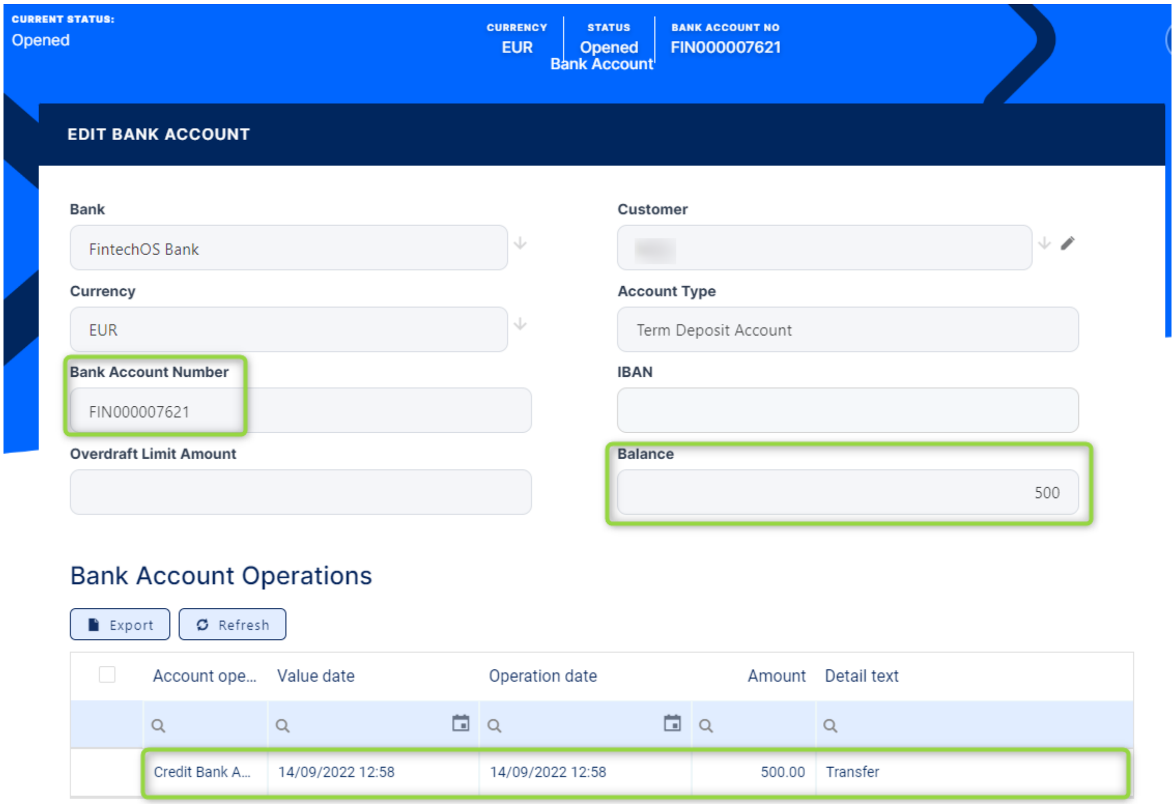
Contract ID:
Customer: [redacted]
Banking Product: Deposit EUR
Currency: EUR
Activation Date: 2022/09/14
Main Bank Account: FIN000007621
Current Account: FIN000007606
Amount: 500
Managing Branch: root
Direct Debit Settlement Account: ✓
Sales Channel: Assisted Contract

Product Interest Rate

Interest Commission Item: I&C Term Deposit
Product Interest: Corporate Fixed Deposit Interest 2
Date for Review Interest Rate:

Automated Actions After Contract Approval

The **Main Bank Account** is created automatically for the bank defined as Main within the **Core Banking Operational > Bank** menu. In order for Core Banking to generate an account number, a rule must be defined during the implementation phase (example: branch code + incremental sequence number). The amount of the deposit is automatically transferred from the specified current account of the same customer into this new account associated with the deposit contract. You can see the details of the account and its balance clicking the pencil icon next to the **Main Bank Account** field in the contract's **Overview** tab.



CURRENT STATUS: Opened

CURRENCY: EUR | STATUS: Opened | BANK ACCOUNT NO: FIN000007621

Bank Account

EDIT BANK ACCOUNT

Bank: FintechOS Bank

Customer: [redacted]

Currency: EUR

Account Type: Term Deposit Account

Bank Account Number: FIN000007621

IBAN:

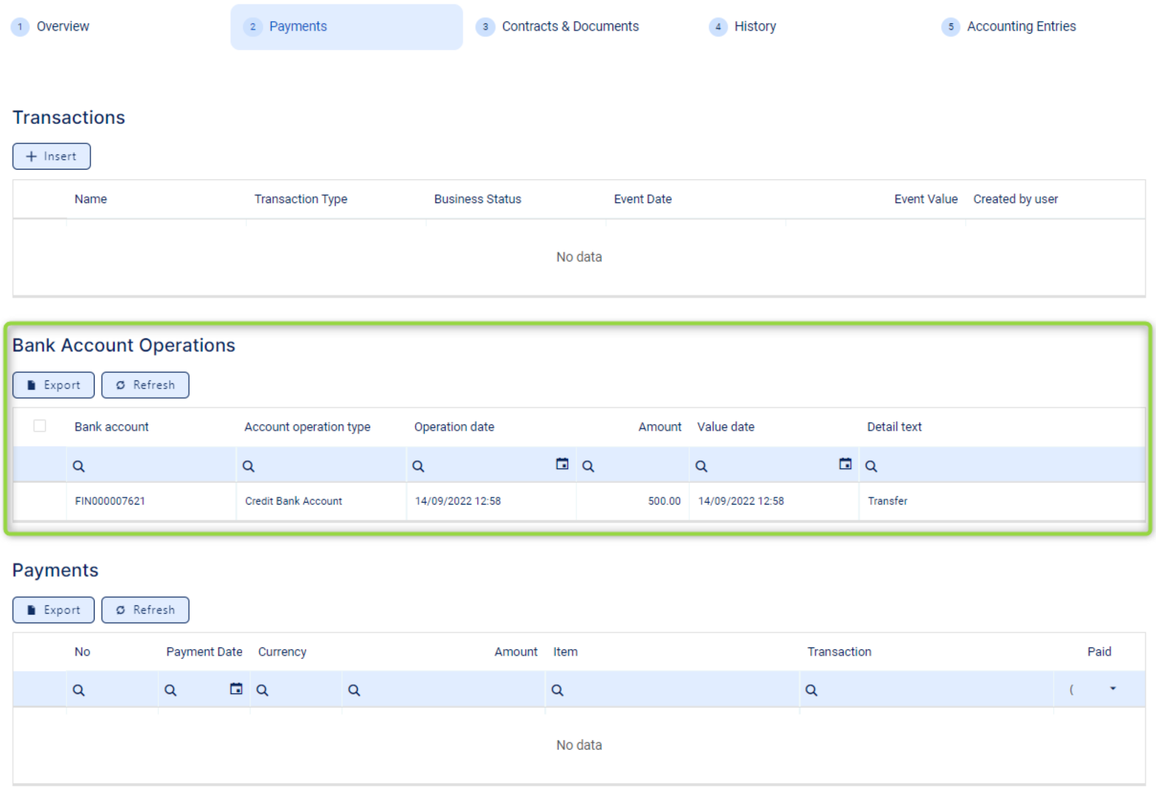
Overdraft Limit Amount:

Balance: 500

Bank Account Operations

Account ope...	Value date	Operation date	Amount	Detail text
Credit Bank A...	14/09/2022 12:58	14/09/2022 12:58	500.00	Transfer

On the **Payments** tab you can see the bank account operation that was generated following the approval of the deposit contract,.



Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
No data					

Bank Account Operations

Bank account	Account operation type	Operation date	Amount	Value date	Detail text
FIN000007621	Credit Bank Account	14/09/2022 12:58	500.00	14/09/2022 12:58	Transfer

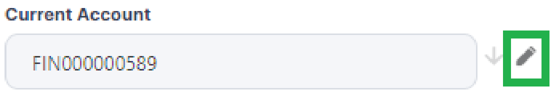
Payments

No	Payment Date	Currency	Amount	Item	Transaction	Paid
No data						

NOTE

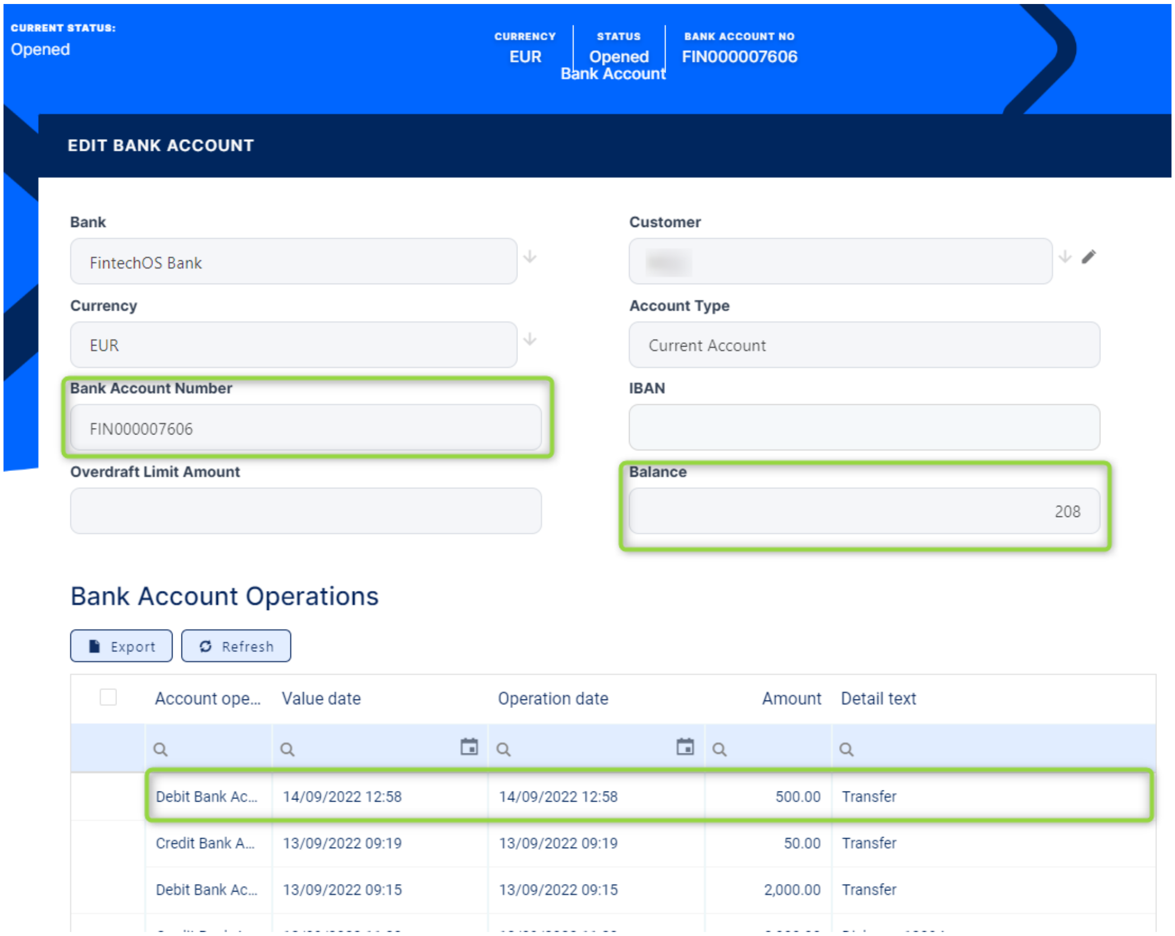
The tab **Payments** has no information to display while the contract is in the **Draft** status. You must approve the contract to perform any contract event. Meaningful payment information is displayed in this tab only after performing transactions on the contract.

You can also check the **Current Account** transaction. On the contract's **Overview** tab, click on the pencil next to the `Current Account`:



Current Account: FIN000000589

In the displayed window, view the details of the current account from where the funds were transferred and its new balance.



CURRENT STATUS: Opened

CURRENCY: EUR

STATUS: Opened Bank Account

BANK ACCOUNT NO: FIN000007606

EDIT BANK ACCOUNT

Bank: FintechOS Bank

Customer: [redacted]

Currency: EUR

Account Type: Current Account

Bank Account Number: FIN000007606

IBAN:

Overdraft Limit Amount:

Balance: 208

Bank Account Operations

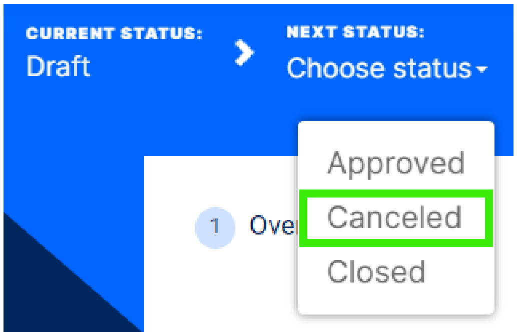
□	Account ope...	Value date	Operation date	Amount	Detail text
	Debit Bank Ac...	14/09/2022 12:58	14/09/2022 12:58	500.00	Transfer
	Credit Bank A...	13/09/2022 09:19	13/09/2022 09:19	50.00	Transfer
	Debit Bank Ac...	13/09/2022 09:15	13/09/2022 09:15	2,000.00	Transfer

Rejecting a Deposit

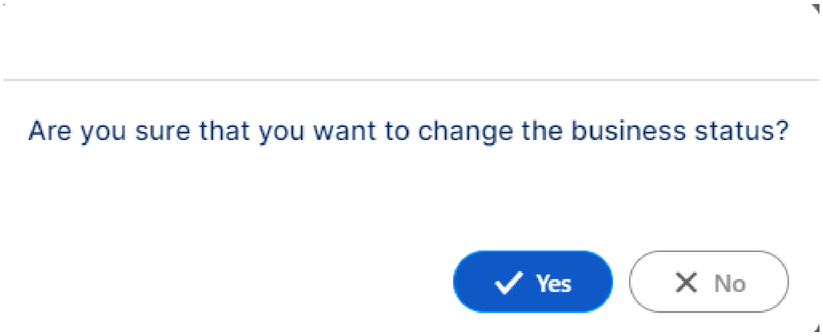
You can reject a deposit, canceling it, when the deal with the customer drops. You can perform the cancellation either from a customer journey flow via API integration or from the Core Banking user interface.

Follow these steps to cancel the contract:

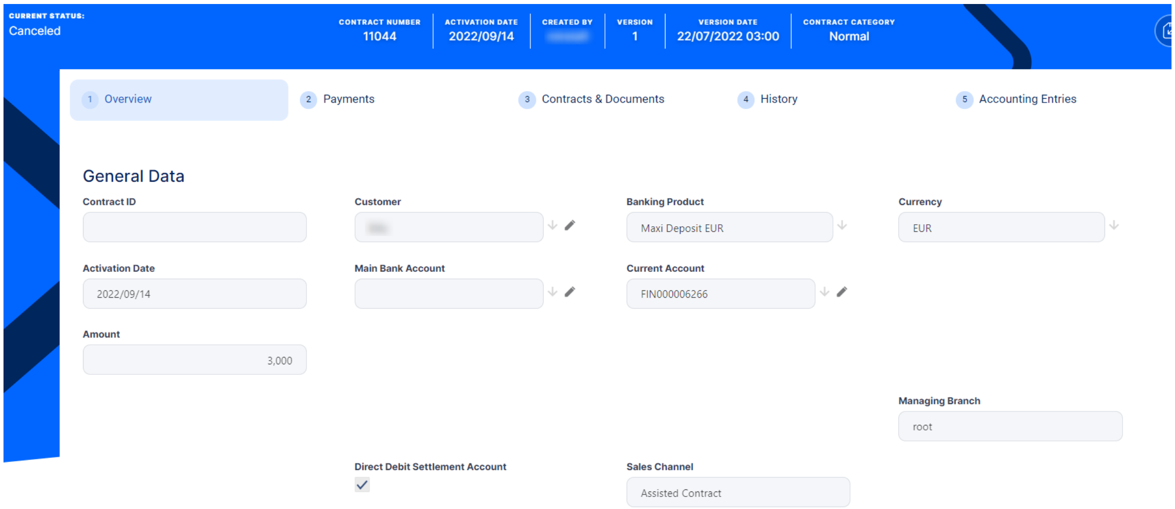
1. Select a contract in **Draft** (or **Version Draft**) status.
2. Change its status into **Canceled**.



3. Click **Yes** to confirm your action.


Are you sure that you want to change the business status?

If Core Banking performs all the validations successfully, then the current status of the contract changes to **Canceled**.


CURRENT STATUS: Canceled

CONTRACT NUMBER: 11044
ACTIVATION DATE: 2022/09/14
CREATED BY: [redacted]
VERSION: 1
VERSION DATE: 22/07/2022 03:00
CONTRACT CATEGORY: Normal

General Data

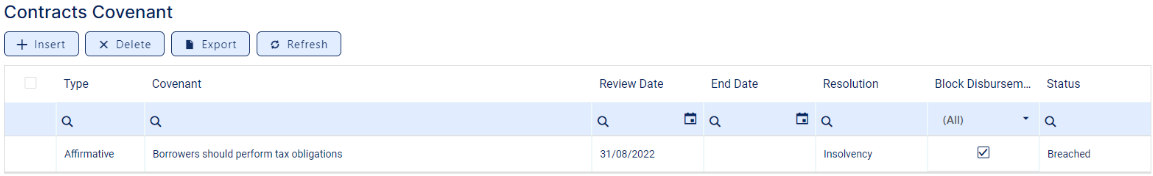
Contract ID:
Customer: [redacted]
Banking Product: Maxi Deposit EUR
Currency: EUR
Activation Date: 2022/09/14
Main Bank Account:
Current Account: FIN000006266
Amount: 3,000
Managing Branch: root
Direct Debit Settlement Account: ☑
Sales Channel: Assisted Contract

NOTE
You can't further use a canceled contract. Create a new contract, if you need to.

Working with Covenants

The covenants are conventions that applicants must abide by after the approval of a contract. Such conventions are usually applicable for corporate clients that must meet certain requirements in order to continue to receive disbursements and not only: submit balance sheet every x months, have account turnover of at least x percent from average monthly turnover, provide other relevant documents from authorities. Covenants are configured at the product level.

While creating a contract, Core Banking brings the covenants to the contract level, in the **Contract Covenant** section of the **Overview** tab. There you also add, delete or export covenants for the contract.



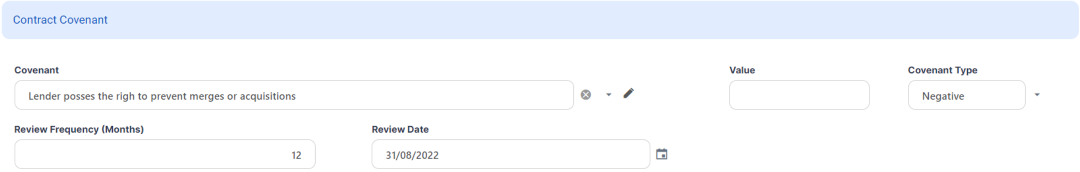
Contracts Covenant

□	Type	Covenant	Review Date	End Date	Resolution	Block Disbursem...	Status
						(All)	
	Affirmative	Borrowers should perform tax obligations	31/08/2022		Insolvency	☑	Breached

Upon adding a covenant to a contract, you must activate it. After approving the contract, when it reaches the covenant's review date, you must perform the review of the covenant. If the conditions are not met, then you can mark the covenant for blocking further disbursements of the contract. Further implementation is needed if you want automatic processes to take care of contracts with breached covenants.

Adding & Activating Covenants

1. To add a covenant to a contract, click **Insert** in the **Contracts Covenant** section of a contract in `Draft` or `Version Draft` status.
2. On the newly displayed **Contract Covenant** page, fill in the following fields:



Contract Covenant

Covenant: Lender posses the righ to prevent merges or acquisitions

Value:

Covenant Type: Negative

Review Frequency (Months): 12

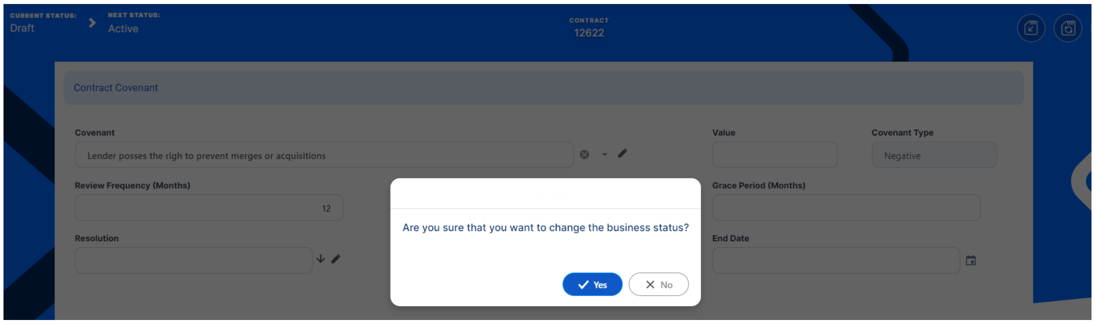
Review Date: 31/08/2022

- **Covenant** - Select the desired covenant from the list of possible values:
  - `Borrowers should perform tax obligations`: the lenders expect the borrowers to perform their tax obligations to both the business and towards their employees. This covenant is of type affirmative.
  - `Lender can monitor borrower's current ratio`: the lender may continuously monitor the borrower's current ratio to ensure it stays relatively attractive and promising. This covenant is of type financial.
  - `Lender posses the right to prevent merges or acquisitions`: a clear stipulation that the lender possesses the right to prevent merges of acquisitions without proper notification or full knowledge of the process. This covenant is of type negative.

    Core Banking automatically fills in the covenant type.
- **Value** - Enter the numeric value of the covenant, if applicable.
- **Review Frequency (Months)** - Enter the number of months after which the covenant has to be reviewed.
- **Review Date** - Enter the date when the covenant has to be reviewed.

3. Click the **Save and Reload** button. The covenant is displayed in the list of covenants in the **Contracts Covenant** section, in `Draft` status.
4. Activate the covenant record by changing its status to **Active** and confirming

your action.



CURRENT STATUS: Draft

NEXT STATUS: Active

CONTRACT 12622

Contract Covenant

Covenant: Lender posses the righ to prevent merges or acquisitions

Value:

Covenant Type: Negative

Review Frequency (Months): 12

Grace Period (Months):

Resolution:

End Date:

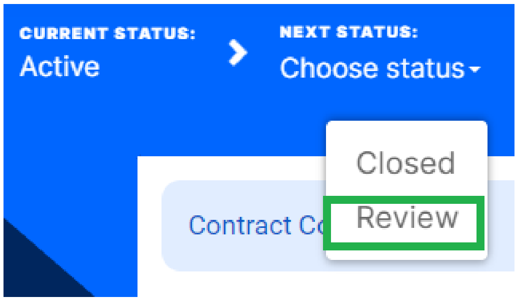
Are you sure that you want to change the business status?

5. Click the **Save and Close** button. The covenant's status changes to `Active`.

Reviewing Covenants

Core Banking allows you to add details about the process of reviewing a covenant for an approved contract.

1. To review an active covenant for an approved contract, double-click the desired covenant in the **Contracts Covenant** section of the contract's Overview tab.
2. On the newly displayed **Contract Covenant** page, change the covenant's status to **Review** and confirm your action.

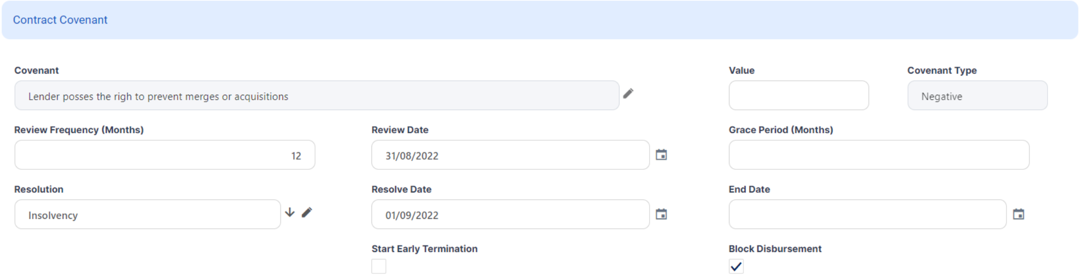


CURRENT STATUS: Active

NEXT STATUS: Choose status

The covenant's status changes to Review and the page reloads with new fields.

3. Fill in the following fields with the results of the covenant review process:



Contract Covenant

Covenant: Lender posses the righ to prevent merges or acquisitions

Value:

Covenant Type: Negative

Review Frequency (Months): 12

Review Date: 31/08/2022

Grace Period (Months):

Resolution: Insolvency

Resolve Date: 01/09/2022

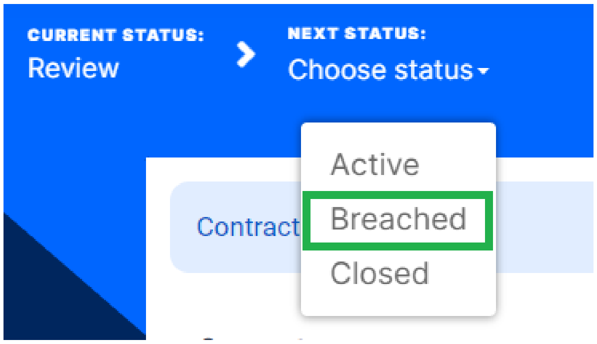
End Date:

Start Early Termination: □

Block Disbursement: ☑

- **Grace Period (Months)** - Enter a grace period in month for the fulfillment of the covenant, if needed.
- **Resolution** - Select from the list the actual resolution of the covenant. Add a new covenant resolution, if you can't find a match in the list.
- **Resolve Date** - Enter the date when the covenant is considered as resolved.
- **End Date** - Enter an end date for the covenant, if needed.
- **Start Early Termination** - If the covenant's terms are not met, then you can check this field to mark the covenant for contract early termination.
- **Block Disbursement** - If the covenant's terms are not met, then you can check this field to mark the covenant for blocking further disbursements of the contract.

4. Click the **Save and Reload** button.
5. If the covenant's terms are met, change the covenant's status to **Active** and confirm your action.
   If the covenant's terms are not met, change the covenant's status to **Breached** and confirm your action.



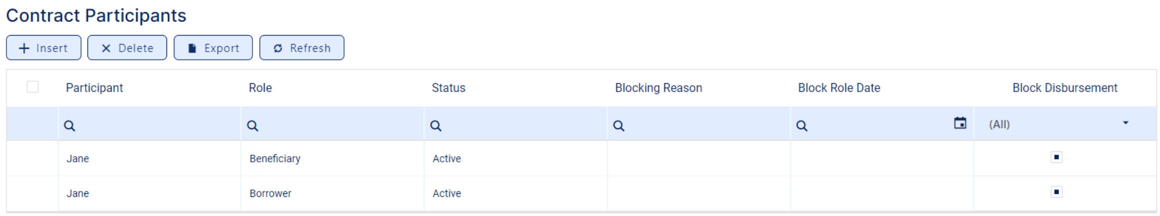
6. Click the **Save and Close** button. The covenant's status changes to `Active` or `Breached`, according to your previous choice.

> **NOTE** Further implementations are needed in order for Core Banking to manage contracts with breached covenants if you need actions enforced at the contract level.

Working with Participants

The participants to a contract are those legal or individual persons who have a role to play during the life-cycle of the contract. They can be the person who borrows the funds, the actual beneficiary of the funds, the company administrator of the legal person, a notary, and so on. Another example are the agents, brokers, insurers, or merchants who participate in contracts as third-party entities, and they may get commissions according to third-party agreements. They must be recorded in contracts as contract participant with the specified role in order to qualify for the commissions stated in the agreement pricing records added to an agreement.

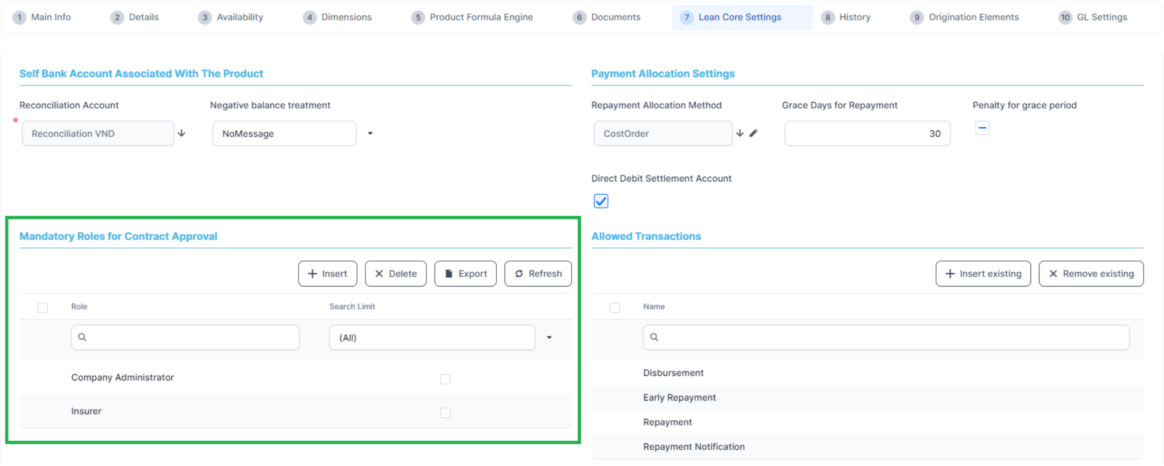
While creating a contract, Core Banking automatically populates the **Contract Participants** section within the **Overview** tab of the contract with the customer's information as both Borrower and Beneficiary of the funds, for loan contracts. If the customer is a legal entity, all the company’s already entered legal representatives such as administrators, affiliates, owners, or other key contact persons are displayed in this list. In the **Contract Participants** section, you can add other participants to the contract, like Guarantors, Co-Debtors, etc, even after approval, delete, block, or export customers who participate in a contract.



Contract Participants

Participant	Role	Status	Blocking Reason	Block Role Date	Block Disbursement
					(All)
Jane	Beneficiary	Active			■
Jane	Borrower	Active			■

There may be cases when some roles are mandatory for a product. If there is a mandatory role defined in the banking product definition, Core Banking displays an error on trying to approve the contract without a customer mentioned in the contract with that specific role.



Self Bank Account Associated With The Product

Reconciliation Account: Reconciliation VND

Negative balance treatment: NoMessage

Payment Allocation Settings

Repayment Allocation Method: CostOrder

Grace Days for Repayment: 30

Penalty for grace period: ☐

Direct Debit Settlement Account: ☑

Mandatory Roles for Contract Approval

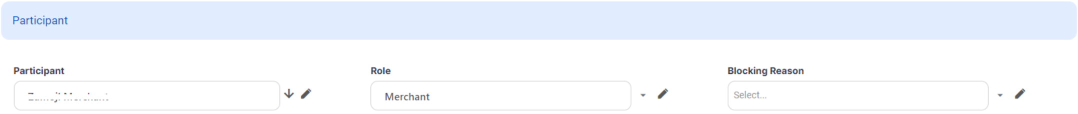
☐	Role	Search Limit
		(All)
	Company Administrator	☐
	Insurer	☐

Allowed Transactions

☐	Name
	Disbursement
	Early Repayment
	Repayment
	Repayment Notification

Adding Participants

1. To add a participant, click **Insert** in the **Contract Participants** section of contract in `Draft, Version Draft`, or `Approved` status.
2. On the newly displayed **Participant** page, fill in the following fields:



Participant

Participant	Role	Blocking Reason
[redacted]	Merchant	Select...

- **Participant** - Select from the list the name of the customer who can access the contract.
- **Role** - Select from the list the role in the contract of the previously selected customer.
- **Blocking Reason** - Leave this empty if you don't want to limit the customer's access to the contract.

3. Click the **Save and Close** button.

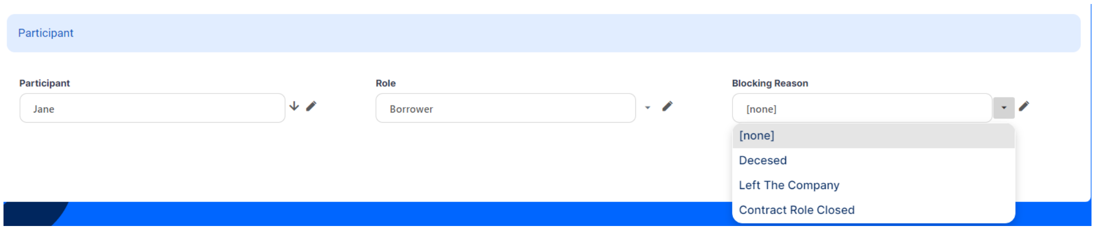
IMPORTANT!

For legal entity customers, add the participant with the `Company Administrator` role, otherwise, the loan contracts cannot be approved. This is not the case for current account contracts.

Blocking Participants

If you need to block an existing participant's access to the contract for various reasons, such as the person left the company who is the beneficiary of the contract, follow these steps:

1. Double-click an existing participant in the **Contract Participants** section of contract in `Draft, Version Draft`, or `Approved` status.
2. On the displayed **Participant** page, in the **Blocking Reason** field, choose the reason for blocking the selected participant from accessing the contract.



Participant

Participant: Jane

Role: Borrower

Blocking Reason: [none]

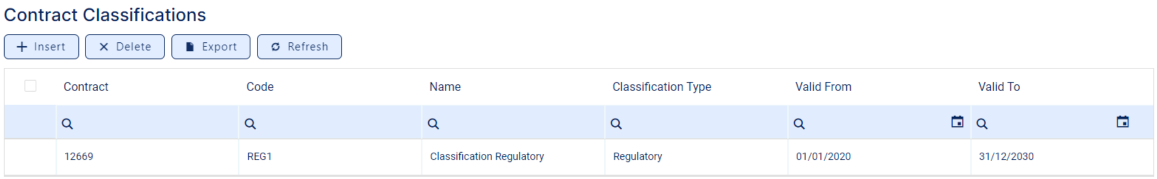
3. In the **Block Role Date** field, select the starting date for blocking the participant's access to the contract.
4. Select the **Block Disbursement** checkbox to instruct Core Banking to stop disbursements on the contract, if needed.
5. Click the **Save and Close** button.

Working with Contract Classification

Financial institutions may classify their contracts for organization purposes, or to mark some contracts as to belonging to a specific category or another. Core Banking brings the classifications defined at the product level to the contract level when creating a contract.

> **NOTE**
> For information about the **automatic loan classification** performed by Core Banking based on DPD, please read the "Loan Classification" on page 44 topic.

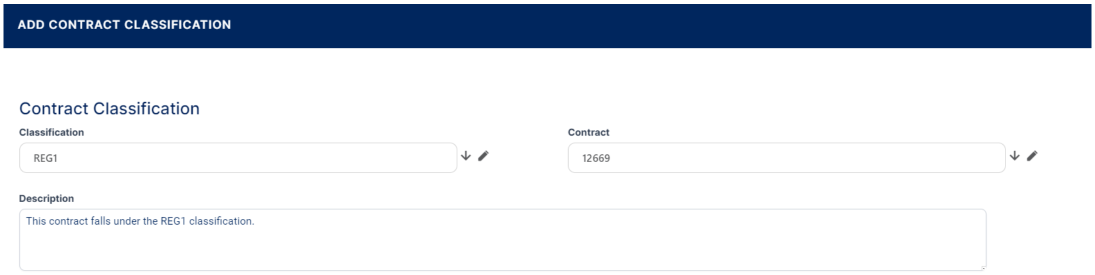
You can manage a contract's classification within the **Contract Classifications** section on the **Overview** tab. Here you can insert, delete or export classifications for the contract.



□	Contract	Code	Name	Classification Type	Valid From	Valid To
	12669	REG1	Classification Regulatory	Regulatory	01/01/2020	31/12/2030

Adding Classifications to a Contract

1. To add a classification to a contract, click **Insert** in the **Contract Classifications** section of a contract.
2. On the newly displayed **Add Contract Classification** page, fill in the following fields:



Classification: REG1

Contract: 12669

Description: This contract falls under the REG1 classification.

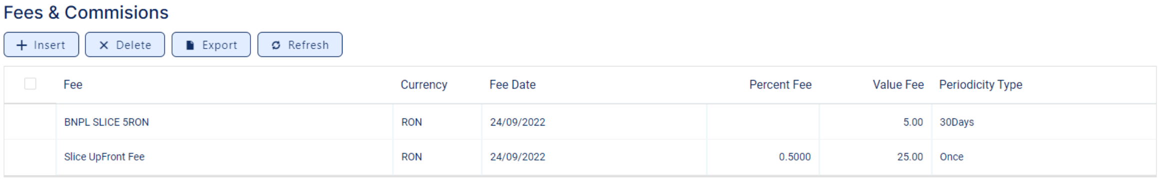
- **Classification** - Select the desired classification for the contract from the list of classifications associated with the banking product.
- **Description** - Enter a description for the contract classification.

3. Click the **Save and Close** button.

Applying Fees and Commissions

The financial institutions take commissions and fees for offering a product or service such as opening an account, for cash withdrawals, for transfers, for making payments in certain countries, for exchanging currencies, for emitting debit cards, for handling documents etc. These commissions are set at the product level and vary from institution to institution, based on their policy.

In the **Fees & Commissions** section within the **Overview** tab of the contract, you can view all the fees and commissions configured at the product level that have the `Automatic Load on Contract` checkbox set to `True`. After the first saving operation, Core Banking display all the fees that are defined as values. The fees defined as percentages are displayed after completing all the values of the contract. Read more about the commissions automatically inserted and calculated in the below section. You can also add, delete or export fees and commissions for the contract.



Fees & Commisions

□	Fee	Currency	Fee Date	Percent Fee	Value Fee	Periodicity Type
	BNPL SLICE 5RON	RON	24/09/2022		5.00	30Days
	Slice UpFront Fee	RON	24/09/2022	0.5000	25.00	Once

Automatic Insertion and Calculation of Commissions

Core Banking automatically inserts/ updates commissions in the **Fees & Commissions** section depending on the life cycle and status of the contract:

- **Creating a new contract**: Core Banking automatically inserts active commissions associated to the banking product, within their defined validity period, with `Automatically load on contract = True`, with `Is For Unusage = False`, and `Commission value is percentage = False`.
  If `Commission value is percentage = True`, then the commission is only inserted if the amount value was previously inserted.
- **Updating a contract in `Draft` status**: Core Banking automatically inserts active commissions associated to the banking product, within their defined validity period, with `Automatically load on contract = True`, with `Is For Unusage = False`. If a commission with `Commission value is percentage = True` was already inserted, then the commission's value is updated according to the contract's financed amount. If the value of a commission with `Commission value is percentage = True` was manually modified (for negotiable commissions), then the new value is calculated based on the modified percentage.
- **Creating a new version for a contract**: Core Banking automatically inserts all the commissions already present in the contract. Additionally, all commissions specifically created for contract version (`Is For Contract Version = True`) are added as well.

> **NOTE**
>
> If a version for a contract is created more than once on the same day, then all commissions with `Is For Contract Version = True` that were not notified yet for each previous version are deleted. At the end of the day, there is only one commission for the latest version.

- **Updating a contract in `Contract Version Draft` status**: Core Banking only updates the percentage commissions that are not already notified.

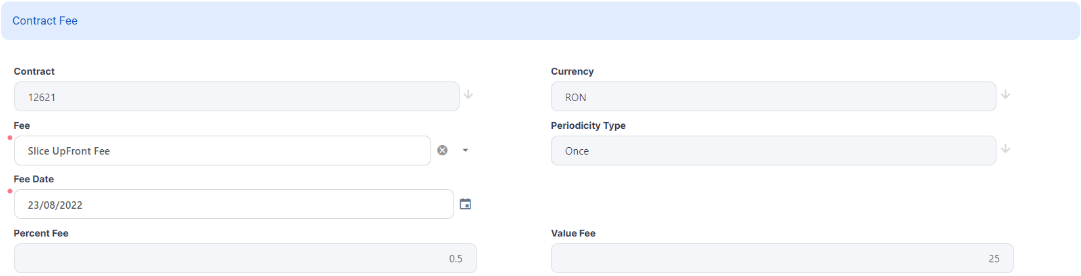
For percentage commissions (with `Commission value is percentage = True`), the financed amount of the contract is used to calculate the commission value based on the percentage. The calculation method differs depending on the contract type:

- For contracts based on **Term Loan,Mortgage** or **Overdraft** banking products:
  - If the commission is applied to amount, then the financed amount = amount due;
  - If the commission is applied to financed amount, then the financed amount = amount due - advance amount;
  - If the commission is applied to remaining value and the contract is in `Contract Version Draft` status, then financed amount = (-1) * main bank account balance. If the result is a negative value, then financed amount = null. In all the other cases, financed amount = null, which is the default value.
- For contracts based on **Bank Account with Overdraft** banking products:
  - If the commission is applied to overdraft limit amount, then the financed amount = overdraft limit amount;

- If the commission is applied to used amount and the commission's period type is `Once`, then the financed amount = overdraft limit amount - available amount for overdraft. In all the other cases, financed amount = null, which is the default value.

Adding Fees

1. To add a fee for this contract, click **Insert** in the **Fees & Commissions** section of a contract in `Draft` or `Version Draft` status.
2. On the newly displayed **Contract Fee** page, fill in the following fields:



Contract Fee

Contract: 12621

Currency: RON

Fee: Slice UpFront Fee

Periodicity Type: Once

Fee Date: 23/08/2022

Percent Fee: 0.5

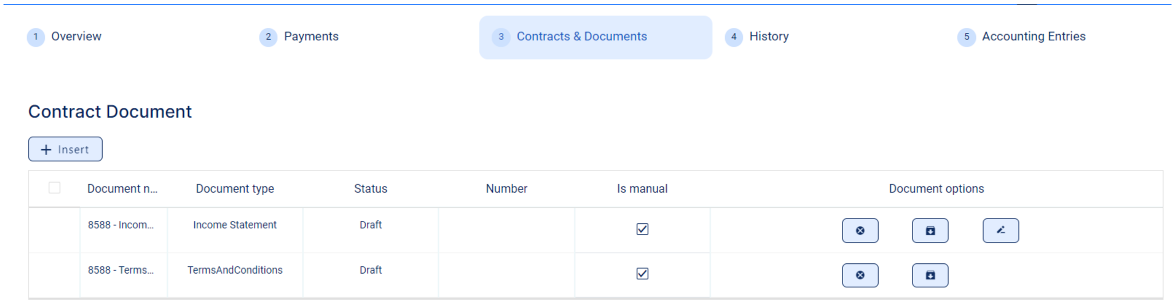
Value Fee: 25

   - **Fee** - Select a commission from the list of commissions defined for the banking product used when creating the contract.
   - **Fee Date** - Specify which value of the commission is to be used by selecting the date of the commission.

3. Optionally, check the rest of the fields, automatically filled in by Core Banking: contract number, currency, periodicity type of the selected fee, the fee percentage or value applicable for the selected date. You can't change these values.
4. Click the **Save and Close** button.

Working with Documents

Core Banking allows you to manage all the documents related to a contract in one place, in the contract's **Contracts & Documents** tab. The tab is meant to be the electronic folder of the contract. It displays a list of the document records for the current contract, with details such as document name, type, status, number, whether the record was added through the user interface (`Is manual = True`) or through API integration (`Is manual = False`), and download options for the attached files. Contract documents have a dedicated business workflow, thus you can transition them through a series of statuses.



Contract Document

□	Document n...	Document type	Status	Number	Is manual	Document options
	8588 - Incom...	Income Statement	Draft		☑	
	8588 - Terms...	TermsAndConditions	Draft		☑	

In the **Contracts & Documents** tab, you can: add a new contract document record, edit or delete a record in **Draft** status, view the details for records in **Signed** or **Canceled** status, or download the initial or the signed document, if it exists, by clicking the **Initial document**, respectively the **Signed document** button next to the record. Open the downloaded file to view its content.

NOTE

Users with the associated predefined security roles of Corporate Credit Officer and Retail Credit Officer can perform contract document-related operations such as adding, updating, and deleting records or changing their statuses.

Contract Document Statuses

A contract document record has the following statuses, visible in the top left corner of the **Add Contract Document** page, after saving the record:

- **Draft** - the status of a newly created contract document record that was not yet authorized (marked as **Signed**). While in this status, you can edit some fields and you can delete the uploaded documents. Change its status to **Signed** after editing all the necessary details and uploading the `Signed Document` file. Change its status to **Canceled** if the document is not to be used within the contract.
- **Signed** - the status of a contract document record after being authorized. You cannot edit any of the record's details. You can change the status of the record to **Canceled**, if needed.

- **Canceled** - the status of a contract document after being canceled. Once **Signed**, a contract document should be canceled if the document is not to be used within the contract. You cannot edit any of the record's details. There is no further transition from this status. Contract document records created through integration (having their `Is manual` field = `False`) can't be canceled.

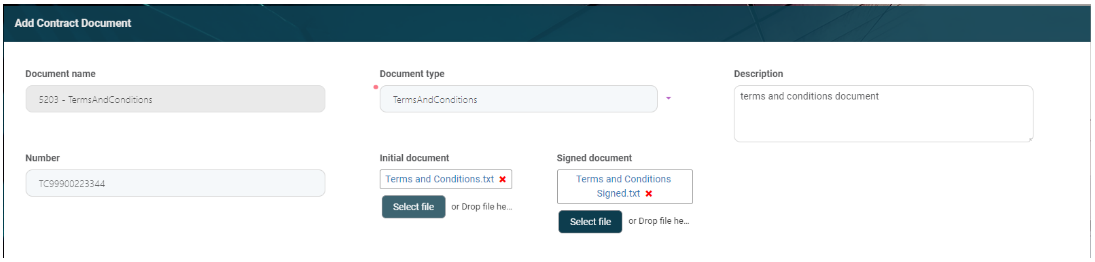
Adding Contract Documents

1. To insert a document to the contract, click the **Insert** button in the **Contract Document** section.
   The **Add Contract Document** page is displayed, with the **Document Name** field automatically completed with the name of the document.

   NOTE

   You can't add documents to contracts in **Contract Closed** or **Contract Version Closed** statuses.

2. Fill in the following fields:



Add Contract Document

Document name: 5203 - TermsAndConditions

Document type: TermsAndConditions

Description: terms and conditions document

Number: TC99900223344

Initial document: Terms and Conditions.txt ✖

Signed document: Terms and Conditions Signed.txt ✖

- **Document type** - Select the type of the document.
- **Description** - Enter the description of the document.
- **Number** - Enter the number of the document, if the document has an external identifier number.
- **Initial document** - Insert the file containing the initial, unsigned document.
  Click the **Select file** button under this field, navigate to the desired file,

select it and click **Open**. The selected file's name is displayed here. You can delete it by clicking the **x** next to the file name.

- **Signed Document** - Insert the file containing the final, signed document, if available.
  Click the **Select file** button under this field, navigate to the desired file, select it and click **Open**. The selected file's name is displayed here. You can delete it by clicking the **x** next to the file name.

  > **NOTE**
  >
  > To change the status of the contract document record to **Signed**, a signed document file must exist within the record.

3. Click the **Save and Close** button.

> **NOTE**
>
> You can also add, update, and approve contract document records through API integration, using the `AddUpdateContractDocument` and `ApproveContractDocument` endpoints. Read more details in the Core Banking Developer Guide.
> Contract document files added through integration cannot be deleted and those records can't be canceled!

Automatic Contract Document Validations

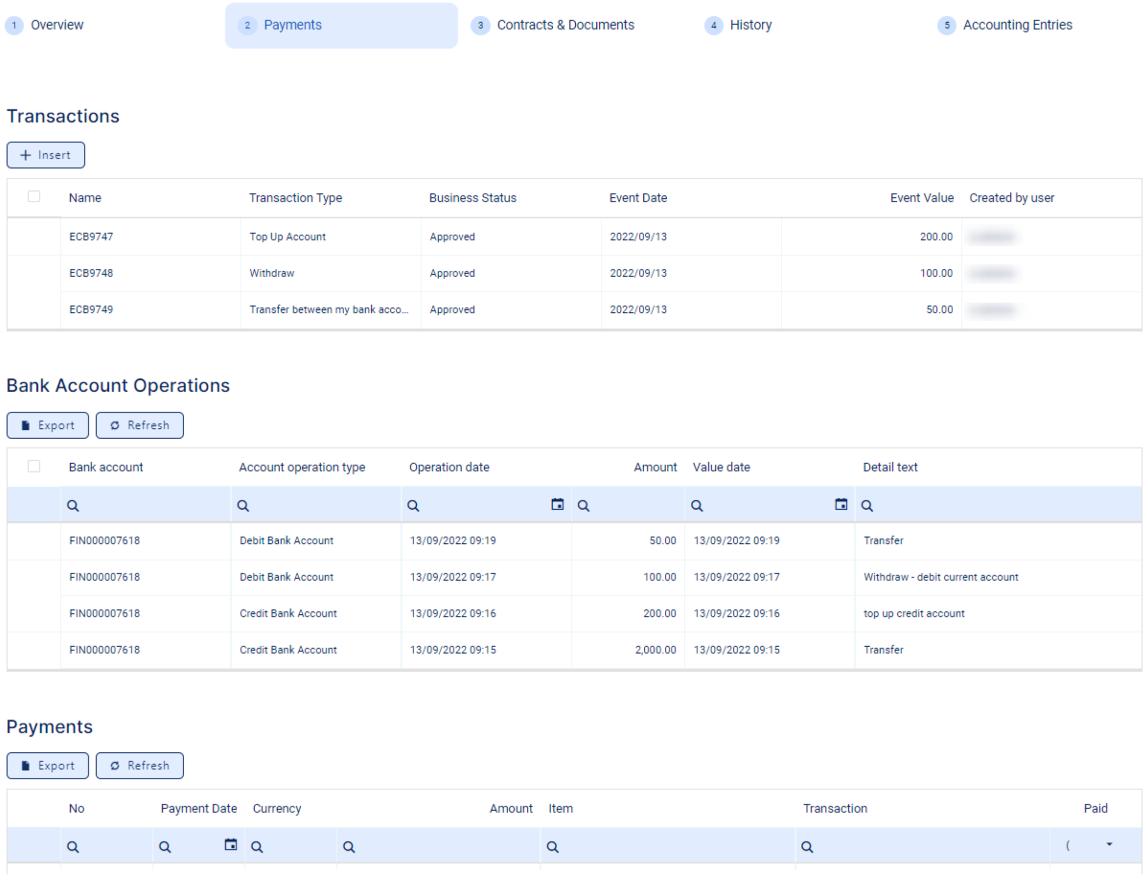
Core Banking performs the following validations for contract document records:

- The uploaded files' specifications follow FintechOS Platform's settings and restrictions regarding size and format, allowing .pdf,.doc,.docx,.els,.jpg,.jpeg,.xlsx,.dll,.ppt,.pptx,.txt,.png,.ttf,.xml file formats.
- If the contract document record is in **Signed** status, the record can't be deleted or updated, nor can its files be deleted.

- The name of the contract document record is unique, automatically generated by Core Banking. The naming convention is "the contract name + '-' + the selected document type + '-' + a unique document increment". For example, `5203 - Income Statement - 60`.
- The names of the selected files are not validated for uniqueness.

Deposits, Withdrawals and Transfers

You can find all the existing transactions, bank account operations, and payments for a contract on the **Payments** tab. The tab has no information to display for contracts in **Draft** status. Approve the contract to perform any transactions on the contract.



Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB9747	Top Up Account	Approved	2022/09/13	200.00	[redacted]
ECB9748	Withdraw	Approved	2022/09/13	100.00	[redacted]
ECB9749	Transfer between my bank acco...	Approved	2022/09/13	50.00	[redacted]

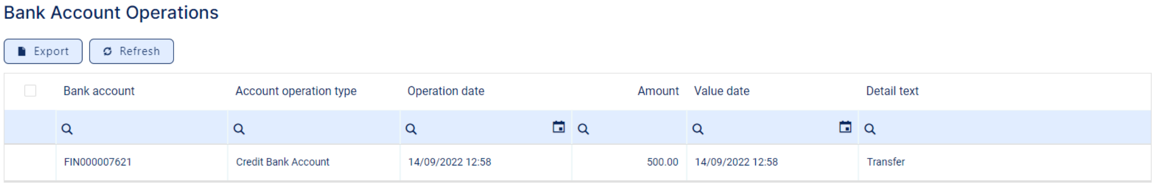
Bank Account Operations

Bank account	Account operation type	Operation date	Amount	Value date	Detail text
FIN000007618	Debit Bank Account	13/09/2022 09:19	50.00	13/09/2022 09:19	Transfer
FIN000007618	Debit Bank Account	13/09/2022 09:17	100.00	13/09/2022 09:17	Withdraw - debit current account
FIN000007618	Credit Bank Account	13/09/2022 09:16	200.00	13/09/2022 09:16	top up credit account
FIN000007618	Credit Bank Account	13/09/2022 09:15	2,000.00	13/09/2022 09:15	Transfer

Payments

No	Payment Date	Currency	Amount	Item	Transaction	Paid

The **Bank Account Operations** section contains details about each account operation performed on the deposit after its approval, starting with the transfer from the current account to the deposit account of the funds specified for constituting the deposit.



Bank Account Operations

□	Bank account	Account operation type	Operation date	Amount	Value date	Detail text
	FIN000007621	Credit Bank Account	14/09/2022 12:58	500.00	14/09/2022 12:58	Transfer

The following sections show you how to perform the usual transactions available on deposit contracts during the duration of the deposit.

NOTE

For information about liquidating a deposit, either on maturity or before, read the "Liquidating a Deposit" on page 409 topic.

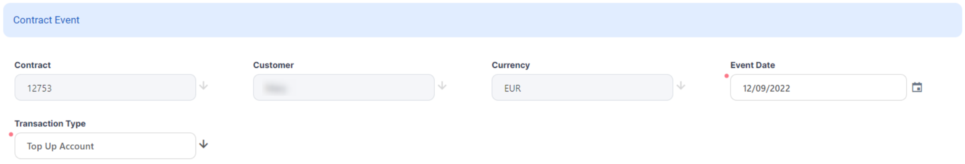
Topping Up an Approved Deposit Contract

A top-up transaction on a deposit represents adding amounts to the deposit to increase the deposit balance.

You can add top-up transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a top-up transaction to a deposit contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



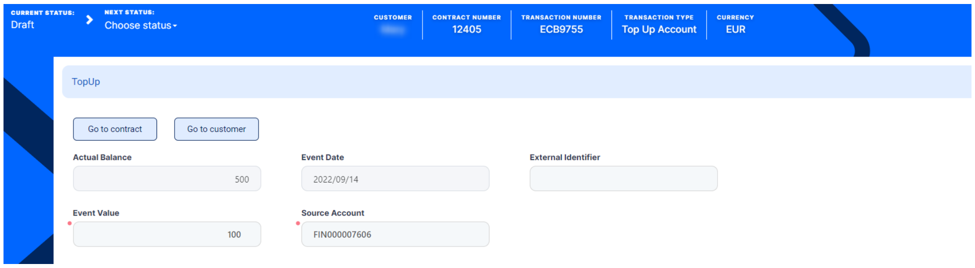
Contract Event

Contract: 12753
Customer: [redacted]
Currency: EUR
Event Date: 12/09/2022
Transaction Type: Top Up Account

3. Fill in the following fields:
    - **Event Date** - This is pre-filled with the current date.
    - **Transaction Type** - Select from the list the **Top Up Account** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

    Other values are automatically completed: contract, customer, and currency.

4. Click the **Save and Reload** button.
    The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. The account's actual balance is automatically calculated, and you can't edit it.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CUSTOMER	CONTRACT NUMBER	TRANSACTION NUMBER	TRANSACTION TYPE	CURRENCY
[redacted]	12405	ECB9755	Top Up Account	EUR

TopUp

Actual Balance: 500

Event Date: 2022/09/14

External Identifier:

Event Value: 100

Source Account: FIN000007606

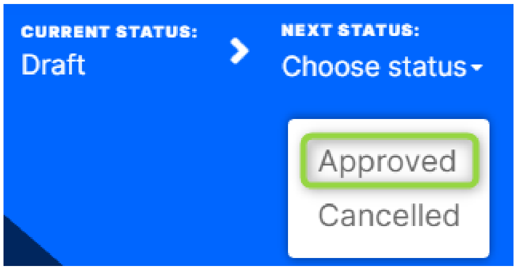
5. Fill in the **external identifier** of the transaction, if available.

6. In the **Event Value** field, enter the amount that is added to the deposit account.

7. Enter the **Source Account** for the respective amount, the account from where the funds are taken to perform the top-up.

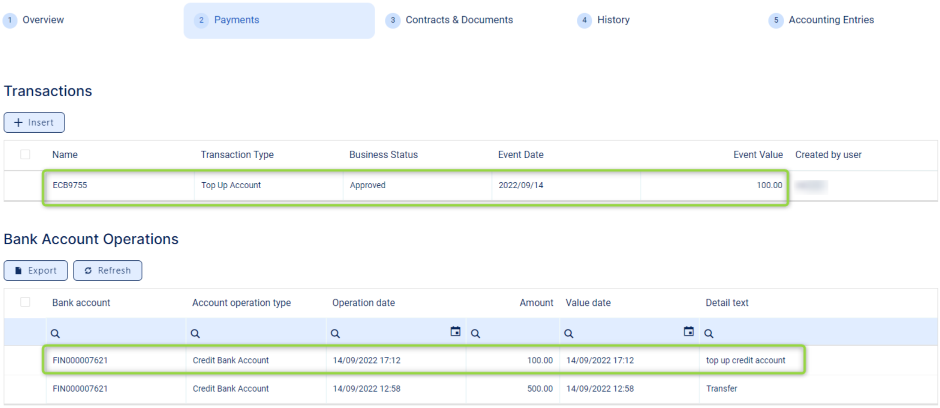
> **NOTE**
>
> Core Banking actually uses the financial institution's reconciliation account as a source bank account.

8. Click the **Save and Reload** button.
   If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
   While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.
9. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



10. Confirm the change of status in the **Confirmation** window, clicking **Yes**. The event is now in **Approved** status and Core Banking applies the transaction to the contract, moving the funds specified in the event value from the source account into the deposit account.

    The transaction is visible in the **Transactions** section, and you can also see the account operation in the **Bank Account Operations** section.



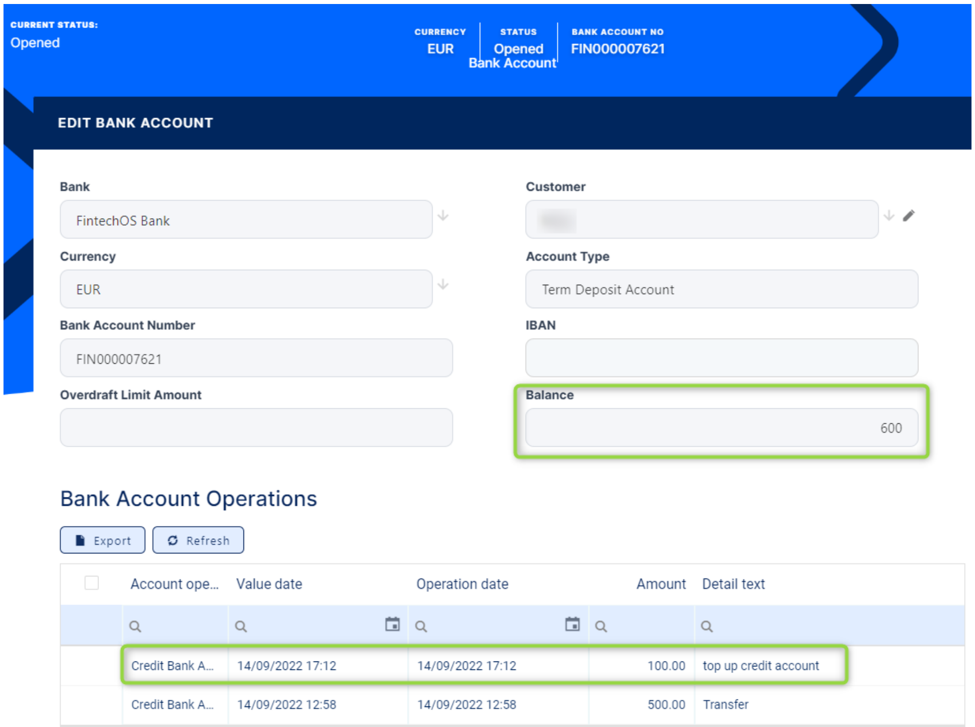
Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB9755	Top Up Account	Approved	2022/09/14	100.00	[redacted]

Bank Account Operations

Bank account	Account operation type	Operation date	Amount	Value date	Detail text
FIN000007621	Credit Bank Account	14/09/2022 17:12	100.00	14/09/2022 17:12	top up credit account
FIN000007621	Credit Bank Account	14/09/2022 12:58	500.00	14/09/2022 12:58	Transfer

11. View the balance of the account after approving the transaction, clicking the pencil icon next to the **Main Bank Account** field in the contract's **Overview** tab:



Bank	Customer
FintechOS Bank	[redacted]
Currency	Account Type
EUR	Term Deposit Account
Bank Account Number	IBAN
FIN000007621	
Overdraft Limit Amount	Balance
	600

Bank Account Operations

Account ope...	Value date	Operation date	Amount	Detail text
Credit Bank A...	14/09/2022 17:12	14/09/2022 17:12	100.00	top up credit account
Credit Bank A...	14/09/2022 12:58	14/09/2022 12:58	500.00	Transfer

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

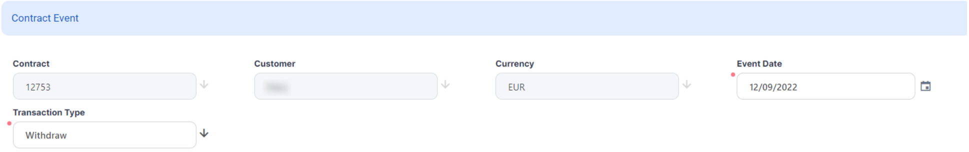
Withdrawing Funds from an Approved Contract

A withdrawal transaction on a deposit contract represents removing a part of the funds available on the deposit, without terminating the deposit contract. This operation may affect the interest calculation.

You can add withdrawal transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a withdrawal transaction to a deposit contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



Contract Event

Contract: 12753

Customer: [redacted]

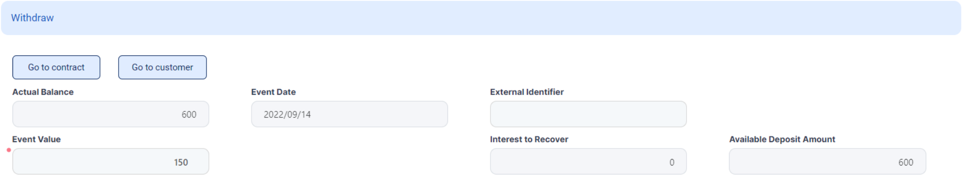
Currency: EUR

Event Date: 12/09/2022

Transaction Type: Withdraw

3. Fill in the following fields:
   - **Event Date** - This is pre-filled with the current date.
   - **Transaction Type** - Select from the list the **Withdraw** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

   Other values are automatically completed: contract, customer, and currency.
4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. The account's actual balance, the interest to recover, and available amount on the deposit are automatically calculated, and you can't edit them.
5. Fill in the **external identifier** of the transaction, if available.
6. In the **Event Value** field, enter the amount that is removed from the account.



Withdraw

Actual Balance: 600

Event Date: 2022/09/14

External Identifier:

Event Value: 150

Interest to Recover: 0

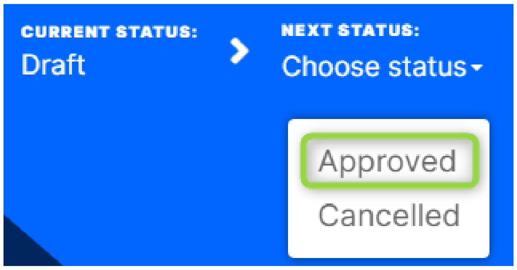
Available Deposit Amount: 600

NOTE

Core Banking actually uses the financial institution's reconciliation account as a destination bank account.

7. Click the **Save and Reload** button.
   If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
   While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

8. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.

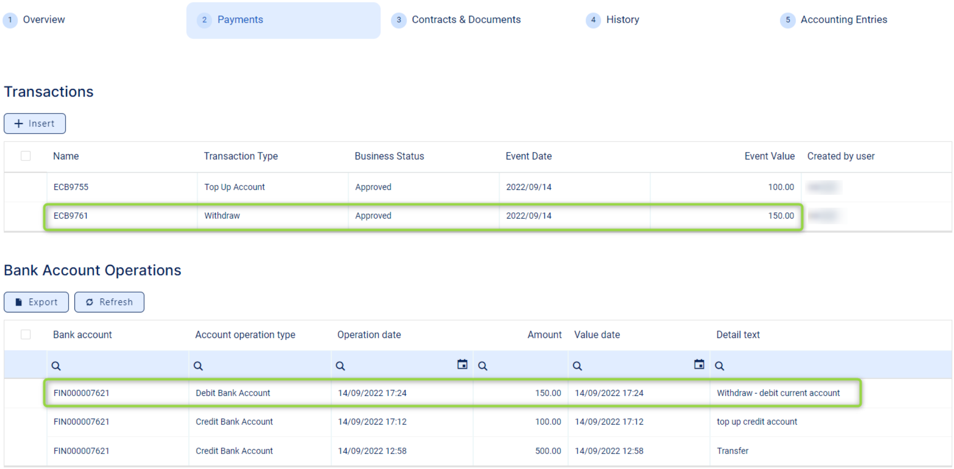


CURRENT STATUS: Draft

NEXT STATUS: Choose status

9. Confirm the change of status in the **Confirmation** window, clicking **Yes**.
   The event is now in **Approved** status and Core Banking applies the transaction to the contract, removing the funds specified in the event value from the current account.

   The transaction is visible in the **Transactions** section, and you can also see the account operation in the **Bank Account Operations** section.



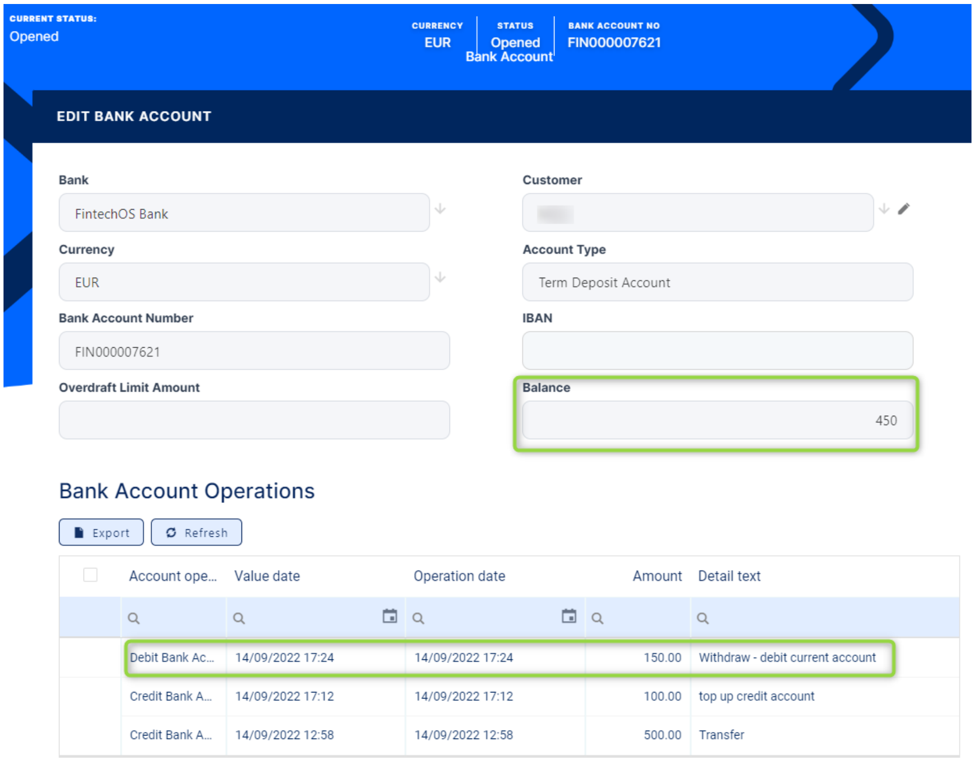
Transactions

□	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB9755	Top Up Account	Approved	2022/09/14	100.00	[redacted]
	ECB9761	Withdraw	Approved	2022/09/14	150.00	[redacted]

Bank Account Operations

□	Bank account	Account operation type	Operation date	Amount	Value date	Detail text
	FIN000007621	Debit Bank Account	14/09/2022 17:24	150.00	14/09/2022 17:24	Withdraw - debit current account
	FIN000007621	Credit Bank Account	14/09/2022 17:12	100.00	14/09/2022 17:12	top up credit account
	FIN000007621	Credit Bank Account	14/09/2022 12:58	500.00	14/09/2022 12:58	Transfer

10. View the balance of the deposit account after approving the transaction, clicking the pencil icon next to the **Main Bank Account** field in the contract's **Overview** tab:



CURRENT STATUS: Opened

CURRENCY EUR | STATUS Opened | BANK ACCOUNT NO FIN000007621

Bank Account

EDIT BANK ACCOUNT

Bank: FintechOS Bank

Customer: [redacted]

Currency: EUR

Account Type: Term Deposit Account

Bank Account Number: FIN000007621

IBAN:

Overdraft Limit Amount:

Balance: 450

Bank Account Operations

□	Account ope...	Value date	Operation date	Amount	Detail text
	Debit Bank Ac...	14/09/2022 17:24	14/09/2022 17:24	150.00	Withdraw - debit current account
	Credit Bank A...	14/09/2022 17:12	14/09/2022 17:12	100.00	top up credit account
	Credit Bank A...	14/09/2022 12:58	14/09/2022 12:58	500.00	Transfer

NOTE

All existing versions of the contract in **Contract Version Draft** status are

> automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

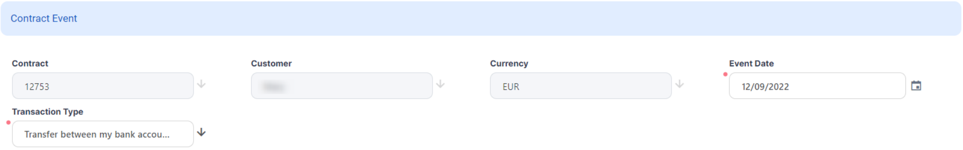
Transferring Funds from a Deposit into Another of the Customer's Accounts

A `transfer between my bank accounts` transaction on a deposit represents the process of moving funds from the deposit contract into another of the customer's bank accounts.

You can add transfer transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a transfer transaction to a deposit contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



Contract Event

Contract	Customer	Currency	Event Date
12753	[redacted]	EUR	12/09/2022
Transaction Type			
Transfer between my bank accou...			

3. Fill in the following fields:
   - **Event Date** - This is pre-filled with the current date.
   - **Transaction Type** - Select from the list the **Transfer between my bank accounts** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

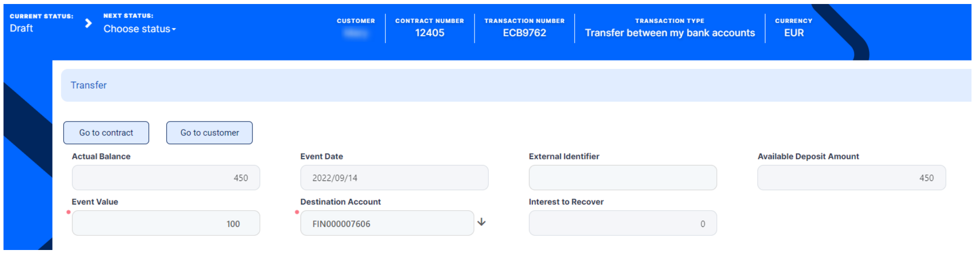
   Other values are automatically completed: contract, customer, and currency.

4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. The account's actual balance, the interest to recover, and the available deposit amount are automatically calculated, and you can't edit them.

5. Fill in the **external identifier** of the transaction, if available.

6. In the **Event Value** field, enter the amount that is added to the account.

7. Select the **Destination Account** where the respective amount should be transferred into. You can choose from the list of accounts that belong to the contract's customer and have the same currency.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CUSTOMER [redacted]

CONTRACT NUMBER 12405

TRANSACTION NUMBER ECB9762

TRANSACTION TYPE Transfer between my bank accounts

CURRENCY EUR

Transfer

Actual Balance: 450

Event Date: 2022/09/14

External Identifier:

Available Deposit Amount: 450

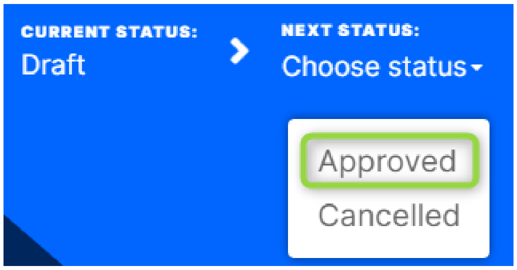
Event Value: 100

Destination Account: FIN000007606

Interest to Recover: 0

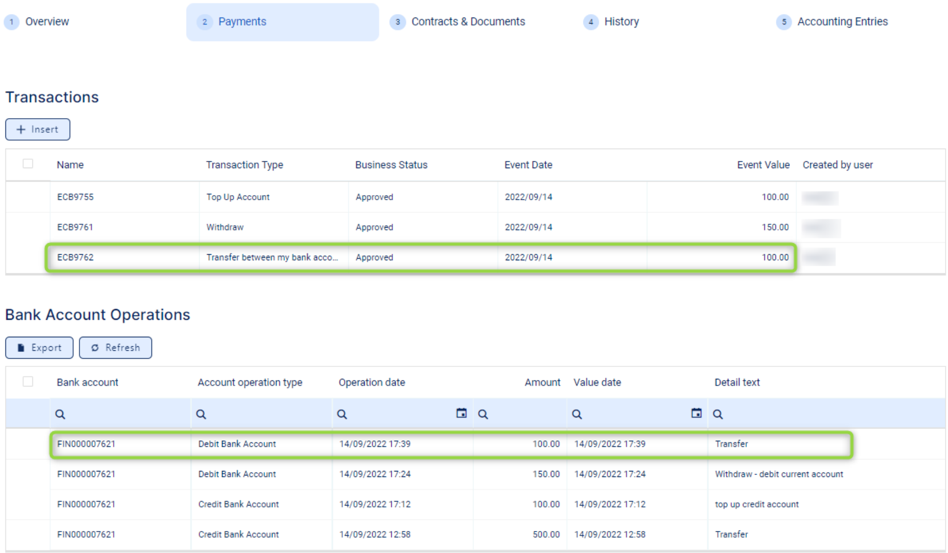
8. Click the **Save and Reload** button.
   If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
   While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

9. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



10. Confirm the change of status in the **Confirmation** window, clicking **Yes**. The event is now in **Approved** status and Core Banking applies the transaction to the contract, moving the funds specified in the event value from the current account into the destination account of the same customer.

    The transaction is visible in the **Transactions** section, and you can also see the account operation in the **Bank Account Operations** section.



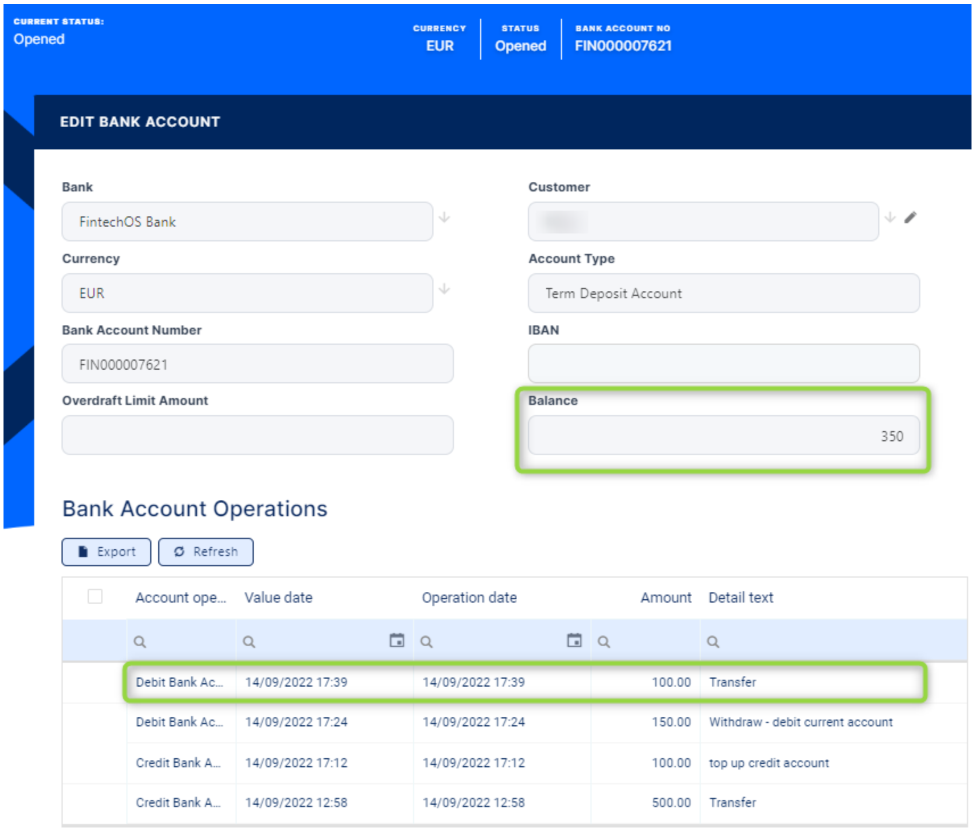
Transactions

□	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB9755	Top Up Account	Approved	2022/09/14	100.00	[redacted]
	ECB9761	Withdraw	Approved	2022/09/14	150.00	[redacted]
	ECB9762	Transfer between my bank acco...	Approved	2022/09/14	100.00	[redacted]

Bank Account Operations

□	Bank account	Account operation type	Operation date	Amount	Value date	Detail text
	FIN000007621	Debit Bank Account	14/09/2022 17:39	100.00	14/09/2022 17:39	Transfer
	FIN000007621	Debit Bank Account	14/09/2022 17:24	150.00	14/09/2022 17:24	Withdraw - debit current account
	FIN000007621	Credit Bank Account	14/09/2022 17:12	100.00	14/09/2022 17:12	top up credit account
	FIN000007621	Credit Bank Account	14/09/2022 12:58	500.00	14/09/2022 12:58	Transfer

11. View the balance of the deposit account after approving the transaction, clicking the pencil icon next to the **Main Bank Account** field in the contract's **Overview** tab:



CURRENT STATUS: Opened

CURRENCY EUR | STATUS Opened | BANK ACCOUNT NO FIN000007621

EDIT BANK ACCOUNT

Bank: FintechOS Bank	Customer: [redacted]
Currency: EUR	Account Type: Term Deposit Account
Bank Account Number: FIN000007621	IBAN:
Overdraft Limit Amount:	Balance: 350

Bank Account Operations

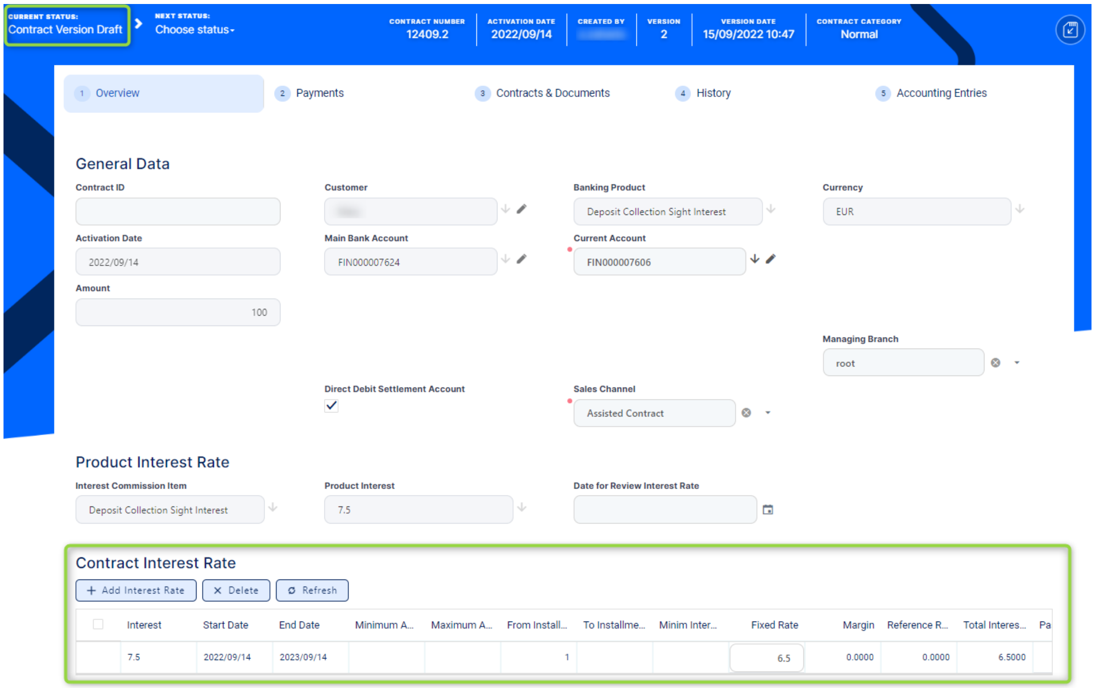
Account ope...	Value date	Operation date	Amount	Detail text
Debit Bank Ac...	14/09/2022 17:39	14/09/2022 17:39	100.00	Transfer
Debit Bank Ac...	14/09/2022 17:24	14/09/2022 17:24	150.00	Withdraw - debit current account
Credit Bank A...	14/09/2022 17:12	14/09/2022 17:12	100.00	top up credit account
Credit Bank A...	14/09/2022 12:58	14/09/2022 12:58	500.00	Transfer

NOTE
All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

Changing Interest Rates on Active Deposit Contracts

Once a contract is approved, hence active, you can't edit the interest rates. However, in certain cases, you might have to change the interest rates due to inflation, renegotiation of the contract, and so on. For such cases, follow these general steps:

1. Select and open an `Approved` contract.
2. Create a new version for the contract, as described on the "Creating New Versions of Existing Deposit Contracts" on page 419 page.
3. Edit the values within the **Contract Interest Rate** section in the **Overview** tab of the contract in `Contract Version Draft` status according to your needs.



CURRENT STATUS: Contract Version Draft | NEXT STATUS: Choose status

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12409.2	2022/09/14	[redacted]	2	15/09/2022 10:47	Normal

General Data

Contract ID:
Customer: [redacted]
Banking Product: Deposit Collection Sight Interest
Currency: EUR
Activation Date: 2022/09/14
Main Bank Account: FIN000007624
Current Account: FIN000007606
Amount: 100
Managing Branch: root
Direct Debit Settlement Account: ☑
Sales Channel: Assisted Contract

Product Interest Rate

Interest Commission Item: Deposit Collection Sight Interest
Product Interest: 7.5
Date for Review Interest Rate:

Contract Interest Rate

□	Interest	Start Date	End Date	Minimum A...	Maximum A...	From Install...	To Installme...	Minim Inter...	Fixed Rate	Margin	Reference R...	Total Interes...	Pa
	7.5	2022/09/14	2023/09/14			1			6.5	0.0000	0.0000	6.5000	

IMPORTANT!

You can change the contract interest rates only if the product interest was defined with `Is Negotiable = True`.

Read more about the fields that you can modify in the "5. Manage Contract Level Interest & Penalty Interest Rates" on page 366 section of this user guide.

4. Approve the contract version, as described on the "Approving a Deposit" on page 372 page.

Core Banking calculates the interest capitalization according to the interest rates found on the approved contract version.

5. You can view the previous interest rates accessing the **History** tab and viewing the older contract information, as described on the "Viewing a Contract's History" on page 420 page.

Processing Interest Capitalization and Payment

Core Banking calculates the accrued interest for each deposit while running its `Start of Day` scheduled job. The interest calculation depends on the contract and banking product configuration, as follows:

For `Interest Payment Type = Maturity` at the banking product level

If the deposit is liquidated at maturity date, which means that the customer receives the total interest accumulated for the period during which the deposit was made, or the sight interest if other transactions like transfer or withdrawal occurred in the period between activation and maturity date.

If the deposit is liquidated before maturity date, the customer receives only the sight interest and only if a sight interest is configured on the banking product. If there is no sight interest configured, the customer receives only the initial amount.

If a withdrawal or transfer transaction occurs during the deposit contract's life cycle (possible only if the checkbox **Allow withdraws** is selected on the banking product configuration), the sight interest is paid (if there is a sight deposit configured on the banking product) and calculated taking into account the amount and the period of time the funds were in the account.

If one or more top-up transactions occur during the deposit contract's life cycle (possible only if the checkbox **Allow top-ups** is selected on the banking product configuration), the total interest rate is paid, calculated taking into account the amount and the period of time the fund were in the account.

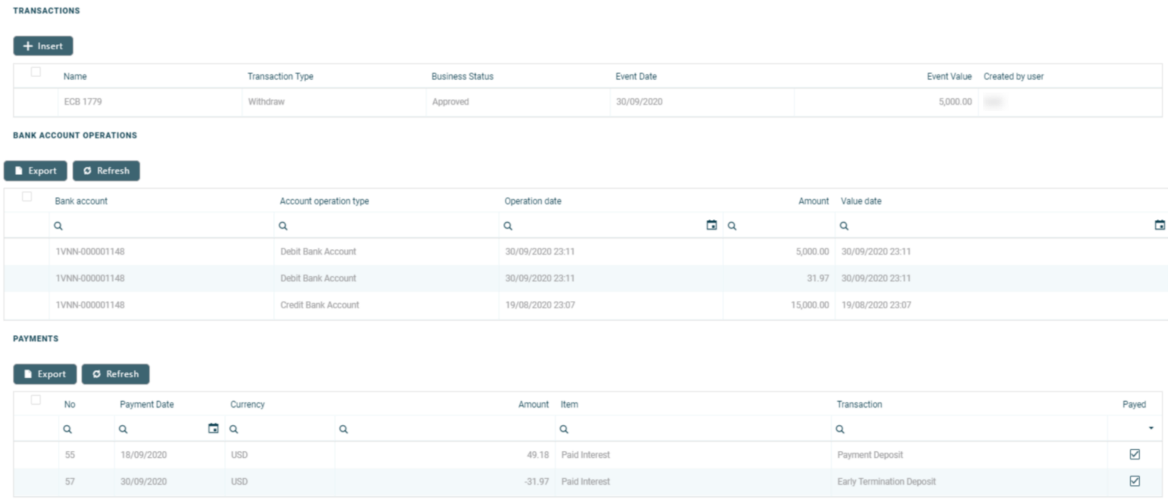
For `Interest Payment Type =` any other value except `Maturity` at the banking product level

> If the interest payment type is set to `Monthly, Yearly, Daily` or `Quarterly` then the interest is calculated and paid taking into account this periodicity, on the date specified in the deposit contract.
>
> If the deposit reaches maturity, the total interest rate is paid according to the periodicity and the date specified on the contract, in the current account or in the deposit account, depending on how the deposit banking product was configured.
>
> If the deposit contract doesn’t reach the maturity because it is liquidated in advance, but one or more interest payments were already made, Core Banking recovers the interest paid from the deposit amount. The interest recovery is made if the deposit contract reaches maturity, but during the deposit contract's life cycle, at least one withdrawal or transfer transaction was made (possible if **Allow withdraws** is checked on the banking product configuration).

If the **DepositAggregateItemValues** Core Banking system parameter's value is set to **False**, Core Banking recovers the entire interest paid until that moment and after that the sight interest from the beginning until the transaction date is paid (if a sight interest is configured on the banking product). If the **DepositAggregateItemValues**Core Banking system parameter's value is set to **True**, the system recovers the difference between the paid interest and the sight interest that should be paid (if there is a sight interest configured on the banking product).

The `interest to recover` value affects the deposit amount or the interest amount, depending on the deposit banking product configuration: with interest capitalization or not, with interest payment on the maturity date or on a specific interval.

If the deposit is without capitalization, which means the interest is paid in the current account, in case a withdrawal transaction occurs, the interest already paid is recovered from the deposit amount.



TRANSACTIONS

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB 1779	Withdraw	Approved	30/09/2020	5,000.00	[redacted]

BANK ACCOUNT OPERATIONS

Bank account	Account operation type	Operation date	Amount	Value date
1VNN-000001148	Debit Bank Account	30/09/2020 23:11	5,000.00	30/09/2020 23:11
1VNN-000001148	Debit Bank Account	30/09/2020 23:11	31.97	30/09/2020 23:11
1VNN-000001148	Credit Bank Account	19/08/2020 23:07	15,000.00	19/08/2020 23:07

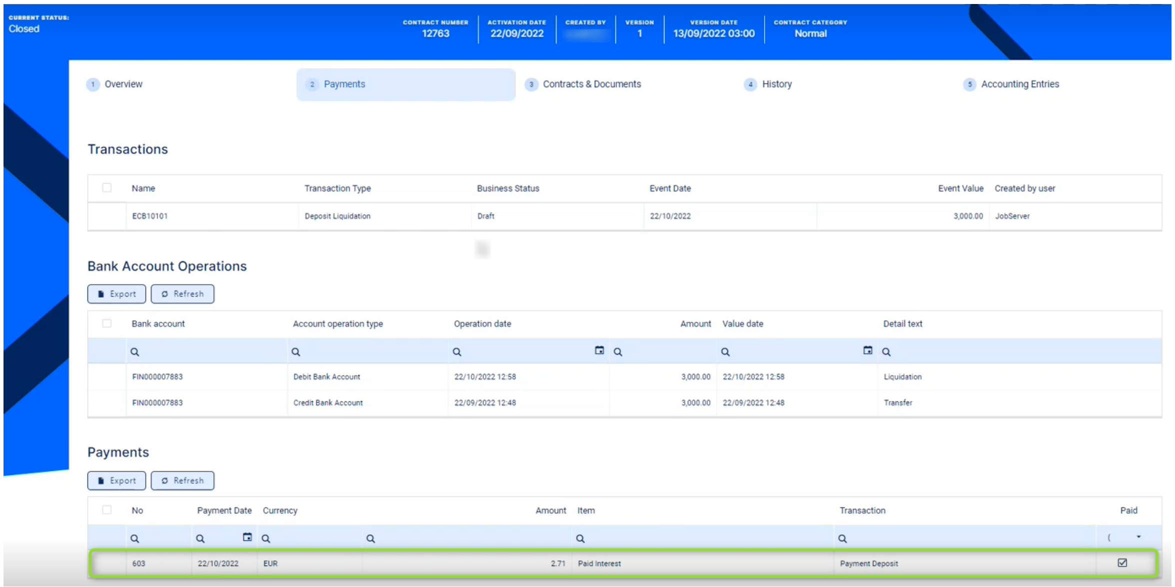
PAYMENTS

No	Payment Date	Currency	Amount	Item	Transaction	Payed
55	18/09/2020	USD	49.18	Paid Interest	Payment Deposit	☑
57	30/09/2020	USD	-31.97	Paid Interest	Early Termination Deposit	☑

For example, if a deposit is open for a period of 3 months with a monthly interest payment and the customer orders a withdrawal after the first month, the interest already paid in the current account is recovered from the deposit amount.

If the deposit is with capitalization, the interest is paid in the deposit account, so in case a withdrawal occurs, the interest is recovered from the deposit amount containing the initial value + the interest already paid, which means the initial amount is not affected.

The `Generate Deposit Payments` scheduled job performs the payments for the calculated interests on the deposit's maturity date. You can view the paid interest for a deposit in the **Payments** section:



CURRENT STATUS:	CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
Closed	12763	22/09/2022	[redacted]	1	13/09/2022 03:00	Normal

Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB10101	Deposit Liquidation	Draft	22/10/2022	3,000.00	JobServer

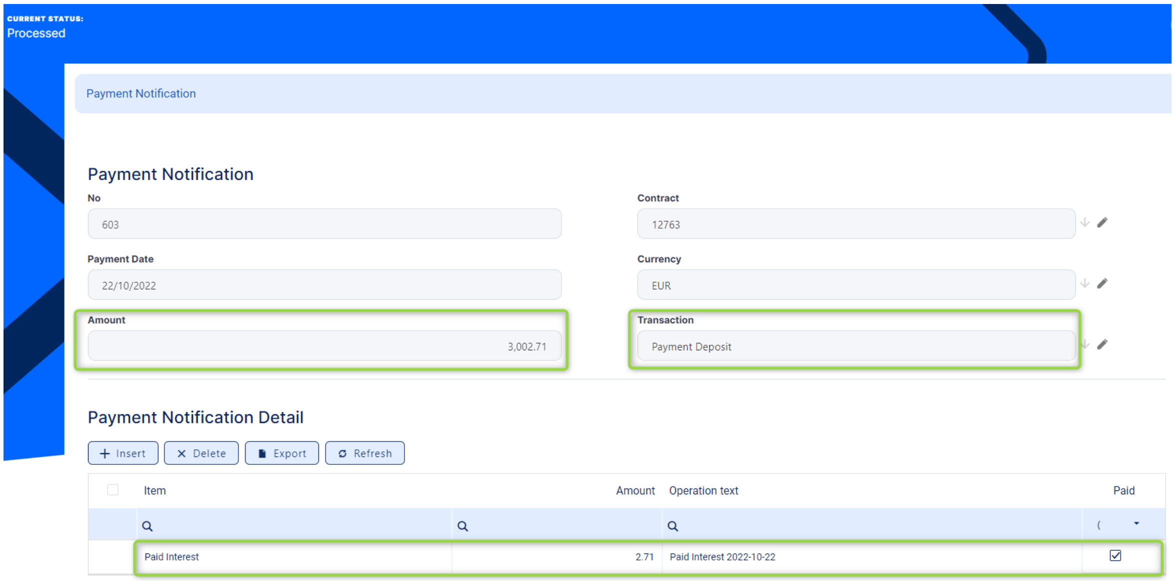
Bank Account Operations

Bank account	Account operation type	Operation date	Amount	Value date	Detail text
FIN000007883	Debit Bank Account	22/10/2022 12:58	3,000.00	22/10/2022 12:58	Liquidation
FIN000007883	Credit Bank Account	22/09/2022 12:48	3,000.00	22/09/2022 12:48	Transfer

Payments

No	Payment Date	Currency	Amount	Item	Transaction	Paid
603	22/10/2022	EUR	2.71	Paid Interest	Payment Deposit	☑

Open the payment record to view more relevant details:



CURRENT STATUS:
Processed

Payment Notification

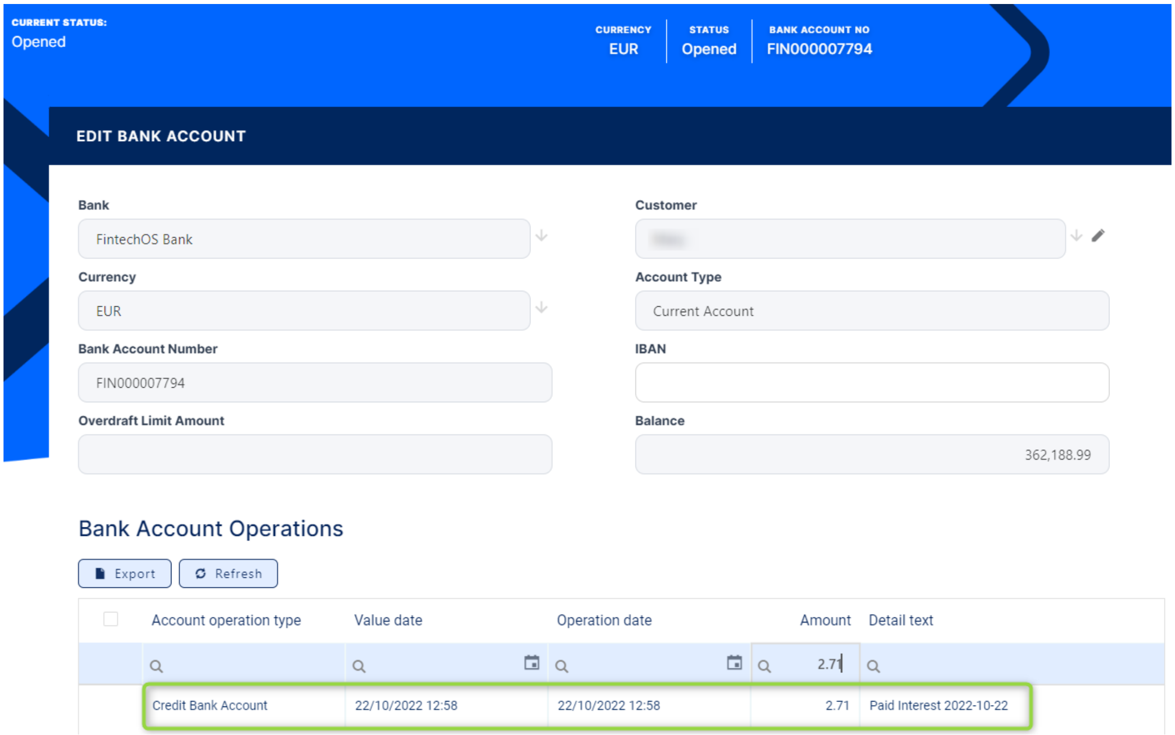
Payment Notification

No: 603	Contract: 12763
Payment Date: 22/10/2022	Currency: EUR
Amount: 3,002.71	Transaction: Payment Deposit

Payment Notification Detail

Item	Amount	Operation text	Paid
Paid Interest	2.71	Paid Interest 2022-10-22	☑

The interest is paid into the current account specified during deposit creation:



CURRENT STATUS:
Opened

CURRENCY: EUR | STATUS: Opened | BANK ACCOUNT NO: FIN000007794

EDIT BANK ACCOUNT

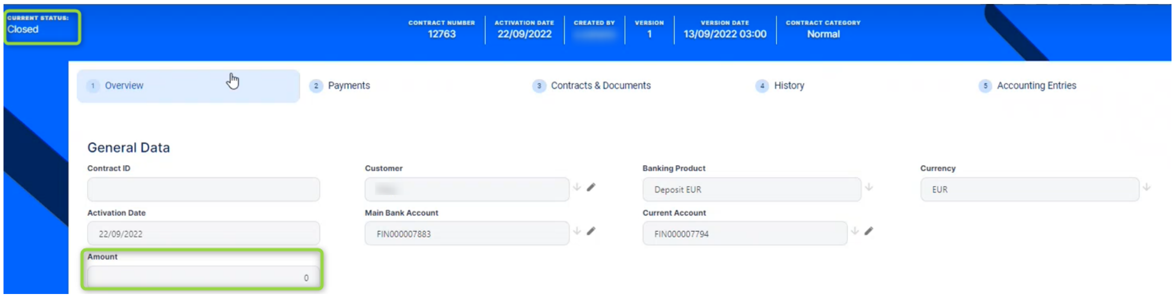
Bank: FintechOS Bank	Customer: [redacted]
Currency: EUR	Account Type: Current Account
Bank Account Number: FIN000007794	IBAN:
Overdraft Limit Amount:	Balance: 362,188.99

Bank Account Operations

Account operation type	Value date	Operation date	Amount	Detail text
			2.71	
Credit Bank Account	22/10/2022 12:58	22/10/2022 12:58	2.71	Paid Interest 2022-10-22

Liquidating a Deposit

You can leave a deposit contract to reach its maturity and allow Core Banking to liquidate it automatically. In this case, the balance available on the deposit is transferred to the current account selected during contract creation and the contract is closed, along with its associated account.



CURRENT STATUS: Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12763	22/09/2022	[redacted]	1	13/09/2022 03:00	Normal

General Data

Contract ID:

Customer: [redacted]

Banking Product: Deposit EUR

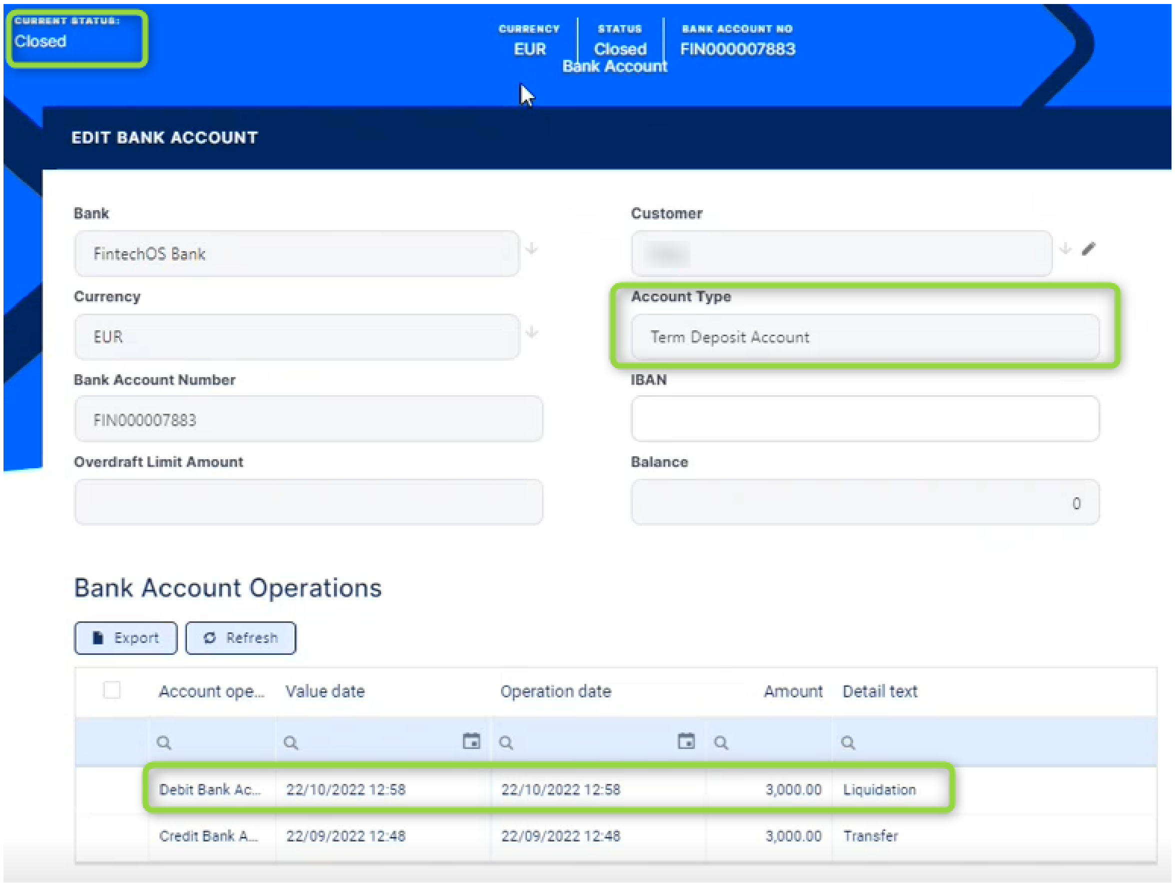
Currency: EUR

Activation Date: 22/09/2022

Main Bank Account: FIN000007883

Current Account: FIN000007794

Amount: 0



CURRENT STATUS: Closed

CURRENCY	STATUS	BANK ACCOUNT NO
EUR	Closed	FIN000007883

Bank Account

EDIT BANK ACCOUNT

Bank: FintechOS Bank

Customer: [redacted]

Currency: EUR

Account Type: Term Deposit Account

Bank Account Number: FIN000007883

IBAN:

Overdraft Limit Amount:

Balance: 0

Bank Account Operations

□	Account ope...	Value date	Operation date	Amount	Detail text
	Debit Bank Ac...	22/10/2022 12:58	22/10/2022 12:58	3,000.00	Liquidation
	Credit Bank A...	22/09/2022 12:48	22/09/2022 12:48	3,000.00	Transfer

You can also liquidate a deposit on request, either at maturity, with the full payment of interest, or before the deposit's term is up, with possible penalty applied to the accrued interest. This can be especially useful for deposit contracts with automatic roll-over setting at the banking product level. Core Banking offers you two predefined contract transactions that aid you in liquidating a deposit, as follows:

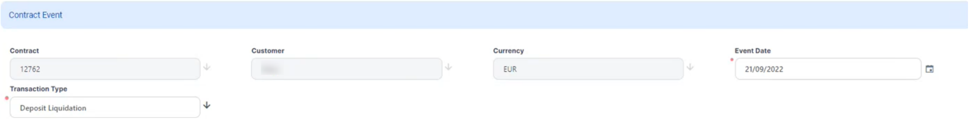
Liquidating a Deposit Contract

A `Deposit Liquidation` transaction represents the way of closing the deposit account, so the entire amount is transferred in the current account. If the liquidation occurs at the maturity date, the interest is also paid. If the liquidation occurs on any other day except the maturity date, the customer receives the sight interest, if a sight interest was configured.

You can add deposit liquidation transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a deposit liquidation transaction to a deposit contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



Contract Event

Contract: 12762

Customer: [redacted]

Currency: EUR

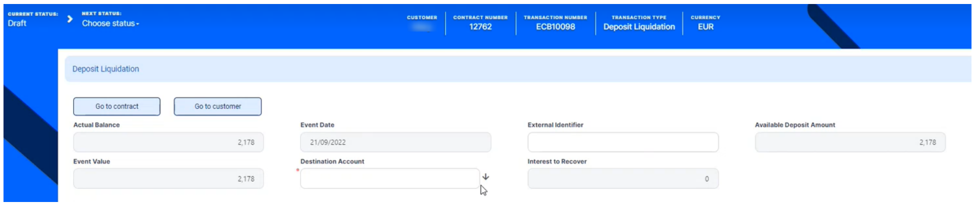
Event Date: 21/09/2022

Transaction Type: Deposit Liquidation

3. Fill in the following fields:
   - **Event Date** - This is pre-filled with the current date.
   - **Transaction Type** - Select from the list the **Deposit Liquidation** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

   Other values are automatically completed: contract, customer, and currency.

4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. The account's actual balance, available deposit amount, the calculated interest to recover at the current date, event value, and event date are automatically calculated, and you can't edit them.

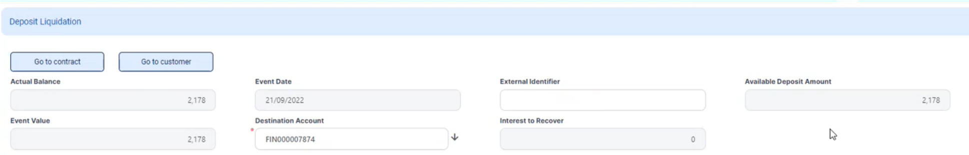

CURRENT STATUS: Draft
NEXT STATUS: Choose status
CUSTOMER [redacted]
CONTRACT NUMBER 12762
TRANSACTION NUMBER ECB10098
TRANSACTION TYPE Deposit Liquidation
CURRENCY EUR

Deposit Liquidation

Actual Balance 2,178
Event Date 21/09/2022
External Identifier
Available Deposit Amount 2,178
Event Value 2,178
Destination Account
Interest to Recover 0

5. Fill in the **external identifier** of the transaction, if available.

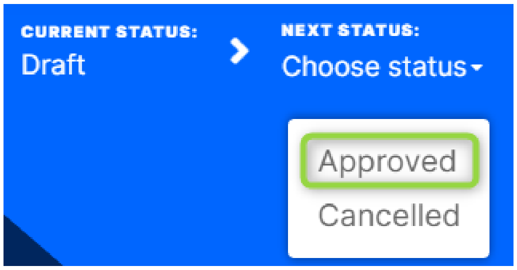
6. Select from the list the **Destination Account** for the respective amount, the account where the all the funds from the deposit should be moved by Core Banking after approving the liquidation transaction. The list contains all the active accounts in the system. You should select an account belonging to the same customer as the deposit, opened in the same currency.


Deposit Liquidation

Actual Balance 2,178
Event Date 21/09/2022
External Identifier
Available Deposit Amount 2,178
Event Value 2,178
Destination Account FIN000007874
Interest to Recover 0

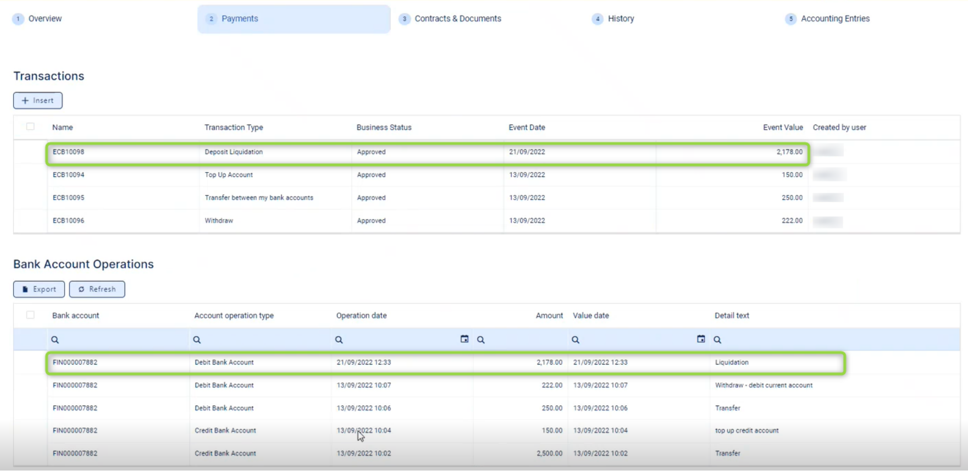
7. Click the **Save and Reload** button.
   If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
   While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

8. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



9. Confirm the change of status in the **Confirmation** window, clicking **Yes**. The event is now in **Approved** status and Core Banking applies the transaction to the contract, moving the funds calculated in the liquidation event value from the deposit account into the selected destination account.

   The transaction is visible in the **Transactions** section, and you can also see the account operation in the **Bank Account Operations** section.



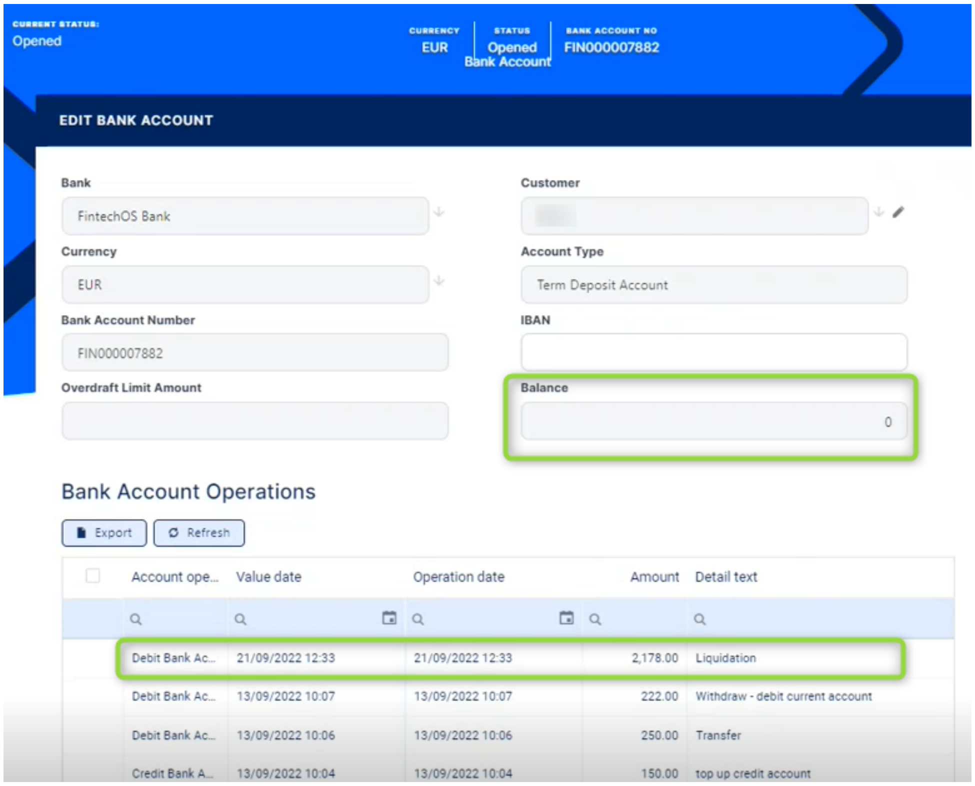
Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB10098	Deposit Liquidation	Approved	21/09/2022	2,178.00	[redacted]
ECB10094	Top Up Account	Approved	13/09/2022	150.00	[redacted]
ECB10095	Transfer between my bank accounts	Approved	13/09/2022	250.00	[redacted]
ECB10096	Withdraw	Approved	13/09/2022	222.00	[redacted]

Bank Account Operations

Bank account	Account operation type	Operation date	Amount	Value date	Detail text
FIN000007882	Debit Bank Account	21/09/2022 12:33	2,178.00	21/09/2022 12:33	Liquidation
FIN000007882	Debit Bank Account	13/09/2022 10:07	222.00	13/09/2022 10:07	Withdraw - debit current account
FIN000007882	Debit Bank Account	13/09/2022 10:06	250.00	13/09/2022 10:06	Transfer
FIN000007882	Credit Bank Account	13/09/2022 10:04	150.00	13/09/2022 10:04	top up credit account
FIN000007882	Credit Bank Account	13/09/2022 10:02	2,500.00	13/09/2022 10:02	Transfer

10. The deposit account's balance is now zero. View the balance of the account after approving the transaction, clicking the pencil icon next to the **Main Bank Account** field in the contract's **Overview** tab:



CURRENT STATUS: Opened

CURRENCY: EUR | STATUS: Opened Bank Account | BANK ACCOUNT NO: FIN000007882

EDIT BANK ACCOUNT

Bank: FintechOS Bank

Customer: [redacted]

Currency: EUR

Account Type: Term Deposit Account

Bank Account Number: FIN000007882

IBAN:

Overdraft Limit Amount:

Balance: 0

Bank Account Operations

Account ope...	Value date	Operation date	Amount	Detail text
Debit Bank Ac...	21/09/2022 12:33	21/09/2022 12:33	2,178.00	Liquidation
Debit Bank Ac...	13/09/2022 10:07	13/09/2022 10:07	222.00	Withdraw - debit current account
Debit Bank Ac...	13/09/2022 10:06	13/09/2022 10:06	250.00	Transfer
Credit Bank A...	13/09/2022 10:04	13/09/2022 10:04	150.00	top up credit account

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

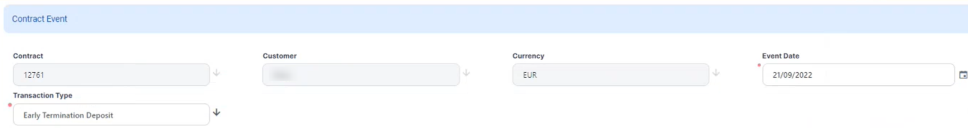
The liquidated deposit contract, with zero available balance, is now ready to be closed. Depending on its closure settings, it is either picked up by Core Banking and automatically closed, or you can close it manually.

Terminating a Deposit Contract before Maturity

An `Early Termination Deposit` transaction represents the way of closing the deposit account before its maturity, so the entire amount is transferred in the current account. Because the liquidation occurs before maturity date, the customer receives the sight interest, if a sight interest was configured, or the interest accrued to the date with possible penalty applied.

In order to add an early termination transaction to a deposit contract, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.

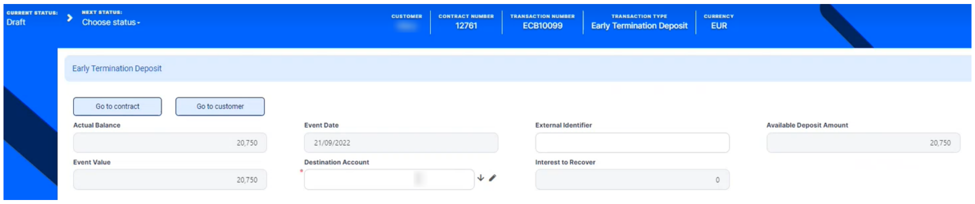
   

   Contract Event

   Contract: 12761
   Customer: [redacted]
   Currency: EUR
   Event Date: 21/09/2022
   Transaction Type: Early Termination Deposit

3. Fill in the following fields:
   - **Event Date** - This is pre-filled with the current date.
   - **Transaction Type** - Select from the list the **Early Termination Deposit** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

   Other values are automatically completed: contract, customer, and currency.
4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. The account's actual balance, available deposit amount, the calculated interest to recover at the current date, event value, and event date are automatically calculated, and you can't edit them.

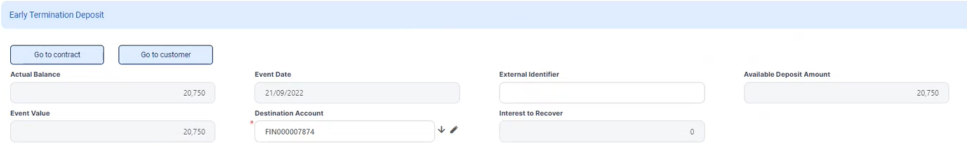
   CURRENT STATUS: Draft
   NEXT STATUS: Choose status
   CUSTOMER: [redacted]
   CONTRACT NUMBER: 12761
   TRANSACTION NUMBER: ECB10099
   TRANSACTION TYPE: Early Termination Deposit
   CURRENCY: EUR

   Early Termination Deposit

   Actual Balance: 20,750
   Event Date: 21/09/2022
   External Identifier:
   Available Deposit Amount: 20,750
   Event Value: 20,750
   Destination Account: [redacted]
   Interest to Recover: 0

5. Fill in the **external identifier** of the transaction, if available.

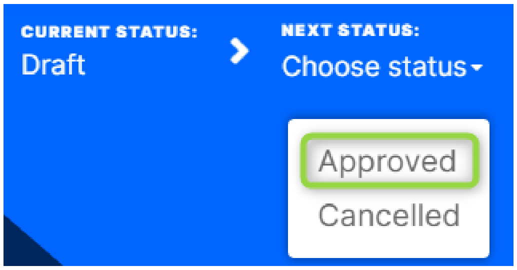
6. Select from the list the **Destination Account** for the respective amount, the account where the all the funds from the deposit should be moved by Core Banking after approving the liquidation transaction. The list contains all the active accounts in the system. You should select an account belonging to the same customer as the deposit, opened in the same currency.



Actual Balance: 20,750
Event Date: 21/09/2022
External Identifier:
Available Deposit Amount: 20,750
Event Value: 20,750
Destination Account: FIN000007874
Interest to Recover: 0

7. Click the **Save and Reload** button.
If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

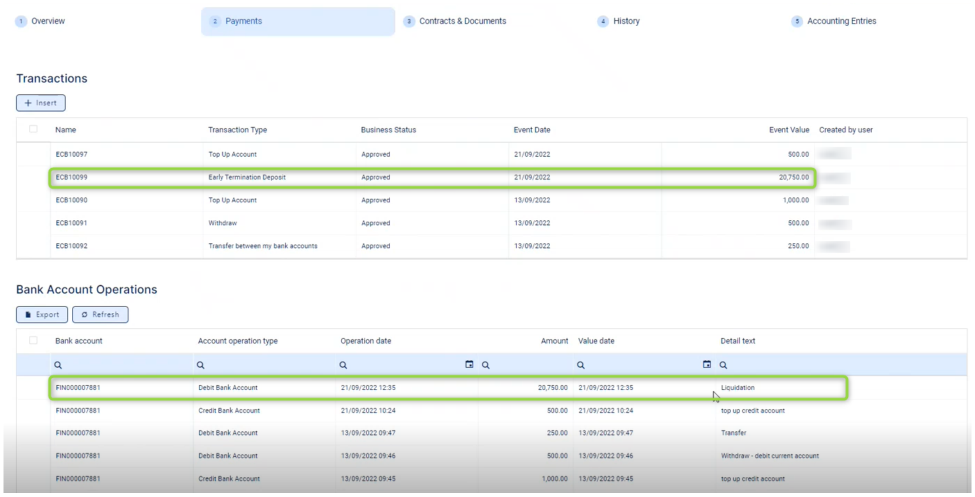
8. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



CURRENT STATUS: Draft
NEXT STATUS:

9. Confirm the change of status in the **Confirmation** window, clicking **Yes**.
The event is now in **Approved** status and Core Banking applies the transaction to the contract, moving the funds calculated in the early termination event value from the deposit account into the selected destination account.

The transaction is visible in the **Transactions** section, and you can also see the account operation in the **Bank Account Operations** section.



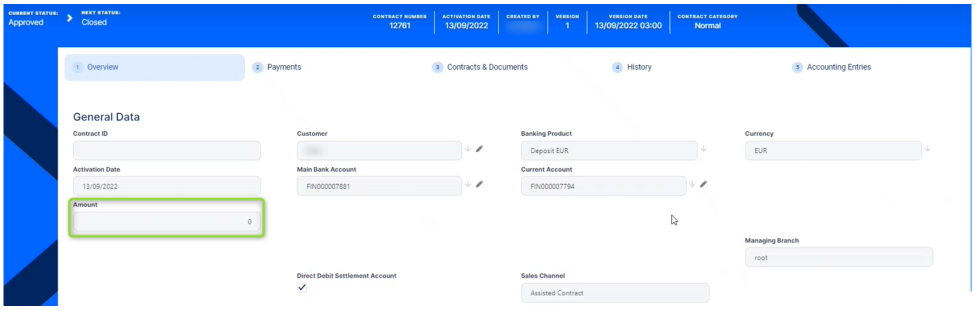
Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB10097	Top Up Account	Approved	21/09/2022	500.00	[redacted]
ECB10099	Early Termination Deposit	Approved	21/09/2022	20,750.00	[redacted]
ECB10090	Top Up Account	Approved	13/09/2022	1,000.00	[redacted]
ECB10091	Withdraw	Approved	13/09/2022	500.00	[redacted]
ECB10092	Transfer between my bank accounts	Approved	13/09/2022	250.00	[redacted]

Bank Account Operations

Bank account	Account operation type	Operation date	Amount	Value date	Detail text
FIN000007881	Debit Bank Account	21/09/2022 12:35	20,750.00	21/09/2022 12:35	Liquidation
FIN000007881	Credit Bank Account	21/09/2022 10:24	500.00	21/09/2022 10:24	top up credit account
FIN000007881	Debit Bank Account	13/09/2022 09:47	250.00	13/09/2022 09:47	Transfer
FIN000007881	Debit Bank Account	13/09/2022 09:46	500.00	13/09/2022 09:46	Withdraw - debit current account
FIN000007881	Credit Bank Account	13/09/2022 09:45	1,000.00	13/09/2022 09:45	top up credit account

10. The deposit account's balance is now zero, as you can see in the contract's **Overview** tab.



CURRENT STATUS: Approved
NEXT STATUS: Closed

CONTRACT NUMBER: 12761
ACTIVATION DATE: 13/09/2022
CREATED BY: [redacted]
VERSION: 1
VERSION DATE: 13/09/2022 03:00
CONTRACT CATEGORY: Normal

General Data

Contract ID:
Customer: [redacted]
Banking Product: Deposit EUR
Currency: EUR
Activation Date: 13/09/2022
Main Bank Account: FIN000007881
Current Account: FIN000007794
Amount: 0
Managing Branch: root
Direct Debit Settlement Account: ☑
Sales Channel: Assisted Contract

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

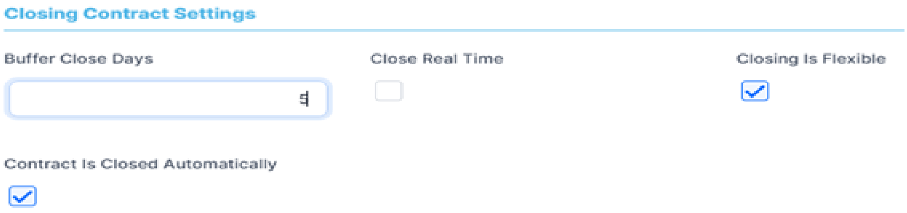
The terminated deposit contract, with zero available balance, is now ready to be closed. Depending on its closure settings, it is either picked up by Core Banking and automatically closed, or you can close it manually.

Closing a Deposit Contract

Liquidated deposit contracts with zero available balance can be closed. Depending on their closure settings, such contracts are either picked up by Core Banking and automatically closed through scheduled jobs, or you can close them manually.

There are cases when you might expect the deposit to get closed once all amounts transferred (either at maturity or after performing a liquidation or an early termination transaction) and the deposit is not configured with automatic roll-over, or you might want such contracts to be closed after a certain number of days, allowing for possible reconciliations, or even leave them to be manually closed or with a localized job. All this is enabled from product level and, if set as negotiable, you can also change the default at contract level. You might need such settings if you work with direct debit and need to allow for the number of days the direct debit can bounce to pass before you really close the deal.

You can configure the closure settings during product definition, in the **Lean Contract Settings**' tab -> **Closing Contract Settings** section, as described in the Banking Product Factory user guide:



Closing Contract Settings

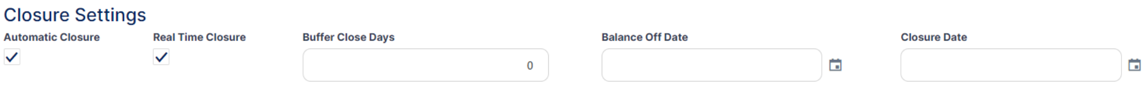
Buffer Close Days: 5

Close Real Time: □

Closing Is Flexible: ☑

Contract Is Closed Automatically: ☑

If allowed from the product definition, you can amend the closure settings of the contract, the way Core Banking should behave once the deposit's balance is zero and the contract can be closed. Perform these configurations in the **Closure Settings** section of the **Overview** tab, during contract creation, for contracts based on banking products having the `Closing Is Flexible = True` setting:



Closure Settings

Automatic Closure: ✓

Real Time Closure: ✓

Buffer Close Days: 0

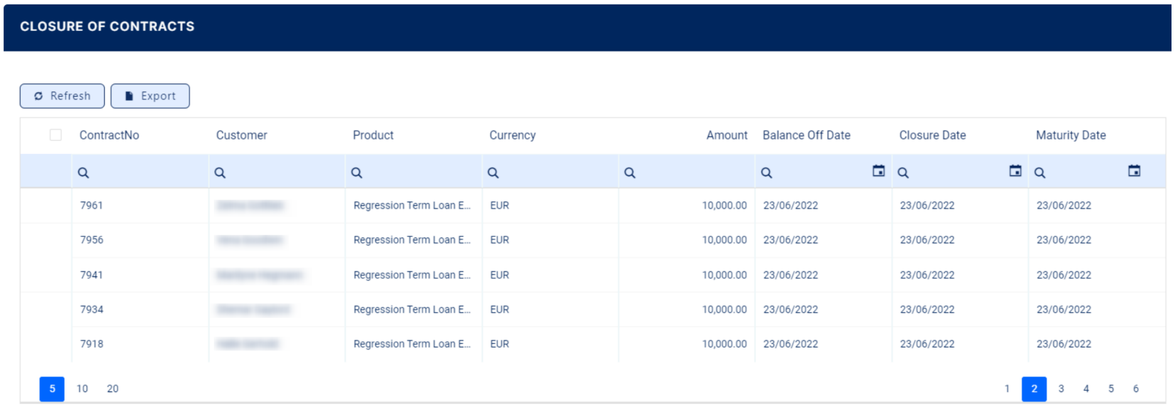
Balance Off Date:

Closure Date:

Depending on the real time closure setting, Core Banking uses the one following scheduled jobs to close the contracts automatically:

- `Close Contracts (CB) Job` - this job closes automatically all contracts with `Automatic Closure = True` and `Real Time Closure = False`, with zero available amount and with no further amounts to be recovered, that have `Balance Off Date` filled in and `Closure Date = Current Date`.
- `Close Contracts RealTime(CB) Job` - this job closes automatically all contracts with `Automatic Closure = True` and `Real Time Closure = True`, with zero available amount and with no further amounts to be recovered.

You can see the list of contracts that are ready to be closed in the **Closure of Contracts** report:



CLOSURE OF CONTRACTS

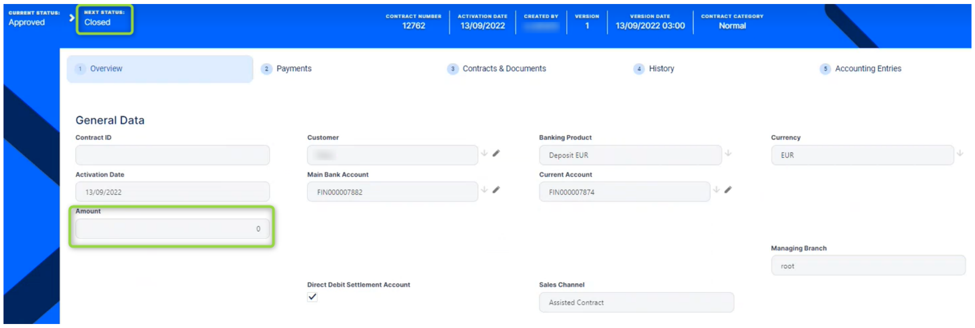
☐	ContractNo	Customer	Product	Currency	Amount	Balance Off Date	Closure Date	Maturity Date
	7961	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
	7956	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
	7941	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
	7934	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
	7918	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022

You can also use the `GetClosureOfContracts` endpoint to fetch the same information within your own API integration.

Manually Closing a Contract

If you opted to close a contract with all the obligations met manually, and not automatically, then follow these steps:

1. Double-click to open an approved deposit contract with zero balance, that was already liquidated.
2. Change the contract's **Next Status** into **Closed**.



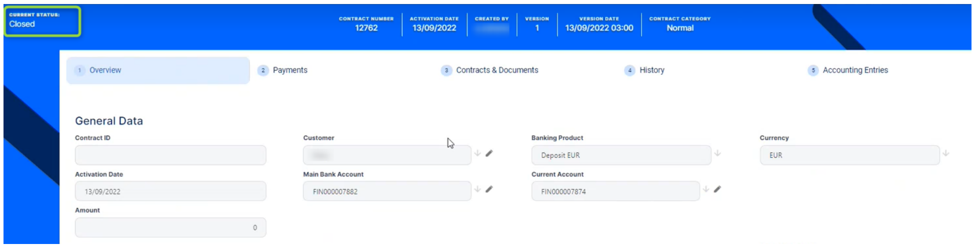
CURRENT STATUS: Approved
NEXT STATUS: Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12762	13/09/2022	[redacted]	1	13/09/2022 03:00	Normal

General Data

Contract ID:
Customer: [redacted]
Banking Product: Deposit EUR
Currency: EUR
Activation Date: 13/09/2022
Main Bank Account: FIN000007882
Current Account: FIN000007874
Amount: 0
Managing Branch: root
Direct Debit Settlement Account: ✓
Sales Channel: Assisted Contract

If Core Banking performs all the validations and finds that the financial obligations are met and there are no more amount to be recovered, then the contract's status becomes **Closed**. You can't perform any other operations on this contract.



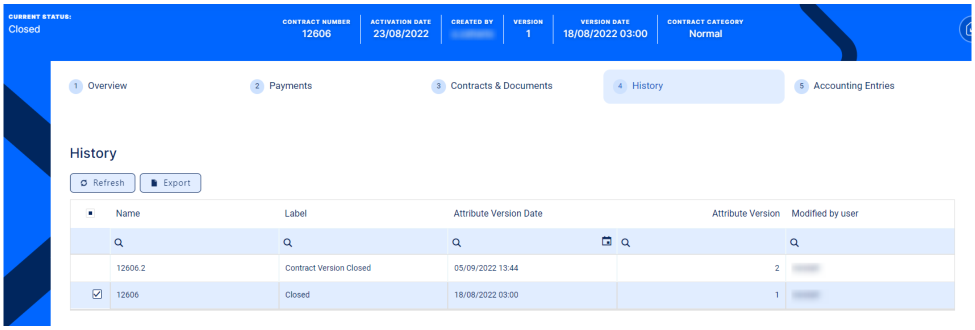
CURRENT STATUS: Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12762	13/09/2022	[redacted]	1	13/09/2022 03:00	Normal

General Data

Contract ID:
Customer: [redacted]
Banking Product: Deposit EUR
Currency: EUR
Activation Date: 13/09/2022
Main Bank Account: FIN000007882
Current Account: FIN000007874
Amount: 0

Any existing versions of the contract are also automatically closed, as you can see in the **History** tab.



CURRENT STATUS: Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12606	23/08/2022	[redacted]	1	18/08/2022 03:00	Normal

History

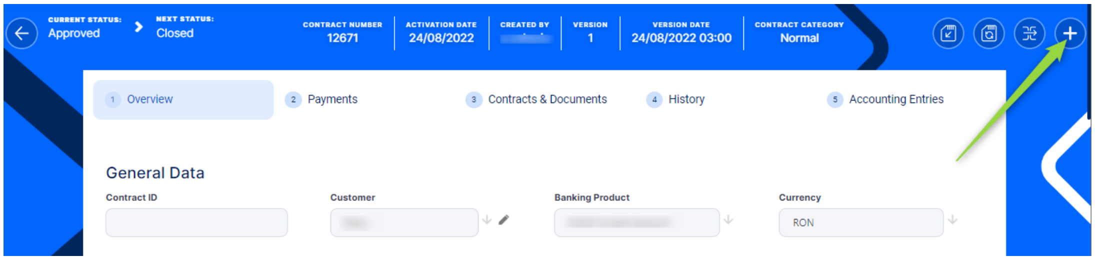
	Name	Label	Attribute Version Date	Attribute Version	Modified by user
	12606.2	Contract Version Closed	05/09/2022 13:44	2	[redacted]
☑	12606	Closed	18/08/2022 03:00	1	[redacted]

Creating New Versions of Existing Deposit Contracts

In Core Banking, the contracts are set up for versioning. Thus, if you want to update the details of an approved contract, then you must create a new version of the record.

To create a new version for a record with the **Approved** status, follow these steps:

1. While in the **Contract** page of the record selected for updates, click the **New Version** button.



CURRENT STATUS: Approved > NEXT STATUS: Closed

CONTRACT NUMBER 12671 | ACTIVATION DATE 24/08/2022 | CREATED BY [redacted] | VERSION 1 | VERSION DATE 24/08/2022 03:00 | CONTRACT CATEGORY Normal

General Data

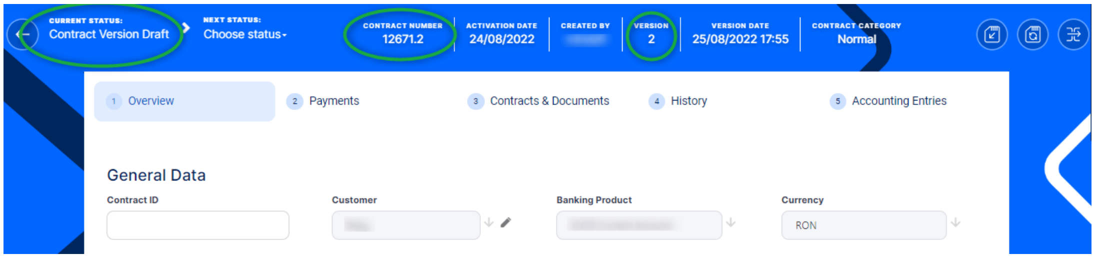
Contract ID:

Customer: [redacted]

Banking Product: [redacted]

Currency: RON

2. View the new version of the contract created by Core Banking, with **Contract Version Draft** status.



CURRENT STATUS: Contract Version Draft > NEXT STATUS: Choose status

CONTRACT NUMBER 12671.2 | ACTIVATION DATE 24/08/2022 | CREATED BY [redacted] | VERSION 2 | VERSION DATE 25/08/2022 17:55 | CONTRACT CATEGORY Normal

General Data

Contract ID:

Customer: [redacted]

Banking Product: [redacted]

Currency: RON

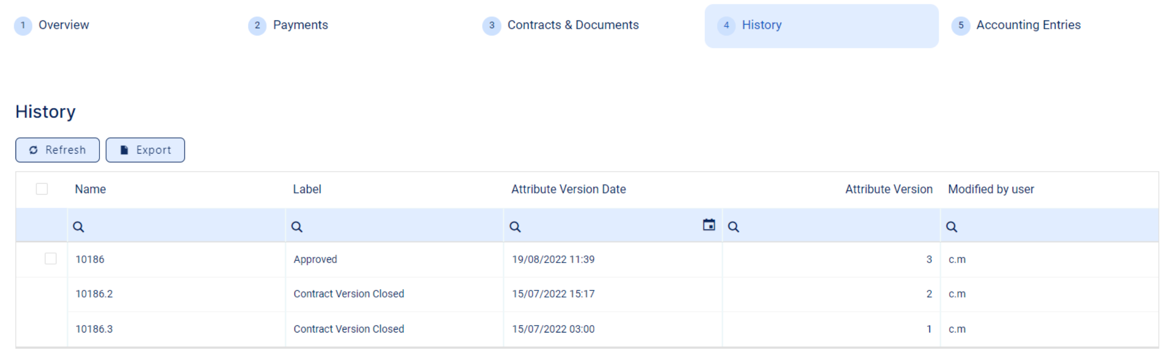
3. Edit the desired fields in the **Overview** tab. You can only edit a set of fields for contracts based on specific banking products.
4. Click the **Save and Reload** button.

If you approve the contract in **Contract Version Draft** status, then the original record transitions into the **Contract Version Closed** status and the secondary version becomes the **Approved** currently active contract record.

Read more details about versioning a record on the How to Version an Entity Record page.

Viewing a Contract's History

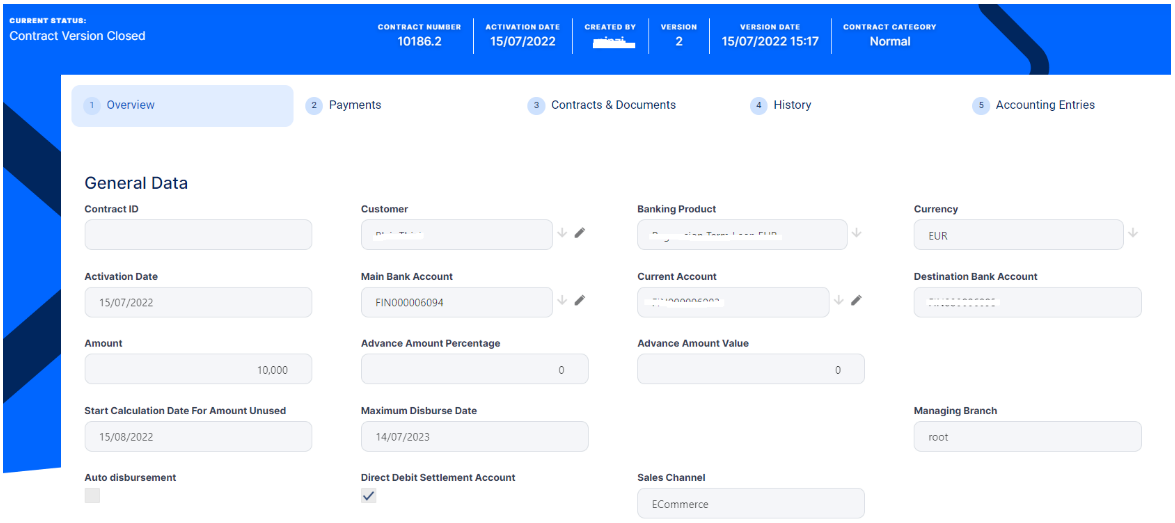
You can view the versions of the contract, along with workflow status and the user who modified the record, in the contract's **History** tab.



History

Name	Label	Attribute Version Date	Attribute Version	Modified by user
10186	Approved	19/08/2022 11:39	3	c.m
10186.2	Contract Version Closed	15/07/2022 15:17	2	c.m
10186.3	Contract Version Closed	15/07/2022 03:00	1	c.m

A contract can have only one **Draft** version, one **Current** version, but it may have multiple **History** versions, which are displayed in this section. Here you can track the contract's life cycle and view older versions that are no longer active. Double-click a version in the list to view its details.



CURRENT STATUS: Contract Version Closed

CONTRACT NUMBER 10186.2 | ACTIVATION DATE 15/07/2022 | CREATED BY [redacted] | VERSION 2 | VERSION DATE 15/07/2022 15:17 | CONTRACT CATEGORY Normal

General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	[redacted]	EUR
Activation Date	Main Bank Account	Current Account	Destination Bank Account
15/07/2022	FIN000006094	[redacted]	[redacted]
Amount	Advance Amount Percentage	Advance Amount Value	
10,000	0	0	
Start Calculation Date For Amount Unused	Maximum Disburse Date		Managing Branch
15/08/2022	14/07/2023		root
Auto disbursement	Direct Debit Settlement Account	Sales Channel	
□	☑	ECommerce	

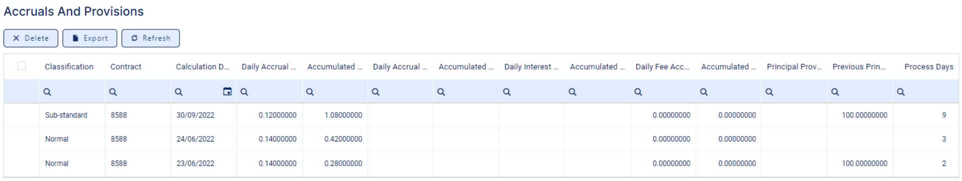
Viewing a Contract's Accounting Entries

You can view all the accounting entries, accounting totals, and accruals and provisions recorded for a contract within the **Accounting Entries** tab of the contract. These records are automatically generated by the system, after performing transactions for an approved contract.

View Accruals and Provisions

To view the records containing daily accrual and provisions, generated automatically by the system respecting the definition of the contract, product dimensions, system parameters and jobs, follow these steps:

1. Navigate to the contract's **Accounting Entries** tab > **Accruals and Provisions** section.



Accruals And Provisions

□	Classification	Contract	Calculation D...	Daily Accrual ...	Accumulated ...	Daily Accrual ...	Accumulated ...	Daily Interest ...	Accumulated ...	Daily Fee Acc...	Accumulated ...	Principal Prov...	Previous Prin...	Process Days
	Sub-standard	8588	30/09/2022	0.12000000	1.08000000					0.00000000	0.00000000		100.00000000	9
	Normal	8588	24/06/2022	0.14000000	0.42000000					0.00000000	0.00000000			3
	Normal	8588	23/06/2022	0.14000000	0.28000000					0.00000000	0.00000000		100.00000000	2

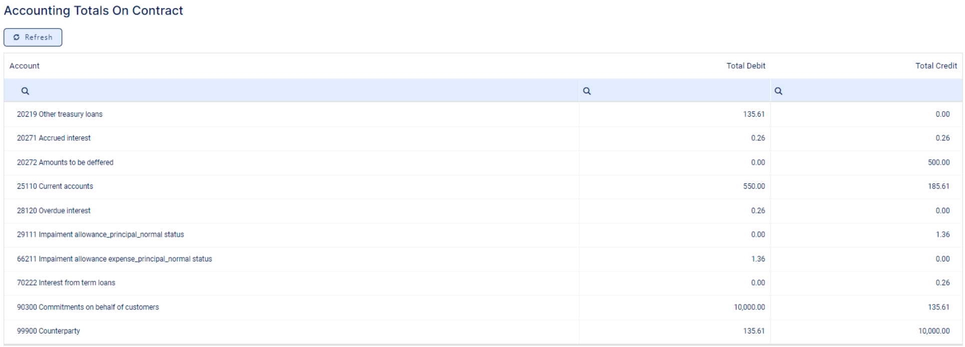
2. View the information displayed for each accrual and provision entry:
   - **Classification** - The classification of the accrual and provision entry. The classification is determined based on the records created in the **Loan Classification** menu. These records classify transactions based on the number of days since a repayment notification is overdue.
   - **Contract** - The number of the current contract.
   - **Calculation Date** - The date when the accrual and provision calculation was performed.
   - **Daily Accrual Interest** - The amount of interest accrued on that day.
   - **Accumulated Interest Accrual** - The total amount of interest accrued until that day.
   - **Daily Interest Provision** - The amount of interest provisioned on that day.
   - **Accumulated Interest Provision** - The total amount of interest provisioned until that day.
   - **Daily Fee Accrual** - The amount of fees and commissions accrued on that day.
   - **Accumulated Fee Accrual** - The total amount of fees and commissions accrued until that day.
   - **Principal Provision** - The amount of principal provisioned.

- **Previous Principal Provision** - The previous amount of principal provisioned.
- **Process Days** - The number of days processed.

View Accounting Totals on Contract

To view an overview of the total amounts specified in accounting records generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job, follow these steps:

1. Navigate to the contract's **Accounting Entries** tab > **Accounting Totals on Contract** section.



Accounting Totals On Contract

Account	Total Debit	Total Credit
20219 Other treasury loans	135.61	0.00
20271 Accrued interest	0.26	0.26
20272 Amounts to be deffered	0.00	500.00
25110 Current accounts	550.00	185.61
28120 Overdue interest	0.26	0.00
29111 Impaiment allowance_principal_normal status	0.00	1.36
66211 Impaiment allowance expense_principal_normal status	1.36	0.00
70222 Interest from term loans	0.00	0.26
90300 Commitments on behalf of customers	10,000.00	135.61
99900 Counterparty	135.61	10,000.00

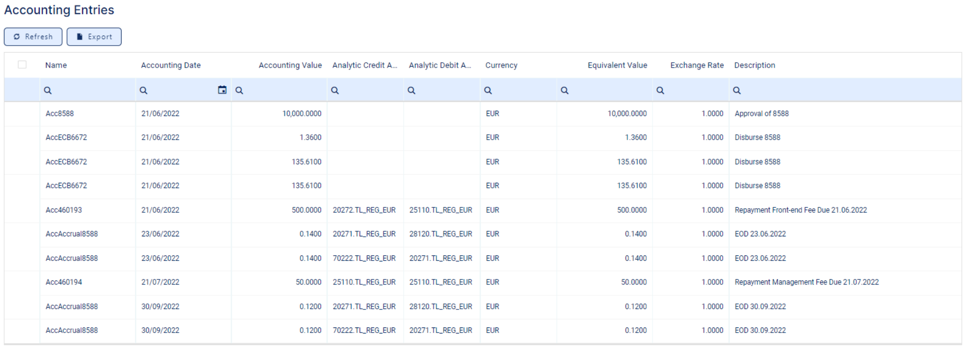
2. View the information displayed for each total amount:

   - **Account** - The account where the operation was performed.
   - **Total Debit** - The amount which was debited from the account.
   - **Total Credit** - The amount which was credited to the account.

View Accounting Entries

To view the accounting for the transactions related to the loan contract generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job, follow these steps:

1. Navigate to the contract's **Accounting Entries** tab > **Accounting Entries** section.



Accounting Entries

□	Name	Accounting Date	Accounting Value	Analytic Credit A...	Analytic Debit A...	Currency	Equivalent Value	Exchange Rate	Description
	Acc8588	21/06/2022	10,000.0000			EUR	10,000.0000	1.0000	Approval of 8588
	AccECB6672	21/06/2022	1.3600			EUR	1.3600	1.0000	Disburse 8588
	AccECB6672	21/06/2022	135.6100			EUR	135.6100	1.0000	Disburse 8588
	AccECB6672	21/06/2022	135.6100			EUR	135.6100	1.0000	Disburse 8588
	Acc460193	21/06/2022	500.0000	20272.TL_REG_EUR	25110.TL_REG_EUR	EUR	500.0000	1.0000	Repayment Front-end Fee Due 21.06.2022
	AccAccrual8588	23/06/2022	0.1400	20271.TL_REG_EUR	28120.TL_REG_EUR	EUR	0.1400	1.0000	EOD 23.06.2022
	AccAccrual8588	23/06/2022	0.1400	70222.TL_REG_EUR	20271.TL_REG_EUR	EUR	0.1400	1.0000	EOD 23.06.2022
	Acc460194	21/07/2022	50.0000	25110.TL_REG_EUR	25110.TL_REG_EUR	EUR	50.0000	1.0000	Repayment Management Fee Due 21.07.2022
	AccAccrual8588	30/09/2022	0.1200	20271.TL_REG_EUR	28120.TL_REG_EUR	EUR	0.1200	1.0000	EOD 30.09.2022
	AccAccrual8588	30/09/2022	0.1200	70222.TL_REG_EUR	20271.TL_REG_EUR	EUR	0.1200	1.0000	EOD 30.09.2022

2. View the information displayed for each accounting entry:
   - **Name** - The id of the accounting entry.
   - **Accounting Date** - The date when the entry was generated.
   - **Accounting Value** - The value of the accounting entry.
   - **Analytic Credit Account Code** - The code of the analytic credit account.
   - **Analytic Debit Account Code** - The code of the analytic debit account.
   - **Currency** - The currency of the accounting entry.
   - **Equivalent Value** - The equivalent value of the accounting entry expressed in the contract's currency.
   - **Exchange Rate** - The exchange rate between the accounting entry currency and the contract currency.
   - **Description** - The description of the accounting operation.

Current Accounts

A current account is a bank account where you can store and withdraw money, enable it for debit/ credit transactions internally (disburse/ repay loan, transfer between accounts) or via integrated solutions for card management or payments. Core Banking enables you to create contracts based on current account products and to manage such contracts. Read about the operations that you can perform for the current accounts with or without the overdraft functionality.

Current Account Contract Life Cycle and States

The four-eyes principle is applicable for all contracts in FintechOSCore Banking, meaning that a record should be approved by a second financial institution employee, with higher authorization rights. This is enabled via approval task FintechOS Platform capabilities and thus it is also a financial institution's responsibility to set proper security roles and access rights to its users, in order to make sure that the same user can't insert and also authorize the same record.

A contract record has the following business workflow statuses:

- **Draft** - the status of a newly created contract record that was not yet sent for approval. While in this status, you can edit some fields, but you can't add events (payments) to it. Send the record to approval after editing all the necessary details.
- **Pending** - this is a system status applied to contracts sent for approval, but not yet approved. No updates are available in this system status.
- **Approved** - the status of a contract record after being authorized by a user with contract approval competencies. While in this status, you cannot edit the record's details, but you can add events to it within the **Payments** tab. If you need to alter the contract's details, create a new version based on the current contract.

  NOTE

  Each event must also be approved by a user with contract approval competencies, otherwise, the transaction is not performed by the system. New contract approval is blocked by Core Banking if the customer has overdue days >= the value of the `DelayDaysForBlockNewContractApproval` parameter.

- **Closed** - the last status of a contract, after manually closing it or after creating a new version based on the current version. No updates are allowed on the record.

- **Canceled** - the status of a contract after manually canceling it straight from the **Draft** status. No updates are allowed on the record.

> **NOTE**
> Change the contract's status to **Approved** so that the customer can use the contract and in order to apply transactions to it.

Contract Versioning

Core Banking allows you to create new versions for an existing contract if you need to modify an existing approved contract. New versions are automatically created when the payment schedule is modified - that implies any increase/ decrease, change of costs, reschedule or payment holiday transactions.

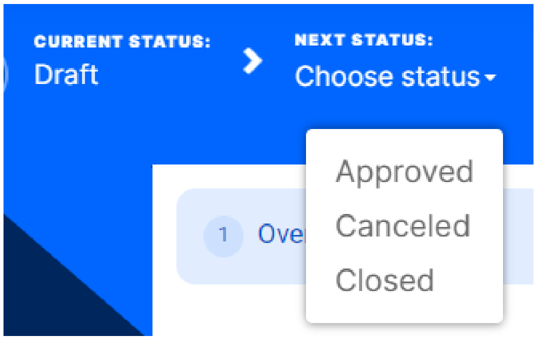
A contract version can have the following statuses:

- **Contract Version Draft** - the status of a newly created contract version record that was not yet sent for approval. While in this status, you can edit some fields, but you can't add events (payments) to it. Send the record to approval after editing all the necessary details.
- **Approved** - the status of a contract version record after being authorized by a user with contract approval competencies. While in this status, you cannot edit the record's details, but you can add events to it within the **Payments** tab.
- **Contract Version Closed** - the last status of a contract version, after manually closing it or after creating another new version based on the current version. No updates are allowed on the record.

> **NOTE**
> All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event outside regular schedule is approved for that contract.

Changing Contract Statuses

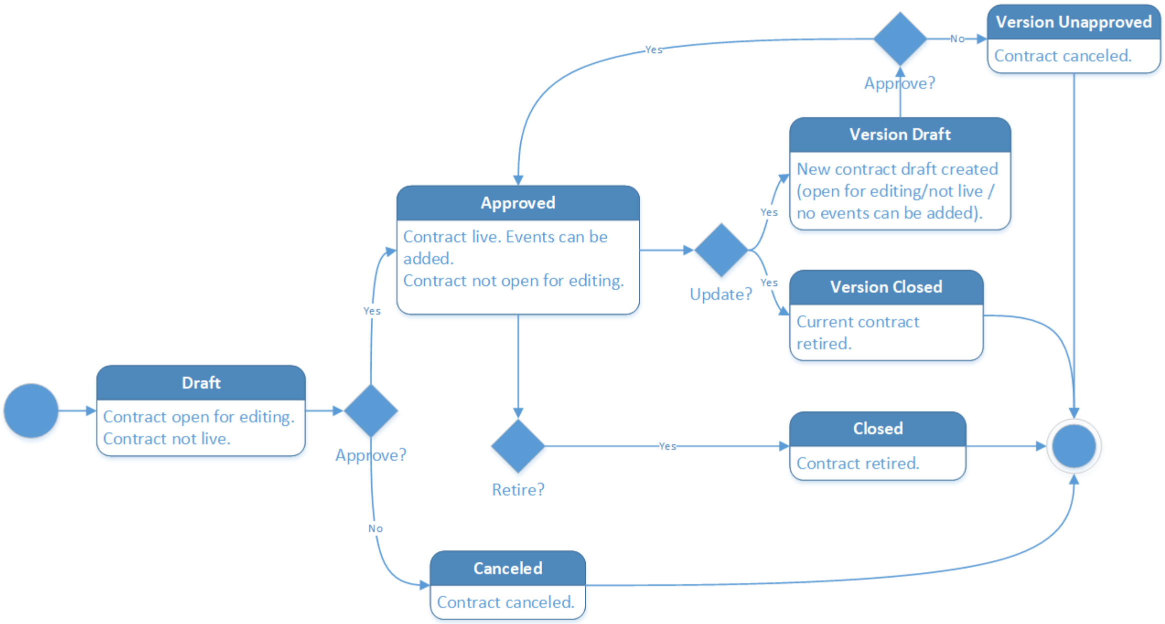
You can manage a contract's life cycle by changing its status from the top right corner of the screen.



CURRENT STATUS: Draft

NEXT STATUS: Choose status ▾

The contract status transitions are illustrated below:



Draft
Contract open for editing.
Contract not live.
Approve?
Yes
No
Approved
Contract live. Events can be added.
Contract not open for editing.
Update?
Yes
Yes
Version Draft
New contract draft created (open for editing/not live / no events can be added).
Approve?
Yes
No
Version Unapproved
Contract canceled.
Version Closed
Current contract retired.
Retire?
Yes
Closed
Contract retired.
Canceled
Contract canceled.

Note that:

- Once a record is live, its settings can no longer be modified.
- If you want to update the details of a live contract, you must create a new contract version.
- When you create a new contract version, the current version is retired and moved to history; no updates are allowed on the retired version.
- Every contract version starts in a draft state and must go through an approval process

before going live.

- Only one version of a contract can be live at one time.

NOTE
As a best practice, new records or new versions of existing records created on a specific day should be approved on the same day.

Creating a Current Account

A current account is a bank account where you can store and withdraw money, enable it for debit/ credit transactions internally (disburse/ repay loan, transfer between accounts) or via integrated solution for card management or payments.

A current account with an attached overdraft functionality allows customers to withdraw funds from the account even if the available balance goes below zero. If there is a prior agreement with the account provider for an overdraft, and the amount overdrawn is within the authorized overdraft limit, then interest is normally charged at the agreed rate. If the negative balance exceeds the agreed terms, then additional fees may be charged and higher interest rates may apply. The customer may use the account beyond their available balance (credit balance) and may have a debit balance as low as the approved overdraft/ limit. The overdraft can be added on top of existing current accounts.

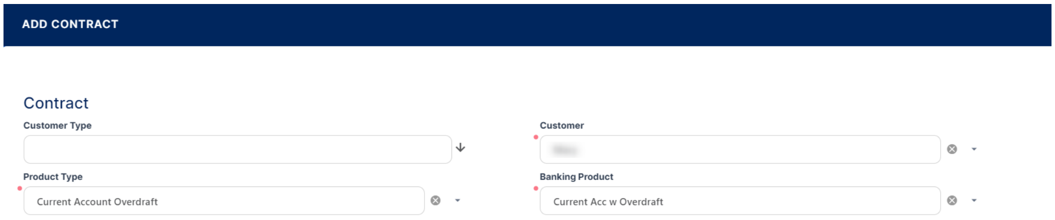
The overdraft feature of the current account may expire, in which case the contract continues to function as a current account. If needed, the overdraft feature can be reactivated in the future within the same contract by editing the contract and creating a new version. If the overdraft feature is extended by creating a new version of the contract, the repayment schedule is also updated. In cases when the feature is extended after a period of expiry, then the repayment schedule has a missing period equivalent with the period when overdraft was expired. All overdue amounts from previous overdraft notifications generated for the same current account contract are covered automatically, decreasing the balance and available limit amount of the new overdraft. The overdraft amount can fluctuate seasonally or be reduced or increased according to a schedule, defined in the Contract Reevaluation Plans section of the contract.

NOTE
Before creating a current account contract, make sure that the customer is recorded in Core Banking.

To create a new contract:

1. Add Minimum Contract Data

1. Open the **Contracts** page as described in the Managing Contracts section.
2. Click the **Insert** button to display the **Add Contract** page is displayed, the initial page when you insert any type of contract.


ADD CONTRACT

Contract

Customer Type:

Customer: [redacted]

Product Type: Current Account Overdraft

Banking Product: Current Acc w Overdraft

3. Fill in the following fields:

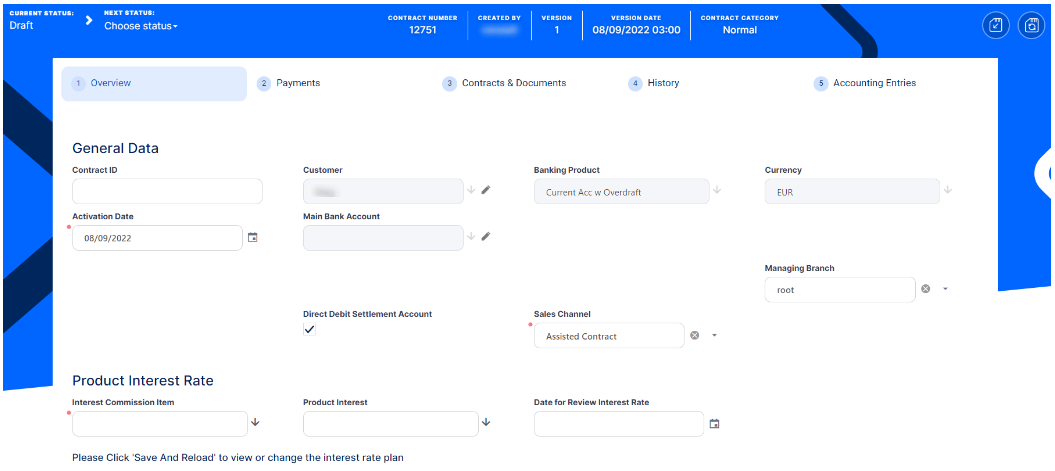
- **Customer Type** - Optionally, select the type of the customer for the contract, to filter the displayed customers in the next field.
- **Customer** - Select from the list the customer for whom you are creating a contract.
- **Product Type** - Select from the list the product type to filter the list of banking products accordingly.
- **Banking Product** - Select from the list the desired banking product.

NOTE
Be careful when choosing the values for the previously mentioned fields because you can't modify them after saving the contract!
Make sure that you select `Current Account` in the Product Type field and a `Current Account` banking product in the Banking Product field. If you want to use the overdraft functionality now or sometime in the future for this current account contract, select `Current Account Overdraft`

> in the Product Type field and a `Current Account with Overdraft` banking product in the Banking Product field.

4. Click the **Save and Reload** button.

Core Banking saves the contract in **Draft** status, with minimum default information, such as an auto-generated contract number, created by, version and version number. The previously provided details are kept on screen in the General Data section, but they are no longer available for update. The **Currency** has been updated from the banking product level.



CURRENT STATUS: Draft › NEXT STATUS: Choose status

CONTRACT NUMBER: 12751
CREATED BY: [redacted]
VERSION: 1
VERSION DATE: 08/09/2022 03:00
CONTRACT CATEGORY: Normal

General Data

Contract ID:
Customer: [redacted]
Banking Product: Current Acc w Overdraft
Currency: EUR
Activation Date: 08/09/2022
Main Bank Account:
Managing Branch: root
Direct Debit Settlement Account: ☑
Sales Channel: Assisted Contract

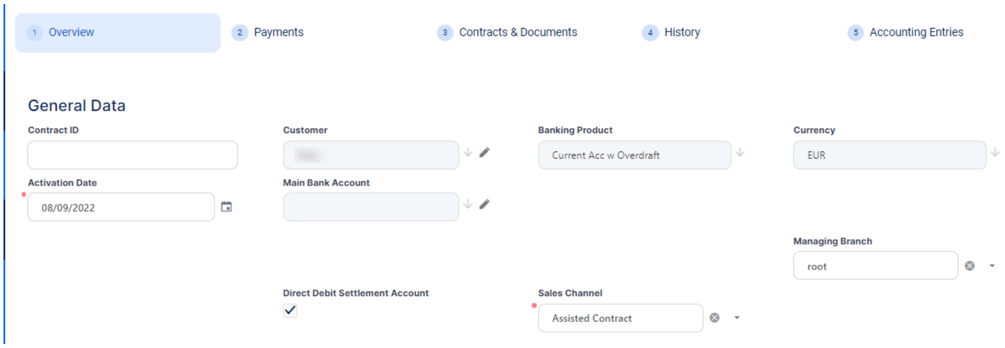
Product Interest Rate

Interest Commission Item:
Product Interest:
Date for Review Interest Rate:

Please Click 'Save And Reload' to view or change the interest rate plan

Proceed to the next steps where the details about the contract are captured and validated against the underlying product, setting the basic elements for the creation of a contract such as customer, banking product, activation date, interest rate, fees, and contract classification, within the newly displayed **Overview** tab.

2. Add General Data to the Contract



General Data

Contract ID:

Customer: [redacted]

Banking Product: Current Acc w Overdraft

Currency: EUR

Activation Date: 08/09/2022

Main Bank Account:

Managing Branch: root

Direct Debit Settlement Account: ☑

Sales Channel: Assisted Contract

1. Fill in or modify, or view the following information:
   - **Contract ID** - Enter a contract ID other than the contract number generated automatically by Core Banking when you saved the contract.
   - **Main Bank Account** - When the contract is approved, this account is created automatically for the bank defined as `Main` in Core Banking, within the **Core Banking Operational** > **Bank** menu. In order to generate an account number, a rule must be defined during the Core Banking implementation phase (example: branch code + incremental sequence number). Until contract approval, no information is displayed here, and you can't edit the field.
   - **Managing Branch** - This represents the branch of the organization where the contract was created. Suppose you work in a branch or credit center, and you need cases to be linked to a specific location so that you can properly allocate them for further actions. It is automatically completed at contract saving time, but you can select another branch from the list.
   - **Direct Debit Settlement Account** - Select this checkbox if the automated settlement of repayment notifications (the direct debit settlement account) functionality is turned on at the contract level. The value of the checkbox was set at the banking product level, but it can be modified at the contract level. The checkbox can be edited in all the statuses of a contract except `Version Closed`, `Closed`, and `Canceled`.

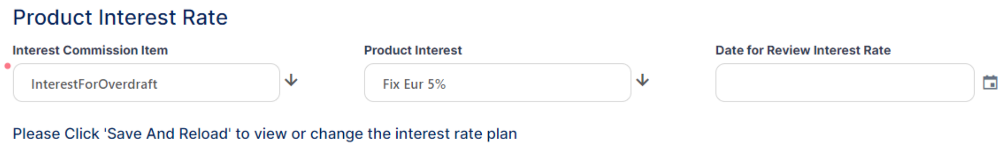
> **NOTE** The `Direct Debit Settlement Account` setting at the customer level takes precedence over the setting at the contract level when creating new contracts. For existing contracts, Core Banking applies the setting configured within the `CustomerToContractDirectDebitSettlementAcc` system parameter.

- **Sales Channel** - Select the channel through which the contract is created.

2. Click the **Save and Reload** button.

3. Manage Product Interest Rate for the Contract

Enter the details about the Product Interest Rate applied to the contract. Depending on the product definition again, you have a list of interest definitions that you can bring along to the contract.



Product Interest Rate

Interest Commission Item	Product Interest	Date for Review Interest Rate
InterestForOverdraft	Fix Eur 5%	

Please Click 'Save And Reload' to view or change the interest rate plan

To manage the product interest rate as it must be applied to this contract:

1. Fill in or modify the following fields:

- **Interest Commission Item** - This field is automatically completed with the interest & commission item defined at the product level, if only one item is found at the product level. If the selected product has more items, you must select one from the list.

- **Product Interest** - Select from the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Penalty interests cannot be selected here.
- **Date for Review Interest Rate** - Enter the date for reviewing the interest rate applicable. For variable interest, this field is automatically completed with the `Reference Rate Date` + `Reference Interest Period` of the underlying interest definition, from the base type interest attached to variable interest. You can edit this field. For months where the date is overlapped, the last day of the month is used for the calculation.

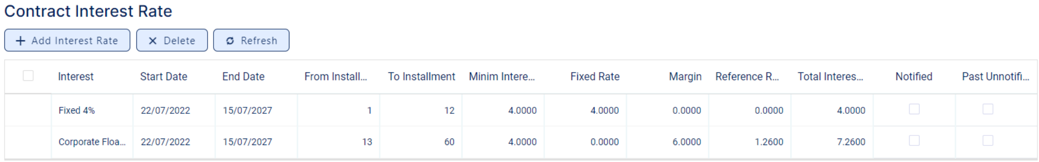
2. Click the **Save and Reload** button.

> **NOTE**
> Fill in any other mandatory fields from the **General Data** and **Repayment Overview** sections, otherwise you can't successfully save the contract.

4. Manage Contract Level Interest & Penalty Interest Rates

Define the information about the contract interest rate (or rates, if you selected a `Collection` type interest rate in the previous **Product Interest Rate** section) in a table format, in the section **Contract Interest Rate** section, which appears only after saving the selected product interest rates.

You can edit the tables cells, so you can customize the interest rates selected at the product level, if the interest and commission list was defined as `negotiable`, to obtain the desired interest rates configuration at the contract level. You can also add or delete interest rates, using the **Add Interest Rate**, respectively the **Delete** buttons above the tables. Thus, the tables enables you to work with multiple interest rates at the contract level.



□	Interest	Start Date	End Date	From Install...	To Installment	Minim Intere...	Fixed Rate	Margin	Reference R...	Total Interes...	Notified	Past Unnotifi...
	Fixed 4%	22/07/2022	15/07/2027	1	12	4.0000	4.0000	0.0000	0.0000	4.0000	□	□
	Corporate Floa...	22/07/2022	15/07/2027	13	60	4.0000	0.0000	6.0000	1.2600	7.2600	□	□

NOTE
The information disappears if you change the product interest, tenor, first due date, maturity date, contract period, or activation date. In this case, save the contract again to display the updated information.

To customize the information specific to each of the contract's **interest rates**:

1. In the **Contract Interest Rate** section, edit the existing information that was automatically completed based on your product interest rate selections:

- **Interest** - Automatically completed with the interest (or interests, for `Collection` type product interest rate) selected in the previous **Product Interest Rate** section. You can select from the drop-down list the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Penalty and overdraft interests cannot be selected here. Depending on the selected interest, other fields can be displayed to be filled in.
- **Start Date** - The interest's start date, automatically completed with the contract's activation date.
- **End Date** - The interest's end date, automatically completed with the contract's maturity date.
- **From Installment** - The first installment for which this interest is applied to the contract.
- **To Installment** - The last installment for which this interest is applied to the contract.
- **Minimum Interest Rate** - This read-only cell is automatically completed with the minimum interest rate applicable for the contract, defined at the banking product level.
- **Fixed Rate** - The fixed rate of the interest. You can only change it if the interest at the banking product level was marked as `Is Negociable`.
- **Margin** - This cell is automatically completed with the margin of the previously selected product interest. You can only change it if the interest at the banking product level was marked as `Is Negociable`.

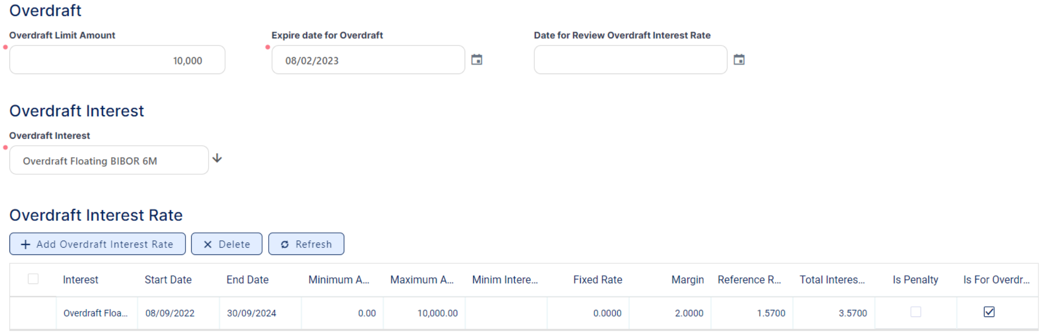
If the product interest was not selected, you can manually enter the margin.

- **Reference Rate** - This read-only cell is automatically completed with the interest type's definition's reference rate valid at the previously selected date.
- **Total Interest Rate** - This read-only cell is automatically completed with the calculated total interest rate of the previously selected product interest and any values entered for margin and reference rate. If the product interest was not selected or if the interest at the banking product level was marked as `Is Negociable`, you can manually enter the interest rate.
- **Notified** - This is a read-only checkbox. For contracts in `Version Draft` status, it shows you whether the installments range shown on this table line was already notified or not.
- **Past Unnotified** - This is read-only cell read-only checkbox. For contracts in `Version Draft` status, it shows whether there are days that already passed from the current month's not yet notified installment, days for which you can't change the interest rate.

2. After performing the desired changes, make sure that the interest rate (s) cover the entire tenor of the contract, from activation date until maturity date, and there are no overlapping intervals, otherwise an error prevents you from approving the contract.
3. Click the **Save and Reload** button.

5. (Only for Current Accounts with Overdraft) Enter Overdraft Information for the Contract

For current accounts with overdraft functionality, in the **Overdraft** section you should enter the overdraft limit amount and expiation date, in the **Overdraft Interest** section select an interest applicable for the overdraft amount, and then in the **Overdraft Interest Rate** section amend the overdraft interest rates applicable for this contract, so that Core Banking can properly build the repayment schedule.



Overdraft

Overdraft Limit Amount	Expire date for Overdraft	Date for Review Overdraft Interest Rate
10,000	08/02/2023	

Overdraft Interest

Overdraft Interest: Overdraft Floating BIBOR 6M

Overdraft Interest Rate

□	Interest	Start Date	End Date	Minimum A...	Maximum A...	Minim Intere...	Fixed Rate	Margin	Reference R...	Total Interes...	Is Penalty	Is For Overdr...
	Overdraft Floa...	08/09/2022	30/09/2024	0.00	10,000.00		0.0000	2.0000	1.5700	3.5700	□	☑

1. In the **Overdraft** section, fill in or modify the following information specific to the contract's overdraft functionality:

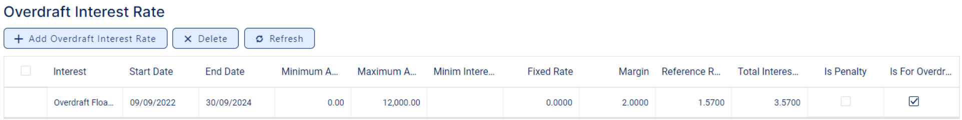
    - **Overdraft Limit Amount** - Enter the limit for the overdraft amount applicable for this contract. If the overdraft limit amount is greater than 0, then all the fields related to the overdraft interest rate are mandatory to be completed, as well as a newly displayed field, **Start Calculation Date For Amount Unused**, back in the **General data** section.

    - **Expire Date for Overdraft** - Enter the date until when the overdraft functionality is active for this contract. On the expiry of the overdraft limit, any used amount and the underlying interest becomes due. A repayment notification is generated in case the current account does not hold enough balance to cover the interest.

        > **NOTE**
        >
        > The due dates of all installments within the repayment schedule of current account with overdraft contracts fall before the expire date for overdraft.

    - **Date for Review Overdraft Interest Rate** - Optionally, enter the date for reviewing the interest rate applicable for the overdraft.

2. In the **Overdraft Interest** section, select from the list the overdraft interest to be applied for the overdraft amount of this contract. Only the interests marked as `Is For Overdraft` are displayed within the list.
3. Click **Save And Reload** to view or change the overdraft interest rate plan.
4. In the **Overdraft Interest Rate** section, configure the contract's overdraft interest rate in a table format, similar to the one in the **Contract Penalty Interest Rate** section.



□	Interest	Start Date	End Date	Minimum A...	Maximum A...	Minim Intere...	Fixed Rate	Margin	Reference R...	Total Interes...	Is Penalty	Is For Overdr...
	Overdraft Floa...	09/09/2022	30/09/2024	0.00	12,000.00		0.0000	2.0000	1.5700	3.5700	□	☑

> **NOTE**
>
> The information disappears if you change the overdraft interest.
>
> In this case, save the contract again to display the updated information.

You can edit the tables cells, so you can customize the overdraft interest rates, if the interest and commission list was defined as `negotiable`. You can also add or delete overdraft interest rates, using the **Add Overdraft Interest Rate**, respectively the **Delete** buttons above the tables. Thus, the tables enables you to work with multiple overdraft interest rates at the contract level.

To customize the information specific to each of the contract's **overdraft interest rates**, edit the existing information that was automatically completed based on your overdraft interest rate selection:

- **Interest** - Automatically completed with the interest (or interests, for `Collection` type product interest rate) selected in the previous **Overdraft Interest** section. You can select from the drop-down list the overdraft interest to be applied for this contract. Only the overdraft interests associated to the selected banking product are displayed within the list.

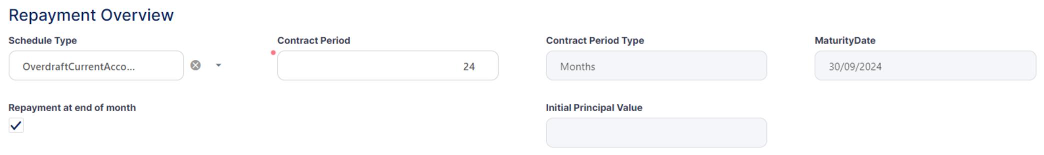
- **Start Date** and **End Date** - The overdraft interest's start and end date, automatically completed with the contract's activation, respectively maturity date.
- **Minimum** and **Maximum Amount** - The overdraft interval to which the overdraft interest is applicable.
- **Minimum Interest Rate** - This read-only cell is automatically completed with the minimum interest rate applicable for overdraft amounts for this contract, defined at the banking product level.
- **Fixed Rate** - The fixed rate of the overdraft interest. You can only change it if the interest at the banking product level was marked as `Is Negociable`.
- **Margin** - This cell is automatically completed with the margin of the previously selected overdraft interest. You can only change it if the overdraft interest at the banking product level was marked as `Is Negociable`. If the overdraft interest was not selected, you can manually enter the margin.
- **Reference Rate** - This read-only cell is automatically completed with the overdraft interest type's definition's reference rate valid at the previously selected date.
- **Total Interest Rate** - This read-only cell is automatically completed with the calculated total overdraft interest rate of the previously selected overdraft interest and any values entered for margin and reference rate. If the overdraft interest was not selected or if the overdraft interest at the banking product level was marked as `Is Negociable`, you can manually enter the overdraft interest rate.

After performing the desired changes, make sure that the overdraft interest rate(s) cover the entire tenor of the contract, and there are no overlapping intervals, otherwise an error prevents you from approving the contract.

5. Back up in the **General Data** section, in the newly displayed **Start Calculation Date For Amount Unused** field, select the date when the amount not drawn from the overdraft limit amount starts to be calculated. This field is displayed and required to be filled in only when the `Overdraft Limit Amount` value is `>0`.
6. Click the **Save and Reload** button.

6. Enter Repayment Information for the Contract

In the **Repayment Overview** section you should enter term and schedule type so that Core Banking can properly build the repayment schedule.



Repayment Overview

Schedule Type: OverdraftCurrentAcco...

Contract Period: 24

Contract Period Type: Months

MaturityDate: 30/09/2024

Repayment at end of month: ✓

Initial Principal Value:

1. Fill in or modify the following information specific to the contract's repayment schedule:
   - **Schedule Type** - Select the payment schedule type to be used to calculate the installments of this contract. You can select one of the payment schedule types associated to the underlying banking product in the **Details** tab > **Associated Payment Schedule Types** list. Core Banking uses the schedule type to build the repayment plan with equal installments or linear payments, include fees on the schedule and arrive to the day basis to be used for interest calculation (30/360).
   - **Contract Period** - Edit the term of the contract that was automatically completed with the number defined at banking product level, according to your needs. The contract period is used together with Contract Period Type and Periodicity Type.

They all need to be in sync and also in sync with the schedule definition itself, and if there are multiple definitions allowed on the product, make sure to pick those working together.

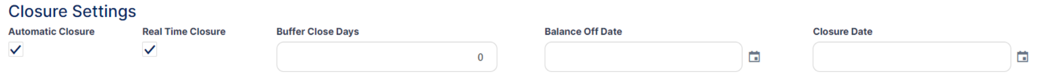
- **Contract Period Type** - This field is automatically completed with the contract period type as it was defined at banking product level. You can't edit this value.
- **Maturity Date** - This field is automatically completed with the calculated contract maturity date.
- **Initial Principal Value** - This field is automatically completed with the value of the principal within an installment. The field is displayed and can be filled in if the selected schedule type is of type `Equal Principal`. You can edit this value. If at the selected payment schedule type's level the `Installment Value Custom` field is `False`, then the `Initial Principal Value` field at the contract level is read only.
- **Repayment at end of month** - If you select this checkbox, then the due day of the contract is automatically set to the last day of the month, and the repayment schedule is calculated with an installment in the last day of month.

2. Click the **Save and Reload** button.

7. Amend Closure Settings

If allowed from the product definition, you can amend the closure settings of the contract, the way Core Banking should behave once any due amounts are repaid and the contract can be closed. Most of the times this is not something that you have to access, but it adds extra flexibility at the contract level. This may prove useful if you suspect there may be reasons to keep a contract open for some time post recovering all amounts for instances when there may appear claims of funds (SEPA DD) or other similar cases.

The **Closure Settings** section is only displayed for contracts based on banking products having the `Closing Is Flexible = True` setting.



Closure Settings

Automatic Closure	Real Time Closure	Buffer Close Days	Balance Off Date	Closure Date
✓	✓	0		

To amend the closure settings brought from product level here at the contract level:

1. Fill in or modify the following fields:
    - **Automatic Closure** – If selected, Core Banking automatically closes the contract once all other conditions are met. This field is automatically completed with the value defined at the banking product level, but you can modify it.
        - Select this checkbox to instruct Core Banking to close the contract automatically when the available amount becomes zero and there are no further amounts to be recovered, and after the number of days set as buffer before closure pass and `Closure Date = Current Date`.
        - Deselect it to instruct Core Banking to keep the contract open, regardless of the fulfillment of its maturity and balance criteria, waiting to be manually closed by changing its status to `Closed`.

        > **NOTE**
        >
        > You can perform contracts events as specified in the **Allowed Transactions** section of the banking product, plus manual closure while the contract is pending closure. Performing any other transactions displays an error message.

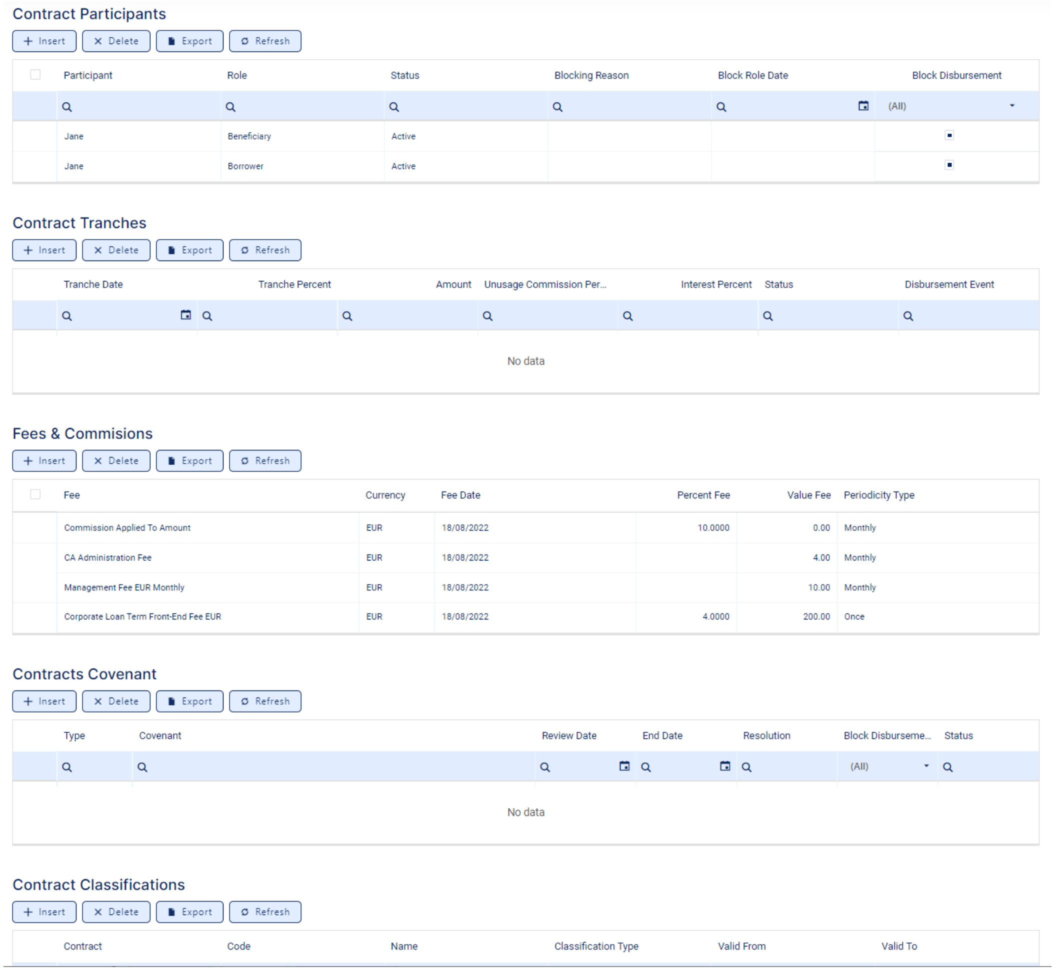
    - **Real Time Closure** – If you select this checkbox, when the amounts become zero and the product is not a revolving one, the contract is closed automatically. If `Real Time Closure = True`, then `Buffer Close Days = 0` and `Automatic Closure = True`. For more details about the real-time closure, see Close Contracts RealTime(CB) Job.

- **Buffer Close Days** - Enter the number of days used as buffer before automatically closing the contract. If `Buffer Close Days > 0`, then `Real Time Closure = False`. Core Banking waits the entered number of days after the contract's balances reach zero, and at the end of that day the contract is closed.
- **Balance Off Date** – This is a system maintained field and it is populated with the date on top of which Core Banking adds the Buffer Close Days to arrive to the Closure Date.
- **Closure Date** – This is a system maintained field and holds the date when the contract is closed. For automatic closure, the date is calculated by Core Banking as Balance Off Date + Buffer Close Days.

2. Click the **Save and Reload** button.

8. Check Other Details Pre-Filled Based on Product Definition

Once you defined the mandatory details, then saved and reloaded the contract, Core Banking updates some of the next sections on the page, based on product definitions:



Contract Participants

□	Participant	Role	Status	Blocking Reason	Block Role Date	Block Disbursement
						(All)
	Jane	Beneficiary	Active			■
	Jane	Borrower	Active			■

Contract Tranches

Tranche Date	Tranche Percent	Amount	Unusage Commission Per...	Interest Percent	Status	Disbursement Event
No data						

Fees & Commisions

□	Fee	Currency	Fee Date	Percent Fee	Value Fee	Periodicity Type
	Commission Applied To Amount	EUR	18/08/2022	10.0000	0.00	Monthly
	CA Administration Fee	EUR	18/08/2022		4.00	Monthly
	Management Fee EUR Monthly	EUR	18/08/2022		10.00	Monthly
	Corporate Loan Term Front-End Fee EUR	EUR	18/08/2022	4.0000	200.00	Once

Contracts Covenant

Type	Covenant	Review Date	End Date	Resolution	Block Disburseme...	Status
					(All)	
No data						

Contract Classifications

Contract	Code	Name	Classification Type	Valid From	Valid To

Core Banking brings the **Contract Participants**, where you can add participants to the contract, like Guarantors, Co-Debtors, etc. There may be cases when some roles are mandatory for a product. Those are detailed in a separate section. If there is a mandatory role defined in the banking product definition, Core Banking displays an error on trying to approve the contract.

Contract Tranches is a section where you can implement progressive access to the funds. This is valuable in case of loans granted for investment projects where you can know upfront that there is a plan for the project and payments need to happen for each stage of the project, those stages being known from the start.

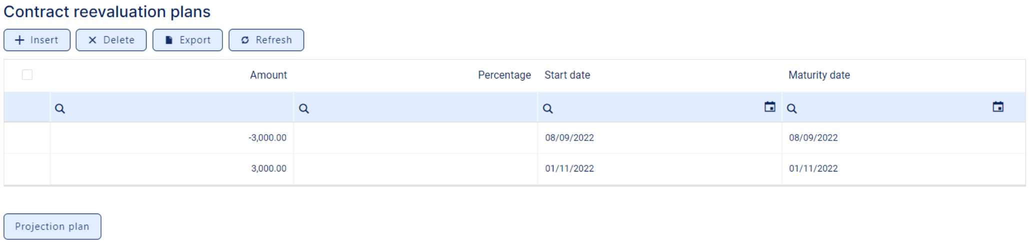
Another important section brought from the product definition is the **Fees & Commissions**. Depending on the system setup, you are allowed or not to amend fees and commissions in this section.

Contract Covenants section displays the covenants that applicants must abide by after getting the contract, configured at the product level. Such conventions are usually applicable for corporate customers that must meet certain requirements in order to continue to receive disbursements and not only: submit balance sheet every x months, have account turnover of at least x percent from average monthly turnover, provide other relevant documents from authorities. In this section, you can manage covenants for the contract. These covenants would need to be monitored procedurally; Core Banking doesn't have the logic in place to implement automated processes.

You can use the **Contract Classifications** section to capture various classifications that might be relevant for the financial institution for that loan at a moment in time. It is a placeholder for such details and there is no automated logic in place to update them. In implementation this can be used for other developments if required.

9. (Only for Current Accounts with Overdraft) Define Overdraft Limit Reevaluation Plans

For current account contracts with overdraft functionality, in the **Contract Reevaluation Plans** section, you can define the increase or decrease of the overdraft limit amount and of the customer limit attached to the contract, according to the customer's seasonal needs. For example, for an approved overdraft limit for 12 months, after 6 months the limit has to be decreased because the customer does not need the entire limit and wants to reduce the costs of the overdraft functionality. Similarly, the overdraft limit can be increased, for example for a working capital requirement, the bank can grant the limit in January, but the company works in tourism and the cash flow needs are higher in summer, thus the bank needs to increase the overdraft.

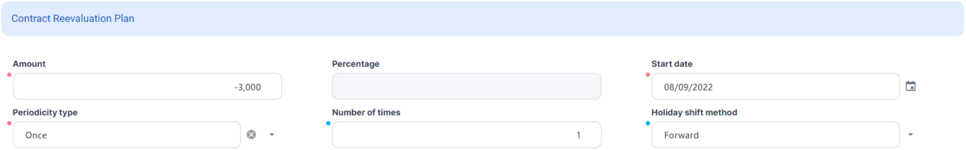


Contract reevaluation plans

□	Amount	Percentage	Start date	Maturity date
	-3,000.00		08/09/2022	08/09/2022
	3,000.00		01/11/2022	01/11/2022

To add a reevaluation plan to a contract based on a current account with overview, follow these steps:

1. Click **Insert** to open the **Contract Reevaluation Plan** page.
2. Fill in the following fields:



Contract Reevaluation Plan

Amount: -3,000	Percentage:	Start date: 08/09/2022
Periodicity type: Once	Number of times: 1	Holiday shift method: Forward

   - **Amount** - Enter the amount with which the overdraft limit has to increase or decrease. Use negative values for decrease and positive values for increase. This field cannot be filled in if the `Percentage` field was completed.
   - **Percentage** - Enter the percentage with which the overdraft limit has to increase or decrease. Use negative values for decrease and positive values for increase. This field cannot be filled in if the `Amount` field was completed.
   - **Start date** - Enter the start date when the overdraft limit increase or decrease should be performed.
   - **Periodicity type** - Select the periodicity type for applying the overdraft limit increase or decrease. The possible values are: Once, Weekly, Monthly, Bimonthly, 4 Weeks, Trimestrial, Semestrial and Annual.
   - **Number of times** - Enter how many times the overdraft limit increase or decrease should be performed.
   - **Holiday shift method** - Select the desired holiday shift method from the possible values: Forward or Backward.

3. Click the **Save and Close** button.

   When the utilized amount is greater that the resulted available limit, a new repayment schedule detail is added to the repayment notification, displaying the difference between utilized amounts – available limit amount on the Principal column of the notification. The repayment notification notifies the principal amount and tries to collect it.

4. Click the **Projection Plan** button to view the projection of the overdraft limit reevaluation plan. A `.pdf` file containing a detailed overview of the overdraft limit fluctuations in time is automatically downloaded by your browser.

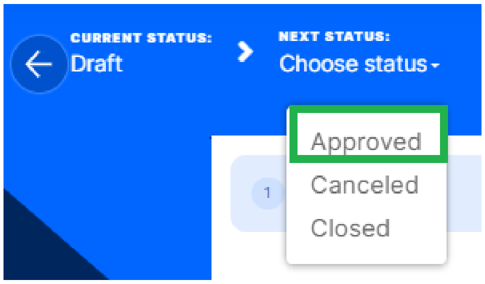
After defining the relevant details of the contract, proceed to **contract approval**.

Approving a Current Account

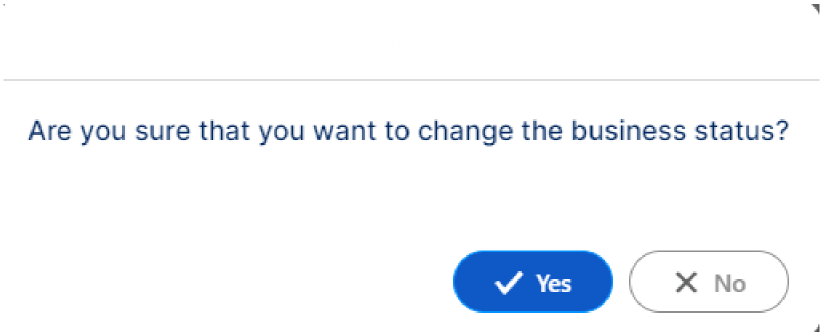
You can perform the approval either from a customer journey flow via API integration or from the Core Banking user interface.

After defining the relevant details of the contract, proceed to contract approval:

1. Select a contract in **Draft** (or **Version Draft**) status.
2. Change its status into **Approved**.

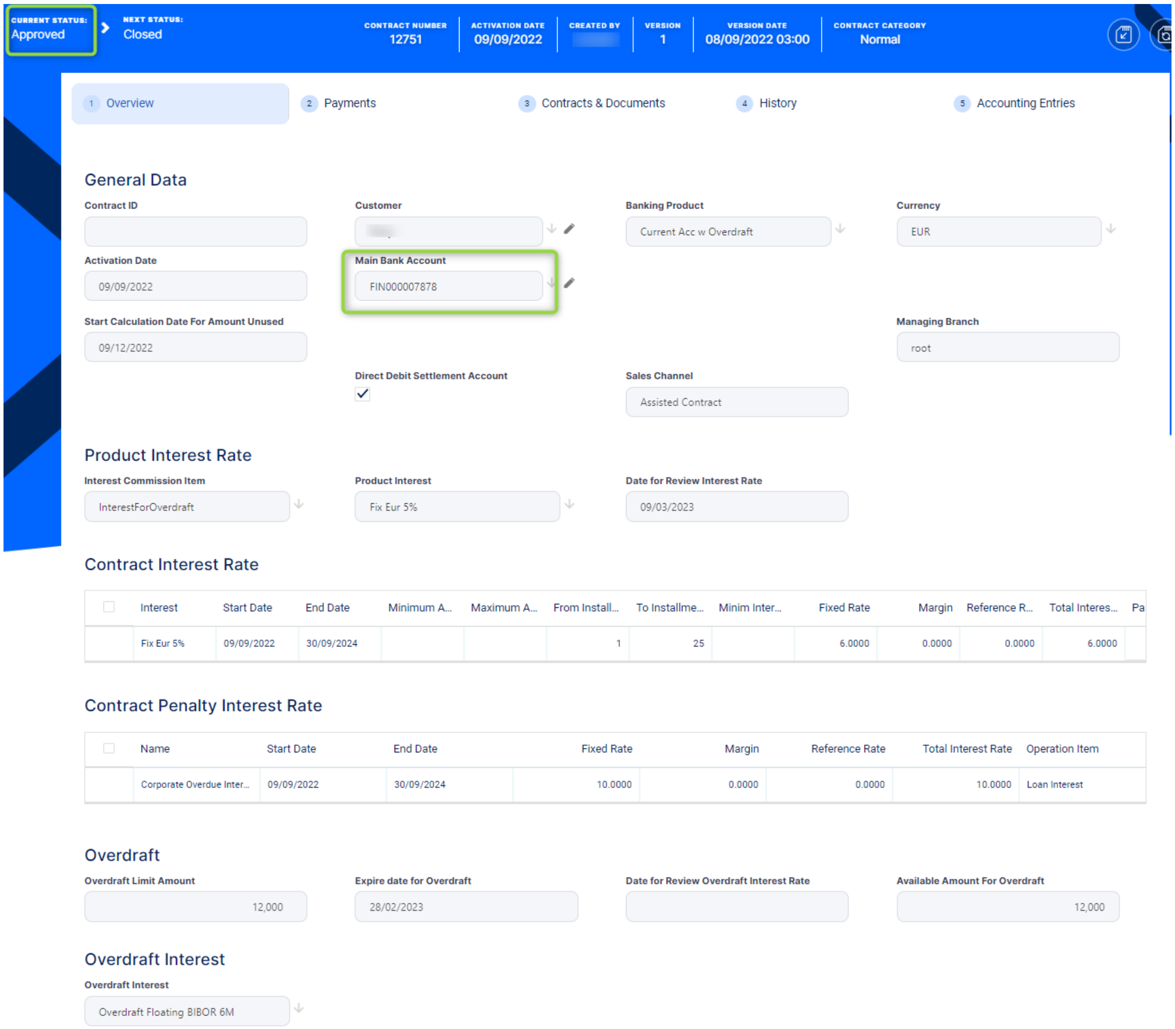


3. Click **Yes** to confirm your action.



Are you sure that you want to change the business status?

If Core Banking performs all the validations successfully, then the current status of the contract changes to **Approved** and Core Banking automatically generates the current account number, displaying it in the **Main Bank Account** field.



CURRENT STATUS: Approved
NEXT STATUS: Closed
CONTRACT NUMBER 12751
ACTIVATION DATE 09/09/2022
CREATED BY [redacted]
VERSION 1
VERSION DATE 08/09/2022 03:00
CONTRACT CATEGORY Normal

1 Overview
2 Payments
3 Contracts & Documents
4 History
5 Accounting Entries

General Data

Contract ID:
Customer: [redacted]
Banking Product: Current Acc w Overdraft
Currency: EUR
Activation Date: 09/09/2022
Main Bank Account: FIN000007878
Start Calculation Date For Amount Unused: 09/12/2022
Managing Branch: root
Direct Debit Settlement Account: ✓
Sales Channel: Assisted Contract

Product Interest Rate

Interest Commission Item: InterestForOverdraft
Product Interest: Fix Eur 5%
Date for Review Interest Rate: 09/03/2023

Contract Interest Rate

□	Interest	Start Date	End Date	Minimum A...	Maximum A...	From Install...	To Installme...	Minim Inter...	Fixed Rate	Margin	Reference R...	Total Interes...	Pa
	Fix Eur 5%	09/09/2022	30/09/2024			1	25		6.0000	0.0000	0.0000	6.0000	

Contract Penalty Interest Rate

□	Name	Start Date	End Date	Fixed Rate	Margin	Reference Rate	Total Interest Rate	Operation Item
	Corporate Overdue Inter...	09/09/2022	30/09/2024	10.0000	0.0000	0.0000	10.0000	Loan Interest

Overdraft

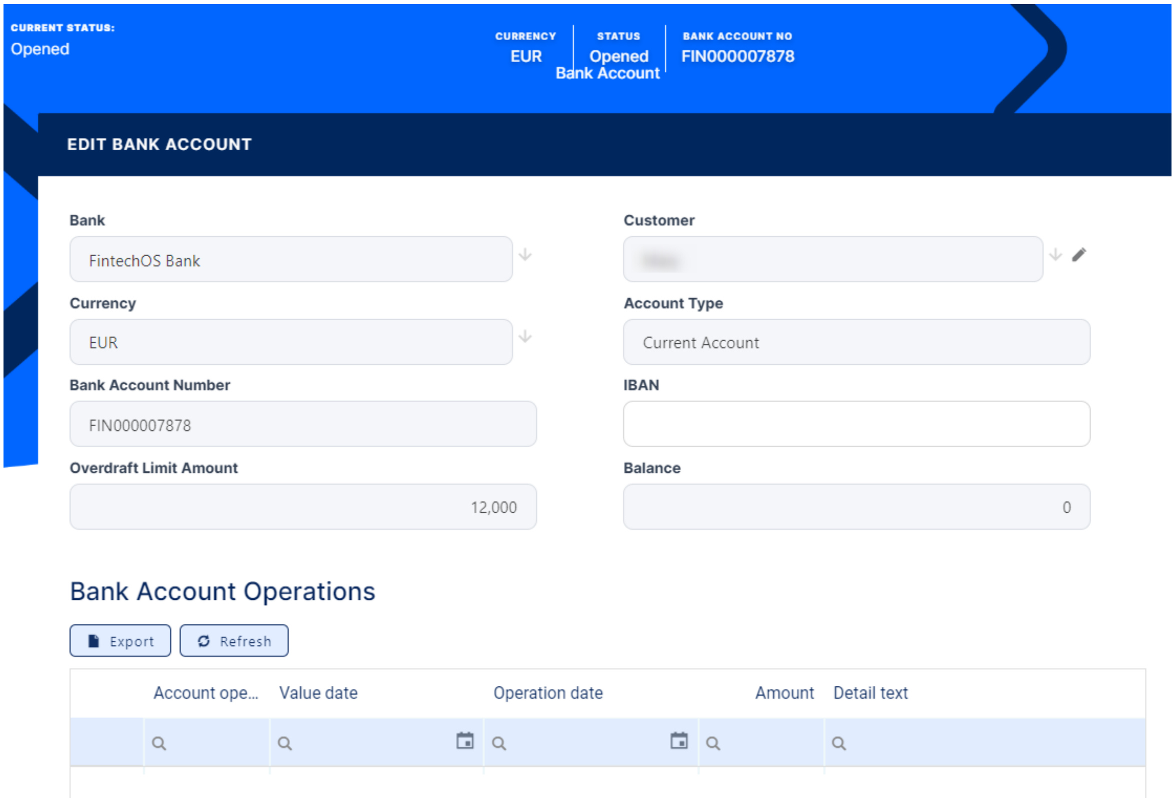
Overdraft Limit Amount: 12,000
Expire date for Overdraft: 28/02/2023
Date for Review Overdraft Interest Rate:
Available Amount For Overdraft: 12,000

Overdraft Interest

Overdraft Interest: Overdraft Floating BIBOR 6M

Automated Actions After Contract Approval

The **Main Bank Account** is created automatically for the bank defined as Main within the **Core Banking Operational > Bank** menu. In order for Core Banking to generate an account number, a rule must be defined during the implementation phase (example: branch code + incremental sequence number).



CURRENT STATUS: Opened

CURRENCY	STATUS	BANK ACCOUNT NO
EUR	Opened Bank Account	FIN000007878

EDIT BANK ACCOUNT

Bank: FintechOS Bank	Customer: [redacted]
Currency: EUR	Account Type: Current Account
Bank Account Number: FIN000007878	IBAN:
Overdraft Limit Amount: 12,000	Balance: 0

Bank Account Operations

Account ope...	Value date	Operation date	Amount	Detail text

On the **Payments** tab you can see the repayment schedule that was generated based on the commissions with `Commission Undrawn Amount (overdraft)` type, if any.

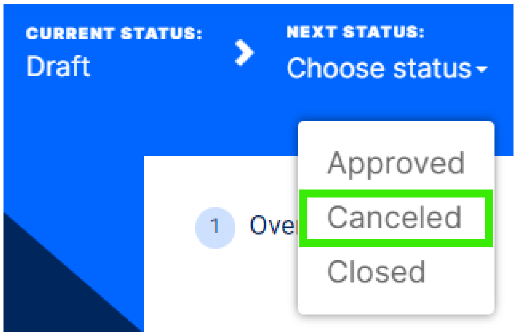
> **NOTE** The tab **Payments** has no information to display while the contract is in the **Draft** status. You must approve the contract to perform any contract event. Meaningful payment information is displayed in this tab only after performing transactions on the contract.

Rejecting a Current Account

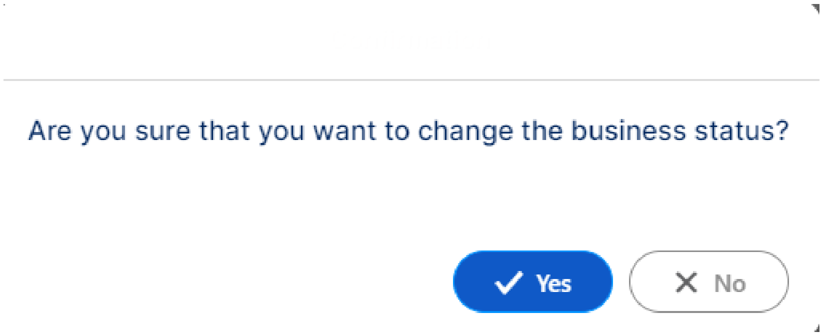
You can reject a current account contract, canceling it, when the deal with the customer drops. You can perform the cancellation either from a customer journey flow via API integration or from the Core Banking user interface.

Follow these steps to cancel the contract:

1. Select a contract in **Draft** (or **Version Draft**) status.
2. Change its status into **Canceled**.

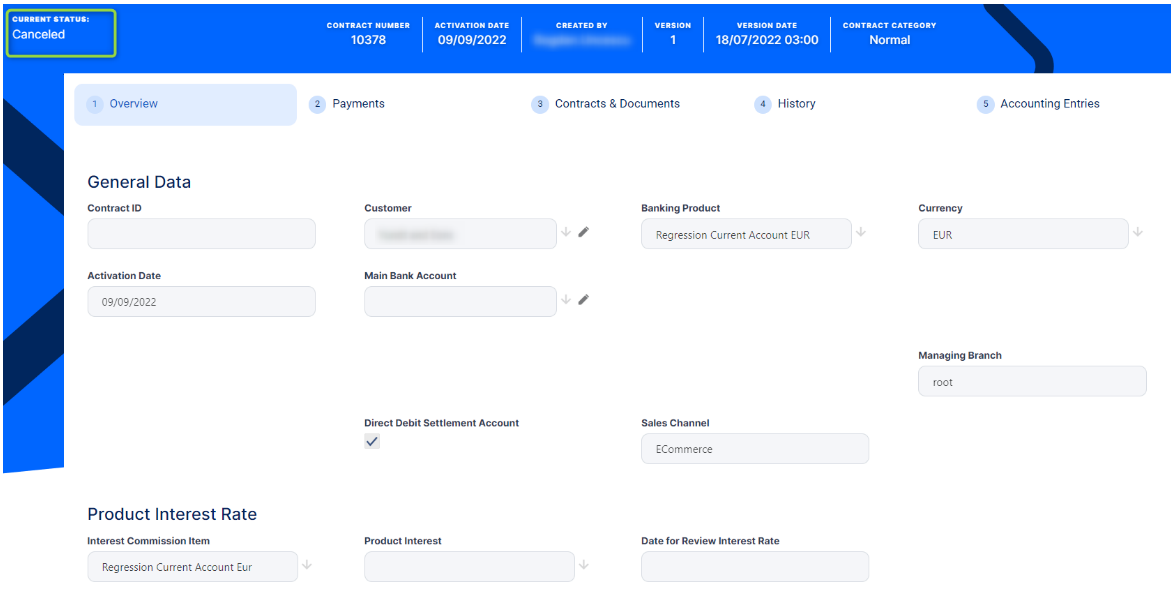


3. Click **Yes** to confirm your action.



Are you sure that you want to change the business status?

If Core Banking performs all the validations successfully, then the current status of the contract changes to **Canceled**.



CURRENT STATUS: Canceled

CONTRACT NUMBER 10378 | ACTIVATION DATE 09/09/2022 | CREATED BY [redacted] | VERSION 1 | VERSION DATE 18/07/2022 03:00 | CONTRACT CATEGORY Normal

General Data

Contract ID:

Customer: [redacted]

Banking Product: Regression Current Account EUR

Currency: EUR

Activation Date: 09/09/2022

Main Bank Account:

Managing Branch: root

Direct Debit Settlement Account: ☑

Sales Channel: ECommerce

Product Interest Rate

Interest Commission Item: Regression Current Account Eur

Product Interest:

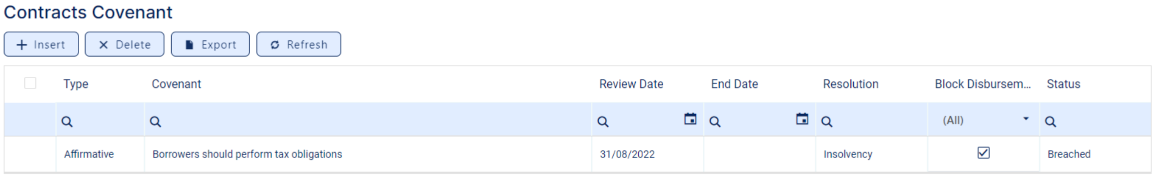
Date for Review Interest Rate:

NOTE You can't further use a canceled contract. Create a new contract, if you need to.

Working with Covenants

The covenants are conventions that applicants must abide by after the approval of a contract. Such conventions are usually applicable for corporate clients that must meet certain requirements in order to continue to receive disbursements and not only: submit balance sheet every x months, have account turnover of at least x percent from average monthly turnover, provide other relevant documents from authorities. Covenants are configured at the product level.

While creating a contract, Core Banking brings the covenants to the contract level, in the **Contract Covenant** section of the **Overview** tab. There you also add, delete or export covenants for the contract.

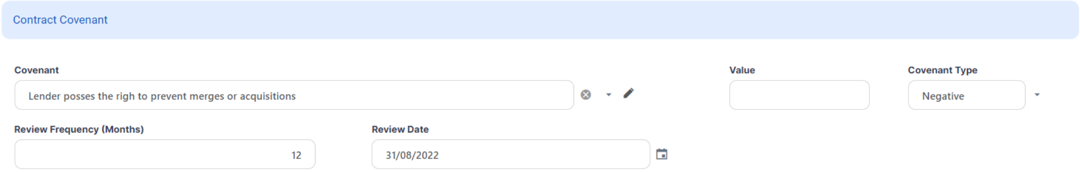


□	Type	Covenant	Review Date	End Date	Resolution	Block Disbursem...	Status
						(All)	
	Affirmative	Borrowers should perform tax obligations	31/08/2022		Insolvency	☑	Breached

Upon adding a covenant to a contract, you must activate it. After approving the contract, when it reaches the covenant's review date, you must perform the review of the covenant. If the conditions are not met, then you can mark the covenant for blocking further disbursements of the contract. Further implementation is needed if you want automatic processes to take care of contracts with breached covenants.

Adding & Activating Covenants

1. To add a covenant to a contract, click **Insert** in the **Contracts Covenant** section of a contract in `Draft` or `Version Draft` status.
2. On the newly displayed **Contract Covenant** page, fill in the following fields:



Contract Covenant

Covenant: Lender posses the righ to prevent merges or acquisitions

Value:

Covenant Type: Negative

Review Frequency (Months): 12

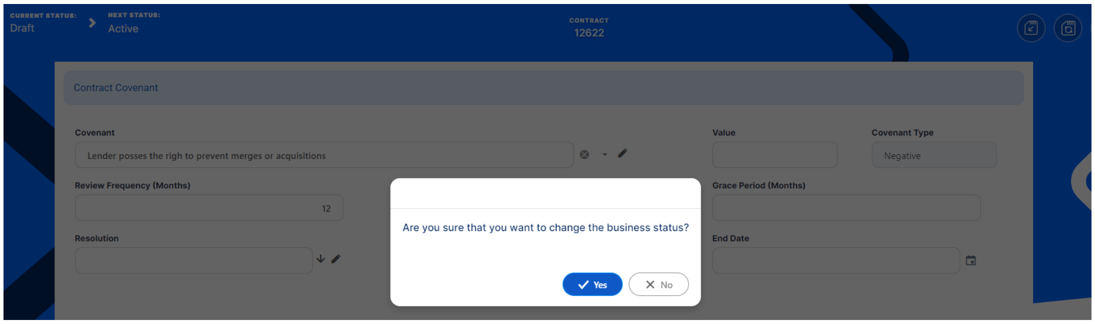
Review Date: 31/08/2022

- **Covenant** - Select the desired covenant from the list of possible values:
  - `Borrowers should perform tax obligations`: the lenders expect the borrowers to perform their tax obligations to both the business and towards their employees. This covenant is of type affirmative.
  - `Lender can monitor borrower's current ratio`: the lender may continuously monitor the borrower's current ratio to ensure it stays relatively attractive and promising. This covenant is of type financial.
  - `Lender posses the right to prevent merges or acquisitions`: a clear stipulation that the lender possesses the right to prevent merges of acquisitions without proper notification or full knowledge of the process. This covenant is of type negative.

    Core Banking automatically fills in the covenant type.
- **Value** - Enter the numeric value of the covenant, if applicable.
- **Review Frequency (Months)** - Enter the number of months after which the covenant has to be reviewed.
- **Review Date** - Enter the date when the covenant has to be reviewed.

3. Click the **Save and Reload** button. The covenant is displayed in the list of covenants in the **Contracts Covenant** section, in `Draft` status.
4. Activate the covenant record by changing its status to **Active** and confirming

your action.



CURRENT STATUS: Draft

NEXT STATUS: Active

CONTRACT 12622

Contract Covenant

Covenant: Lender posses the righ to prevent merges or acquisitions

Value:

Covenant Type: Negative

Review Frequency (Months): 12

Grace Period (Months):

Resolution:

End Date:

Are you sure that you want to change the business status?

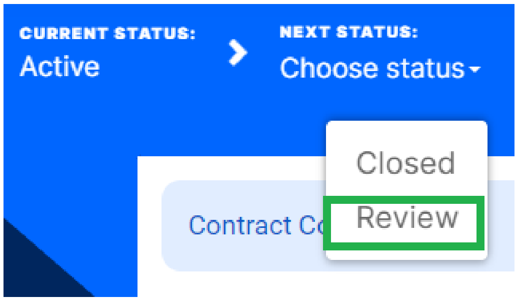
✓ Yes ✕ No

5. Click the **Save and Close** button. The covenant's status changes to `Active`.

Reviewing Covenants

Core Banking allows you to add details about the process of reviewing a covenant for an approved contract.

1. To review an active covenant for an approved contract, double-click the desired covenant in the **Contracts Covenant** section of the contract's Overview tab.
2. On the newly displayed **Contract Covenant** page, change the covenant's status to **Review** and confirm your action.

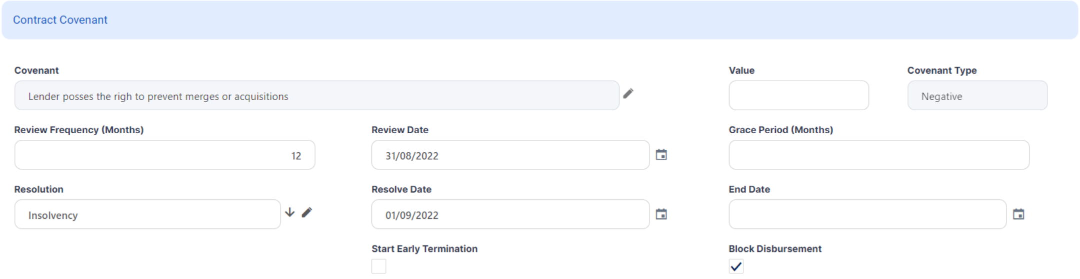


CURRENT STATUS: Active

NEXT STATUS: Choose status

The covenant's status changes to Review and the page reloads with new fields.

3. Fill in the following fields with the results of the covenant review process:



Contract Covenant

Covenant: Lender posses the righ to prevent merges or acquisitions

Value:

Covenant Type: Negative

Review Frequency (Months): 12

Review Date: 31/08/2022

Grace Period (Months):

Resolution: Insolvency

Resolve Date: 01/09/2022

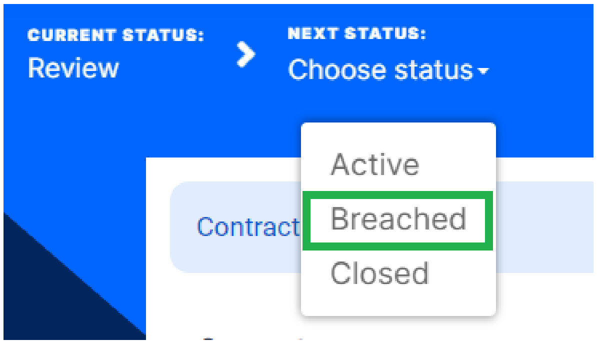
End Date:

Start Early Termination: □

Block Disbursement: ☑

- **Grace Period (Months)** - Enter a grace period in month for the fulfillment of the covenant, if needed.
- **Resolution** - Select from the list the actual resolution of the covenant. Add a new covenant resolution, if you can't find a match in the list.
- **Resolve Date** - Enter the date when the covenant is considered as resolved.
- **End Date** - Enter an end date for the covenant, if needed.
- **Start Early Termination** - If the covenant's terms are not met, then you can check this field to mark the covenant for contract early termination.
- **Block Disbursement** - If the covenant's terms are not met, then you can check this field to mark the covenant for blocking further disbursements of the contract.

4. Click the **Save and Reload** button.
5. If the covenant's terms are met, change the covenant's status to **Active** and confirm your action.
   If the covenant's terms are not met, change the covenant's status to **Breached** and confirm your action.



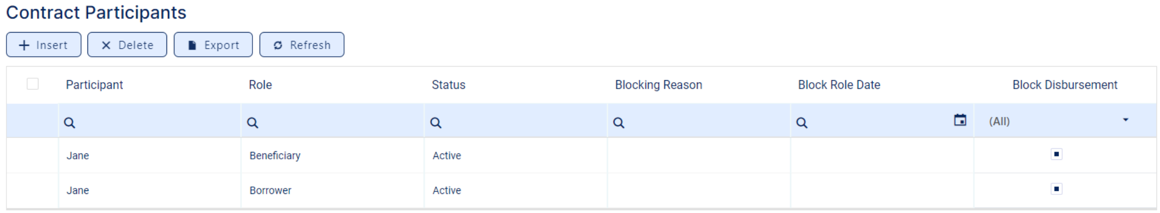
6. Click the **Save and Close** button. The covenant's status changes to `Active` or `Breached`, according to your previous choice.

> **NOTE** Further implementations are needed in order for Core Banking to manage contracts with breached covenants if you need actions enforced at the contract level.

Working with Participants

The participants to a contract are those legal or individual persons who have a role to play during the life-cycle of the contract. They can be the person who borrows the funds, the actual beneficiary of the funds, the company administrator of the legal person, a notary, and so on. Another example are the agents, brokers, insurers, or merchants who participate in contracts as third-party entities, and they may get commissions according to third-party agreements. They must be recorded in contracts as contract participant with the specified role in order to qualify for the commissions stated in the agreement pricing records added to an agreement.

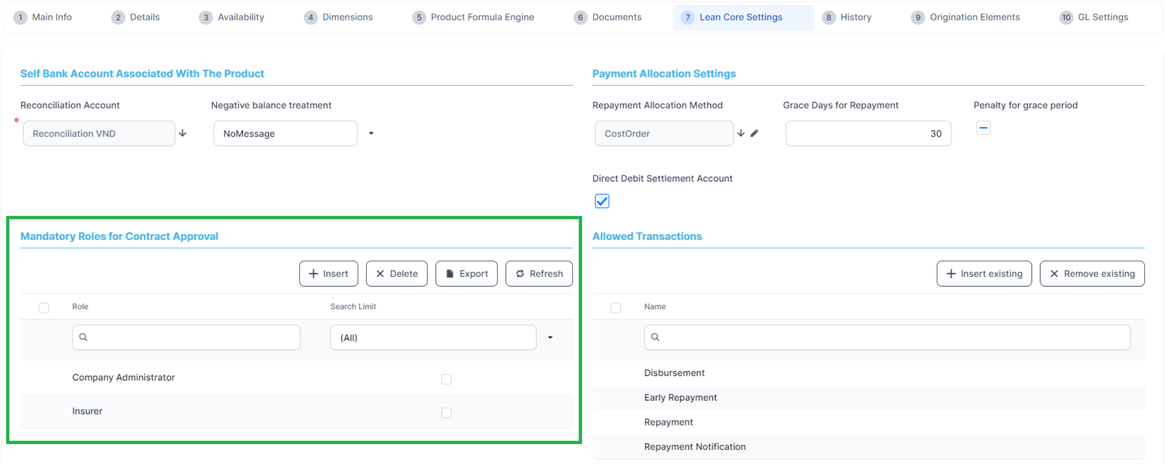
While creating a contract, Core Banking automatically populates the **Contract Participants** section within the **Overview** tab of the contract with the customer's information as both Borrower and Beneficiary of the funds, for loan contracts. If the customer is a legal entity, all the company’s already entered legal representatives such as administrators, affiliates, owners, or other key contact persons are displayed in this list. In the **Contract Participants** section, you can add other participants to the contract, like Guarantors, Co-Debtors, etc, even after approval, delete, block, or export customers who participate in a contract.



Contract Participants

□	Participant	Role	Status	Blocking Reason	Block Role Date	Block Disbursement
						(All)
	Jane	Beneficiary	Active			■
	Jane	Borrower	Active			■

There may be cases when some roles are mandatory for a product. If there is a mandatory role defined in the banking product definition, Core Banking displays an error on trying to approve the contract without a customer mentioned in the contract with that specific role.



1 Main Info | 2 Details | 3 Availability | 4 Dimensions | 5 Product Formula Engine | 6 Documents | 7 Lean Core Settings | 8 History | 9 Origination Elements | 10 GL Settings

Self Bank Account Associated With The Product

Reconciliation Account: Reconciliation VND

Negative balance treatment: NoMessage

Payment Allocation Settings

Repayment Allocation Method: CostOrder

Grace Days for Repayment: 30

Penalty for grace period: ▭

Direct Debit Settlement Account: ☑

Mandatory Roles for Contract Approval

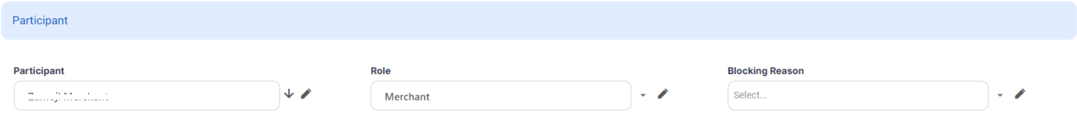
□	Role	Search Limit
		(All)
	Company Administrator	□
	Insurer	□

Allowed Transactions

□	Name
	Disbursement
	Early Repayment
	Repayment
	Repayment Notification

Adding Participants

1. To add a participant, click **Insert** in the **Contract Participants** section of contract in `Draft, Version Draft`, or `Approved` status.
2. On the newly displayed **Participant** page, fill in the following fields:



Participant

Participant: [illegible] Merchant

Role: Merchant

Blocking Reason: Select...

- **Participant** - Select from the list the name of the customer who can access the contract.
- **Role** - Select from the list the role in the contract of the previously selected customer.
- **Blocking Reason** - Leave this empty if you don't want to limit the customer's access to the contract.

3. Click the **Save and Close** button.

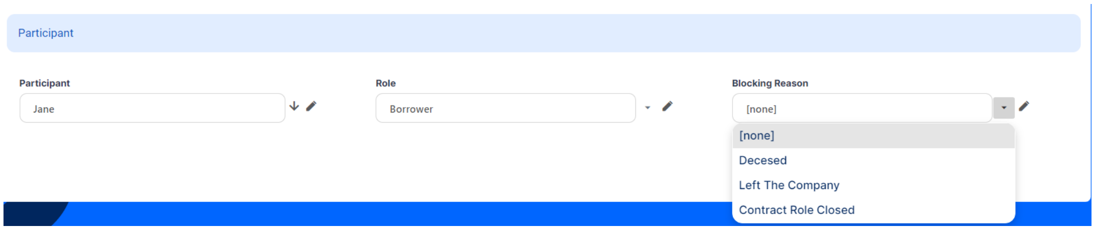
IMPORTANT!

For legal entity customers, add the participant with the `Company Administrator` role, otherwise, the loan contracts cannot be approved. This is not the case for current account contracts.

Blocking Participants

If you need to block an existing participant's access to the contract for various reasons, such as the person left the company who is the beneficiary of the contract, follow these steps:

1. Double-click an existing participant in the **Contract Participants** section of contract in `Draft, Version Draft`, or `Approved` status.
2. On the displayed **Participant** page, in the **Blocking Reason** field, choose the reason for blocking the selected participant from accessing the contract.



Participant

Participant: Jane

Role: Borrower

Blocking Reason: [none]

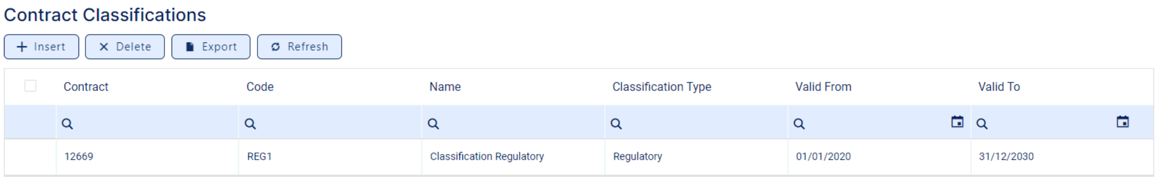
3. In the **Block Role Date** field, select the starting date for blocking the participant's access to the contract.
4. Select the **Block Disbursement** checkbox to instruct Core Banking to stop disbursements on the contract, if needed.
5. Click the **Save and Close** button.

Working with Contract Classification

Financial institutions may classify their contracts for organization purposes, or to mark some contracts as to belonging to a specific category or another. Core Banking brings the classifications defined at the product level to the contract level when creating a contract.

> **NOTE**
> For information about the **automatic loan classification** performed by Core Banking based on DPD, please read the "Loan Classification" on page 44 topic.

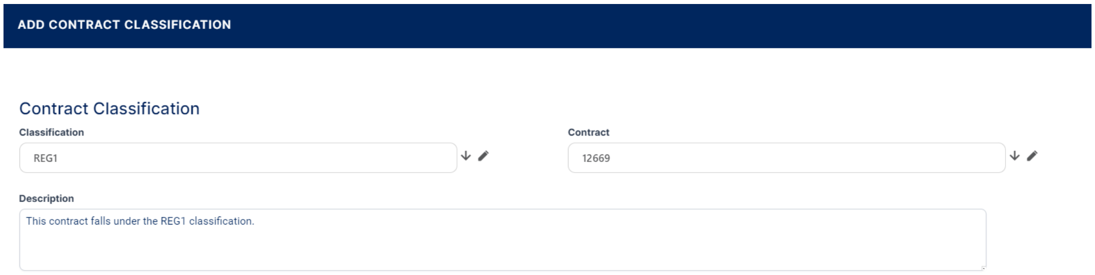
You can manage a contract's classification within the **Contract Classifications** section on the **Overview** tab. Here you can insert, delete or export classifications for the contract.


Contract Classifications

Contract	Code	Name	Classification Type	Valid From	Valid To
12669	REG1	Classification Regulatory	Regulatory	01/01/2020	31/12/2030

Adding Classifications to a Contract

1. To add a classification to a contract, click **Insert** in the **Contract Classifications** section of a contract.
2. On the newly displayed **Add Contract Classification** page, fill in the following fields:


ADD CONTRACT CLASSIFICATION

Contract Classification

Classification: REG1

Contract: 12669

Description: This contract falls under the REG1 classification.

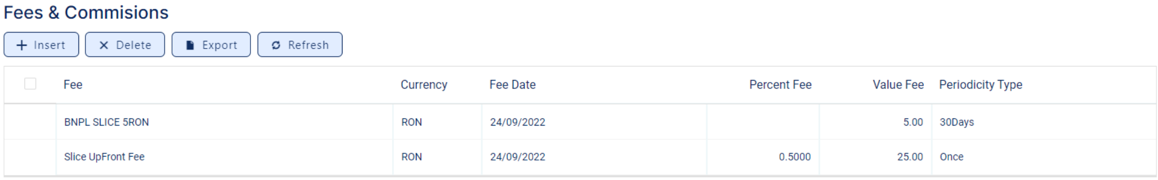
- **Classification** - Select the desired classification for the contract from the list of classifications associated with the banking product.
- **Description** - Enter a description for the contract classification.

3. Click the **Save and Close** button.

Applying Fees and Commissions

The financial institutions take commissions and fees for offering a product or service such as opening an account, for cash withdrawals, for transfers, for making payments in certain countries, for exchanging currencies, for emitting debit cards, for handling documents etc. These commissions are set at the product level and vary from institution to institution, based on their policy.

In the **Fees & Commissions** section within the **Overview** tab of the contract, you can view all the fees and commissions configured at the product level that have the `Automatic Load on Contract` checkbox set to `True`. After the first saving operation, Core Banking display all the fees that are defined as values. The fees defined as percentages are displayed after completing all the values of the contract. Read more about the commissions automatically inserted and calculated in the below section. You can also add, delete or export fees and commissions for the contract.



□	Fee	Currency	Fee Date	Percent Fee	Value Fee	Periodicity Type
	BNPL SLICE 5RON	RON	24/09/2022		5.00	30Days
	Slice UpFront Fee	RON	24/09/2022	0.5000	25.00	Once

Automatic Insertion and Calculation of Commissions

Core Banking automatically inserts/ updates commissions in the **Fees & Commissions** section depending on the life cycle and status of the contract:

- **Creating a new contract**: Core Banking automatically inserts active commissions associated to the banking product, within their defined validity period, with `Automatically load on contract = True`, with `Is For Unusage = False`, and `Commission value is percentage = False`.
  If `Commission value is percentage = True`, then the commission is only inserted if the amount value was previously inserted.
- **Updating a contract in `Draft` status**: Core Banking automatically inserts active commissions associated to the banking product, within their defined validity period, with `Automatically load on contract = True`, with `Is For Unusage = False`. If a commission with `Commission value is percentage = True` was already inserted, then the commission's value is updated according to the contract's financed amount. If the value of a commission with `Commission value is percentage = True` was manually modified (for negotiable commissions), then the new value is calculated based on the modified percentage.
- **Creating a new version for a contract**: Core Banking automatically inserts all the commissions already present in the contract. Additionally, all commissions specifically created for contract version (`Is For Contract Version = True`) are added as well.

> **NOTE**
>
> If a version for a contract is created more than once on the same day, then all commissions with `Is For Contract Version = True` that were not notified yet for each previous version are deleted. At the end of the day, there is only one commission for the latest version.

- **Updating a contract in `Contract Version Draft` status**: Core Banking only updates the percentage commissions that are not already notified.

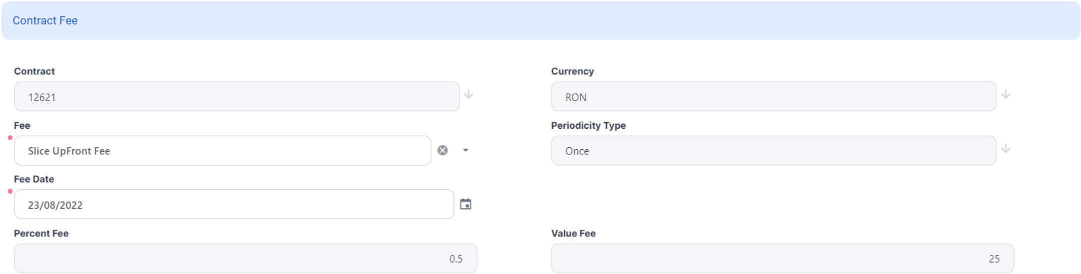
For percentage commissions (with `Commission value is percentage = True`), the financed amount of the contract is used to calculate the commission value based on the percentage. The calculation method differs depending on the contract type:

- For contracts based on **Term Loan,Mortgage** or **Overdraft** banking products:
  - If the commission is applied to amount, then the financed amount = amount due;
  - If the commission is applied to financed amount, then the financed amount = amount due - advance amount;
  - If the commission is applied to remaining value and the contract is in `Contract Version Draft` status, then financed amount = (-1) * main bank account balance. If the result is a negative value, then financed amount = null. In all the other cases, financed amount = null, which is the default value.
- For contracts based on **Bank Account with Overdraft** banking products:
  - If the commission is applied to overdraft limit amount, then the financed amount = overdraft limit amount;

- If the commission is applied to used amount and the commission's period type is `Once`, then the financed amount = overdraft limit amount - available amount for overdraft. In all the other cases, financed amount = null, which is the default value.

Adding Fees

1. To add a fee for this contract, click **Insert** in the **Fees & Commissions** section of a contract in `Draft` or `Version Draft` status.
2. On the newly displayed **Contract Fee** page, fill in the following fields:



Contract Fee

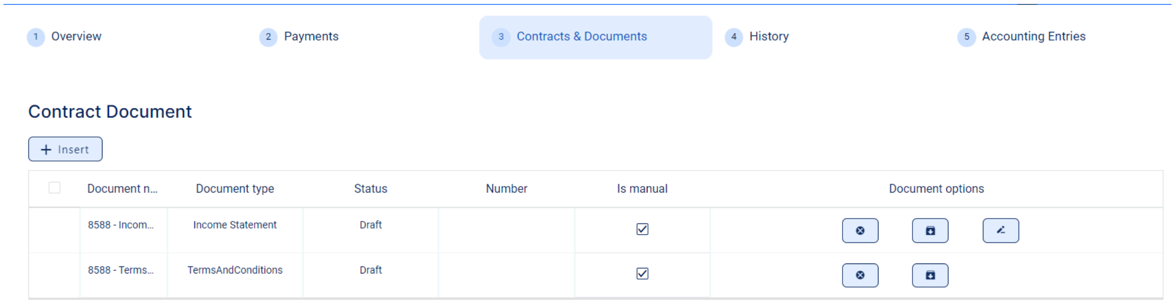
Contract: 12621	Currency: RON
Fee: Slice UpFront Fee	Periodicity Type: Once
Fee Date: 23/08/2022	
Percent Fee: 0.5	Value Fee: 25

   - **Fee** - Select a commission from the list of commissions defined for the banking product used when creating the contract.
   - **Fee Date** - Specify which value of the commission is to be used by selecting the date of the commission.

3. Optionally, check the rest of the fields, automatically filled in by Core Banking: contract number, currency, periodicity type of the selected fee, the fee percentage or value applicable for the selected date. You can't change these values.
4. Click the **Save and Close** button.

Working with Documents

Core Banking allows you to manage all the documents related to a contract in one place, in the contract's **Contracts & Documents** tab. The tab is meant to be the electronic folder of the contract. It displays a list of the document records for the current contract, with details such as document name, type, status, number, whether the record was added through the user interface (`Is manual = True`) or through API integration (`Is manual = False`), and download options for the attached files. Contract documents have a dedicated business workflow, thus you can transition them through a series of statuses.



Contract Document

□	Document n...	Document type	Status	Number	Is manual	Document options
	8588 - Incom...	Income Statement	Draft		☑	
	8588 - Terms...	TermsAndConditions	Draft		☑	

In the **Contracts & Documents** tab, you can: add a new contract document record, edit or delete a record in **Draft** status, view the details for records in **Signed** or **Canceled** status, or download the initial or the signed document, if it exists, by clicking the **Initial document**, respectively the **Signed document** button next to the record. Open the downloaded file to view its content.

> **NOTE**
> Users with the associated predefined security roles of Corporate Credit Officer and Retail Credit Officer can perform contract document-related operations such as adding, updating, and deleting records or changing their statuses.

Contract Document Statuses

A contract document record has the following statuses, visible in the top left corner of the **Add Contract Document** page, after saving the record:

- **Draft** - the status of a newly created contract document record that was not yet authorized (marked as **Signed**). While in this status, you can edit some fields and you can delete the uploaded documents. Change its status to **Signed** after editing all the necessary details and uploading the `Signed Document` file. Change its status to **Canceled** if the document is not to be used within the contract.
- **Signed** - the status of a contract document record after being authorized. You cannot edit any of the record's details. You can change the status of the record to **Canceled**, if needed.

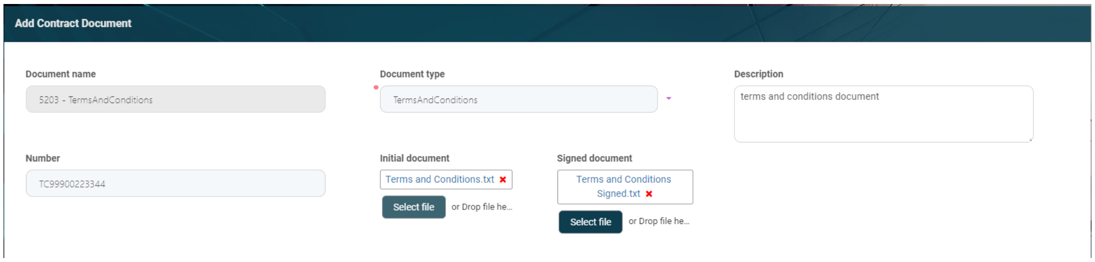
- **Canceled** - the status of a contract document after being canceled. Once **Signed**, a contract document should be canceled if the document is not to be used within the contract. You cannot edit any of the record's details. There is no further transition from this status. Contract document records created through integration (having their `Is manual` field = `False`) can't be canceled.

Adding Contract Documents

1. To insert a document to the contract, click the **Insert** button in the **Contract Document** section.
   The **Add Contract Document** page is displayed, with the **Document Name** field automatically completed with the name of the document.

   > **NOTE**
   >
   > You can't add documents to contracts in **Contract Closed** or **Contract Version Closed** statuses.

2. Fill in the following fields:



Add Contract Document

Document name 5203 - TermsAndConditions	Document type TermsAndConditions	Description terms and conditions document
Number TC99900223344	Initial document Terms and Conditions.txt Signed document Terms and Conditions Signed.txt	

   - **Document type** - Select the type of the document.
   - **Description** - Enter the description of the document.
   - **Number** - Enter the number of the document, if the document has an external identifier number.
   - **Initial document** - Insert the file containing the initial, unsigned document.
     Click the **Select file** button under this field, navigate to the desired file,

select it and click **Open**. The selected file's name is displayed here. You can delete it by clicking the **x** next to the file name.

- **Signed Document** - Insert the file containing the final, signed document, if available.
  Click the **Select file** button under this field, navigate to the desired file, select it and click **Open**. The selected file's name is displayed here. You can delete it by clicking the **x** next to the file name.

> **NOTE**
>
> To change the status of the contract document record to **Signed**, a signed document file must exist within the record.

3. Click the **Save and Close** button.

> **NOTE**
>
> You can also add, update, and approve contract document records through API integration, using the `AddUpdateContractDocument` and `ApproveContractDocument` endpoints. Read more details in the Core Banking Developer Guide.
>
> Contract document files added through integration cannot be deleted and those records can't be canceled!

Automatic Contract Document Validations

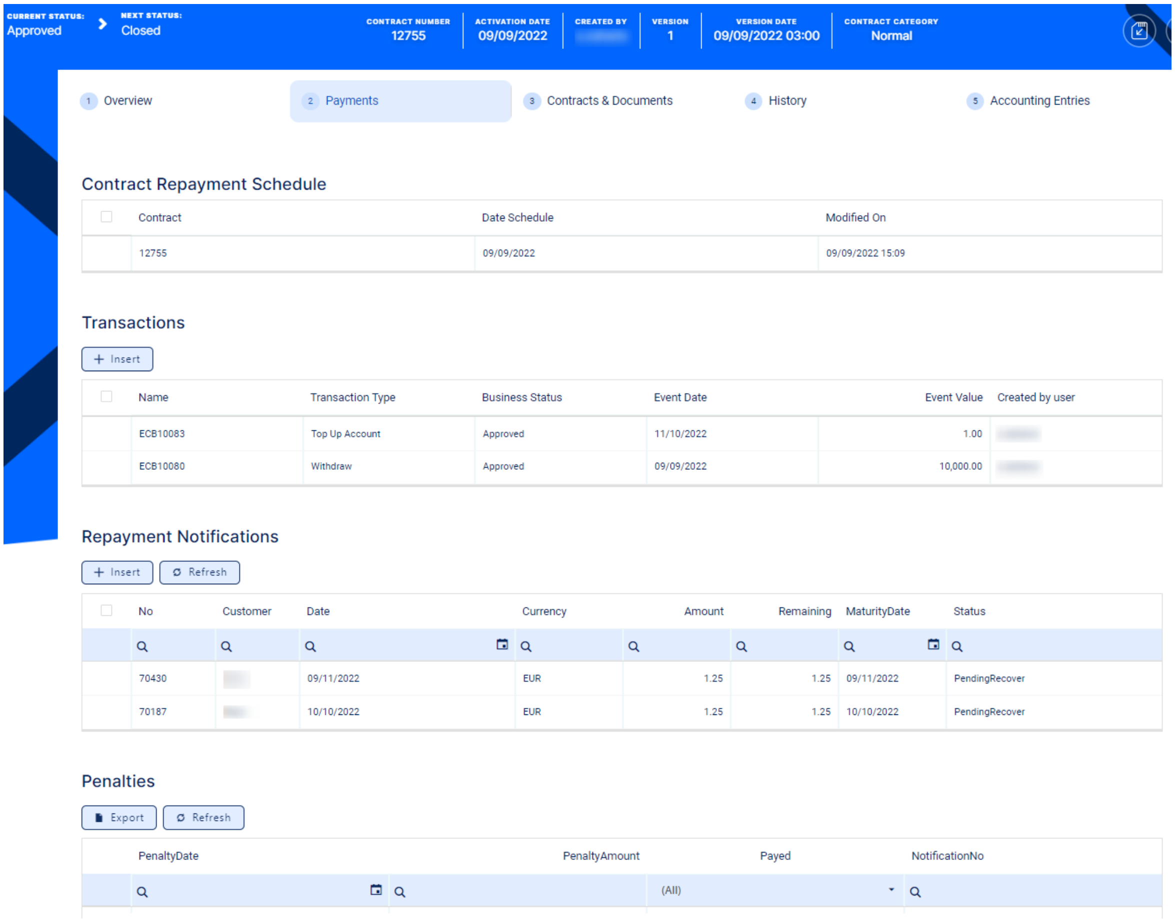
Core Banking performs the following validations for contract document records:

- The uploaded files' specifications follow FintechOS Platform's settings and restrictions regarding size and format, allowing .pdf,.doc,.docx,.els,.jpg,.jpeg,.xlsx,.dll,.ppt,.pptx,.txt,.png,.ttf,.xml file formats.
- If the contract document record is in **Signed** status, the record can't be deleted or updated, nor can its files be deleted.

- The name of the contract document record is unique, automatically generated by Core Banking. The naming convention is "the contract name + '-' + the selected document type + '-' + a unique document increment". For example, `5203 - Income Statement - 60`.
- The names of the selected files are not validated for uniqueness.

Performing Transactions on Current Accounts

You can find all the existing transactions, payments, penalties, bank account operations, repayment schedules, schedule versions, repayment notifications for a contract on the **Payments** tab. The tab has no information to display for contracts in **Draft** status. Approve the contract to perform any transactions on the contract.



CURRENT STATUS: Approved > NEXT STATUS: Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
12755	09/09/2022	[redacted]	1	09/09/2022 03:00	Normal

Contract Repayment Schedule

Contract	Date Schedule	Modified On
12755	09/09/2022	09/09/2022 15:09

Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB10083	Top Up Account	Approved	11/10/2022	1.00	[redacted]
ECB10080	Withdraw	Approved	09/09/2022	10,000.00	[redacted]

Repayment Notifications

No	Customer	Date	Currency	Amount	Remaining	MaturityDate	Status
70430	[redacted]	09/11/2022	EUR	1.25	1.25	09/11/2022	PendingRecover
70187	[redacted]	10/10/2022	EUR	1.25	1.25	10/10/2022	PendingRecover

Penalties

PenaltyDate	PenaltyAmount	Payed	NotificationNo
		(All)	

The following sections show you how to perform the usual transactions available on current account contracts:

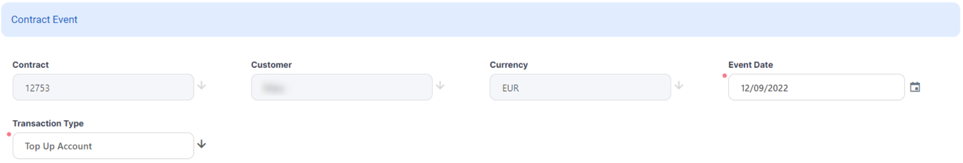
Topping Up an Approved Contract

A top-up transaction represents adding amounts to the account before the value drains down to zero.

You can add top-up transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a top-up transaction to a contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.

   Contract Event

   Contract: 12753

   Customer: [redacted]

   Currency: EUR

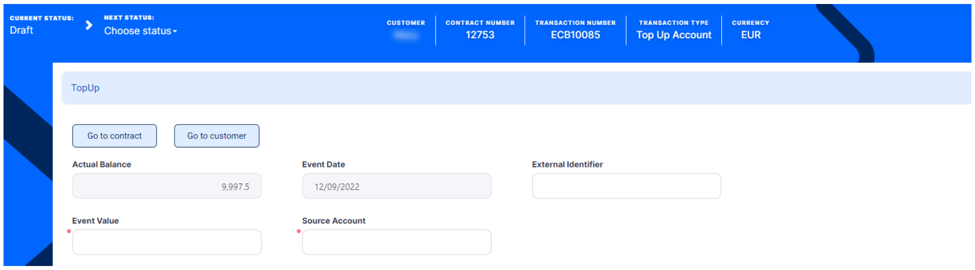
   Event Date: 12/09/2022

   Transaction Type: Top Up Account

3. Fill in the following fields:
   - **Event Date** - This is pre-filled with the current date.
   - **Transaction Type** - Select from the list the **Top Up Account** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

   Other values are automatically completed: contract, customer, and currency.
4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. The account's actual balance is automatically calculated, and you can't edit

it.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CUSTOMER [redacted]

CONTRACT NUMBER 12753

TRANSACTION NUMBER ECB10085

TRANSACTION TYPE Top Up Account

CURRENCY EUR

TopUp

Actual Balance: 9,997.5

Event Date: 12/09/2022

External Identifier:

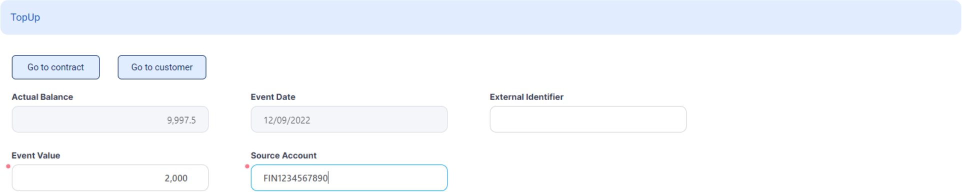
Event Value:

Source Account:

5. Fill in the **external identifier** of the transaction, if available.

6. In the **Event Value** field, enter the amount that is added to the account.

7. Enter the **Source Account** for the respective amount, the account from where the funds are taken to perform the top-up.



TopUp

Actual Balance: 9,997.5

Event Date: 12/09/2022

External Identifier:

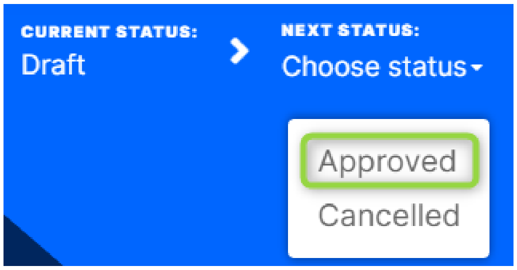
Event Value: 2,000

Source Account: FIN1234567890

> **NOTE**
>
> Core Banking actually uses the financial institution's reconciliation account as a source bank account.

8. Click the **Save and Reload** button.
   If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
   While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

9. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.

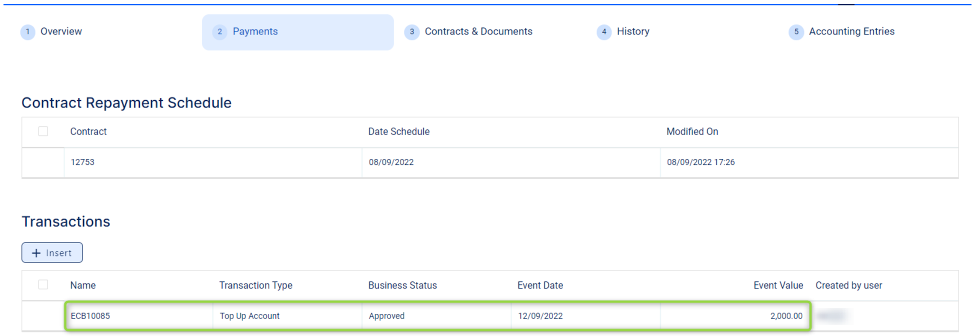


CURRENT STATUS: Draft

NEXT STATUS: Choose status

10. Confirm the change of status in the **Confirmation** window, clicking **Yes**. The event is now in **Approved** status and Core Banking applies the transaction to the contract, moving the funds specified in the event value from the source account into the current account.

    The transaction is visible in the **Transactions** section.



Contract Repayment Schedule

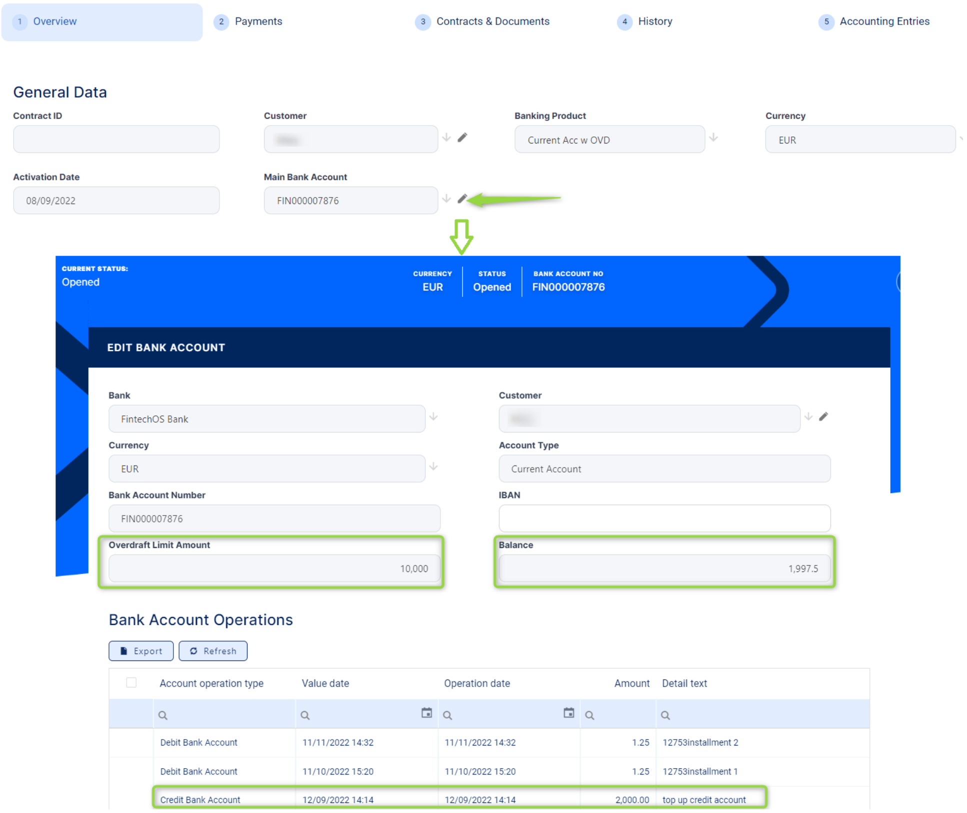
☐	Contract	Date Schedule	Modified On
	12753	08/09/2022	08/09/2022 17:26

Transactions

☐	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB10085	Top Up Account	Approved	12/09/2022	2,000.00	[redacted]

> **NOTE**
>
> For approved transactions on current accounts, Core Banking updates the repayment schedule when running the End of Day job on the last day of the month.

11. View the balance of the account after approving the transaction, clicking the pencil icon next to the **Main Bank Account** field in the contract's **Overview** tab:



General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	Current Acc w OVD	EUR
Activation Date	Main Bank Account		
08/09/2022	FIN000007876		

CURRENT STATUS: Opened

CURRENCY EUR | STATUS Opened | BANK ACCOUNT NO FIN000007876

EDIT BANK ACCOUNT

Bank	Customer
FintechOS Bank	[redacted]
Currency	Account Type
EUR	Current Account
Bank Account Number	IBAN
FIN000007876	
Overdraft Limit Amount	Balance
10,000	1,997.5

Bank Account Operations

□	Account operation type	Value date	Operation date	Amount	Detail text
	Debit Bank Account	11/11/2022 14:32	11/11/2022 14:32	1.25	12753installment 2
	Debit Bank Account	11/10/2022 15:20	11/10/2022 15:20	1.25	12753installment 1
	Credit Bank Account	12/09/2022 14:14	12/09/2022 14:14	2,000.00	top up credit account

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

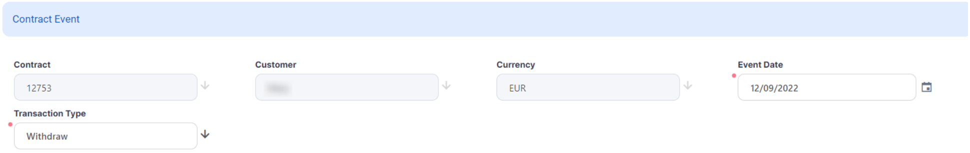
Withdrawing Funds from an Approved Contract

A withdrawal transaction represents removing funds from a bank account.

You can add withdrawal transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a withdrawal transaction to a contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



Contract Event

Contract: 12753

Customer: [redacted]

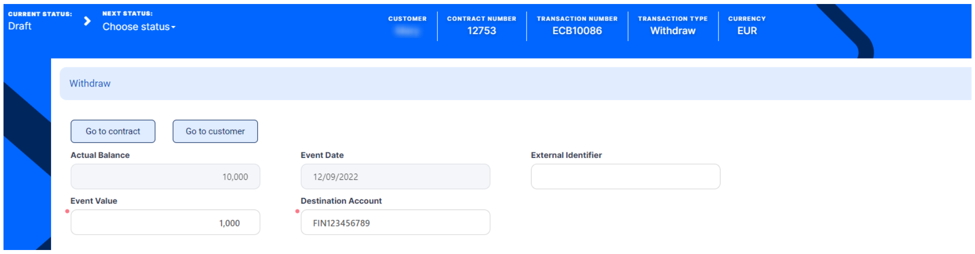
Currency: EUR

Event Date: 12/09/2022

Transaction Type: Withdraw

3. Fill in the following fields:
   - **Event Date** - This is pre-filled with the current date.
   - **Transaction Type** - Select from the list the **Withdraw** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

   Other values are automatically completed: contract, customer, and currency.
4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. The account's actual balance is automatically calculated, and you can't edit it.
5. Fill in the **external identifier** of the transaction, if available.
6. In the **Event Value** field, enter the amount that is removed from the account.
7. Enter the **Destination Account** for the respective amount, the account where the funds are being moved to.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

CUSTOMER [redacted]

CONTRACT NUMBER 12753

TRANSACTION NUMBER ECB10086

TRANSACTION TYPE Withdraw

CURRENCY EUR

Withdraw

Actual Balance: 10,000

Event Date: 12/09/2022

External Identifier:

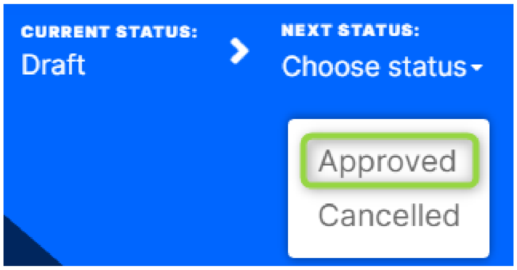
Event Value: 1,000

Destination Account: FIN123456789

> **NOTE**
>
> Core Banking actually uses the financial institution's reconciliation account as a destination bank account.

8. Click the **Save and Reload** button.
   If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
   While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

9. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.

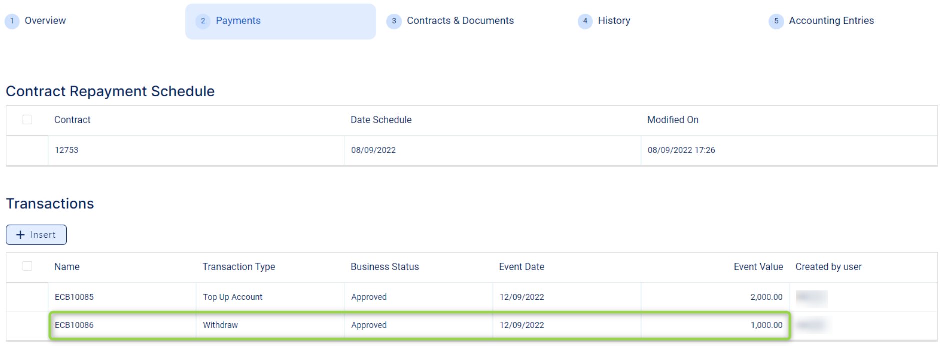


CURRENT STATUS: Draft

NEXT STATUS: Choose status

10. Confirm the change of status in the **Confirmation** window, clicking **Yes**.
    The event is now in **Approved** status and Core Banking applies the transaction to the contract, removing the funds specified in the event value from the current account.

    The transaction is visible in the **Transactions** section.



Contract Repayment Schedule

Contract	Date Schedule	Modified On
12753	08/09/2022	08/09/2022 17:26

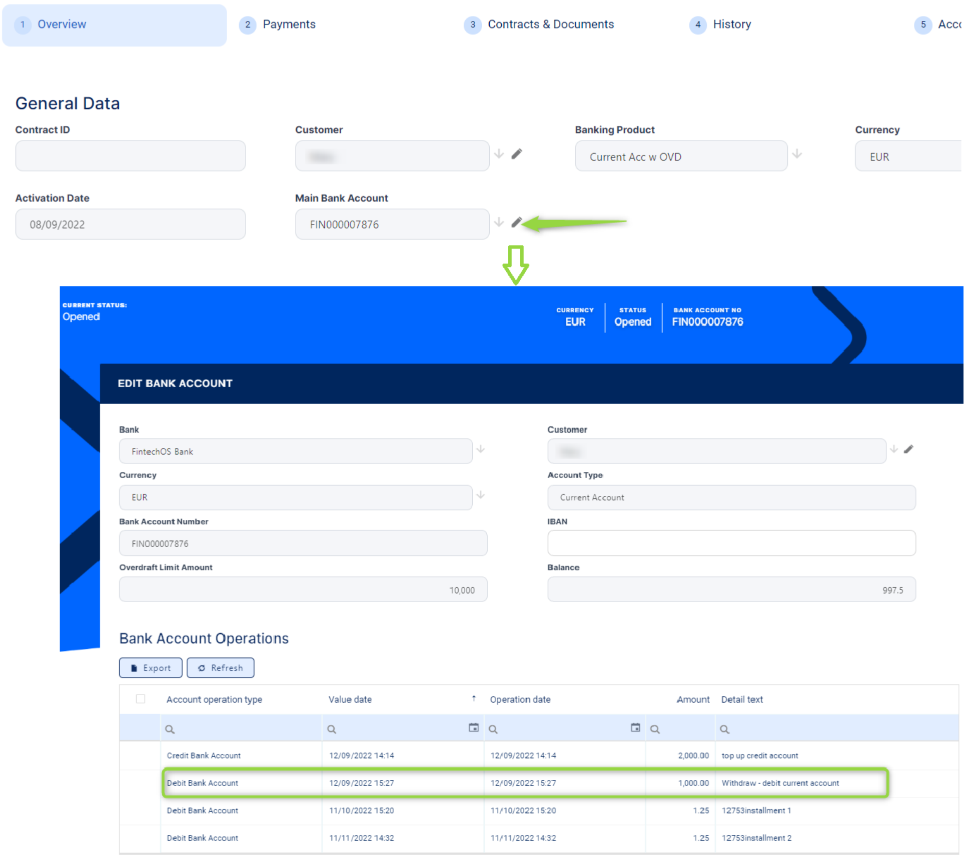
Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB10085	Top Up Account	Approved	12/09/2022	2,000.00	[redacted]
ECB10086	Withdraw	Approved	12/09/2022	1,000.00	[redacted]

NOTE

For approved transactions on current accounts, Core Banking updates the repayment schedule when running the End of Day job on the last day of the month.

11. View the balance of the account after approving the transaction, clicking the pencil icon next to the **Main Bank Account** field in the contract's **Overview** tab:



General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	Current Acc w OVD	EUR
Activation Date	Main Bank Account		
08/09/2022	FIN000007876		

CURRENT STATUS: Opened

CURRENCY EUR | STATUS Opened | BANK ACCOUNT NO FIN000007876

EDIT BANK ACCOUNT

Bank	Customer
FintechOS Bank	[redacted]
Currency	Account Type
EUR	Current Account
Bank Account Number	IBAN
FIN000007876	
Overdraft Limit Amount	Balance
10,000	997.5

Bank Account Operations

Account operation type	Value date	Operation date	Amount	Detail text
Credit Bank Account	12/09/2022 14:14	12/09/2022 14:14	2,000.00	top up credit account
Debit Bank Account	12/09/2022 15:27	12/09/2022 15:27	1,000.00	Withdraw - debit current account
Debit Bank Account	11/10/2022 15:20	11/10/2022 15:20	1.25	12753installment 1
Debit Bank Account	11/11/2022 14:32	11/11/2022 14:32	1.25	12753installment 2

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

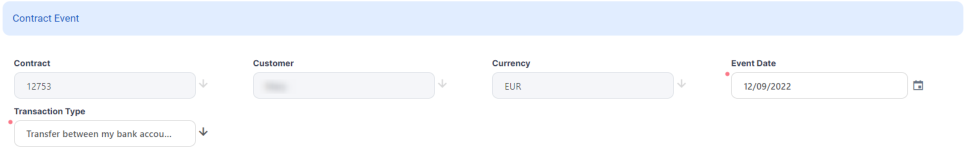
Transferring Funds between the Customer's Accounts

A `transfer between my bank accounts` transaction represents the process of moving funds between the same customer's bank accounts.

You can add transfer transactions to an approved contract via Core Banking's user interface or through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

In order to add a transfer transaction to a contract through the menus available in Core Banking, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



Contract Event

Contract: 12753

Customer: [redacted]

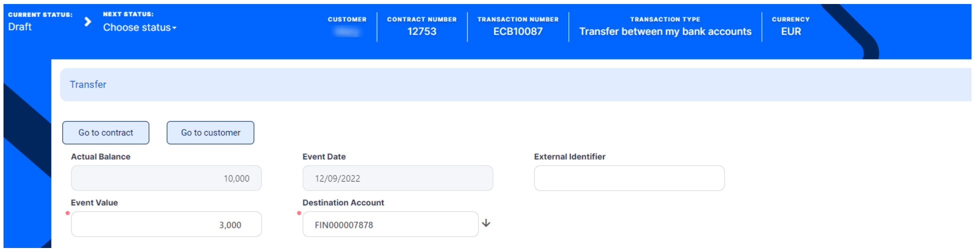
Currency: EUR

Event Date: 12/09/2022

Transaction Type: Transfer between my bank accou...

3. Fill in the following fields:
    - **Event Date** - This is pre-filled with the current date.
    - **Transaction Type** - Select from the list the **Transfer between my bank accounts** transaction type. If you can't find it, then the transaction type is not associated with the banking product which is at the base of the contract.

    Other values are automatically completed: contract, customer, and currency.
4. Click the **Save and Reload** button.
   The event is saved in **Draft** status and a transaction number is automatically generated for it. The **Edit Contract Event** page corresponding to the selected transaction type is displayed. The account's actual balance is automatically calculated, and you can't edit it.
5. Fill in the **external identifier** of the transaction, if available.
6. In the **Event Value** field, enter the amount that is added to the account.
7. Select the **Destination Account** where the respective amount should be transferred into. You can choose from the list of accounts that belong to the contract's customer and have the same currency.



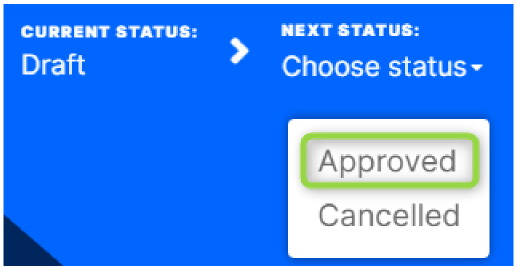
CURRENT STATUS: Draft
NEXT STATUS: Choose status
CUSTOMER [redacted]
CONTRACT NUMBER 12753
TRANSACTION NUMBER ECB10087
TRANSACTION TYPE Transfer between my bank accounts
CURRENCY EUR

Transfer

Actual Balance 10,000
Event Date 12/09/2022
External Identifier
Event Value 3,000
Destination Account FIN000007878

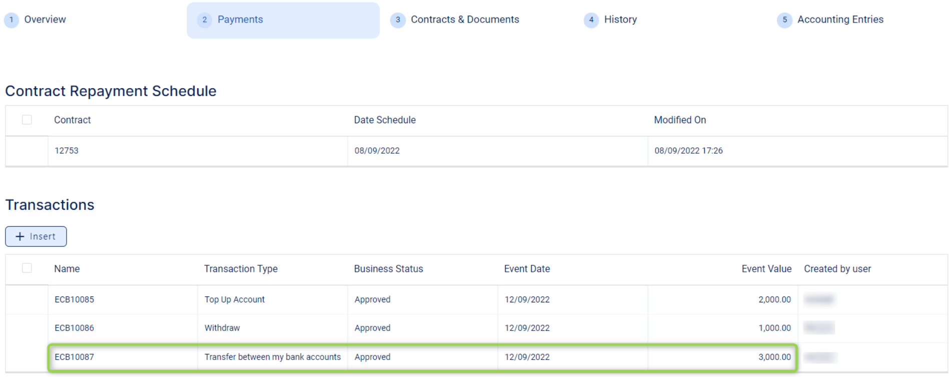
8. Click the **Save and Reload** button.
   If the event value meets the business requirements defined within Core Banking, the event is saved. Otherwise, an error message appears. Change the values as instructed in the message and try saving the event again.
   While the event is in **Draft** status, you can modify all the event's fields except **Transaction Type**. The event value is not applied to the contract while the event is still in this status.

9. Approve the event by changing its status to **Approved** in the upper left corner of the **Event** page.



10. Confirm the change of status in the **Confirmation** window, clicking **Yes**.
    The event is now in **Approved** status and Core Banking applies the transaction to the contract, moving the funds specified in the event value from the current account into the destination account of the same customer.

    The transaction is visible in the **Transactions** section.



Contract Repayment Schedule

	Contract	Date Schedule	Modified On
□	12753	08/09/2022	08/09/2022 17:26

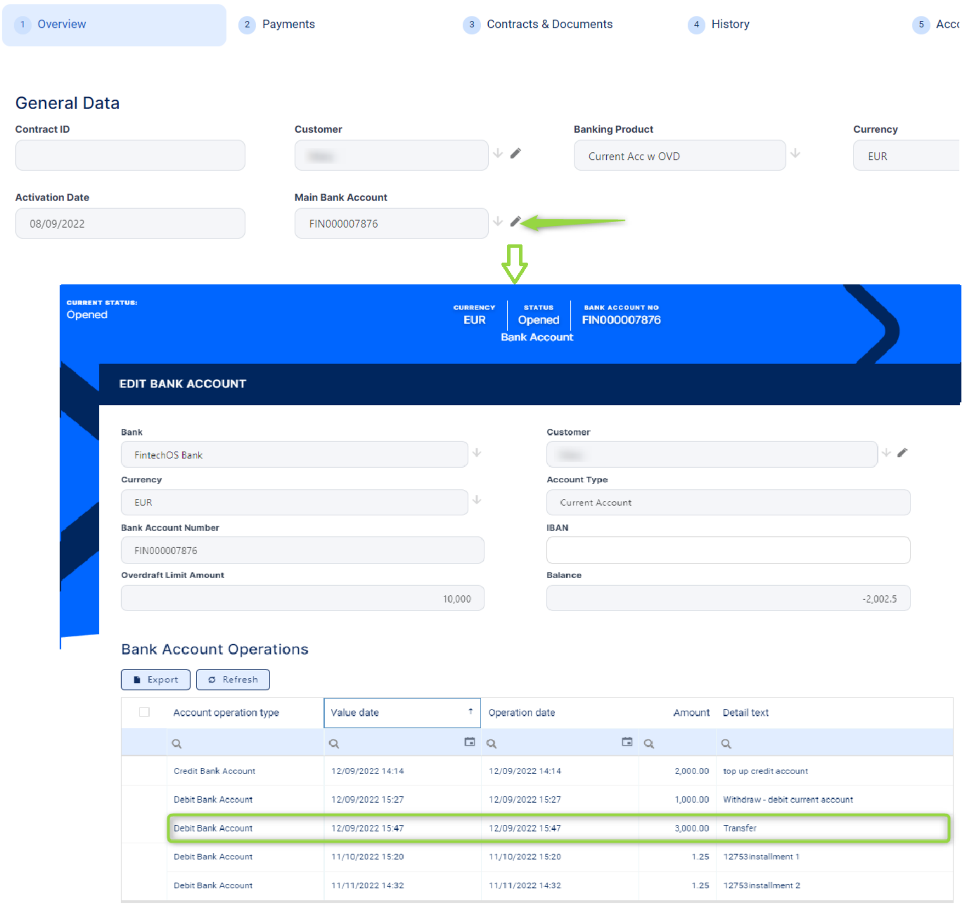
Transactions

	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB10085	Top Up Account	Approved	12/09/2022	2,000.00	[redacted]
	ECB10086	Withdraw	Approved	12/09/2022	1,000.00	[redacted]
	ECB10087	Transfer between my bank accounts	Approved	12/09/2022	3,000.00	[redacted]

NOTE

For approved transactions on current accounts, Core Banking updates the repayment schedule when running the `End of Day job` on the last day of the month.

11. View the balance of the account after approving the transaction, clicking the pencil icon next to the **Main Bank Account** field in the contract's **Overview** tab:



General Data

Contract ID	Customer	Banking Product	Currency
		Current Acc w OVD	EUR
Activation Date	Main Bank Account		
08/09/2022	FIN000007876		

CURRENT STATUS: Opened

CURRENCY EUR | STATUS Opened | BANK ACCOUNT NO FIN000007876

Bank Account

EDIT BANK ACCOUNT

Bank	Customer
FintechOS Bank	
Currency	Account Type
EUR	Current Account
Bank Account Number	IBAN
FIN000007876	
Overdraft Limit Amount	Balance
10,000	-2,002.5

Bank Account Operations

Account operation type	Value date	Operation date	Amount	Detail text
Credit Bank Account	12/09/2022 14:14	12/09/2022 14:14	2,000.00	top up credit account
Debit Bank Account	12/09/2022 15:27	12/09/2022 15:27	1,000.00	Withdraw - debit current account
Debit Bank Account	12/09/2022 15:47	12/09/2022 15:47	3,000.00	Transfer
Debit Bank Account	11/10/2022 15:20	11/10/2022 15:20	1.25	12753installment 1
Debit Bank Account	11/11/2022 14:32	11/11/2022 14:32	1.25	12753installment 2

NOTE

All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event is approved for that contract.

Processing Overdraft Repayments

Based on defined product pricing and established parameters, financial institutions can manage the billing and collection process on a current account with overdraft contract fully automatically. Once the withdraw from the overdraft amount is performed, Core Banking keeps track of the amounts and on the end of the month it updates the repayment schedule and generates underlying notifications. When generating the notification, the system checks if the amounts are fully or partially available on the overdraft and uses them to settle the notification. Otherwise, the amounts are pending recovery on the notification. They will be recovered if and when the amounts are available on the account. If funds are not available, overdue amounts and days are calculated and penalties applied. Read about repayment notifications in the Managing Repayment Notifications topic.

Once a current account with overdraft approved and used, you can check the repayment schedule built based on contract details, on the **Payments** tab's **Contract Repayment Schedule** section, as described in the Viewing a Contract's Repayment Schedule topic.

When the system reaches the dates that appear on schedule projections, the amounts resulting are made due, and Core Banking automatically triggers the notifications. Depending on the availability of funds in the current account and the direct debit setup, Core Banking settles those notifications, marking them with the **Recovered** status. Any amount that is not recovered on due date stays on the notification, and when funds become available, Core Banking automatically recovers and allocates them to the pending notifications based on the **Payment Allocation Method** setup at the product level, in the Lean Core tab. When the notifications are recovered, you can see the underlying debit transactions on the bank account – there is always such traceability of the funds.

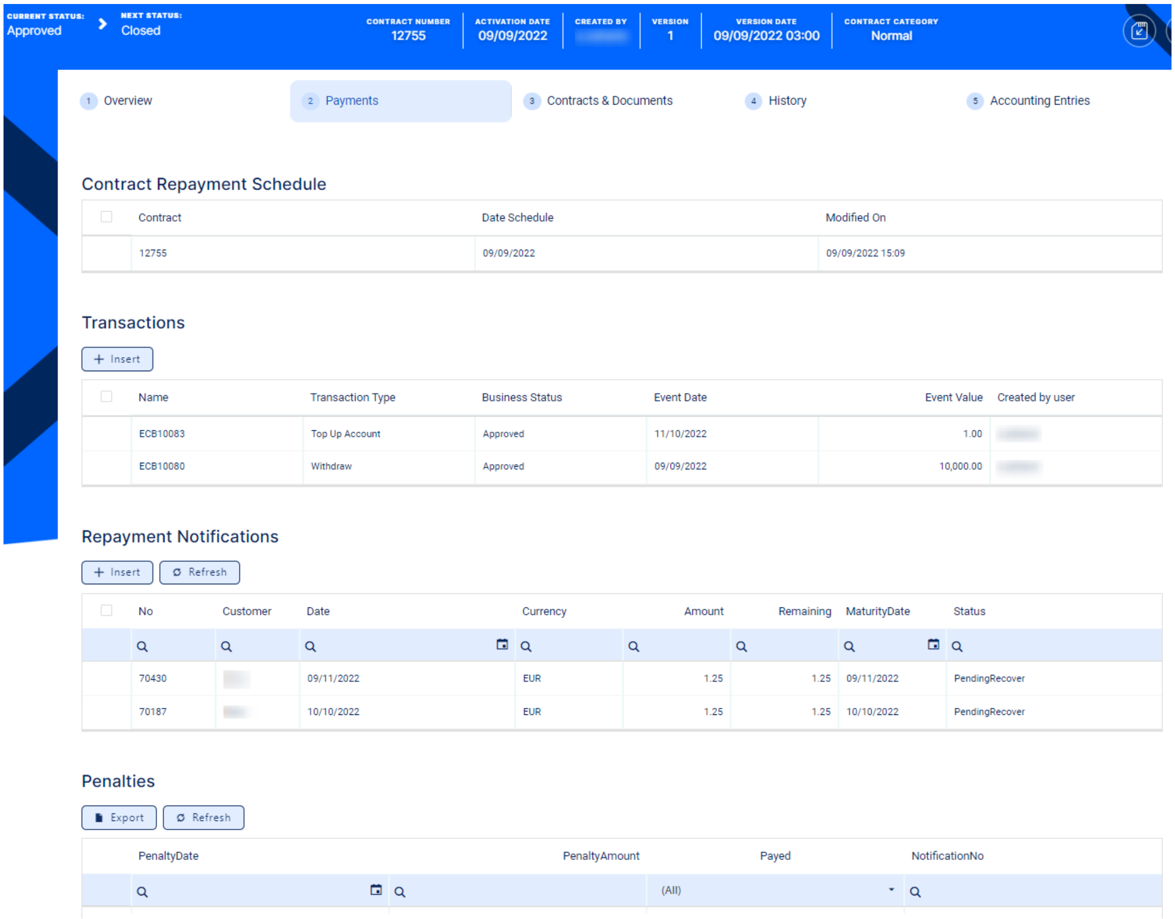
Payment Schedule Types, defined at the Banking Product Factory level, define how Core Banking handles the following:

- How the overdraft interest is calculated (day basis: 30/360, actual/ 360, etc).
- Fees you want to include in the repayment schedule.
- Frequency of the installment (monthly, every 30 days, etc).

When amounts are not available to cover notified amounts and there is a penalty interest defined for the product, the missed amounts are subject to automatic penalty calculation. Core Banking calculates and notifies the penalty interest daily. All the penalties applied by automated processes at the contract level are visible on the **Payments** tab, in the **Penalties** section, as described in the Viewing a Contract's Penalties topic. When the penalty interest is defined, there are specific Operation Items linked to it so that the system knows what types of amounts are subject to penalty: overdue principal, interest, commissions. Alternatively, the penalty interest can be applied to all missed payments. Penalty interest is defaulted from the product level and, if allowed, it can also be amended at contract level.

Is Penalty	Is General	Applied To Loan Item (If Overdue)
☑	□	Loan Principal

You can find all the existing transactions, payments, penalties, bank account operations, repayment schedules, schedule versions, repayment notifications for a contract on the **Payments** tab. The tab has no information to display for contracts in **Draft** status. Approve the contract to perform any transactions on the contract.



CURRENT STATUS:	NEXT STATUS:	CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
Approved	Closed	12755	09/09/2022	[redacted]	1	09/09/2022 03:00	Normal

Contract Repayment Schedule

Contract	Date Schedule	Modified On
12755	09/09/2022	09/09/2022 15:09

Transactions

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB10083	Top Up Account	Approved	11/10/2022	1.00	[redacted]
ECB10080	Withdraw	Approved	09/09/2022	10,000.00	[redacted]

Repayment Notifications

No	Customer	Date	Currency	Amount	Remaining	MaturityDate	Status
70430	[redacted]	09/11/2022	EUR	1.25	1.25	09/11/2022	PendingRecover
70187	[redacted]	10/10/2022	EUR	1.25	1.25	10/10/2022	PendingRecover

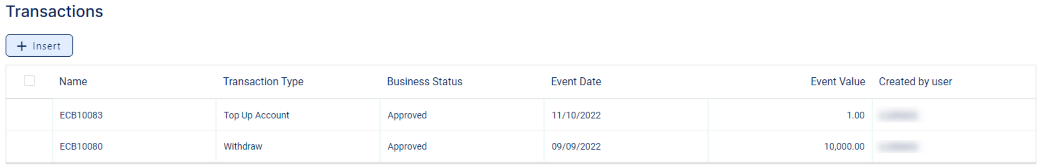
Penalties

PenaltyDate	PenaltyAmount	Payed	NotificationNo
		(All)	

Managing a Contract's Transactions

Contract transactions are events/ changes performed at the **Approved** contract's level. Such events are top-ups, withdrawals, and transfers between the customer's accounts. Read more information about the available transaction types in the "Transaction Types Used in Core Banking" on page 72 topic.

The **Transactions** section within the **Payments** tab holds all the transactions performed at the contract level, in any status. This section only has information if the contract is in **Approved** status and transactions were already created.



Transactions

□	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB10083	Top Up Account	Approved	11/10/2022	1.00	[redacted]
	ECB10080	Withdraw	Approved	09/09/2022	10,000.00	[redacted]

Event Statuses

An event (transaction) record has the following statuses, visible in the top left corner of any **Event** page:

- **Draft** - the status of a newly created event record that was not yet sent for approval. The event value is not applied to the contract while the event is still in this status. While in this status, you can edit some fields. Approve after editing all the necessary details.
- **Approved** - the status of an event record after being authorized. The event value is applied to the contract and you cannot edit any of the event's details. There is no further transition from this status.
- **Canceled** - the status of an event record after being canceled. The event value is not applied to the contract and you cannot edit any of the event's details. There is no further transition from this status.

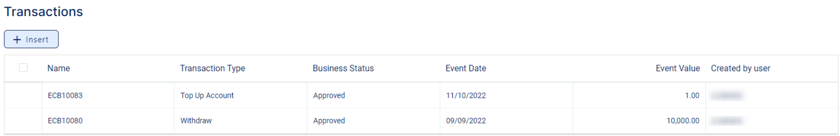
NOTE

As a best practice, new records or new versions of existing records created on a specific day should be approved on the same day.

Viewing Existing Events

To view the events on a contract, follow these steps:

1. In FintechOS Portal, select a contract with **Approved** status and double-click to open it.
2. Navigate to the contract's **Payments** tab and view the list of events displayed in the **Transactions** section.



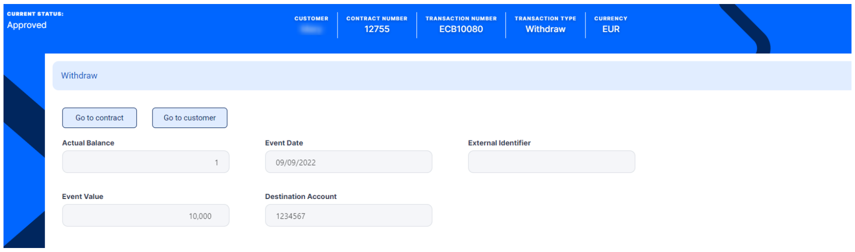
Transactions

+ Insert

□	Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
	ECB10083	Top Up Account	Approved	11/10/2022	1.00	[redacted]
	ECB10080	Withdraw	Approved	09/09/2022	10,000.00	[redacted]

Here you can see only basic information about the transactions, such as event number, status, date, transaction type, value and the user who created it.

3. To view detailed information about the transaction, double-click the event record to open the Event page:



CURRENT STATUS: Approved

CUSTOMER [redacted] | CONTRACT NUMBER 12755 | TRANSACTION NUMBER ECB10080 | TRANSACTION TYPE Withdraw | CURRENCY EUR

Withdraw

Actual Balance: 1

Event Date: 09/09/2022

External Identifier:

Event Value: 10,000

Destination Account: 1234567

You can't edit the information displayed on this page.

4. View the following information displayed about each event, with some variations depending on the event type:

   - Transaction status, contract number, customer name, transaction number, type, and currency, all displayed in the header of the page.

   The following details are displayed in the body of the page:

   - Event date and value. Contract events added through API integration also contain an external identifier.
   - Contract's actual amounts and source/ destination accounts.

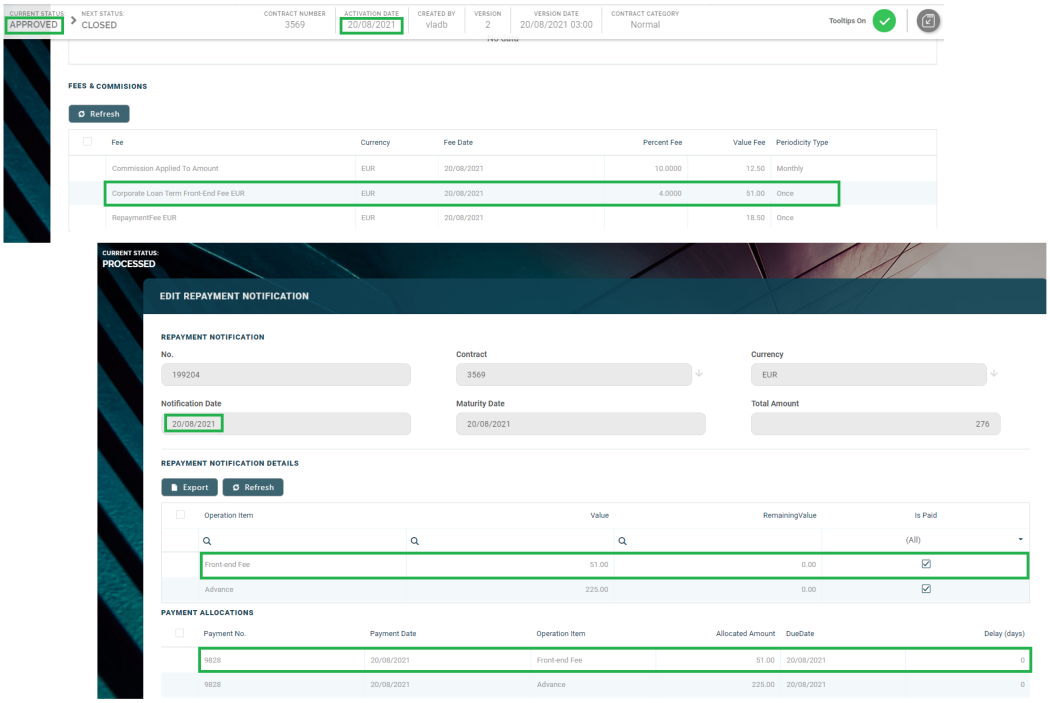
Managing Repayment Notifications

Core Banking automatically generates notifications for each installment that has to be paid for existing contracts with overdrawn amounts. There can be various types of notifications generated for fees, commissions, and so on. Core Banking also assists you reconcile wrongly processed cases and other situations resulted from delayed processing/ wrong updates. Thus, depending on your user rights, you can manually add notifications for an active contract, or add notifications for amounts to be recovered even if there is no active contract. Core Banking includes all such manual notifications in the recovery processes.

All the repayment notifications that are not paid in full after their maturity dates are subject to automated penalty calculation processes performed by Core Banking. Thus, for repayment notifications linked to a contract, Core Banking uses the penalty interests defined within the interests list attached at the banking product level, and for repayment notifications not linked to a contract, it uses the penalty interest list specified in a `system parameter`.

NOTE

All the `Front-End Fee` commission types with `Once` periodicity type applied to a contract are notified and must be paid when the contract is approved. The Core Banking system parameter `FrontEndFee` defines the type of commission that is automatically notified at the contract approval.



CURRENT STATUS:	NEXT STATUS:	CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
APPROVED	CLOSED	3569	20/08/2021	vladb	2	20/08/2021 03:00	Normal

FEES & COMMISIONS

□	Fee	Currency	Fee Date	Percent Fee	Value Fee	Periodicity Type
	Commission Applied To Amount	EUR	20/08/2021	10.0000	12.50	Monthly
	Corporate Loan Term Front-End Fee EUR	EUR	20/08/2021	4.0000	51.00	Once
	RepaymentFee EUR	EUR	20/08/2021		18.50	Once

CURRENT STATUS:
PROCESSED

EDIT REPAYMENT NOTIFICATION

REPAYMENT NOTIFICATION

No. 199204	Contract 3569	Currency EUR
Notification Date 20/08/2021	Maturity Date 20/08/2021	Total Amount 276

REPAYMENT NOTIFICATION DETAILS

□	Operation Item	Value	RemainingValue	Is Paid
				(All)
	Front-end Fee	51.00	0.00	☑
	Advance	225.00	0.00	☑

PAYMENT ALLOCATIONS

□	Payment No.	Payment Date	Operation Item	Allocated Amount	DueDate	Delay (days)
	9828	20/08/2021	Front-end Fee	51.00	20/08/2021	0
	9828	20/08/2021	Advance	225.00	20/08/2021	0

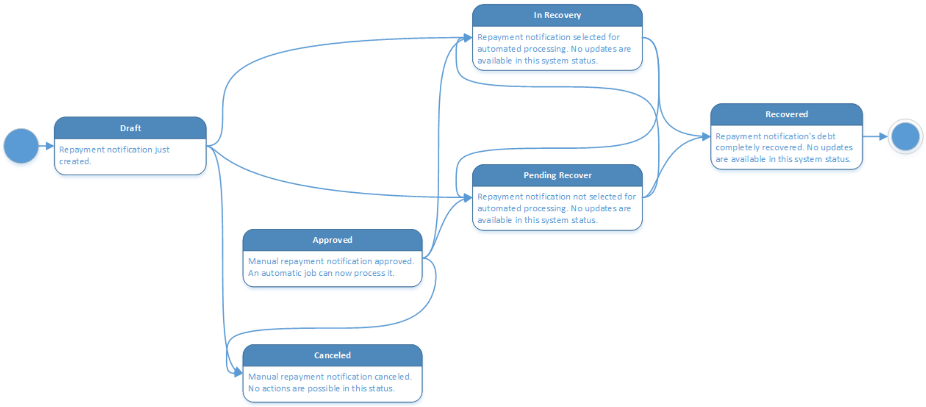
Repayment Notification Statuses

A repayment notification record has the following business workflow statuses:

- **Draft** - the status of a newly created repayment notification record, either automatic or manual.
- **Approved** - the status of a manual repayment notification record after being authorized by a user with notification approval competencies. While in this status, you cannot edit the record's details. From this status, the record is picked up by a scheduled job and its status is automatically changed, depending on the direct debit settlement settings. If the `Direct Debit Settlement Account` field at the contract level = `True`, then the manual notification's status changes to **In Recovery**, otherwise it changes to **Pending Recover**.

- **Canceled** - the status of a manual repayment notification after canceling it straight from the **Draft** status. You can only cancel a manual notification if its `Total Amount` = `Remaining Value`.
- **Pending Recover** - this is a system status applied to repayment notification when `Direct Debit Settlement Account` at the contract level is set to `False`. No updates are available in this system status.
- **In Recovery** - this is a system status applied to repayment notification when `Direct Debit Settlement Account` at the contract level is set to `True`. No updates are allowed on the record.
- **Recovered** - the last status of a repayment notification, after the complete recovery of the notification's debt. No updates are allowed on the record.

The repayment notification status transitions are illustrated below:


In Recovery
Repayment notification selected for automated processing. No updates are available in this system status.
Draft
Repayment notification just created.
Recovered
Repayment notification's debt completely recovered. No updates are available in this system status.
Pending Recover
Repayment notification not selected for automated processing. No updates are available in this system status.
Approved
Manual repayment notification approved. An automatic job can now process it.
Canceled
Manual repayment notification canceled. No actions are possible in this status.

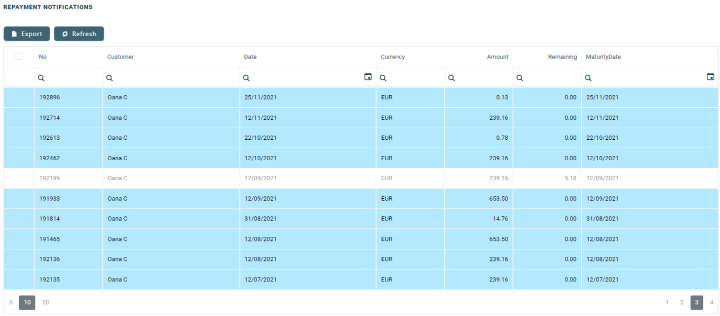
Accessing Repayment Notifications

Core Banking enables you to access notifications in several places, for your convenience.

Accessing a contract's repayment notifications

To view the notifications generated for a specific contract, follow these steps:

1. On the **Contract** page, navigate to the **Payments** tab > **Repayment Notifications** section.
2. View all the repayment notifications generated for the contract. This section only has information if the contract is in **Approved** status and disbursements were already performed.



No	Customer	Date	Currency	Amount	Remaining	MaturityDate
192896	Oana C	25/11/2021	EUR	0.13	0.00	25/11/2021
192714	Oana C	12/11/2021	EUR	239.16	0.00	12/11/2021
192613	Oana C	22/10/2021	EUR	0.78	0.00	22/10/2021
192462	Oana C	12/10/2021	EUR	239.16	0.00	12/10/2021
192199	Oana C	12/09/2021	EUR	239.16	5.18	12/09/2021
191933	Oana C	12/09/2021	EUR	653.50	0.00	12/09/2021
191814	Oana C	31/08/2021	EUR	14.76	0.00	31/08/2021
191465	Oana C	12/08/2021	EUR	653.50	0.00	12/08/2021
192136	Oana C	12/08/2021	EUR	239.16	0.00	12/08/2021
192135	Oana C	12/07/2021	EUR	239.16	0.00	12/07/2021

Repayment notifications highlighted in blue are already paid, allocated or closed to payment, while the ones not highlighted remain to be paid.

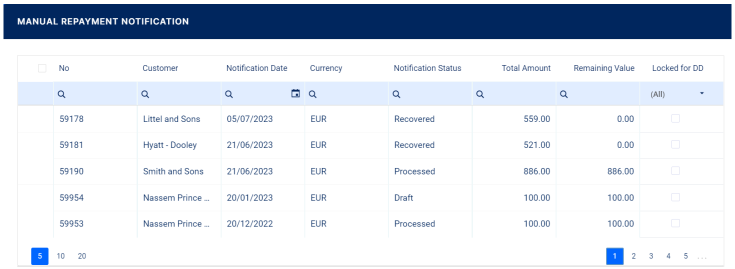
3. View the information is displayed about each notification:
    - Number, date, and status of the notification
    - Customer and currency of the contract
    - Amount of the installment for which the notification was generated
    - Remaining amount from the installment to be paid
    - Maturity date of the notification, automatically calculated adding the value of the Grace

`period for repayment` field at the banking product level to the notification date.

Accessing all the repayment notifications generated by Core Banking

To access all the notifications created in Core Banking, follow these steps:

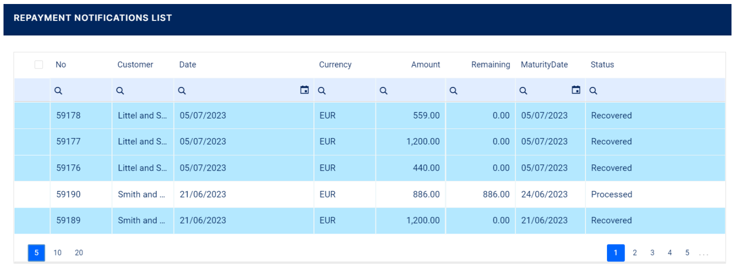
1. In the FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. To access only manually captured notifications, click **Manual Repayment Notification** menu item to open the **Manual Repayment Notifications** page.



MANUAL REPAYMENT NOTIFICATION

□	No	Customer	Notification Date	Currency	Notification Status	Total Amount	Remaining Value	Locked for DD
								(All)
	59178	Littel and Sons	05/07/2023	EUR	Recovered	559.00	0.00	□
	59181	Hyatt - Dooley	21/06/2023	EUR	Recovered	521.00	0.00	□
	59190	Smith and Sons	21/06/2023	EUR	Processed	886.00	886.00	□
	59954	Nassem Prince ...	20/01/2023	EUR	Draft	100.00	100.00	□
	59953	Nassem Prince ...	20/12/2022	EUR	Processed	100.00	100.00	□

3. To access automatic and manual notifications, click **Repayment Notification** menu item to open the **Repayment Notifications List** page.

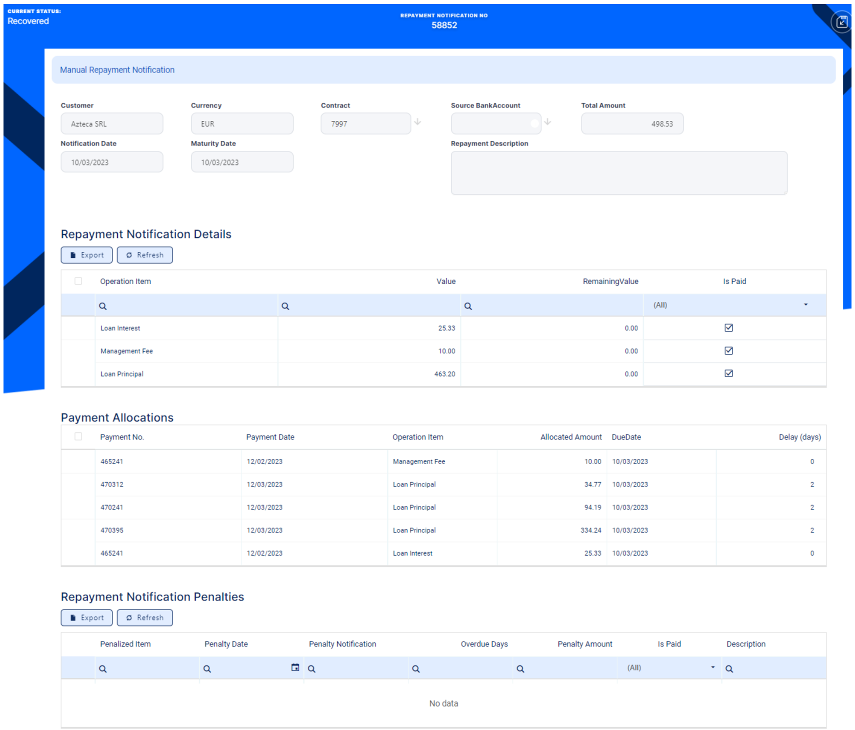


REPAYMENT NOTIFICATIONS LIST

□	No	Customer	Date	Currency	Amount	Remaining	MaturityDate	Status
	59178	Littel and S...	05/07/2023	EUR	559.00	0.00	05/07/2023	Recovered
	59177	Littel and S...	05/07/2023	EUR	1,200.00	0.00	05/07/2023	Recovered
	59176	Littel and S...	05/07/2023	EUR	440.00	0.00	05/07/2023	Recovered
	59190	Smith and ...	21/06/2023	EUR	886.00	886.00	24/06/2023	Processed
	59189	Smith and ...	21/06/2023	EUR	1,200.00	0.00	21/06/2023	Recovered

Viewing Repayment Notifications

1. To view the details of a repayment notification, double-click the desired record. The **Edit Repayment Notification** page is displayed for automatically generated notifications, or the **Edit Manual Repayment Notification** page for manual notifications, both presenting the repayment notification details.



CURRENT STATUS:
Recovered

REPAYMENT NOTIFICATION NO
58852

Manual Repayment Notification

Customer	Currency	Contract	Source BankAccount	Total Amount
Azteca SRL	EUR	7997		498.53
Notification Date	Maturity Date		Repayment Description	
10/03/2023	10/03/2023			

Repayment Notification Details

□	Operation Item	Value	RemainingValue	Is Paid
				(All)
	Loan Interest	25.33	0.00	☑
	Management Fee	10.00	0.00	☑
	Loan Principal	463.20	0.00	☑

Payment Allocations

□	Payment No.	Payment Date	Operation Item	Allocated Amount	DueDate	Delay (days)
	465241	12/02/2023	Management Fee	10.00	10/03/2023	0
	470312	12/03/2023	Loan Principal	34.77	10/03/2023	2
	470241	12/03/2023	Loan Principal	94.19	10/03/2023	2
	470395	12/03/2023	Loan Principal	334.24	10/03/2023	2
	465241	12/02/2023	Loan Interest	25.33	10/03/2023	0

Repayment Notification Penalties

Penalized Item	Penalty Date	Penalty Notification	Overdue Days	Penalty Amount	Is Paid	Description
					(All)	

No data

NOTE

Automatically generated notifications can't be edited!

You can only edit the details of manual notifications in `Draft` status.

2. View notification specific data in the **Repayment Notification** section:

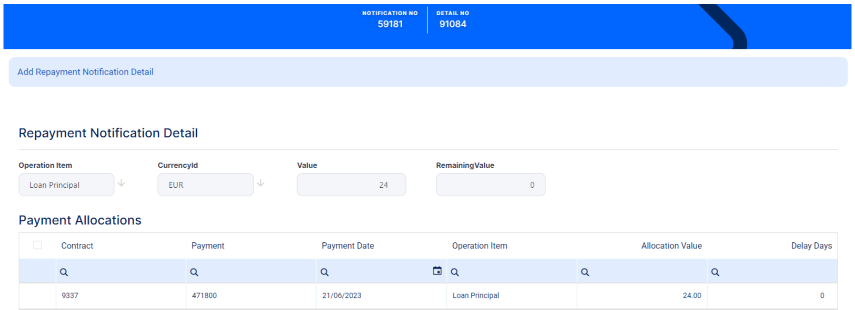
- **Repayment Notification No.** - The number of the repayment notification record.
- **Customer** - The customer for whom the notification was generated.
- **Currency** - The currency of the notification.
- **Contract** - The number of the contract for which the notification was generated.
- **Notification Date** - The date when the notification was generated.
- **Maturity Date** - The maturity date of the notification. This is calculated by adding the value of the `Grace period for repayment` field at the banking product level to the notification date.
- **Source Bank Account** - The bank account from where the notified amount should be allocated.
- **Total Amount** - The total amount to be paid within the notification (the sum of all the details' values).
- **Repayment Description** - A description of the manual notification.

3. View details (lines) of the notification in the **Repayment Notification Details** section:
   - **Operation Item** - The operation item for which the notification detail is generated.
   - **Value** - The value of the notification detail.
   - **Remaining Value** - The remaining value still to be paid from the notification value.
   - **Is Paid** - This checkbox is automatically marked as true when the full amount is allocated to the detail value. You cannot change this value.

NOTE

Notification details are automatically marked as paid when a repayment transaction performed and approved for the contract is allocated by the system to cover the value of the notification detail.

4. To view more information about a notification detail, double-click it to open the **Repayment Notification Details** page:



NOTIFICATION NO 59181 | DETAIL NO 91084

Add Repayment Notification Detail

Repayment Notification Detail

Operation Item	CurrencyId	Value	RemainingValue
Loan Principal	EUR	24	0

Payment Allocations

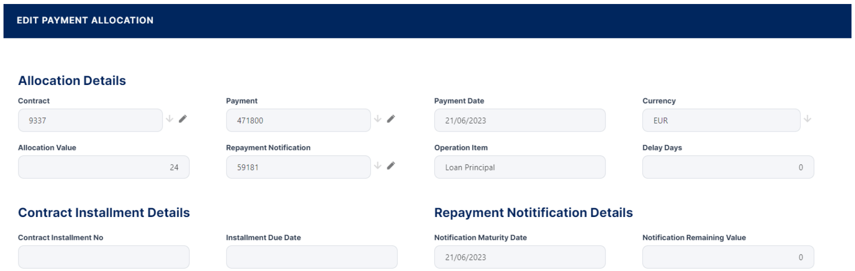
□	Contract	Payment	Payment Date	Operation Item	Allocation Value	Delay Days
	9337	471800	21/06/2023	Loan Principal	24.00	0

5. View information about the payments allocated for the notification details in the **Payment Allocation** section:

   - **Payment No.** - The number of the payment.
   - **Payment Date** - The date when the payment was performed.
   - **Operation Item** - The operation item from the notification for which the payment was allocated.
   - **Allocated Amount** - The amount allocated from the payment.
   - **Due Date** - The due date of the notification.

- **Delays (days)** - The number of days passed since the notification's due date.

6. To view more information about a payment allocation, double-click it to open the **Edit Payment Allocation** page:



EDIT PAYMENT ALLOCATION

Allocation Details

Contract: 9337
Payment: 471800
Payment Date: 21/06/2023
Currency: EUR
Allocation Value: 24
Repayment Notification: 59181
Operation Item: Loan Principal
Delay Days: 0

Contract Installment Details

Contract Installment No:
Installment Due Date:

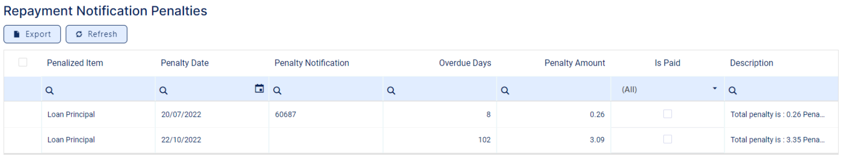
Repayment Notitification Details

Notification Maturity Date: 21/06/2023
Notification Remaining Value: 0

You cannot edit any of the fields from this page.

> **NOTE**
>
> The operation item is used in the payment allocation process. If the repayment notification is not linked to a contract, then Core Banking takes the operation item value from the allocation method configured within the `ManualAllocationMethod` system parameter. If a repayment notification is created for a contract with `Closed` status, then Core Banking takes the operation item value from the allocation method selected at the banking product level.

7. View information about the penalties calculated for the manual repayment notifications that were not paid in full until their maturity date in the **Viewing Notification Penalties** section:



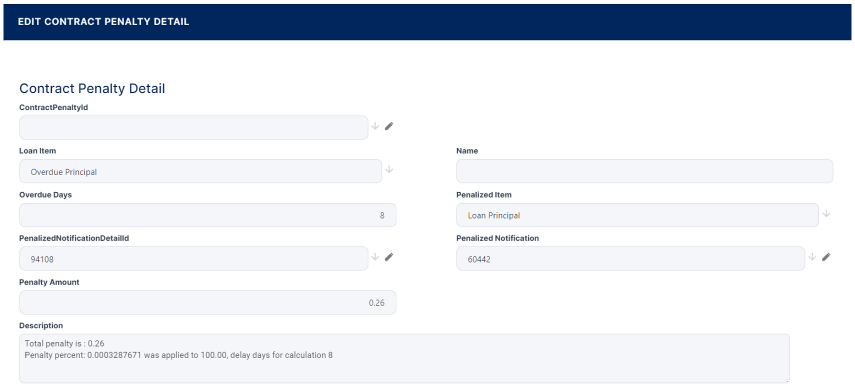
Repayment Notification Penalties

□	Penalized Item	Penalty Date	Penalty Notification	Overdue Days	Penalty Amount	Is Paid	Description
						(All)	
	Loan Principal	20/07/2022	60687	8	0.26	□	Total penalty is : 0.26 Pena...
	Loan Principal	22/10/2022		102	3.09	□	Total penalty is : 3.35 Pena...

All the repayment notifications that are not paid in full after their maturity dates are subject to automated penalty calculation processes performed by Core Banking. Thus, for repayment notifications linked to a contract, Core Banking uses the penalty interests defined within the interests list attached at the banking product level. For repayment notifications which are not linked to a contract, Core Banking uses the penalty interest list specified in the `ManualPenaltyInterestList` system parameter.

Each penalty displays information about the penalized item, the penalty date, the number of penalty notification, the number of overdue days after the repayment notification's maturity date, the penalty amount, a description, and whether the penalty was pad or not.

8. To view more information about a correction entry, double-click it to open the **Edit Contract Penalty Detail** page:



EDIT CONTRACT PENALTY DETAIL

Contract Penalty Detail

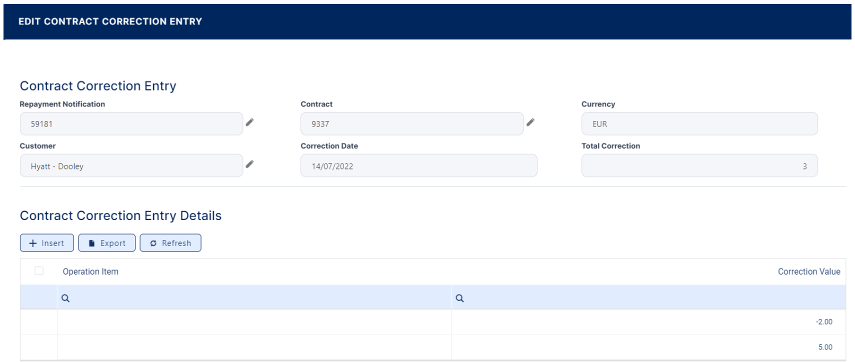
ContractPenaltyId:	
Loan Item: Overdue Principal	Name:
Overdue Days: 8	Penalized Item: Loan Principal
PenalizedNotificationDetailId: 94108	Penalized Notification: 60442
Penalty Amount: 0.26	

Description:
Total penalty is : 0.26
Penalty percent: 0.0003287671 was applied to 100.00, delay days for calculation 8

You can't edit any of the fields from this page.

9. View information about any correction entries created for the notification in the **Viewing Corrections** section. Contract correction entries are automatically generated, for notifications that are overdue, when creating a **Reschedule Overdue** transaction type contract event. Here you can see information about the customer of the contract, the date and currency of the correction entry, and the total amount of the correction (the sum of all the correction details' values).

10. To view more information about a correction entry, double-click it to open the **Edit Contract Correction Entry** page:



EDIT CONTRACT CORRECTION ENTRY

Contract Correction Entry

Repayment Notification 59181	Contract 9337	Currency EUR
Customer Hyatt - Dooley	Correction Date 14/07/2022	Total Correction 3

Contract Correction Entry Details

□	Operation Item	Correction Value
		-2.00
		5.00

- **Repayment Notification** - The repayment notification number.
- **Contract** - The contract number associated with the notification.
- **Currency** - The currency of the notification.
- **Customer** - The customer associated with the notification.
- **Correction Date** - The date when the correction was created.
- **Total Correction** - The sum of all correction entry detail records associated with the current correction entry.

11. Additionally, you can view information about each detail within the correction:

- **Operation Item** - The operation item of the transaction for which the correction entry detail was inserted.
- **Correction Value** - The value of the correction entry detail, in the correction entry's currency.

Understanding Automated Settlement of Repayment Notifications (Direct Debit Settlement Account)

The automated settlement of repayment notification, or direct debit settlement account, is the functionality whereby, if funds are available on the settlement account and the contract has repayment notifications pending for recovery, Core Banking automatically uses the available balance up to full settlement of repayment notifications.

When you have restrictions of any kind on the settlement account or the allocation simply needs to be done as per a legal authority instructions, you can turn off the automated settlement of `Installment` type repayment notifications functionality (the payment allocation) at the **contract level** using the `Direct Debit Settlement Account` checkbox. Deselecting the checkbox leads to the underlying amounts on notifications pending recovery not being retrieved automatically even if there are available funds in settlement account. Thus, financial institution can manage the contracts in case of blocked accounts and control the allocation of funds to outstanding `Installment` type notifications in case of need to impose a block on the settlement account, or manage the settlement of multiple loans from the same settlement account when short on funds and exceptional rules might apply.

This parametrization is available at product level, you can it amended at the contract level, and it is also available at customer level with a system parameter to instruct Core Banking if the customer level setup should impact underlying contracts or not. Thus, you can manage the `Direct Debit Settlement Account` setting at the **customer level**. The customer level setting takes precedence over the setting at the contract level when creating new contracts. For existing contracts, Core Banking applies the setting configured within the `CustomerToContractDirectDebitSettlementAcc` system parameter.

If the automated settlement of repayment notification functionality is turned off, the contract is pending for manual repayment. You can turn it back on as required, when required, and allow Core Banking to allocate the funds according to its automated processes, using any funds that become available in the settlement account in order to cover pending notifications. When the functionality is turned on or off, the notifications already processed remain unchanged. You can turn the automated settlement functionality on or off even after the maturity of a contract, as long as the contract is not closed.

The following validations are performed for the `Direct Debit Settlement Account` field at the contract level:

- If `Direct Debit Settlement Account` = `True` and new `Installment` type repayment notifications are generated, the system automatically tries to recover the values from Settlement Amount. When the repayment notification is fully paid, Core Banking automatically changes the `Installment` type repayment notification's status to `Recovered`.
- If `Direct Debit Settlement Account` = `True` and old unpaid `Installment` type repayment notifications already exist, the system tries to create recover debt records for the remaining amount for all unpaid `Installment` type repayment notifications, and changes their status to `In recovery`.
- If `Direct Debit Settlement Account` = `False` and new `Installment` type repayment notifications are generated, the

system doesn't register any debt to recover, and changes the notification's status to `Pending Recover`.

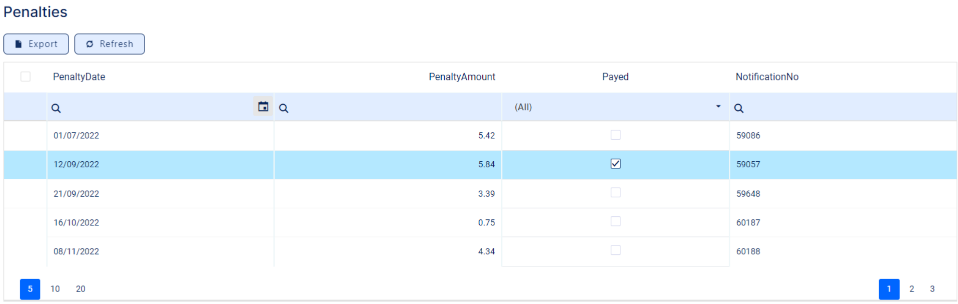
- if `Direct Debit Settlement Account` = `False` and old `Installment` type repayment notifications are generated, the system removes debts to recover from the Settlement Account, and changes the status to `Pending Recover`.

Viewing a Contract's Penalties

You can view the penalty interest already notified for the contract in the **Penalties** section of the **Payments** tab. These penalties are automatically calculated by Core Banking for an approved contract based on all the interests with selected **Is Penalty** checkbox that are applied to this contract.

To view the penalties applied to a contract, follow these steps:

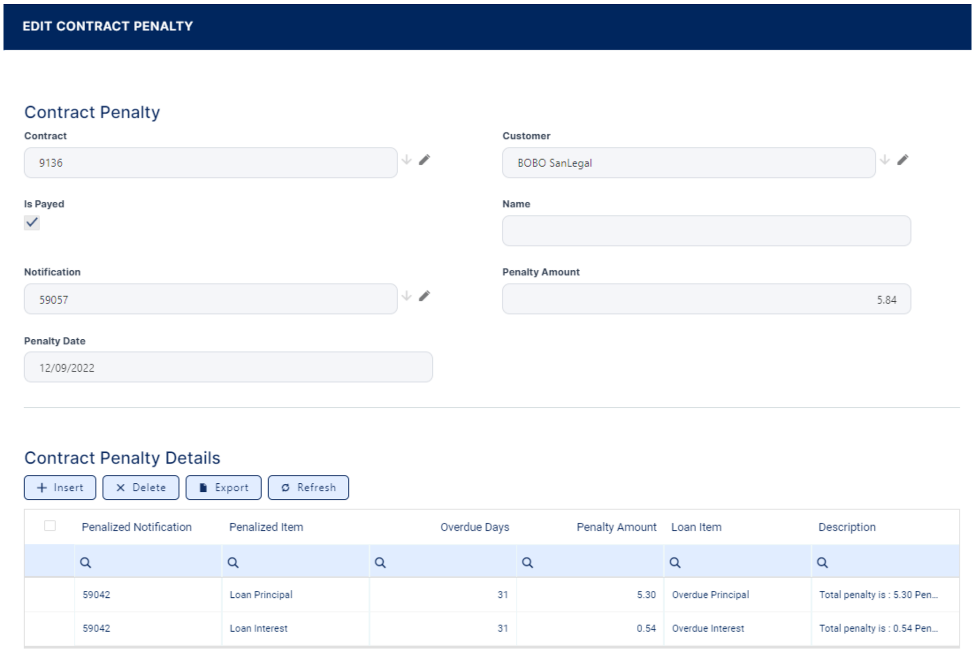
1. On an approved contract's **Payments** tab, navigate to the **Penalties** section. If any penalty interest was calculated for the contract, they are displayed here:



	PenaltyDate	PenaltyAmount	Payed	NotificationNo
□	01/07/2022	5.42	□	59086
	12/09/2022	5.84	☑	59057
	21/09/2022	3.39	□	59648
	16/10/2022	0.75	□	60187
	08/11/2022	4.34	□	60188

2. View basic information about the penalties in the list, such as penalty date, amount, notification number and whether it was paid or not. Payed penalties are also highlighted in blue, for your convenience.

3. To see detailed information about one of the applied penalties, double-click on the desired penalty record. The **Contract Penalty** page is displayed with the selected penalty's details:



EDIT CONTRACT PENALTY

Contract Penalty

Contract: 9136	Customer: BOBO SanLegal
Is Payed: ☑	Name:
Notification: 59057	Penalty Amount: 5.84
Penalty Date: 12/09/2022	

Contract Penalty Details

☐	Penalized Notification	Penalized Item	Overdue Days	Penalty Amount	Loan Item	Description
	59042	Loan Principal	31	5.30	Overdue Principal	Total penalty is : 5.30 Pen...
	59042	Loan Interest	31	0.54	Overdue Interest	Total penalty is : 0.54 Pen...

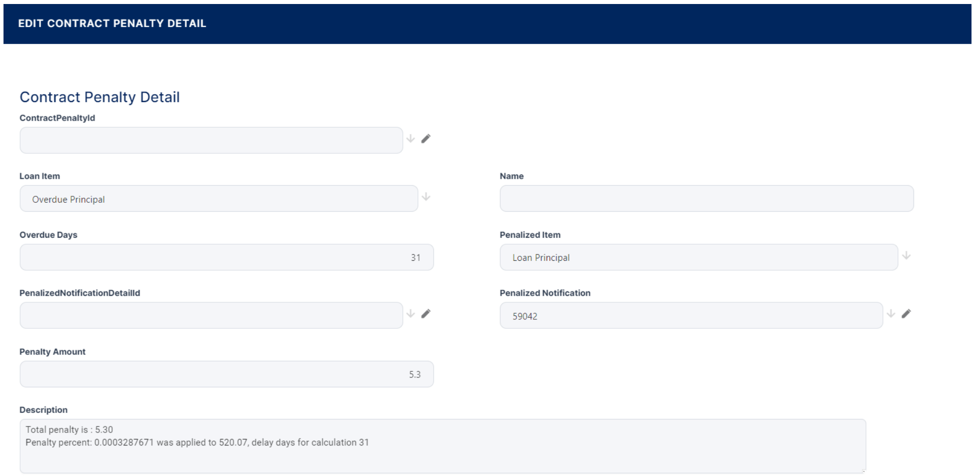
You can't edit the information displayed on this page.

4. View the information in the **Contract Penalty** section, as displayed:
    - **Contract** - The number of the contract for which the penalty is applied.
    - **Customer** - The customer for whom the contract was created.
    - **Is Paid** - A checkbox indicating whether the penalty was already paid through a payment allocation or not.
    - **Name** - The name of the penalty.
    - **Notification** - The number of the notification where the penalty is included.
    - **Penalty Amount** - The amount of the penalty expressed in the contract's currency.
    - **Penalty Date** - The date when the penalty was calculated.

5. View the information in the **Contract Penalty Details** section, as displayed:

    - **Penalized Notification** - The notification which was not paid in time and for which the penalty is calculated.
    - **Penalized Item** - The item to which the penalty interest was applied.
    - **Overdue Days** - The number of days since the notification was overdue for payment.
    - **Penalty Amount** - The calculated amount of the penalty.
    - **Loan Item** - The loan item which is used to calculate the penalty interest.
    - **Description** - The description of the contract penalty detail. It contains the total penalty value, the penalty percent or value applied to the number of overdue, and the delay days for calculation.

6. Double-click a detail record to view the details of the penalty on a separate page, **Edit Contract Penalty Detail**:



EDIT CONTRACT PENALTY DETAIL

Contract Penalty Detail

ContractPenaltyId

Loan Item: Overdue Principal

Name

Overdue Days: 31

Penalized Item: Loan Principal

PenalizedNotificationDetailId

Penalized Notification: 59042

Penalty Amount: 5.3

Description:
Total penalty is : 5.30
Penalty percent: 0.0003287671 was applied to 520.07, delay days for calculation 31

You can't edit the information displayed on this page.

Manually Capture Notifications

Apart from the notifications automatically generated by Core Banking for each installment that has to be paid for existing contracts that disbursed various amounts to customers, Core Banking also assists you reconcile wrongly processed cases and other situations resulted from delayed processing/ wrong updates. Thus, depending on your user rights, you can manually add notifications for an active contract based on lending product types, term loans, and mortgages, or add notifications for amounts to be recovered even if there is no active contract. Core Banking includes all such manual notifications in the recovery processes.

NOTE
Core Banking enables you to manage manual repayment notification via the user interface or via integration through APIs. For information about the available endpoints, please visit the Core Banking Developer Guide.
For information about managing manual repayment notification via the user interface, continue reading this page.

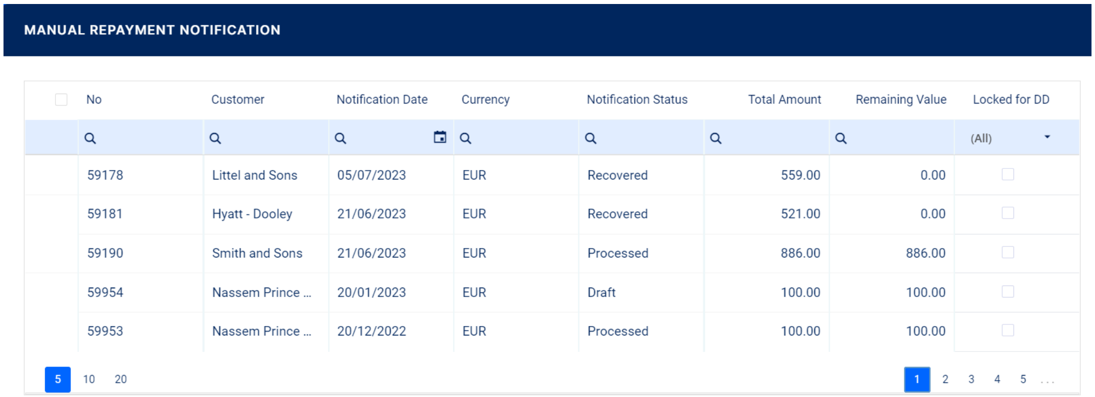
NOTE
You need one of the **Corporate Credit Officer**, **Retail Credit Officer**, or **Loan Admin Officer** security roles to view, create, delete, and update manual repayment notifications.
You need the **Loan Admin Officer** security role to update their status to Approved.

Adding Repayment Notifications

Follow these steps to manually add a repayment notification:

1. In the FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.

2. Click **Manual Repayment Notification** menu item to open the **Manual Repayment Notifications** page.

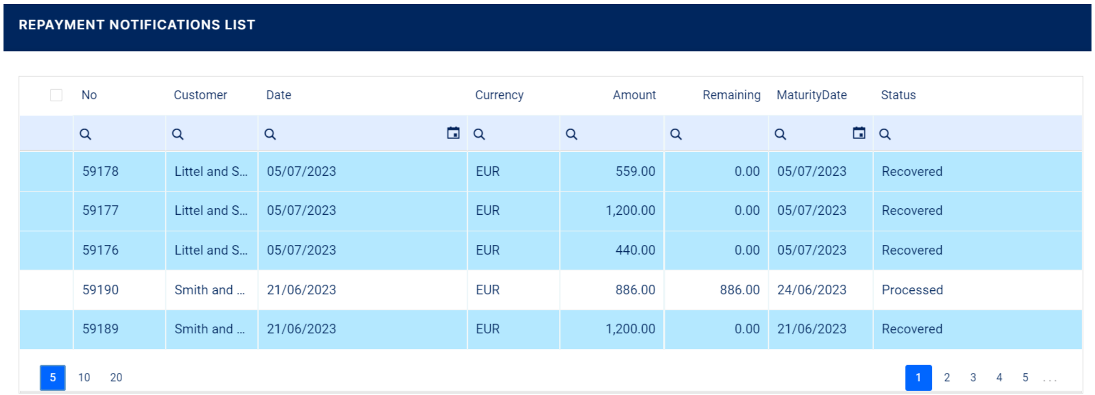


MANUAL REPAYMENT NOTIFICATION

□	No	Customer	Notification Date	Currency	Notification Status	Total Amount	Remaining Value	Locked for DD
								(All)
	59178	Littel and Sons	05/07/2023	EUR	Recovered	559.00	0.00	□
	59181	Hyatt - Dooley	21/06/2023	EUR	Recovered	521.00	0.00	□
	59190	Smith and Sons	21/06/2023	EUR	Processed	886.00	886.00	□
	59954	Nassem Prince ...	20/01/2023	EUR	Draft	100.00	100.00	□
	59953	Nassem Prince ...	20/12/2022	EUR	Processed	100.00	100.00	□

5 10 20 1 2 3 4 5 ...

Or, click **Repayment Notification** menu item to open the **Repayment Notifications List** page.



REPAYMENT NOTIFICATIONS LIST

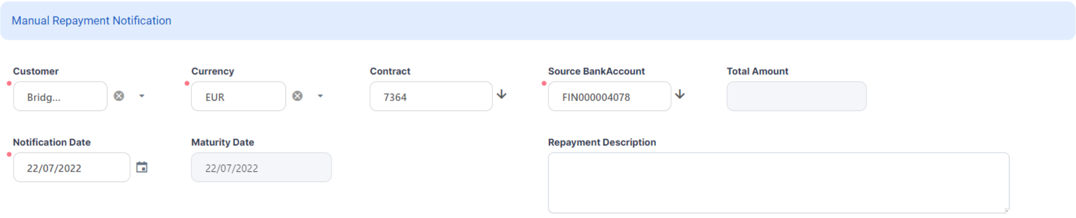
□	No	Customer	Date	Currency	Amount	Remaining	MaturityDate	Status
	59178	Littel and S...	05/07/2023	EUR	559.00	0.00	05/07/2023	Recovered
	59177	Littel and S...	05/07/2023	EUR	1,200.00	0.00	05/07/2023	Recovered
	59176	Littel and S...	05/07/2023	EUR	440.00	0.00	05/07/2023	Recovered
	59190	Smith and ...	21/06/2023	EUR	886.00	886.00	24/06/2023	Processed
	59189	Smith and ...	21/06/2023	EUR	1,200.00	0.00	21/06/2023	Recovered

5 10 20 1 2 3 4 5 ...

Within the list, the notifications highlighted in blue are already paid, allocated, or closed to payment, while notifications not highlighted (displayed on a white background) remain to be paid.

3. On the **Manual Repayment Notifications** page, click **Insert** to open the **Add Manual Repayment Notification** page.

4. Fill in the following details regarding the notification:



Manual Repayment Notification

Customer: Bridg...

Currency: EUR

Contract: 7364

Source BankAccount: FIN000004078

Total Amount:

Notification Date: 22/07/2022

Maturity Date: 22/07/2022

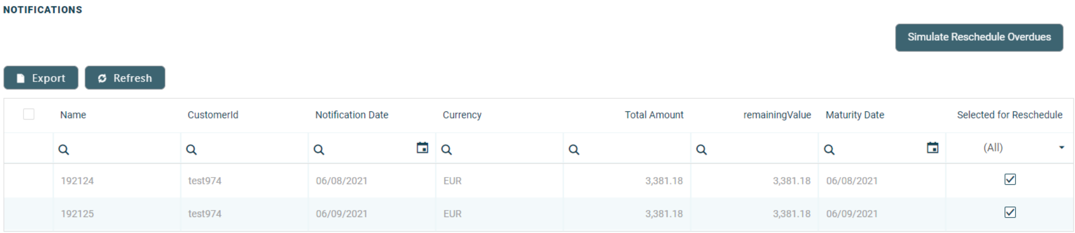
Repayment Description:

- **Customer** - Select the customer for whom the notification is created.
- **Contract** - Select the number of the contract for which the notification is generated. You can choose from the approved and closed contracts of the selected customer. The currency and the source bank account are automatically filled in using the values from the selected contract. If the notification is not linked to an active contract, you must select a source bank account.
- **Source Bank Account** - Automatically filled in if the contract was selected. Select the bank account from where the notified amount should be allocated. After selecting a source bank account, the currency is changed with the bank account's currency.
- **Notification Date** - Select the date when the notification is created.

> **NOTE**
>
> You can also add manual repayment notification from the contract level's **Payments** tab, clicking **Insert** within the **Repayment Notification** section. In the displayed **Add Manual Repayment Notification** page, some of the fields are automatically filled in based on the contract's information and can't be modified.

5. Optionally, view or edit the following details:
    - **Currency** - Automatically filled in with the currency of the notification, if the contract or the source bank account was selected.
    - **Total Amount** - This read-only field holds the total amount to be paid within the notification, calculated as the sum of all the details' values.
    - **Maturity Date** - This field is automatically filled in with the maturity date of the notification, calculated by adding the value of the `Grace period for repayment` field at the banking product level to the notification date. If no contract is selected, hence there is grace period to consider from the banking product level, then the `ManualGraceRepayment` Core Banking system parameter is used for maturity date calculation.
    - **Repayment Description** - Enter a description for the manual notification.

6. Click the **Save and Reload** button. The manual notification is saved by Core Banking in `Draft` status. You can now continue by adding repayment notification details to it.
   You can view the notifications generated for a specific contract on the **Contract** page, in the **Payments** tab > **Repayment Notifications** section:



NOTIFICATIONS

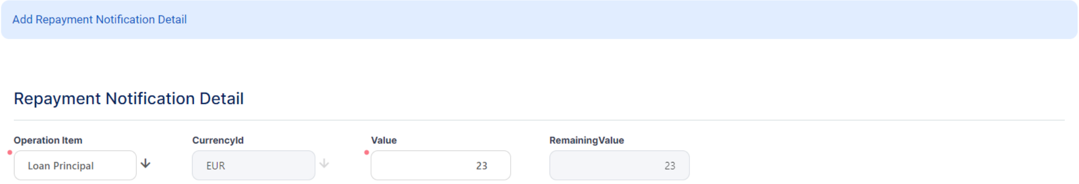
□	Name	CustomerId	Notification Date	Currency	Total Amount	remainingValue	Maturity Date	Selected for Reschedule
								(All)
	192124	test974	06/08/2021	EUR	3,381.18	3,381.18	06/08/2021	☑
	192125	test974	06/09/2021	EUR	3,381.18	3,381.18	06/09/2021	☑

> **NOTE**
> Once the repayment notification is in `Draft` status, you can edit the currency and the source bank account only if there are no notification details created for it.

Adding Repayment Notification Details

Follow these steps to manually add a repayment notification detail:

1. On the **Edit Manual Repayment Notifications** page, click **Insert** to open the **Add Manual Repayment Notification Detail** page. The page already has the currency of the notification and the remaining value still to be paid from the notification value completed. When you create the notification detail, `Remaining Value = Value`.
2. Fill in the following details regarding the notification detail:



Add Repayment Notification Detail

Repayment Notification Detail

Operation Item	CurrencyId	Value	RemainingValue
Loan Principal	EUR	23	23

- **Operation Item** - Select the operation item for which the notification detail is created.

  The operation item is used in the payment allocation process. If you select an operation item that is not included in the allocation method used for manual notifications (stored in the `ManualAllocationMethod` system parameter), then Core

Banking displays a warning message.

- **Value** - Enter the value of the notification detail. It must be must be greater than 0.

3. Click the **Save and Close** button. The notification detail is saved by Core Banking. You can add as many details as needed to a manual repayment notification in `Draft` status.

> **NOTE**
> For the payment allocation job to process the details, you must first approve the manual repayment notification record.

Approving Manual Repayment Notifications

After adding all the details you need to a manual repayment notification, make sure you approve it by changing its status to **Approved**. Otherwise, the payment allocation automated jobs don't process it.

Core Banking performs the following validations before approving a manual repayment notification:

- The `Total Amount` of the repayment notification must be greater than 0;
- The `Value` fields at the details level must be greater than 0;
- The operation items selected at details level must be included in the allocation method used for manual notifications (stored in the `ManualAllocationMethod` system parameter).

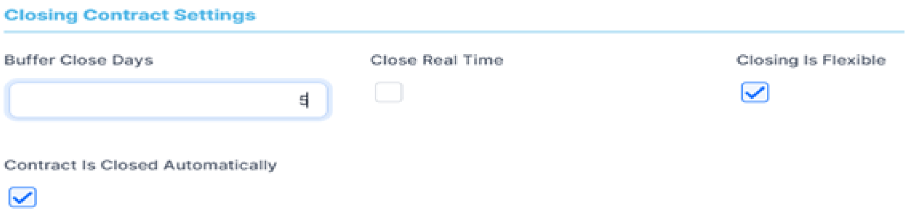
After approval, Core Banking automatically transitions manual repayment notifications from the **Approved** status into **Pending Recover** or **In Recovery** statuses, using the `Auto Process Manual Repayment Notifications` scheduled job. Further, the automated settlement of repayment notification takes the notification and processes it, allocating funds from the source bank account to settle the debt.

Closing a Current Account

Current account contracts with all their financial obligations met can be closed. Core Banking enables you to close these contracts automatically through scheduled jobs or manually, according to a series of settings defined at the banking product and at the contract level. The automatic closure of contract is triggered whenever the maturity date of the contract is reached and there are no overdue amounts on the contract, or according to the closure settings.

There are cases when you might expect the account to get closed once all amounts recovered, maturity date reached, or you might want such contracts to be closed after a certain number of days, allowing for possible reconciliations, or even leave them to be manually closed or with a localized job. All this is enabled from product level and, if set as negotiable, you can also change the default at contract level. You might need such settings if you work with direct debit and need to allow for the number of days the direct debit can bounce to pass before you really close the deal.

You can configure the closure settings during product definition, in the **Lean Contract Settings**' tab -> **Closing Contract Settings** section, as described in the Banking Product Factory user guide:



Closing Contract Settings

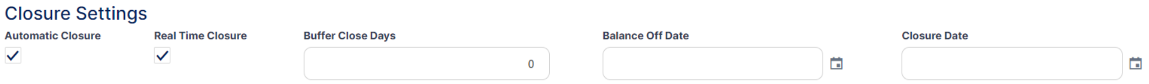
Buffer Close Days: 5

Close Real Time: □

Closing Is Flexible: ☑

Contract Is Closed Automatically: ☑

If allowed from the product definition, you can amend the closure settings of the contract, the way Core Banking should behave once there are no more due amounts and the contract can be closed. Perform these configurations in the **Closure Settings** section of the **Overview** tab, during contract creation, for contracts based on banking products having the `Closing Is Flexible = True` setting:



Closure Settings

Automatic Closure: ✓

Real Time Closure: ✓

Buffer Close Days: 0

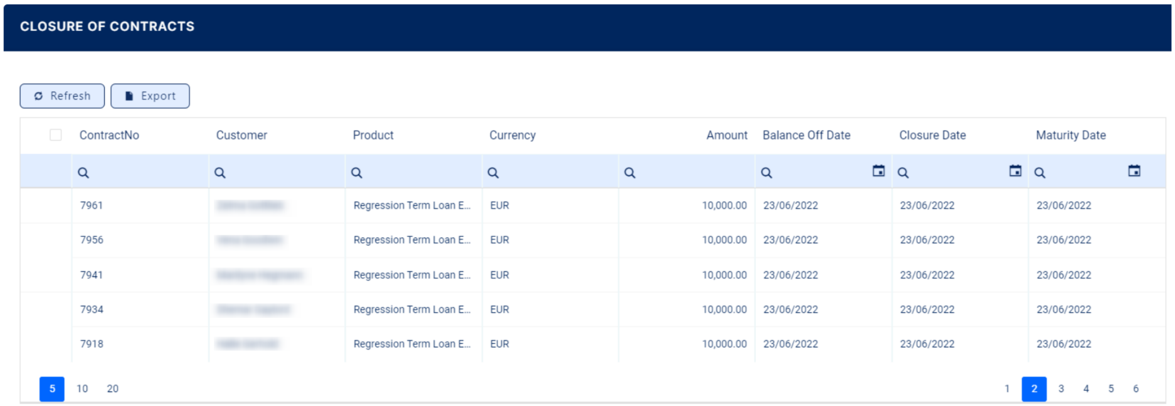
Balance Off Date:

Closure Date:

Depending on the real time closure setting, Core Banking uses the one following scheduled jobs to close the contracts automatically:

- `Close Contracts (CB) Job` - this job closes automatically all contracts with `Automatic Closure = True` and `Real Time Closure = False`, with zero available amount and with no further amounts to be recovered, that have `Balance Off Date` filled in and `Closure Date = Current Date`.
- `Close Contracts RealTime(CB) Job` - this job closes automatically all contracts with `Automatic Closure = True` and `Real Time Closure = True`, with zero available amount and with no further amounts to be recovered.

You can see the list of contracts that are ready to be closed in the **Closure of Contracts** report:



□	ContractNo	Customer	Product	Currency	Amount	Balance Off Date	Closure Date	Maturity Date
	7961	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
	7956	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
	7941	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
	7934	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
	7918	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022

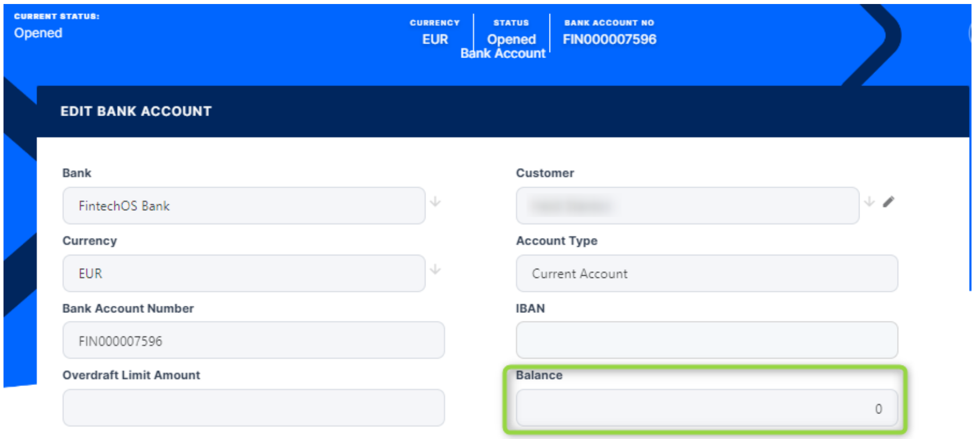
You can also use the `GetClosureOfContracts` endpoint to fetch the same information within your own API integration.

Manually Closing Current Account without Overdraft Contracts

If you opted to close a contract with all the obligations met manually, and not automatically, before its maturity date, then follow these steps:

1. Double-click an approved contract with zero amounts to be recovered and zero available balance, opening it for editing.

   This example shows you a current account with its balance = 0 and no overdraft:



CURRENT STATUS: Opened

CURRENCY EUR | STATUS Opened Bank Account | BANK ACCOUNT NO FIN000007596

EDIT BANK ACCOUNT

Bank: FintechOS Bank

Customer: [redacted]

Currency: EUR

Account Type: Current Account

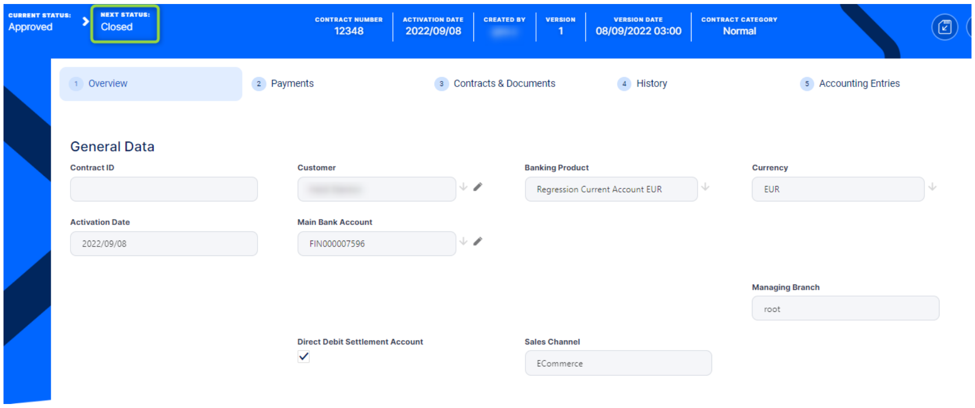
Bank Account Number: FIN000007596

IBAN:

Overdraft Limit Amount:

Balance: 0

2. Change the contract's **Next Status** into **Closed**.



CURRENT STATUS: Approved > NEXT STATUS: Closed

CONTRACT NUMBER 12348 | ACTIVATION DATE 2022/09/08 | CREATED BY [redacted] | VERSION 1 | VERSION DATE 08/09/2022 03:00 | CONTRACT CATEGORY Normal

General Data

Contract ID:

Customer: [redacted]

Banking Product: Regression Current Account EUR

Currency: EUR

Activation Date: 2022/09/08

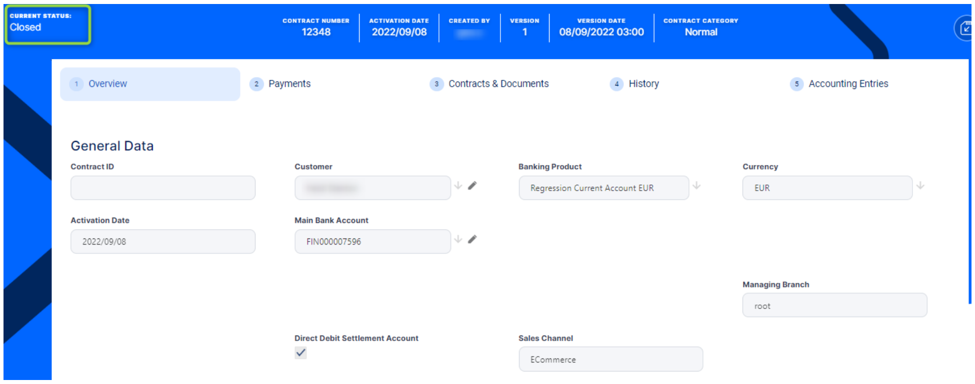
Main Bank Account: FIN000007596

Managing Branch: root

Direct Debit Settlement Account: ✓

Sales Channel: ECommerce

If Core Banking performs all the validations and finds that the financial obligations are met and there are no more amounts to be recovered or to be transferred out, then the contract's status becomes **Closed**. You can't perform any other operations on this contract.



CURRENT STATUS: Closed

CONTRACT NUMBER 12348 | ACTIVATION DATE 2022/09/08 | CREATED BY [redacted] | VERSION 1 | VERSION DATE 08/09/2022 03:00 | CONTRACT CATEGORY Normal

General Data

Contract ID:

Customer: [redacted]

Banking Product: Regression Current Account EUR

Currency: EUR

Activation Date: 2022/09/08

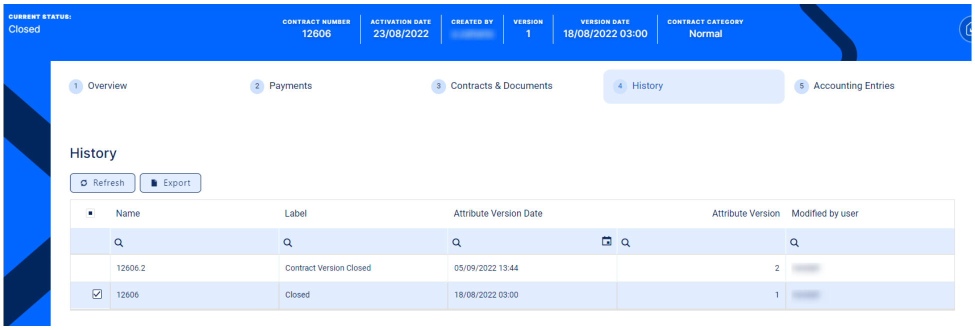
Main Bank Account: FIN000007596

Managing Branch: root

Direct Debit Settlement Account: ✓

Sales Channel: ECommerce

Any existing versions of the contract are also automatically closed, as you can see in the **History** tab.



CURRENT STATUS:	CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
Closed	12606	23/08/2022	[redacted]	1	18/08/2022 03:00	Normal

History

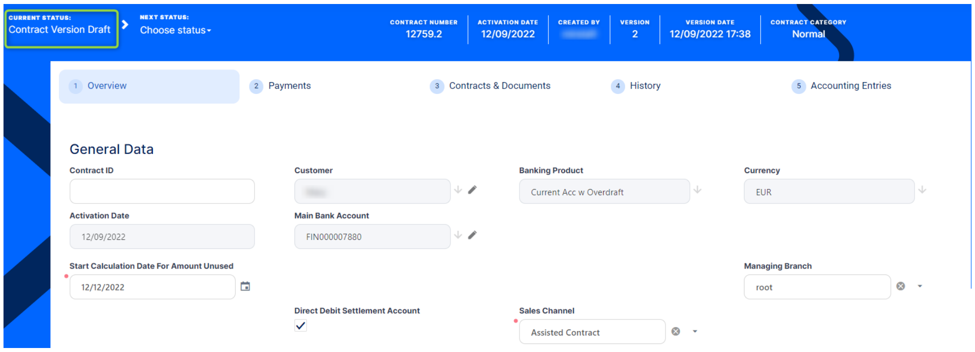
■	Name	Label	Attribute Version Date	Attribute Version	Modified by user
	12606.2	Contract Version Closed	05/09/2022 13:44	2	[redacted]
☑	12606	Closed	18/08/2022 03:00	1	[redacted]

Manually Closing Current Account with Overdraft Contracts

IMPORTANT!
When you plan to close a current account with an attached overdraft functionality, first you have to settle the costs linked to the overdraft, transfer any remaining balance to another account, and only then you can proceed to close the account.

If you opted to close a current account with overdraft contract with all the obligations met manually, and not automatically, before its maturity date, then follow these steps:

1. Create a new version of the **Approved** contract.

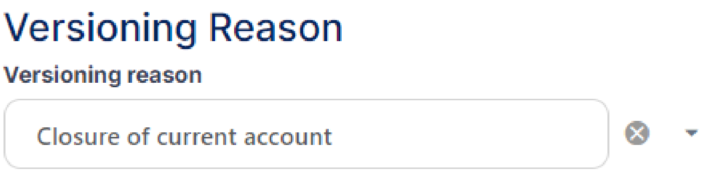


CURRENT STATUS:	NEXT STATUS:	CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
Contract Version Draft	Choose status	12759.2	12/09/2022	[redacted]	2	12/09/2022 17:38	Normal

General Data

Contract ID:
Customer: [redacted]
Banking Product: Current Acc w Overdraft
Currency: EUR
Activation Date: 12/09/2022
Main Bank Account: FIN000007880
Start Calculation Date For Amount Unused: 12/12/2022
Managing Branch: root
Direct Debit Settlement Account: ✓
Sales Channel: Assisted Contract

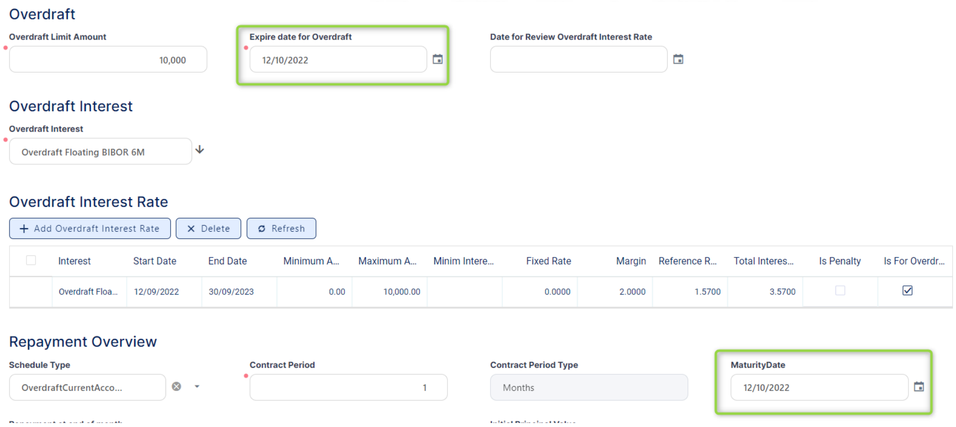
2. Scroll down in the new version's **Overview** tab and fill in a `Versioning Reason`.



Versioning Reason

Versioning reason: Closure of current account

3. Change the `Maturity Date` of the contract to an agreed upon date.



Overdraft

Overdraft Limit Amount: 10,000

Expire date for Overdraft: 12/10/2022

Date for Review Overdraft Interest Rate:

Overdraft Interest

Overdraft Interest: Overdraft Floating BIBOR 6M

Overdraft Interest Rate

□	Interest	Start Date	End Date	Minimum A...	Maximum A...	Minim Intere...	Fixed Rate	Margin	Reference R...	Total Interes...	Is Penalty	Is For Overdr...
	Overdraft Floa...	12/09/2022	30/09/2023	0.00	10,000.00		0.0000	2.0000	1.5700	3.5700	□	☑

Repayment Overview

Schedule Type: OverdraftCurrentAcco...

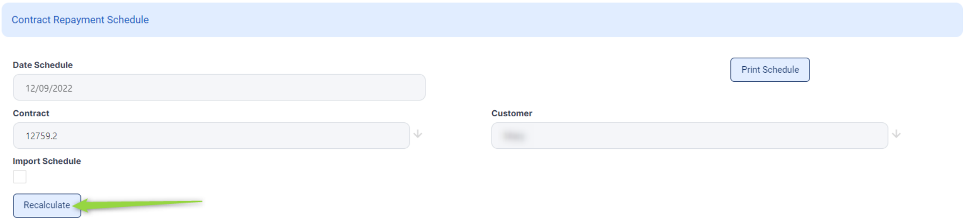
Contract Period: 1

Contract Period Type: Months

MaturityDate: 12/10/2022

4. If the `Expire Date for Overdraft` was not reached yet, then you must also change it to the same date as you did for `Maturity Date`.

5. Go to the contract's **Payments** tab and double-click the repayment schedule to open it. Click **Recalculate** for Core Banking to perform a recalculation of the repayment plan, to have the last installment due on the new maturity date, with all the accrued amount added into the designated columns.



Contract Repayment Schedule

Date Schedule: 12/09/2022

Contract: 12759.2

Customer: [redacted]

Import Schedule: □

6. Approve the contract version.

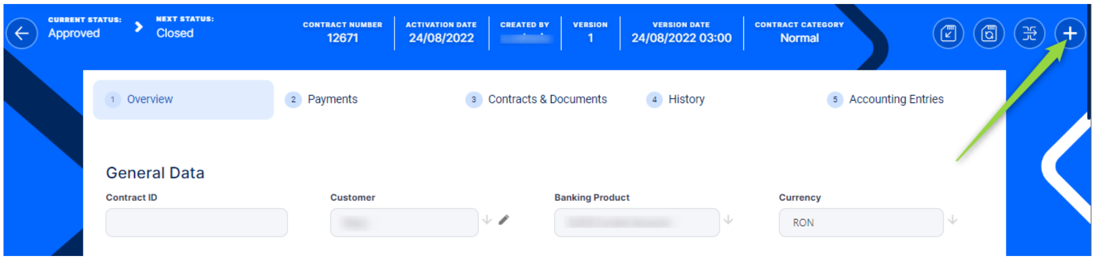
7. At the end of that day, Core Banking notifies the installment. Whenever a due amount is notified before the expiration date of the overdraft, the balance of the current account is credited with the notification amount when running the `Core Banking End Of Day` scheduled job. When the expiration date of the overdraft is reached, any due amounts are moved to the last, expiration installment of the repayment schedule, on the principal, and the balance, the overdraft limit amount and the overdraft available amount are zeroed. The expiration installment amount can be covered with a top-up or a new overdraft on the same current account.
8. The next day, settle the last installment, performing a top-up.
9. Close the current account manually, performing the same steps described in the "Manually Closing Current Account without Overdraft Contracts" on page 504 section.

Creating New Versions of Existing Current Account Contracts

In Core Banking, the contracts are set up for versioning. Thus, if you want to update the details of an approved contract, then you must create a new version of the record.

To create a new version for a record with the **Approved** status, follow these steps:

1. While in the **Contract** page of the record selected for updates, click the **New Version** button.



CURRENT STATUS: Approved
NEXT STATUS: Closed
CONTRACT NUMBER: 12671
ACTIVATION DATE: 24/08/2022
CREATED BY: [redacted]
VERSION: 1
VERSION DATE: 24/08/2022 03:00
CONTRACT CATEGORY: Normal

General Data

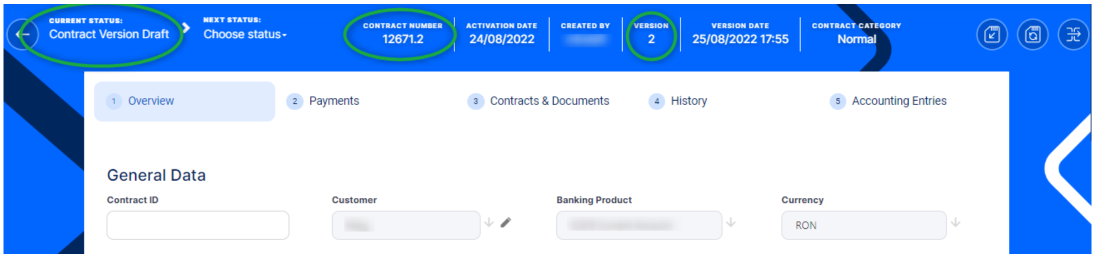
Contract ID:

Customer: [redacted]

Banking Product: [redacted]

Currency: RON

2. View the new version of the contract created by Core Banking, with **Contract Version Draft** status.



CURRENT STATUS: Contract Version Draft

NEXT STATUS: Choose status

CONTRACT NUMBER 12671.2

ACTIVATION DATE 24/08/2022

CREATED BY [redacted]

VERSION 2

VERSION DATE 25/08/2022 17:55

CONTRACT CATEGORY Normal

General Data

Contract ID

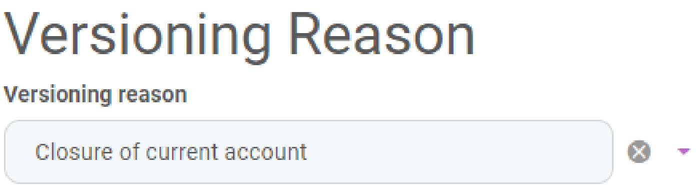
Customer [redacted]

Banking Product [redacted]

Currency RON

3. Edit the desired fields in the **Overview** tab. You can only edit a set of fields for contracts based on specific banking products.

4. Select a versioning reason in the newly displayed editable **Versioning Reson** section.



Versioning Reason

Versioning reason: Closure of current account

> **NOTE** Select the `Closure of current account` reason when closing the current account with overdraft contract, as it signals Core Banking to perform the procedures needed in order to settle all the costs of the overdraft and of the current account.

5. Click the **Save and Reload** button.

If you approve the contract in **Contract Version Draft** status, then the original record transitions into the **Contract Version Closed** status and the secondary version becomes the **Approved** currently active contract record.

Read more details about versioning a record on the How to Version an Entity Record page.

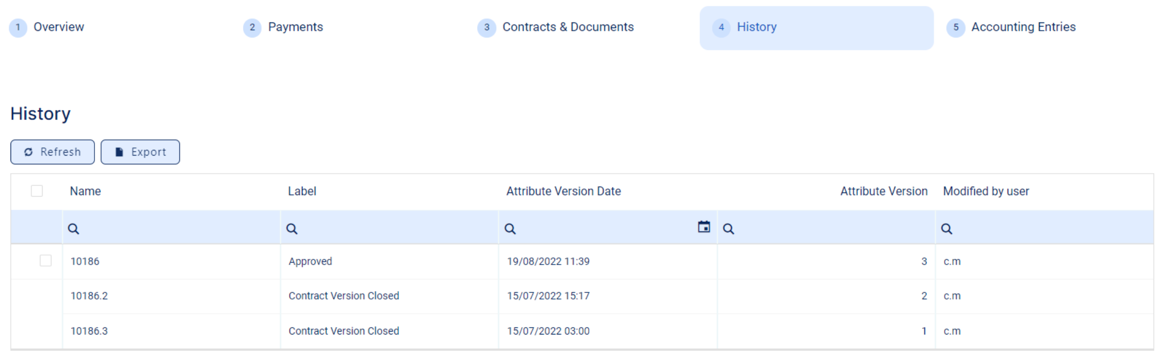
Possible Changes on New Current Account with Overdraft Contract Versions

- The **Financed Amount** value can either be increased or decreased. The amount can be decreased with a number smaller than or equal to the **Available amount**. Financed amount can be increased up to the maximum value specified at banking product level.
- The **Current Account** attached to the contract can be changed to any other active account belonging to the customer.
- **Product Interest** can be changed to any other type set at banking product level.
- **Schedule Type** can be changed with any other type set at banking product level.
- **Contract Period** cannot exceed the maximum set at banking product level.
- **Interest Grace Period** can be changed up to the maximum number of months set at banking product level.

After any of the above changes, in order to approve the new version of contract, the **Contract Repayment Schedule** must be recalculated.

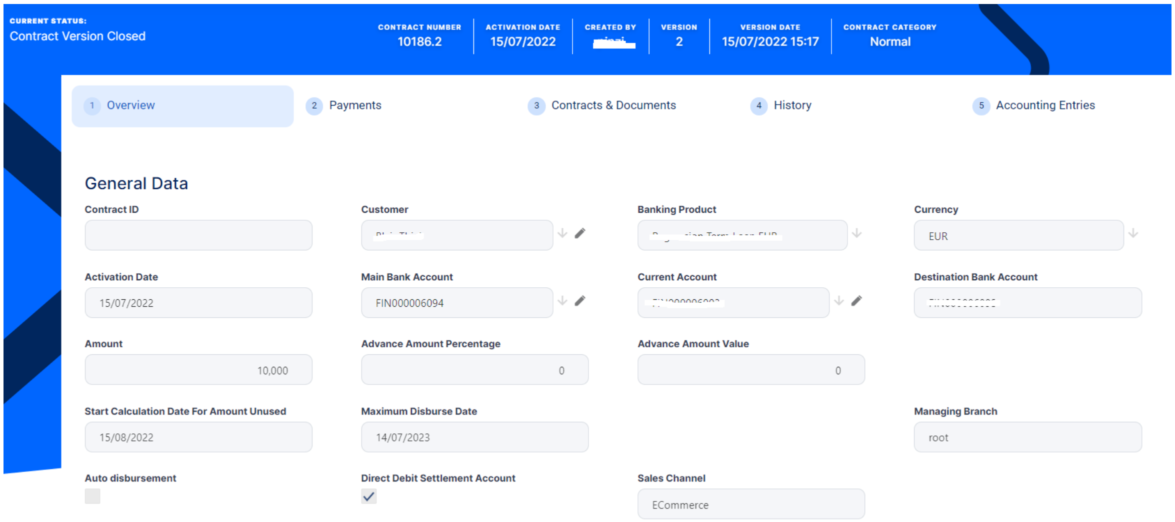
Viewing a Contract's History

You can view the versions of the contract, along with workflow status and the user who modified the record, in the contract's **History** tab.



Name	Label	Attribute Version Date	Attribute Version	Modified by user
10186	Approved	19/08/2022 11:39	3	c.m
10186.2	Contract Version Closed	15/07/2022 15:17	2	c.m
10186.3	Contract Version Closed	15/07/2022 03:00	1	c.m

A contract can have only one **Draft** version, one **Current** version, but it may have multiple **History** versions, which are displayed in this section. Here you can track the contract's life cycle and view older versions that are no longer active. Double-click a version in the list to view its details.



CURRENT STATUS:
Contract Version Closed

CONTRACT NUMBER	ACTIVATION DATE	CREATED BY	VERSION	VERSION DATE	CONTRACT CATEGORY
10186.2	15/07/2022	[redacted]	2	15/07/2022 15:17	Normal

1 Overview | 2 Payments | 3 Contracts & Documents | 4 History | 5 Accounting Entries

General Data

Contract ID	Customer	Banking Product	Currency
	[redacted]	[redacted]	EUR
Activation Date	Main Bank Account	Current Account	Destination Bank Account
15/07/2022	FIN000006094	[redacted]	[redacted]
Amount	Advance Amount Percentage	Advance Amount Value	
10,000	0	0	
Start Calculation Date For Amount Unused	Maximum Disburse Date		Managing Branch
15/08/2022	14/07/2023		root
Auto disbursement	Direct Debit Settlement Account	Sales Channel	
□	☑	ECommerce	

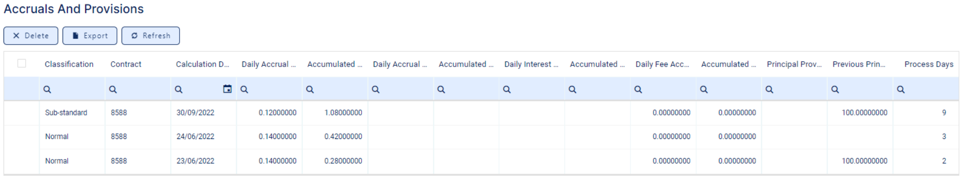
Viewing a Contract's Accounting Entries

You can view all the accounting entries, accounting totals, and accruals and provisions recorded for a contract within the **Accounting Entries** tab of the contract. These records are automatically generated by the system, after performing transactions for an approved contract.

View Accruals and Provisions

To view the records containing daily accrual and provisions, generated automatically by the system respecting the definition of the contract, product dimensions, system parameters and jobs, follow these steps:

1. Navigate to the contract's **Accounting Entries** tab > **Accruals and Provisions** section.



Accruals And Provisions

☐	Classification	Contract	Calculation D...	Daily Accrual ...	Accumulated ...	Daily Accrual ...	Accumulated ...	Daily Interest ...	Accumulated ...	Daily Fee Acc...	Accumulated ...	Principal Prov...	Previous Prin...	Process Days
	Sub-standard	8588	30/09/2022	0.12000000	1.08000000					0.00000000	0.00000000		100.00000000	9
	Normal	8588	24/06/2022	0.14000000	0.42000000					0.00000000	0.00000000			3
	Normal	8588	23/06/2022	0.14000000	0.28000000					0.00000000	0.00000000		100.00000000	2

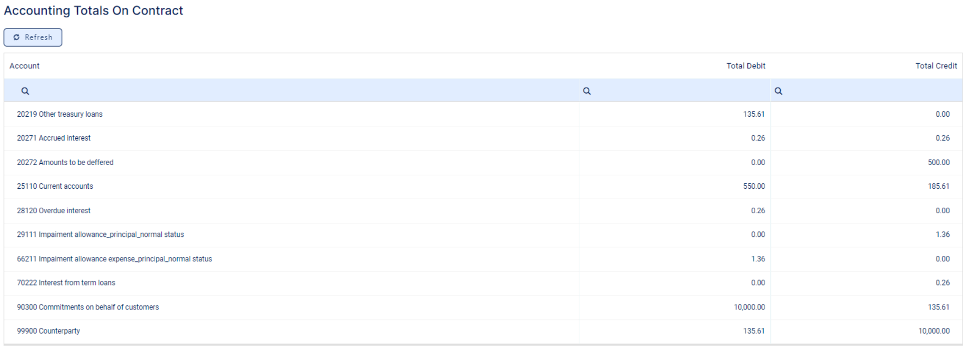
2. View the information displayed for each accrual and provision entry:

    - **Classification** - The classification of the accrual and provision entry. The classification is determined based on the records created in the **Loan Classification** menu. These records classify transactions based on the number of days since a repayment notification is overdue.
    - **Contract** - The number of the current contract.
    - **Calculation Date** - The date when the accrual and provision calculation was performed.
    - **Daily Accrual Interest** - The amount of interest accrued on that day.
    - **Accumulated Interest Accrual** - The total amount of interest accrued until that day.
    - **Daily Interest Provision** - The amount of interest provisioned on that day.
    - **Accumulated Interest Provision** - The total amount of interest provisioned until that day.
    - **Daily Fee Accrual** - The amount of fees and commissions accrued on that day.
    - **Accumulated Fee Accrual** - The total amount of fees and commissions accrued until that day.
    - **Principal Provision** - The amount of principal provisioned.
    - **Previous Principal Provision** - The previous amount of principal provisioned.
    - **Process Days** - The number of days processed.

View Accounting Totals on Contract

To view an overview of the total amounts specified in accounting records generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job, follow these steps:

1. Navigate to the contract's **Accounting Entries** tab > **Accounting Totals on Contract** section.



Accounting Totals On Contract

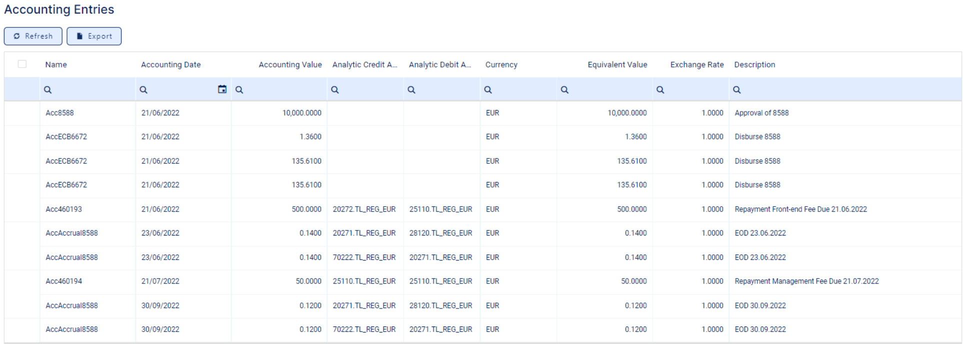
Account	Total Debit	Total Credit
20219 Other treasury loans	135.61	0.00
20271 Accrued interest	0.26	0.26
20272 Amounts to be deffered	0.00	500.00
25110 Current accounts	550.00	185.61
28120 Overdue interest	0.26	0.00
29111 Impaiment allowance_principal_normal status	0.00	1.36
66211 Impaiment allowance expense_principal_normal status	1.36	0.00
70222 Interest from term loans	0.00	0.26
90300 Commitments on behalf of customers	10,000.00	135.61
99900 Counterparty	135.61	10,000.00

2. View the information displayed for each total amount:
   - **Account** - The account where the operation was performed.
   - **Total Debit** - The amount which was debited from the account.
   - **Total Credit** - The amount which was credited to the account.

View Accounting Entries

To view the accounting for the transactions related to the loan contract generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job, follow these steps:

1. Navigate to the contract's **Accounting Entries** tab > **Accounting Entries** section.



Accounting Entries

Name	Accounting Date	Accounting Value	Analytic Credit A...	Analytic Debit A...	Currency	Equivalent Value	Exchange Rate	Description
Acc8588	21/06/2022	10,000.0000			EUR	10,000.0000	1.0000	Approval of 8588
AccECB6672	21/06/2022	1.3600			EUR	1.3600	1.0000	Disburse 8588
AccECB6672	21/06/2022	135.6100			EUR	135.6100	1.0000	Disburse 8588
AccECB6672	21/06/2022	135.6100			EUR	135.6100	1.0000	Disburse 8588
Acc460193	21/06/2022	500.0000	20272.TL_REG_EUR	25110.TL_REG_EUR	EUR	500.0000	1.0000	Repayment Front-end Fee Due 21.06.2022
AccAccrual8588	23/06/2022	0.1400	20271.TL_REG_EUR	28120.TL_REG_EUR	EUR	0.1400	1.0000	EOD 23.06.2022
AccAccrual8588	23/06/2022	0.1400	70222.TL_REG_EUR	20271.TL_REG_EUR	EUR	0.1400	1.0000	EOD 23.06.2022
Acc460194	21/07/2022	50.0000	25110.TL_REG_EUR	25110.TL_REG_EUR	EUR	50.0000	1.0000	Repayment Management Fee Due 21.07.2022
AccAccrual8588	30/09/2022	0.1200	20271.TL_REG_EUR	28120.TL_REG_EUR	EUR	0.1200	1.0000	EOD 30.09.2022
AccAccrual8588	30/09/2022	0.1200	70222.TL_REG_EUR	20271.TL_REG_EUR	EUR	0.1200	1.0000	EOD 30.09.2022

2. View the information displayed for each accounting entry:
   - **Name** - The id of the accounting entry.
   - **Accounting Date** - The date when the entry was generated.
   - **Accounting Value** - The value of the accounting entry.
   - **Analytic Credit Account Code** - The code of the analytic credit account.
   - **Analytic Debit Account Code** - The code of the analytic debit account.
   - **Currency** - The currency of the accounting entry.
   - **Equivalent Value** - The equivalent value of the accounting entry expressed in the contract's currency.
   - **Exchange Rate** - The exchange rate between the accounting entry currency and the contract currency.
   - **Description** - The description of the accounting operation.

Credit Facilities

A credit facility is a grouping of multiple credit products that a customer has arranged with a financial institution under a single credit limit. Financial institutions can offer companies a credit limit for the company as a whole, and the company can then take on different loan products without the need for separate risk assessments. This simplifies access to funds for companies and greatly reduces time-to-cash. Credit facilities also create operational efficiencies for the financial institution, because individual loans no longer need separate risk assessments.

FintechOS Core Banking allows financial institutions to create credit facility agreements for their customers based on approvals.

IMPORTANT!
Credit facility management is available via the **Core Banking Corporate 4.0** package, which has to be installed on top of the **Core Banking 4.0** package.

Credit Facility Implementation Notes

- The credit facility approval is made according to the specifications of the financial institution set during the implementation process.

Business Logic

Let's say a financial institution approves a credit facility for a group or a customer up to EUR 100.000, to be used by the credit facility participants among various currencies:

- guarantees allowed in EUR and USD;
- term loans allowed in EUR and GBP;
- overdrafts allowed in EUR.

First, an agreement is made between a financial institution and a customer (total exposure limit). This limit is used while creating the credit facility, making sure that the credit facility limit amount does not exceed the total exposure limit of the customer. The approval can be revolving or non-revolving, thus both limit and facility have the same nature.

The credit facility holds details about:

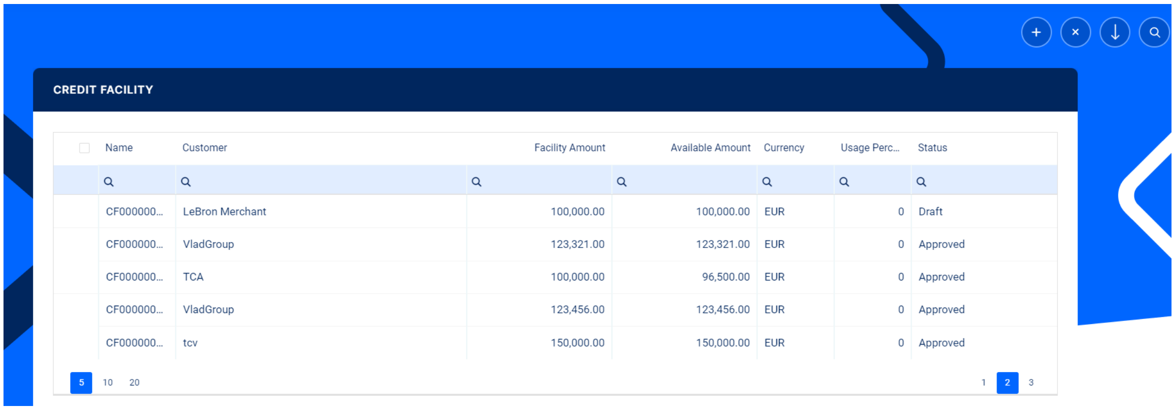
- Allowed banking products, with their preset currency;
- Allowed customers, if the facility is granted for a specific group of customers;
- Covenants, if needed;
- Prices:
  - Unused amount fee, as a percentage to be applied to daily unused amount. The fee is collected from current/ servicing account with a given frequency/ periodicity;
  - Interest and commission related elements, for negotiable product costs.

Loan contracts are entered whenever the customer asks for disbursements, according to the credit facility setup.

Managing Credit Facilities

To manage credit facilities:

1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click **Credit Facility** menu item to open the **Credit Facility** page.



CREDIT FACILITY

□	Name	Customer	Facility Amount	Available Amount	Currency	Usage Perc...	Status
	CF000000...	LeBron Merchant	100,000.00	100,000.00	EUR	0	Draft
	CF000000...	VladGroup	123,321.00	123,321.00	EUR	0	Approved
	CF000000...	TCA	100,000.00	96,500.00	EUR	0	Approved
	CF000000...	VladGroup	123,456.00	123,456.00	EUR	0	Approved
	CF000000...	tcv	150,000.00	150,000.00	EUR	0	Approved

On the **Credit Facility** page, you can create a new credit facility, search, edit, or delete existing ones in Draft status.

Credit Facility Life Cycle and States

Credit facilities are complex agreements between a bank and its customers. Therefore the four-eyes principle is applicable here, meaning that a record should be approved by a second bank employee, with higher authorization rights.

A credit facility record has the following business workflow statuses:

- **Draft** - the status of a newly created credit facility record that was not yet sent for approval. While in this status, you can edit the fields from the record's **Credit Facility** tab, but you can't add utilizations to it. Send the record to approval after editing all the necessary details.
- **Pending** - a system status applied to credit facilities sent for approval, but not yet approved. You can't perform any updates in this system status.
- **Approved** - the status of a credit facility record after being authorized by a user with credit facility approval competencies. While in this status, you can't edit the record's details, but you can add utilizations to it within the **Credit Facility Utilizations** tab. If you need to alter the credit facility's details, create a new version based on the current credit facility.

> **NOTE**
>
> Each facility utilization must also be approved by a user with credit facility

utilization approval competencies, otherwise, the disbursement of the utilization is performed by Core Banking.

- **Unapproved** - the last status of a credit facility, after manually canceling it directly from Draft status. You can't perform any updates on the record.
- **Closed** - the last status of a credit facility, after manually closing it or after creating a new version based on the current version. You can't perform any updates on the record.

IMPORTANT!
In order to use the credit facility, it must be in the **Approved** status.

Credit Facility Versioning

Core Banking allows you to create new versions for an existing credit facility if you need to modify an existing approved one.

A credit facility version can have the following statuses:

- **Version Draft** - the status of a newly created credit facility version record that was not yet sent for approval. While in this status, you can edit some fields, but you can't add utilizations to it. Send the record to approval after editing all the necessary details.
- **Approved** - the status of a credit facility version record after being authorized by a user with credit facility approval competencies. While in this status, you cannot edit the record's details, but you can add utilizations to it.
- **Version Closed** - the last status of a credit facility version, after manually closing it or after creating another new version based on the current version. You can't perform any updates on the record.

Credit Facility Life Cycle

First, an agreement is made between a financial institution and a customer - usually, a legal entity, for the customer to have easy access to funds whenever in whichever banking product they need it. The amount cannot exceed the customer's approved **Total Exposure** type limit.

This agreement is recorded in the financial institution's system by a clerk, in the form of a credit facility. All details of the agreement are captured while creating the credit facility record: who are the participants with access to funding, what's the usable amount in the chosen currency, what products can be used within this agreement, when is the agreement applicable, under which conditions, whether the facility's amount increases or decreases over time, and so on. The clerk fills in all the mandatory details, saves the record still in **Draft** status, and then sends it for approval.

Another employee of the financial institution, with higher authorization rights and with credit facility competencies, consults the record and approves or rejects the credit facility, depending on the details entered before by the creator of the record. If rejected, the credit facility's status becomes **Closed**.

If approved, the credit facility, now in **Approved** status, can be used by the customer to access funds. Its details cannot be altered anymore, but the clerk can add utilizations to it up until the credit facility's maturity date, in the form of contracts for banking products listed in the credit facility.

These utilizations, being in fact banking contracts, after creation are still in **Draft** status, and thus have to be further approved by a second employee of the bank, with corresponding contract approval rights. After being approved, a utilization disburses its amount in the customer's account. This amount is taken from the credit facility, thus the available amount is lowered with the sum of the approved utilization.

NOTE

The total amount of approved utilizations, in any of the banking products' currencies, cannot exceed the amount approved in the credit facility, calculated in the facility's currency based on the exchange rate valid on each day.

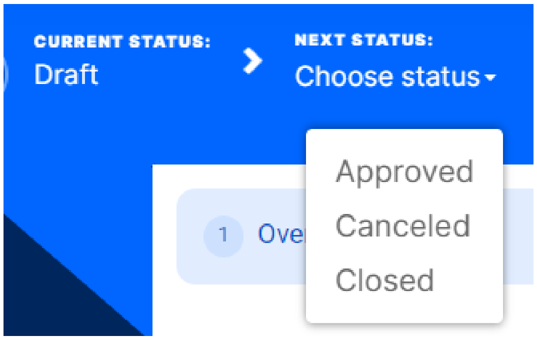
Fee values and accruals are calculated for the approved utilizations and displayed in the **Credit Facility Utilizations** tab, along with any repayment notifications.

You can manually close credit facilities if needed. Records in **Closed** status cannot be altered in any way.

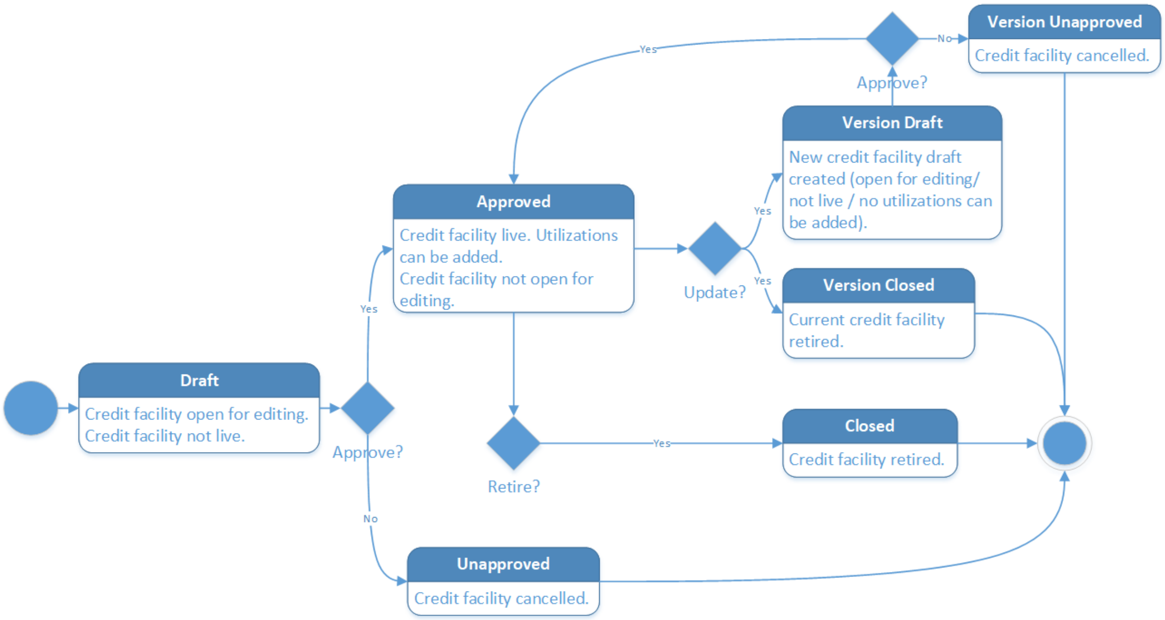
If you have to update the details of an approved credit facility, then you must create a new version of the record. The new version of the record is created in Draft status, thus restarting the life cycle.

Changing Credit Facility Statuses

You can manage a credit facility's life cycle by changing its status from the top right corner of the screen.



The credit facility status transitions are illustrated below:


Draft
Credit facility open for editing.
Credit facility not live.
Approve?
Yes
No
Approved
Credit facility live. Utilizations can be added.
Credit facility not open for editing.
Unapproved
Credit facility cancelled.
Update?
Yes
Yes
Version Draft
New credit facility draft created (open for editing/ not live / no utilizations can be added).
Approve?
Yes
No
Version Unapproved
Credit facility cancelled.
Version Closed
Current credit facility retired.
Retire?
Yes
Closed
Credit facility retired.

Note that:

- Once a record is live, its settings can no longer be modified.
- If you want to update the details of a live credit facility, you must create a new credit facility version.
- When you create a new credit facility version, the current version is retired; no updates are allowed on the retired version.
- Every credit facility version starts in a draft state and must go through an approval process before going live.
- Only one version of a credit facility can be live at one time.

> **NOTE**
> As a best practice, new records or new versions of existing records created on a specific day should be approved on the same day.

Creating Credit Facilities

A credit facility is a grouping of multiple credit products that a customer has arranged with a financial institution under a single credit limit.

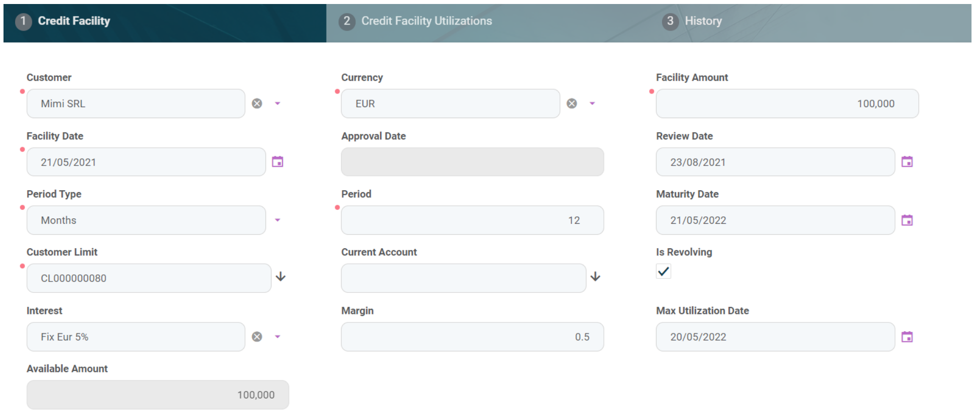
Before creating a credit facility, make sure that:

- the customer is recorded in Core Banking,
- a settlement account (a current account contract for the same customer) is set up for the desired currency,
- and the limits are configured according to Core Banking's setup.

To create a new credit facility:

1. Add Details

1. Open the **Credit Facility** page as described in the Managing Credit Facilities section.
2. Click the **Insert** button to display the **Add Credit Facility** page.
   The **Credit Facility** tab requires the basic elements for the creation of a credit facility such as customer, facility amount and currency, period, attached customer limit. Other important details such as participants, products, plans, fees, and contract covenants are captured in specialized sections of the same tab.
3. Fill in the following fields, also available for completion when updating a record in **Draft** status:



Customer: Mimi SRL	Currency: EUR	Facility Amount: 100,000
Facility Date: 21/05/2021	Approval Date:	Review Date: 23/08/2021
Period Type: Months	Period: 12	Maturity Date: 21/05/2022
Customer Limit: CL000000080	Current Account:	Is Revolving: ✓
Interest: Fix Eur 5%	Margin: 0.5	Max Utilization Date: 20/05/2022
Available Amount: 100,000		

- **Customer** - Select from the list the name of the customer with whom the financial institution agreed upon the credit facility. Changing the selected customer at a later point of the record creation process leads to emptying the `Current Account` and `Customer Limit` fields, if these were already selected.
- **Currency** - Select from the list the currency of the credit facility. If the banking products attached to the credit facility are defined in different currencies, then their values are converted in this currency when calculating the facility's available amount. Changing the selected currency at a later point of the record creation process leads to emptying the `Current Account` field, if this was already selected.
- **Facility Amount** - Enter the amount agreed upon to grant within the credit facility, expressed in the currency selected above.

The facility amount cannot exceed the selected customer limit's value.

- **Facility Date** - Select the date when the facility becomes active. The maturity date is automatically calculated following the formula: `Facility Date` + (`Period` * `Period Type`).
- **Period Type** - Select from the list the period type for the facility's validity.
- **Period** - Enter the number of periods during which the facility is valid.
- **Customer Limit** - Select a customer limit from the list of limits approved for the chosen customer. The list is already filtered to display only the selected customer's already approved **Total Exposure** type limits that have `Is Revolving = True` at the limit level.

> **NOTE**
>
> The previously entered facility amount cannot exceed the selected customer limit's value.

- **Current Account** - Select the customer's bank account where the credit facility amount can be disbursed. The list is already filtered to display only the selected customer's bank accounts in the currency selected before for the credit facility.

4. Optionally, view or fill in the following fields:
    - **Approval Date** - This is the date when the credit facility record is approved by a user with credit facility approval competencies. This date is automatically displayed when the record's status changes to **Approved**.
    - **Review Date** - Enter the date when the credit facility's amount should be reviewed for possible adjustments.

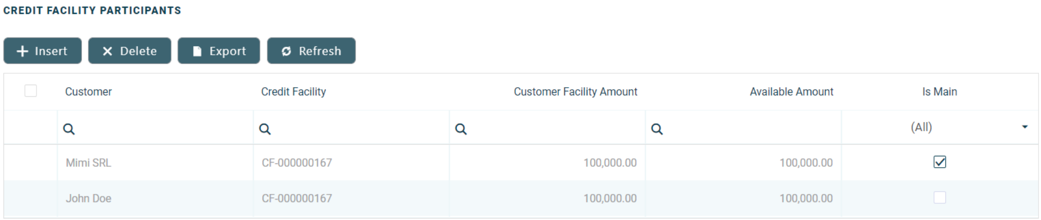
- **Maturity Date** - This is the automatically calculated maturity date of the credit facility. You can modify this date from the attached calendar, if needed.
- **Is Revolving** - Select this checkbox to mark the credit facility as revolving. This means that the customer can borrow money repeatedly up to the entered facility amount while repaying a portion of the current balance due in regular installments. Each payment, minus the interest and fees charged, replenishes the available amount.
- **Interest** - Select from the list the interest applicable for the credit facility amount. The list is already filtered to display only the interests defined in the selected currency.
- **Margin** - Enter a margin for the credit facility amount.
- **Max Utilization Date** - Select from the calendar the maximum date when the credit facility's available amount can be disbursed through utilizations.
- **Available Amount** - This is the amount still available in the credit facility after disbursing the amounts specified in the approved utilizations, expressed in the facility's currency.
  At creation time, `Available Amount` = `Facility Amount`.

5. Click the **Save and Reload** button.

NOTE
When creating a credit facility, fill in all the mandatory fields. After saving the credit facility, all the other sections of the **Credit Facility** page become visible and can be completed.

2. Insert Participants

You can insert, delete, or export customers who can participate in this credit facility within the **Credit Facility Participants** section. After the first save operation, Core Banking adds the customer as the main facility participant. If the customer is a group, then all the group members are also added.



☐	Customer	Credit Facility	Customer Facility Amount	Available Amount	Is Main
					(All)
	Mimi SRL	CF-000000167	100,000.00	100,000.00	☑
	John Doe	CF-000000167	100,000.00	100,000.00	☐

To add a participant, follow these steps:

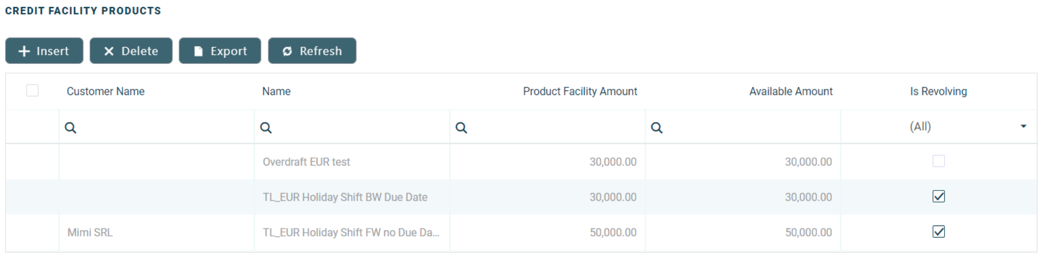
1. Click the **Insert** button to display the **Credit Facility Participant** page.
2. Fill in, modify or view the following fields:
   - **Customer** - Select from the list the name of the customer who can participate to the selected credit facility.
   - **Customer Facility Amount** - This is automatically filled with the facility amount. You can modify the amount that this specific participant can use within the credit facility. The entered amount cannot exceed the available amount of the facility.
   - **Available Amount** - This read-only field displays the available amount of the facility.
3. Click the **Save and Close** button.

NOTE

For information purposes, the **Credit Facility Participant** page also displays the **Facility Utilizations** section, containing a list with all the credit facility utilizations corresponding to the selected customer. You cannot perform any action on the records within this list.

3. Associate Banking Products

You can insert, delete or export banking products which can be utilized through this credit facility in the **Credit Facility Products** section.



CREDIT FACILITY PRODUCTS

□	Customer Name	Name	Product Facility Amount	Available Amount	Is Revolving
					(All)
		Overdraft EUR test	30,000.00	30,000.00	□
		TL_EUR Holiday Shift BW Due Date	30,000.00	30,000.00	☑
	Mimi SRL	TL_EUR Holiday Shift FW no Due Da...	50,000.00	50,000.00	☑

To add a banking product, follow these steps:

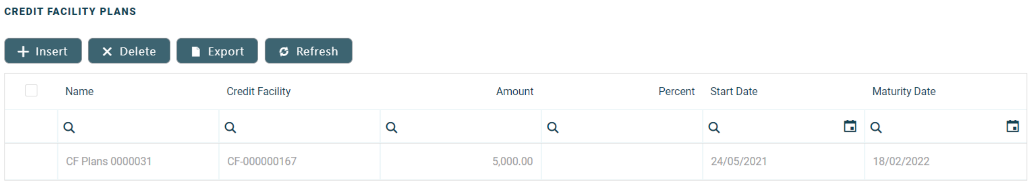
1. Click the **Insert** button to display the **Credit Facility Products** page.
2. Fill in, modify or view the following fields:
    - **Product Facility Amount** - This is automatically filled with the facility amount. You can modify the amount that can be disbursed through the use of this product within the credit facility's utilizations. The entered amount cannot exceed the facility amount.
    - **Available Amount** - This read-only field displays the available amount of the facility.
    - **Allowed Customer** - Select from the list the customers who is allowed to use this banking product through credit facility utilizations, if the use of this banking product has to be restricted to certain customers. The list is already filtered to display only the customers defined as participants in this credit facility record.
    - **Banking Product** - Select from the list the banking product that can be used through credit facility utilizations.
    - Is revolving - Select this checkbox to mark the banking product used through the credit facility utilizations as revolving. This means that the customer can borrow money repeatedly up to the entered product facility amount while repaying a portion of the current balance due in regular installments. Each payment, minus the interest and fees charged, replenishes the available amount.
3. Click the **Save and Close** button.

NOTE

For information purposes, the **Credit Facility Products** page also displays the **Facility Utilizations** section, containing a list with all the credit facility utilizations already created for the selected banking product. You cannot perform any action on the records within this list.

4. Create Plans

You can insert, delete or export plans for the increase or decrease of the facility amount during the credit facility's duration in the **Credit Facility Plans** section.



□	Name	Credit Facility	Amount	Percent	Start Date	Maturity Date
	CF Plans 0000031	CF-000000167	5,000.00		24/05/2021	18/02/2022

To add a plan, follow these steps:

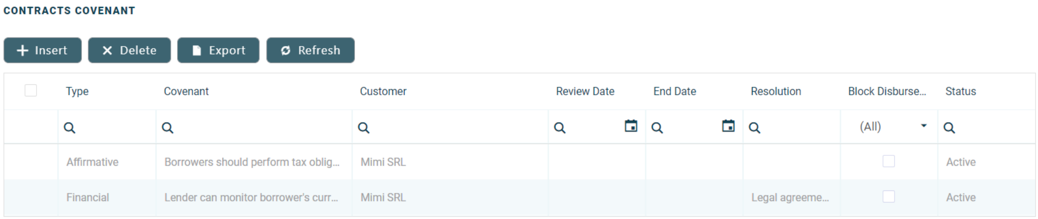
1. Click the **Insert** button to display the **Credit Facility Plans** page.
2. Fill in, modify or view the following fields:
   - **Amount** - Enter the amount which affects the credit facility plan. Use negative values if you wish to decrease the facility amount. Positive values increase the facility amount. This field is mandatory only if `Percent` is not filled in, otherwise, it can't be completed.
   - **Periodicity Type** - Select from the list the periodicity type applicable for the facility plan. The possible values are `Semestrial, Weekly, Monthly, Annual, Bimonthly, Trimestrial, Once, 4 Weeks`.
   - **No Times** - Enter the number of times the plan should increase or decrease of the facility amount, until the credit facility's maturity date.

- **Percent** - Enter the percent of facility amount which affects the credit facility plan. Use negative percent values if you wish to decrease the facility amount. Positive percent values increase the facility amount. Mandatory only if `Amount` is not filled in, otherwise, it can't be completed.
- **Start Date** - Select from the calendar the first date when the plan should be executed. Depending on the periodicity type and number of times already completed for plan execution, the maturity date of the plan is calculated. The plan's maturity date cannot exceed the credit facility's maturity date.
- **Maturity Date** - This read-only field displays the plan's maturity date based on the start date, periodicity type and number of times already completed for plan execution.

3. Click the **Save and Close** button.

5. Enter Contract Covenants

You can insert, delete or export covenants, certain conventions that customers must abide by after getting the facility in the **Contract Covenants** section.



□	Type	Covenant	Customer	Review Date	End Date	Resolution	Block Disburse...	Status
							(All)	
	Affirmative	Borrowers should perform tax oblig...	Mimi SRL				□	Active
	Financial	Lender can monitor borrower's curr...	Mimi SRL			Legal agreeme...	□	Active

To add a covenant, follow these steps:

1. Click the **Insert** button to display the **Contracts Covenant** page.
2. Fill in, modify or view the following fields:

- **Covenant** - Select from 3 possible covenants:
    - *Borrowers should perform tax obligations* - the lenders expect the borrowers to perform their tax obligations to both the business and towards their employees. This covenant is of affirmative type.
    - *Lender can monitor borrower's current ratio* - the lender may continuously monitor the borrower's current ratio to ensure it stays relatively attractive and promising. This covenant is of financial type.
    - *Lender posses the right to prevent merges or acquisitions* - a clear stipulation that the lender possesses the right to prevent merges of acquisitions without proper notification or full knowledge of the process. This covenant is of negative type.
- **Value** - Enter the value for the covenant.
- **Covenant Type** - This field displays the type of the selected covenant. You can edit it, selecting one the possible values: `Financial, Affirmative`, or `Negative`.
- **Review Frequency (Months)** - Enter the number of months applicable for the covenant review frequency.
- **Review Date** - Enter the date when the covenant should be reviewed.
- **Customer** - Select the customer who must abide by the covenant's terms. The list is already filtered to display only the customers defined as participants in this credit facility record.

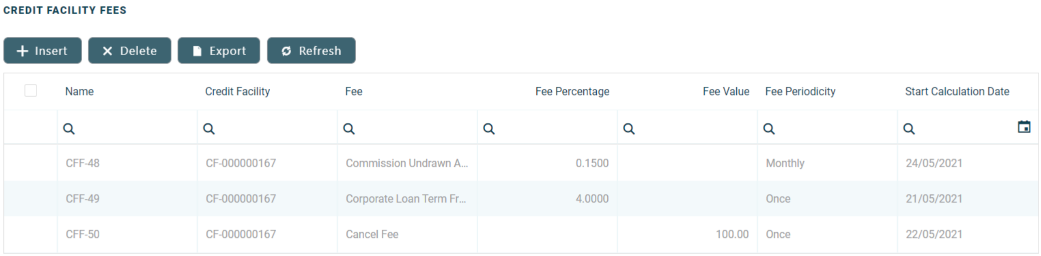
3. Click the **Save and Reload** button.
   Core Banking displays a series of fields after the save operation.
4. Fill in the following fields:

- **Grace Period (Months)** - Enter the number of months acting as grace period for this covenant's resolution, if applicable.
- **Resolution** - Select from the list the resolution of this covenant, if applicable.
- **Resolve Date** - Enter the date when the covenant is achieved, if applicable.
- **End Date** - Enter the last day when this covenant is applicable.
- **Start Early Termination** - If you select this checkbox, then the credit facility agreement is terminated before its maturity date.
- **Block Disbursement** - If you select this checkbox, then Core Banking blocks any further disbursements if the covenant is not achieved after end date.

5. Activate the covenant by changing its status to **Active**.
6. Click the **Save and Close** button.

6. Add Fees

You can insert, delete or export fees or commissions that are added to this credit facility in the **Credit Facility Fees** section.



□	Name	Credit Facility	Fee	Fee Percentage	Fee Value	Fee Periodicity	Start Calculation Date
	CFF-48	CF-000000167	Commission Undrawn A...	0.1500		Monthly	24/05/2021
	CFF-49	CF-000000167	Corporate Loan Term Fr...	4.0000		Once	21/05/2021
	CFF-50	CF-000000167	Cancel Fee		100.00	Once	22/05/2021

To add a fee, follow these steps:

1. Click the **Insert** button to display the **Credit Facility Fees** page.
2. Fill in, modify or view the following fields:

- **Credit Facility** - This read-only field displays the id of the selected credit facility record.
- **Start Calculation Date** - Enter the start date for fee calculation.
- **Fee** - Select a fee to apply to the credit facility from the list of defined fees & commissions.
- **Fee Value, Fee Percentage**, and **Fee Periodicity** - These read-only fields display the value, the percentage, and the periodicity of the selected fee, as defined in Core Banking.
- **Use specific day for aggregation** - Enter a day of the month when the fee accrual should be aggregated.
- **Use End Of Month for Aggregation** - Select the checkbox to mark the last day of the month as aggregation day for the fee accrual. Mandatory only if the `Use specific day for aggregation` field is not completed.

3. Click the **Save and Reload** button.
   A new list, **Credit Facility Fee Values**, is displayed for viewing after the save operation, containing the calculated fee values for the saved fee. The list displays the fee name, date, value and currency.

After filling in all the mandatory details in the **Credit Facility** tab, the record is still in **Draft** status. Change its status to **Send to Approved** to send it for approval.

NOTE
You can add utilizations only for credit facility records with **Approved** status.

Sending Credit Facilities for Approval

After creating a new credit facility and filling in all the mandatory details within the **Credit Facility** tab, the record is still in **Draft** status. In this status, the customer cannot access any funding through utilizations (the term for contracts opened for banking products attached to the facility).

You must first send the record for approval to an employee of the financial institution with corresponding competencies, following the 4-eyes principle.

As a clerk, you should change the credit facility's status to **Send to Approved**. Core Banking automatically sends the record for approval to users with credit facility approval competencies.

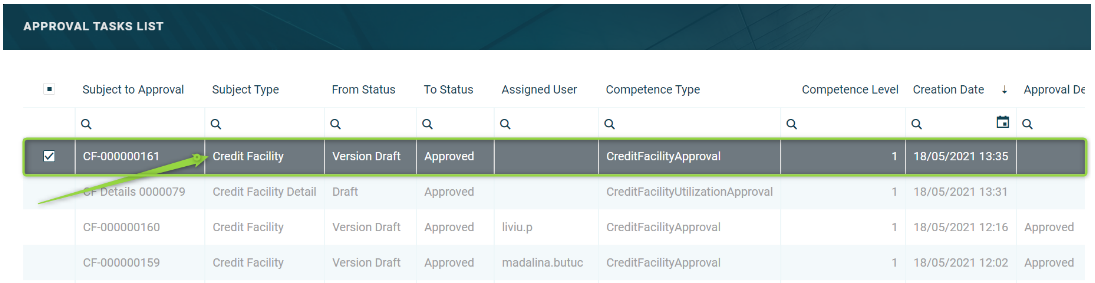
For more details on how to perform a change of status, read the Changing Credit Facility Statuses section.

Approving Credit Facilities

Credit facility records in **Draft** status must be approved in order to add utilizations to it. The record's status can be changed to **Approved** by users with credit facility approval competencies.

To approve a credit facility:

1. Log into FintechOS Portal with a user with credit facility approval competencies.
2. Access **Main** menu > **Approval Tasks** > **My Approval Tasks** to view your list of approval tasks.
3. Find the desired Credit Facility record in the **Approval Tasks List** page and double-click it to open.



APPROVAL TASKS LIST

■	Subject to Approval	Subject Type	From Status	To Status	Assigned User	Competence Type	Competence Level	Creation Date ↓	Approval De
☑	CF-000000161	Credit Facility	Version Draft	Approved		CreditFacilityApproval	1	18/05/2021 13:35	
	CF Details 0000079	Credit Facility Detail	Draft	Approved		CreditFacilityUtilizationApproval	1	18/05/2021 13:31	
	CF-000000160	Credit Facility	Version Draft	Approved	liviu.p	CreditFacilityApproval	1	18/05/2021 12:16	Approved
	CF-000000159	Credit Facility	Version Draft	Approved	madalina.butuc	CreditFacilityApproval	1	18/05/2021 12:02	Approved

4. Click the **Approve** button.

Follow the steps described on the Approve Workflow Transitions page for more detailed instructions.

After approving a credit facility, you can't edit the record's details, but you can add utilizations to it within the **Credit Facility Utilizations tab**. If you need to alter the credit facility's details, create a new version based on the current credit facility.

For more details, read about user competencies and workflow transition approvals.

Adding Utilizations to Credit Facilities

A credit facility utilization is a contract opened for banking products attached to the facility. You can add utilizations to a credit facility record when the record has the **Approved** status.

Follow these steps to add utilizations to a credit facility record:

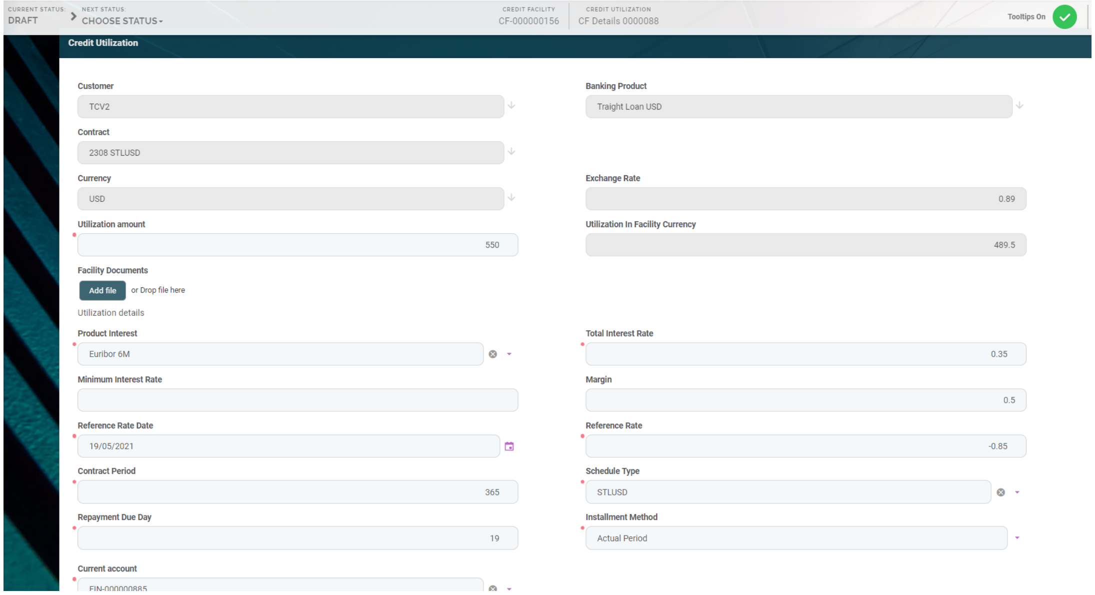
1. On the **Credit Facility** page, double-click the desired credit facility with **Approved** status to edit it.
2. Select the **Credit Facility Utilizations** tab.
3. Click the **Insert** button in the **Facility Utilizations** section to open the **Insert credit Utilization** page.
4. Fill in the following fields:
   - **Customer** - Select the customer who becomes the owner of this utilization. The list is already filtered to display only the customers entered as participants in the credit facility.
   - **Banking Product** - Choose the banking product which is the object of this credit facility utilization. The list is already filtered to display only the banking products attached to the credit facility.
   - **Contract** - You can select an existing contract of the same customer containing the selected banking product where you can attach this credit facility utilization. The list is already filtered to display only the selected customer's contracts that contain that same banking product.
     If no contract is selected, Core Banking automatically creates a new contract for this credit facility utilization.

> **NOTE**
>
> The contract's start date cannot precede the utilization's start date.

- **Currency**, **Exchange Rate** - These read-only fields display the selected banking product's defined currency, respectively exchange rate for that currency.
- **Utilization amount** - Enter the amount to be disbursed through this utilization, expressed in the selected banking product's currency.
- **Utilization In Facility Currency** - This read-only field displays the utilization amount expressed in the credit facility's currency, calculated using the exchange rate displayed above.
- **Facility Documents** - Add any credit facility utilization documents needed in this field, either by dragging and dropping the file, or by clicking the **Add file** button and selecting the desired file.

5. Click the **Save and Reload** button.
After saving the credit facility, other fields of the **Insert credit Utilization** page become visible and can be completed.

6. Fill in the following fields in the **Utilization details** section:



CURRENT STATUS: DRAFT	NEXT STATUS: CHOOSE STATUS	CREDIT FACILITY CF-000000156	CREDIT UTILIZATION CF Details 0000088

Credit Utilization

Customer	TCV2	Banking Product	Traight Loan USD
Contract	2308 STLUSD		
Currency	USD	Exchange Rate	0.89
Utilization amount	550	Utilization In Facility Currency	489.5
Facility Documents			

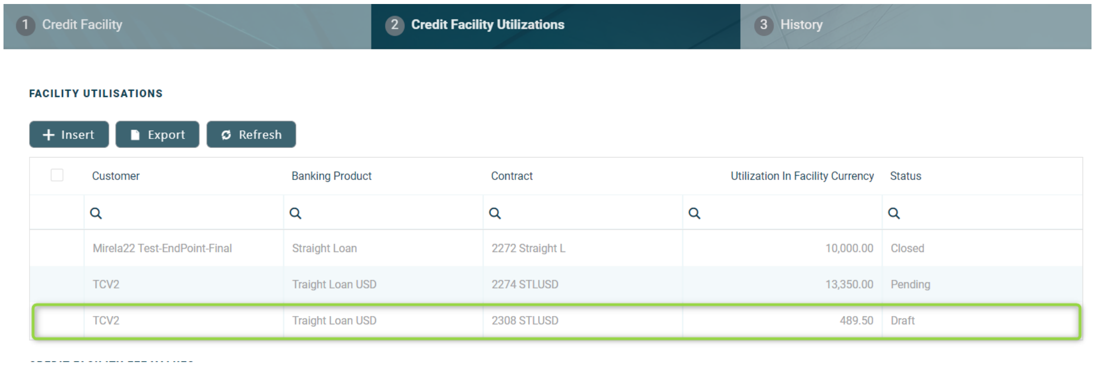
Utilization details

Product Interest	Euribor 6M	Total Interest Rate	0.35
Minimum Interest Rate		Margin	0.5
Reference Rate Date	19/05/2021	Reference Rate	-0.85
Contract Period	365	Schedule Type	STLUSD
Repayment Due Day	19	Installment Method	Actual Period
Current account	FIN-000000885		

- **Product Interest** - Select the product interest applicable for this utilization. The list is already filtered to display only the interests defined for the selected banking product.
- **Total Interest Rate** - This field displays the total interest rate of the utilization, as it was calculated for the selected banking product. You can edit the value.
- **Minimum Interest Rate** - Enter a minimum interest rate applicable for this utilization, if needed.
- **Margin** - Enter a margin applicable for this utilization, if needed.
- **Reference Rate Date** - Select from the calendar the date for the exchange reference rate to be used for utilization amount calculation, when the selected banking product was defined with a currency different from the credit facility's currency.
- **Reference Rate** - This field displays the value of the selected exchange reference rate. You can edit the value.
- **Contract Period** - This field displays the contract period in days, as it was defined for the selected banking product. You can edit the value.
- **Schedule Type** - Select the schedule type applicable for this utilization. The list is already filtered to display only the schedule types defined for the selected banking product.
- **Repayment Due Day** - This field displays the day in the month when the repayment is due, as it was defined for the selected banking product. You can edit the value.
- **Installment Method** - This field displays the installment calculation method, as it was defined for the selected banking product. You can edit the value, selecting one of the possible values:
  - `Actual Period` - The first installment should be paid on this month's repayment due date.
  - `Next Period` - The first installment should be paid on the next month's repayment due date.

- **Current account** - Select the current account for disbursing the amount for this utilization. The list is already filtered to display only the bank accounts opened in the facility’s currency for the selected customer.

7. Click the **Save and Close** button.
   The utilization record is saved in **Draft** status.



□	Customer	Banking Product	Contract	Utilization In Facility Currency	Status
	Mirela22 Test-EndPoint-Final	Straight Loan	2272 Straight L	10,000.00	Closed
	TCV2	Traight Loan USD	2274 STLUSD	13,350.00	Pending
	TCV2	Traight Loan USD	2308 STLUSD	489.50	Draft

8. Double-click the utilization and send it to approval by changing its status to **Send to Approved**.

For more details on how to perform a change of status, read the Changing Credit Facility Statuses section.

IMPORTANT!
Each facility utilization must be approved by a user with credit facility utilization approval competencies, otherwise, Core Banking doesn't perform the disbursement of the utilization.

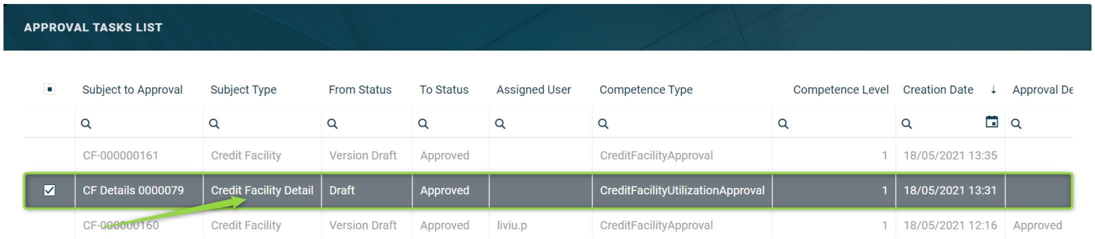
At any given time, the available amount of the credit facility = the facility amount - (the sum of all approved utilizations expressed in the facility's currency).

Approving Utilization Requests

Credit facility utilization records (contracts opened based on the selected credit facility) in **Draft** status must be approved before the utilization's amount can be disbursed in the customer's account. The utilization record's status can be changed to **Approved** by users with credit facility utilization approval competencies.

To approve a credit facility utilization:

1. Log into FintechOS Portal with a user with credit facility utilization approval competencies.
2. Access **Main** menu > **Approval Tasks** > **My Approval Tasks** to view your list of approval tasks.
3. Find the desired Credit Facility Detail record on the **Approval Tasks List** page and double-click it to open.



APPROVAL TASKS LIST

▪	Subject to Approval	Subject Type	From Status	To Status	Assigned User	Competence Type	Competence Level	Creation Date ↓	Approval De
	CF-000000161	Credit Facility	Version Draft	Approved		CreditFacilityApproval	1	18/05/2021 13:35	
☑	CF Details 0000079	Credit Facility Detail	Draft	Approved		CreditFacilityUtilizationApproval	1	18/05/2021 13:31	
	CF-000000160	Credit Facility	Version Draft	Approved	liviu.p	CreditFacilityApproval	1	18/05/2021 12:16	Approved

4. Click the **Approve** button.

Follow the steps described on the Approve Workflow Transitions page for more detailed instructions. For more information, read about user competencies and workflow transition approvals.

After approving a credit facility utilization, you can't edit the utilization's details.

An approved utilization disburses its amount in the customer's account. Core Banking takes this amount from the credit facility, thus the facility's available amount is lowered with the sum of the approved utilization.

> **NOTE**
> The total amount of approved utilizations, in any of the banking products' currencies, can't exceed the amount approved in the credit facility, calculated in the facility's currency based on the exchange rate valid on each day.

Fee values and accruals are automatically calculated by Core Banking for the approved utilizations, and displayed in the **Credit Facility Utilizations** tab, along with any repayment notifications. Read the "Managing Credit Facility Utilization Details" on the next page for more details.

Managing Credit Facility Utilization Details

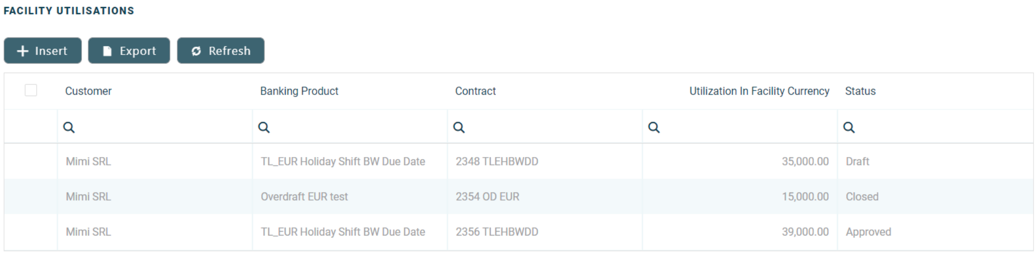
A credit facility utilization is a contract opened for banking products attached to the facility.

You can find the details of the credit facility such as facility utilizations, fee values, accruals and repayment notifications in a credit facility record's **Credit Facility Utilizations** tab. There is no information here to display for records in **Draft** status. You can add utilizations only after the record reaches **Approved** status.

Here are the actions that you can perform on utilizations already added to a credit facility record:

View & Update Utilizations

You can view, insert or export contracts based on the banking products added to this credit facility in the **Facility Utilizations** section within a credit facility record's **Credit Facility Utilizations** tab. These contracts are known as utilizations.



□	Customer	Banking Product	Contract	Utilization In Facility Currency	Status
	Mimi SRL	TL_EUR Holiday Shift BW Due Date	2348 TLEHBWDD	35,000.00	Draft
	Mimi SRL	Overdraft EUR test	2354 OD EUR	15,000.00	Closed
	Mimi SRL	TL_EUR Holiday Shift BW Due Date	2356 TLEHBWDD	39,000.00	Approved

To add a utilization, perform the steps described on the Adding Utilizations to Credit Facilities page.

The already added utilizations are displayed in a list with the following fields:

- **Customer** - The name of the customer who is the owner of this utilization.
- **Banking Product** - The banking product which is the object of this credit facility utilization.

- **Contract** - The number of the contract holding this credit facility utilization, either selected when adding the utilization, or automatically created by Core Banking.
- **Utilization in Facility Currency** - The amount specified in the credit facility utilization, expressed in the credit facility's currency.
- **Status** - The status of the credit facility utilization record. The possible values are:
  - **Draft** - The utilization was created, but it needs further approval.
  - **Approved** - The utilization was approved and its amount was disbursed in the customer's designated current account.
  - **Closed** - The utilization reached its final unalterable status either by being rejected during the utilization approval process, or manually by changing the record's status.

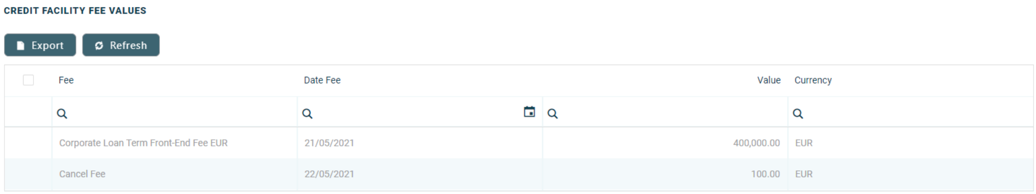
To update a utilization in **Draft** status:

1. Double-click to open the **Credit Utilization** page.
2. Update the editable fields of the utilization according to your needs.
3. Click the **Save and Close** button.

> **IMPORTANT!**
> Approve credit facility utilizations to instruct Core Banking to disburse the amount of the contract in the customer's account.

View Fee Values

You can see or export the fee values already applied to this credit facility in the **Credit Facility Fee Values** section within the **Credit Facility Utilizations** tab.



CREDIT FACILITY FEE VALUES

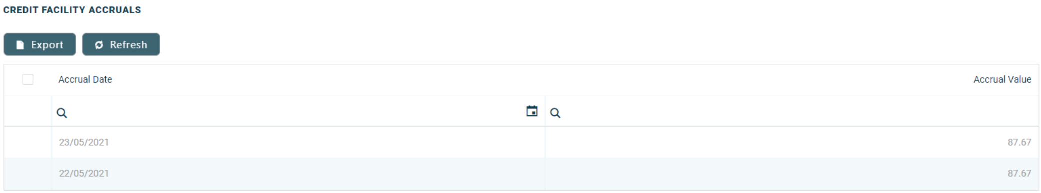
□	Fee	Date Fee	Value	Currency
	Corporate Loan Term Front-End Fee EUR	21/05/2021	400,000.00	EUR
	Cancel Fee	22/05/2021	100.00	EUR

To view the details of a fee:

1. Double-click the fee to display the **Credit Facility Fee Value** page.
2. View the following information regarding the fee:
    - **Credit Facility** - The id of the selected credit facility record.
    - **Fee** - The fee applied to the credit facility.
    - **Date Fee** - The date when the fee was applied to the credit facility.
    - **Customer** - The customer who must pay the fee value.
    - **Currency** - The currency of the fee.
    - **Repayment Notification** - The number of the repayment notification automatically generated by Core Banking.
    - **Loan Item** - The type of the fee.
    - **Value** - The value of the fee, expressed in the fee's currency.
3. Click the **Save and Close** button.

View Accruals

You can see or export the values of the accrual automatically calculated by Core Banking for this credit facility in the **Credit Facility Accruals** section of the **Credit Facility Utilizations** tab.



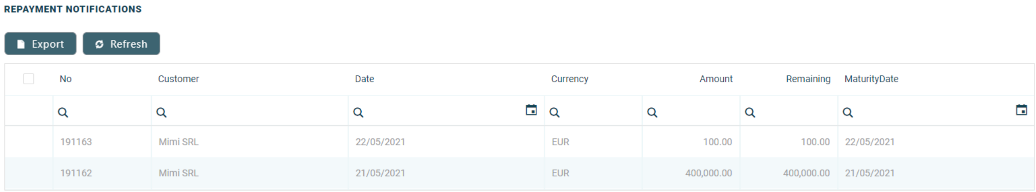
Accrual Date	Accrual Value
23/05/2021	87.67
22/05/2021	87.67

Each accrual lists the following information:

- **Accrual Date** and **Accrual Value** - The date and the value of the accrual calculation, expressed in the credit facility's currency.
- **Fee** - The fee or commission based on which the accrual was calculated. This is only displayed on the **Credit Facility Accrual** page, opened if you double-click an accrual record for viewing purposes.

View & Correct Repayment Notifications

You can see, update or export the repayment notifications automatically issued by Core Banking for this credit facility in the **Repayment Notifications** section of the **Credit Facility Utilizations** tab.

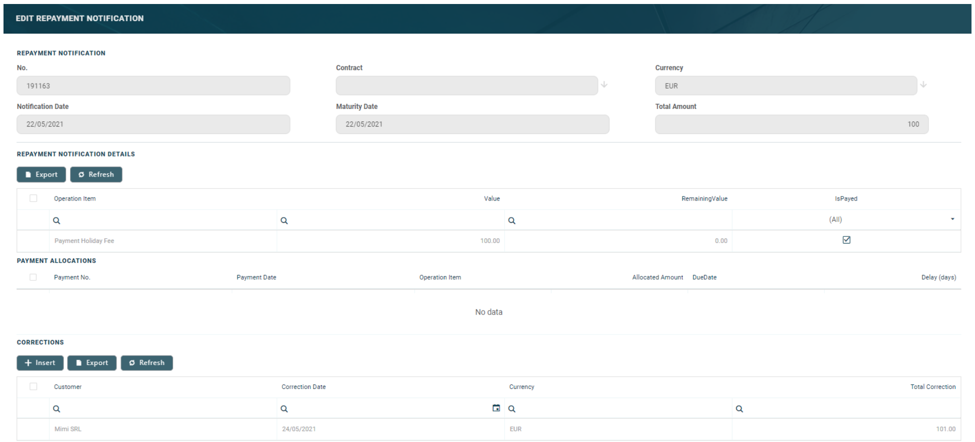


No	Customer	Date	Currency	Amount	Remaining	MaturityDate
191163	Mimi SRL	22/05/2021	EUR	100.00	100.00	22/05/2021
191162	Mimi SRL	21/05/2021	EUR	400,000.00	400,000.00	21/05/2021

Each repayment notification lists the following information: number, issuance date, the customer participant to the credit facility for whom the repayment notification was issued, the amount, the currency, and the due date of the notification, as well as the amount that remains to be paid by the customer for this repayment notification.

To update a repayment notification:

1. Double-click a record to open the **Edit Repayment Notification** page.
2. View the details of the repayment notification.



EDIT REPAYMENT NOTIFICATION

REPAYMENT NOTIFICATION

No.	Contract	Currency
191163		EUR
Notification Date	Maturity Date	Total Amount
22/05/2021	22/05/2021	100

REPAYMENT NOTIFICATION DETAILS

Operation Item	Value	RemainingValue	IsPayed
			(All)
Payment Holiday Fee	100.00	0.00	☑

PAYMENT ALLOCATIONS

Payment No.	Payment Date	Operation Item	Allocated Amount	DueDate	Delay (days)

No data

CORRECTIONS

Customer	Correction Date	Currency	Total Correction
Mimi SRL	24/05/2021	EUR	101.00

3. If needed, insert corrections by clicking the **Insert** button next to the **Corrections** section.
4. On the newly displayed **Add Contract Correction Entry** page, view in the following details: repayment notification number, contract, currency, the name of the customer, the date when the correction entry is saved, and the sum of values entered for in the correction entry details section.
5. In the **Contract Correction Entry Details** section, fill in the following details:
    - **Repayment Notification Detail** - Select the repayment notification detail to be corrected.
    - **Operation Item** - Select the operation item.
    - **Correction Value** - Enter the desired value.
6. The correction entries must be approved in order to be processed. Change the record's status to **Approved**.
7. Click the **Save and Reload** button after performing the desired updates.

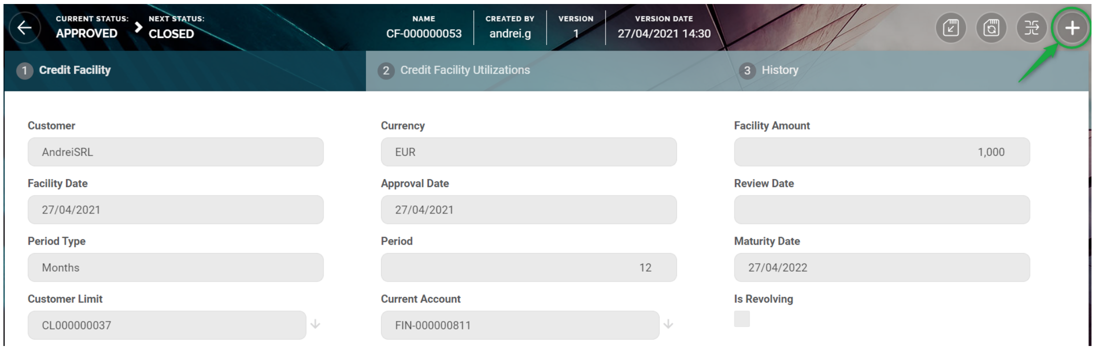
The repayment notification is automatically marked as paid (the **IsPaid** checkbox in the **Repayment Notification details** section is selected) after the payment is processed, either by a Core Banking process or by adding a manual correction.

Creating New Versions of Existing Credit Facilities

In Core Banking, the credit facilities are set up for versioning. Thus, if you want to update the details of an approved credit facility, then you must create a new version of the record.

To create a new version for a record with the **Approved** status, follow these steps:

1. While in the **Credit Facility List** page, double-click the credit facility record selected for updates.
2. Click the **New Version** button in the top right corner of the page.

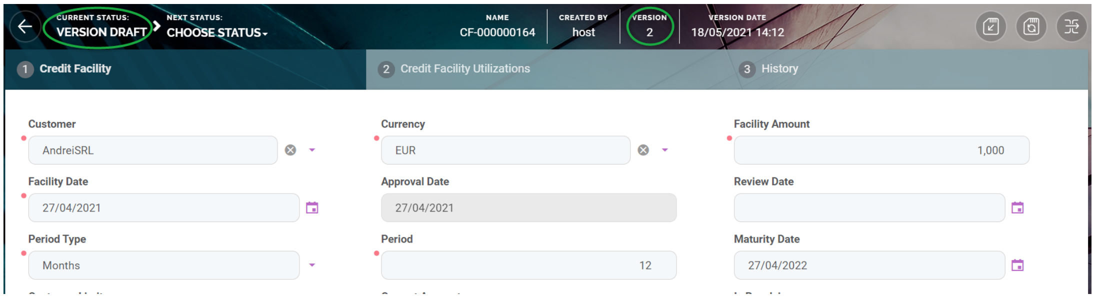


CURRENT STATUS: APPROVED | NEXT STATUS: CLOSED | NAME: CF-000000053 | CREATED BY: andrei.g | VERSION: 1 | VERSION DATE: 27/04/2021 14:30

1 Credit Facility | 2 Credit Facility Utilizations | 3 History

Customer: AndreiSRL
Currency: EUR
Facility Amount: 1,000
Facility Date: 27/04/2021
Approval Date: 27/04/2021
Review Date:
Period Type: Months
Period: 12
Maturity Date: 27/04/2022
Customer Limit: CL000000037
Current Account: FIN-000000811
Is Revolving: □

A new version of the credit facility is created, with **Version Draft** status, thus restarting the life cycle.



CURRENT STATUS: VERSION DRAFT | NEXT STATUS: CHOOSE STATUS | NAME: CF-000000164 | CREATED BY: host | VERSION: 2 | VERSION DATE: 18/05/2021 14:12

1 Credit Facility | 2 Credit Facility Utilizations | 3 History

Customer: AndreiSRL
Currency: EUR
Facility Amount: 1,000
Facility Date: 27/04/2021
Approval Date: 27/04/2021
Review Date:
Period Type: Months
Period: 12
Maturity Date: 27/04/2022

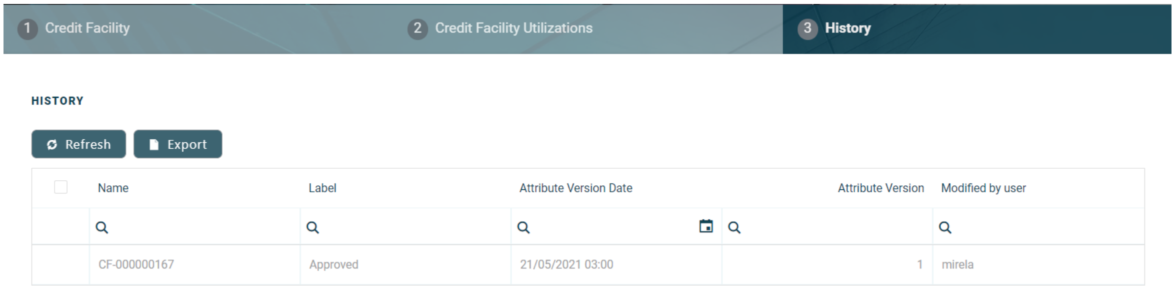
3. Edit the desired fields in the **Credit Facility** tab.
4. Click the **Save and Reload** button.

If you approve the draft version, then the original record transitions into the **Version Closed** status and the secondary version becomes the **Approved** currently active credit facility record.

Read more details about versioning a record on the How to Version an Entity Record page.

Viewing a Credit Facility's History

You can view the versions of the credit facility, their workflow status and the user who modified the record, in the credit facility's **History** tab.



□	Name	Label	Attribute Version Date	Attribute Version	Modified by user
	CF-000000167	Approved	21/05/2021 03:00	1	mirela

Here you can track the record's life cycle and review older versions that are no longer active (for details, see Credit Facility Statuses).

There are no edits allowed in this tab. Double-click a version in the list to view its details.

Third-Party Management

The third-party management functionality of Core Banking refers to third-party entities (agents, brokers, insurers, etc.) registered with the financial institution to intermediate the selling of various banking products to customers. For their work, the third-party entities are compensated with fees payable for each new contract, based on a pricing agreement with the financial institution. Core Banking facilitates the management of third-party agreements, the linkage of contracts to third-parties, and the configuration of the commissioning processes through dedicated menus. A third-party invoicing process also takes care of the transfer part of the payments related with these third-party entities.

FintechOS Core Banking allows banks to create third-party agreements based on approvals.

IMPORTANT!
The third-party management features are available via the **Third-Party Management v4.0** package, which has to be installed on top of the **Core Banking 4.0** package.

Business Logic

Let's say a third-party entity (an agent, a broker, an insurer, or a merchant) agrees with a financial institution to intermediate the selling of various banking products to customers, for a fee. Thus, an agreement is recorded in Core Banking, containing all the pricing information needed to compensate the third-party. Specific commissioning configurations must be in place to be then applied to the agreements. Whenever the third-party entity intermediates the selling of a contract to a customer, specifying in the contract the entity and their role, the entity should be compensated with the commissions mentioned in the agreement. The payments are performed based on automatic or manual invoicing processes. Agreement records must be approved before being used for invoice generation. You can create invoices and attach invoice details for an agreement for each currency mentioned in the pricing details, that are automatically processed for payment by Core Banking. An automated process running once each night creates third-party invoices and payments for the combination of third-party entity/ agreements currency, during the validity of the agreement, on the Payment Day of each agreement, excluding any invoice details already created on a manual invoice. The payments for the invoices are performed for unallocated or partially allocated payments.

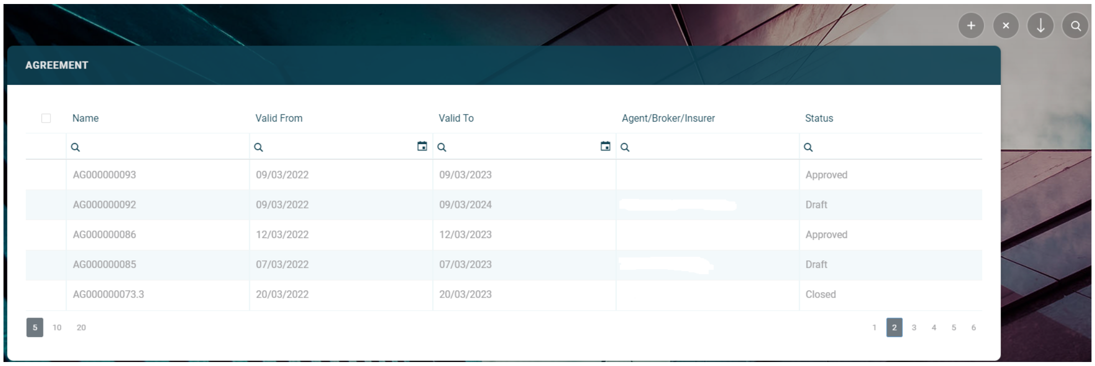
Managing Third-Party Agreements

You can manage third-party agreements via the user interface or via integration through APIs.

NOTE
For information about the available endpoints, please visit the Third-Party Management Endpoints page.

To manage third-party agreements through the user interface, follow these steps:

1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational > Third-Party Agreements** menu.
2. Click the **Agreements** menu item to open the **Agreements** page.



Name	Valid From	Valid To	Agent/Broker/Insurer	Status
AG000000093	09/03/2022	09/03/2023		Approved
AG000000092	09/03/2022	09/03/2024	[redacted]	Draft
AG000000086	12/03/2022	12/03/2023		Approved
AG000000085	07/03/2022	07/03/2023	[redacted]	Draft
AG000000073.3	20/03/2022	20/03/2023		Closed

On the **Agreements** page, you can create a new agreement, search, edit, or delete agreements in **Draft** status.

IMPORTANT!
Users with the associated role of Loan Admin Officer or Retail Credit Officer can

view, insert, update, or delete third-party agreement records. Users with the other associated Core Banking security roles can only view such records.

NOTE
You can also manage agreements in the **Third-Party Agreements dashboard**. Agreements that remain in `Draft` status for a predefined number of days can be purged within the **Records To Be Purged dashboard**'s **Agreements** tab.

Third-Party Configurations

This page contains a series of topics that explain the configurations needed by Core Banking regarding the setup of commissions for third-party management:

- **Third-Party Commission Schema**
- **Third-Party Commission Type**
- **Third-Party Commission**

Third-Party Commission Schema

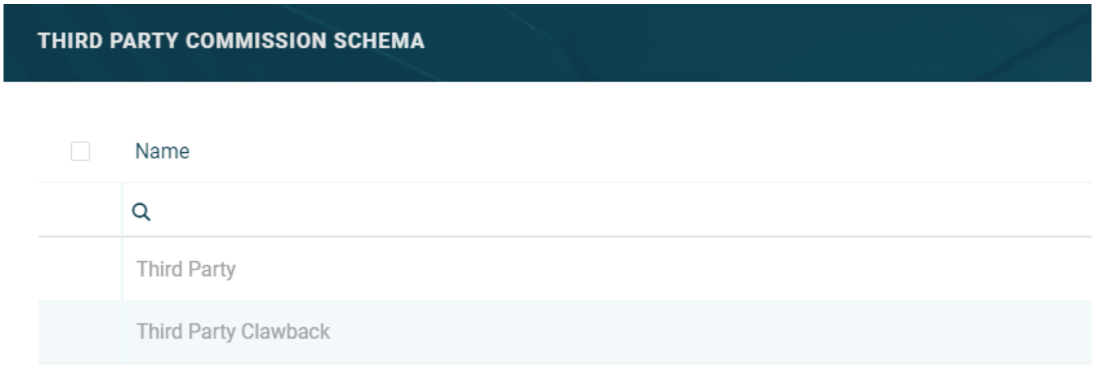
Third-party commission schema records are commission schemas that can be used only for the third-party management processes within Core Banking. They are used to categorize third-party commission types. For example, there are two schemas that come out-of-the-box with Core Banking: `Third Party` and `Third Party Clawback`.

IMPORTANT!
You can add other schemas if needed, just bear in mind that the business logic must also be implemented for your new schemas. By default, the scripts are written to treat only the schemas that come out-of-the-box with the Core Banking packages,

> `Third Party` for commissions types given to the third-party entity, and `Third Party Clawback` for commissions types reclaimed from the third-party entity.

To manage third-party commission schemas:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.
2. Click the **Third-Party Commission Schema** menu item to open the **Third-Party Commission Schema** page.



THIRD PARTY COMMISSION SCHEMA

□	Name
	Third Party
	Third Party Clawback

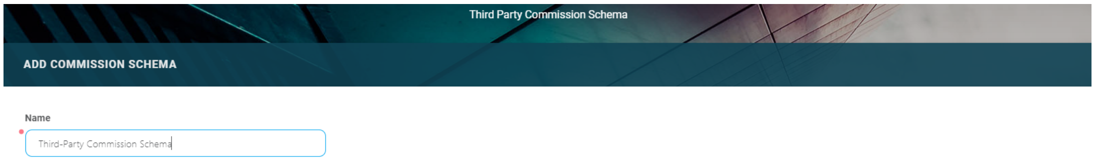
On the **Third-Party Commission Schema** page, you can create a new third-party commission schema, search, edit or delete an existing one. You can't delete schemas already used to define commissions.

> **NOTE**
> Users with the associated role of Loan Admin Officer or Retail Credit Officer can insert, update, or delete third-party commission schema records. Users with the other associated Core Banking security roles can only view such records.

Creating Third-Party Commission Schemas

Follow these steps to create new third-party commission schema records:

1. In the FintechOS Portal, click the **Insert** button on the top right side of the **Third-Party Commission Schema** page. The **Add Third-Party Commission Schema** page is displayed.



Third Party Commission Schema

ADD COMMISSION SCHEMA

Name: Third-Party Commission Schema

2. Fill in the **Name** field with the name of the third-party commission schema.

3. Click the **Save and Reload** button. The new third-party commission schema is created and ready to be used.

Third-Party Commission Type

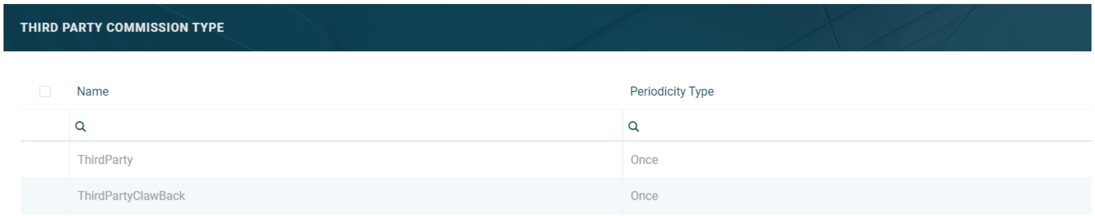
Third-party commission types are used to categorize third-party commissions according to their intended usage. For example, there are third-party type commissions and third-party clawback type commissions.

> **IMPORTANT!**
> You can add other third-party commission types if needed, with the desired periodicity, just bear in mind that the business logic must also be implemented for your new third-party commission types. To benefit from the implemented business processes, we recommend you to select one of the following options for periodicity: `Once`, `Monthly`, or `Annual`.

To manage third-party commission types:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.

2. Click the **Third-Party Commission Type** menu item to open the **Third-Party Commission Type** page.



THIRD PARTY COMMISSION TYPE

Name	Periodicity Type
ThirdParty	Once
ThirdPartyClawBack	Once

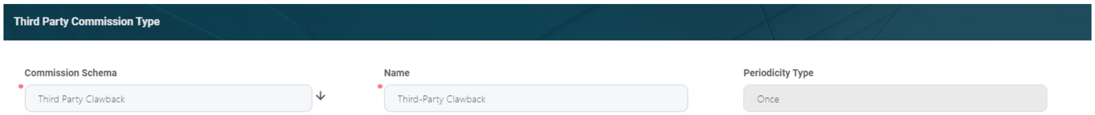
On the **Third-Party Commission Type** page, you can create a new third-party commission type, search, edit, or delete an existing one. You can't delete commission types already used to define commissions.

> **NOTE**
>
> Users with the associated role of Loan Admin Officer or Retail Credit Officer can insert, update, or delete third-party commission type records. Users with the other associated Core Banking security roles can only view such records.

Creating Third-Party Commission Types

Follow these steps to create new third-party commission type records:

1. In the FintechOS Portal, click the **Insert** button on the top right side of the **Third-Party Commission Type** page. The **Add Third-Party Commission Type** page is displayed.

   Third Party Commission Type

   Commission Schema: Third Party Clawback

   Name: Third-Party Clawback

   Periodicity Type: Once

2. Fill in the following fields from the **Commission Type** section:

   - **Commission Schema** - Select the schema where this third-party commission type belongs.
   - **Name** - Enter the name of the third-party commission type.
   - **Periodicity type** - Select a periodicity from the drop-down. To benefit from the implemented business processes, we recommend you to select one of the following options: `Once`, `Monthly`, or `Annual`.

     > **NOTE**
     >
     > The periodicity type can only be `Once` and it cannot be changed if `Commission Schema = Third Party Clawback`.
     >
     > For example, this is the case for a list of commissions that are applied at a contract's approval. These commissions are applied only once per contract.

3. (missing or bad snippet) The new third-party commission type is created and ready to be used.

Third-Party Commission

Third-party commissions are the fees paid by the bank or the financial institution to third-party entities (agents, brokers, etc.) for intermediating the selling of a product or service to a customer. There may also be commissions paid by the third-party entity to the financial institution, for example for accessing the financial institution's crediting platforms, or even agreement management commissions paid periodically to the financial institution. These third-party commissions vary from bank to bank, based on their policy.

To prevent losing profits, there may be situations when the financial institution claims back all or some of the commission already paid out to third-party entities, because the affected contracts were closed before their due date.

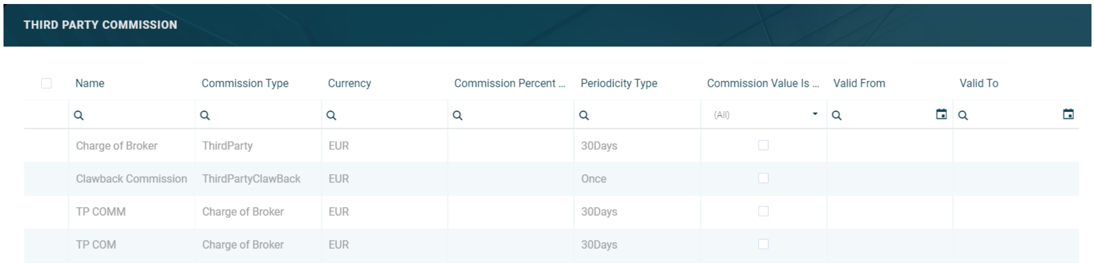
Core Banking has a dedicated menu for managing third-party commissions. These third-party commissions are attached to agreements with third-party entities.

IMPORTANT!
Third-party commissions cannot be used in contracts for customer.
They are not displayed in Banking Product Factory's **Commissions** menu and they can't be selected in Commission Lists.
Third-party commissions and third-party commission types can't be used in Payment Schedule Type Details.

To manage third-party commissions:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.

2. Click the **Third-Party Commission** menu item to open the **Third-Party Commission** page.



THIRD PARTY COMMISSION

□	Name	Commission Type	Currency	Commission Percent ...	Periodicity Type	Commission Value Is ...	Valid From	Valid To
						(All)		
	Charge of Broker	ThirdParty	EUR		30Days	□		
	Clawback Commission	ThirdPartyClawBack	EUR		Once	□		
	TP COMM	Charge of Broker	EUR		30Days	□		
	TP COM	Charge of Broker	EUR		30Days	□		

On the **Third-Party Commission** page, you can create a new third-party commission, search, edit, or delete an existing one. You can't delete commissions already used by other records.

IMPORTANT!

The value of a third-party commission used in active contracts can't be edited. Instead, you can modify the value's validity and add a new value with a future validity period. For details, see the Editing The Value Of A Commission Already In Use section.

NOTE

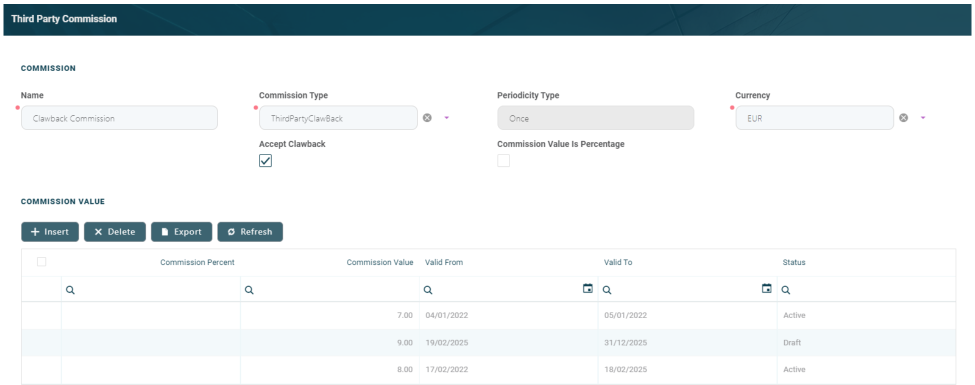
Users with the associated role of Loan Admin Officer or Retail Credit Officer can insert, update, or delete third-party commission records. Users with the other associated Core Banking security roles can only view such records.

Creating Third-Party Commissions

Follow these steps to create new third-party commission records:

1 Add Commission Details

1. In the FintechOS Portal, click the **Insert** button on the top right side of the **Third-Party Commission** page. The **Add Third-Party Commission** page is displayed.



COMMISSION

Name	Commission Type	Periodicity Type	Currency
Clawback Commission	ThirdPartyClawBack	Once	EUR
	Accept Clawback	Commission Value Is Percentage	
	☑	□	

COMMISSION VALUE

□	Commission Percent	Commission Value	Valid From	Valid To	Status
		7.00	04/01/2022	05/01/2022	Active
		9.00	19/02/2025	31/12/2025	Draft
		8.00	17/02/2022	18/02/2025	Active

2. Fill in the following fields from the **Commission** section:
   - **Name** - Enter the name of the commission.
   - **Commission Type** - Choose one from the following third-party commission types:
     - `ThirdParty` (out-of-the-box third-party commission type)
     - `ThirdParty Clawback` (out-of-the-box third-party commission type, defined for clawback commissions)
     - Other third-party commission types defined by your users.

> **NOTE**
>
> The types have a periodicity already set: once/ monthly/ trimester etc.
>
> For `ThirdParty Clawback` commission type, `Periodicity Type = Once`.

   - **Currency** - Select the currency of the commission from the drop-down.
   - **Accept Clawback** - Select this checkbox if the commission accepts a clawback commission during agreement pricing definition.

- **Is For Transaction** - Select this checkbox if the commission is applicable when approving a transaction at the contract level, for example when approving a disbursement. If left unselected, then the commission is applicable when approving the contract. Depending on this setting, the system automatically triggers the calculation of the commission value in the moment when a contract or a contract event that falls under a third-party agreement is approved.

  NOTE

  If a clawback commission has `Is For Transaction = True`, the clawback commission is calculated/ queued for calculation for each transaction type set in the `Clawback Transaction Types` field at the agreement pricing level.

  If a clawback commission has `Is For Transaction = False`, the clawback commission is calculated/ queued for calculation only for the first occurring transaction type from the ones set in the `Clawback Transaction Types` field at the agreement pricing level.

- **Commission Value Is Percentage** - Select this checkbox if the commission is measured by percentage, not as a fixed value
- **Commission Percent Applied To** - Only displayed if you select the checkbox next to the `Commission Value Is Percentage` field. Choose one of the following:
  - `Remaining value` - the percentage applies to the contract's remaining to be repaid value .

  - `Financed value` - the percentage applies to the contract's financed value.
  - `Amount` - the percentage applies to the contract's amount.
  - `Interest` - the percentage applies to the contract's interest.

  For **Term Loan**, **Mortgage** or **Overdraft** banking products the calculation method is as follows:

  If `percentAppliedTo = financedAmount`, then `financedAmount = amountDue - advanceAmount;`

  If `percentAppliedTo = amount`, then `financedAmount = amountDue`;

  If `percentAppliedTo = remainingValue`, then, if `Contract Status = ContractVersionDraft`, then `financedAmount = (-1) * mainBankAccountBalance`. No negative values are allowed, so if the result is negative, then `financedAmount = null`.

  Default value `financedAmount = null`.For **Current Account with Overdraft** banking products the calculation method is as follows:

  If `percentAppliedTo = overdraftLimitAmount`, then `financedAmount = overdraftLimitAmount`;

  If `percentAppliedTo = usedAmount`, then if (`periodType == Once`), `financedAmount = overdraftLimitAmount - availableAmountForOverdraft`, else `financedAmount = null`.

  Default value `financedAmount = null`.

- **Use Banking Formula** - Select this checkbox to calculate the commission using the banking product formulas.

  When using banking formulas to calculate the commission, you can't define actual values for the commission, so the **Commission Value** section is not displayed.

- **Commission Formula** - Only displayed if you select the **Use Banking Formula** checkbox. Select the commission formula that you want to use for the commission calculation.

  > **NOTE**
  >
  > You can build your own commission calculation business formulas, or you can use one of the pre-built formulas coming with the Third-Party Management package:
  >
  > - `OnePercentLoanAmountBPFormula` - When using this demo formula, the commission is calculated as `1% from the loan amount`. For example, when loan amount is 10000, the calculated commission is 100.
  >
  > - `ClawbackCommissionEventValueLoanAmount` - When using this demo formula, the clawback commission is calculated as `initially granted commission* [(transaction amount of clawback trigger)/ (loan amount)]`. This formula is not based on formula mapping, but on an input json file, provided as a sample. This can be customized in projects by changing the function `getFormulaInputJSON` from the `FTOS_TPM_InvoiceHelper` server script library.

- **Formula Mapping** - Only displayed if you select the **Use Banking Formula** checkbox. Select the formula mapping to be used when calculating the commission.

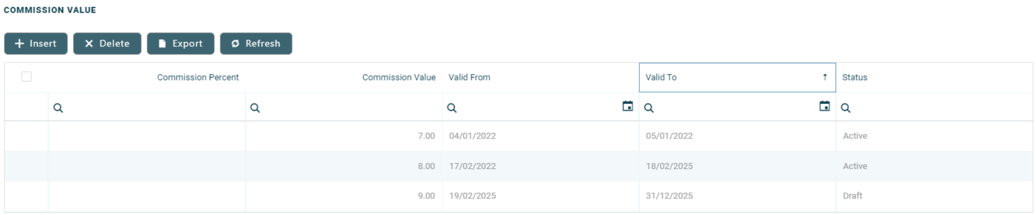
  > **NOTE**
  >
  > You can build your own formula mappings, or you can use

> one of the pre-built formula mappings coming with the Third-Party Management package:
>
> - `OnePercentLoanAmountFormula_formula_FTOS_CB_Contract` - When using this demo data mapping, the formula is mapped to the Contract master entity.
>
> If you are not selecting the formula mapping, it is calculated from the `formulaInputJSON` parameter, which in its turn is calculated based on the event.

3. Optionally, view or edit the following fields:
   - **Periodicity type** - Automatically filled-in when you choose the commission type. You can't change this value.
4. (missing or bad snippet)

2. (Only if not using a banking formula) Add Commission Values

After saving the commission record, you should define the actual values of the third-party commission. These values are later displayed on the **Edit Third-Party Commission** page's **Commission Value** section.

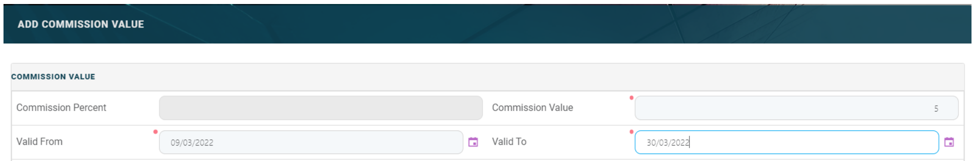


☐	Commission Percent	Commission Value	Valid From	Valid To ↑	Status
		7.00	04/01/2022	05/01/2022	Active
		8.00	17/02/2022	18/02/2025	Active
		9.00	19/02/2025	31/12/2025	Draft

> **IMPORTANT!**
> When using banking formulas to calculate the commission, you can't define actual values for the commission, so the **Commission Value** section is not displayed.

To add a new commission value, follow these steps:

1. Click the **Insert** button above the **Commission Value** section within the **Add Third-Party Commission** page.
2. Fill in the following fields in the newly opened **Add Commission Value** page:



ADD COMMISSION VALUE

COMMISSION VALUE

Commission Percent		Commission Value	5
Valid From	09/03/2022	Valid To	30/03/2022

- **Commission Value** - Enter the value of the commission.
- **Valid From** and **Valid To** - Select the interval during which the commission value is applicable.
- **Commission Percent** - This is the percent representing the commission. If the commission percentage > 100, Core Banking displays a warning message.

3. Click the **Save and Close** button.

Third-Party Agreements Life Cycle and States

Third-party agreements are complex agreements between a financial institution and third-party entities such as agents or brokers, who intermediate the creation of contracts with customers, in exchange of a payment previously negotiated with the financial institution. Therefore the four-eyes principle is applicable here, meaning that a record should be approved by a second financial institution employee, with higher authorization rights. This is enabled via approval task FintechOS Platform capabilities and thus it is also a financial institution's responsibility to set proper security roles and access rights to its users, in order to make sure that the same user can't insert and also authorize the same record.

A third-party agreement record has the following business workflow statuses:

- **Draft** - the status of a newly created third-party agreement record that was not yet sent for approval. While in this status, you can edit the fields from the record's **Agreement** tab, but Core Banking doesn't attach any invoices to it. Send the record to approval after editing all the necessary details and adding at least one agreement pricing record.
- **Pending** - this is a system status applied to records sent for approval, but not yet approved (when the four-eyes approval process is implemented). You can't perform any updates in this system status.
- **Approved** - the status of a third-party agreement record after being authorized by a user with approval competencies. While in this status, you can't edit the record's details, but the invoice details are automatically added through the Core Banking invoicing processes. If you need to alter the record's details, create a new version based on the current agreement.
- **Closed** - the last status of a third-party agreement, after manually closing it or after creating a new version based on the current version. You can't perform any updates on the record.
- **Canceled** - the status of a record after manually canceling it straight from the Draft status. You can't perform any updates on the record.

Third-Party Agreements Versioning

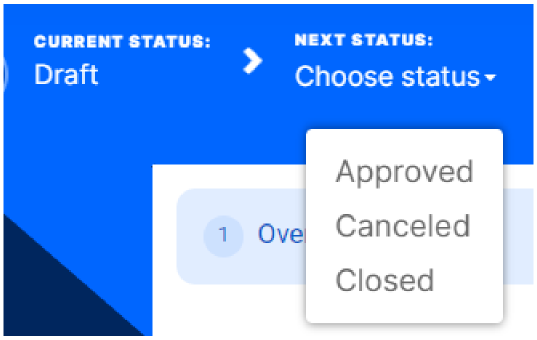
Core Banking allows you to create new versions for an existing agreement if you need to modify an existing approved record.

A third-party agreement version can have the following statuses:

- **Version Draft** - the status of a newly created agreement version record that was not yet sent for approval. While in this status, you can edit some fields. Send the record to approval after editing all the necessary details.
- **Approved** - the status of an agreement version record after being authorized by a user with approval competencies. While in this status, you can't edit the record's details.
- **Version Closed** - the last status of an agreement version, after manually closing it or after creating another new version based on the current version. You can't perform any updates on the record.

Changing Third-Party Agreement Statuses

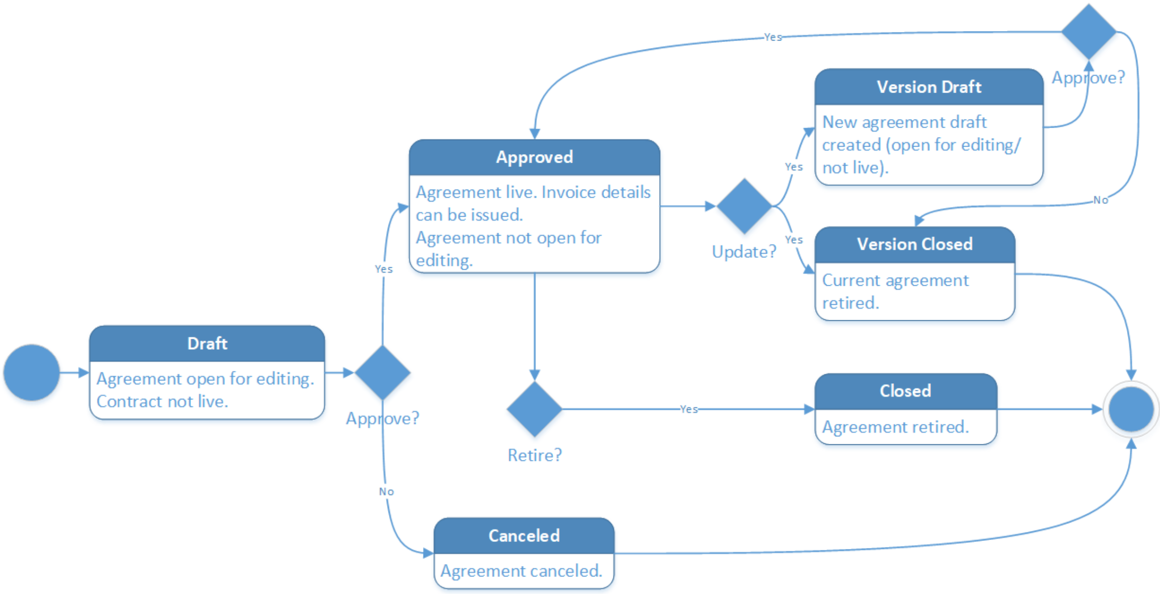
You can manage a third-party agreement's life-cycle by changing its status from the top right corner of the screen.



CURRENT STATUS: Draft

NEXT STATUS: Choose status

The third-party agreement status transitions are illustrated below:



Draft
Agreement open for editing. Contract not live.
Approve?
Yes
No
Approved
Agreement live. Invoice details can be issued. Agreement not open for editing.
Update?
Yes
Version Draft
New agreement draft created (open for editing/ not live).
Approve?
Yes
No
Yes
Version Closed
Current agreement retired.
Retire?
Yes
Closed
Agreement retired.
Canceled
Agreement canceled.

Note that:

- Once a record is live, its settings can no longer be modified.
- If you want to update the details of a live agreement, you must create a new agreement version.

- When you create a new agreement version, the current version is retired; no updates are allowed on the retired version.
- Every agreement version starts in a Draft state and must go through an approval process before going live.
- Only one version of an agreement can be live at one time.

NOTE
As a best practice, new records or new versions of existing records created on a specific day should be approved on the same day.

Creating Agreements For Third-Parties

Third-party agreements are complex agreements between a financial institution and third-party entities such as agents or brokers, who intermediate the creation of contracts with customers, in exchange of a payment previously negotiated with the financial institution.

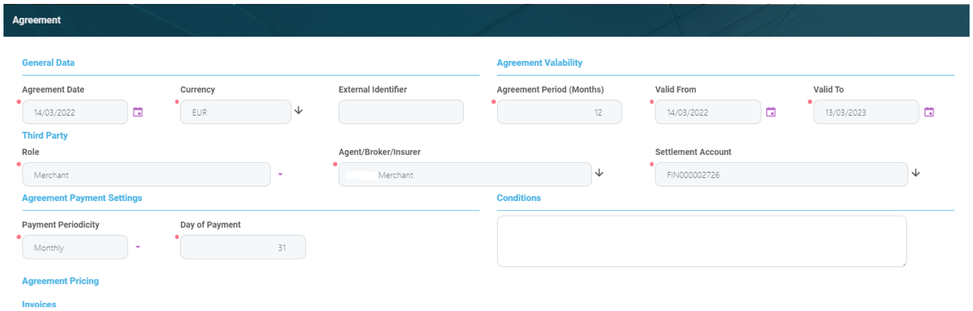
Before creating an agreement for a third-party entity, make sure that:

- the third-party roles and the role-based limits are set up according to your financial institution's needs,
- the third-party entity is recorded as a customer in Core Banking,
- the third-party has the desired role associated within its customer record,
- a settlement account (a current account contract for the same third-party entity) is set up for the desired currency.

To create a new third-party agreement:

1. Add Agreement Details

1. Open the **Agreements** page as described in the Managing Third-Party Agreements section.
2. Click the **Insert** button to open the **Agreement** page, with the first tab displayed, the **Agreement** tab.



Agreement

General Data

Agreement Date: 14/03/2022
Currency: EUR
External Identifier:

Agreement Valability

Agreement Period (Months): 12
Valid From: 14/03/2022
Valid To: 13/03/2023

Third Party

Role: Merchant
Agent/Broker/Insurer: Merchant
Settlement Account: FIN000002726

Agreement Payment Settings

Payment Periodicity: Monthly
Day of Payment: 31

Conditions

Agreement Pricing

Invoices

The fields displayed here are also available for completion when updating a record in **Draft** status.

3. Fill in the following fields in the **General Data** section:
   - **Agreement Date** - This is the date of the agreement, automatically filled-in with the system's date. You can change this value.
   - **Currency** - Select from the list the currency of the agreement. This is the currency for settling the included commissions. Make sure the third-party has a current account in the selected currency.
   - **External Identifier** - Enter an external identifier of the agreement record, if available.
4. In the **Agreement Validity** section, fill in the following fields:
   - **Agreement Period (Months)** - Enter the number of months for the agreement's validity.
     If you modify the `Valid To` date, then the value of `Agreement Period (Months)` is recalculated, rounding up the fractions of a month to 1 whole month.

- **Valid From** - Select the date when the agreement becomes active. This field is automatically completed with the system's current date. You can modify this date from the attached calendar, if needed.
  The maturity date is automatically calculated following the formula: `Facility Date` + (`Period` * `Period Type`).
- **Valid To** - The date until when the agreement is valid. This field is automatically completed with the date calculated as the system's current date + the number of months entered in the `Agreement Period Months` field. You can modify this date from the attached calendar, if needed, but it must be greater than or equal with `Valid From`. If you modify this date, then the value of `Agreement Period (Months)` is recalculated, rounding up the fractions of a month to 1 whole month.

5. In the **Third-Party** section, fill in the following fields:
   - **Role** - Select from the drop-down the role of the entity with whom the agreement is created. The roles are listed in the `ThirdPartyRole`Core Banking system parameter. The default roles are: Agent, Broker, Insurer, and Merchant.
   - **Agent/ Broker/ Insurer/ Merchant** - Select from the list the name of the customer with whom the agreement is created. This is the entity who should be mentioned in contracts as contract participant with the specified role in order to qualify for the commissions stated in the agreement pricing records added to this agreement. The list is already filtered, displaying only the customers that have the same role as the one selected in the `Role` field.

     NOTE

     Once an agreement is saved, you can only change the **Role** and **Agent/ Broker/ Insurer/ Merchant** fields if you create a new version for the agreement.

- **Settlement Account** - Select the entity's bank account that acts as settlement account, where the commissions payable based on this agreement should be disbursed and/ or from where the financial institution should subtract the amounts to recover. The list is already filtered to display only the selected customer's current accounts in Open status, in the currency selected previously for the agreement.

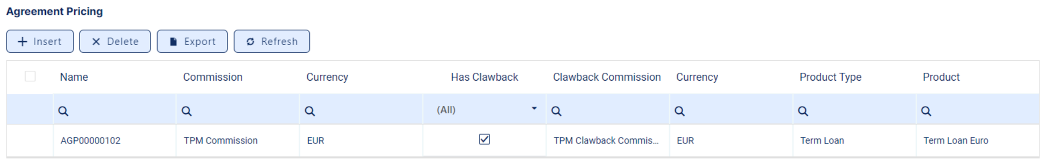
6. In the **Agreement Payment Settings** section, fill in the following fields:
    - **Payment Periodicity** - Select from the list the periodicity for processing the payments calculated based on this agreement. The possible values are:
        - `Daily` - the payments are performed each day. If you select this option, the `Payment is in Real Time` field is displayed.
        - `Weekly` - the payments are performed once a week. If you select this option, the `Week Day` field is displayed.
        - `Monthly` - the payments are performed once a month. If you select this option, the `Day of Payment` field is displayed.
    - **Payment is in Real Time** - Only displayed if `Payment Periodicity = Daily`. If you select the checkbox, then the payment is processed in real-time.
    - **Week Day** - Only displayed if `Payment Periodicity = Weekly`. Select the day of the week when the payment should be processed.
    - **Day of Payment** - Only displayed if `Payment Periodicity = Monthly`. Enter the day of the month when the payment should be processed, with values between 1 and 31. The default value is 31, the last day of the month.
    - **Conditions** - Enter any other conditions applicable to the agreement.
7. Click the **Save and Reload** button.

After saving the agreement, a unique identifier is generated based on the increment number and is displayed as the name of the agreement at the top of the page, along with the versioning information. All the other sections of the **Agreement** page (**Agreement Pricing** and **Invoices**) become visible after saving the record, so that you can fill them in.

The record is still in **Draft** status and you should define at least one pricing record before you change its status to **Approved**. You or Core Banking's automatic process can create invoices only for agreement records with **Approved** status.

2. Define Agreement Pricing

You can insert, update, delete or export pricing records for an agreement in **Draft** status in the **Agreement Pricing** section, displayed after saving the agreement,



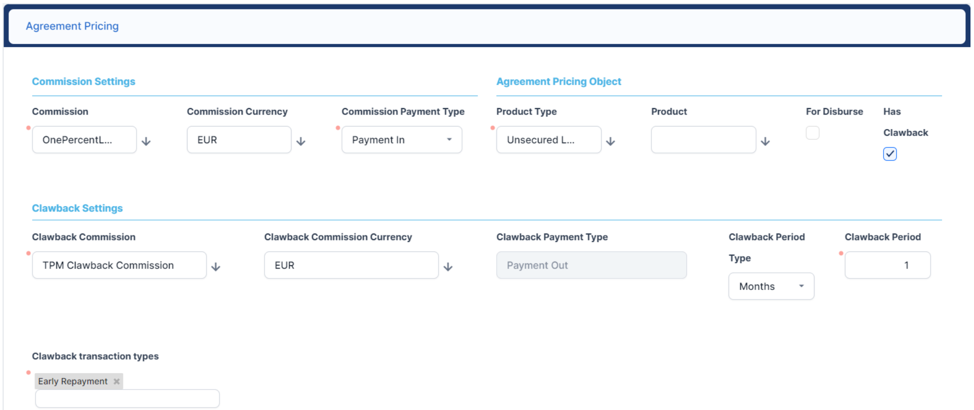
Agreement Pricing

□	Name	Commission	Currency	Has Clawback	Clawback Commission	Currency	Product Type	Product
				(All)				
	AGP00000102	TPM Commission	EUR	☑	TPM Clawback Commis...	EUR	Term Loan	Term Loan Euro

The section displays information about the pricing's commission and its currency, the clawback commission, if applicable, and the products for which the pricing was set up. You can add as many pricing records as you need for an agreement.

To add a pricing record, follow these steps:

1. Click the **Insert** button to display the **Agreement Pricing** page.



Agreement Pricing

Commission Settings

Commission: OnePercentL...

Commission Currency: EUR

Commission Payment Type: Payment In

Agreement Pricing Object

Product Type: Unsecured L...

Product:

For Disburse: □

Has Clawback: ☑

Clawback Settings

Clawback Commission: TPM Clawback Commission

Clawback Commission Currency: EUR

Clawback Payment Type: Payment Out

Clawback Period Type: Months

Clawback Period: 1

Clawback transaction types: Early Repayment

2. Fill in or view the following fields in the **Commission Settings** section within the newly opened page:
    - **Commission** - Select from the list the third-party commission to be applied for the agreement pricing. The list is filtered to display only commissions with `ThirdParty` commission schema.
    - **Commission Currency** - This field is automatically completed with the selected commission's currency. You can't change this value.
    - **Commission Payment Type** - Select the type of payment to be performed for the commission:
        - `Payment In` - for payments from the third-party's settlement account into the financial institution's reconciliation account
        - `Payment Out` - for payments from the financial institution's reconciliation account into the third-party's settlement account.
3. In the **Agreement Pricing Object** section, fill in the following fields:
    - **Product Type** or **Product** - Select the product type or the product that must be present in a contract in order for the agreement pricing to be applicable.

> **NOTE**
>
> If you are planning to use the clawback settings, make sure

> that you mark the desired transaction types with `Is Clawback Transaction = True`, and those transaction types are selected at the banking product type level.

- **Has Clawback** - This checkbox is displayed only if the selected commission was defined with `Accept Clawback = True`.
  If you select this checkbox, then the pricing has a clawback commission attached to it. The fields within the **Clawback Settings** section are displayed only if `Has Clawback = True.`
  Default value: `False`.
- **For Disburse** - Select this checkbox if the pricing is applicable only when the contract subject to the agreement is disbursed, and not at the contract approval. This means that the commission applicable to this pricing is automatically calculated by the system as a pre-invoice detail when a disbursement event is approved at the contract level.

4. To prevent losing profits, there may be situations when the financial institution claims back all or some of the commission already paid out to third-party entities, due to the fact that the affected contracts were closed before their due date through certain contract events that determine the clawback (for example, Early Repayment or Returned Amount or Goods events).
   In the **Clawback Settings** section, fill in or view the following fields:
   - **Clawback Commission** - If displayed, select from the list the third-party clawback commission to be applied for the agreement pricing. The list is filtered to display only commissions with `ThirdParty Clawback` commission schema.
   - **Clawback Commission Currency** - If displayed, this field is automatically completed with the selected clawback commission's currency. You can't change this value.

- **Clawback Payment Type** - If displayed, select the type of payment to be performed for the clawback commission:
    - `Payment In` - for payments from the third-party's settlement account into the financial institution's reconciliation account;
    - `Payment Out` - for payments from the financial institution's reconciliation account into the third-party's settlement account.
- **Clawback Period Type** - If displayed, select from the list the period type for the clawback commission.
- **Clawback Period** - If displayed, enter the number of periods during which the clawback commission can be reclaimed by the financial institution in case a contract subject to the agreement pricing was closed earlier or a transaction type marked as clawback transaction type was performed on such a contract.
- **Clawback Transaction Types** - Select the transaction types for which the clawback commission should be applied.
  You can choose from the list of transaction types with `Is Clawback Transaction = True`, and are listed at the banking product type level, if the `Product Type` field is selected, or are listed at the banking product level, if the `Product` field is selected.
- **Block After Clawback** - Select the checkbox to mark the contract as blocked for further agreements after performing a clawback payment. If `True`, which is the default value, when a clawback commission is paid for this contract, no other commission found on the contract can be invoiced by Core Banking.

5. Click the **Save and Close** button.

After defining the relevant details of the agreement and at least one pricing record, proceed to **agreement approval**.

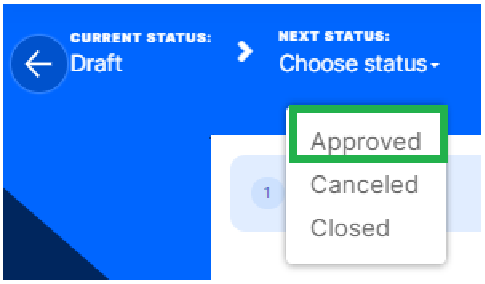
IMPORTANT!
You or Core Banking's automatic process can create invoices only for agreement records with **Approved** status. These invoices are later used for paying out the commissions to the third-party entity and/ or the financial institution.

Approving a Third-Party Agreement

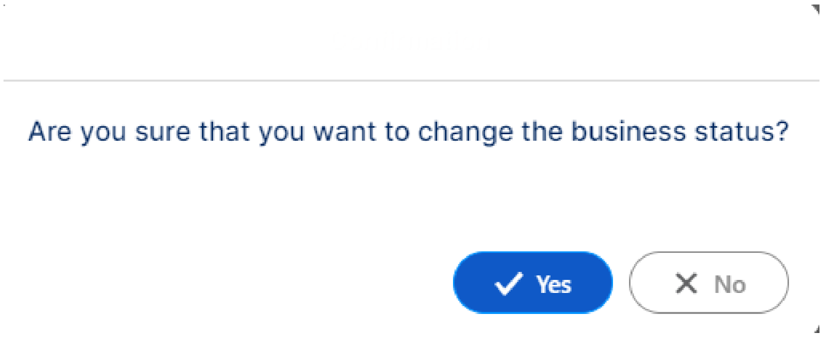
You can perform the approval either from a customer journey flow via API integration or from the Core Banking user interface.

After defining the relevant details of the agreement and at least one pricing record, proceed to agreement approval:

1. Select an agreement in **Draft** (or **Version Draft**) status.
2. Change its status into **Approved**.



3. Click **Yes** to confirm your action.



Are you sure that you want to change the business status?

If Core Banking performs all the validations successfully, then the current status of the agreement changes to **Approved**. While in this status, you can't edit the record's details, but the invoice details are automatically added through the Core Banking invoicing processes. If you need to alter the record's details, create a new version based on the current agreement.

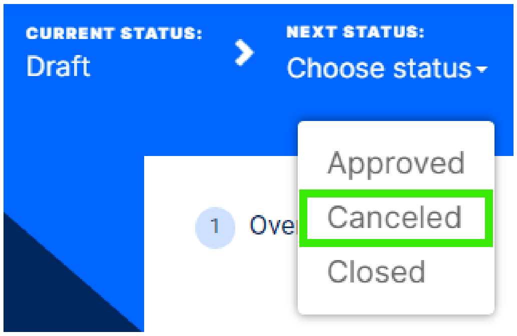
> **NOTE**
> Core Banking validates the existence of a setting for a reconciliation account for a specific currency upon third-party agreement or agreement version approval. It also checks whether the reconciliation account setting has continuity for the entire validity period of the agreement.

Rejecting a Third-Party Agreement

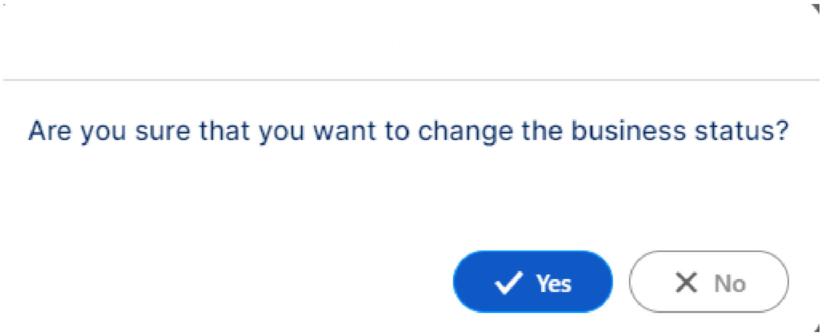
You can reject an agreement, canceling it, when the deal with the third-party entity drops. You can perform the cancellation either from a customer journey flow via API integration or from the Core Banking user interface.

Follow these steps to cancel the agreement:

1. Select an agreement in **Draft** (or **Version Draft**) status.
2. Change its status into **Canceled**.



3. Click **Yes** to confirm your action.


Are you sure that you want to change the business status?

If Core Banking performs all the validations successfully, then the current status of the agreement changes to **Canceled**.

> **NOTE** You can't further use a canceled agreement. Create a new agreement, if you need to.

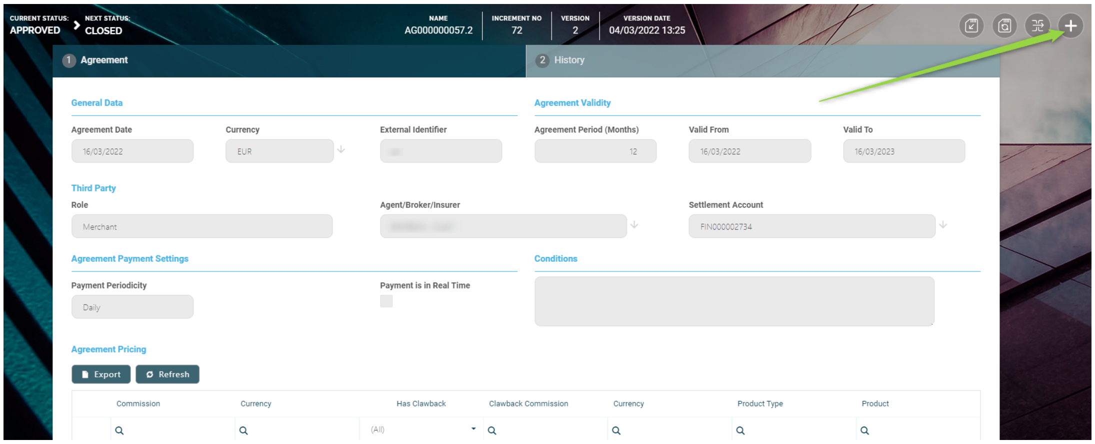
Creating New Versions Of Third-Party Agreements

The third-party agreements are set up for versioning. Thus, if you have to update the details of an approved agreement, then you must create a new version of the record.

To create a new version for a record with the **Approved** status, follow these steps:

1. Double-click the agreement record selected for updates.

2. Click the **New Version** button in the top right corner of the page.



CURRENT STATUS: APPROVED › NEXT STATUS: CLOSED

NAME: AG000000057.2 | INCREMENT NO: 72 | VERSION: 2 | VERSION DATE: 04/03/2022 13:25

General Data

Agreement Date: 16/03/2022
Currency: EUR
External Identifier: [redacted]

Agreement Validity

Agreement Period (Months): 12
Valid From: 16/03/2022
Valid To: 16/03/2023

Third Party

Role: Merchant
Agent/Broker/Insurer: [redacted]
Settlement Account: FIN000002734

Agreement Payment Settings

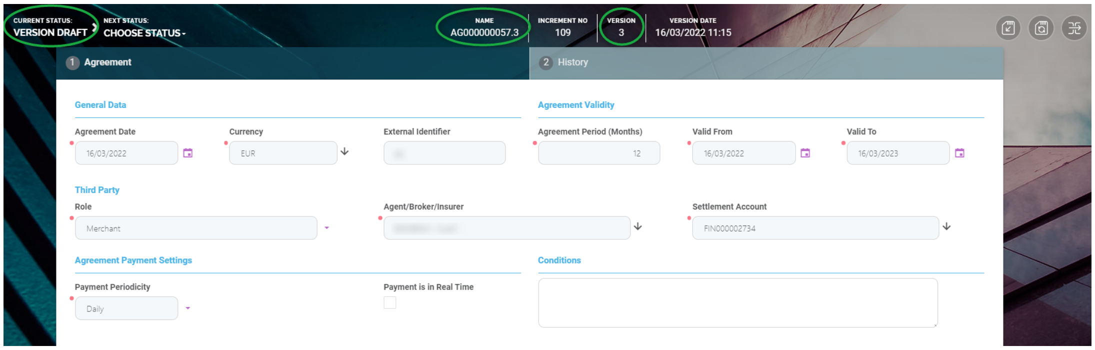
Payment Periodicity: Daily
Payment is in Real Time: □

Conditions

Agreement Pricing

Commission	Currency	Has Clawback	Clawback Commission	Currency	Product Type	Product
		(All)				

A new version of the agreement is created, with **Version Draft** status, thus restarting the life-cycle.



CURRENT STATUS: VERSION DRAFT › NEXT STATUS: CHOOSE STATUS

NAME: AG000000057.3 | INCREMENT NO: 109 | VERSION: 3 | VERSION DATE: 16/03/2022 11:15

General Data

Agreement Date: 16/03/2022
Currency: EUR
External Identifier: [redacted]

Agreement Validity

Agreement Period (Months): 12
Valid From: 16/03/2022
Valid To: 16/03/2023

Third Party

Role: Merchant
Agent/Broker/Insurer: [redacted]
Settlement Account: FIN000002734

Agreement Payment Settings

Payment Periodicity: Daily
Payment is in Real Time: □

Conditions

3. Edit the desired fields in the **Agreement** tab.

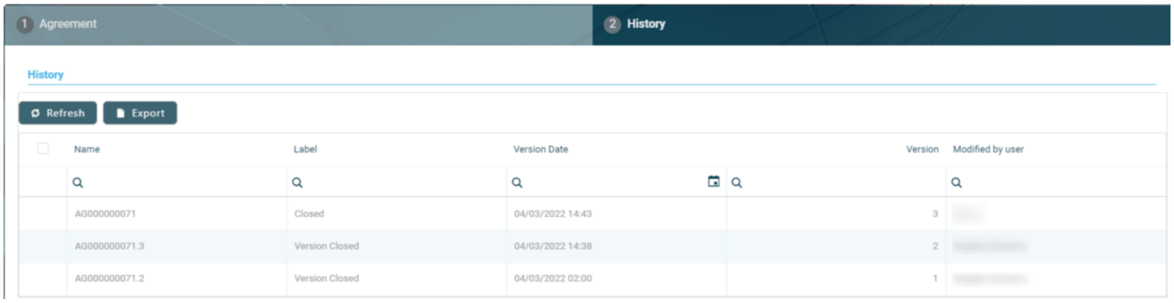
4. Click the **Save and Reload** button.

If the Version Draft record is approved, then the original record transitions into the **Version Closed** status and the secondary version becomes the **Approved** currently active agreement record.

Read more details about versioning a record on the How to Version an Entity Record page.

Viewing a Third-Party Agreement's History

You can view the versions of the agreement, their workflow status, the version creation date, and the user who modified the record, in the third-party agreement's **History** tab. This tab only appears after saving the agreement record.



□	Name	Label	Version Date	Version	Modified by user
	AG000000071	Closed	04/03/2022 14:43	3	[redacted]
	AG000000071.3	Version Closed	04/03/2022 14:38	2	[redacted]
	AG000000071.2	Version Closed	04/03/2022 02:00	1	[redacted]

Here you can track the record's life-cycle and review older versions that are no longer active (for details, see Third-Party Agreements Statuses).

There are no edits allowed in this tab. To view a version of the record, double-click it.

Working with Third-Party Invoices

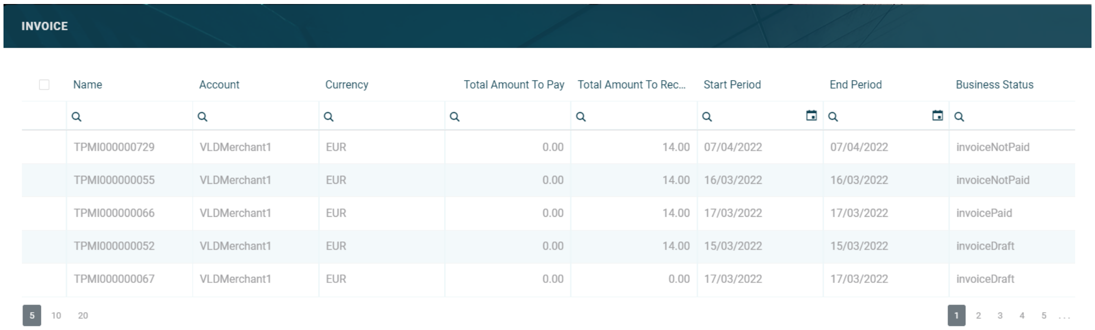
Third-party invoices are the invoices that track the incomes and expenses resulted from contracts based on the bank or financial institution's agreements with third-party entities (agents, brokers, etc.) . Core Banking has a dedicated menu for managing third-party invoices. These third-party invoices are attached to agreements with third-party entities. You can create invoices manually, or allow Core Banking to create the invoices automatically, using a dedicated scheduled job.

The commissions applicable to agreement pricings are automatically calculated by the system as pre-invoice details. The calculation is triggered either when a disbursement event is approved at the contract level (for pricings with `For Disburse = True`), or when the contract itself is approved (for pricings with `For Disburse = False`). The commission is not calculated in that moment, instead, the event's information is recorded in a queue. From here, a specialized job processes each queue record and writes the results as pre-invoice details. These pre-invoice details are automatically added to the invoices when the system creates invoices, or you can add them manually to invoices.

Managing Invoices For Third-Parties

To manage third-party invoices:

1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Click the **Invoice** menu item to open the **Invoices** page.



INVOICE

Name	Account	Currency	Total Amount To Pay	Total Amount To Rec...	Start Period	End Period	Business Status
TPMI000000729	VLDMerchant1	EUR	0.00	14.00	07/04/2022	07/04/2022	invoiceNotPaid
TPMI000000055	VLDMerchant1	EUR	0.00	14.00	16/03/2022	16/03/2022	invoiceNotPaid
TPMI000000066	VLDMerchant1	EUR	0.00	14.00	17/03/2022	17/03/2022	invoicePaid
TPMI000000052	VLDMerchant1	EUR	0.00	14.00	15/03/2022	15/03/2022	invoiceDraft
TPMI000000067	VLDMerchant1	EUR	0.00	0.00	17/03/2022	17/03/2022	invoiceDraft

On the **Invoices** page, you can create a new invoice manually, search, edit, or delete an existing third-party invoice in **Draft** status.

NOTE
Core Banking can also create the invoices automatically, using the TPM Invoices (TPM) scheduled job. This job runs once each night and creates third-party invoices and payments, for the combination of third-party entity/ agreements currency, during the validity of the agreement, on the Payment Day of each agreement, as defined in the third-party agreement's `Payment Periodicity` (daily, monthly, or weekly).

NOTE
Users with the associated role of Loan Admin Officer or Retail Credit Officer can insert, update, or delete third-party invoice records. Users with the other associated Core Banking security roles can only view such records.

Third-Party Invoices Life Cycle and States

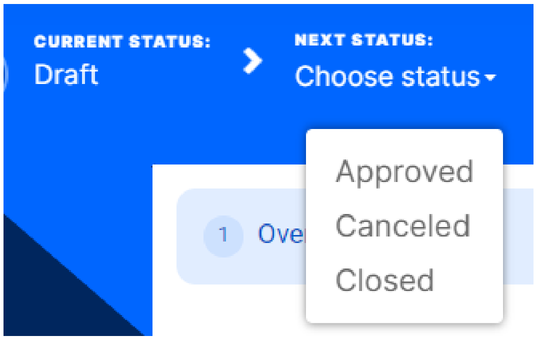
The four-eyes principle is applicable for status transitions of a third-party invoice, meaning that a record should be approved by a second financial institution employee, with higher authorization rights. This is enabled via approval task FintechOS Platform capabilities and thus it is also a financial institution's responsibility to set proper security roles and access rights to its users, in order to make sure that the same user can't insert and also authorize the same record.

A third-party invoice record has the following business workflow statuses:

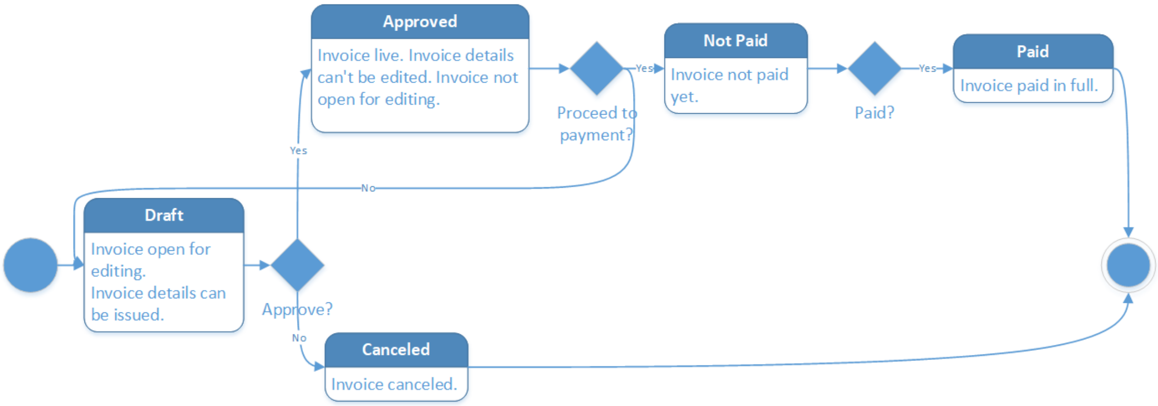
- **Draft** - the status of a newly created invoice record that was not yet sent for approval. While in this status, you can edit the fields from the record's **Invoice** and **Invoice Details** tabs, but no payments can be processed yet. Send the record to approval after editing all the necessary information and adding at least one invoice detail record.
- **Approved** - the status of an invoice record after being authorized by a user with approval competencies. While in this status, you can't edit the record's details. If you need to alter the record's details, change its status back to Draft.
- **Not Paid** - the status of an invoice record after approval and before actually performing the bank account transactions for the due payments.
- **Paid** - the last status of an invoice record after performing the bank account transactions for the due payments. No other transitions are allowed from this status.
- **Canceled** - the last status of a record after manually canceling it straight from the Draft status. No updates are allowed on the record. No other transitions are allowed from this status.

Changing Third-Party Invoice Statuses

You can manage a third-party invoice's life-cycle by changing its status from the top left corner of the screen.



The third-party invoice status transitions are illustrated below:



Creating Third-Party Invoices

Third-party invoices are the invoices that track the incomes and expenses resulted from contracts based on the bank or financial institution's agreements with third-party entities (agents, brokers, etc.) . You can allow Core Banking to create the invoices automatically, or you can create invoices manually. When a disbursement event is approved at the contract level (for pricings with `For Disburse = True`), or when the contract itself is approved (for pricings with `For Disburse = True`), the commission information is placed in a queue. From this queue, the commissions are automatically calculated by the system as pre-invoice details. These calculated pre-invoice details are later attached to invoices, either automatically or manually.

Automatically Create Invoices

Core Banking automatically creates invoices for approved third-party agreements, using a dedicated scheduled job, both for `PaymentOut` and for `PaymentIn`. The automatic invoices contain the same information as the manually added ones, with the difference that `Start Period = End Period = current system date`. The job runs once each night and creates third-party invoices, for the combination of third-party entity/ agreements currency, during the validity of the agreement, on the Payment Day of each agreement, as defined in the third-party agreement's `Payment Periodicity` (daily, monthly, or weekly). The job also creates invoice detail records.

To prevent losing profits, there may be situations when the financial institution claims back all or some of the commission already paid out to third-party entities, due to the fact that the affected contracts were closed before their due date. Core Banking automatically identifies the contract events that determine the clawback (for example, Early Repayment events). To make use of the clawback settings, make sure that you mark the desired transaction types with `Is Clawback Transaction = True`, and those transaction types are selected at the banking product type level or at the banking product level, depending on your agreement pricing definition. Core Banking calculates the clawback commission for each contract and inserts a corresponding invoice detail for the invoice generated for the third-party entity. If no invoice was yet generated for the third-party entity, a new invoice is created, and the invoice details are included there.

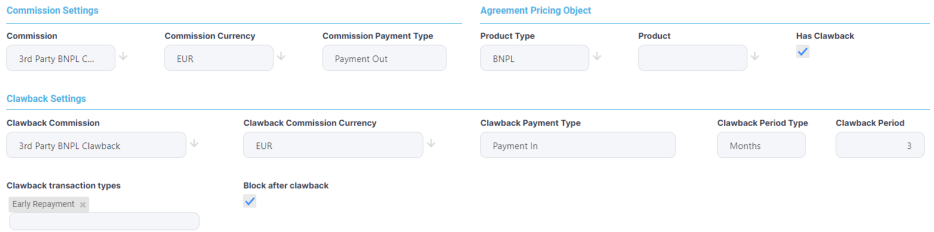
NOTE

If a contract is marked as blocked for further agreements after performing a clawback payment (`Block After Clawback` = `True`), when a clawback commission is paid for this contract, no other third-party commission found on the contract can be invoiced by the system, hence, for the same agreement pricing, no future invoice details are generated.

For any type of transaction performed on the contracts subject to agreements that have `Has Clawback = True`, if the Clawback Period covers the date of the transaction and the contracts are closed, then the system automatically generates an invoice so that the broker is charged.

Example

Let's say you have a transaction that has `Has Clawback = True`, it is included in the product that is captured in the **Agreement Pricing Object** section of the agreement, and it is also captured in the **Clawback Settings**' `Clawback transaction types` field. When a contract is created for one of these products including the specified transaction, Core Banking commissions the third-party entity as defined within the agreement. If the transaction targeted for clawback happens within the time frame resulting from clawback period type and period, Core Banking automatically generates an invoice for the clawback commission.



Commission Settings

Commission	Commission Currency	Commission Payment Type
3rd Party BNPL C...	EUR	Payment Out

Agreement Pricing Object

Product Type	Product	Has Clawback
BNPL		✓

Clawback Settings

Clawback Commission	Clawback Commission Currency	Clawback Payment Type	Clawback Period Type	Clawback Period
3rd Party BNPL Clawback	EUR	Payment In	Months	3

Clawback transaction types	Block after clawback
Early Repayment ×	✓

For a setup like the above, if all the conditions are met and a contract for a Buy Now Pay Later product type is included in the invoice for the agreement and if an Early Repayment transaction is performed within the first 3 months from creating the contract/ generating the initial commission, then Core Banking triggers the clawback automatically.

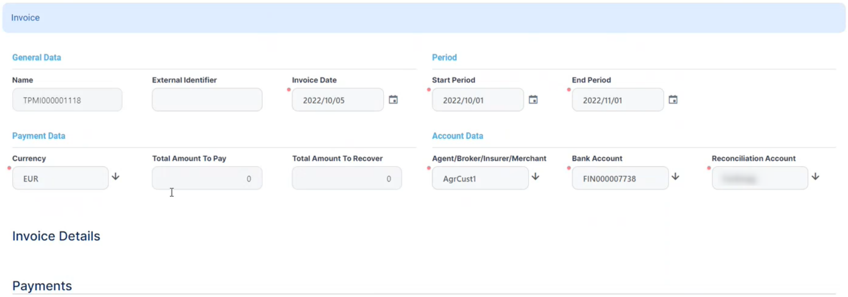
Manually Create Invoices

Using Core Banking's user interface, you can create third-party invoices from a dedicated menu item, or directly from an approved agreement's page, with a few differences for each method, as follows:

Creating Invoices Using a Dedicated Menu

Follow these steps to create new third-party invoice records for any approved agreement:

1. In the FintechOS Portal, click the **Insert** button on the top right side of the **Invoices** page. The **Add Invoice** page is displayed.



Invoice

General Data

Name	External Identifier	Invoice Date
TPMI000001118		2022/10/05

Period

Start Period	End Period
2022/10/01	2022/11/01

Payment Data

Currency	Total Amount To Pay	Total Amount To Recover
EUR	0	0

Account Data

Agent/Broker/Insurer/Merchant	Bank Account	Reconciliation Account
AgrCust1	FIN000007738	

Invoice Details

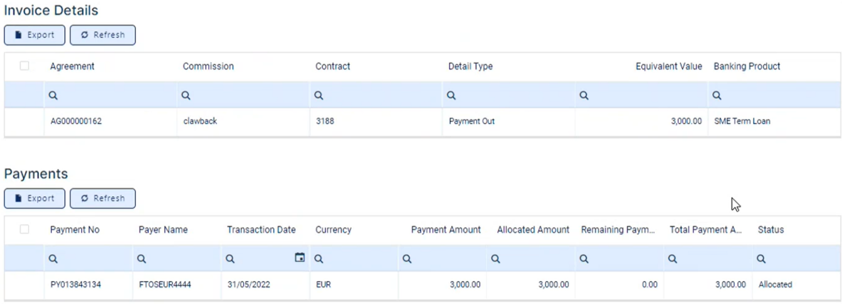
Payments

2. In the **General Data** section of the newly displayed page, fill in, view or modify the following fields:
   - **Name** - Automatically filled in with the name of the invoice record, after saving the record. You can't modify this field.
   - **External Identifier** - Enter an external identifier for the invoice, if needed.
   - **Invoice Date** - Automatically filled in with the current date of the system. You can modify this date.
3. In the **Period** section, fill in the following fields:
   - **Start Period** and **End Period** - Select the starting and the ending date of the interval during which Core Banking filters the contracts that are subject to invoicing. The `Start Period` must be `<= End Period`.
4. In the **Payment Data** section, fill in or view the following fields:
   - **Currency** - Select the currency in which the invoice is to be paid.
   - **Total Amount To Pay** and **Total Amount To Recover** - The total amounts to pay to and to recover from the third-party, expressed in the selected currency. You

can't modify these fields. T hey are automatically calculated by Core Banking based on the invoice details entered later, after saving the invoice record.

5. In the **Account Data** section, fill in the following fields:
    - **Agent/ Broker/ Insurer/ Merchant** - Select the third-party entity for whom you are creating the invoice.
    - **Bank Account** - Select the third-party entity's settlement account. You can only choose from the list of the entity's accounts opened in the selected currency.
    - **Reconciliation Account** - Select the financial institution's reconciliation account. You can only choose from the list of the accounts opened in the selected currency.
6. Click the **Save and Reload** button.

   After saving the invoice record, the **Invoice** page also displays the **Invoice Details** section, containing a list with all the invoice details attached to the invoice, and the **Payments** section, containing information about the payments performed by Core Banking.



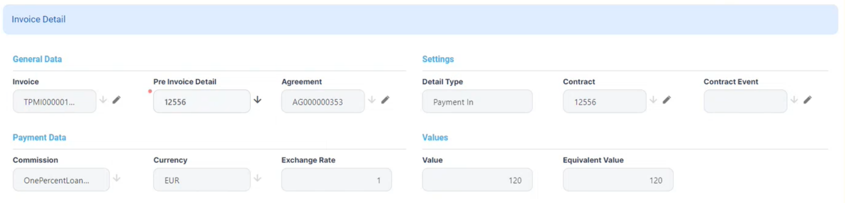
Invoice Details

Agreement	Commission	Contract	Detail Type	Equivalent Value	Banking Product
AG000000162	clawback	3188	Payment Out	3,000.00	SME Term Loan

Payments

Payment No	Payer Name	Transaction Date	Currency	Payment Amount	Allocated Amount	Remaining Paym...	Total Payment A...	Status
PY013843134	FTOSEUR4444	31/05/2022	EUR	3,000.00	3,000.00	0.00	3,000.00	Allocated

7. Continue by adding an invoice detail to the invoice in **Draft** status. Click **Insert** within the **Invoice Details** section on the **Invoice** page.
   The **Invoice Detail** page is displayed.



Invoice Detail

General Data

Invoice: TPMI000001...

Pre Invoice Detail: 12556

Agreement: AG000000353

Settings

Detail Type: Payment In

Contract: 12556

Contract Event:

Payment Data

Commission: OnePercentLoan...

Currency: EUR

Exchange Rate: 1

Values

Value: 120

Equivalent Value: 120

8. On the **Invoice Detail** page's **General Data** section, select the **Pre Invoice Detail** you want to use for the invoice from the list of pre-invoice detail records created for the selected agreement. All the other fields are automatically filled in after selecting the pre-invoice detail and you can't modify them.
9. On the **Invoice Detail** page's **General Data** section, view the following automatically filled in fields: **Invoice** and **Agreement**.
10. In the **Settings** section, view the following automatically filled in fields: **Detail Type**, **Contract**, and **Contract Event**.
11. In the **Payment Data** section, view in the following automatically filled in fields: **Commission**, **Currency**, and **Exchange Rate**, the exchange rate for Commission Currency to Invoice Currency valid on the date of the invoice, or the latest exchange rate recorded for Commission Currency to Invoice Currency.
12. In the **Values** section, view in the following automatically filled in fields: **Value**, the calculated commission value, and **Equivalent Value**, commission's equivalent value in the invoice's currency, calculated by Core Banking as (`Exchange Rate * Value`).

NOTE

`Equivalent Value` is summed up to `Total Amount To Pay` if `Detail Type = Payment Out`.

`Equivalent Value` is summed up to `Total Amount To Recover` if `Detail Type = Payment In`.

13. Click the **Save and Close** button.

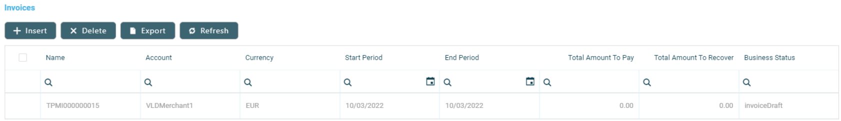
14. Change the status of the invoice record to **Approved** to allow Core Banking to automatically process the payments.

> **NOTE**
> You can create as many invoice details as needed for an invoice, but you can create only one invoice detail for the combination between a contract, a commission and a detail type. Core Banking prevents you to create duplicate invoice detail records containing the same combination of `Contract`, `Commission`, and `Detail Type` values.

Creating Invoices Using the Agreement Page

Follow these steps to create new third-party invoice records directly within the **Agreement** page of an approved agreement record:

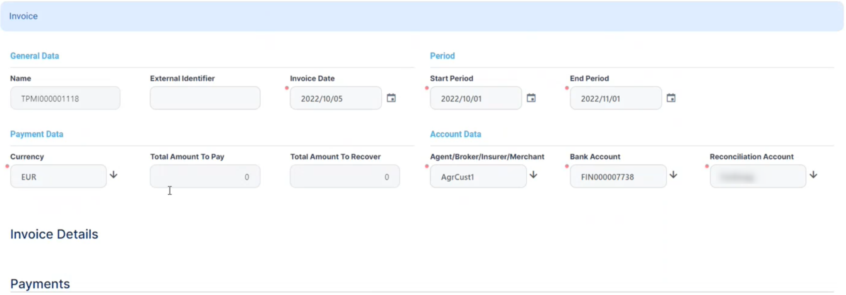
1. Open an agreement in **Approved** status and scroll to its **Invoices** section. Here you can insert, delete or export invoices for the selected agreement.



□	Name	Account	Currency	Start Period	End Period	Total Amount To Pay	Total Amount To Recover	Business Status
	TPMI000000015	VLDMerchant1	EUR	10/03/2022	10/03/2022	0.00	0.00	invoiceDraft

The section displays information about the invoice: name, third-party, currency, start and end period, total amount to pay to the third-party and to recover by the financial institution, record's business status.

2. Click **Insert** to display the **Add Invoice** page:



Invoice

General Data

Name: TPMI000001118

External Identifier:

Invoice Date: 2022/10/05

Period

Start Period: 2022/10/01

End Period: 2022/11/01

Payment Data

Currency: EUR

Total Amount To Pay: 0

Total Amount To Recover: 0

Account Data

Agent/Broker/Insurer/Merchant: AgrCust1

Bank Account: FIN000007738

Reconciliation Account: [redacted]

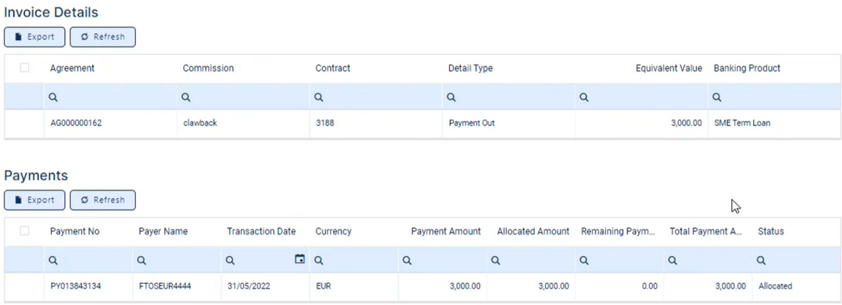
Invoice Details

Payments

3. In the **General Data** section of the newly displayed page, fill in, view or modify the following fields:
   - **Name** - Automatically filled in with the name of the invoice record, after saving the record. You can't modify this field.
   - **External Identifier** - Enter an external identifier for the invoice, if needed.
   - **Invoice Date** - Automatically filled in with the current date of the system. You can modify this date.
4. In the **Period** section, fill in the following fields:
   - **Start Period** and **End Period** - Select the starting and the ending date of the interval during which Core Banking filters the contracts that are subject to invoicing. The `Start Period` must be <= `End Period`.
5. In the **Payment Data** section, fill in or view the following fields:
   - **Currency** - Select the currency in which the invoice is to be paid.
   - **Total Amount To Pay** and **Total Amount To Recover** - The total amounts to pay to and to recover from the third-party, expressed in the selected currency. You can't modify these fields. T hey are automatically calculated by Core Banking based on the invoice details entered later, after saving the invoice record.

6. In the **Account Data** section, view or fill in the following fields:
   - **Agent/ Broker/ Insurer/ Merchant** - Automatically filled in with the third-party entity for whom you are creating the invoice. You can't modify this field.
   - **Bank Account** - Select the third-party entity's settlement account. You can only choose from the list of the entity's accounts opened in the selected currency.
   - **Reconciliation Account** - Select the financial institution's reconciliation account. You can only choose from the list of the accounts opened in the selected currency.
7. Click the **Save and Reload** button.

   After saving the invoice record, the **Invoice** page also displays the **Invoice Details** section, containing a list with all the invoice details attached to the invoice, and the **Payments** section, containing information about the payments performed by Core Banking.



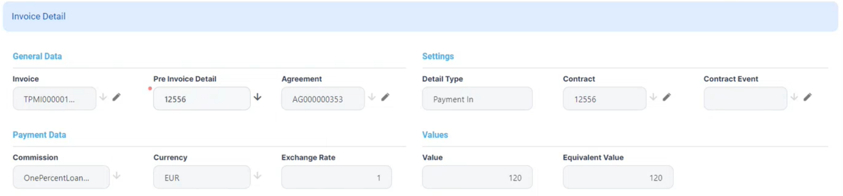
Invoice Details

Agreement	Commission	Contract	Detail Type	Equivalent Value	Banking Product
AG000000162	clawback	3188	Payment Out	3,000.00	SME Term Loan

Payments

Payment No	Payer Name	Transaction Date	Currency	Payment Amount	Allocated Amount	Remaining Paym...	Total Payment A...	Status
PY013843134	FTOSEUR4444	31/05/2022	EUR	3,000.00	3,000.00	0.00	3,000.00	Allocated

8. Continue by adding an invoice detail to the invoice in **Draft** status. Click **Insert** within the **Invoice Details** section on the **Invoice** page.
   The **Invoice Detail** page is displayed.



Invoice Detail

General Data

Invoice: TPMI000001...

Pre Invoice Detail: 12556

Agreement: AG000000353

Settings

Detail Type: Payment In

Contract: 12556

Contract Event:

Payment Data

Commission: OnePercentLoan...

Currency: EUR

Exchange Rate: 1

Values

Value: 120

Equivalent Value: 120

9. On the **Invoice Detail** page's **General Data** section, select the **Pre Invoice Detail** you want to use for the invoice from the list of pre-invoice detail records created for the selected agreement. All the other fields are automatically filled in after selecting the pre-invoice detail and you can't modify them.
10. On the **Invoice Detail** page's **General Data** section, view the following automatically filled in fields: **Invoice** and **Agreement**.
11. In the **Settings** section, view the following automatically filled in fields: **Detail Type**, **Contract**, and **Contract Event**.
12. In the **Payment Data** section, view in the following automatically filled in fields: **Commission**, **Currency**, and **Exchange Rate**, the exchange rate for Commission Currency to Invoice Currency valid on the date of the invoice, or the latest exchange rate recorded for Commission Currency to Invoice Currency.
13. In the **Values** section, view in the following automatically filled in fields: **Value**, the calculated commission value, and **Equivalent Value**, commission's equivalent value in the invoice's currency, calculated by Core Banking as (`Exchange Rate * Value`).

> **NOTE**
>
> `Equivalent Value` is summed up to `Total Amount To Pay` if `Detail Type = Payment Out`.

`Equivalent Value` is summed up to `Total Amount To Recover` if `Detail Type = Payment In`.

14. Click the **Save and Close** button.

15. Change the status of the invoice record to **Approved** to allow Core Banking to automatically process the payments.

NOTE
You can create as many invoice details as needed for an invoice, but you can create only one invoice detail for the combination between a contract, a commission and a detail type. Core Banking prevents you to create duplicate invoice detail records containing the same combination of `Contract`, `Commission`, and `Detail Type` values.

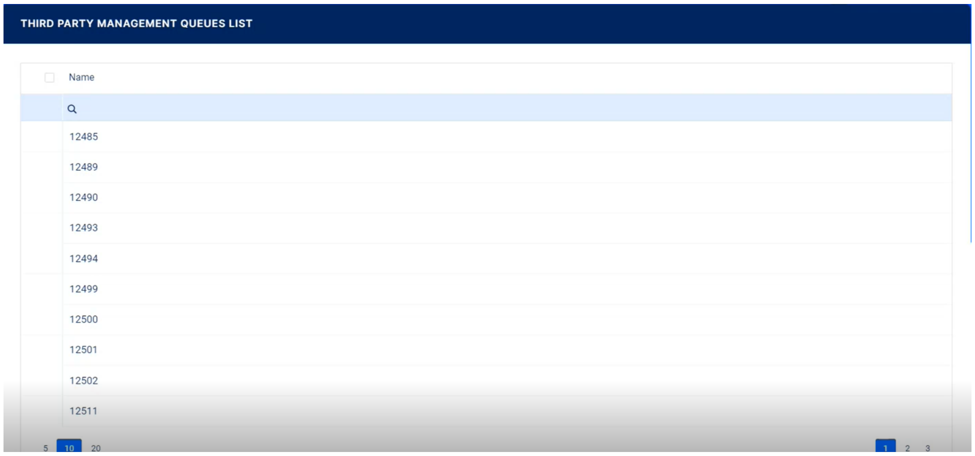
Viewing Third-Party Management Queue Records

Whenever you approve a disbursement at the contract level (for pricings with `For Disburse = True`), or when you approve the contract itself (for pricings with `For Disburse = False`), a trigger signals the system to record that event's information in a queue. From here, a specialized job processes each queue record, calculates the third-party commission value applicable to the event, and writes the results as a pre-invoice detail. Later, these pre-invoice details are automatically added to the invoices when the system creates invoices, or you can add them manually to invoices.

To view the list of third-party management queue records that were not processed yet by the specialized job, follow these steps:

1. In FintechOS Portal, click the main menu icon and expand the **Admin Configurations** menu.

2. Click the **Third-Party Management Queue** menu item to open the **Third-Party Management Queues List** page.

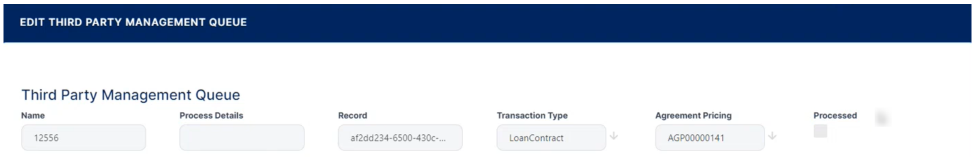


THIRD PARTY MANAGEMENT QUEUES LIST

Name
12485
12489
12490
12493
12494
12499
12500
12501
12502
12511

3. Double-click a record to open it for viewing. You can't perform any other operation on a queue item.

4. On the newly displayed **Edit Third-Party Management Queue** page, view the following information about a record that has to be processed by the system to calculated the value of the commission:



EDIT THIRD PARTY MANAGEMENT QUEUE

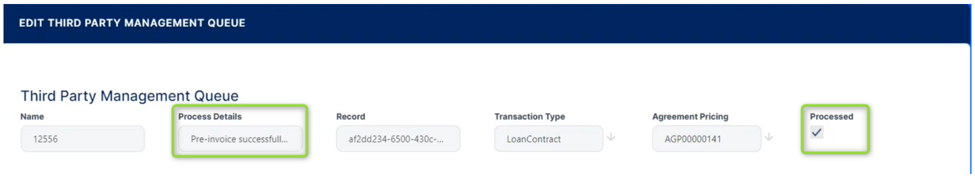
Third Party Management Queue

Name	Process Details	Record	Transaction Type	Agreement Pricing	Processed
12556		af2dd234-6500-430c-...	LoanContract	AGP00000141	□

- **Name** - the number of the contract that is the object of the third-party agreement.
- **Process Details** - any details after the processing of the record by the specialized job.
- **Record** - the id of the contract or of the contract event whose approval triggered the placing of this record in the queue.
- **Transaction Type** - the type of transaction that triggered the placing in the queue.
- **Agreement Pricing** - the name of the agreement pricing applicable to the contract.

- **Processes** - a checkbox that signals whether the record was already processed by the specialized job (for `True` value) or not.

5. After the specialized job processes the queue record, you can see it marked as processed.



EDIT THIRD PARTY MANAGEMENT QUEUE

Third Party Management Queue

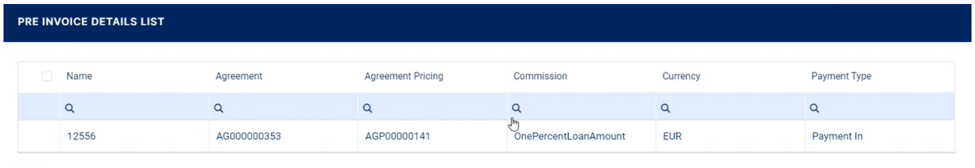
Name	Process Details	Record	Transaction Type	Agreement Pricing	Processed
12556	Pre-invoice successfull...	af2dd234-6500-430c-...	LoanContract	AGP00000141	✓

Viewing Pre-Invoice Detail Records

The commissions are automatically calculated as pre-invoice details after the system processes the third-party management queue records. These pre-invoice details are automatically added to the invoices when the system creates invoices, or you can add them manually to invoices.

To view the list of pre-invoice detail records that are not associated to an invoice yet, follow these steps:

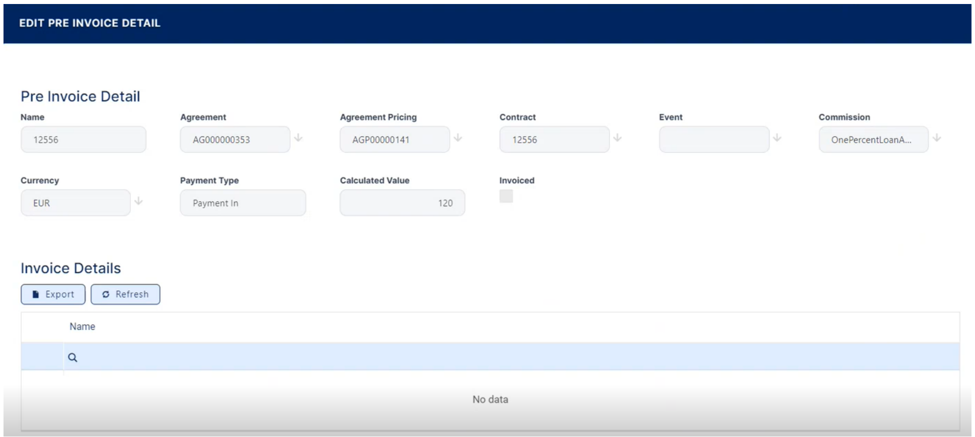
1. In FintechOS Portal, click the main menu icon and expand the **Core Banking Operational** menu.
2. Expand the **Third-Party Agreements** menu and click the **Pre-Invoice Detail** menu item to open the **Pre-Invoice Details List** page.



PRE INVOICE DETAILS LIST

Name	Agreement	Agreement Pricing	Commission	Currency	Payment Type
12556	AG000000353	AGP00000141	OnePercentLoanAmount	EUR	Payment In

3. Double-click a record to open it for viewing. You can't perform any other operation on a pre-invoce detail record.
4. On the newly displayed **Edit Pre-Invoice Detail** page, view the following information about a calculated commission:



EDIT PRE INVOICE DETAIL

Pre Invoice Detail

Name	Agreement	Agreement Pricing	Contract	Event	Commission
12556	AG000000353	AGP00000141	12556		OnePercentLoanA...
Currency	Payment Type	Calculated Value	Invoiced		
EUR	Payment In	120	□		

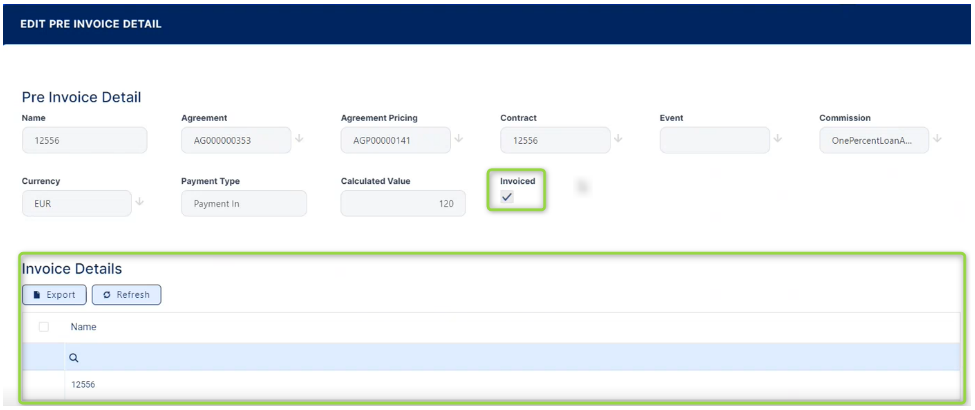
Invoice Details

Name
No data

- **Name** - the name of the third-party management queue record processed for the calculation of this pre-invoice detail record.
- **Agreement** - the number of the agreement on which this record is based.
- **Agreement Pricing** - the name of the agreement pricing applicable to the contract.
- **Contract** - the number of the contract that is the object of the third-party agreement.
- **Event** - the number of the contract event whose approval triggered the calculation of the commission.
- **Commission** - the third-party commission used for commission calculation.
- **Currency** - the currency code of the calculated commission.
- **Payment Type** - the type of payment to be performed: `Payment In` for payments from the third-party's settlement account, or `Payment Out` for payments into the third-party's settlement account.
- **Calculated Value** - the calculated value of the commission, to be applied to the invoice.

- **Processes** - a checkbox that signals whether the record was already processed by the specialized job (for True value) or not.

5. In the **Invoice Details** section of the same page, you can see the number of the invoice to which this pre-invoice detail record was attached, for example after running the TPM Invoices job. In that case, the Invoiced checkbox is also selected.



EDIT PRE INVOICE DETAIL

Pre Invoice Detail

Name	Agreement	Agreement Pricing	Contract	Event	Commission
12556	AG000000353	AGP00000141	12556		OnePercentLoanA...
Currency	Payment Type	Calculated Value	Invoiced		
EUR	Payment In	120	☑		

Invoice Details

□	Name
	12556

> **NOTE**
>
> If an invoice is canceled, all the pre-invoice details attached to it are marked with Invoiced = False, so that they can be attached to another invoice.

Managing Automatic Invoice Payments

Core Banking identifies the invoices that are not paid on the day of payment specified in the agreement, using the **Charge Not Paid Invoices** service within the **TPM Invoices (TPM)** scheduled job. The system can automatically generate and process the payments for the invoices. The method of operating these payments depends on the setting of the ThirdPartyPaymentIsNet system parameter. The value of the parameter specifies whether Core Banking should generate one or two bank account transactions and payments for a third-party agreement invoice when the invoice's status is changed from **Approved** to **Unpaid**.

IMPORTANT!
Depending on the `Third Party Invoice` transaction type's `Real Time Process` field's value, the transactions made on bank accounts are processed in real-time, when the transaction is approved, or at a later time, after being placed in a queue and taken for processing by a specialized scheduled job.

ThirdPartyPaymentIsNet = False

If `ThirdPartyPaymentIsNet =False`, when the invoice's status is changed from **Approved** to **Unpaid**, Core Banking generates one or two bank account transactions with the corresponding payments, as follows:

- If `Total Amount To Recover > 0`, one bank account transaction is generated, with **source** account = `Settlement Account` and **destination** account = `Reconciliation Account` with the value of `Total Amount To Recover`, and with status `Approved`. A payment is generated.
- If `Total Amount To Pay > 0`, another bank account transaction with **source** account = `Reconciliation Account` and **destination** account = `Settlement Account` with the value of `Total Amount To Pay`, and with status `Approved`. A second payment is generated.

NOTE
When `Total Amount To Pay > 0`, `Total Amount To Recover > 0` , and both payments' statuses become **Allocated**, the invoice's status becomes **Paid**.

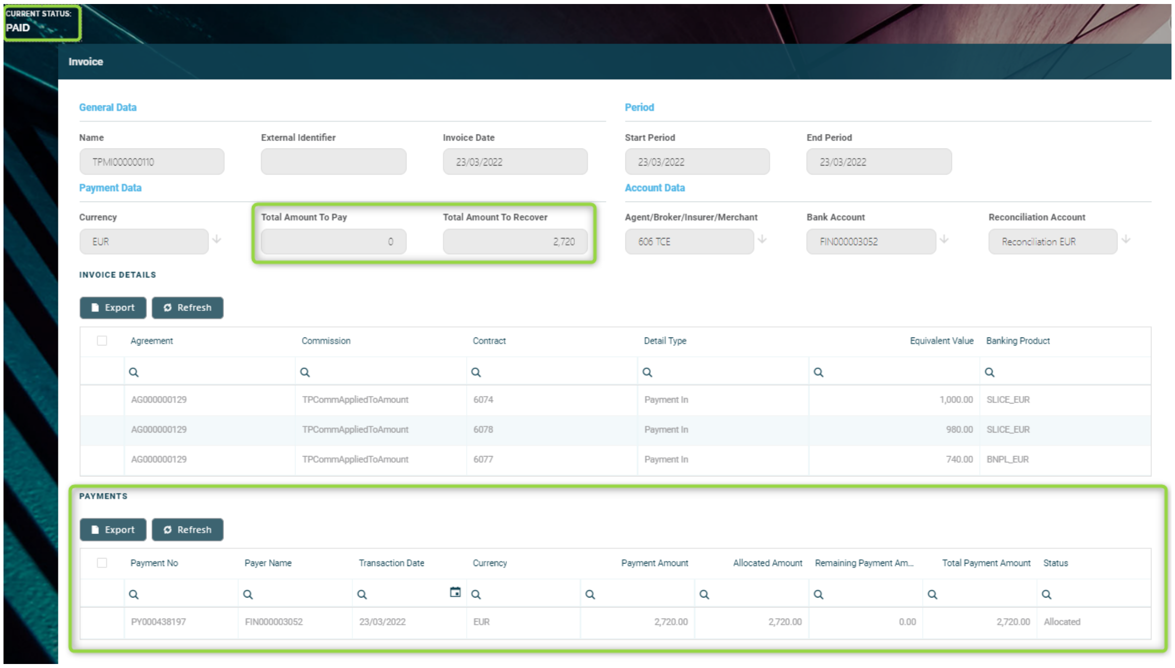
ThirdPartyPaymentIsNet = True

If `ThirdPartyPaymentIsNet =True`, when the invoice's status is changed from **Approved** to **Unpaid**, Core Banking calculates the difference between `Total Amount To Recover` and `Total Amount To Pay`. Only one bank account transaction is generated and only one payment, representing the non-zero value between the `Total Amount To Recover` and the `Total Amount To Pay`, as follows:

- If `Total Amount To Recover - Total Amount To Pay > 0`, a new bank account transaction is generated with **source** account = `Settlement Account` and **destination** account = `Reconciliation Account`, and a payment is generated for the invoice.
- If `Total Amount To Recover - Total Amount To Pay = 0`, a bank account transaction is generated, and the transaction's status changes to **Paid**.
- If `Total Amount To Recover - Total Amount To Pay < 0`, a new bank account transaction is generated with **source** account = `Reconciliation Account` and **destination** account = `Settlement Account`, and a payment is generated for the invoice.

> **NOTE**
> When the payment's status becomes **Allocated**, the invoice's status becomes **Paid**.

After automatically creating the payment records, Core Banking displays them for each invoice in the **Invoice** page's **Payments** section:



CURRENT STATUS:
PAID

Invoice

General Data

Name: TPMI000000110
External Identifier:
Invoice Date: 23/03/2022

Period

Start Period: 23/03/2022
End Period: 23/03/2022

Payment Data

Currency: EUR
Total Amount To Pay: 0
Total Amount To Recover: 2,720

Account Data

Agent/Broker/Insurer/Merchant: 606 TCE
Bank Account: FIN000003052
Reconciliation Account: Reconciliation EUR

INVOICE DETAILS

Agreement	Commission	Contract	Detail Type	Equivalent Value	Banking Product
AG000000129	TPCommAppliedToAmount	6074	Payment In	1,000.00	SLICE_EUR
AG000000129	TPCommAppliedToAmount	6078	Payment In	980.00	SLICE_EUR
AG000000129	TPCommAppliedToAmount	6077	Payment In	740.00	BNPL_EUR

PAYMENTS

Payment No	Payer Name	Transaction Date	Currency	Payment Amount	Allocated Amount	Remaining Payment Am...	Total Payment Amount	Status
PY000438197	FIN000003052	23/03/2022	EUR	2,720.00	2,720.00	0.00	2,720.00	Allocated

Each payment record in the list displays information about the payment number, payer's bank account name, transaction date, currency, payment amount, allocated amount, remaining payment amount, total payment amount, and status.

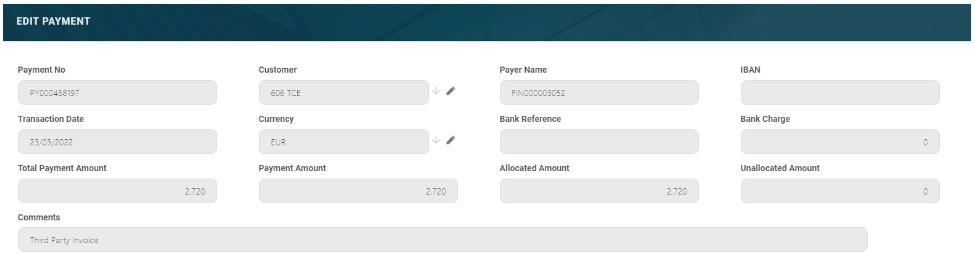
In the **Payments** section, you can search and open for viewing existing payment records, or delete payments in **Draft** status.

> **NOTE**
> You can't edit any of the fields of a payment.
> Any payment with a status different than **Draft** cannot be deleted

Viewing Third-Party Invoice Payments

To view a third-party invoice payment record, follow these steps:

1. On the **Invoice** page's **Payments** section, double-click the desired payment. The **Payment** page is displayed.



EDIT PAYMENT

Payment No	Customer	Payer Name	IBAN
PY000438197	606 TCE	FIN000003052	
Transaction Date	Currency	Bank Reference	Bank Charge
23/03/2022	EUR		0
Total Payment Amount	Payment Amount	Allocated Amount	Unallocated Amount
2,720	2,720	2,720	0
Comments			
Third Party Invoice			

2. View the following information about the selected payment:
   - **Payment No** - The number of the payment.
   - **Customer** - The name of the third-party entity associated with the payment.
   - **Payer Name** - The number of the payer bank account.
   - **IBAN** - The IBAN of the account where the money is being paid.
   - **Transaction Date** - The date of the payment transaction.
   - **Currency** - The currency of the payment.
   - **Bank Reference** - The bank reference for the payment.

- **Bank Charge** - The amount charged by the bank for performing this transaction.
- **Total Payment Amount** - The sum of the payment amount and the bank charge value.
- **Payment Amount** - The amount of the payment.
- **Allocated Amount** - The amount that was already allocated as a contract's repayment for a notification for the selected customer.
- **Unallocated Amount** - The amount that remains to be allocated as a contract's repayment for a notification for the selected customer.
- **Comments** - Any comments referring to the payment.

Dashboards and Reports

Core Banking facilitates user interaction with a series of in-built dashboards and reports. According to their specific destination, they aid the bank employees in their daily tasks, displaying important, up-to-date information on the statuses of different contracts, events, limits, needed approval tasks, generating reports or offering easy navigation through a button to record creation pages.

These dashboards can be accessed from the FintechOS Portal's **Home** page in accordance with each user's specific access rights.

The following dashboards and reports come along with your Core Banking package:

- **Contracts** - displays a list of the contracts along with a pie-chart specifying the number of contracts in each business status, a list of contract approval requests and a button to access the **Add Contract** page.
- **Customer Limits** - displays a list of the existing customer limit records, a list of the customer limit approval requests and a button for adding new customer limits.
- **Soon to Expire Overdrafts** - displays a list of contracts based on `current accounts with overdraft` banking products whose overdraft functionality is about to expire.
- **Credit Facility Dashboard** - displays a list of the credit facility records along with a pie-chart specifying the number of credit facilities in each business status, separate lists of credit facility approval requests, utilizations and utilizations approval requests, and a button to access the **Create Credit Facility** page.
- **Reports** - contains links to a series of reports such as repayment notifications past due, collaterals in default, limits, closure of contracts, future installments or past due installments.
- **Records To Be Purged** - displays the list of records in `Draft` status that are scheduled to be deleted at the current day's end, grouped on tabs specific for each transaction type: disbursement, early repayments, top-ups, early termination for deposits, loan contracts, payment holidays, reschedule overdue, withdraws, transfers, returned amount or goods, or agreements. Also displays tabs with agreement records in `Draft` status that are scheduled to be purged.

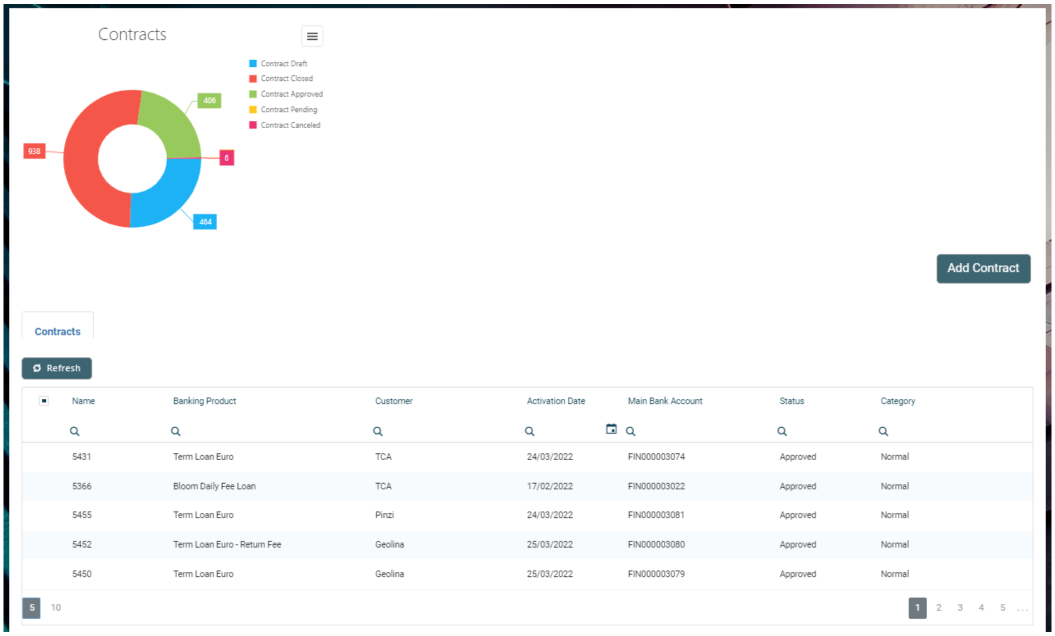
- **Third Party Agreements** - displays a list of the third-party agreements created in the system along with a pie-chart specifying the number of agreements in each business status, and a button to access the **Creating Agreements For Third-Parties** page.
- **Loan Admin Officer Dashboard** - focuses on improving users' experience and productivity for users with the associated role of **Loan Admin Officer** in day-to-day tasks, displaying important notices, overview information about contracts, customers, collateral evaluations, credit facilities, third-party agreements, the user's upcoming tasks, calendar, as well as an integrated chat with colleagues.

Contracts

The **Contracts** dashboard displays a list of the contracts created in the system and a list of contract approval requests. The lists can be filtered on every column. Access records from the lists by double-clicking them.

The **Add Contract** button facilitates your access to the **Create Contract** page, where you can create new contracts.

The dashboard also shows a visual of the contracts within the system, displaying a pie-chart that specifies the number of contracts in each status: `Contract Draft`, `Contract Closed`, `Contract Approved` , `Contract Pending` and `Contract Canceled`.



Name	Banking Product	Customer	Activation Date	Main Bank Account	Status	Category
5431	Term Loan Euro	TCA	24/03/2022	FIN000003074	Approved	Normal
5366	Bloom Daily Fee Loan	TCA	17/02/2022	FIN000003022	Approved	Normal
5455	Term Loan Euro	Pinzi	24/03/2022	FIN000003081	Approved	Normal
5452	Term Loan Euro - Return Fee	Geolina	25/03/2022	FIN000003080	Approved	Normal
5450	Term Loan Euro	Geolina	25/03/2022	FIN000003079	Approved	Normal

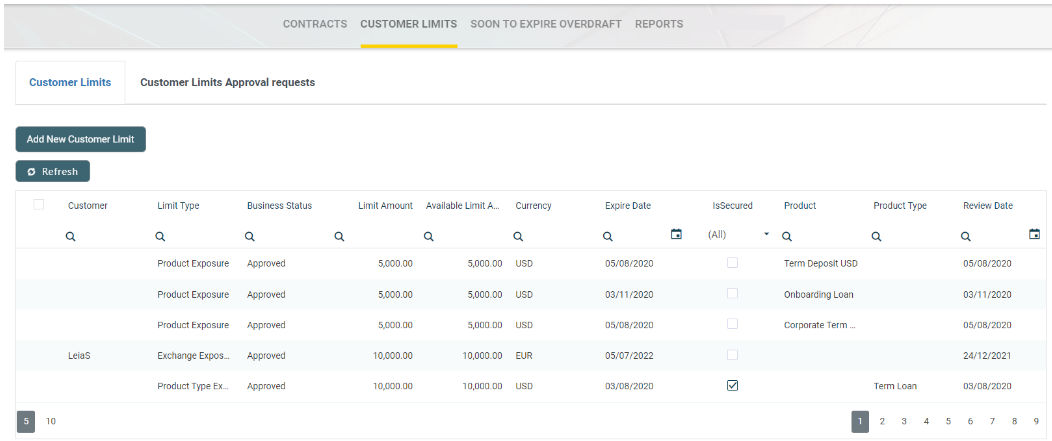
This dashboard can be accessed by users with the following predefined security roles, but note that some actions may be limited according to the role setup:

- Loan Admin Officer
- Supervisor Corporate Officer
- Supervisor Retail Loans Officer
- Corporate Credit Officer
- Retail Credit Officer
- Supervisor Risk Officer
- Risk Officer.

Customer Limits

The **Customer Limits** dashboard displays a list of the customer limit records created in the system and a list of customer limit approval requests. The lists can be filtered on every column. Access records from the lists by double-clicking them.

The **Add New Customer Limit** button helps you add new customer limits.



□	Customer	Limit Type	Business Status	Limit Amount	Available Limit A...	Currency	Expire Date	IsSecured	Product	Product Type	Review Date
								(All)			
		Product Exposure	Approved	5,000.00	5,000.00	USD	05/08/2020	□	Term Deposit USD		05/08/2020
		Product Exposure	Approved	5,000.00	5,000.00	USD	03/11/2020	□	Onboarding Loan		03/11/2020
		Product Exposure	Approved	5,000.00	5,000.00	USD	05/08/2020	□	Corporate Term ...		05/08/2020
	LeiaS	Exchange Expos...	Approved	10,000.00	10,000.00	EUR	05/07/2022	□			24/12/2021
		Product Type Ex...	Approved	10,000.00	10,000.00	USD	03/08/2020	☑		Term Loan	03/08/2020

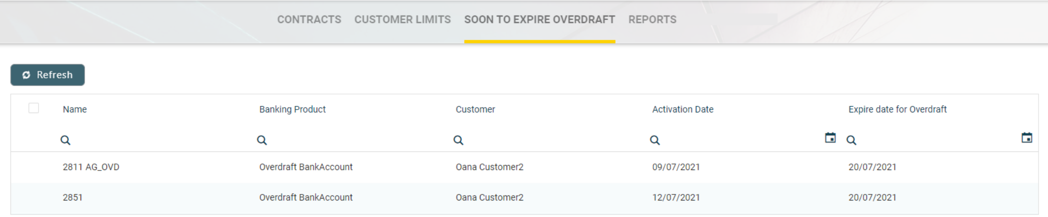
This dashboard can be accessed by users with the following predefined security roles, but note that some actions may be limited according to the role setup:

- Loan Admin Officer
- Supervisor Corporate Officer
- Corporate Credit Officer
- Supervisor Risk Officer
- Risk Officer.

Soon to Expire Overdrafts

The **Soon to Expire Overdrafts** dashboard displays a list of the contracts created in the system based on `current account with overdraft` banking products whose overdraft functionality is about to expire. The Core Banking system parameter `CurrentAccount_WithOverdraft_DaysBeforeExpire` determines the number of days before overdraft expiration when the contract can be displayed in this dashboard.

The lists can be filtered on every column. Access records from the lists by double-clicking them.



Name	Banking Product	Customer	Activation Date	Expire date for Overdraft
2811 AG_OVD	Overdraft BankAccount	Oana Customer2	09/07/2021	20/07/2021
2851	Overdraft BankAccount	Oana Customer2	12/07/2021	20/07/2021

This dashboard can be accessed by users with the following predefined security roles, but note that some actions may be limited according to the role setup:

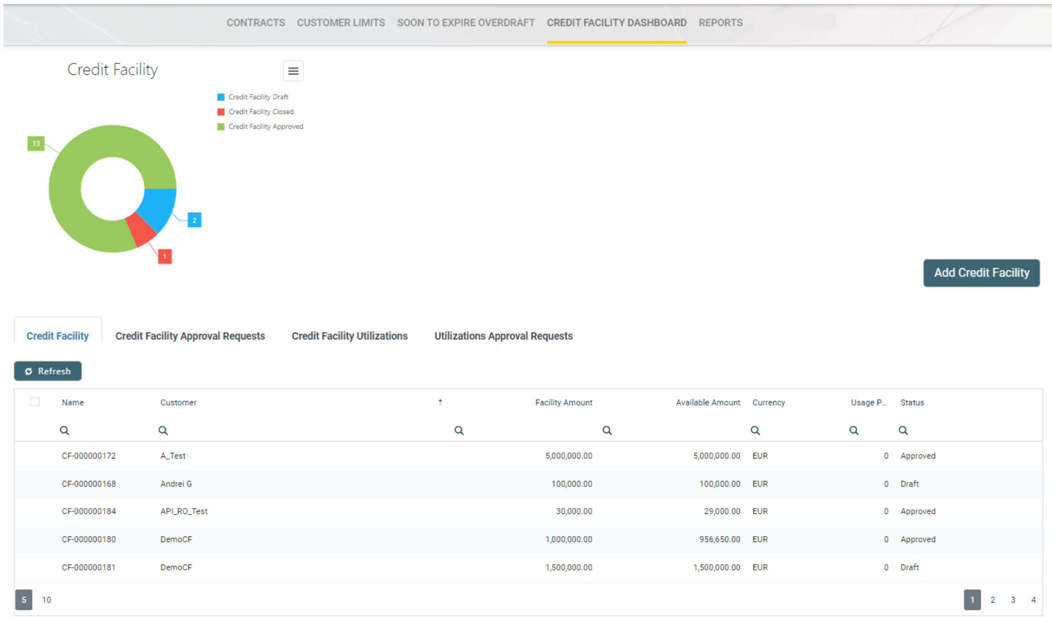
- Loan Admin Officer
- Supervisor Corporate Officer
- Supervisor Retail Loans Officer
- Corporate Credit Officer
- Retail Credit Officer
- Supervisor Risk Officer
- Risk Officer.

Credit Facility Dashboard

The **Credit Facility** dashboard displays a list of the credit facility records created in the system. It also displays separate lists of credit facility approval requests, utilizations and utilizations approval requests. The lists can be filtered on every column. Access records from the lists by double-clicking them.

The **Add Credit Facility** button facilitates your access to the **Create Credit Facility** page, where you can create new credit facilities.

The dashboard also shows a visual of the credit facilities within the system, displaying a pie-chart that specifies the number of records in each status: `Credit Facility Draft`, `Credit Facility Closed`, and `Credit Facility Approved`.



□	Name	Customer	↑	Facility Amount	Available Amount	Currency	Usage P...	Status
	CF-000000172	A_Test		5,000,000.00	5,000,000.00	EUR	0	Approved
	CF-000000168	Andrei G		100,000.00	100,000.00	EUR	0	Draft
	CF-000000184	API_RO_Test		30,000.00	29,000.00	EUR	0	Approved
	CF-000000180	DemoCF		1,000,000.00	956,650.00	EUR	0	Approved
	CF-000000181	DemoCF		1,500,000.00	1,500,000.00	EUR	0	Draft

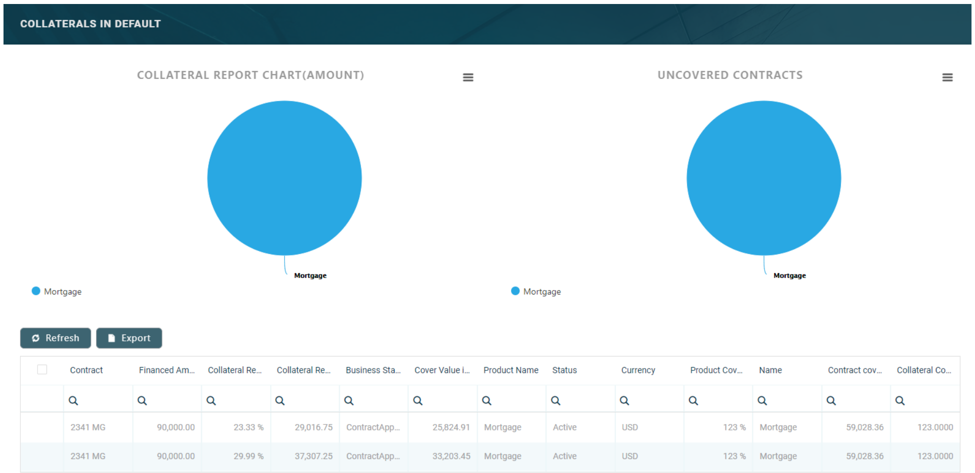
This dashboard can be accessed by users with the following predefined security roles, but note that some actions may be limited according to the role setup:

- Loan Admin Officer
- Supervisor Corporate Officer
- Corporate Credit Officer
- Supervisor Risk Officer
- Risk Officer.

Reports

The **Reports** dashboard contains links to a series of reports:

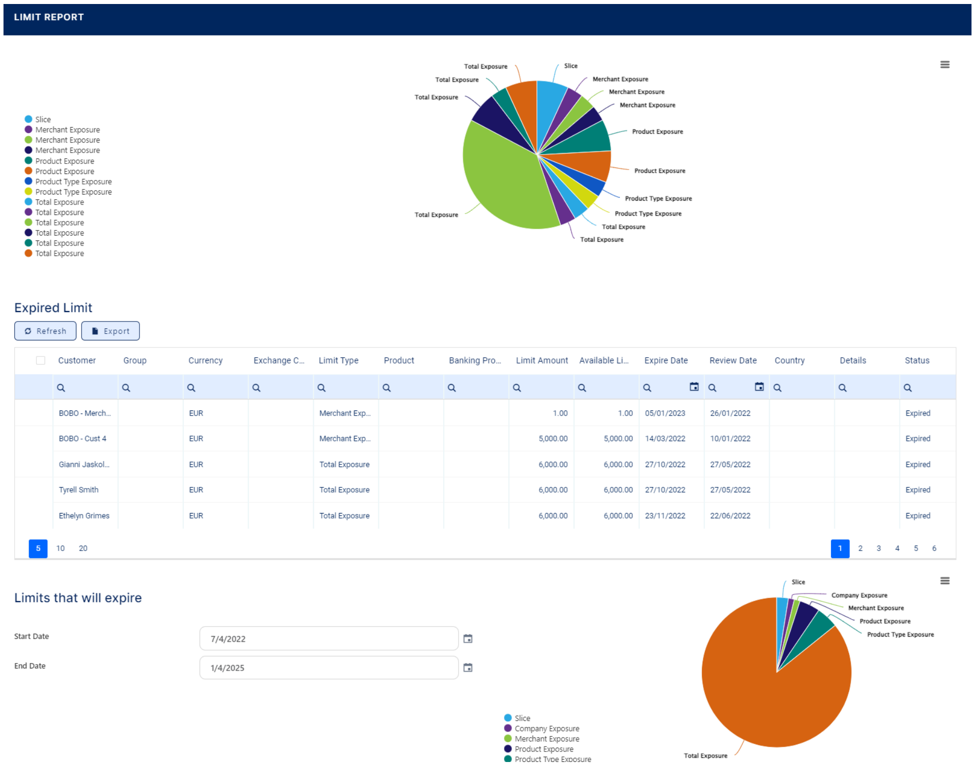
- **Report Days Past Due** - Click this link to display the report of repayment notifications past due date.
- **Collaterals in Default** - Click this link to display the report of collateral records in default.



COLLATERALS IN DEFAULT

□	Contract	Financed Am...	Collateral Re...	Collateral Re...	Business Sta...	Cover Value i...	Product Name	Status	Currency	Product Cov...	Name	Contract cov...	Collateral Co...
	2341 MG	90,000.00	23.33 %	29,016.75	ContractApp...	25,824.91	Mortgage	Active	USD	123 %	Mortgage	59,028.36	123.0000
	2341 MG	90,000.00	29.99 %	37,307.25	ContractApp...	33,203.45	Mortgage	Active	USD	123 %	Mortgage	59,028.36	123.0000

- **Limit Report** - Click this link to display the report of limits records in Core Banking. The report displays different sections for expired limits, limits with available amount lower than 0, limits about to expire and limits to be reviewed, the latest two with the option to select the desired interval of dates. The reports are run automatically with a default value defined in the `DefaultIntervalLimitsReport` Core Banking system parameter, but you can change the intervals according to your needs directly from the report.



LIMIT REPORT

Expired Limit

Refresh Export

□	Customer	Group	Currency	Exchange C...	Limit Type	Product	Banking Pro...	Limit Amount	Available Li...	Expire Date	Review Date	Country	Details	Status
	BOBO - Merch...		EUR		Merchant Exp...			1.00	1.00	05/01/2023	26/01/2022			Expired
	BOBO - Cust 4		EUR		Merchant Exp...			5,000.00	5,000.00	14/03/2022	10/01/2022			Expired
	Gianni Jaskol...		EUR		Total Exposure			6,000.00	6,000.00	27/10/2022	27/05/2022			Expired
	Tyrell Smith		EUR		Total Exposure			6,000.00	6,000.00	27/10/2022	27/05/2022			Expired
	Ethelyn Grimes		EUR		Total Exposure			6,000.00	6,000.00	23/11/2022	22/06/2022			Expired

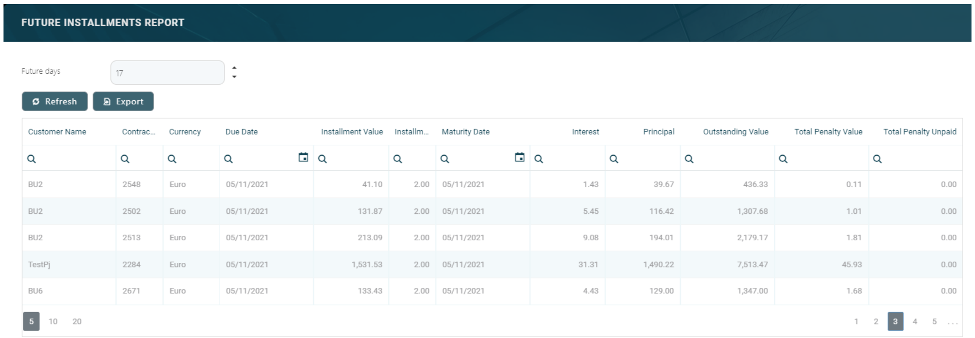
5 10 20 1 2 3 4 5 6

Limits that will expire

Start Date 7/4/2022

End Date 1/4/2025

- **Future Installments** - Click this link to display the list of installments that are due in the following X number of days from the current date. X represents a default value taken from the `DaysFutureInstallmentsReport` Core Banking system parameter. You can generate the report for a different number of days simply by changing the value of the **Future days** field within the **Future Installments Report** page. The report displays the following information about the future installments: customer name, contract number, currency, due date, installment value, installment number, maturity date, interest, principal, outstanding value, total penalty value and total penalty unpaid.

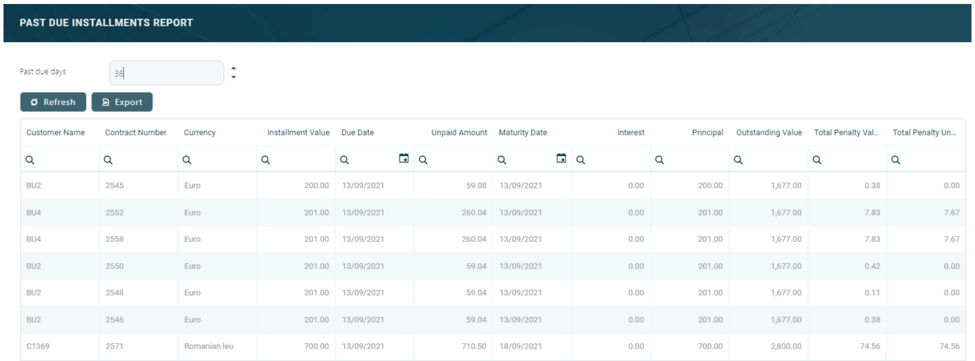


FUTURE INSTALLMENTS REPORT

Future days: 17

Customer Name	Contrac...	Currency	Due Date	Installment Value	Installm...	Maturity Date	Interest	Principal	Outstanding Value	Total Penalty Value	Total Penalty Unpaid
BU2	2548	Euro	05/11/2021	41.10	2.00	05/11/2021	1.43	39.67	436.33	0.11	0.00
BU2	2502	Euro	05/11/2021	131.87	2.00	05/11/2021	5.45	116.42	1,307.68	1.01	0.00
BU2	2513	Euro	05/11/2021	213.09	2.00	05/11/2021	9.08	194.01	2,179.17	1.81	0.00
TestPj	2284	Euro	05/11/2021	1,531.53	2.00	05/11/2021	31.31	1,490.22	7,513.47	45.93	0.00
BU6	2671	Euro	05/11/2021	133.43	2.00	05/11/2021	4.43	129.00	1,347.00	1.68	0.00

- **Past Due Installments** - Click this link to display the list of installments that were due but not have been fully paid, no matter their origin - normal installments, penalties, transaction fees, etc, - in the last Y number of days from the current date. Y represents a default value taken from the `DaysPastDueInstallmentsReport` Core Banking system parameter. You can generate the report for a different number of days simply by changing the value of the **Past due days** field within the **Past Due Installments Report** page. The report displays the following information about the past due installments: customer name, contract number, currency, installment total value, due date, unpaid amount, maturity date, interest, principal, outstanding value, total penalty value and total penalty unpaid.

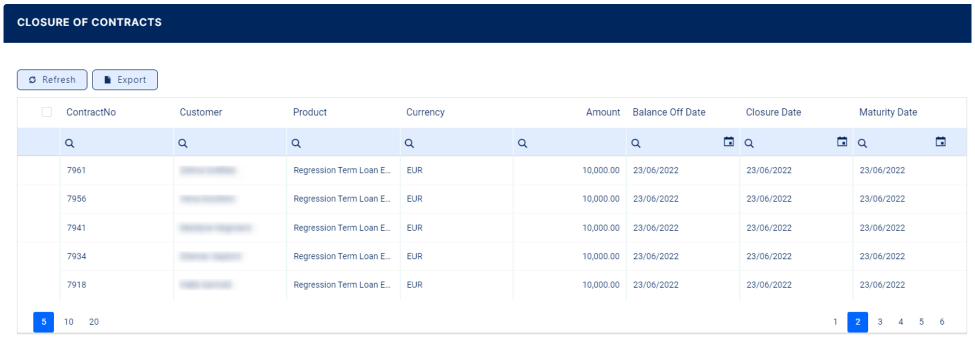


PAST DUE INSTALLMENTS REPORT

Past due days: 36

Customer Name	Contract Number	Currency	Installment Value	Due Date	Unpaid Amount	Maturity Date	Interest	Principal	Outstanding Value	Total Penalty Val...	Total Penalty Un...
BU2	2545	Euro	200.00	13/09/2021	59.08	13/09/2021	0.00	200.00	1,677.00	0.38	0.00
BU4	2552	Euro	201.00	13/09/2021	260.04	13/09/2021	0.00	201.00	1,677.00	7.83	7.67
BU4	2558	Euro	201.00	13/09/2021	260.04	13/09/2021	0.00	201.00	1,677.00	7.83	7.67
BU2	2550	Euro	201.00	13/09/2021	59.04	13/09/2021	0.00	201.00	1,677.00	0.42	0.00
BU2	2548	Euro	201.00	13/09/2021	59.04	13/09/2021	0.00	201.00	1,677.00	0.11	0.00
BU2	2546	Euro	201.00	13/09/2021	59.04	13/09/2021	0.00	201.00	1,677.00	0.38	0.00
C1369	2571	Romanian leu	700.00	13/09/2021	710.50	18/09/2021	0.00	700.00	2,800.00	74.56	74.56

- **Closure of Contracts** - Click this link to display the list of contracts that are ready to be closed because they meet the following conditions: the contracts are in `Approved` status, their maturity date < the current system date, their loan balance = 0, and the remaining amount for all their notifications = 0. The report displays the following information about the contracts that can be closed: contract number, customer name, product, currency, amount, balance off date, closure date, and maturity date.



CLOSURE OF CONTRACTS

ContractNo	Customer	Product	Currency	Amount	Balance Off Date	Closure Date	Maturity Date
7961	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
7956	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
7941	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
7934	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022
7918	[redacted]	Regression Term Loan E...	EUR	10,000.00	23/06/2022	23/06/2022	23/06/2022

You can also use the `GetClosureOfContracts` endpoint to fetch the same information within your own API integration.

The lists can be filtered on every column. Access records from the lists by double-clicking them.

The charts can be downloaded by clicking the Chart context menu in the top right corner of each chart and selecting the desired format: PNG or JPEG image, PDF document or SVG vector image.

The reports can be accessed by users with the following predefined security roles, but note that some actions may be limited according to the role setup:

- Loan Admin Officer
- Supervisor Corporate Officer
- Corporate Credit Officer
- Supervisor Risk Officer
- Risk Officer.

The **Future Installments** and the **Past Due Installments** reports can also be accessed by users with Supervisor Retail Officer and Retail Credit Officer roles.

Records To Be Purged

The **Records To Be Purged** dashboard displays the records in `Draft` status that are due be purged on the current day and have their transaction type's **To Be Purged** field marked as `True`.

NOTE

In order to be purged on the current day, the record's **Created On** date + the value of the **Purge Number of Days** parameter at transaction type level must be equal with the current date. If the **Purge Number of Days** parameter at transaction type is `null`, then the value of the `DaysBeforePurge` system parameter is considered instead.

The job performing the deletion is `Delete Purged Entries` and it should be scheduled at the bank's level. The lists can be filtered on every column. You can select to display only the records created on a specific day from the calendar button next to the **Created On** column.

The following tabs are available to display the records to be purged, based on their transaction type:

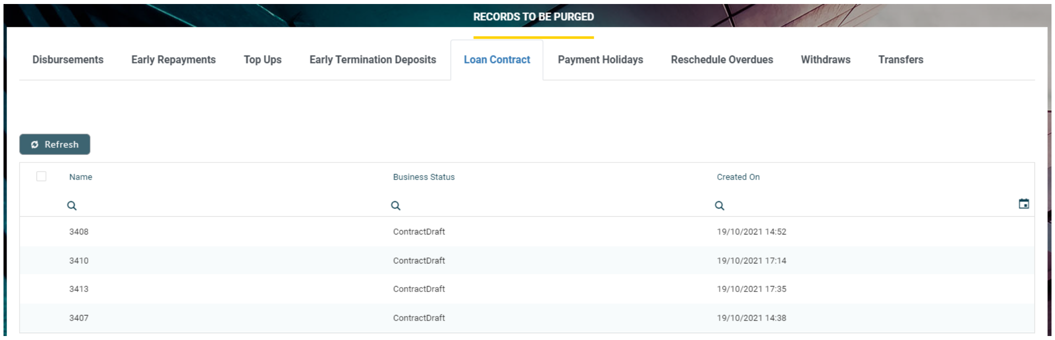
- Disbursements - displays all the disbursement type transactions in `Draft` status which are due to be purged on the current system date;
- Early Repayment - displays all the early repayments type transactions in `Draft` status which are due to be purged on the current system date;
- Top-Ups - displays all the top-up account type transactions in `Draft` status which are due to be purged on the current system date;
- Early Termination Deposit - displays all the early termination deposits type transactions in `Draft` status which are due to be purged on the current system date;
- Loan Contract - displays all the contracts in `Draft` status created based on Term Loan banking products which are due to be purged on the current system date;
- Payment Holidays - displays all the payment holidays type transactions in `Draft` status which are due to be purged on the current system date;

- Reschedule Overdues - displays all the reschedule overdues type transactions in `Draft` status which are due to be purged on the current system date;
- Withdraws - displays all the withdraw type transactions in `Draft` status which are due to be purged on the current system date;
- Transfers - displays all the transfer type transactions in `Draft` status which are due to be purged on the current system date.
- Return Fees - displays all the Returned Amount of Goods type transactions in `Draft` status which are due to be purged on the current system date.
- Agreements - displays all the Agreement type transactions in `Draft` status which are due to be purged on the current system date.

> **NOTE**
> For each transaction type that can be purged (marked with **Yes** in the Predefined Transaction Types table's **Can Be Purged** column), Core Banking displays a tab in the **Records To Be Purged** dashboard only if their **To Be Purged** field is marked as `True`.

For each record, the following information is displayed: name, business status, creation date and transaction type.

The example below shows the **Loan Contract** tab, which displays all the contracts in `Draft` status created based on Term Loan banking products and which are due to be purged on the current system date.



□	Name	Business Status	Created On
	3408	ContractDraft	19/10/2021 14:52
	3410	ContractDraft	19/10/2021 17:14
	3413	ContractDraft	19/10/2021 17:35
	3407	ContractDraft	19/10/2021 14:38

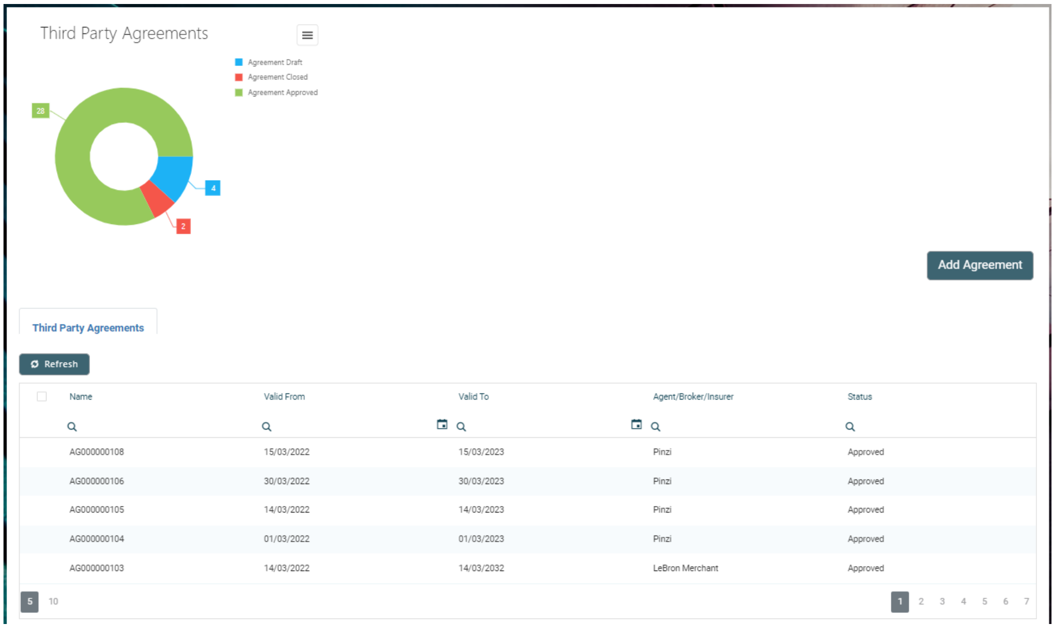
This dashboard can be accessed by users with the **Loan Admin Officer** predefined security role.

Third-Party Agreements

The **Third-Party Agreements** dashboard displays a list of the third-party agreements created in the system. The list can be filtered on every column. Access records from the lists by double-clicking them.

The **Add Agreement** button facilitates your access to the **Creating Agreements for Third-Parties** page, where you can create new agreements.

The dashboard also shows a visual of the agreements within the system, displaying a pie-chart that specifies the number of agreements in each status: `Draft`, `Closed`, `Approved` , and `Canceled`.

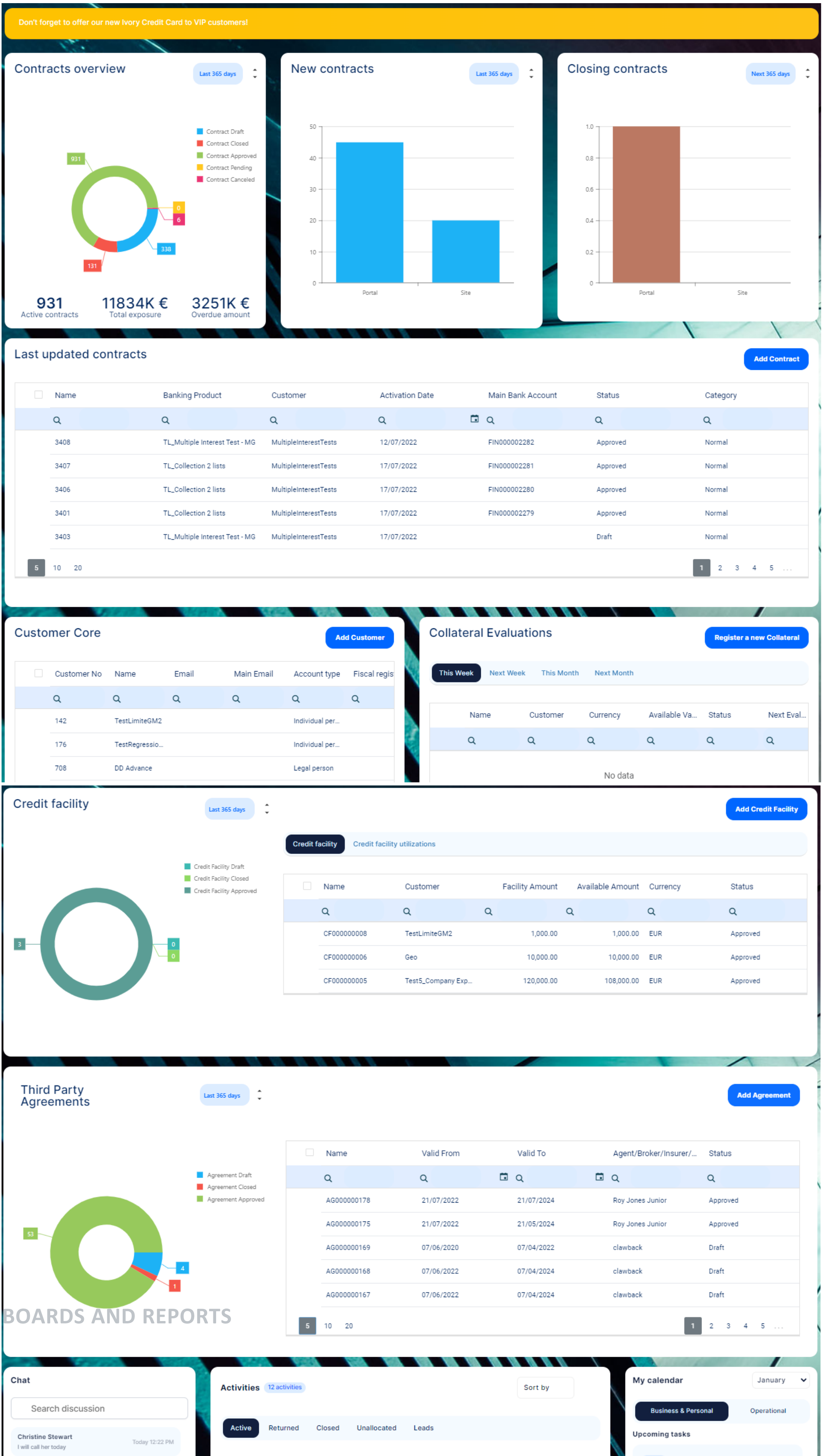


Name	Valid From	Valid To	Agent/Broker/Insurer	Status
AG000000108	15/03/2022	15/03/2023	Pinzi	Approved
AG000000106	30/03/2022	30/03/2023	Pinzi	Approved
AG000000105	14/03/2022	14/03/2023	Pinzi	Approved
AG000000104	01/03/2022	01/03/2023	Pinzi	Approved
AG000000103	14/03/2022	14/03/2032	LeBron Merchant	Approved

Users with the associated role of Loan Admin Officer or Retail Credit Officer can view, insert, update, or delete third-party agreement records. Users with the other associated Core Banking security roles can only view such records.

Loan Admin Officer Dashboard

The **Loan Admin Officer Dashboard** aims to be the main overview page for users with the associated role of **Loan Admin Officer** in their day-to-day tasks. It offers in a glimpse the important notices, overview information about contracts, customers, collateral evaluations, credit facilities, third-party agreements, the user's upcoming tasks, calendar, as well as an integrated chat with colleagues, while also enabling users to access record creation or viewing pages without having to navigate to the corresponding menu items.



Don't forget to offer our new Ivory Credit Card to VIP customers!

Contracts overview

931 Active contracts

11834K € Total exposure

3251K € Overdue amount

New contracts

Closing contracts

Last updated contracts

Name	Banking Product	Customer	Activation Date	Main Bank Account	Status	Category
3408	TL_Multiple Interest Test - MG	MultipleInterestTests	12/07/2022	FIN000002282	Approved	Normal
3407	TL_Collection 2 lists	MultipleInterestTests	17/07/2022	FIN000002281	Approved	Normal
3406	TL_Collection 2 lists	MultipleInterestTests	17/07/2022	FIN000002280	Approved	Normal
3401	TL_Collection 2 lists	MultipleInterestTests	17/07/2022	FIN000002279	Approved	Normal
3403	TL_Multiple Interest Test - MG	MultipleInterestTests	17/07/2022		Draft	Normal

Customer Core

Customer No	Name	Email	Main Email	Account type	Fiscal regis
142	TestLimiteGM2			Individual per...	
176	TestRegressio...			Individual per...	
708	DD Advance			Legal person	

Collateral Evaluations

Name	Customer	Currency	Available Va...	Status	Next Eval...

No data

Credit facility

Name	Customer	Facility Amount	Available Amount	Currency	Status
CF000000008	TestLimiteGM2	1,000.00	1,000.00	EUR	Approved
CF000000006	Geo	10,000.00	10,000.00	EUR	Approved
CF000000005	Test5_Company Exp...	120,000.00	108,000.00	EUR	Approved

Third Party Agreements

Name	Valid From	Valid To	Agent/Broker/Insurer/...	Status
AG000000178	21/07/2022	21/07/2024	Roy Jones Junior	Approved
AG000000175	21/07/2022	21/05/2024	Roy Jones Junior	Approved
AG000000169	07/06/2020	07/04/2022	clawback	Draft
AG000000168	07/06/2022	07/04/2024	clawback	Draft
AG000000167	07/06/2022	07/04/2024	clawback	Draft

Chat

Christine Stewart — Today 12:22 PM

I will call her today

Activities 12 activities

My calendar

Upcoming tasks

The operations available for each user depend on their role and permissions, but users associated with the out-of-the box Loan Admin Officer security role can perform all the actions available on the dashboard.

The lists can be filtered on every column. Access records from the lists by double-clicking them.

The default number of days used to generate the reports can be configured through the `DashboardDefaultLastXDays` Core Banking system parameter. You can modify the number within each section of the dashboard, using the up and down arrows next to `Last x days`, or entering the desired number.

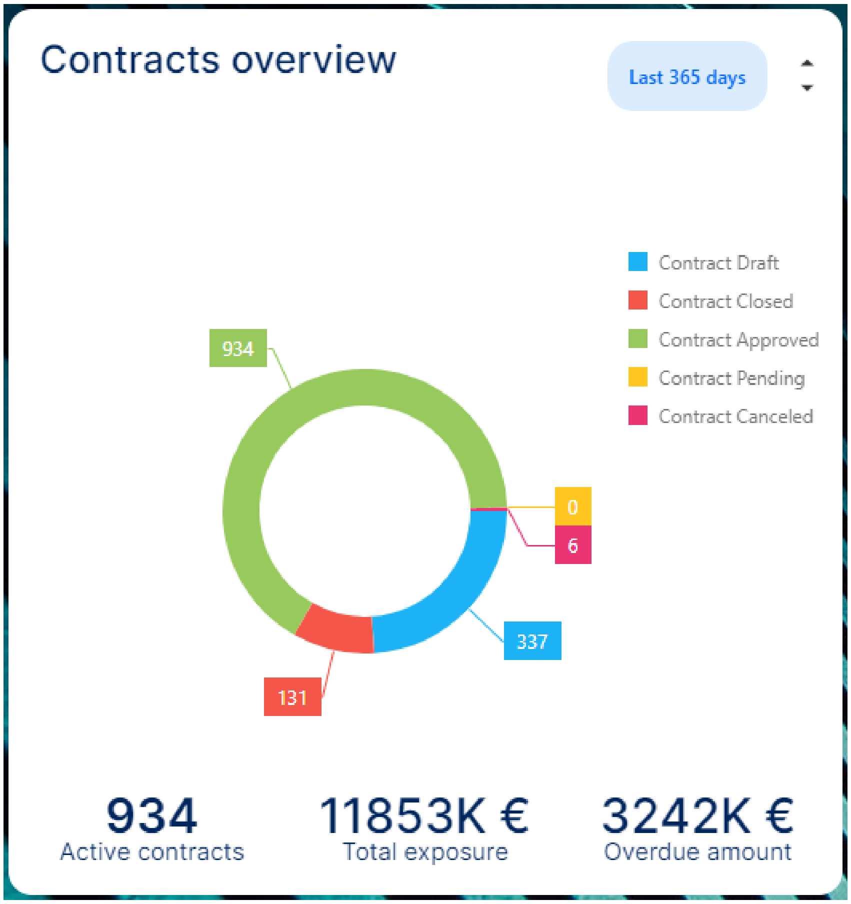
Last 365 days

The dashboard contains the following sections dedicated to different processes:

- **Important Notice** - The information displayed here is dependent on the Core Banking implementation. If the functionality was implemented, the section displays important notifications. This is where the financial institutions can set reminders to their employees.

  Don't forget to offer our new Ivory Credit Card to VIP customers!

- **Contracts Overview** - It displays a pie-chart that specifies the number of contracts in each status: `Contract Draft, Contract Closed, Contract Approved`, `Contract Pending` and `Contract Canceled`. It also shows the number of active contracts, the amount of total exposure of these contracts, and the total overdue amount, both amounts converted into the currency specified in the `DashboardCurrency` Core Banking system parameter.



Contracts overview

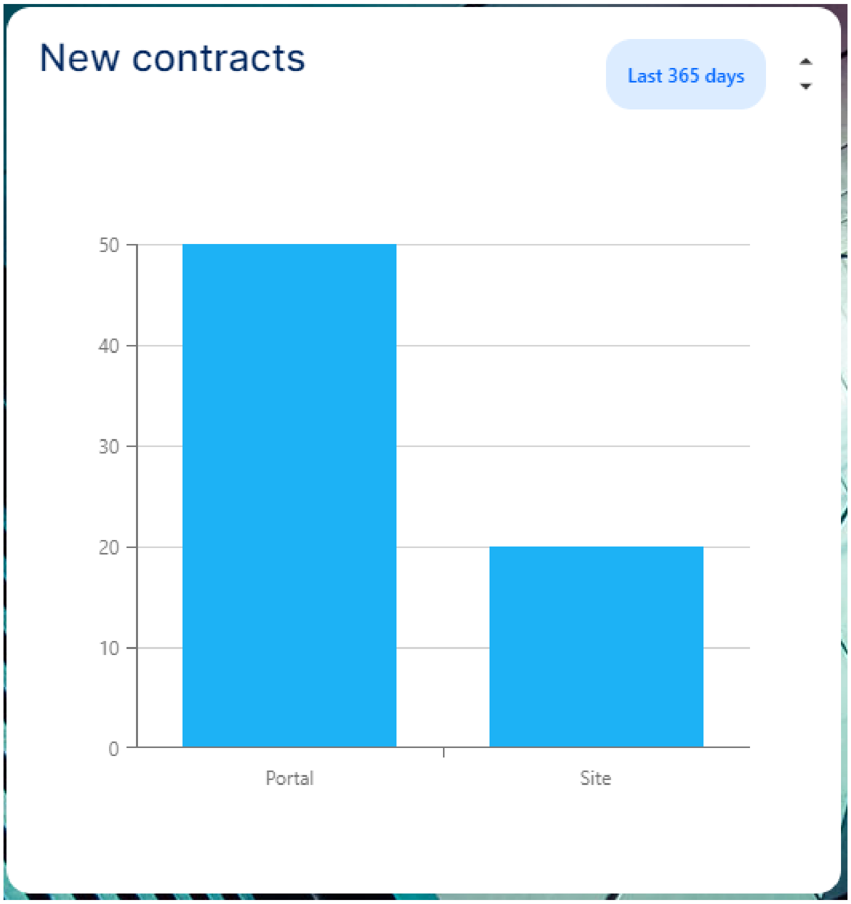
Last 365 days

934 Active contracts

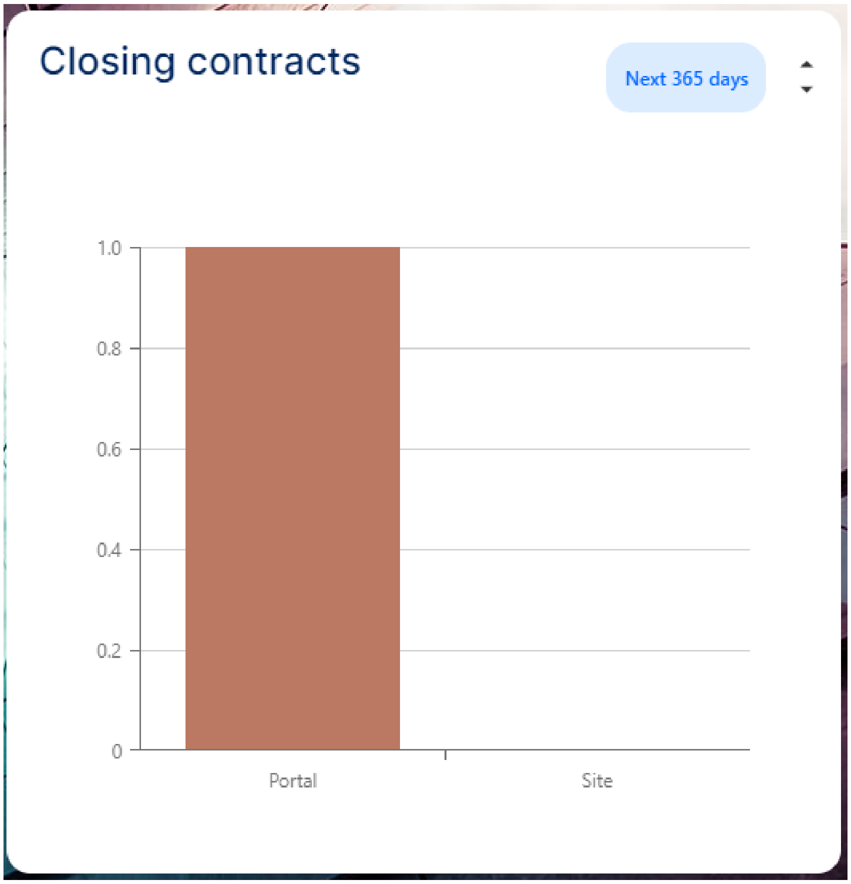
11853K € Total exposure

3242K € Overdue amount

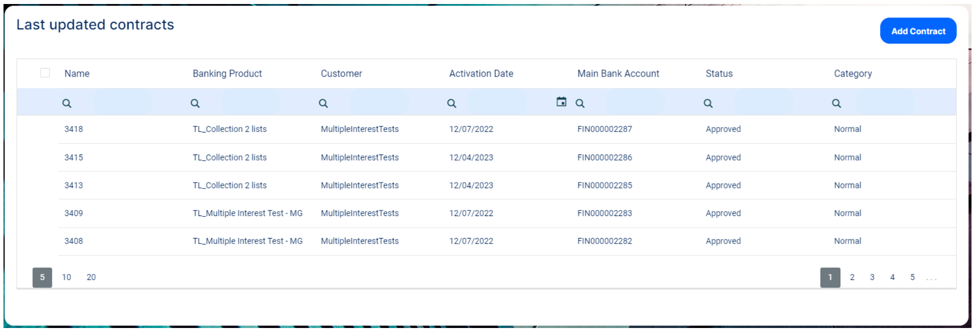
- **New Contracts** - It displays a bar chart with the approved contracts created through different sales channels, during the last x days based on activation date, where x represents the configured default number of days.



- **Closing Contracts** - It displays a bar chart with the contracts closed through different sales channels, during the last x days based on closing date, where x represents the configured default number of days.

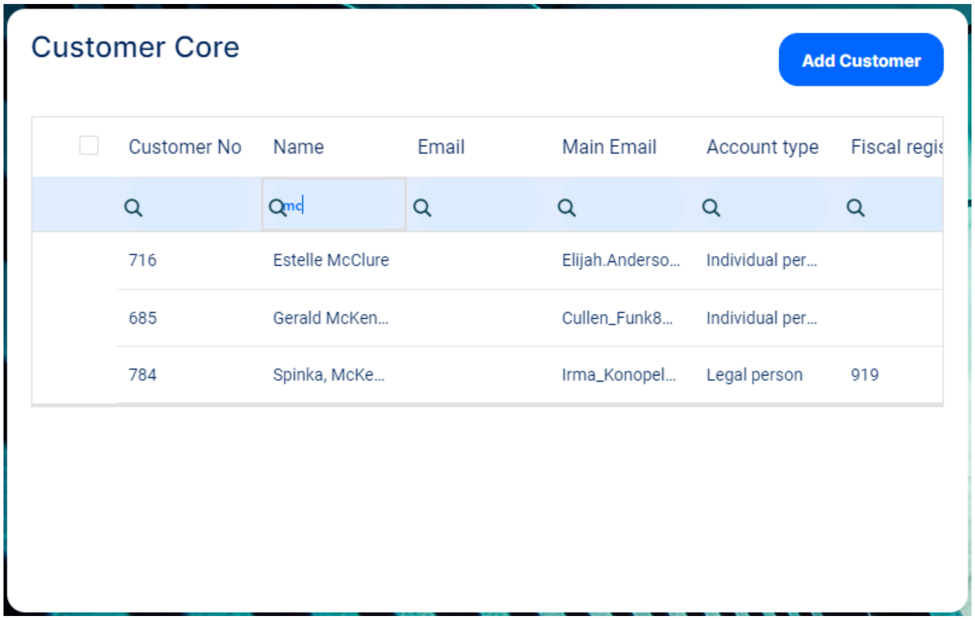


- **Last Updated Contracts** - It displays a list of the contracts updated in the system during the last x days, where x represents the configured default number of days. Click the **Add Contract** button to open the **Add Contract** page, where you can create new contracts.



□ Name	Banking Product	Customer	Activation Date	Main Bank Account	Status	Category
3418	TL_Collection 2 lists	MultipleInterestTests	12/07/2022	FIN000002287	Approved	Normal
3415	TL_Collection 2 lists	MultipleInterestTests	12/04/2023	FIN000002286	Approved	Normal
3413	TL_Collection 2 lists	MultipleInterestTests	12/04/2023	FIN000002285	Approved	Normal
3409	TL_Multiple Interest Test - MG	MultipleInterestTests	12/07/2022	FIN000002283	Approved	Normal
3408	TL_Multiple Interest Test - MG	MultipleInterestTests	12/07/2022	FIN000002282	Approved	Normal

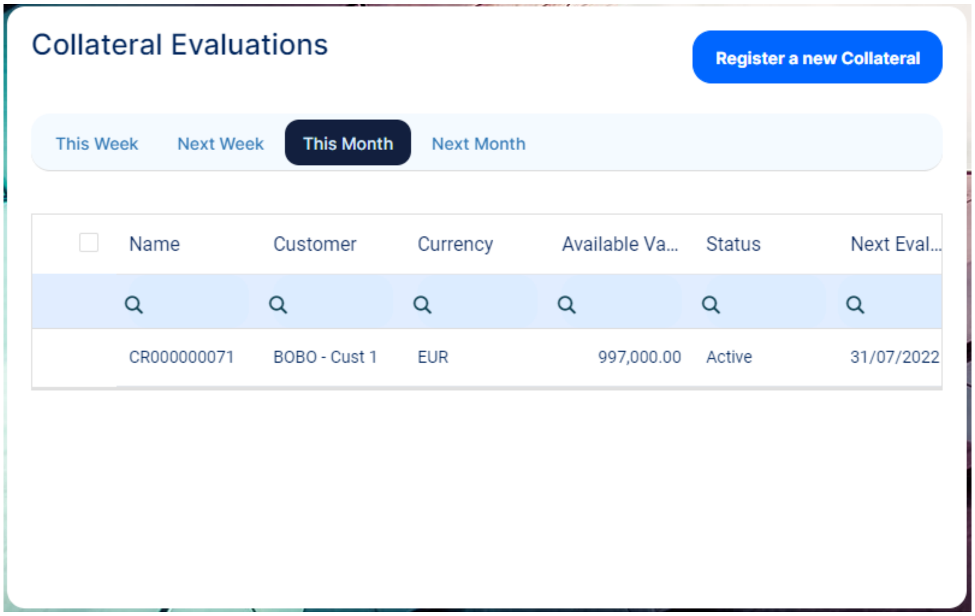
- **Customer Core** - It displays a list of the customers created in the system. Click the **Add Customer** button to open the **Add Customer** page, where you can create new customers.



Customer Core

□	Customer No	Name	Email	Main Email	Account type	Fiscal regis
		mc				
	716	Estelle McClure		Elijah.Anderso...	Individual per...	
	685	Gerald McKen...		Cullen_Funk8...	Individual per...	
	784	Spinka, McKe...		Irma_Konopel...	Legal person	919

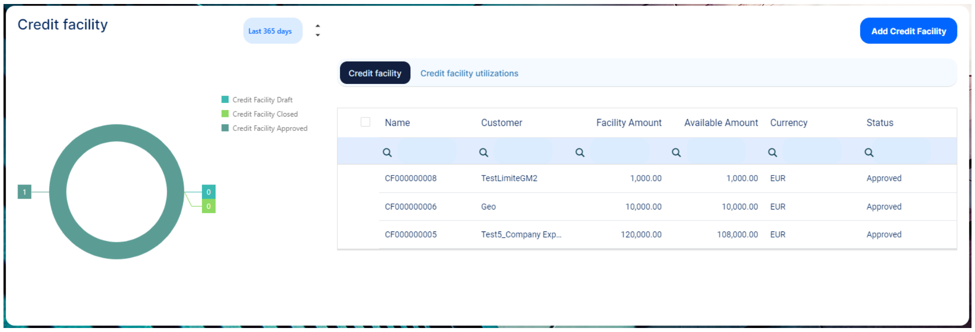
- **Collateral Evaluations** - It displays a list of the collaterals with the next evaluation date within x days, where x represents the configured default number of days. You can also select to view the collaterals with the evaluations due this week, next week, this month, or next month. Click the **Register a new Collateral** button to open the **Add Collateral Register** page, where you can register new collaterals.



Collateral Evaluations

□	Name	Customer	Currency	Available Va...	Status	Next Eval...
	CR000000071	BOBO - Cust 1	EUR	997,000.00	Active	31/07/2022

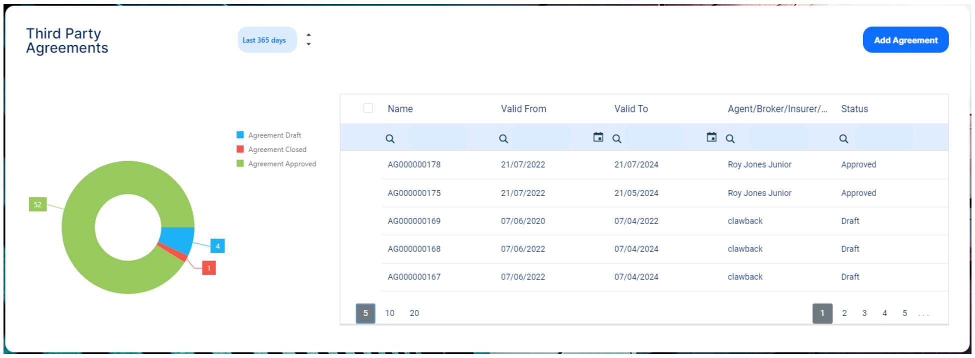
- **Credit Facility** - This section is displayed if the UseCF Core Banking system parameter is set to `True`. It displays lists of the credit facility and utilizations records created in the system in the last x days based on the credit facility date, where x represents the configured default number of days. It also displays a pie-chart that specifies the number of records in each status: `Credit Facility Draft`, `Credit Facility Closed`, and `Credit Facility Approved`. Click the **Add Credit Facility** button to open the **Create Credit Facility** page, where you can create new credit facilities.



Credit facility

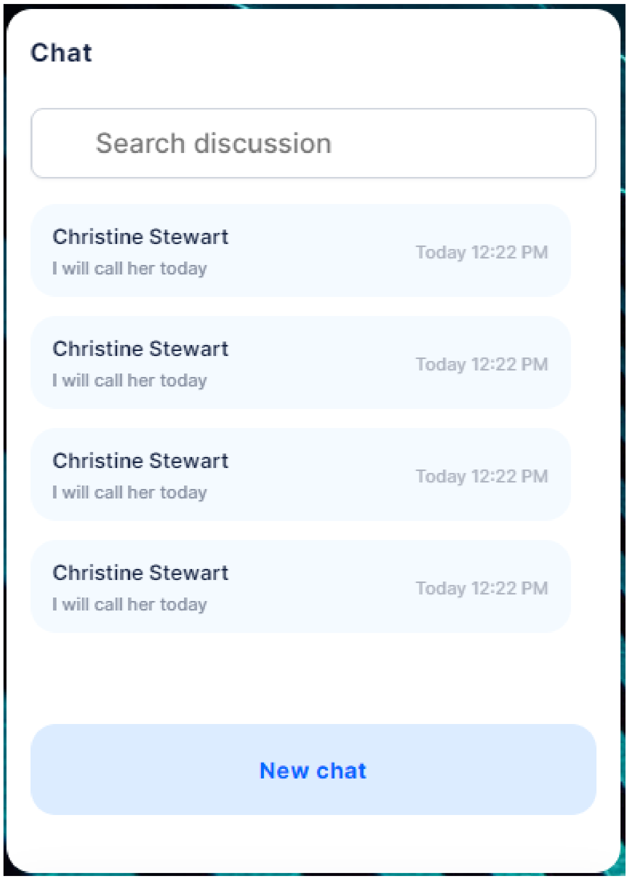
□	Name	Customer	Facility Amount	Available Amount	Currency	Status
	CF000000008	TestLimiteGM2	1,000.00	1,000.00	EUR	Approved
	CF000000006	Geo	10,000.00	10,000.00	EUR	Approved
	CF000000005	Test5_Company Exp...	120,000.00	108,000.00	EUR	Approved

- **Third Party Agreements** - This section is displayed if the `UseTPM` Core Banking system parameter is set to `True`. It shows a list of the agreements defined within the system in last x days based on the agreement date, where x represents the configured default number of days. It also displays a pie-chart that specifies the number of agreements in each status: `Draft, Closed` , and `Approved`. Click the **Add Agreement** button to open the **Creating Agreements for Third-Parties** page, where you can create new agreements.



□	Name	Valid From	Valid To	Agent/Broker/Insurer/...	Status
	AG000000178	21/07/2022	21/07/2024	Roy Jones Junior	Approved
	AG000000175	21/07/2022	21/05/2024	Roy Jones Junior	Approved
	AG000000169	07/06/2020	07/04/2022	clawback	Draft
	AG000000168	07/06/2022	07/04/2024	clawback	Draft
	AG000000167	07/06/2022	07/04/2024	clawback	Draft

- **Chat** - The information displayed here is dependent on the Core Banking implementation. If the functionality was implemented, this section contains a chat communication channel with your colleagues. You can start a new discussion by clicking **New chat** or search in the chat for a person. You can search for chats with Customers or Team by clicking one of the buttons.



Chat

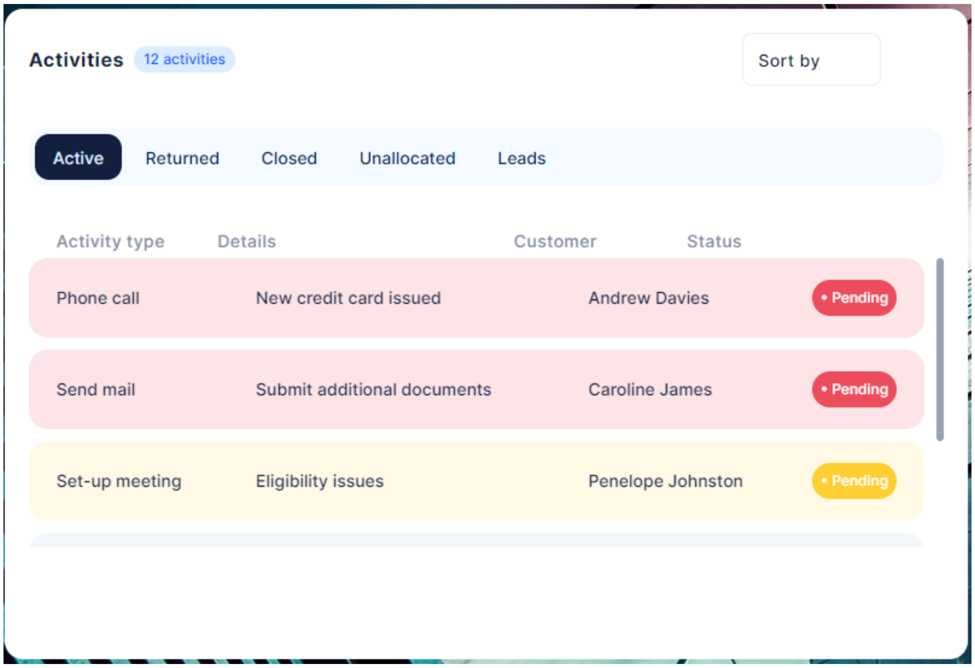
Christine Stewart
I will call her today
Today 12:22 PM

Christine Stewart
I will call her today
Today 12:22 PM

Christine Stewart
I will call her today
Today 12:22 PM

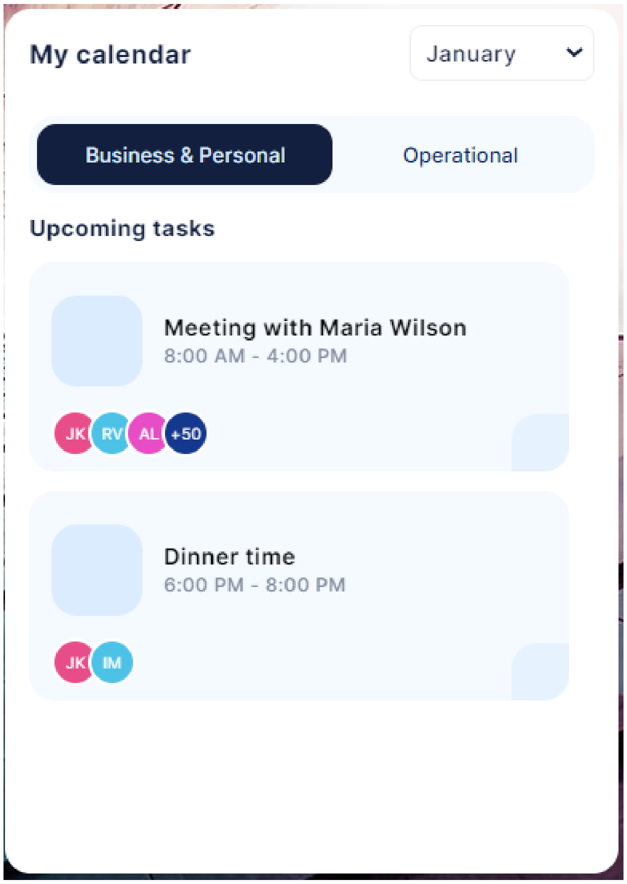
Christine Stewart
I will call her today
Today 12:22 PM

- **Activities** - The information displayed here is dependent on the Core Banking implementation. If the functionality was implemented, this section displays the activities assigned to you, filtered by active, returned, closed, unallocated, and leads.



Activity type	Details	Customer	Status
Phone call	New credit card issued	Andrew Davies	• Pending
Send mail	Submit additional documents	Caroline James	• Pending
Set-up meeting	Eligibility issues	Penelope Johnston	• Pending

- **My calendar** - The information displayed here is dependent on the Core Banking implementation. If the functionality was implemented, the section displays the upcoming tasks filtered by month from the top right-hand corner of the screen. You can filter them by Operational or Business & Personal tasks, and you can add tasks.



My calendar

January

Business & Personal

Operational

Upcoming tasks

Meeting with Maria Wilson
8:00 AM - 4:00 PM

JK RV AL +50

Dinner time
6:00 PM - 8:00 PM

JK IM