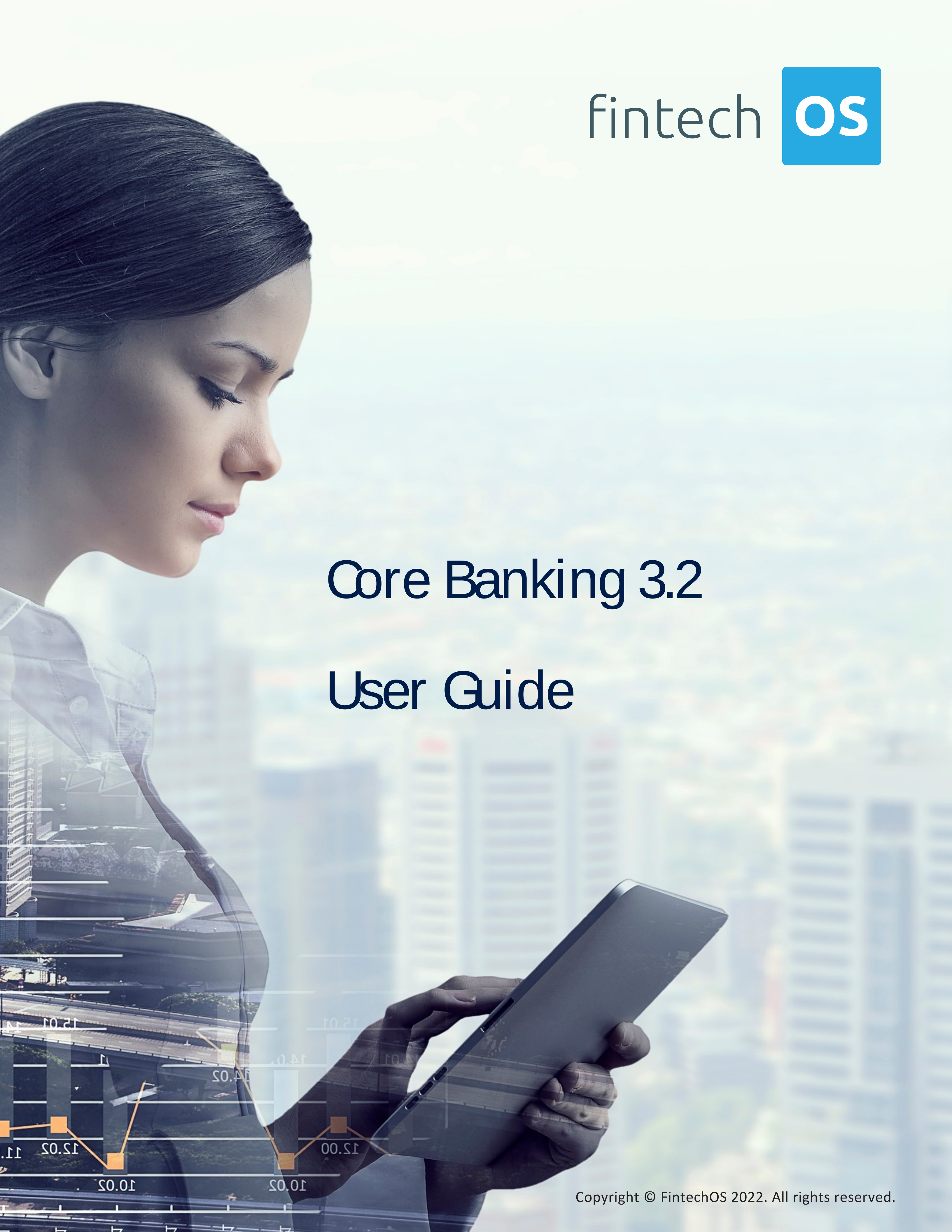


Core Banking 3.2

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 and some other areas to be considered in the future.

All the features are enabled via form driven flows and various validations are incorporated along the process.

Apart from the features accessible by the users through dedicated menus and dashboards via the FintechOS Portal, Core Banking contains automated processes scheduled to happen during close of day to calculate cost elements and keep up the correct figures driven by the contracts inserted.

Banking Product Factory

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

Core Banking Menus

Users with appropriate access rights can perform specific tasks using the Core Banking menus found in FintechOS Portal.

Admin Configurations menu contains a series of menu items that enable you to configure the way your Core Banking implementation must function:

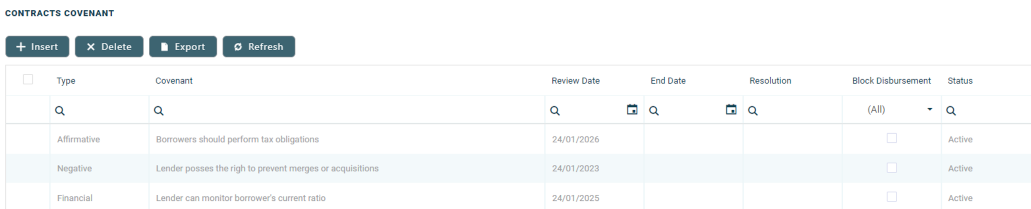
- **Holiday** menu item - allows you to define the non-working days for specific countries;
- **Allocation Method** menu item - allows you to define the allocation methods used by the Core Banking processes;
- **Exchange Rate** menu item - allows you to define the exchange rates;
- **Exchange Rate Type** menu item - allows you to define the exchange rate types;
- **Operation Item** menu item - allows you to define the operation items used by the Core Banking processes;
- **Transaction Type** menu item - allows you to define the transaction types used by the Core Banking processes;
- **Loan Classification** menu item - allows you to define the risk classifications used for loan contracts within Core Banking;
- **Core Banking System Parameter** menu item - allows you to set the Core Banking specific system parameters;

Core Banking Operational menu contains a series of menu items that enable you to manage the records involved in the business relation between a financial institution and a customer:

- **Bank** menu item - allows you to perform bank records management tasks;
- **Reconciliation Accounts** menu item - allows you to perform reconciliation accounts management tasks;
- **Customer Core** menu item - allows you to perform customer records management tasks;
- **Customer Limit** menu item - allows you to perform customer limit management tasks;
- **Collateral Register** menu item - allows you to perform collateral registration tasks;
- **Contract** menu item - allows you to perform contracts management tasks;
- **Credit Facility** menu item - allows you to perform credit facilities management tasks;
- **Repayment Notification** menu item - allows you to view generated repayment notifications.

Working with Lists

In the application's interface, collections of items (such as contracts, banking products, accounts, etc.) are often listed in a tabular format as illustrated below:


CONTRACTS COVENANT

+ Insert | ✕ Delete | Export | Refresh

	Type	Covenant	Review Date	End Date	Resolution	Block Disbursement	Status
						(All)	
	Affirmative	Borrowers should perform tax obligations	24/01/2026				Active
	Negative	Lender posses the righ to prevent merges or acquisitions	24/01/2023				Active
	Financial	Lender can monitor borrower's current ratio	24/01/2025				Active

You can click the list headers to order the list of entries based on the desired attribute. You can also use the magnifying glass icons to filter the list of entries based on the desired criteria.

To **add a new entry** to the list:

1. Click the **Insert** 

button.
2. In the form that opens, fill in the relevant fields.
3. After you fill in the data:

- To return to the list, click the **Save and close**  button.
- To add another entry to the list, click the **Save and new**  button.
- If you haven't finished working with the current entry, click the **Save and reload**  button.

To **edit an existing entry**:

1. Double-click the desired entry.
2. In the form that opens, edit the relevant fields.
3. After you fill in the data:

- To return to the list, click the **Save and close** button.
- If you haven’t finished working with the current entry, click the **Save and reload** button.

To **delete entries** from the list:

1. In the first column, select the checkboxes for the entries you wish to delete.
2. Click the **Delete** button.

To **export entries** in Excel format:

1. Click the **Export** button.
2. You are prompted to export only the current set or the entire data set. If your list is filtered or truncated (displaying 5, 10, 20, etc. entries per page out of a larger set), the **current set** export includes only the displayed values.

Installing Core Banking 3.2

Follow the steps described below to perform an automatic installation of the Core Banking. 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 v3.2** into your Innovation Studio.

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

Dependencies

To install **Core Banking v3.2**, first you need to install the following:

- **Innovation Studio** minimum version **22.1.0.1**
- **SySDigitalSolutionPackages v22.1.0000**
- **Banking Product Factory** (Project or Standard Pack) **v3.2**.

NOTE
A JobServer must be running on your High Productivity Fintech Infrastructure 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 `web.config` files.

Pre-Installation Checklist

The SysPack has unique constraints on some of the standard entities like: `FTOS_DFP_FlowSettings` , `FTOS_DFP_ProcessorSettings`, `FTOS_VersionSettings`, `FTOS_VersionSettingsItem`, `FTOS_EntityStatusSettings`, `FTOS_MKT_AudienceSegments`, `FTOS_MKT_Audience`, and for all `Banking Product` entities.

If you have already moved data using the **Configuration Data Deployment Package** menu, then you probably have already configured some unique constraints.

Before running the script, make sure you:

1. Disable the constraints that you have created on your environment, allowing the system to create the new ones after the **Core Banking v3.2** is imported.
2. Use the new **Configuration Data Definitions** imported with the **Core Banking v3.2** file when you export the data.

HINT
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 Settings v3.2** project. Decide whether you should import it or not!

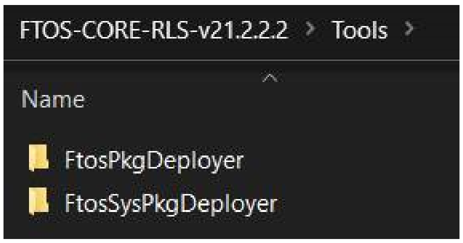
The Backup Settings v3.2 Project

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.FTOS_CB_SystemParameter`).

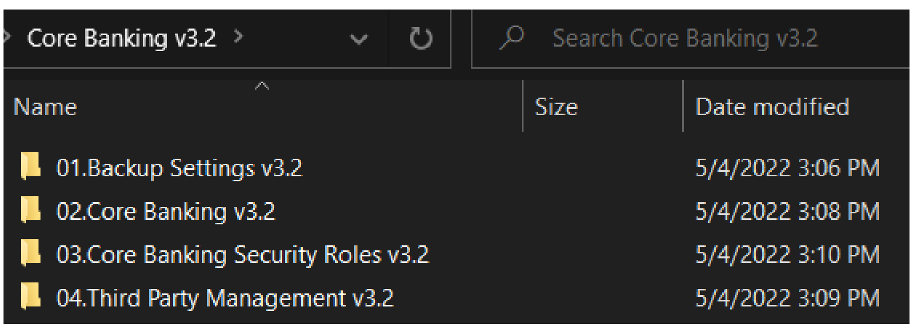
The project has a matching script at the end of the Core Banking package, which restores the old values saved by this first script.

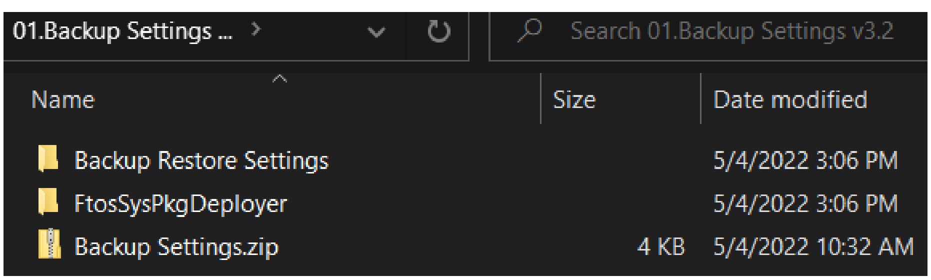
Installation Steps

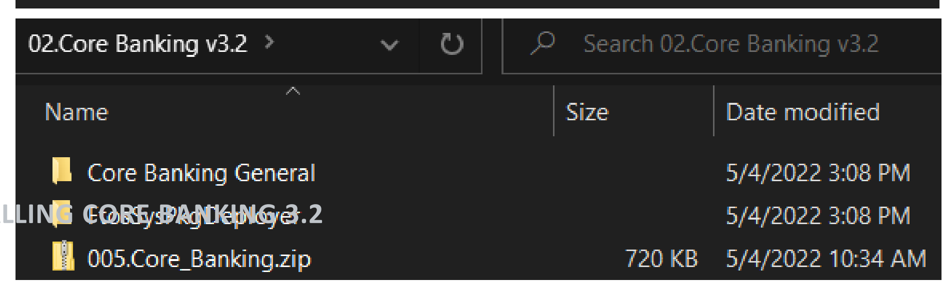
1. Unzip your **Core Banking_3.2.zip** archive file.
2. Locate the *FtosSysPkgDeployer* folder in the `FintechOS installation kit` (the path is *<unzipped_install_archive>\Tools\FtosSysPkgDeployer*). You need it to install the SySDigitalSolutionPackages.

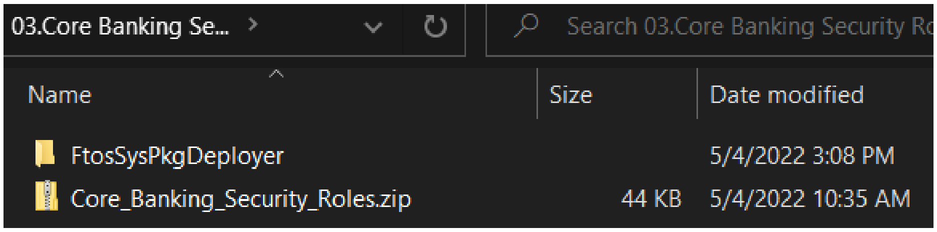


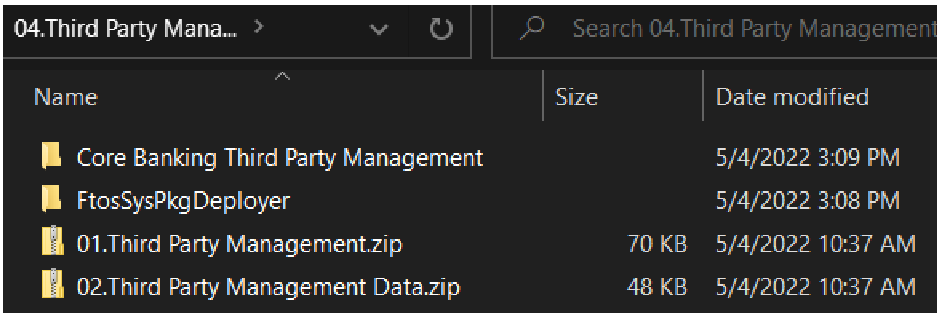
3. Select and copy the *FtosSysPkgDeployer* folder.
4. Navigate to the location where you have unzipped the Core Banking_3.2.zip (let's call this location *<pckg_deployer_dir>*), then paste the *FtosSysPkgDeployer* folder there, within each and every `zip` file that comes with the package.











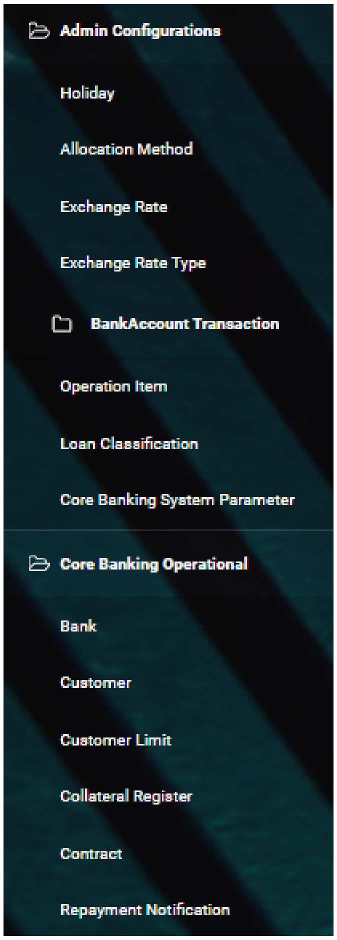
IMPORTANT!

Each `zip` file within the **CoreBanking_v3.2.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. Edit the `install_Syspack.bat` file. Replace the parameters described in the "install_SysPack.bat Parameters Explanation" on the next page section with your own values. Save and close the file.
6. Right-click `install_SysPack.bat` » Run as administrator.

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 Innovation Studio installation, for example *http://localhost/ftos_studio*.
- `<AdminStudioUser>` - The username of the Innovation Studio user under which this import is executed. The user has to exist in Innovation Studio prior to this operation.
- `<user_password>` - The password for the Innovation 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_3.2 is deployed.
- `<syspack_path>` - The physical path to the unzipped CoreBanking_3.2 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 `web.config` Files

After performing the installation steps, make sure you complete the following changes to the application keys within the `web.config` files which come with the Core Banking package:

`CoreBankingInstall` Application Key

The `CoreBankingInstall` application key setting has to be configured in the FintechOS Portal app's `web.config` file and in the Innovation Studio app's `web.config` file.

This application key should be set as below:

app key setting in web.config

```
<add key="CoreBankingInstall" value="0" />
```

This setting performs a context switch between `EbsMetadata.SystemParameter (0)` and `ebs.FTOS_CB_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 the `web.config` files, it is treated as **0**.

Installing Core Banking 3.2.1

HINT
This page contains the installation steps for Core Banking v**3.2.1**.
If you need to install the Core Banking v**3.2**, follow the instructions on this page.

Follow the steps described below to perform an automatic installation of the Core Banking. 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 v3.2.1** into your Innovation Studio.

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

Dependencies

To install **Core Banking v3.2.1**, first you need to install the following:

- **Innovation Studio** minimum version **22.1.0.1**
- **SySDigitalSolutionPackages v22.1.0001**
- **Banking Product Factory** (Project or Standard Pack) **v3.2.1**.

NOTE
A JobServer must be running on your High Productivity Fintech Infrastructure 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 `web.config` files.

Pre-Installation Checklist

The SysPack has unique constraints on some of the standard entities like: `FTOS_DFP_FlowSettings` , `FTOS_DFP_ProcessorSettings`, `FTOS_VersionSettings`, `FTOS_VersionSettingsItem`, `FTOS_EntityStatusSettings`, `FTOS_MKT_AudienceSegments`, `FTOS_MKT_Audience`, and for all `Banking Product` entities.

If you have already moved data using the **Configuration Data Deployment Package** menu, then you probably have already configured some unique constraints.

Before running the script, make sure you:

1. Disable the constraints that you have created on your environment, allowing the system to create the new ones after the **Core Banking v3.2.1** is imported.
2. Use the new **Configuration Data Definitions** imported with the **Core Banking v3.2.1** file when you export the data.

> **HINT**
> 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 Settings v3.2.1** project. Decide whether you should import it or not!

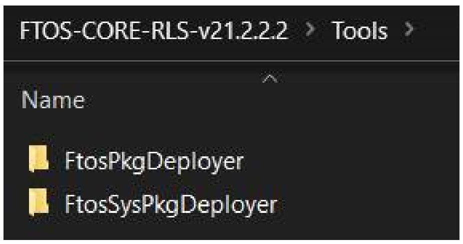
The Backup Settings v3.2.1 Project

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.FTOS_CB_SystemParameter`).

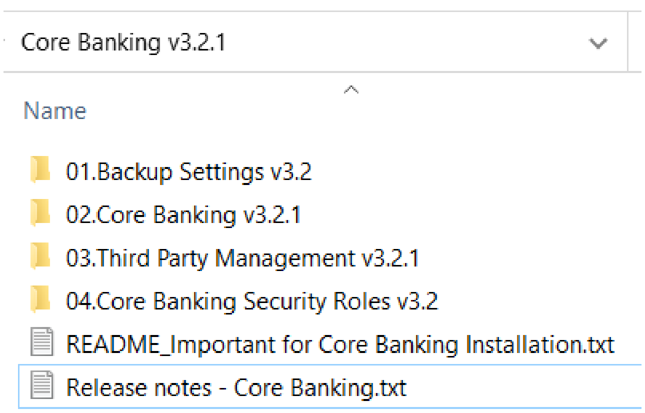
The project has a matching script at the end of the Core Banking package, which restores the old values saved by this first script.

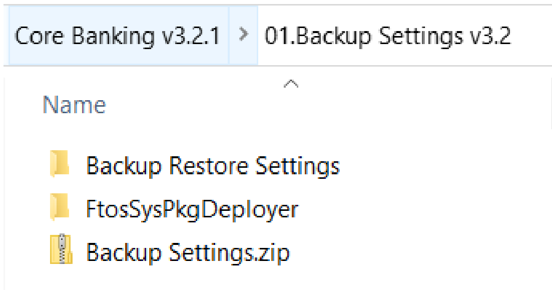
Installation Steps

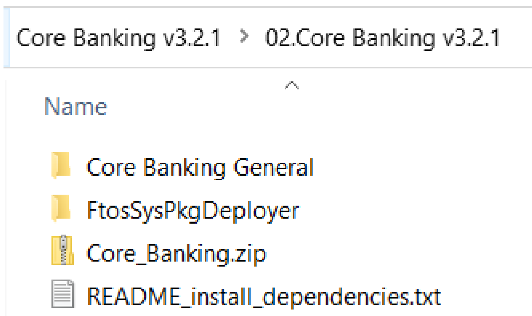
1. Unzip your **Core Banking_3.2.1.zip** archive file.
2. Locate the *FtosSysPkgDeployer* folder in the `FintechOS installation kit` (the path is *<unzipped_install_archive>\Tools\FtosSysPkgDeployer*). You need it to install the SySDigitalSolutionPackages.

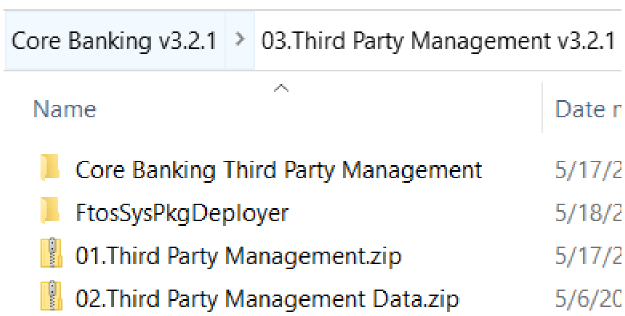


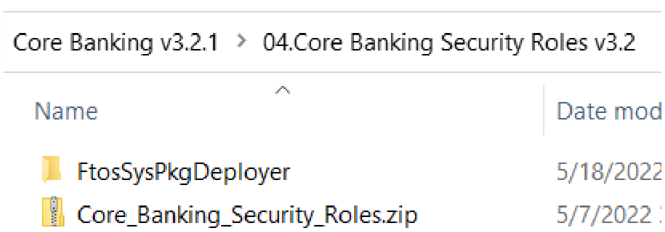
3. Select and copy the *FtosSysPkgDeployer* folder.
4. Navigate to the location where you have unzipped the Core Banking_3.2.1.zip (let's call this location *<pckg_deployer_dir>*), then paste the *FtosSysPkgDeployer* folder there, within each and every `zip` file that comes with the package.











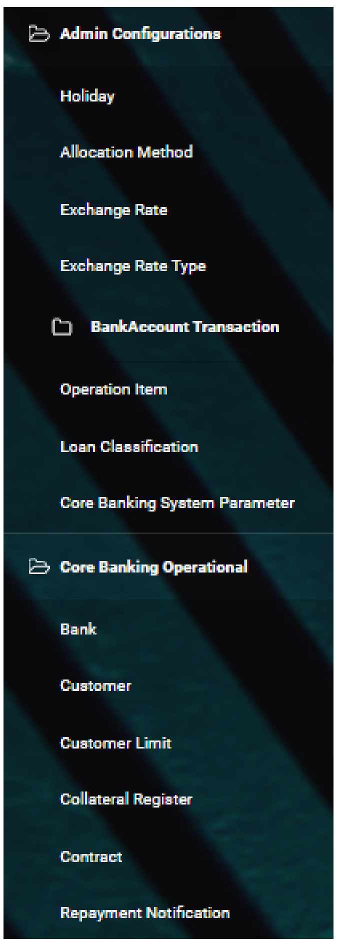
IMPORTANT!

Each `zip` file within the **CoreBanking_v3.2.1.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. Edit the `install_Syspack.bat` file. Replace the parameters described in the "install_SysPack.bat Parameters Explanation" on the next page section with your own values. Save and close the file.
6. Right-click `install_SysPack.bat` » Run as administrator.

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 Innovation Studio installation, for example *http://localhost/ftos_studio*.
- `<AdminStudioUser>` - The username of the Innovation Studio user under which this import is executed. The user has to exist in Innovation Studio prior to this operation.
- `<user_password>` - The password for the Innovation 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_3.2.1 is deployed.
- `<syspack_path>` - The physical path to the unzipped CoreBanking_3.2.1 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 `web.config` Files

After performing the installation steps, make sure you complete the following changes to the application keys within Vault which come with the Core Banking package:

`CoreBankingInstall` Application Key

The `CoreBankingInstall` application key setting has to be configured in the apps' Vault settings.

This application key should be set as below:

app key setting in Vault

```
<add key="CoreBankingInstall" value="0" />
```

This setting performs a context switch between `EbsMetadata.SystemParameter (0)` and `ebs.FTOS_CB_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 3.2

The **Core Banking Corporate** package comes with a series of features such as credit facility management which are complementary to the Core Banking package.

Follow the steps described below to perform an automatic installation of the Core Banking Corporate 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 v3.2** into your Innovation Studio, on top of your Core Banking v3.1 installation.

> **IMPORTANT!**
> The **Core Banking Corporate v3.2** package must be installed only after installing the **Core Bankingv3.2** package!
> You must run the script on the machine where Innovation Studio is installed.
> Make sure you have access rights to Studio's database.

Dependencies

To install **Core Banking Corporate v3.2**, first you need to install the following:

- **Innovation Studio** minimum version **v22.1.0.1**
- **SySDigitalSolutionPackages v22.1.0001**
- **Banking Product Factory** (Project or Standard Pack) **v3.2**
- **Core Banking v3.2** package.

> **NOTE**
> A JobServer must be running on your High Productivity Fintech Infrastructure in order to process any asynchronous, batch, end of day and start of day jobs.

Pre-Installation Checklist

The SysPack has unique constraints on some of the standard entities like: `FTOS_DFP_FlowSettings` , `FTOS_DFP_ProcessorSettings`, `FTOS_VersionSettings`, `FTOS_VersionSettingsItem`, `FTOS_EntityStatusSettings`, `FTOS_MKT_AudienceSegments`, `FTOS_MKT_Audience`, and for all `Banking Product` entities.

If you have already moved data using the **Configuration Data Deployment Package** menu, then you probably have already configured some unique constraints.

Before running the script, make sure you:

1. Disable the constraints that you have created on your environment, allowing the system to create the new ones after the **Core Banking Corporate v3.2** is imported.
2. Use the new **Configuration Data Definitions** imported with the **Core Banking Corporate v3.2** file when you export the data.

> **HINT**
> 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 Settings v3.2** project. Decide whether you should import it or not!

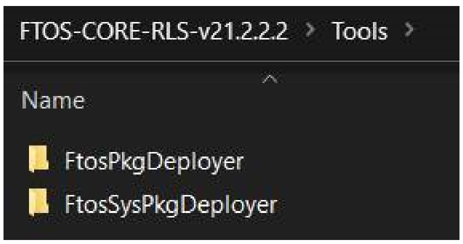
The Backup Settings v3.2 Project

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.FTOS_CB_SystemParameter`).

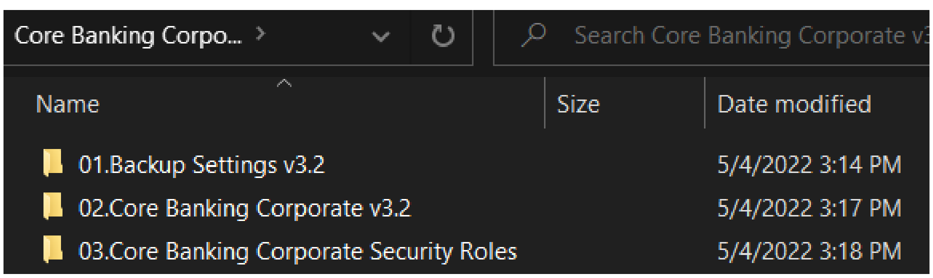
The project has a matching script at the end of the Core Banking Corporate package, which restores the old values saved by this first script.

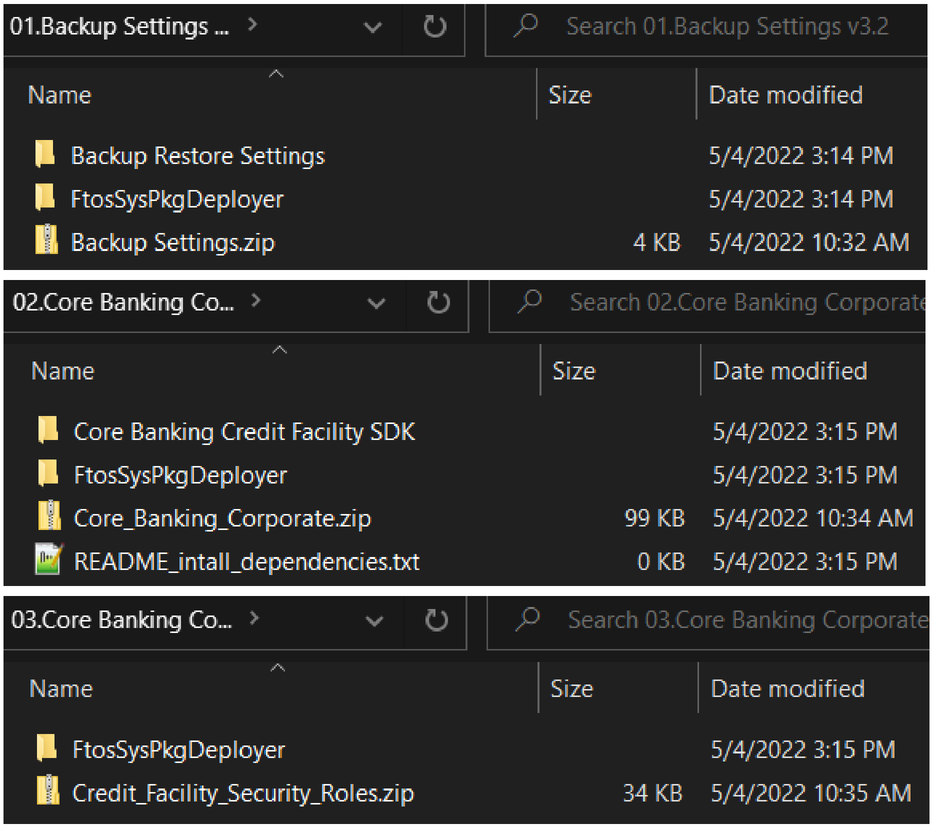
Installation Steps

1. Unzip your **Core Banking Corporate 3.2.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.



3. Select and copy the *FtosSysPkgDeployer* folder.
4. Navigate to the location where you have unzipped the `CoreBankingCorporate_3.2.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.





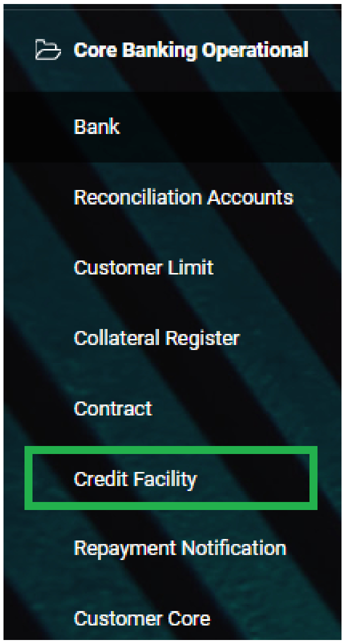
IMPORTANT!

Each `zip` file within the **CoreBankingCorporate_v3.2.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. Edit the `install_Syspack.bat` file. Replace the parameters described in the "install_SysPack.bat Parameters Explanation" on the next page section with your own values. Save and close the file.
6. Right-click `install_SysPack.bat` » Run as administrator.

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:



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 Innovation Studio installation, for example *http://localhost/ftos_studio*.
- <AdminStudioUser> - The username of the Innovation Studio user under which this import is executed. The user has to exist in Innovation Studio prior to this operation.
- <user_password> - The password for the Innovation 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 CoreBankingCorporate_3.2 is deployed.
- `<syspack_path>` - The physical path to the unzipped CoreBankingCorporate_3.2 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.

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 has to be 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	Operation	Notes
	Setting Up 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	Using the **Core Banking Operational > Bank** menu, create a bank record to be the main bank. This record must have 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	In Core Banking, allocation methods are used to determine the order in which credit items are prioritized when repaying loans, credit accounts, etc. The **Allocation Method** menu stores information about the details and the banking products using those specific definitions in their setup. Read here how to create and manage allocation methods.

Step	Operation	Notes
5	Enter holidays for the desired countries	Public holidays for each country are used in the product definition for the calendar years over which the bank's current business is spread. The **Holiday** menu allows the creation of holiday records specific to the bank's country or organization. More details about setting the holiday records can be found 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. The **Exchange Rate Type** menu allows users to add exchange rate types where there is a need to differentiate between exchange rates based on the currency market or business area. Learn how to create exchange rate records and how to manage exchange rate types in this guide's dedicated pages.
7	Define your loan classification	Banks 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. Examples and information on creating operation item records are available on a dedicated page.
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 the list of different types of transactions used in Core Banking.
10	Define other banks with whom your main bank has business relations and add external accounts	Using the **Core Banking Operational > Bank** menu, create bank records for the banking institutions with whom your main bank collaborates. Add external bank accounts within these banks.

Step	Operation	Notes
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	Create limit types for role-based limits	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 here how to manage limit types.
13	Make sure a JobServer is up and running	In order 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.
14	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, Recovering Password and Security Roles.
15	Operational Ledger	The accounting information needed for ledger reports and other financial statements is managed via the Operational Ledger add-on. Access the Operation Ledger user guide for detailed information.
	Setting Up Banking Products	
1	Log into Innovation Studio 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 Innovation Studio.
2	Define banking agreements	Banking agreements are not relevant to be set up for Core Banking. They are used in digital journeys such as Mobile Retail Loan Origination.
3	Define product classifications	This functionality allows banks to set up classification items for their banking products offer. For more details, view the Banking Product Classification page.
4	Define your banking product hierarchy	The banking system has developed numerous products and services to tend to their customers' needs and to stay competitive ahead of time. To aid consultants and developers manage these products, Innovation Studio offers a dedicated menu, **Banking Product Hierarchy**, where a hierarchy can be built. Learn here how to manage this hierarchy.

Step	Operation	Notes
5	Manage your banking schedule types	The **Banking Schedule Types** menu creates payment schedules, a quintessential part of a loan. Its menu items help you configure the installments, dates, and calculations. For details on managing banking schedule types, see this dedicated page.
6	Define and manage commissions and commission lists/ interests and interest lists	Interests and commissions are set up independently from the banking products. They are available in banking products in the form of interest lists or commission lists respectively, after they have been grouped based on their use. Read here detailed instructions about managing interest and commissions.
7	Define insurances and insurance lists	Insurances and insurance lists are defined at the banking product level, but they are not used within Core Banking processes at the moment.
8	Define discounts	Discounts are defined at the banking product level, but they are not used within Core Banking processes at the moment.
9	Define questions	Questions are not relevant to be set up for Core Banking. They are used in digital journeys such as Mobile Retail Loan Origination.
10	Manage your banking product filter	Banking product filters are defined at the banking product level, but they are not used within Core Banking processes at the moment.
11	Create and approve banking products	A great variety of banking products and hybrid products were created to offer the best service to a customer. Based on their rights, a user has access to the existing products. Learn about managing banking products on the dedicated pages.
	Using Core Banking Capabilities	
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	Customers are at the core of the banking business. Learn how to create customer records and attach them to groups on this dedicated page.
3	Set up customer limits	Manage the limits available for the customers as described here.

Step	Operation	Notes
4	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. Learn here how to manage collateral records in Core Banking.
5	Create banking contracts	Core Banking allows banks to create contracts for their customers based on approvals, as described on this guide's dedicated Banking Contracts pages.
6	Create 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.

Configurations

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:

Holiday

The purpose of this menu is to indicate the public holidays for the country used in the product definition, for the calendar years over which the bank's current business is spread. Financial institutions are usually closed and do not process payments or repayments for loans during holidays. The **Holiday** menu allows the creation of holiday records specific to the bank's country or organization.

There are two methods used for loan repayment processing when 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. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configuration** menu.
4. Click the **Holiday** menu item to open the **Holidays List** page.

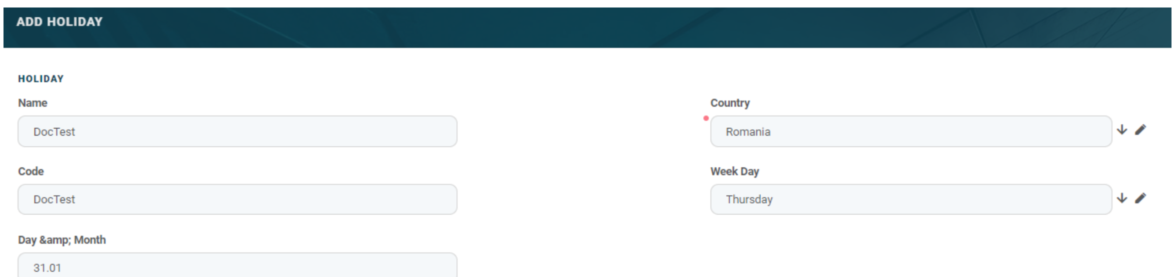
HINT
In the **Holidays List** page, users can add new holiday records or search, edit, and delete existing ones.

Creating Holiday Records

Holiday records are created manually in FintechOS Portal.

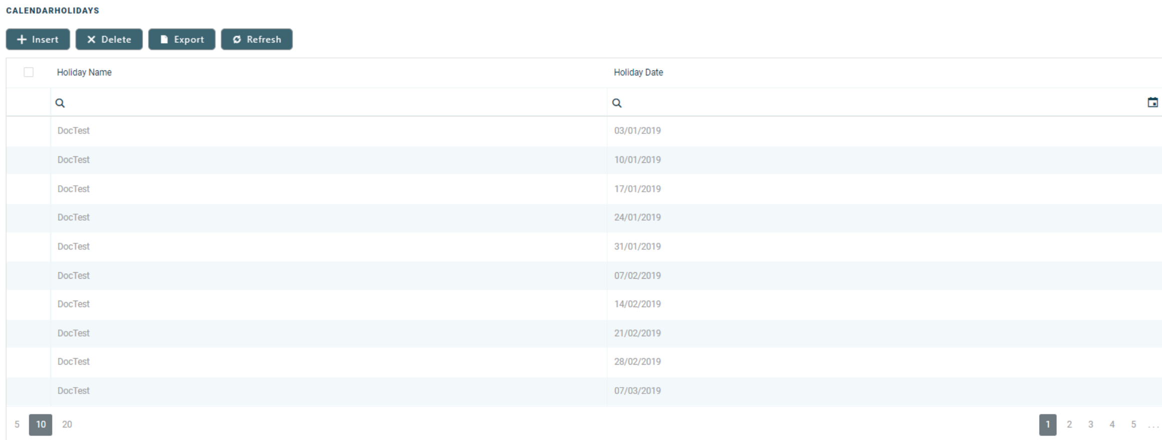
1. To create a new record, click the **Insert** button on the top right side of the **Holiday List** page. The **Add Holiday** page is displayed.

2. Fill in the following fields:



Field	Mandatory	Data Type	Details
Name	No	Text	The name of the holiday.
Code	No	Text	The code of the holiday.
Day and Month	No	Date	Input the day and the month of the holiday.
Country	Yes	Lookup	The country in which the holiday rule applies to.
Week Day	No	Lookup	The weekday on which the holidays falls on.

3. Click the **Save and Reload** button at the top right corner of the page. The **Calendar Holidays** records are populated.



HINT
Users can insert, delete, or export the calendar holiday data.

Allocation Method

The **Allocation Method** menu stores information about the details and the banking products using those specific definitions in their setup. In FintechOS, allocation methods are used to determine the order in which credit items are prioritized when repaying loans, credit accounts, and so on. Simply put, it represents the order in which a bank 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.

To manage allocation methods, follow these steps:

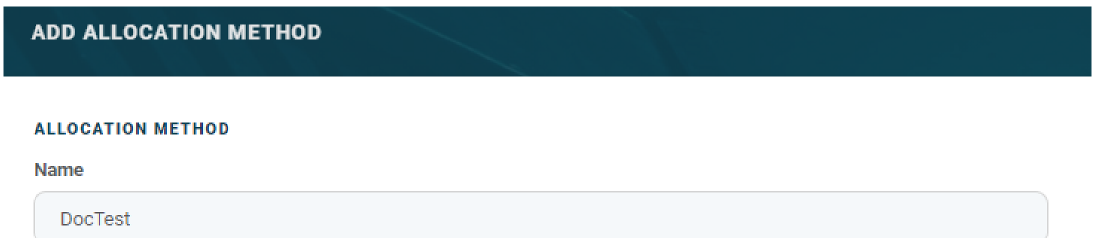
1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configuration** menu.
4. Click the **Allocation Method** menu item to open the **Add Allocation Method** page.

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

Creating Allocation Methods

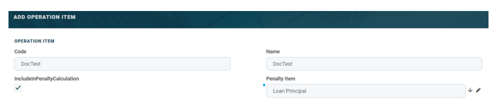
Allocation methods are created manually in FintechOS Portal, in the **Add Allocation Method** page.

1. To create a new allocation method, click the **Insert** button on the top right side of the **Allocation Method** page. The **Add Allocation Method** page is displayed.
2. Fill in the following field:



Field	Mandatory	Data Type	Details
Name	No	Text	The name of the allocation method.

3. Click the **Save and Reload** button at the top right corner of the page. The **Allocation Method Details** and the **Banking Products** sections are displayed.
4. In the newly displayed **Allocation Method Details** section, click the **Insert** button. The **Add Allocation Method Details** page opens.
5. Fill in the following fields:

Field	Mandatory	Data Type	Details
Credit Item	No	Lookup	The credit item of the allocation method. **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 `FTOS_CB_OperationItem`. 
Minimum Overdue days	No	Whole Number	The minimum overdue days of the credit item.
Maximum Overdue days	No	Whole Number	The maximum overdue days of the credit item.

IMPORTANT!

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.

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

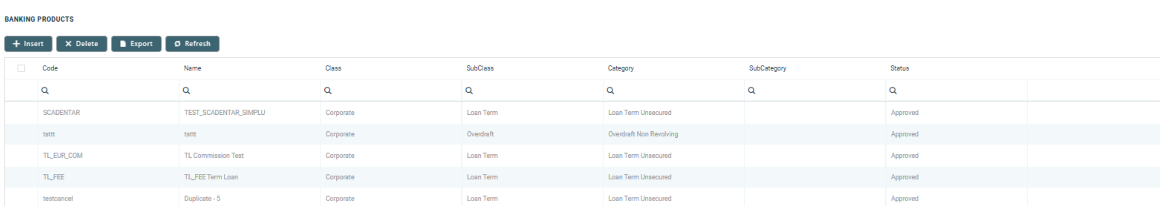
HINT
Users can insert, delete, or export the allocation method details.

Banking Products

Banking products are used in FintechOS digital journeys for cash management processes such as loan origination. The **Banking Products** menu displays the banking products associated with the allocation method previously created.

In addition, banking products are used when managing loans after the loan origination process is closed:

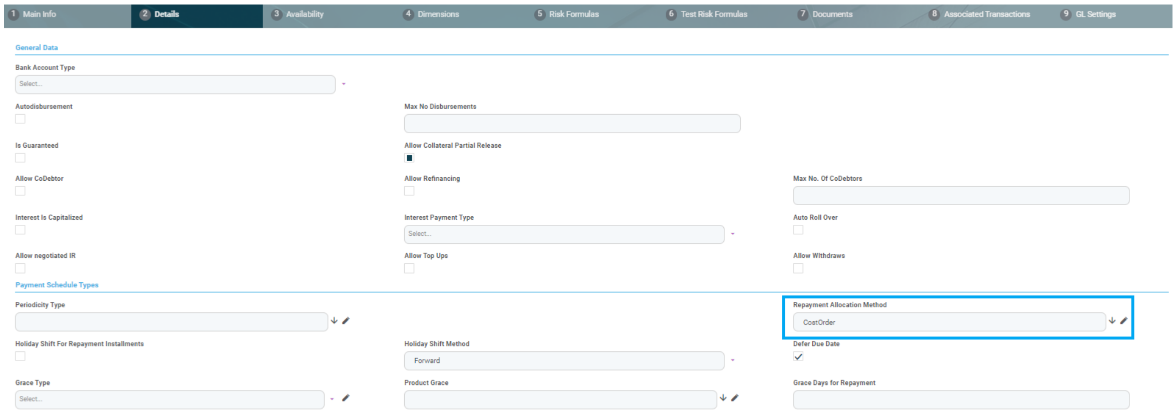
- open loan contract,
- loan disbursement,
- schedule projection creation,
- make due amounts according to the schedule projection.


BANKING PRODUCTS

Insert Delete Export Refresh

Code	Name	Class	SubClass	Category	SubCategory	Status	
SCADENTAR	TEST_SCADENTAR_SIMPLU	Corporate	Loan Term	Loan Term Unsecured		Approved	1
tsttt	tsttt	Corporate	Overdraft	Overdraft Non Revolving		Approved	1
TL_EUR_COM	TL Commission Test	Corporate	Loan Term	Loan Term Unsecured		Approved	1
TL_FEE	TL_FEE Term Loan	Corporate	Loan Term	Loan Term Unsecured		Approved	1
testcancel	Duplicate - 5	Corporate	Loan Term	Loan Term Unsecured		Approved	1

To create a banking product, click the **Insert** button under the **Banking Products** section. For more details on how to create banking products, see Managing Banking Products.



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.

Exchange rates are used in limit, collateral, and credit facility calculations, when the contract and the attached limit/ collateral, or the credit facility and its attached contracts are expressed in different currencies. They are also used within Operational Ledger, where all amounts are calculated using the accounting reference currency. In FintechOS, the **Exchange Rate** menu allows users to add the exchange rates needed in financial operations.

To manage exchange rates, follow these steps:

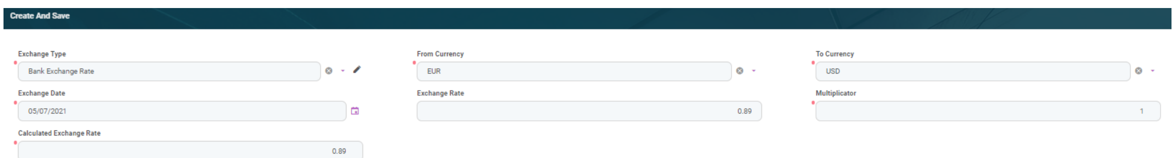
1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configuration** menu.
4. Click the **Exchange rate** menu item to open the **Exchange rate** page.

> **HINT**
> In the **Exchange Rate** page, users can add new exchange rates or search, edit, and delete existing ones.

Creating Exchange Rates

Exchange rates are created manually in FintechOS Portal, on the **Create and Save** page.

1. To create a new exchange rate, click the **Insert** button on the top right side of the **Exchange Rate** page. The **Create and Save** page is displayed.
2. Fill in the following fields:



Field	Mandatory	Data Type	Details
Exchange Type	Yes	Option Set	The exchange type. **IMPORTANT!** Users can create new exchange rate types in the **Exchange Rate Type** menu.
Exchange Date	Yes	Date	The exchange date.

Field	Mandatory	Data Type	Details
Calculated Exchange Rate	Yes	Numeric	The calculated exchange rate. The value is auto-calculated based on the following formula: `ExchangeRate * Multiplicator`. The field is editable.
From Currency	Yes	Option Set	The currency from which the exchange rate is made.
Exchange Rate	No	Numeric	The exchange rate.
To Currency	Yes	Option Set	The currency to which the exchange rate is made.
Multiplicator	Yes	Numeric	The value inputted here multiplies the exchange rate value. The default value is 1 but the field is editable.

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

Exchange Rate Type

The **Exchange Rate Type** menu allows users to add exchange rate types where there is a need to differentiate between exchange rates based on currency market or business area. These records are used when creating exchange rates in the **Exchange Rate** menu.

In FintechOS Core Banking, only BER (Bank Exchange Rate) is used when defining currency rate types.

To manage exchange rate types, follow these steps:

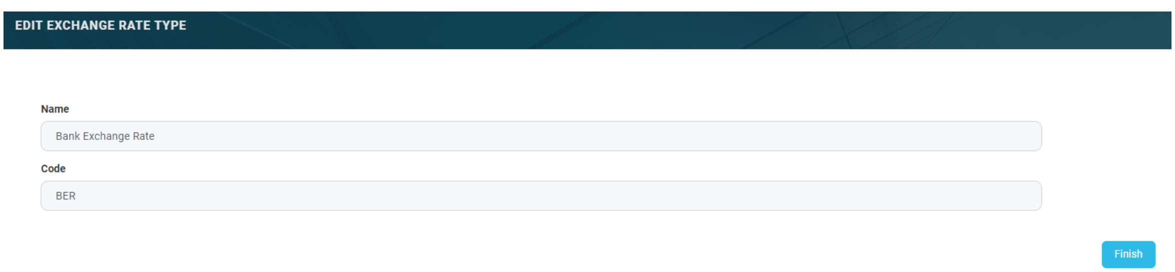
1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configuration** menu.
4. Click the **Exchange Rate Type** menu item to open the **Exchange Rate Types List** page.

> **HINT**
> In the **Exchange Rate Type** page, users can add new exchange rates types or search, edit, and delete existing ones.

Creating Exchange Rates Types

Exchange rate types are created manually in FintechOS Portal, in the **Add Exchange Rate Type** page.

1. To create a new exchange rate, 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:



Field	Mandatory	Data Type	Details
Name	No	Text	The name of the exchange rate type.
Code	No	Text	The code of the exchange rate type.

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

Loan Classification

Banks classify their existing loan contracts based upon the days past due (DPD), number of days passed since repayment due date without fully repaying the due amount.

> **NOTE**
> 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 banks 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 bank, this is again driven by regulations and may vary in time or depending on country or region.

Core Banking enables you to define the desired loan risk classification by managing the records in the FintechOS Portal's dedicated menu, **Loan Classification**.

> **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. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configurations** menu.
4. 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:

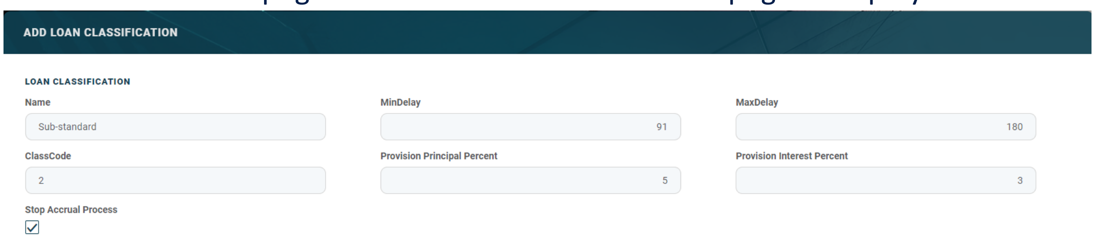
- Create a new classification record by clicking the **Insert** button at the top right corner.
- Edit an existing classification record from the list by double-clicking it and editing the existing values in the fields.
- Delete a record by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in any or all the column headers of the displayed records list.
- 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!
Only users with the attached **Loan Admin Officer** security role can select or deselect the **Stop Accrual Process** checkboxes.

Creating Loan Classification Records

Follow these steps to create new loan risk classification records:

1. In the FintechOS Portal, click the **Insert** button on the top right side of the **Loan Classifications List** page. The **Add Loan Classification** page is displayed.



2. Fill in the following fields:

Field	Mandatory	Data Type	Details
Name	No	Text	Enter the name of the risk classification record.
MinDelay	No	Whole Number	Enter the minimum 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.
MaxDelay	No	Whole Number	Enter the 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	No	Number	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	No	Number	Enter the provision percentage applicable to the principal amount of contracts falling into this loan risk classification.

Field	Mandatory	Data Type	Details
Provision Interest Percent	No	Number	Enter the provision percentage applicable to the interest amount of contracts falling into this loan risk classification.
Stop Accrual Process	No	Boolean	If the checkbox is selected, 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.

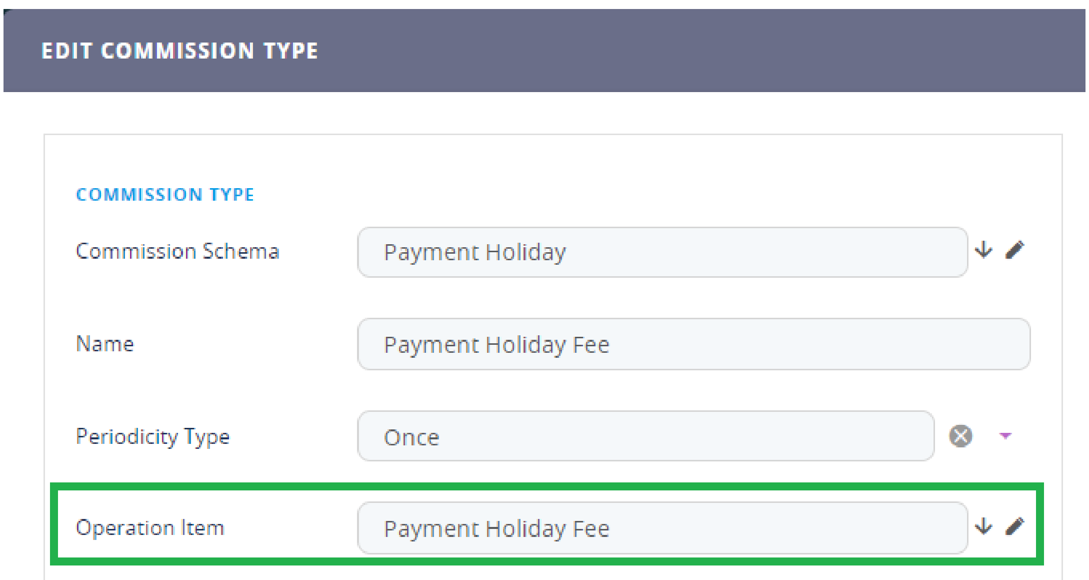
3. Click the **Save and Close** button at the top right corner of the page.

Operation Item

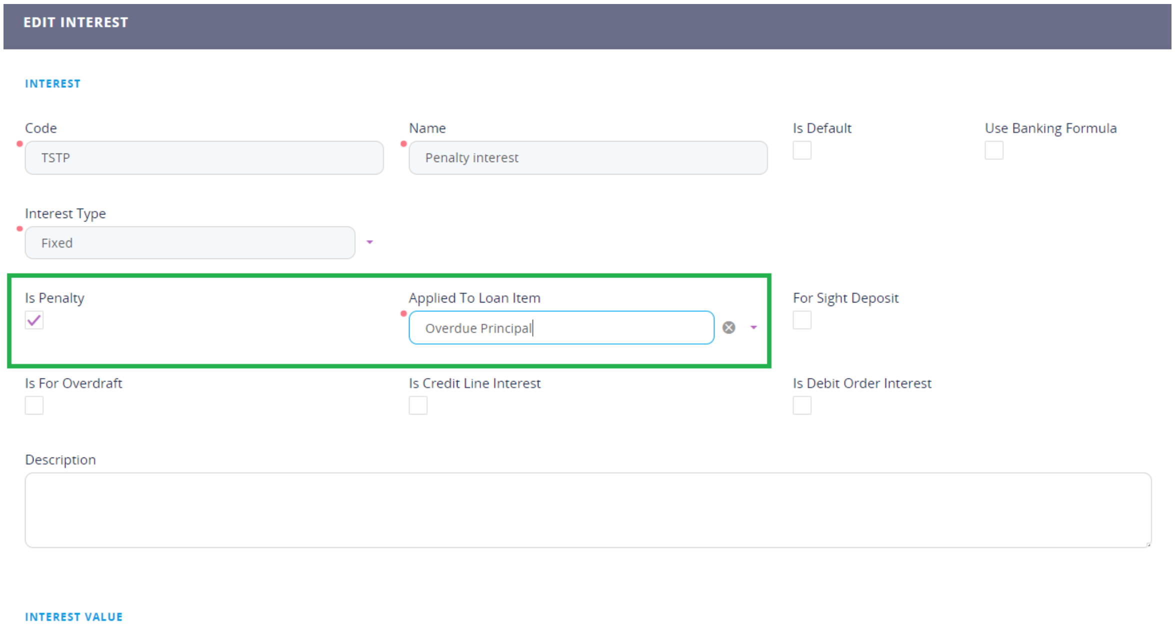
Operation items are those items that relate to a bank's core business, such as all types of fees, commissions, principals, interests, advances or penalty calculations. They can also be considered as balance types that add up to a certain deal or used in tracing what happened on a particular deal. For 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.

After defining the operation items, they are used by Core Banking in the calculation processes of payment and repayment notifications, due amounts, accounting entries, and others.

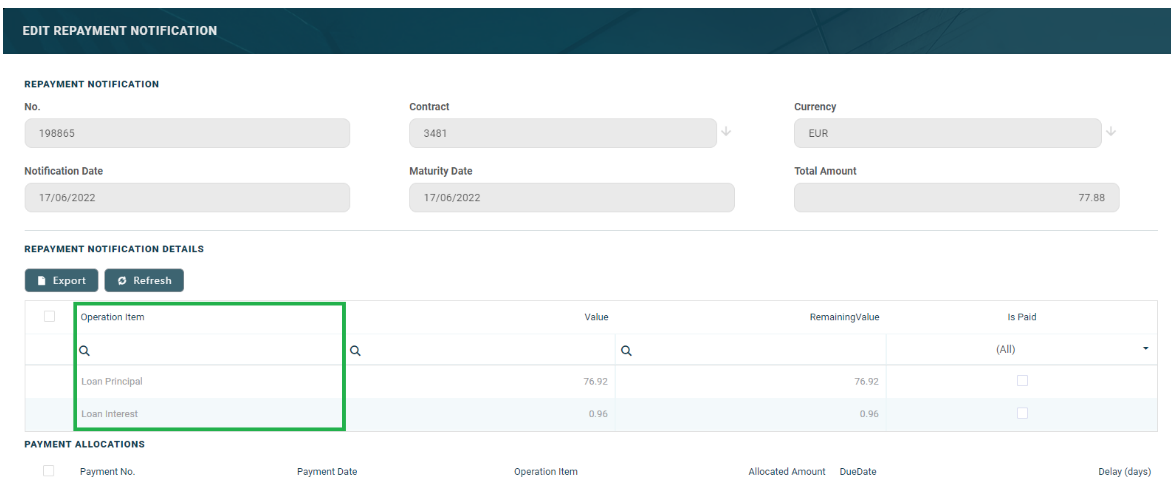
Example of using an operation item within a commission type definition:



Example of using an operation item within an interest definition:



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



Core Banking enables you to define the desired operation items by managing the records in the FintechOS Portal's dedicated menu, **Operation Item**. To manage operation item records:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.

3. In the main menu, expand the **Admin Configurations** menu.

4. 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	■

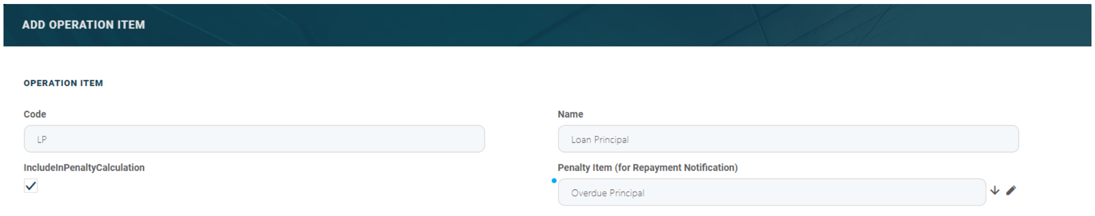
On the **Operation Item** page, you can:

- Create a new operation item record by clicking the **Insert** button at the top right corner.
- Edit an existing record from the list by double-clicking it and editing the existing values in the fields.
- Delete a record by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in any or all the column headers of the displayed records list.

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:

Field	Mandatory	Data Type	Details
Code	No	Text	Enter the unique code of the operation item.
Name	No	Text	Enter the name of the operation item.

Field	Mandatory	Data Type	Details
Include In Penalty Calculation	Yes	Boolean	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

Field	Mandatory	Data Type	Details
			and how to define them on the **Interests** page within the Banking Product User Guide.
Penalty Item (for Repayment Notification)	Yes	Lookup	This field is displayed and mandatory only 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 at the top right corner of the page.

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**
> The Core Banking system parameters are not to be confused with the FintechOS

system parameters, stored in the `systemparameter` and `systemParameterOnPortalProfile` entities.

- `AccountingAnalyticChar`
- `AccountingRealTime`
- `AdvanceNotification`
- `BankAccountTransactionFeeMarkDown`
- `CalendarYearEnd`
- `CalendarYearStart`
- `CreditFacilityLimitPercent`
- `CurrentAccount_WithOverdraft_DaysBeforeExpire`
- `DaysBeforePurge`
- `DaysFutureInstallmentsReport`
- `DaysPastDueInstallmentsReport`
- `DefaultIntervalLimitsReport`
- `DelayDaysForBlockNewContractApproval`
- `DepositAggregateItemValues`
- `EarlyRepaymentFee_IndividualNotification`
- `FrontEndFee`
- `FTOS_CB_CalculatedProvisions`
- `FTOS_CB_ExchangeRate_UseLatest`
- `LimitMandatoryForIndividuals`
- `LogScheduleJobError`
- `ManualRepaymentFee`
- `PurgeScheduleJobLogDays`
- `ReconciliationAccountTreatment`
- `RepaymentFee`
- `ThirdPartyPaymentIsNet`
- `ThirdPartyRole`
- `Unusage`
- `Usage`
- `UseCF`
- `UseContaminationForDPDCategory`
- `UseGLModule`

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

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`AccountingAnalyticChar`	The analytic character used when displaying decimal numbers.	Loan Admin	Text	N/A	N/A	.
`AccountingRealTime`	Specifies if all accounting entries are generated real-time (for `True` value) or on demand (for `False` value).	Loan Admin	Boolean	N/A	N/A	`False`
`AdvanceNotification`	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).	Loan Admin	Boolean	N/A	N/A	`False`

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`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 –	Loan Admin	Text	N/A	N/A	`Total`

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	debit and credit for the transaction value and each fee.					
`CalendarYearEnd`	The maximum year in the calendar to be used when generating holidays for calendars. Format: YYYY	Loan Admin	Whole Number	N/A	N/A	`2100`
`CalendarYearStart`	The minimum year in the calendar to be used when generating holidays for calendars. Format: YYYY	Loan Admin	Whole Number	N/A	N/A	`2019`
`CreditFacilityLimitPercent`	Represents the default limit of credit facility records.	Loan Admin	Whole Number	N/A	N/A	`30`

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`CurrentAccount_ WithOverdraft_ DaysBeforeExpire`	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.	Loan Admin	Whole Number	N/A	N/A	`30`

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`DaysBeforePurge`	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.	Loan Admin	Whole Number	N/A	N/A	Set it according to the bank's policy.

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`DaysFutureInstallmentsReport`	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.	Loan Admin	Whole Number	N/A	N/A	15
`DaysPastDueInstallmentsReport`	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.	Loan Admin	Whole Number	N/A	N/A	25
`DefaultIntervalLimitsReport`	Represents the default number of months considered when running the reports within the Limit Report dashboard.	Loan Admin	Whole Number	N/A	N/A	12

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`DelayDaysForBlockNewContractApproval`	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.	Collection	Whole Number	N/A	N/A	0

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`DepositAggregateItemValues`	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**	Loan Admin	Boolean	N/A	N/A	`False`

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	interest to recover in one line with the aggregate value.					
`EarlyRepaymentFee_IndividualNotification`	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).	Loan Admin	Boolean	N/A	N/A	`False`

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
FrontEndFee	The commission type used for automatic notification on contract approval (Inclusion)/ or notification daily process (Exclusion).	Loan Admin	Lookup	FTOS_BP_CommissionType	N/A	Front-end Fee
FTOS_CB_CalculatedProvisions		Loan Admin	Boolean	N/A	N/A	False
FTOS_CB_ExchangeRate_UseLatest		Loan Admin	Boolean	N/A	N/A	True

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`LimitMandatoryForIndividuals`	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	Loan Admin	Boolean	N/A	N/A	True

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	limits for the individual customers the same way it does for legal entity customers.					
LogScheduleJobError	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.	LoanAdmin	Boolean	N/A	N/A	False

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
ManualRepaymentFee	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	Loan Admin	Boolean	N/A	N/A	True

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	commission list displays all the commissions stored in the `FTOS_BP_Commission` entity with type Repayment Fee. Read more information about the effects of this parameter's value in the Transaction Fees section.					
`PurgeScheduleJobLogDays`	Specifies the number of days used to select the old data from the schedule job log to be purged.	Loan Admin	Whole Number	N/A	N/A	1

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
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	Banking Product	Option Set	N/A	FTOS_BP_WarningErrorTreatment	Warning

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	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					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	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					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	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					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	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.					
`RepaymentFee`	The commission type used for notification daily process (Exclusion).	LoanAdmin	Lookup	`FTOS_BP_CommissionType`	N/A	`Repayment Fee`

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`ThirdPartyPaymentIsNet`	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**	Loan Admin	Boolean	N/A	N/A	`False`

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	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`					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	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					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	`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.					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	• 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					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	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**.					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`ThirdPartyRole`	The list of allowed roles to choose from in the third-party agreement form.	Banking Product	Text	N/A	N/A	`Merchant,Insurer,Broker,Agent`
`Unusage`	Commission for not using the funds. The commission type used for Credit Facility accrual daily process.	Loan Admin	Lookup	`FTOS_BP_CommissionType`	N/A	`Commission Unusage Monthly`
`Usage`	Commission for usage of funds. The commission type used for Credit Facility accrual daily process.	Loan Admin	Lookup	`FTOS_BP_CommissionType`	N/A	`Commission Usage Monthly`

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
UseCF	Specifies whether your installation uses the Credit Facility module for Core Banking Corporate or not. • For `True` value, the Credit Facility module is used and the **Credit Facility** menu item is displayed within the Core Banking Operational menu. • For `False` value, the Credit Facility	Loan Admin	Boolean	N/A	N/A	True

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	module isn't used and the **Credit Facility** menu item is not displayed within the Core Banking Operational menu.					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`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	Loan Admin	Boolean	N/A	N/A	True

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	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					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	don't affect other loan contracts of the same customer. The parameter affects only the EOD and SOD jobs.					

System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
`UseGLModule`	Specifies whether your installation uses the General Ledger module or not. The GL 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	Loan Admin	Boolean	N/A	N/A	`True`

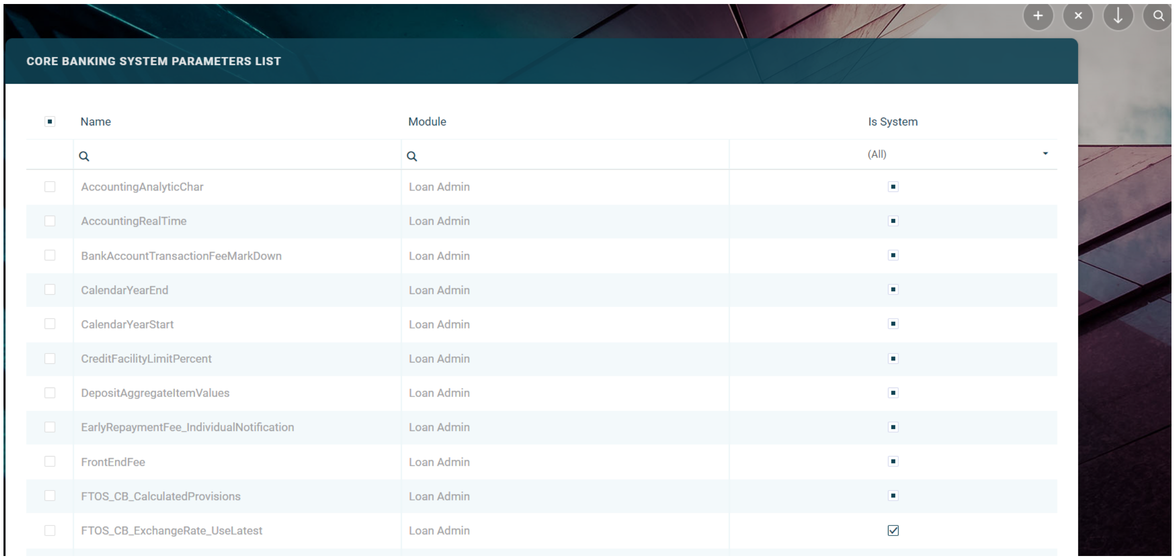
System Parameter	Description	Module	Parameter Type	Entity	Option Set	Default Value
	the **GL Settings** tab does not display at banking product level.					

Managing Core Banking System Parameters

IMPORTANT!
Only users with associated `system administrator` user rights can 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. Log into FintechOS Portal with a user with administrative rights.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configurations** menu.
4. Click **Core Banking System Parameter** menu item to open the **Core Banking System Parameters List** page.



On the **Core Banking System Parameters List** page, you can:

- Create a new Core Banking system parameter by clicking the **Insert** button at the top right corner.
- Edit a parameter from the list by double-clicking it.
- Delete a parameter by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in any or all the column headers of the displayed parameters list.

IMPORTANT!
Parameters marked as **Is System** cannot be deleted. When edited, only their value can be changed.

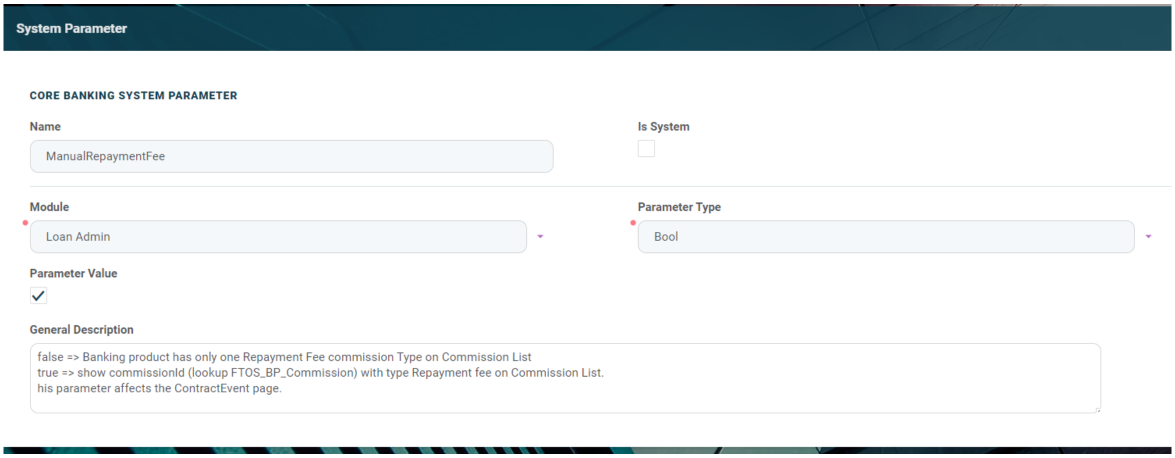
Creating Core Banking System Parameters

To create a new system parameter to be used with Core Banking, fill in the following fields on the **System Parameter** page displayed after clicking the **Insert** button:

Field	Required	Data Type	Details
Name	No	Text	Enter a suggestive name for the parameter.

Field	Required	Data Type	Details
Is System	Yes	Boolean	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	Yes	Option Set	Select the Core Banking module that uses the system parameter.
General Description	No	Text Area	Enter a detailed description for the system parameter.
Parameter Type	Yes	Option Set	Select the data type of the parameter. Possible values: `Text`, `Date`, `Date Time`, `Invariant Date`, `Whole Number`, `Numeric`, `Option Set` and `Entity`. The rest of the fields that need to be completed depend on the selected data type.
Entity	Yes	Lookup	Displayed for Lookup parameter type. Select the entity from where you need to pick a record as parameter value.
Option Set	Yes	Lookup	Displayed for Option Set parameter type. Select the option set from where you need to pick a value as parameter value.

Field	Required	Data Type	Details
Parameter Value	Yes	Depends on the selected parameter type	Holds 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.



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

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.

FintechOS allows you to manage the transaction types in the FintechOS Portal's **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 Innovation 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

The following transaction types are predefined to be used within Core Banking processes:

Transaction Type	Details	Can Be Purged
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.	No
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 intermediation of selling the third-party's products or services to customers, and to compensate the bank for managing the contract with the third-party.	Yes
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).	No
Disbursement	It represents the actual delivery of funds from a bank account to the customer. The repayment schedule gets calculated or recalculated.	Yes
Early Repayment	It represents the early return of funds previously borrowed from a lender. The repayment schedule is updated.	Yes
Early Termination Deposit	It represents the way of closing the deposit account applicable when the deposit is terminated before schedule.	Yes
Interest Capitalization	It represents the addition of the unpaid interest value to the principal balance.	No
Loan Contract	It represents a binding contract between two or more parties to formalize a loan process.	Yes
Overdraft Payment	It represents an amount of money that a customer with a bank account is temporarily allowed to owe to the bank.	No
Payment Deposit	It represents an amount of money paid into an account as part of a payment schedule.	No
Payment Holiday	It represents taking a break of any number of installments for the generated schedule.	Yes

Transaction Type	Details	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.	No
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.	No
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.	Yes
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.	Yes
Reschedule Debt	It represents an operation that updates the balance with the amount rescheduled.	No
Third-Party Invoice	It represents the invoice through which the amounts automatically calculated based on an agreement are recorded in Core Banking.	Yes
Top-Up Account	It represents adding amounts to the account before the value drains down to zero.	Yes
Transfer between my bank accounts	It represents the process of moving funds between the same customer's bank accounts.	Yes
Withdraw	It represents removing funds from a bank account.	Yes

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 (marked with **No** in the above table's **Can Be Purged** column) 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 (marked with **Yes** in the above 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`.

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**: represents adding more money to the account before the value drains down to zero.
- **Transfer between my bank accounts**: represents the process of moving funds between the same customer's bank accounts.
- **Withdraw**: represents removing funds from a bank account, savings plan, pension, or trust.

NOTE
At the moment 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:

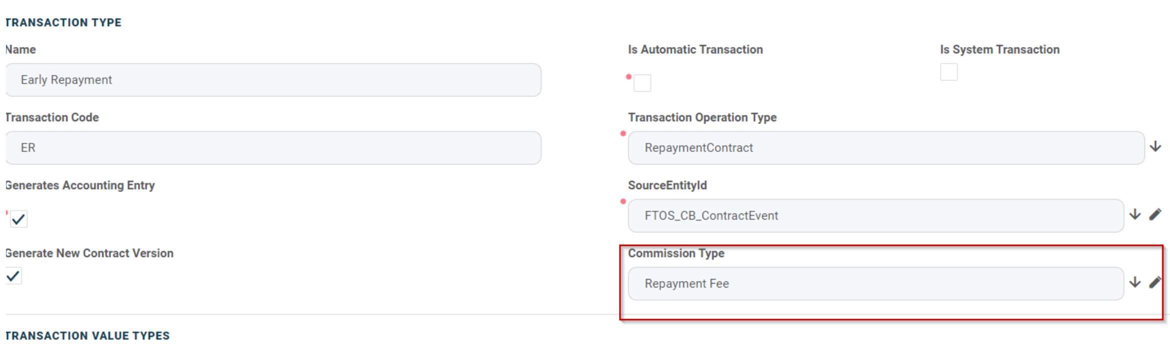
- **Disbursement**: represents the actual delivery of funds from a bank account to the customer. The repayment schedule gets calculated or recalculated.

- **Early Repayment**: represents the early return of funds previously borrowed from a lender. The repayment schedule is updated.
- **Payment Holiday**: represents taking a break of any number of installments for the generated schedule.
- **Repayment Notification**: 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.
- **Reschedule Overdues**: represents an operation where overdue installments are merged to the following installments and they are no longer collecting penalties. The repayments schedule gets updated.
- **Reschedule Debt**: represents an operation that updates the balance with the amount rescheduled.

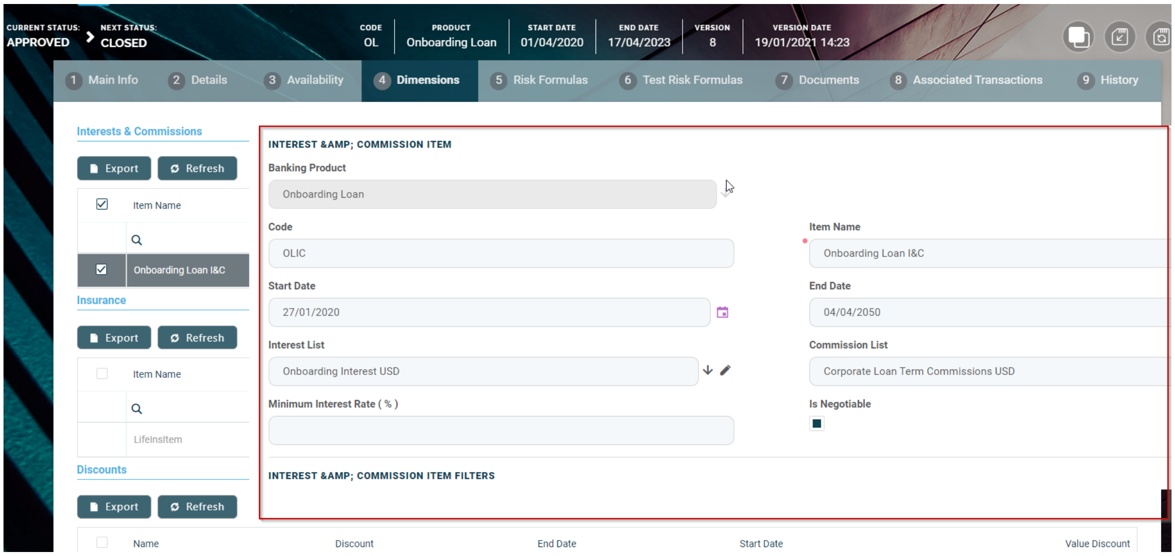
Transaction Fees

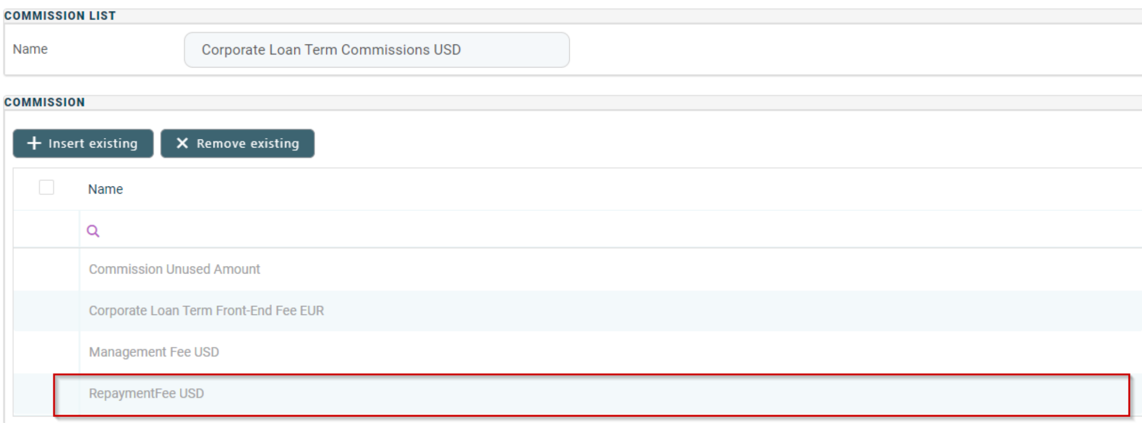
Some transactions have a fee collected at the event validation for each contract. For these transactions, repayment notifications for those fees are automatically generated when an event gets to the **Approved** status. For Early Repayment transaction there is a repayment fee, and for Payment Holiday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

When defining the transaction type, within the **General Ledger Configurations -> Transaction Type** menu of the FintechOS Portal, you can select the commission type for the fee:

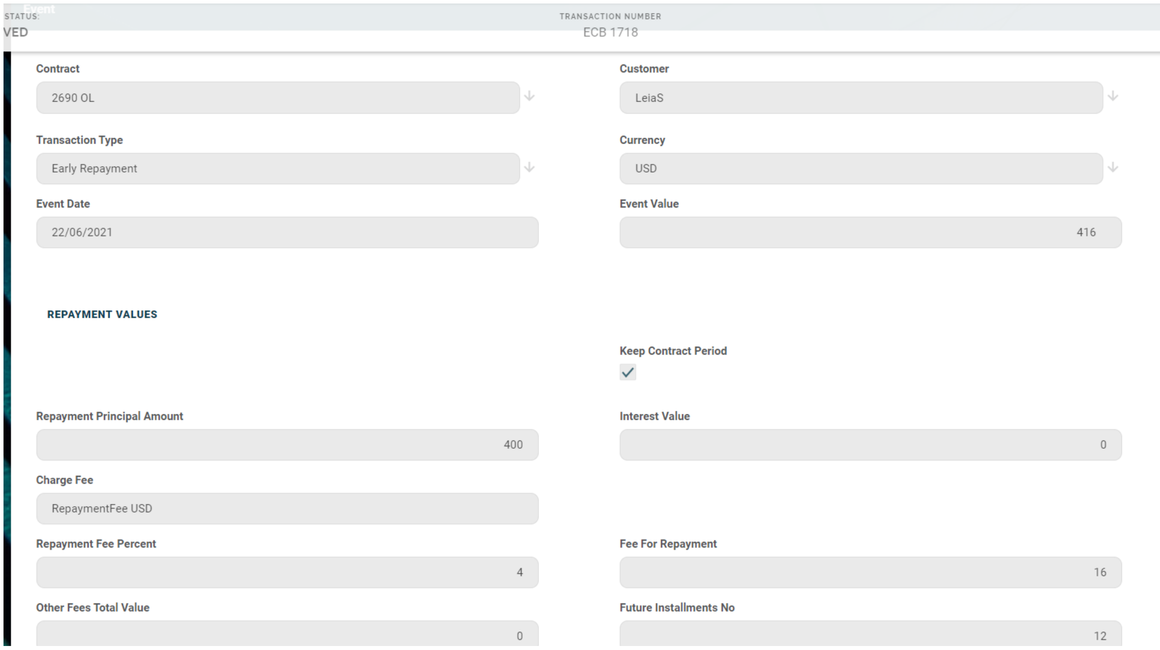


Let's say your contract uses a banking product that has this type of fee attached to it:





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.



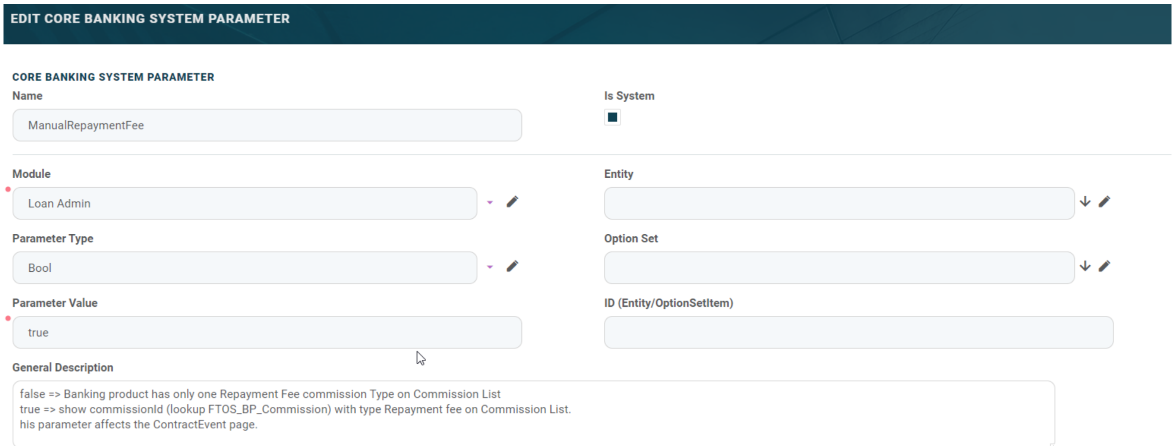
For a payment holiday that affects future installments, only the payment holiday fee gets notified.

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.

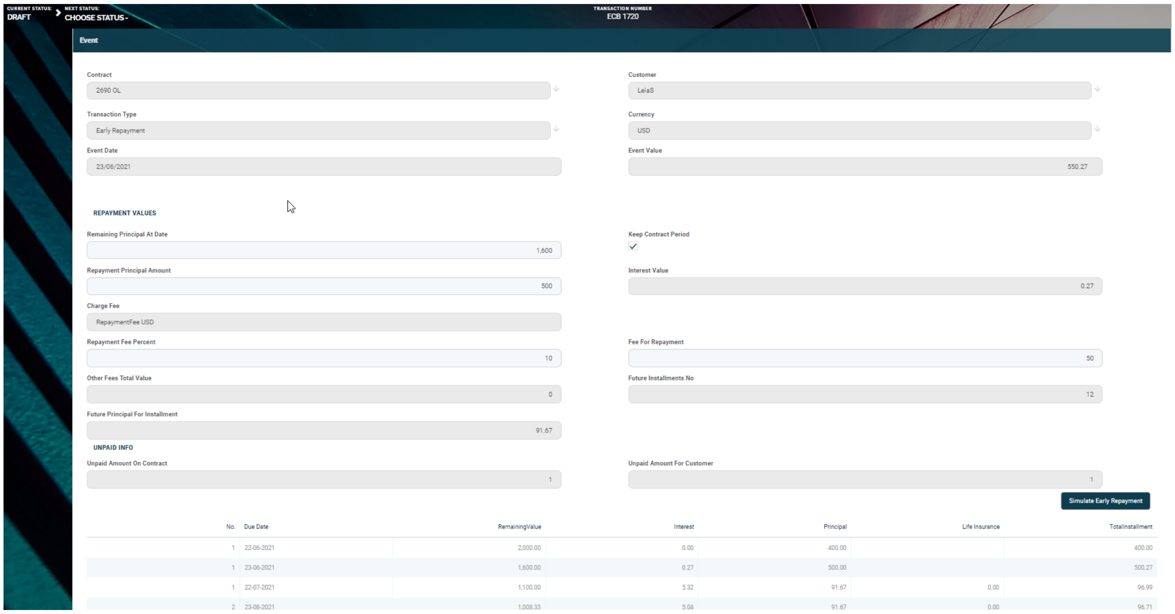
The Core Banking system parameter `ManualRepaymentFee`, having a default value `False`, is used mostly for early repayment.



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.

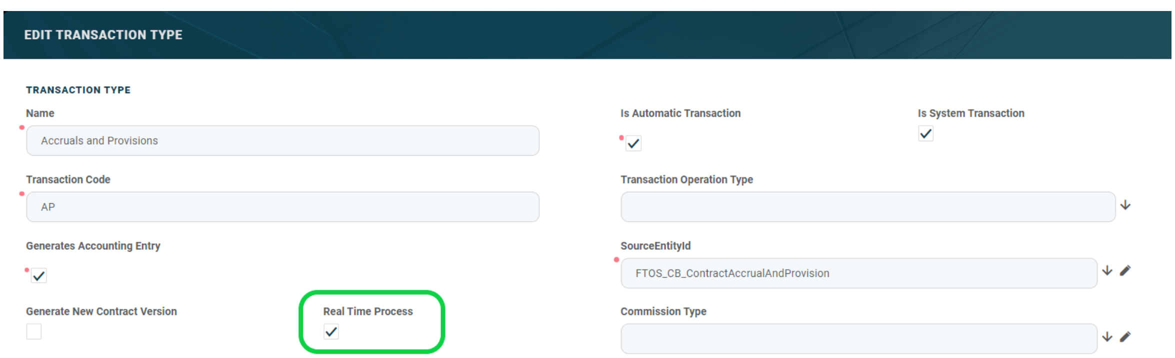
When the value of the `ManualRepaymentFee` parameter is **True**, the early repayment fee is negotiable, and the credit officer that is operating the contract event can change the default value that is coming out of the banking product. If the fee is a percentage, then they can change the fee percentage 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.



Real-Time or Queued Transaction Processing

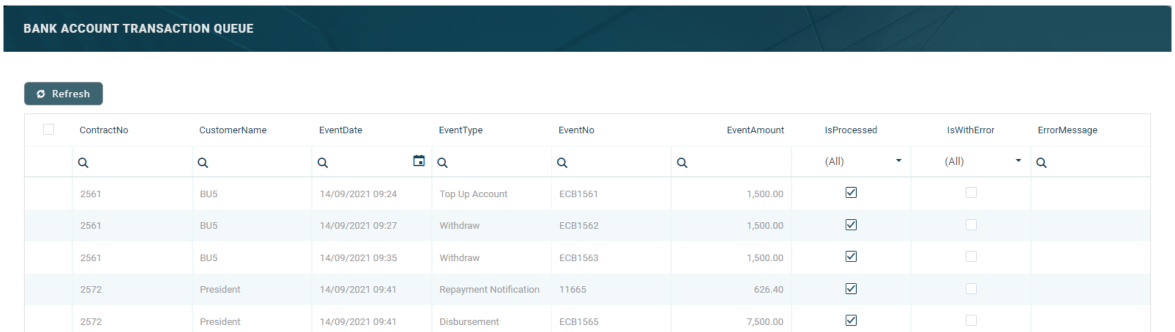
The transactions made on bank accounts can be processed in real-time, when the transaction is approved, or at a later time, after being placed in a queue and taken for processing by a specialized scheduled job. The real-time processing depends on the **Real Time Process** checkbox being selected or not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



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 `FTOS_CB_BankAccountTransactionQueue` entity, with the `isProcessed` attribute set to `False` and `isWithError` set to `False`. The Bank

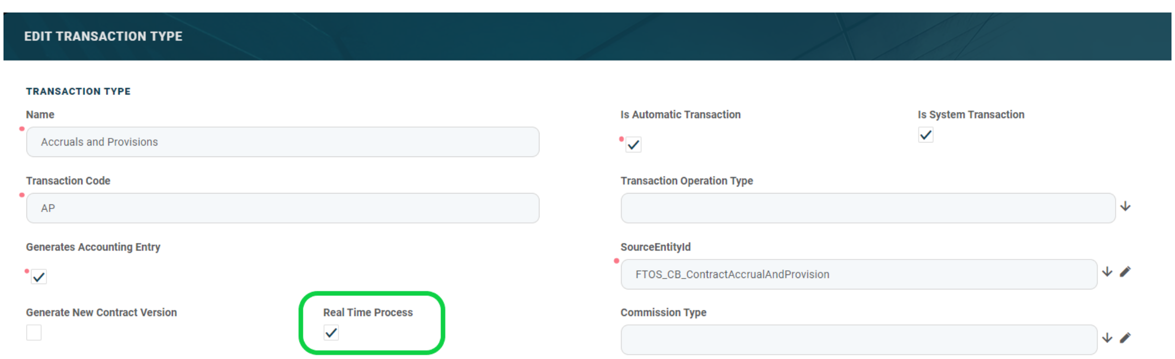
`Account Transaction Queue Processing` scheduled job runs every 1 minute, taking the top 10 records from the entity with the attribute `isProcessed = False`, and processing the transactions. Any errors encountered on processing are logged in the `errorMessage` attribute. The `Bank Account Transaction Queue Cleanup` scheduled job runs once each night and cleans up the already processed transaction records with `isWithError = False`.

The transactions within the queue can be viewed by users with administrator rights from the **Bank Account Transaction Queue** menu in Core Banking:



Bank Account Transaction Queue

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:

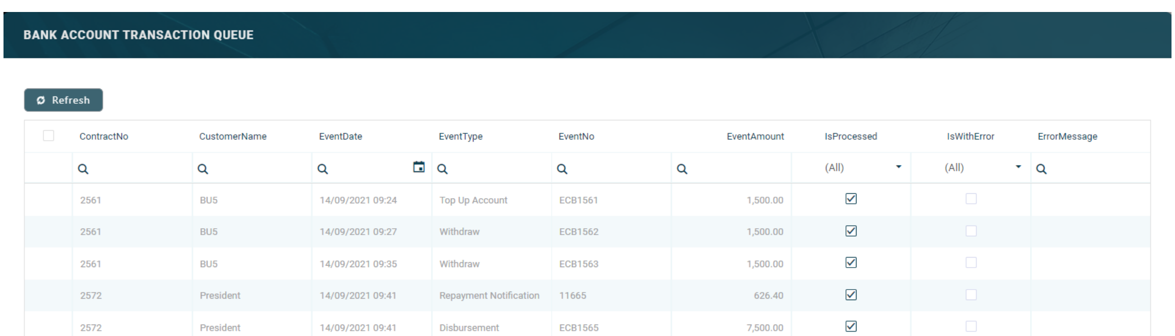


Each time a transaction is performed on a bank account, the system verifies its transaction type's **Real Time Process** field. If the value is `True`, then the transaction is processed right away. If the value is `False`, then the transaction is inserted as a record in the `FTOS_CB_BankAccountTransactionQueue` 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`.

The transactions within the queue can be viewed by users with administrator rights from the **Bank Account Transaction Queue** menu in Core Banking.

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

1. Log into FintechOS Portal with an administrator user with **Loan Admin Officer** security role.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configurations** menu.
4. Click the **Bank Account Transaction Queue** menu to open the **Bank Account Transaction Queue** page.


BANK ACCOUNT TRANSACTION QUEUE

Refresh

ContractNo	CustomerName	EventDate	EventType	EventNo	EventAmount	IsProcessed	IsWithError	ErrorMessage
						(All)	(All)	
2561	BU5	14/09/2021 09:24	Top Up Account	ECB1561	1,500.00	☑	☐	
2561	BU5	14/09/2021 09:27	Withdraw	ECB1562	1,500.00	☑	☐	
2561	BU5	14/09/2021 09:35	Withdraw	ECB1563	1,500.00	☑	☐	
2572	President	14/09/2021 09:41	Repayment Notification	11665	626.40	☑	☐	
2572	President	14/09/2021 09:41	Disbursement	ECB1565	7,500.00	☑	☐	

The page displays in a table 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.
- **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 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).

Transactions between bank accounts within Core Banking are first created in `Draft` status. When the 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.

Fees can be defined to be added to bank account transactions. Using fee lists, fees with specified values can be attached to each bank account transaction type. The lists can further be filtered. 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 data of the transaction. Operations of debit and credit are created for both transaction value and fees. The number of credit and debit operations created by Core Banking is managed through the `BankAccountTransactionFeeMarkDown` system parameter.

Core Banking enables you to configure the bank account transaction operations and fees by managing the records within Innovation Studio's dedicated menu, **Bank Transaction Configurations**, located inside the **Product Factory** menu.

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	1	0	0	0	0	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	1	0	0	1	0	Contract Event	Disbursement
Repayment	RP	Loan Account	1	0	0	1	0	Payment	PaymentIn
Top-Up Account	TPCA	Current Account	1	0	0	0	0	Contract Event	PaymentIn
Payment Deposit	PD	Deposit Account	1	0	0	1	0	Payment Notification	PaymentIn
Withdraw	W	Current/ Deposit Account	1	0	0	0	0	Contract Event	Payment Out
Transfer between my bank accounts	TR	Current Account	0	0	0	0	0		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	1	0	0	1	0	Payment Notification	Payment Out
Revert Transfer between my bank accounts	RTR	Current Account	1	0	0	1	0	Contract Event	Payment Out
Deposit Liquidation	DLQ	Deposit Account	1	0	0	0	0	Contract Event	Payment Out
Reschedule Overdues	RO	Loan Account	0	0	0	0	1		RecoverDebt
Repayment Notification	RN	Loan Account	1	0	0	1	0	Repayment Notification	RepaymentContract
Early Repayment	ER	Loan Account	1	0	0	0	1	Contract Event	RepaymentContract
Overdraft Payment	ODP	Loan Account	1	0	0	0	0	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`).

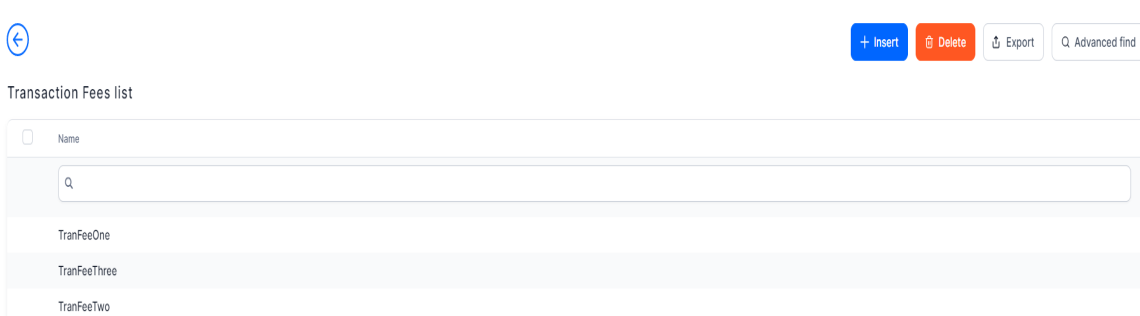
Transaction Fee

Banks can define different fees to be applied to bank account transactions. Using fee lists, fees with specified values can be attached 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.

Core Banking enables you to define the desired transaction fees by managing the records within Innovation Studio's dedicated menu, **Transaction Fees**.

To manage transaction fee records:

1. Log into Innovation Studio.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Product Factory** menu.
4. Expand **Bank Transaction Configurations** menu.
5. Click **Transaction Fee** menu item to open the **Transaction Fees List** page.



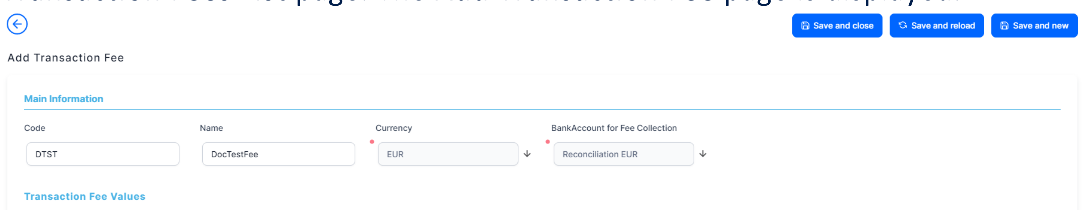
On the **Transaction Fees List** page, you can:

- Create a new transaction fee record by clicking the **Insert** button at the top right corner.
- Edit an existing transaction fee record from the list by double-clicking it and editing the existing values in the fields.
- Delete a record by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in the column header of the displayed records list.

Creating Transaction Fee Records

Follow these steps to create new transaction fee records:

1. In the Innovation Studio, click the **Insert** button on the top right side of the **Transaction Fees List** page. The **Add Transaction Fee** page is displayed.



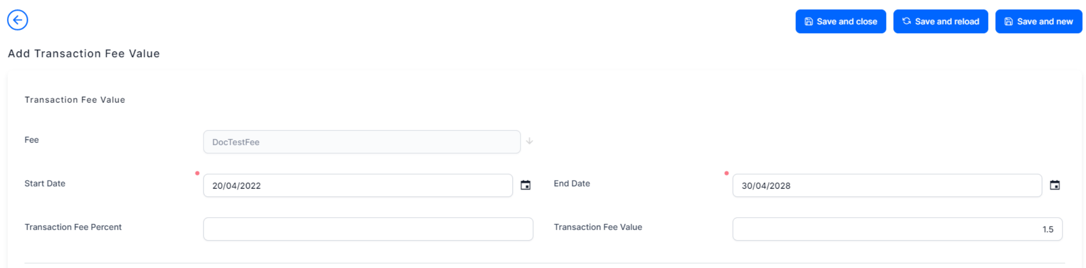
2. Fill in the following fields:

Field	Mandatory	Data Type	Details
Code	No	Text	Enter a code for this transaction fee record.
Name	No	Text	Enter the name of the transaction fee record.
Currency	Yes	Lookup	Select the currency of the fee.
Bank Account for Fee Collection	Yes	Lookup	Select the bank account for the fee collection.

3. Click the **Save and Reload** button at the top right corner of the page.

   A new section, **Transaction Fee Values**, is displayed after saving the record. The values of the transaction fee are managed within this section.

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



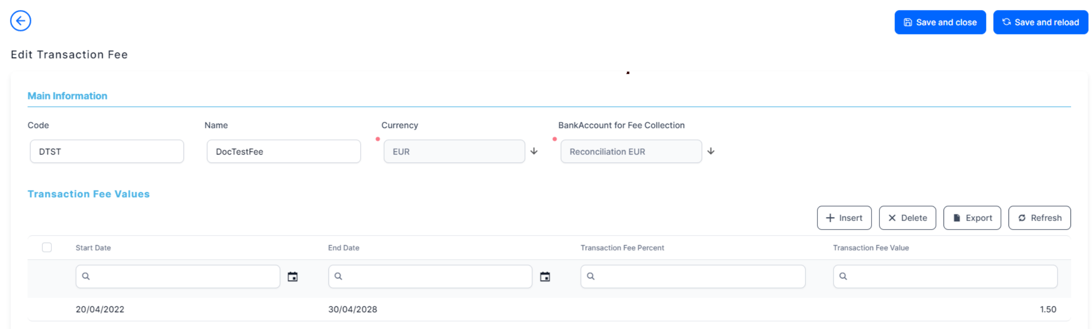
5. Fill in the following fields:

Field	Mandatory	Data Type	Details
Fee	No	Lookup	The transaction fee record for which you are inserting values.
Start Date	Yes	Invariant Date	The date from which the fee value becomes active.
End Date	Yes	Invariant Date	The date until which the fee value is active.
Transaction Fee Percent	No	Numeric	The percent from the bank account transaction applied as fee value if the value is defined as a percentage. If the value is a fixed value, leave this field empty.
Transaction Fee Value	No	Numeric	The value of the transaction fee, expressed in the transaction fee currency if the value is not defined as percentage. If the value is calculated as a percentage, leave this field empty.

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



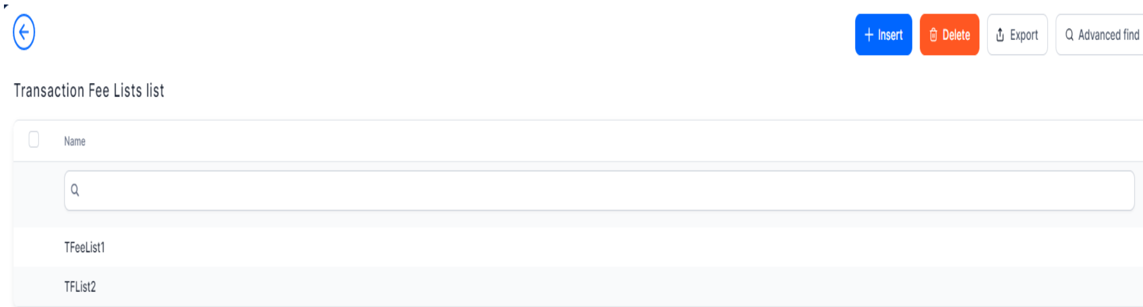
Transaction Fee List

Lists are used 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 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.

Core Banking enables you to define lists to group transaction fees by managing the records within Innovation Studio's dedicated menu, **Transaction Fee List**.

To manage transaction fee list records:

1. Log into Innovation Studio.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Product Factory** menu.
4. Expand **Bank Transaction Configurations** menu.
5. Click **Transaction Fee List** menu item to open the **Transaction Fees Lists List** page.



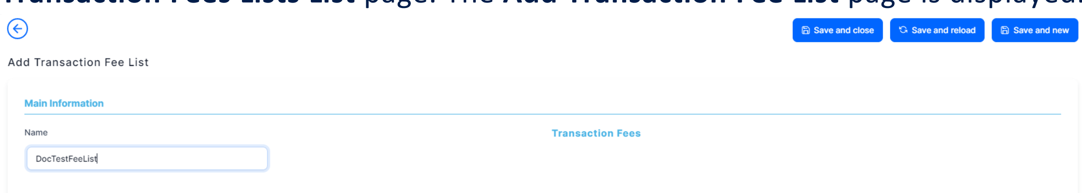
On the **Transaction Fees Lists List** page, you can:

- Create a new transaction fee list record by clicking the **Insert** button at the top right corner.
- Edit an existing transaction fee list record from the list by double-clicking it and editing the existing values in the fields.
- Delete a record by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in the column header of the displayed records list.

Creating Transaction Fee List Records

Follow these steps to create new transaction fee list records:

1. In the Innovation Studio, click the **Insert** button on the top right side of the **Transaction Fees Lists List** page. The **Add Transaction Fee List** page is displayed.



2. Fill in the following field:

Field	Mandatory	Data Type	Details
Name	No	Text	Enter the name of the transaction fee list record.

3. Click the **Save and Reload** button at the top right corner of the page.

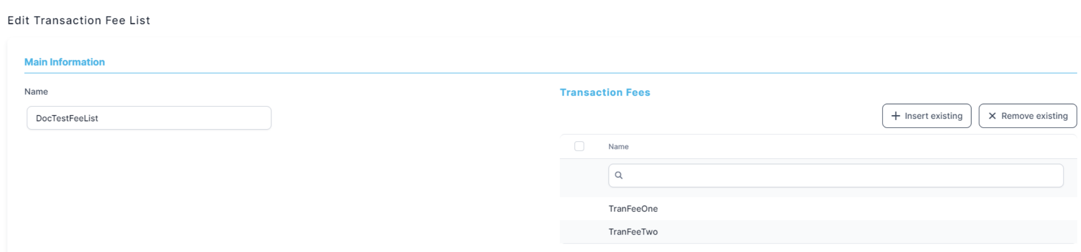
   A new section, **Transaction Fees**, is displayed after saving the record. The actual transaction fees of the list are managed within this section.

4. Click the **Insert existing** button within 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.

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

> **NOTE**
>
> You can add as many transaction fees as needed to your list.



Bank Account Transaction Operation

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

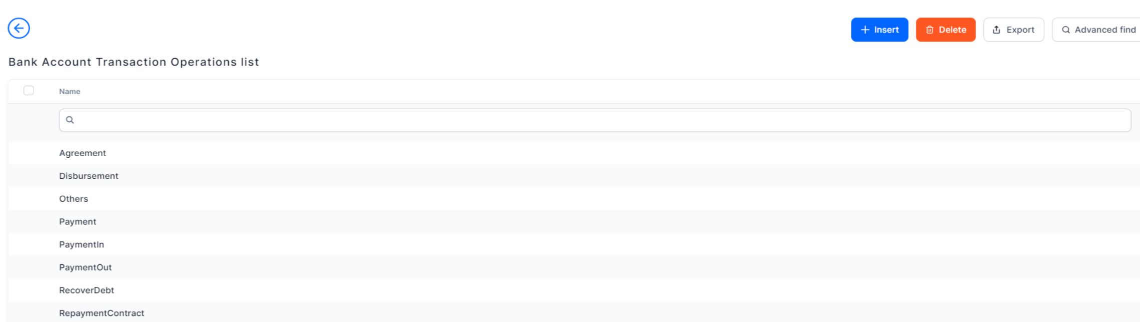
- `Payment` – usual transaction operation for a bank account transaction;
- `PaymentIn` – transaction operated into a bank account;
- `PaymentOut` – transaction operated from a bank account;

- `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, used by Core Banking.
- `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, used by Core Banking.
- `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, used by Core Banking.

Core Banking enables you to define the desired bank account transaction operations by managing the records within Innovation Studio's dedicated menu, **Bank Account Transaction Operation**.

To manage bank account transaction operations records:

1. Log into Innovation Studio.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Product Factory** menu.
4. Expand **Bank Transaction Configurations** menu.
5. Click **Bank Account Transaction Operation** menu item to open the **Bank Account Transaction Operations List** page.



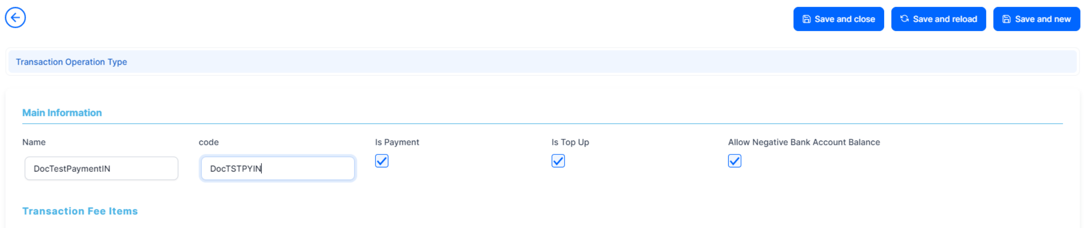
On the **Bank Account Transaction Operations List** page, you can:

- Create a new bank account transaction operation record by clicking the **Insert** button at the top right corner.
- Edit an existing bank account transaction operation record from the list by double-clicking it and editing the existing values in the fields.
- Delete a record by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in the column header of the displayed records list.

Creating Bank Account Transaction Operation Records

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

1. In the Innovation Studio, click the **Insert** button on the top right side of the **Bank Account Transaction Operations List** page. The **Transaction Operation Type** page is displayed, allowing you to add the new record.



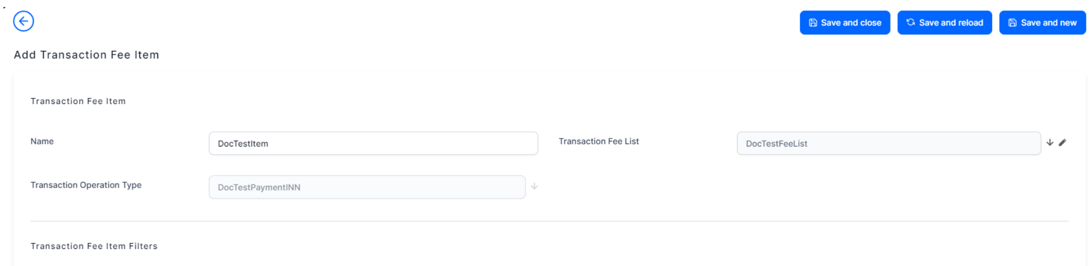
2. Fill in the following fields:

Field	Mandatory	Data Type	Details
Name	No	Text	Enter the name of the bank account transaction operation record.
Code	No	Text	Enter a code for this transaction operation record.
Is Payment	No	Boolean	If the checkbox is selected, then the bank account transaction operation record represents a payment within Core Banking.
Is Top-Up	No	Boolean	If the checkbox is selected, then 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	No	Boolean	If the checkbox is selected, then the bank account allows the existence of a negative balance. This field is displayed only if the `Is Payment` field is selected.

3. Click the **Save and Reload** button at the top right corner of the page.

   A new section, **Transaction Fee Items**, is displayed after saving the record. Here 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.

4. Click the **Insert** button within the **Transaction Fee Items** section to add a new item. The **Add Transaction Fee Item** page is displayed.



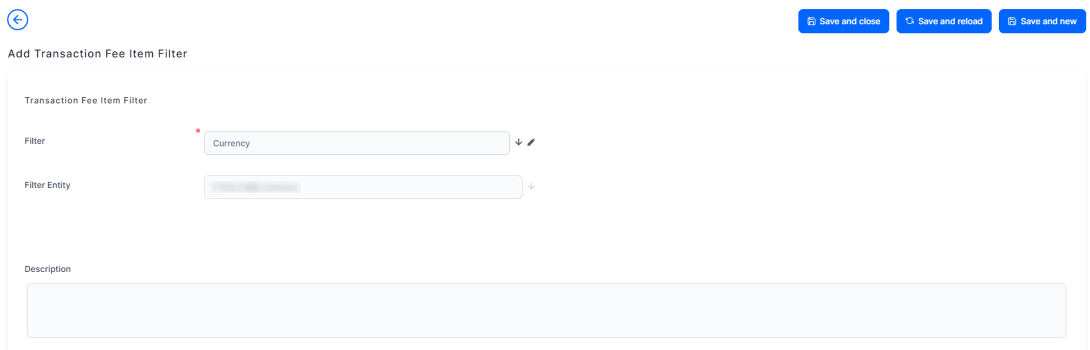
5. Fill in the following fields:

Field	Mandatory	Data Type	Details
Name	No	Text	Enter the name of the transaction fee item record.
Transaction Fee List	No	Lookup	Select the transaction fee list associated to the transaction fee item.
Transaction Operation Type	No	Lookup	This field is automatically completed with the bank account transaction operation record being edited and it cannot be changed.

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

A new section, **Transaction Fee Item Filters**, is displayed after saving the record. Here you can add filters for the transaction fee item. You can add as many item filters as you need.

7. Click the **Insert** button within the **Transaction Fee Item Filters** section to add a new item filter. The **Add Transaction Fee Item Filter** page is displayed.



8. Fill in the following fields:

Field	Mandatory	Data Type	Details
Filter	Yes	Lookup	Select the filter for the transaction fee item filter.
Description	No	Text Area	Enter a description for the transaction fee item filter.

9. Click the **Save and Reload** button at the top right corner of the page. A series of fields are displayed within the same page after saving the record.

10. Fill in the following fields in order to specify the filtering criteria for the transaction fee item filter:

Field	Mandatory	Data Type	Details
Text Value	No	Text	Enter the text value of the filter if applicable.
Value	No	Numeric	Enter the starting value for the filter if applicable.
Until Value	No	Numeric	Enter the ending value of the interval if applicable.
Date	No	Invariant Date	Enter the starting date for the filter if applicable.

Field	Mandatory	Data Type	Details
Until Date	No	Invariant Date	Enter the ending date for the interval if applicable.
OptionSet	No	Option Set	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	No	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 at the top right corner of the page.

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 Innovation Studio User Guide's dedicated page.

Core Banking has 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 are run as part of this job:

Running Order	Service Name	Details
1	**Start Job Log**	When successfully run and if another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `FTOS_CB_ScheduleJobLog` entity, containing information about the job starting time.
2	**Disburse Contracts With Approved Tranches In Current Date**	When successfully run, 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**	When successfully run, 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**	When successfully run, 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)**	When successfully run, 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)**	When successfully run, the service increases/ decreases the limit amount on credit facilities that reached their reevaluation plan due date.

Running Order	Service Name	Details
7	**Set Credit Facility Available Amount Due To FX Change**	When successfully run, 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**	When successfully run, the service changes the status of covenants on contracts that reached their review date.
9	**Set Contract Category Based on Overdue Days**	When successfully run, the service changes the category of contracts based on overdue days.
10	**Schedule versioning after stop accrual**	When successfully run, 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**	When successfully run, 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**	When successfully run, the service recalculates the accrual for utilization and for unusage for credit facilities.
13	**Calculate Accrual And Provisions For Loan Contracts**	When successfully run, the service recalculates the accrual and provisions for loan contracts.
14	**Calculate Overdraft Debt to recover**	When successfully run, the service recalculates the overdraft debt still to recover from contracts.
15	**Calculate Penalties for Contracts and Credit Facility**	When successfully run, the service recalculates the penalties for contracts and for credit facilities.

Running Order	Service Name	Details
16	**Calculate Interests For Deposit Contracts**	When successfully run, the service recalculates the interests for deposit contracts.
17	**End Job Log**	When successfully run, the service updates the same record that the **Start Job Log** service inserted within the `FTOS_CB_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 are run as part of this job:

Running Order	Service Name	Details
1	**Start Job Log**	When successfully run and if another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `FTOS_CB_ScheduleJobLog` entity, containing information about the job starting time.
2	**Set Limit Expired**	When successfully run, 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**	When successfully run, the service recalculates the accrual for utilization on repayment schedules for overdraft contracts and for current account with overdraft contracts.
4	**Run Recover Debts**	When successfully run, 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**	When successfully run, the service recalculates the accrual for unusage commissions on repayment schedules for contracts.

Running Order	Service Name	Details
6	**Update Expiry Date for Overdraft installment**	When successfully run, the service updates all the expiry dates for overdraft installments for the current account with overdraft contracts.
7	**Generate Repayment Notifications**	When successfully run, the service generates the repayment notifications for all the contracts with due amounts on schedule on that day.
8	**Recover Debts After Generate Notification**	When successfully run, the service performs the direct debit transactions to recover all debts after generating the repayment notifications.
9	**Run Payment Allocation**	When successfully run, the service performs the payment allocation operations for unallocated or partially allocated payments.
10	**Generate Accounting Entries**	When successfully run, the service generates the accounting entries for all transactions performed on that day.
11	**Set Limit Available Amount Due To FX Changes**	When successfully run, the service sets the limit amounts available to all contracts due to exchange rates changes.
12	**End Job Log**	When successfully run, the service updates the same record that the **Start Job Log** service inserted within the `FTOS_CB_ScheduleJobLog` entity, writing information about the job ending time.

Bank Account Transaction Queue Processing (CB) Job

The **Bank Account Transaction Queue Processing** scheduled job was created in order to process 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 `FTOS_CB_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 is run as part of this job:

Running Order	Service Name	Details
1	**Start Job Log**	When successfully run and if another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `FTOS_CB_ScheduleJobLog` entity, containing information about the job starting time.
2	**FTOS_CB_ BankAccountTransactionQueue_ Process**	When successfully run, the service takes the top 10 records from the bank account transactions queue (the `FTOS_CB_ 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**	When successfully run, the service updates the same record that the **Start Job Log** service inserted within the `FTOS_CB_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 is run as part of this job:

Running Order	Service Name	Details
1	**FTOS_CB_ BankAccountTransactionQueue_ Cleanup**	When successfully run, the service deletes the records from the bank account transactions queue (the `FTOS_CB_ BankAccountTransactionQueue` entity) with the attribute `isProcessed = True` and `isWithError = False`.

Close Contracts (CB) Job

The **Close Contracts** scheduled job was created to close 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:

Running Order	Service Name	Details
1	**Start Job Log**	When successfully run and if another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `FTOS_CB_ScheduleJobLog` entity, containing information about the job starting time.
2	**FTOS_CB_ CloseContract**	When successfully run, 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**	When successfully run, the service updates the same record that the **Start Job Log** service inserted within the `FTOS_CB_ScheduleJobLog` entity, writing information about the job ending time.

Close Contracts RealTime(CB) Job

The **Close Contracts RealTime** scheduled job was created to close 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:

Running Order	Service Name	Details
1	**Start Job Log**	When successfully run and if another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `FTOS_CB_ScheduleJobLog` entity, containing information about the job starting time.
2	**FTOS_CB_ CloseContractRealTime**	When successfully run, 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**	When successfully run, the service updates the same record that the **Start Job Log** service inserted within the `FTOS_CB_ScheduleJobLog` entity, writing information about the job ending time.

Run Loan Payment Allocation (CB) Job

The **Run Loan Payment Allocation** scheduled job was created to process 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:

Running Order	Service Name	Details
1	**Start Job Log**	When successfully run and if another SOD or EOD job is not currently running within Core Banking, the service inserts a record into the `FTOS_CB_ScheduleJobLog` entity, containing information about the job starting time.
2	**FTOS_CB_Debt_to_Payment**	When successfully run, the service processes the payment allocation operations for unallocated or partially allocated payments.

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:

Running Order	Service Name	Details
1	**Generate Invoices Automatically**	When successfully run, the service generates third-party invoices 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 invoice details were already created on a manual invoice, then these details are excluded from the automatic process.
2	**Charge Not Paid Invoices**	When successfully run, the service creates the bank account transactions for the due payments for invoices with **Not Paid** status.

Security Roles

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

Core Banking has a set of predefined security roles specific for banking-related business needs. Banks 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 Innovation Studio.

Banks can also create new security roles to fit their business needs. Read the Creating Security Roles topic for information about creating new security roles in Innovation Studio.

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 High Productivity Fintech Infrastructure's actions and functions:

Security Role	Description
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**.

Security Role	Description
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 a user is associated with more than one role, then the access rights are cumulative and the highest access right is granted.

The following sections offer detailed information about each security role's access rights to entities and endpoints within the High Productivity Fintech Infrastructure:

Loan Admin Officer

A user with this security role has the following access rights to records in the High Productivity Fintech Infrastructure's entities within **their organization**:

Entity	Scope	Read	Insert	Delete	Update
Account	Organization	1	0	0	0
AccountRelBusiness	Organization	1	0	0	0
AccountRelContact	Organization	1	0	0	0
AccountRelOwnership	Organization	1	0	0	0
Address	Organization	1	0	0	0
approvalTask	Organization	1	0	0	0
businessunit	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
BWstatus	Organization	1	1	0	1
entity	Organization	1	1	0	1
entitystatus	Organization	1	1	0	1
FTOS_ACC_AccountCountry	Organization	1	0	0	0
FTOS_ACC_AccountSanctionList	Organization	1	0	0	0
FTOS_ACC_Division	Organization	1	0	0	0
FTOS_ACC_Document	Organization	1	0	0	0
FTOS_ACC_GroupAccount	Organization	1	1	0	1
FTOS_ACC_GroupMember	Organization	1	0	0	0
FTOS_ACC_UnitType	Organization	1	0	0	0
FTOS_BP_BandedInterest	Organization	1	0	0	0
FTOS_BP_BankingProduct	Organization	1	0	0	0
FTOS_BP_BankingProductAgreement	Organization	1	0	0	0
FTOS_BP_BankingProductDiscount	Organization	1	0	0	0
FTOS_BP_BankingProductDocument	Organization	1	0	0	0
FTOS_BP_BankingProductMandatoryRoles	Business Unit	1	1	0	1
FTOS_BP_ClassificationType	Organization	1	0	0	0
FTOS_BP_CollateralType	Organization	1	1	0	1
FTOS_BP_Commission	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_BP_CommissionType	Organization	1	1	0	1
FTOS_BP_CommissionValue	Organization	1	0	0	0
FTOS_BP_Covenant	Organization	1	1	0	1
FTOS_BP_Feature	Organization	1	0	0	0
FTOS_BP_Formula	Organization	1	0	0	0
FTOS_BP_GLAccounts	Organization	1	1	0	1
FTOS_BP_InsuranceItem	Organization	1	0	0	0
FTOS_BP_Interest	Organization	1	0	0	0
FTOS_BP_InterestCommissionItem	Organization	1	1	0	1
FTOS_BP_InterestCommissionItemFilter	Organization	1	1	0	1
FTOS_BP_InterestRateMatrix	Organization	1	0	0	0
FTOS_BP_InterestValue	Organization	1	0	0	0
FTOS_BP_PaymentScheduleType	Organization	1	0	0	0
FTOS_BP_ProductAvailabilityItemFilter	Organization	1	0	0	0
FTOS_BP_ProductClassification	Organization	1	0	0	0
FTOS_BP_ProductCovenant	Organization	1	0	0	0
FTOS_BP_ProductDestinationType	Organization	1	0	0	0
FTOS_BP_ProductDisbursement	Organization	1	0	0	0
FTOS_BP_ProductGuaranteeStructure	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_BP_ProductQuestion	Organization	1	0	0	0
FTOS_BP_TestScenario	Organization	1	0	0	0
FTOS_CB_BankAccount	Organization	1	1	0	1
FTOS_CB_ BankAccountOperation	Organization	1	1	0	1
FTOS_CB_CollateralRegister	Organization	1	1	0	1
FTOS_CB_ CollateralRegister_BW	Organization	0	1	0	1
FTOS_CB_ CollateralRegisterDocuments	Organization	1	1	0	1
FTOS_CB_ CollateralRegisterOwner	Organization	1	1	0	1
FTOS_CB_ CollateralRegisterParticipants	Organization	1	1	0	1
FTOS_CB_ CollateralRegisterRank	Organization	1	1	0	1
FTOS_CB_Contract	Organization	1	1	0	1
FTOS_CB_Contract_BW	Organization	1	1	0	1
FTOS_CB_ ContractAccrualAndProvision	Organization	1	1	0	1
FTOS_CB_ ContractBorrowers	Organization	1	1	0	1
FTOS_CB_ ContractClassification	Organization	1	1	0	1
FTOS_CB_ContractCollateral	Organization	1	1	0	1
FTOS_CB_ ContractCorrectionEntry	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ ContractCorrectionEntry_ BW	Organization	0	1	0	1
FTOS_CB_ ContractCorrectionEntryDetail	Organization	1	1	0	1
FTOS_CB_ContractCovenant	Organization	1	1	0	1
FTOS_CB_ ContractCovenant_BW	Organization	1	1	0	1
FTOS_CB_ ContractDisbursement	Organization	1	1	0	1
FTOS_CB_ ContractDisbursementTranche	Organization	1	1	0	1
FTOS_CB_ ContractDisbursementTranche_BW	Organization	1	1	0	1
FTOS_CB_ContractDiscount	Organization	1	1	0	1
FTOS_CB_ ContractDocument	Organization	1	1	0	1
FTOS_CB_ContractEvent	Organization	1	1	0	1
FTOS_CB_ContractEvent_ BW	Organization	0	1	0	1
FTOS_CB_ContractFee	Organization	1	1	0	1
FTOS_CB_ ContractGuarantor	Organization	1	1	0	1
FTOS_CB_ ContractParticipant	Organization	1	1	0	1
FTOS_CB_ ContractParticipant_BW	Organization	1	1	0	1
FTOS_CB_ContractPenalty	Organization	1	1	0	1
FTOS_CB_ ContractReevaluation	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ ContractRepaymentSchedule	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleDetail	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleDisb	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleDisbDet	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleVersion	Organization	1	1	0	1
FTOS_CB_ControlPanel	Organization	1	0	0	0
FTOS_CB_ CovenantResolution	Organization	1	1	0	1
FTOS_CB_CreditFacility	Organization	1	0	0	0
FTOS_CB_ CreditFacilityAccrual	Organization	1	0	0	0
FTOS_CB_ CreditFacilityDetail	Organization	1	1	0	1
FTOS_CB_CreditFacilityFee	Organization	1	0	0	0
FTOS_CB_ CreditFacilityFeeValue	Organization	1	0	0	0
FTOS_CB_ CreditFacilityParticipant	Organization	1	0	0	0
FTOS_CB_CreditFacilityPlan	Organization	1	0	0	0
FTOS_CB_ CreditFacilityProduct	Organization	1	0	0	0
FTOS_CB_CustomerLimit	Organization	1	1	0	1
FTOS_CB_CustomerLimit_ BW	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ CustomerLimitType	Organization	1	1	0	1
FTOS_CB_ DailyContractInterest	Organization	1	1	0	1
FTOS_CB_DelayCategory	Organization	1	1	0	1
FTOS_CB_ DepositValueCalculation	Organization	1	1	0	1
FTOS_CB_OperationItem	Organization	1	0	0	0
FTOS_CB_ PaymentAllocation	Organization	1	1	0	1
FTOS_CB_ PaymentNotification	Organization	1	1	0	1
FTOS_CB_PeriodicityType	Organization	1	1	0	1
FTOS_CB_ RepaymentNotification	Organization	1	0	0	0
FTOS_CB_ RepaymentNotificationDetail	Organization	1	0	0	0
FTOS_CB_SystemParameter	Organization	1	1	0	1
FTOS_CB_ TransactionOperationType	Organization	1	1	0	1
FTOS_CB_VersioningReason	Organization	1	0	0	0
FTOS_CMB_AccountType	Organization	1	0	0	0
FTOS_CMB_Action	Organization	1	0	0	0
FTOS_CMB_Activity	Organization	1	0	0	0
FTOS_CMB_Country	Organization	1	0	0	0
FTOS_CMB_Currency	Organization	1	1	0	1
FTOS_EntityStatusSettings	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_GL_AccountingChart	Organization	1	1	0	1
FTOS_GL_AccountingEntry	Organization	1	1	0	1
FTOS_GL_AccountingJournal	Organization	1	1	0	1
FTOS_GL_AccountingScope	Organization	1	1	0	1
FTOS_GL_AccountingSystem	Organization	1	1	0	1
FTOS_GL_Journal	Organization	1	1	0	1
FTOS_GL_LegalEntity	Organization	1	1	0	1
FTOS_GL_LegalEntitySystem	Organization	1	1	0	1
FTOS_GL_ OperationTransaction	Organization	1	1	0	1
FTOS_GL_ OperationTransactionValue	Organization	1	1	0	1
FTOS_GL_ TransactionAccountingModel	Organization	1	1	0	1
FTOS_GL_ TransactionItemAccountingConfig	Organization	1	1	0	1
FTOS_GL_TransactionType	Organization	1	1	0	1
FTOS_GL_ TransactionValueType	Organization	1	1	0	1
FTOS_MKT_Activity	Organization	1	0	0	0
FTOS_VersionSettings	Organization	1	1	0	1
optionset	Organization	1	0	0	0
optionsetitem	Organization	1	0	0	0
systemuser	Organization	1	1	0	1

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

Endpoint
FTOS_BP_GetBankingProductDefaultValues
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetDataSourceFutureInstallmentsReport
FTOS_BP_GetDataSourcePastDueInstallmentsReport
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_AddUpdateContractPaymentHoliday
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateContractCustomValues_ForDisbursement
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckLimitTypeRole
FTOS_CB_ContractCommissionAmountCalc
FTOS_CB_DeleteRepaymentSchedule
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractCollateralInfo
FTOS_CB_GetContractExtendedData
FTOS_CB_GetContractInfo
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetContractsWithPaymentHolidayPossibility
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetEarlyRepaymentValues
FTOS_CB_GetExchangeRateOfCollateralRegisterToContract
FTOS_CB_GetFixedVariableInterest
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetLimitTypesFilter
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue

Endpoint
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetPurgeableRecordsByCode
FTOS_CB_GetReasonDetails
FTOS_CB_GetRemainingNotifications
FTOS_CB_GetSoonToExpireCurrentAccountWithOverdrafts
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
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_releaseCollaterals
FTOS_CB_SetInterestRate
FTOS_CB_UpdateActivationDate
FTOS_CB_UpdateTranche
FTOS_CB_ValidateOverdraftExpireFields
FTOS_CheckLicense
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_GL_CheckToBePurgedTransaction
FTOS_GL_GenerateAccountingEntry
FTOS_VerifyUsersCompetence

Accounting Read

A user with this security role has the following access rights to records in the High Productivity Fintech Infrastructure's entities within **their organization**:

Entity	Scope	Read	Insert	Delete	Update
Account	Organization	1	0	0	0
AccountRelBusiness	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
AccountRelContact	Organization	1	0	0	0
approvalTask	Organization	1	0	0	0
businessunit	Organization	1	0	0	0
entity	Organization	1	0	0	0
entitystatus	Organization	1	0	0	0
FTOS_ACC_GroupMember	Organization	1	0	0	0
FTOS_BP_BankingProduct	Organization	1	0	0	0
FTOS_BP_Commission	Organization	1	0	0	0
FTOS_BP_CommissionType	Organization	1	0	0	0
FTOS_BP_GLAccounts	Organization	1	0	0	0
FTOS_BP_Interest	Organization	1	0	0	0
FTOS_BP_ PaymentScheduleType	Organization	1	0	0	0
FTOS_BP_ ProductClassification	Organization	1	0	0	0
FTOS_CB_BankAccount	Organization	1	0	0	0
FTOS_CB_ BankAccountOperation	Organization	1	0	0	0
FTOS_CB_Contract	Organization	1	0	0	0
FTOS_CB_ ContractAccrualAndProvision	Organization	1	0	0	0
FTOS_CB_ ContractClassification	Organization	1	0	0	0
FTOS_CB_ContractCollateral	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ContractCovenant	Organization	1	0	0	0
FTOS_CB_ ContractDisbursementTranche	Organization	1	0	0	0
FTOS_CB_ ContractDocument	Organization	1	0	0	0
FTOS_CB_ContractEvent	Organization	1	0	0	0
FTOS_CB_ContractFee	Organization	1	0	0	0
FTOS_CB_ ContractGuarantor	Organization	1	0	0	0
FTOS_CB_ ContractParticipant	Organization	1	0	0	0
FTOS_CB_ContractPenalty	Organization	1	0	0	0
FTOS_CB_ ContractReevaluation	Organization	1	0	0	0
FTOS_CB_ ContractRepaymentSchedule	Organization	1	0	0	0
FTOS_CB_ ContractRepaymentScheduleDetail	Organization	1	0	0	0
FTOS_CB_ ContractRepaymentScheduleVersion	Organization	1	0	0	0
FTOS_CB_CreditFacility	Organization	1	0	0	0
FTOS_CB_ CreditFacilityAccrual	Organization	1	0	0	0
FTOS_CB_ CreditFacilityDetail	Organization	1	0	0	0
FTOS_CB_CreditFacilityFee	Organization	1	0	0	0
FTOS_CB_ CreditFacilityFeeValue	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ CreditFacilityParticipant	Organization	1	0	0	0
FTOS_CB_CreditFacilityPlan	Organization	1	0	0	0
FTOS_CB_ CreditFacilityProduct	Organization	1	0	0	0
FTOS_CB_CustomerLimit	Organization	1	0	0	0
FTOS_CB_CustomerLimit_ BW	Organization	1	0	0	0
FTOS_CB_ CustomerLimitType	Organization	1	0	0	0
FTOS_CB_OperationItem	Organization	1	0	0	0
FTOS_CB_ PaymentNotification	Organization	1	0	0	0
FTOS_CB_PeriodicityType	Organization	1	0	0	0
FTOS_CB_ RepaymentNotification	Organization	1	0	0	0
FTOS_CB_ TransactionOperationType	Organization	1	0	0	0
FTOS_CB_VersioningReason	Organization	1	0	0	0
FTOS_CMB_AccountType	Organization	1	0	0	0
FTOS_CMB_Currency	Organization	1	0	0	0
FTOS_EntityStatusSettings	Organization	1	0	0	0
FTOS_GL_AccountingChart	Organization	1	0	0	0
FTOS_GL_AccountingEntry	Organization	1	0	0	0
FTOS_GL_ AccountingJournal	Organization	1	0	0	0
FTOS_GL_AccountingScope	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_GL_ AccountingSystem	Organization	1	0	0	0
FTOS_GL_Journal	Organization	1	0	0	0
FTOS_GL_LegalEntity	Organization	1	0	0	0
FTOS_GL_LegalEntitySystem	Organization	1	0	0	0
FTOS_GL_ OperationTransaction	Organization	1	0	0	0
FTOS_GL_ OperationTransactionValue	Organization	1	0	0	0
FTOS_GL_ TransactionAccountingModel	Organization	1	0	0	0
FTOS_GL_ TransactionItemAccountingConfig	Organization	1	0	0	0
FTOS_GL_TransactionType	Organization	1	0	0	0
FTOS_GL_ TransactionValueType	Organization	1	0	0	0
optionset	Organization	1	0	0	0
optionsetitem	Organization	1	0	0	0

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

Endpoint
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckLimitTypeRole
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract

Endpoint
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetLimitTypesFilter
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetSystemInvariantDate
FTOS_CB_PeriodicityType
FTOS_CB_UpdateActivationDate
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_GL_GenerateAccountingEntry
FTOS_VerifyUsersCompetence

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

Dashboards
FTOS_RequestContractEvent
FTOS_CB_CustomerLimit

Corporate Credit Officer

A user with this security role has the following access rights to records in the High Productivity Fintech Infrastructure's entities within **their organization**:

Entity	Scope	Read	Insert	Delete	Update
Account	Organization	1	0	0	1
AccountRelBusiness	Organization	1	0	0	0
AccountRelContact	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
approvalTask	Organization	1	0	0	0
attribute	Organization	1	0	0	0
businessunit	Organization	1	0	0	0
BWstatus	Organization	1	0	0	0
entity	Organization	1	0	0	0
entitystatus	Organization	1	0	0	0
FTOS_ACC_Document	Organization	1	0	0	1
FTOS_ACC_GroupAccount	Organization	1	0	0	0
FTOS_ACC_GroupMember	Organization	1	0	0	0
FTOS_BP_BankingProduct	Organization	1	0	0	0
FTOS_BP_CollateralType	Organization	1	0	0	1
FTOS_BP_Commission	Organization	1	0	0	0
FTOS_BP_Covenant	Organization	1	0	0	0
FTOS_BP_Interest	Organization	1	0	0	0
FTOS_BP_ InterestCommissionItem	Organization	1	0	0	0
FTOS_BP_ InterestCommissionItemFilter	Organization	1	0	0	0
FTOS_BP_ PaymentScheduleType	Organization	1	0	0	0
FTOS_BP_ ProductClassification	Organization	1	0	0	0
FTOS_CB_BankAccount	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ BankAccountOperation	Organization	1	0	0	0
FTOS_CB_CollateralRegister	Organization	1	1	0	1
FTOS_CB_ CollateralRegister_BW	Organization	1	1	0	0
FTOS_CB_ CollateralRegisterDocuments	Organization	1	1	0	1
FTOS_CB_ CollateralRegisterOwner	Organization	1	1	0	1
FTOS_CB_ CollateralRegisterParticipants	Organization	1	1	0	1
FTOS_CB_ CollateralRegisterRank	Organization	1	1	0	1
FTOS_CB_Contract	Organization	1	1	0	1
FTOS_CB_Contract_BW	Organization	1	1	0	0
FTOS_CB_ ContractAccrualAndProvision	Organization	1	1	0	1
FTOS_CB_ ContractBorrowers	Organization	1	1	0	1
FTOS_CB_ ContractClassification	Organization	1	0	0	0
FTOS_CB_ContractCollateral	Organization	1	1	0	1
FTOS_CB_ ContractCorrectionEntry	Organization	1	1	0	1
FTOS_CB_ ContractCorrectionEntryDetail	Organization	1	1	0	1
FTOS_CB_ContractCovenant	Organization	1	1	1	1
FTOS_CB_ ContractDisbursement	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ ContractDisbursementTranche	Organization	1	1	1	1
FTOS_CB_ContractDiscount	Organization	1	1	0	1
FTOS_CB_ ContractDocument	Organization	1	1	1	1
FTOS_CB_ContractEvent	Organization	1	1	0	1
FTOS_CB_ContractEvent_ BW	Organization	1	1	0	0
FTOS_CB_ContractFee	Organization	1	1	1	1
FTOS_CB_ ContractGuarantor	Organization	1	1	0	1
FTOS_CB_ ContractParticipant	Organization	1	1	1	1
FTOS_CB_ ContractParticipant_BW	Organization	1	1	0	0
FTOS_CB_ContractPenalty	Organization	1	1	0	1
FTOS_CB_ ContractPenaltyDetail	Organization	1	1	0	1
FTOS_CB_ ContractReevaluation	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentSchedule	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleDetail	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleDisb	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleDisbDet	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ ContractRepaymentScheduleVersion	Organization	1	1	0	1
FTOS_CB_ControlPanel	Organization	1	0	0	0
FTOS_CB_CreditFacility	Organization	1	1	0	1
FTOS_CB_CreditFacility_BW	Organization	1	1	0	0
FTOS_CB_CreditFacility_ BWA	Organization	1	1	0	0
FTOS_CB_ CreditFacilityAccrual	Organization	1	1	0	1
FTOS_CB_ CreditFacilityDetail	Organization	1	1	0	1
FTOS_CB_ CreditFacilityDetail_BW	Organization	1	1	0	0
FTOS_CB_ CreditFacilityDetail_BWA	Organization	1	1	0	0
FTOS_CB_CreditFacilityFee	Organization	1	1	0	1
FTOS_CB_ CreditFacilityFeeValue	Organization	1	1	0	1
FTOS_CB_ CreditFacilityParticipant	Organization	1	1	0	1
FTOS_CB_CreditFacilityPlan	Organization	1	1	0	1
FTOS_CB_ CreditFacilityProduct	Organization	1	1	0	1
FTOS_CB_CustomerLimit	Organization	1	0	0	0
FTOS_CB_CustomerLimit_ BW	Organization	1	0	0	0
FTOS_CB_ CustomerLimitType	Organization	1	0	0	0
FTOS_CB_ DailyContractInterest	Organization	1	1	0	1
FTOS_CB_DelayCategory	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_DepositValueCalculation	Organization	1	1	0	1
FTOS_CB_OperationItem	Organization	1	0	0	0
FTOS_CB_PaymentAllocation	Organization	1	1	0	1
FTOS_CB_PaymentNotification	Organization	1	1	0	1
FTOS_CB_PeriodicityType	Organization	1	0	0	0
FTOS_CB_RepaymentNotification	Organization	1	1	0	1
FTOS_CB_VersioningReason	Organization	1	0	0	0
FTOS_CMB_AccountType	Organization	1	0	0	0
FTOS_CMB_Currency	Organization	1	0	0	0
FTOS_EntityStatusSettings	Organization	1	0	0	0
FTOS_GL_AccountingEntry	Organization	1	0	0	0
FTOS_GL_TransactionType	Organization	1	0	0	0
FTOS_VersionSettings	Organization	1	0	0	0
systemuser	Organization	1	0	0	0

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

Endpoint
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetBankingProductsForCreditFacility
FTOS_BP_GetDataSourceFutureInstallmentsReport
FTOS_BP_GetDataSourcePastDueInstallmentsReport
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateContractCustomValues_ForDisbursement
FTOS_CB_CalculateMaturityDate_BA

Endpoint
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckLimitTypeRole
FTOS_CB_ContractCommissionAmountCalc
FTOS_CB_DeleteRepaymentSchedule
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CreditFacility
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractCollateralInfo
FTOS_CB_GetContractExtendedData
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityInfo
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetCreditFacilityParticipantInfo
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_GetLimitTypeByCustomer
FTOS_CB_GetLimitTypesFilter
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetPeriodicity
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetRecoverInterest
FTOS_CB_GetRemainingNotifications
FTOS_CB_GetSoonToExpireCurrentAccountWithOverdrafts
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter

Endpoint
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_VerifyUsersCompetence

Retail Credit Officer

A user with this security role has the following access rights to records in the High Productivity Fintech Infrastructure's entities within **their organization**:

Entity	Scope	Read	Insert	Delete	Update
Account	Organization	1	0	0	0
AccountRelBusiness	Organization	1	0	0	0
AccountRelContact	Organization	1	0	0	0
AccountRelOwnership	Organization	1	0	0	0
Address	Organization	1	0	0	0
approvalTask	Organization	1	0	0	0
businessunit	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
BWstatus	Organization	1	1	0	1
entity	Organization	1	1	0	1
entitystatus	Organization	1	1	0	1
FTOS_ACC_AccountCountry	Organization	1	0	0	0
FTOS_ACC_AccountSanctionList	Organization	1	0	0	0
FTOS_ACC_Division	Organization	1	0	0	0
FTOS_ACC_Document	Organization	1	0	0	0
FTOS_ACC_GroupAccount	Organization	1	1	0	1
FTOS_ACC_GroupMember	Organization	1	0	0	0
FTOS_ACC_UnitType	Organization	1	0	0	0
FTOS_BP_BandedInterest	Organization	1	0	0	0
FTOS_BP_BankingProduct	Organization	1	0	0	0
FTOS_BP_BankingProductAgreement	Organization	1	0	0	0
FTOS_BP_BankingProductDiscount	Organization	1	0	0	0
FTOS_BP_BankingProductDocument	Organization	1	0	0	0
FTOS_BP_ClassificationType	Organization	1	0	0	0
FTOS_BP_CollateralType	Organization	1	1	0	1
FTOS_BP_Commission	Organization	1	0	0	0
FTOS_BP_CommissionType	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_BP_CommissionValue	Organization	1	0	0	0
FTOS_BP_Covenant	Organization	1	1	0	1
FTOS_BP_Feature	Organization	1	0	0	0
FTOS_BP_Formula	Organization	1	0	0	0
FTOS_BP_GLAccounts	Organization	1	0	0	0
FTOS_BP_InsuranceItem	Organization	1	0	0	0
FTOS_BP_Interest	Organization	1	0	0	0
FTOS_BP_InterestCommissionItem	Organization	1	1	0	1
FTOS_BP_InterestCommissionItemFilter	Organization	1	1	0	1
FTOS_BP_InterestRateMatrix	Organization	1	0	0	0
FTOS_BP_InterestValue	Organization	1	0	0	0
FTOS_BP_PaymentScheduleType	Organization	1	0	0	0
FTOS_BP_ProductAvailabilityItemFilter	Organization	1	0	0	0
FTOS_BP_ProductClassification	Organization	1	0	0	0
FTOS_BP_ProductCovenant	Organization	1	0	0	0
FTOS_BP_ProductDestinationType	Organization	1	0	0	0
FTOS_BP_ProductDisbursement	Organization	1	0	0	0
FTOS_BP_ProductGuaranteeStructure	Organization	1	0	0	0
FTOS_BP_ProductQuestion	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_BP_TestScenario	Organization	1	0	0	0
FTOS_CB_BankAccount	Organization	1	1	0	1
FTOS_CB_ BankAccountOperation	Organization	1	0	0	0
FTOS_CB_CollateralRegister	Organization	1	1	0	1
FTOS_CB_ CollateralRegister_BW	Organization	1	1	0	0
FTOS_CB_ CollateralRegisterDocuments	Organization	1	1	0	1
FTOS_CB_ CollateralRegisterOwner	Organization	1	1	0	1
FTOS_CB_ CollateralRegisterParticipants	Organization	1	1	0	1
FTOS_CB_ CollateralRegisterRank	Organization	1	1	0	1
FTOS_CB_Contract	Organization	1	1	0	1
FTOS_CB_Contract_BW	Organization	1	1	0	0
FTOS_CB_ ContractAccrualAndProvision	Organization	1	0	0	0
FTOS_CB_ ContractBorrowers	Organization	1	1	0	1
FTOS_CB_ ContractClassification	Organization	1	1	0	1
FTOS_CB_ContractCollateral	Organization	1	1	0	1
FTOS_CB_ ContractCorrectionEntry	Organization	1	1	0	1
FTOS_CB_ ContractCorrectionEntry_ BW	Organization	1	1	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ ContractCorrectionEntryDetail	Organization	1	1	0	1
FTOS_CB_ContractCovenant	Organization	1	1	0	1
FTOS_CB_ ContractCovenant_BW	Organization	1	1	0	0
FTOS_CB_ ContractDisbursement	Organization	1	1	0	1
FTOS_CB_ ContractDisbursementTranche	Organization	1	1	0	1
FTOS_CB_ ContractDisbursementTranche_BW	Organization	1	1	0	0
FTOS_CB_ContractDiscount	Organization	1	1	0	1
FTOS_CB_ ContractDocument	Organization	1	1	0	1
FTOS_CB_ContractEvent	Organization	1	1	0	1
FTOS_CB_ContractEvent_ BW	Organization	1	1	0	0
FTOS_CB_ContractFee	Organization	1	1	0	1
FTOS_CB_ ContractGuarantor	Organization	1	1	0	1
FTOS_CB_ ContractParticipant	Organization	1	1	0	1
FTOS_CB_ ContractParticipant_BW	Organization	1	1	0	0
FTOS_CB_ContractPenalty	Organization	1	1	0	1
FTOS_CB_ ContractReevaluation	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentSchedule	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ ContractRepaymentScheduleDetail	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleDisb	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleDisbDet	Organization	1	1	0	1
FTOS_CB_ ContractRepaymentScheduleVersion	Organization	1	1	0	1
FTOS_CB_ControlPanel	Organization	1	0	0	0
FTOS_CB_ CovenantResolution	Organization	1	1	0	1
FTOS_CB_CreditFacility	Organization	1	0	0	0
FTOS_CB_ CreditFacilityAccrual	Organization	1	0	0	0
FTOS_CB_ CreditFacilityDetail	Organization	1	1	0	1
FTOS_CB_CreditFacilityFee	Organization	1	0	0	0
FTOS_CB_ CreditFacilityFeeValue	Organization	1	0	0	0
FTOS_CB_ CreditFacilityParticipant	Organization	1	0	0	0
FTOS_CB_CreditFacilityPlan	Organization	1	0	0	0
FTOS_CB_ CreditFacilityProduct	Organization	1	0	0	0
FTOS_CB_CustomerLimit	Organization	1	0	0	0
FTOS_CB_CustomerLimit_ BW	Organization	1	0	0	0
FTOS_CB_ CustomerLimitType	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ DailyContractInterest	Organization	1	1	0	1
FTOS_CB_ DepositValueCalculation	Organization	1	1	0	1
FTOS_CB_OperationItem	Organization	1	0	0	0
FTOS_CB_ PaymentAllocation	Organization	1	1	0	1
FTOS_CB_ PaymentNotification	Organization	1	1	0	1
FTOS_CB_PeriodicityType	Organization	1	1	0	1
FTOS_CB_ RepaymentNotification	Organization	1	0	0	0
FTOS_CB_ RepaymentNotificationDetail	Organization	1	0	0	0
FTOS_CB_VersioningReason	Organization	1	0	0	0
FTOS_CMB_AccountType	Organization	1	0	0	0
FTOS_CMB_Action	Organization	1	0	0	0
FTOS_CMB_Activity	Organization	1	0	0	0
FTOS_CMB_Country	Organization	1	0	0	0
FTOS_CMB_Currency	Organization	1	1	0	1
FTOS_EntityStatusSettings	Organization	1	1	0	1
FTOS_GL_AccountingEntry	Organization	1	0	0	0
FTOS_GL_TransactionType	Organization	1	0	0	0
FTOS_MKT_Activity	Organization	1	0	0	0
FTOS_VersionSettings	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
systemuser	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
Account	Organization	1	0	0	0
AccountRelBusiness	Organization	1	0	0	0
AccountRelContact	Organization	1	0	0	0
AccountRelOwnership	Organization	1	0	0	0
Address	Organization	1	0	0	0
approvalTask	Organization	1	0	0	0
businessunit	Organization	1	1	0	1
BWstatus	Organization	1	1	0	1
entity	Organization	1	1	0	1
entitystatus	Organization	1	1	0	1
FTOS_ACC_AccountCountry	Organization	1	0	0	0
FTOS_ACC_ AccountSanctionList	Organization	1	0	0	0
FTOS_ACC_Division	Organization	1	0	0	0
FTOS_ACC_Document	Organization	1	0	0	0
FTOS_ACC_GroupAccount	Organization	1	1	0	1
FTOS_ACC_GroupMember	Organization	1	0	0	0
FTOS_ACC_UnitType	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_BP_BandedInterest	Organization	1	0	0	0
FTOS_BP_BankingProduct	Organization	1	0	0	0
FTOS_BP_ BankingProductAgreement	Organization	1	0	0	0
FTOS_BP_ BankingProductDiscount	Organization	1	0	0	0
FTOS_BP_ BankingProductDocument	Organization	1	0	0	0
FTOS_BP_ClassificationType	Organization	1	0	0	0
FTOS_BP_CollateralType	Organization	1	1	0	1
FTOS_BP_Commission	Organization	1	0	0	0
FTOS_BP_CommissionType	Organization	1	0	0	0
FTOS_BP_CommissionValue	Organization	1	0	0	0
FTOS_BP_Covenant	Organization	1	1	0	1
FTOS_BP_Feature	Organization	1	0	0	0
FTOS_BP_Formula	Organization	1	0	0	0
FTOS_BP_GLAccounts	Organization	1	0	0	0
FTOS_BP_InsuranceItem	Organization	1	0	0	0
FTOS_BP_Interest	Organization	1	0	0	0
FTOS_BP_ InterestCommissionItem	Organization	1	1	0	1
FTOS_BP_ InterestCommissionItemFilter	Organization	1	1	0	1
FTOS_BP_ InterestRateMatrix	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_BP_InterestValue	Organization	1	0	0	0
FTOS_BP_PaymentScheduleType	Organization	1	0	0	0
FTOS_BP_ProductAvailabilityItemFilter	Organization	1	0	0	0
FTOS_BP_ProductClassification	Organization	1	0	0	0
FTOS_BP_ProductCovenant	Organization	1	0	0	0
FTOS_BP_ProductDestinationType	Organization	1	0	0	0
FTOS_BP_ProductDisbursement	Organization	1	0	0	0
FTOS_BP_ProductGuaranteeStructure	Organization	1	0	0	0
FTOS_BP_ProductQuestion	Organization	1	0	0	0
FTOS_BP_TestScenario	Organization	1	0	0	0
FTOS_CB_BankAccount	Organization	1	1	0	1
FTOS_CB_BankAccountOperation	Organization	1	1	0	1
FTOS_CB_CollateralRegister	Organization	1	1	0	1
FTOS_CB_CollateralRegister_BW	Organization	0	1	0	1
FTOS_CB_CollateralRegisterDocuments	Organization	1	1	0	1
FTOS_CB_CollateralRegisterOwner	Organization	1	1	0	1
FTOS_CB_CollateralRegisterParticipants	Organization	1	1	0	1
FTOS_CB_CollateralRegisterRank	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_Contract	Organization	1	1	0	1
FTOS_CB_Contract_BW	Organization	1	1	0	1
FTOS_CB_ ContractAccrualAndProvision	Organization	1	1	0	1
FTOS_CB_ ContractBorrowers	Organization	1	1	0	1
FTOS_CB_ ContractClassification	Organization	1	1	0	1
FTOS_CB_ContractCollateral	Organization	1	1	0	1
FTOS_CB_ ContractCorrectionEntry	Organization	1	1	0	1
FTOS_CB_ ContractCorrectionEntry_ BW	Organization	0	1	0	1
FTOS_CB_ ContractCorrectionEntryDetail	Organization	1	1	0	1
FTOS_CB_ContractCovenant	Organization	1	1	0	1
FTOS_CB_ ContractCovenant_BW	Organization	1	1	0	1
FTOS_CB_ ContractDisbursement	Organization	1	1	0	1
FTOS_CB_ ContractDisbursementTranche	Organization	1	1	0	1
FTOS_CB_ ContractDisbursementTranche_BW	Organization	1	1	0	1
FTOS_CB_ContractDiscount	Organization	1	1	0	1
FTOS_CB_ ContractDocument	Organization	1	1	0	1
FTOS_CB_ContractEvent	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ContractEvent_BW	Organization	0	1	0	1
FTOS_CB_ContractFee	Organization	1	1	0	1
FTOS_CB_ContractGuarantor	Organization	1	1	0	1
FTOS_CB_ContractParticipant	Organization	1	1	0	1
FTOS_CB_ContractParticipant_BW	Organization	1	1	0	1
FTOS_CB_ContractPenalty	Organization	1	1	0	1
FTOS_CB_ContractReevaluation	Organization	1	1	0	1
FTOS_CB_ContractRepaymentSchedule	Organization	1	1	0	1
FTOS_CB_ContractRepaymentScheduleDetail	Organization	1	1	0	1
FTOS_CB_ContractRepaymentScheduleDisb	Organization	1	1	0	1
FTOS_CB_ContractRepaymentScheduleDisbDet	Organization	1	1	0	1
FTOS_CB_ContractRepaymentScheduleVersion	Organization	1	1	0	1
FTOS_CB_ControlPanel	Organization	1	0	0	0
FTOS_CB_CovenantResolution	Organization	1	1	0	1
FTOS_CB_CreditFacility	Organization	1	0	0	0
FTOS_CB_CreditFacilityAccrual	Organization	1	0	0	0
FTOS_CB_CreditFacilityDetail	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_CreditFacilityFee	Organization	1	0	0	0
FTOS_CB_ CreditFacilityFeeValue	Organization	1	0	0	0
FTOS_CB_ CreditFacilityParticipant	Organization	1	0	0	0
FTOS_CB_CreditFacilityPlan	Organization	1	0	0	0
FTOS_CB_ CreditFacilityProduct	Organization	1	0	0	0
FTOS_CB_CustomerLimit	Organization	1	1	1	1
FTOS_CB_CustomerLimit_ BW	Organization	1	1	1	1
FTOS_CB_ CustomerLimitType	Organization	1	1	1	1
FTOS_CB_ DailyContractInterest	Organization	1	1	0	1
FTOS_CB_ DepositValueCalculation	Organization	1	1	0	1
FTOS_CB_OperationItem	Organization	1	0	0	0
FTOS_CB_ PaymentAllocation	Organization	1	1	0	1
FTOS_CB_ PaymentNotification	Organization	1	1	0	1
FTOS_CB_PeriodicityType	Organization	1	1	0	1
FTOS_CB_ RepaymentNotification	Organization	1	0	0	0
FTOS_CB_ RepaymentNotificationDetail	Organization	1	0	0	0
FTOS_CB_VersioningReason	Organization	1	0	0	0
FTOS_CMB_AccountType	Organization	1	0	0	0
FTOS_CMB_Action	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CMB_Activity	Organization	1	0	0	0
FTOS_CMB_Country	Organization	1	0	0	0
FTOS_CMB_Currency	Organization	1	1	0	1
FTOS_EntityStatusSettings	Organization	1	1	0	1
FTOS_GL_AccountingEntry	Organization	1	0	0	0
FTOS_GL_TransactionType	Organization	1	0	0	0
FTOS_MKT_Activity	Organization	1	0	0	0
FTOS_VersionSettings	Organization	1	1	0	1
systemuser	Organization	1	1	0	1

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

Endpoint
FTOS_BP_GetBankingProductDefaultValues
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetDataSourceFutureInstallmentsReport
FTOS_BP_GetDataSourcePastDueInstallmentsReport
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_AddUpdateContractPaymentHoliday
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateContractCustomValues_ForDisbursement
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckLimitTypeRole
FTOS_CB_ContractCommissionAmountCalc
FTOS_CB_DeleteRepaymentSchedule
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract

Endpoint
FTOS_CB_GetCommissionDetail
FTOS_CB_GetContractCollateralInfo
FTOS_CB_GetContractExtendedData
FTOS_CB_GetContractInfo
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetContractsWithPaymentHolidayPossibility
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetEarlyRepaymentValues
FTOS_CB_GetExchangeRateOfCollateralRegisterToContract
FTOS_CB_GetFixedVariableInterest
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetLimitTypesFilter
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetRemainingNotifications
FTOS_CB_GetSoonToExpireCurrentAccountWithOverdrafts
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
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_releaseCollaterals
FTOS_CB_SetInterestRate
FTOS_CB_UpdateActivationDate
FTOS_CB_UpdateContractDelayCategory_Filtered
FTOS_CB_UpdateTranche

Endpoint
FTOS_CB_ValidateOverdraftExpireFields
FTOS_CheckLicense
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_VerifyUsersCompetence

Accounting Officer

A user with this security role has the following access rights to records in the High Productivity Fintech Infrastructure's entities within **their organization**:

Entity	Scope	Read	Insert	Delete	Update
Account	Organization	1	0	0	0
AccountRelBusiness	Organization	1	0	0	0
AccountRelContact	Organization	1	0	0	0
approvalTask	Organization	1	0	0	0
businessunit	Organization	1	0	0	0
entity	Organization	1	0	0	0
entitystatus	Organization	1	1	0	1
FTOS_ACC_GroupMember	Organization	1	0	0	0
FTOS_BP_BankingProduct	Organization	1	0	0	0
FTOS_BP_Commission	Organization	1	0	0	0
FTOS_BP_CommissionType	Organization	1	1	0	1
FTOS_BP_GLAccounts	Organization	1	1	0	1
FTOS_BP_Interest	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_BP_ PaymentScheduleType	Organization	1	0	0	0
FTOS_BP_ ProductClassification	Organization	1	0	0	0
FTOS_CB_BankAccount	Organization	1	0	0	0
FTOS_CB_ BankAccountOperation	Organization	1	0	0	0
FTOS_CB_Contract	Organization	1	0	0	0
FTOS_CB_ ContractAccrualAndProvision	Organization	1	0	0	0
FTOS_CB_ ContractClassification	Organization	1	0	0	0
FTOS_CB_ContractCollateral	Organization	1	0	0	0
FTOS_CB_ContractCovenant	Organization	1	0	0	0
FTOS_CB_ ContractDisbursementTranche	Organization	1	0	0	0
FTOS_CB_ ContractDocument	Organization	1	0	0	0
FTOS_CB_ContractEvent	Organization	1	0	0	0
FTOS_CB_ContractFee	Organization	1	0	0	0
FTOS_CB_ ContractParticipant	Organization	1	0	0	0
FTOS_CB_ContractPenalty	Organization	1	0	0	0
FTOS_CB_ ContractReevaluation	Organization	1	0	0	0
FTOS_CB_ ContractRepaymentSchedule	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ ContractRepaymentScheduleDetail	Organization	1	0	0	0
FTOS_CB_ ContractRepaymentScheduleVersion	Organization	1	0	0	0
FTOS_CB_CreditFacility	Organization	1	0	0	0
FTOS_CB_ CreditFacilityAccrual	Organization	1	0	0	0
FTOS_CB_ CreditFacilityDetail	Organization	1	0	0	0
FTOS_CB_CreditFacilityFee	Organization	1	0	0	0
FTOS_CB_ CreditFacilityFeeValue	Organization	1	0	0	0
FTOS_CB_ CreditFacilityParticipant	Organization	1	0	0	0
FTOS_CB_CreditFacilityPlan	Organization	1	0	0	0
FTOS_CB_ CreditFacilityProduct	Organization	1	0	0	0
FTOS_CB_CustomerLimit	Organization	1	0	0	0
FTOS_CB_CustomerLimit_ BW	Organization	1	0	0	0
FTOS_CB_ CustomerLimitType	Organization	1	0	0	0
FTOS_CB_OperationItem	Organization	1	0	0	0
FTOS_CB_ PaymentNotification	Organization	1	0	0	0
FTOS_CB_PeriodicityType	Organization	1	0	0	0
FTOS_CB_ RepaymentNotification	Organization	1	0	0	0
FTOS_CB_ TransactionOperationType	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_VersioningReason	Organization	1	0	0	0
FTOS_CMB_AccountType	Organization	1	0	0	0
FTOS_CMB_Currency	Organization	1	0	0	0
FTOS_EntityStatusSettings	Organization	1	0	0	0
FTOS_GL_AccountingChart	Organization	1	1	0	1
FTOS_GL_AccountingEntry	Organization	1	1	0	1
FTOS_GL_ AccountingJournal	Organization	1	1	0	1
FTOS_GL_AccountingScope	Organization	1	1	0	1
FTOS_GL_ AccountingSystem	Organization	1	1	0	1
FTOS_GL_Journal	Organization	1	1	0	1
FTOS_GL_LegalEntity	Organization	1	1	0	1
FTOS_GL_LegalEntitySystem	Organization	1	1	0	1
FTOS_GL_ OperationTransaction	Organization	1	1	0	1
FTOS_GL_ OperationTransactionValue	Organization	1	1	0	1
FTOS_GL_ TransactionAccountingModel	Organization	1	1	0	1
FTOS_GL_ TransactionItemAccountingConfig	Organization	1	1	0	1
FTOS_GL_TransactionType	Organization	1	1	0	1
FTOS_GL_ TransactionValueType	Organization	1	1	0	1

Entity	Scope	Read	Insert	Delete	Update
optionset	Organization	1	0	0	0
optionsetitem	Organization	1	0	0	0

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

Endpoint
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckLimitTypeRole
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetLimitTypesFilter
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetSystemInvariantDate
FTOS_CB_PeriodicityType
FTOS_CB_UpdateActivationDate
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_GL_GenerateAccountingEntry
FTOS_VerifyUsersCompetence

Supervisor Risk Officer

A user with this security role has the following access rights to records in the High Productivity Fintech Infrastructure's entities within **their organization**:

Entity	Scope	Read	Insert	Delete	Update
Account	Organization	1	0	0	0
AccountRelBusiness	Organization	1	0	0	0
AccountRelContact	Organization	1	0	0	0
approvalTask	Organization	1	0	0	1
businessunit	Organization	1	0	0	0
entity	Organization	1	0	0	0
FTOS_ACC_GroupAccount	Organization	1	0	0	0
FTOS_ACC_GroupMember	Organization	1	0	0	0
FTOS_BP_CollateralType	Organization	1	0	0	0
FTOS_BP_Commission	Organization	1	0	0	0
FTOS_BP_Covenant	Organization	1	0	0	0
FTOS_BP_Interest	Organization	1	0	0	0
FTOS_BP_PaymentScheduleType	Organization	1	0	0	0
FTOS_BP_ProductClassification	Organization	1	0	0	0
FTOS_CB_BankAccount	Organization	1	0	0	0
FTOS_CB_BankAccountOperation	Organization	1	0	0	0
FTOS_CB_CollateralRegister	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ CollateralRegisterDocuments	Organization	1	0	0	0
FTOS_CB_ CollateralRegisterOwner	Organization	1	0	0	0
FTOS_CB_ CollateralRegisterParticipants	Organization	1	0	0	0
FTOS_CB_ CollateralRegisterRank	Organization	1	0	0	0
FTOS_CB_Contract	Organization	1	0	0	0
FTOS_CB_ ContractAccrualAndProvision	Organization	1	0	0	0
FTOS_CB_ ContractClassification	Organization	1	0	0	0
FTOS_CB_ContractCollateral	Organization	1	0	0	0
FTOS_CB_ ContractCorrectionEntry	Organization	1	0	0	0
FTOS_CB_ ContractCorrectionEntryDetail	Organization	1	0	0	0
FTOS_CB_ContractCovenant	Organization	1	0	0	0
FTOS_CB_ ContractDisbursementTranche	Organization	1	0	0	0
FTOS_CB_ ContractDocument	Organization	1	0	0	0
FTOS_CB_ContractEvent	Organization	1	0	0	0
FTOS_CB_ContractFee	Organization	1	0	0	0
FTOS_CB_ ContractGuarantor	Organization	1	0	0	0
FTOS_CB_ ContractParticipant	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ContractPenalty	Organization	1	0	0	0
FTOS_CB_ ContractPenaltyDetail	Organization	1	0	0	0
FTOS_CB_ ContractReevaluation	Organization	1	0	0	0
FTOS_CB_ ContractRepaymentSchedule	Organization	1	0	0	0
FTOS_CB_ ContractRepaymentScheduleDetail	Organization	1	0	0	0
FTOS_CB_ ContractRepaymentScheduleDisb	Organization	1	0	0	0
FTOS_CB_ ContractRepaymentScheduleVersion	Organization	1	0	0	0
FTOS_CB_CreditFacility	Organization	1	0	0	0
FTOS_CB_CreditFacility_BW	Organization	1	0	0	0
FTOS_CB_ CreditFacilityAccrual	Organization	1	0	0	0
FTOS_CB_ CreditFacilityDetail	Organization	1	0	0	0
FTOS_CB_CreditFacilityFee	Organization	1	0	0	0
FTOS_CB_ CreditFacilityFeeValue	Organization	1	0	0	0
FTOS_CB_ CreditFacilityParticipant	Organization	1	0	0	0
FTOS_CB_CreditFacilityPlan	Organization	1	0	0	0
FTOS_CB_ CreditFacilityProduct	Organization	1	0	0	0
FTOS_CB_CustomerLimit	Organization	1	1	1	1

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_CustomerLimit_BW	Organization	1	1	1	1
FTOS_CB_CustomerLimitType	Organization	1	1	1	1
FTOS_CB_OperationItem	Organization	1	0	0	0
FTOS_CB_PaymentAllocation	Organization	1	0	0	0
FTOS_CB_PaymentNotification	Organization	1	0	0	0
FTOS_CB_PeriodicityType	Organization	1	0	0	0
FTOS_CB_RepaymentNotification	Organization	1	0	0	0
FTOS_CB_RepaymentNotificationDetail	Organization	1	0	0	0
FTOS_CB_VersioningReason	Organization	1	0	0	0
FTOS_CMB_AccountType	Organization	1	0	0	0
FTOS_CMB_Currency	Organization	1	0	0	0
FTOS_EntityStatusSettings	Organization	1	0	0	0
FTOS_GL_AccountingEntry	Organization	1	0	0	0
FTOS_GL_TransactionType	Organization	1	0	0	0
FTOS_VersionSettings	Organization	1	0	0	0
userCompetence	Organization	1	0	0	0

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

Endpoint
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetDataSourceFutureInstallmentsReport
FTOS_BP_GetDataSourcePastDueInstallmentsReport

Endpoint
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckLimitTypeRole
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetContractEventFee
FTOS_CB_GetContractInfo
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityInfo
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetEarlyRepaymentValues
FTOS_CB_GetGLOnContract
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetLimitTypesFilter
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
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

Endpoint
FTOS_GetDataSourceChartCreditFacility
FTOS_VerifyUsersCompetence

Risk Officer

A user with this security role has the following access rights to records in High Productivity Fintech Infrastructure's entities:

Entity	Scope	Read	Insert	Delete	Update
Account	Organization	1	0	0	0
AccountRelBusiness	Organization	1	0	0	0
AccountRelContact	Organization	1	0	0	0
AccountRelOwnership	Organization	1	0	0	0
Address	Organization	1	0	0	0
approvalTask	Organization	1	0	0	0
businessunit	Organization	1	0	0	0
entity	Organization	1	0	0	0
FTOS_ACC_AccountCountry	Organization	1	0	0	0
FTOS_ACC_ AccountSanctionList	Organization	1	0	0	0
FTOS_ACC_Division	Organization	1	0	0	0
FTOS_ACC_Document	Organization	1	0	0	0
FTOS_ACC_GroupAccount	Organization	1	0	0	0
FTOS_ACC_GroupMember	Organization	1	0	0	0
FTOS_ACC_UnitType	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_BP_CollateralType	Organization	1	0	0	0
FTOS_BP_Commission	Organization	1	0	0	0
FTOS_BP_Covenant	Organization	1	0	0	0
FTOS_BP_Interest	Organization	1	0	0	0
FTOS_BP_ PaymentScheduleType	Organization	1	0	0	0
FTOS_BP_ ProductClassification	Organization	1	0	0	0
FTOS_CB_BankAccount	Organization	1	0	0	0
FTOS_CB_ BankAccountOperation	Organization	1	0	0	0
FTOS_CB_CollateralRegister	Organization	1	0	0	0
FTOS_CB_ CollateralRegisterDocuments	Organization	1	0	0	0
FTOS_CB_ CollateralRegisterOwner	Organization	1	0	0	0
FTOS_CB_ CollateralRegisterParticipants	Organization	1	0	0	0
FTOS_CB_ CollateralRegisterRank	Organization	1	0	0	0
FTOS_CB_Contract	Organization	1	1	0	0
FTOS_CB_ ContractAccrualAndProvision	Organization	1	0	0	0
FTOS_CB_ ContractClassification	Organization	1	0	0	0
FTOS_CB_ContractCollateral	Organization	1	0	0	0
FTOS_CB_ ContractCorrectionEntry	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ContractCorrectionEntryDetail	Organization	1	0	0	0
FTOS_CB_ContractCovenant	Organization	1	0	0	0
FTOS_CB_ContractDisbursementTranche	Organization	1	0	0	0
FTOS_CB_ContractDocument	Organization	1	0	0	0
FTOS_CB_ContractEvent	Organization	1	0	0	0
FTOS_CB_ContractFee	Organization	1	0	0	0
FTOS_CB_ContractGuarantor	Organization	1	0	0	0
FTOS_CB_ContractParticipant	Organization	1	0	0	0
FTOS_CB_ContractPenalty	Organization	1	0	0	0
FTOS_CB_ContractReevaluation	Organization	1	0	0	0
FTOS_CB_ContractRepaymentSchedule	Organization	1	0	0	0
FTOS_CB_ContractRepaymentScheduleDetail	Organization	1	0	0	0
FTOS_CB_ContractRepaymentScheduleDisb	Organization	1	0	0	0
FTOS_CB_ContractRepaymentScheduleVersion	Organization	1	0	0	0
FTOS_CB_CreditFacility	Organization	1	0	0	0
FTOS_CB_CreditFacility_BW	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CB_ CreditFacilityAccrual	Organization	1	0	0	0
FTOS_CB_ CreditFacilityDetail	Organization	1	0	0	0
FTOS_CB_CreditFacilityFee	Organization	1	0	0	0
FTOS_CB_ CreditFacilityFeeValue	Organization	1	0	0	0
FTOS_CB_ CreditFacilityParticipant	Organization	1	0	0	0
FTOS_CB_CreditFacilityPlan	Organization	1	0	0	0
FTOS_CB_ CreditFacilityProduct	Organization	1	0	0	0
FTOS_CB_CustomerLimit	Organization	1	1	1	1
FTOS_CB_CustomerLimit_ BW	Organization	1	1	1	1
FTOS_CB_ CustomerLimitType	Organization	1	1	1	1
FTOS_CB_OperationItem	Organization	1	0	0	0
FTOS_CB_ PaymentAllocation	Organization	1	0	0	0
FTOS_CB_ PaymentNotification	Organization	1	0	0	0
FTOS_CB_PeriodicityType	Organization	1	0	0	0
FTOS_CB_ RepaymentNotification	Organization	1	0	0	0
FTOS_CB_ RepaymentNotificationDetail	Organization	1	0	0	0
FTOS_CB_VersioningReason	Organization	1	0	0	0
FTOS_CMB_AccountType	Organization	1	0	0	0
FTOS_CMB_Action	Organization	1	0	0	0

Entity	Scope	Read	Insert	Delete	Update
FTOS_CMB_Activity	Organization	1	0	0	0
FTOS_CMB_Currency	Organization	1	0	0	0
FTOS_EntityStatusSettings	Organization	1	0	0	0
FTOS_GL_AccountingEntry	Organization	1	0	0	0
FTOS_GL_TransactionType	Organization	1	0	0	0
FTOS_MKT_Activity	Organization	1	0	0	0
FTOS_VersionSettings	Organization	1	1	0	1

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

Endpoints
FTOS_BP_GetBankingProductInfo
FTOS_BP_GetDataSourceFutureInstallmentsReport
FTOS_BP_GetDataSourcePastDueInstallmentsReport
FTOS_BP_GetProductInterestCommissionList
FTOS_CB_CalculateContractCustomValues
FTOS_CB_CalculateMaturityDate_BA
FTOS_CB_CheckCustomerRole
FTOS_CB_CheckLimitTypeRole
FTOS_CB_DisplayFinancedAmountEventForm
FTOS_CB_EntityVersion_Contract
FTOS_CB_EntityVersion_CustomerLimit
FTOS_CB_getBandedInterestObject
FTOS_CB_GetBlockAmountOnContract
FTOS_CB_GetContractEventFee
FTOS_CB_GetContractInfo
FTOS_CB_GetContractRepaymentSchedule
FTOS_CB_GetContractsForLimit
FTOS_CB_GetCreditFacilityInfo
FTOS_CB_GetCreditFacilityLimitPercent
FTOS_CB_GetEarlyRepaymentValues
FTOS_CB_GetGLOnContract

Endpoints
FTOS_CB_GetGroupInfo
FTOS_CB_GetInstallment_Principal_InstallmenNo_Values
FTOS_CB_GetLimitTypeByCustomer
FTOS_CB_GetLimitTypesFilter
FTOS_CB_GetNoOfContractTranches
FTOS_CB_GetNoOfCurrentAccountsForCurrencyId
FTOS_CB_GetProductInterestValue
FTOS_CB_GetProductMinInterestRate
FTOS_CB_GetReasonDetails
FTOS_CB_GetSystemInvariantDate
FTOS_CB_GetSystemParameter
FTOS_CB_PaymentHolidaySchedule
FTOS_CB_PaymentScheduleFields
FTOS_CB_PaymentScheduleFieldsDisb
FTOS_CB_PeriodicityType
FTOS_CB_ScheduleVersionFields
FTOS_CB_UpdateActivationDate
FTOS_GetDataSourceChartContract
FTOS_GetDataSourceChartContractEvents
FTOS_GetDataSourceChartCreditFacility
FTOS_VerifyUsersCompetence

Core Banking Dashboards

Core Banking facilitates user interaction with a series of in-built dashboards. 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 come along with your Core Banking package:

- **Contract** - displays a list of the contract 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** - 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, 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.

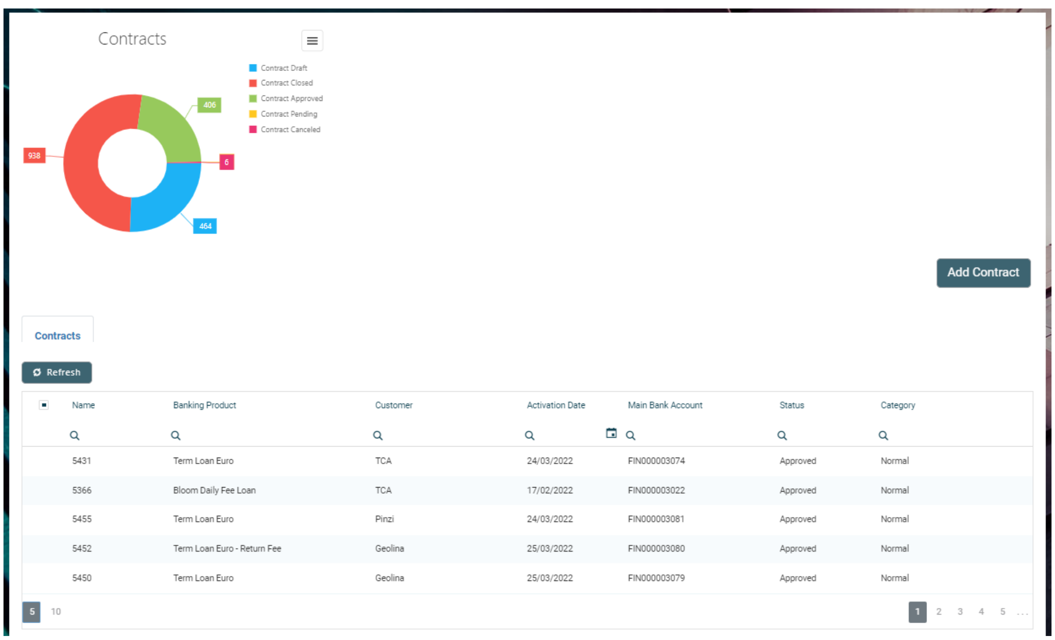
- **Third Party Agreements** - displays a list of the third-party agreements created in the system along with a pie-chart specifying the number of agreements in each business status, and a button to access the **Creating Agreements For Third-Parties** page.

Contract

The **Contract** 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`.



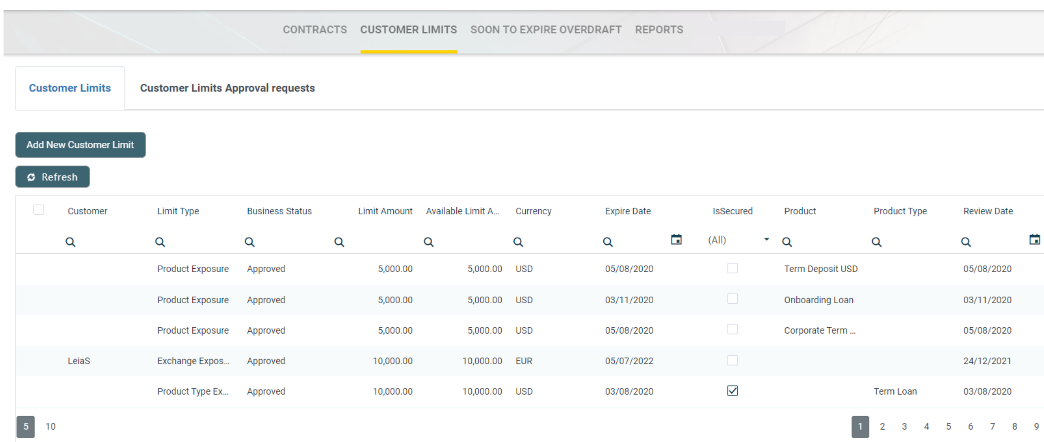
This dashboard can be accessed by users with the following predefined security roles, but note that some actions may be limited according to the role setup:

- 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.



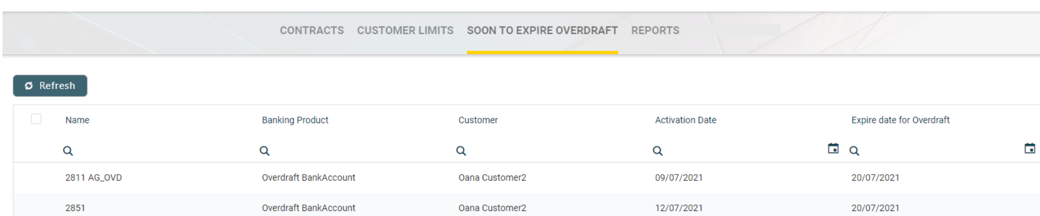
This dashboard can be accessed by users with the following predefined security roles, but note that some actions may be limited according to the role setup:

- 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.



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

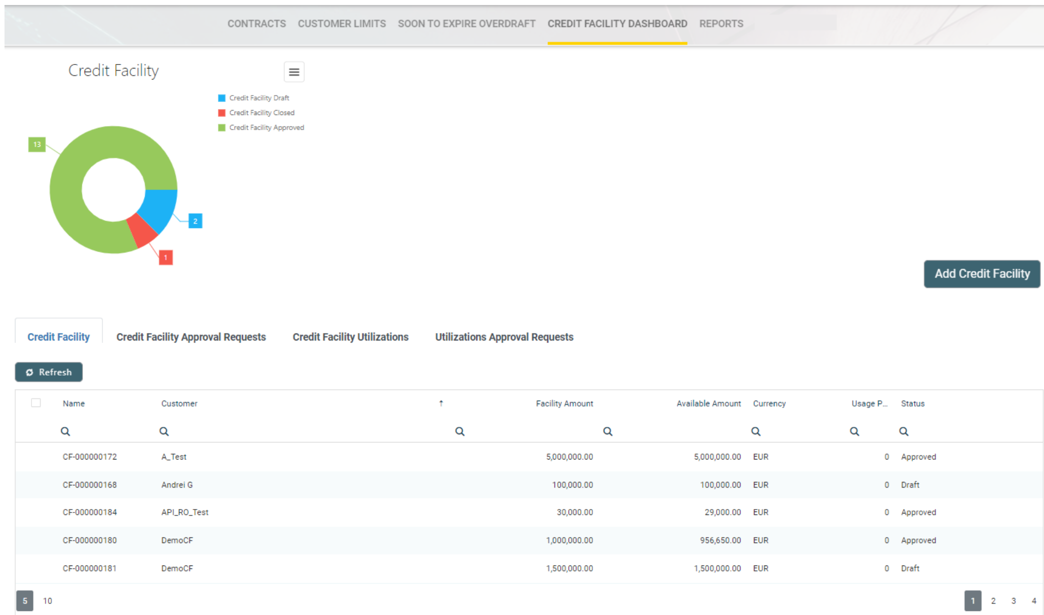
- Supervisor Retail Loans Officer
- Corporate Credit Officer
- Retail Credit Officer
- Supervisor Risk Officer
- Risk Officer.

Credit Facility

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`.



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:

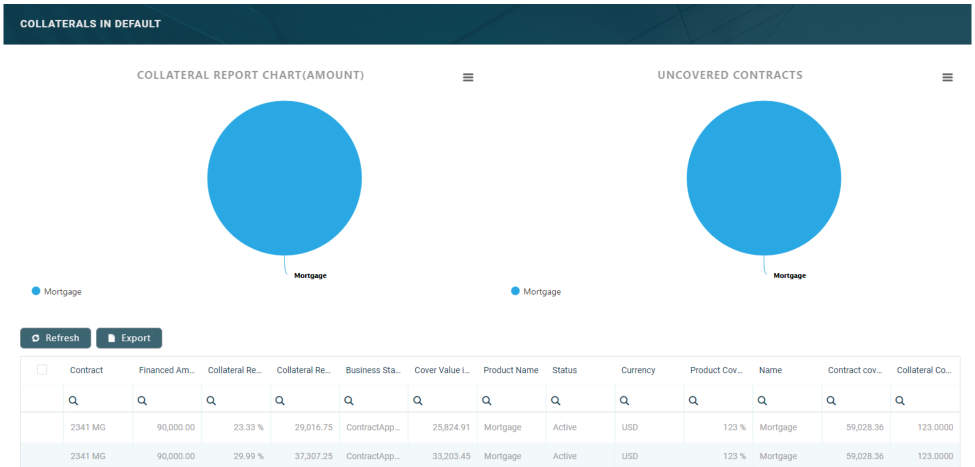
- Loan Admin Officer
- Supervisor Corporate Officer
- Corporate Credit Officer
- Supervisor Risk Officer
- Risk Officer.

Reports

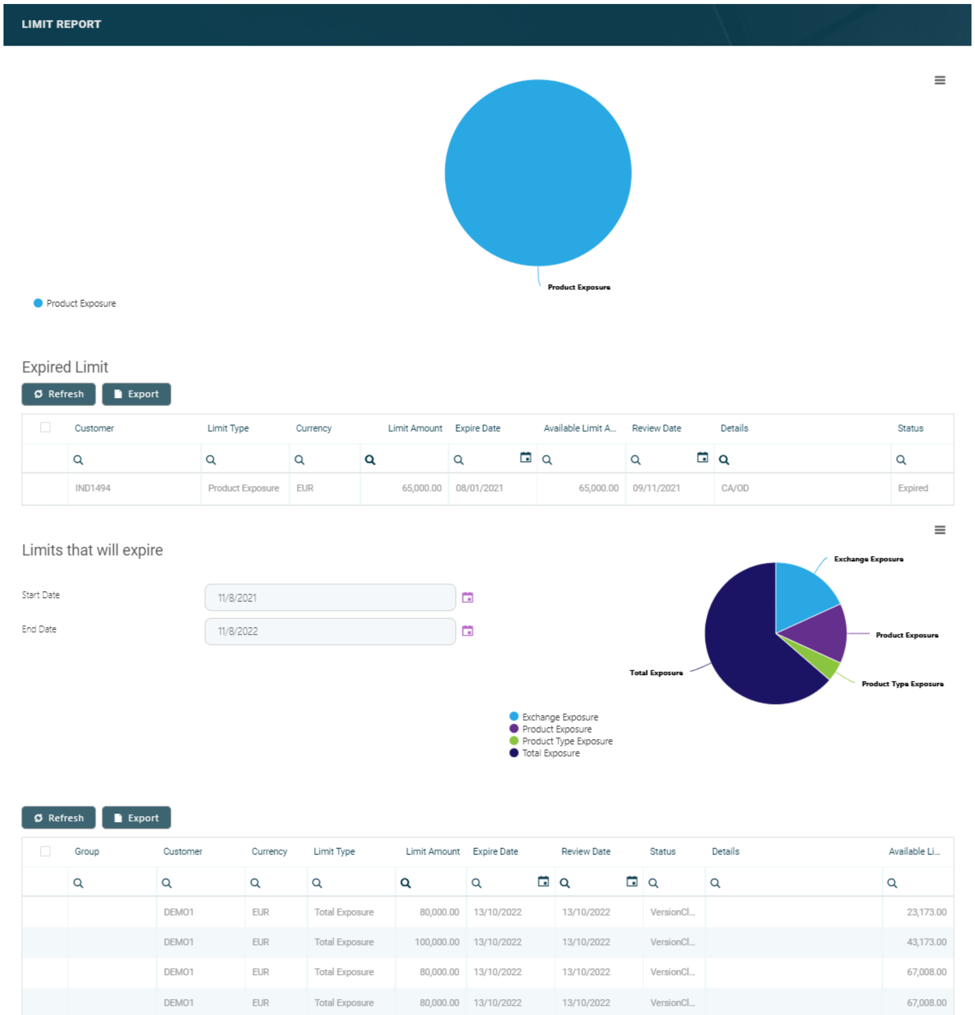
The **Reports** dashboard contains links to a series of reports:

- **Report Days Past Due** - Click this link to display the report of repayment notifications past due date.

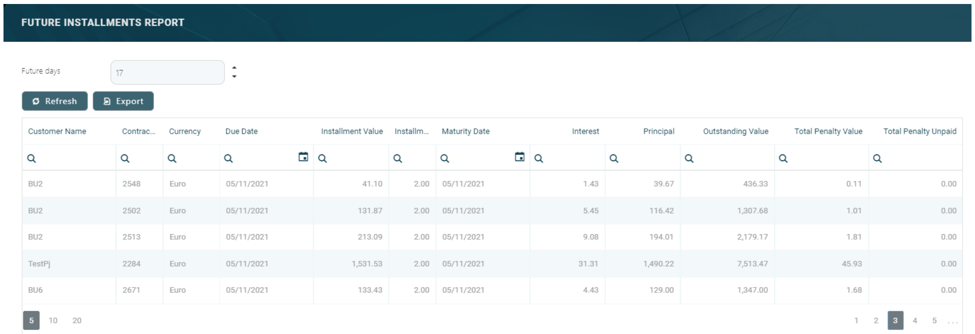
- **Collaterals in Default** - Click this link to display the report of collateral records in default.



- **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.



- **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

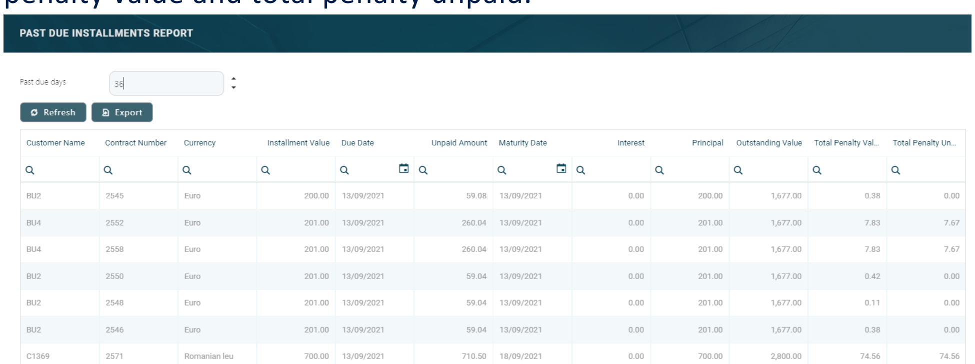
Future days 17

Refresh Export

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

5 10 20 1 2 3 4 5 ...

- **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

Refresh Export

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

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.

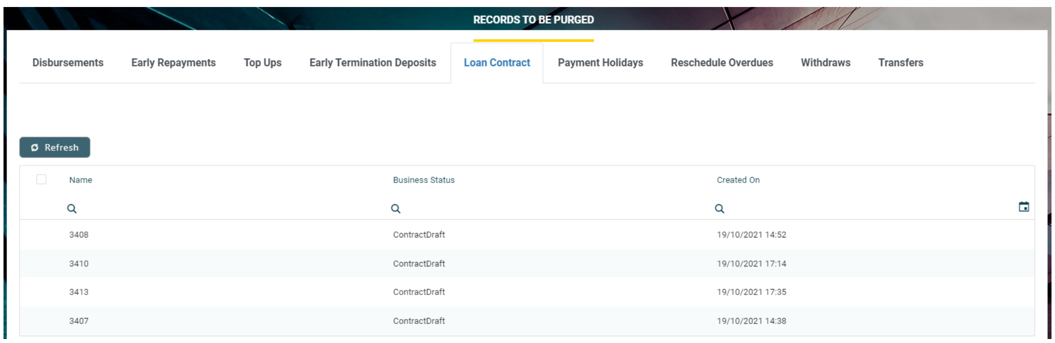
NOTE

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.



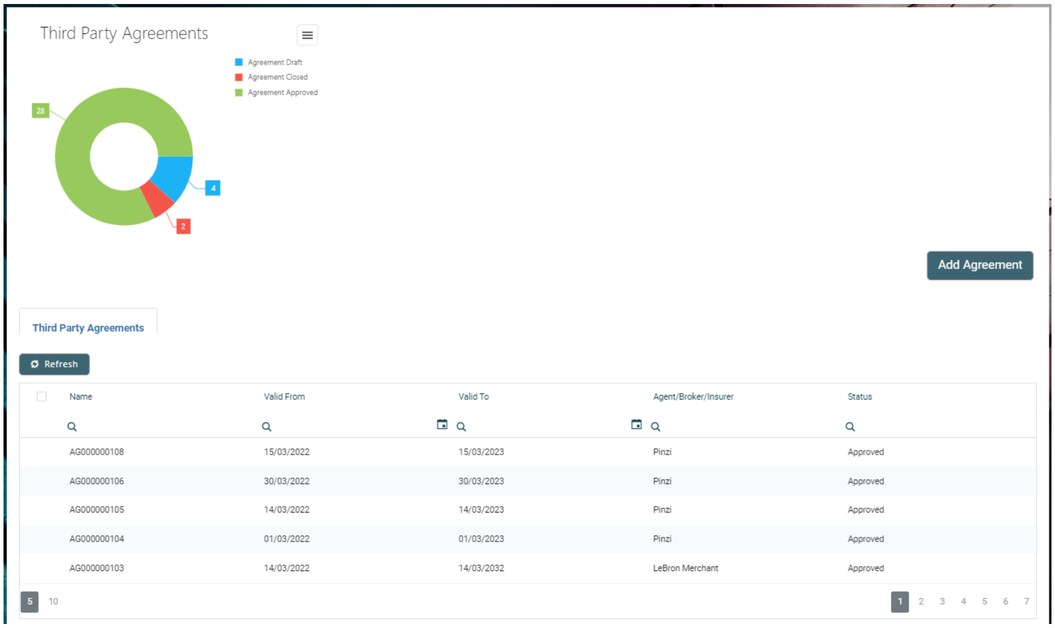
This dashboard can be accessed by users with the **Loan Admin Officer** predefined security role.

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`.



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.

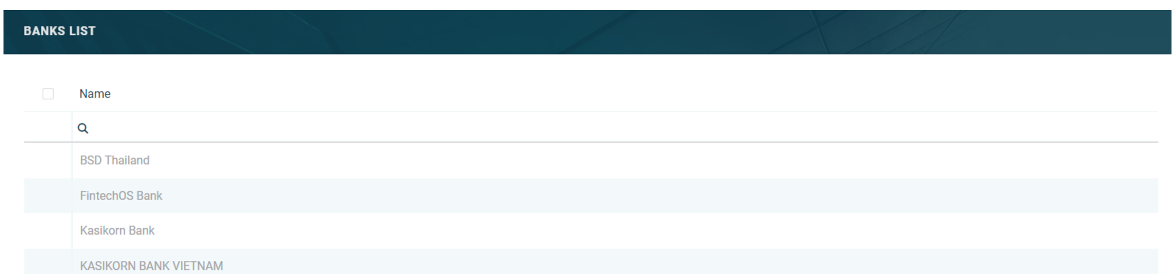
Banks

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 and your bank branches network, as well as about other banks with whom you are in a business relationship. Such information includes name, bank identification, branches, and bank accounts.

Core Banking enables you to manage the bank records in the FintechOS Portal's dedicated menu, **Banks**.

To manage bank records:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational** menu.
4. Click **Bank** menu item to open the **Banks List** page.



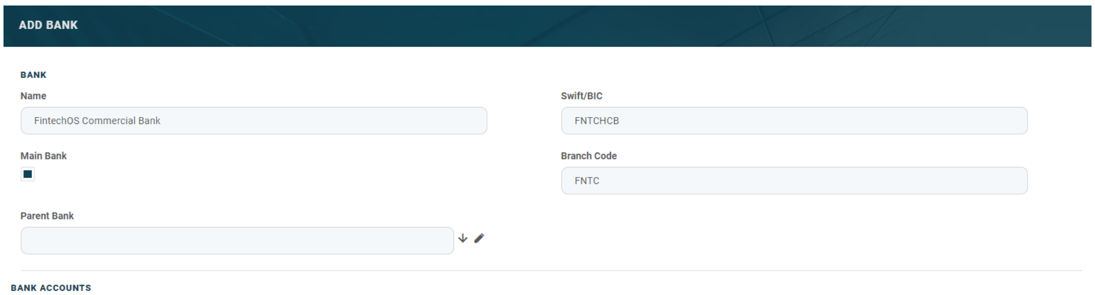
On the **Banks List** page, you can:

- Create a new bank record by clicking the **Insert** button at the top right corner.
- Edit an existing bank record from the list by double-clicking it. After opening the **Edit Bank** page, you can also create bank accounts for a customer.
- Delete a record by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in any or all the column headers of the displayed records list.

Creating Bank Records

Follow these steps to create new bank records:

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



2. Fill in the following fields:

Field	Mandatory	Data Type	Details
Name	Yes	Text	Enter the name of the bank/ financial institution.
Swift/BIC	No	Text	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)
Main Bank	Yes	Bool	If the checkbox is selected, then this record is marked as the main bank, the one where all accounts are created when a new contract is approved.
Branch Code	No		Enter the code of the branch (maximum length 4 characters).

Field	Mandatory	Data Type	Details
Parent Bank	No	Bool	Select the parent bank of the new record if the newly entered bank is a branch.

3. Click the **Save and Reload** button at the top right corner of the page. The bank record is saved and the **Bank Accounts** section is displayed.

The **Bank Accounts** section lists all the accounts opened for that bank record in your system. If the bank is marked as `Main Bank`, then all the accounts created for customers when approving a new contract are listed in this section. Each account shows the following information:

Column	Description
Alias	The alias of the account.
Bank Account Number	The bank account number.
Account Status	The status of the account.

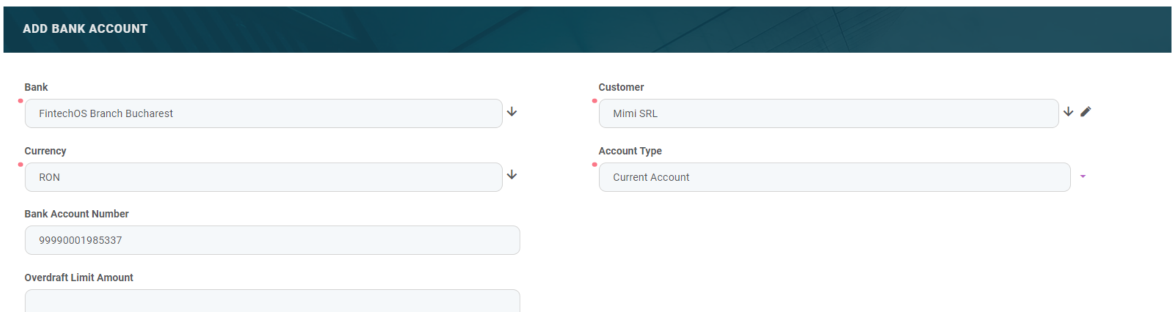
Creating External Bank Accounts

Core Banking enables you to 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. The **Edit Bank** page is displayed.
2. 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:

Field	Mandatory	Data Type	Details
Bank	Yes	Lookup	This field is automatically completed with the bank where you are opening the external bank account.
Customer	Yes	Lookup	Select the customer for whom you are opening the account.
Currency	Yes	Lookup	Select the currency of the account.
Account Type	Yes	Option Set	Select the type of the account. Possible values are current, savings, fixed deposit, term deposit, and loan term account.
Bank Account Number	No	Text	Enter the bank account number.
Overdraft Limit Amount	No	Numeric	Enter an overdraft limit amount, if applicable.



5. Click the **Save and Close** button at the top right corner of the page. The external bank account record is saved in the **Opened** status and is ready to be used for referencing in bank documents.

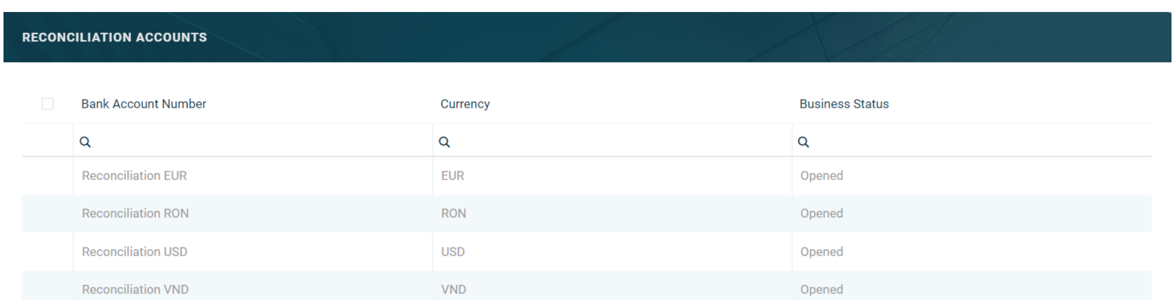
Reconciliation Accounts

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 to be used as tools for monitoring the activity for a specific product or groups of products. Reconciliation accounts are also known as self-bank accounts or internal bank accounts. When creating a banking product, you must choose such 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.

Core Banking enables you to manage the reconciliation accounts used within your bank in the FintechOS Portal's dedicated menu, **Reconciliation Accounts**.

To manage reconciliation accounts:

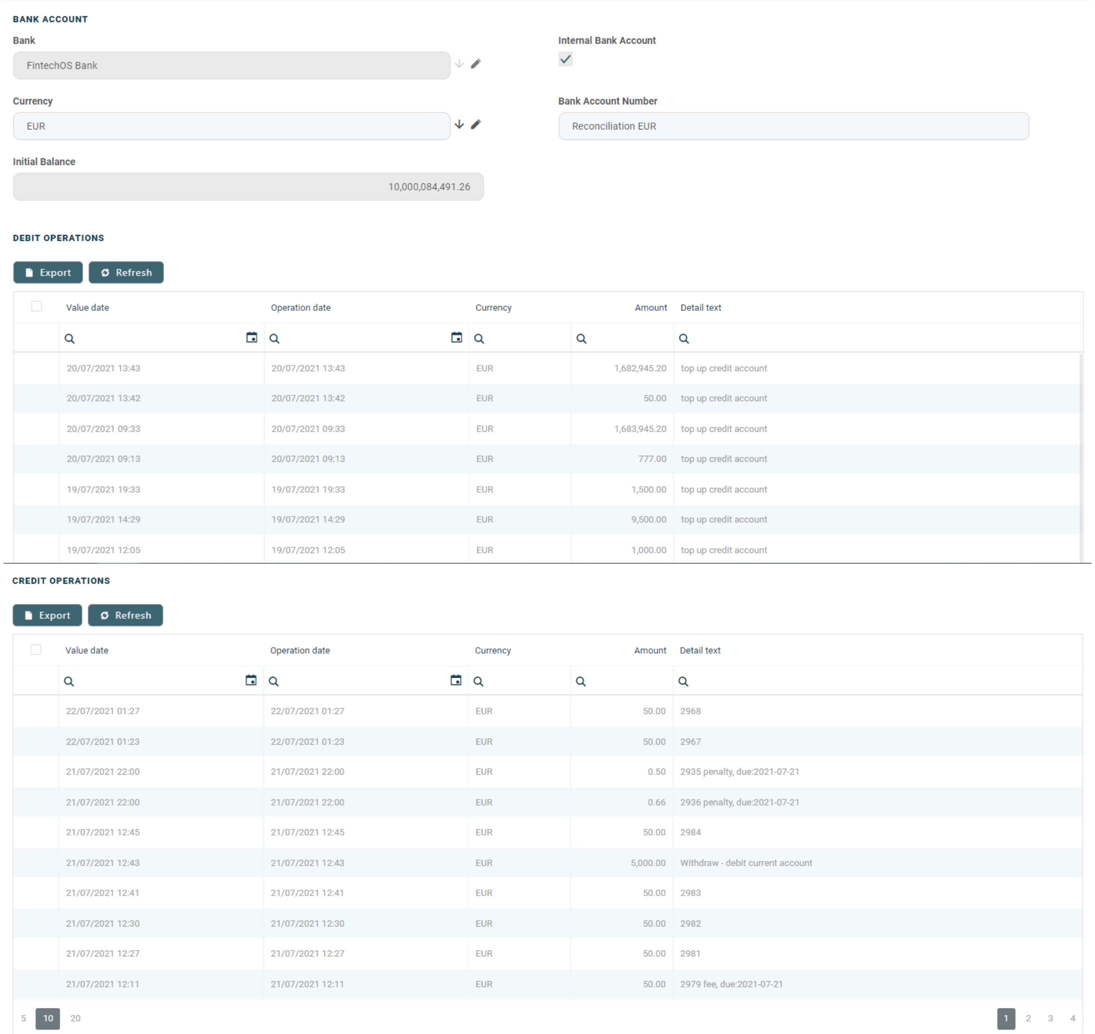
1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational** menu.
4. Click **Reconciliation Accounts** menu item to open the **Reconciliation Accounts** page.


RECONCILIATION ACCOUNTS

Bank Account Number	Currency	Business Status
Reconciliation EUR	EUR	Opened
Reconciliation RON	RON	Opened
Reconciliation USD	USD	Opened
Reconciliation VND	VND	Opened

On the **Reconciliation Accounts** page, you can:

- Create a new reconciliation account by clicking the **Insert** button at the top right corner.
- Edit an account from the list by double-clicking it.
- Delete an account by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in any or all the column headers of the displayed records list.
- 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.



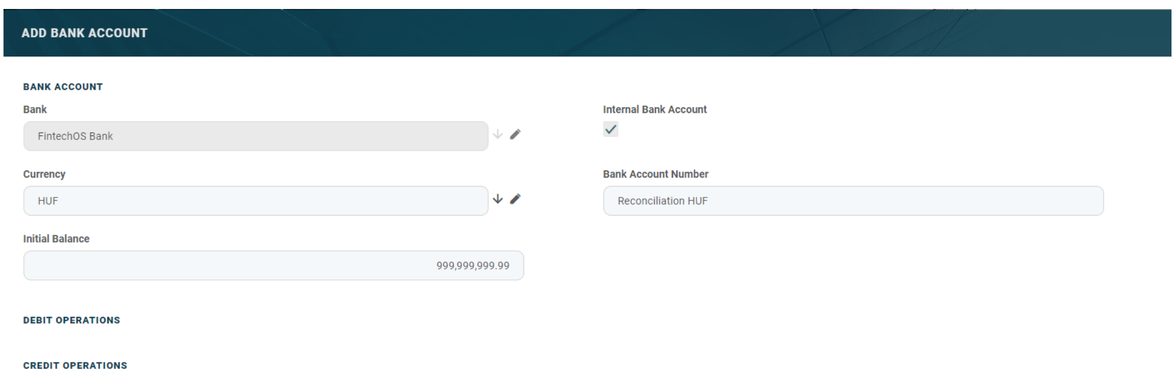
NOTE

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. Read about these settings on the "Reconciliation Account Settings" on page 214 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:

Field	Mandatory	Data Type	Details
Bank	Yes	Lookup	Core Banking automatically completes this field with the bank marked as `Main` Bank in the system.
Internal Bank Account	Yes	Bool	This checkbox specifies that the account is an internal bank account, used for reconciliation. Automatically checked by the system as `True`. Not editable.

Field	Mandatory	Data Type	Details
Currency	Yes	Lookup	Select from the list the currency of the reconciliation account.
Bank Account Number	Yes	Text	Enter the bank account number for the reconciliation account.
Initial Balance	Yes	Numeric	This field represents the reconciliation account's initial amount. It is automatically completed with the value of 999,999,999.00. You can edit the value. The initial balance is needed especially for those accounts that are used for debit purposes, representing the source for some transactions.

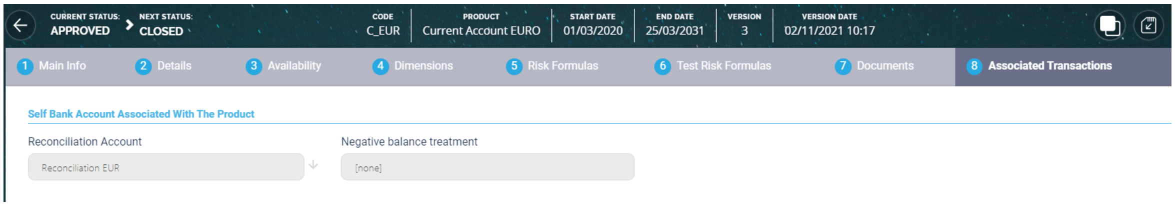
3. Click the **Save and Reload** button at the top right corner of the page. The reconciliation account is saved and its status becomes **Opened**, ready to be used.

The **Debit Operations** and **Credit Operations** sections are now displayed, still empty. New lines show up 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:

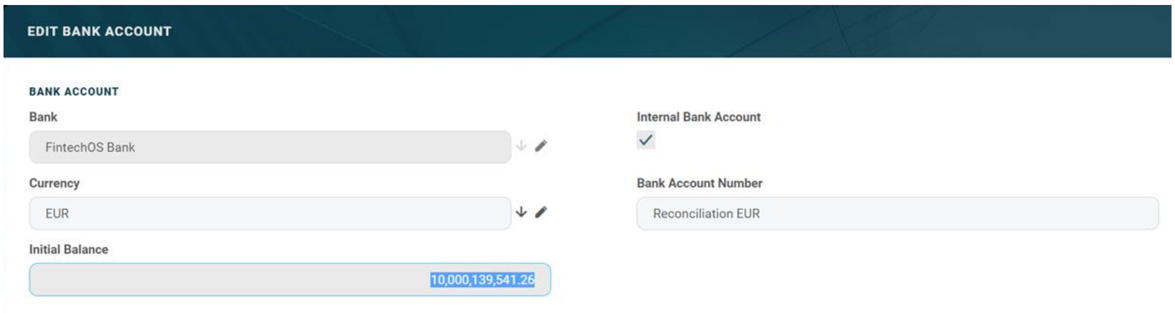
Field	Details
Value Date	The date when the transaction was requested in the system.
Operation Date	The date when the transaction was operated by the system.
Currency	The currency of the transaction.
Amount	The amount of the transaction.
Detail Text	The text representing information about the transaction, such as event type, repayment notification number, due date, and so on.

Reconciliation Accounts Usage in Core Banking

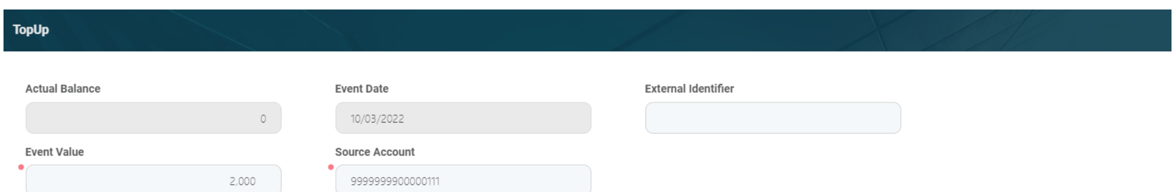
Let’s consider the product definition of the `Current Account EURO` banking product, where the value selected for the **Reconciliation Account** field = `Reconciliation EUR`:



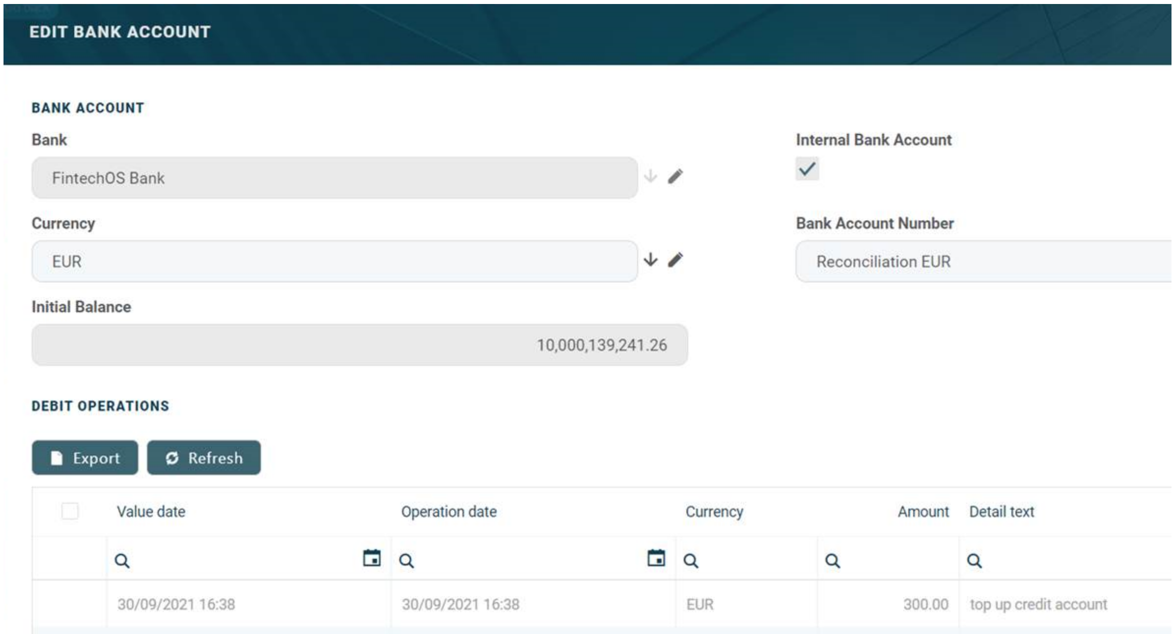
Checking the balance of the `Reconciliation EUR` account in the Reconciliation Accounts menu, we see the **Initial Balance** = 10,000,139,541.26:



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:



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:



Reconciliation Account Settings

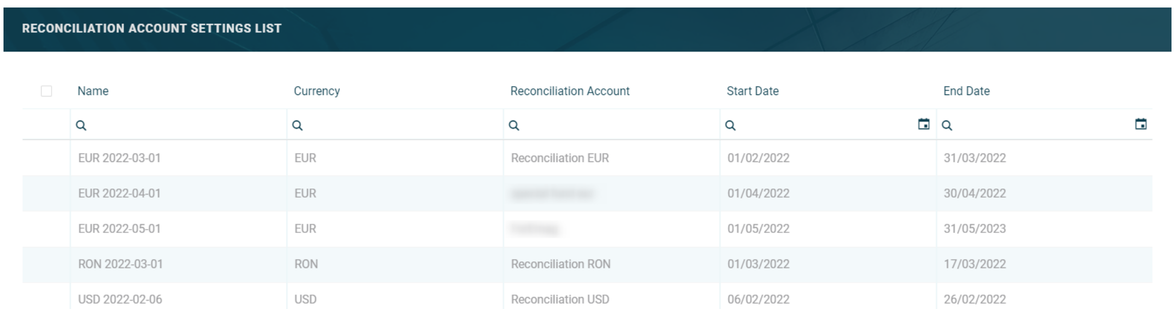
Reconciliation accounts can be opened in every currency, but for the sake of automating some processes, Core Banking allows you to define which reconciliation account opened in a specific currency should be used within a period of time. Thanks to these settings, Core Banking determines automatically 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. It 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 configure the default settings of reconciliation accounts.

IMPORTANT!
Users with the associated role of Loan Admin Officer can view, insert, update, or delete reconciliation account settings records.

To manage reconciliation account settings:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configurations** menu.
4. 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
EUR 2022-03-01	EUR	Reconciliation EUR	01/02/2022	31/03/2022
EUR 2022-04-01	EUR	[illegible]	01/04/2022	30/04/2022
EUR 2022-05-01	EUR	[illegible]	01/05/2022	31/05/2023
RON 2022-03-01	RON	Reconciliation RON	01/03/2022	17/03/2022
USD 2022-02-06	USD	Reconciliation USD	06/02/2022	26/02/2022

On the **Reconciliation Account Settings List** page, you can:

- Create a new reconciliation account setting by clicking the **Insert** button at the top right corner.
- Edit a reconciliation account setting from the list by double-clicking it.
- Delete a reconciliation account setting by selecting it and clicking the **Delete** button at the top right corner.
- Search for a specific record by filling in any or all the column headers of the displayed records list.

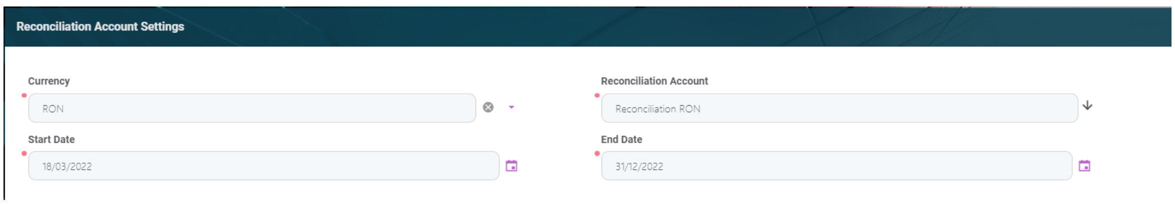
NOTE
You can only delete a setting if the reconciliation account associated to it is not part of a third-party invoice.
You can only edit the End `Date` of a setting if the reconciliation account associated

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. In the FintechOS Portal, click the **Insert** button on the top right side of the **Reconciliation Account Settings List** page. The **Reconciliation Account Settings** page is displayed.



2. Fill in the following fields:

Field	Mandatory	Data Type	Details
Currency	Yes	Lookup	Select from the list the currency of the reconciliation account.
Reconciliation Account	Yes	Bool	This checkbox specifies that the account is an internal bank account, used for reconciliation. Automatically checked by the system as `True`. Not editable.
Start Date	Yes	Invariant Date	Select the starting date for Core Banking to use this reconciliation account for operations in the specified currency.
End Date	Yes	Invariant Date	Select the ending date for Core Banking to use this reconciliation account for operations in the specified currency. `End Date` must be `>= Start Date`.

3. Click the **Save and Reload** button at the top right corner of the page.

   Core Banking check 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`.

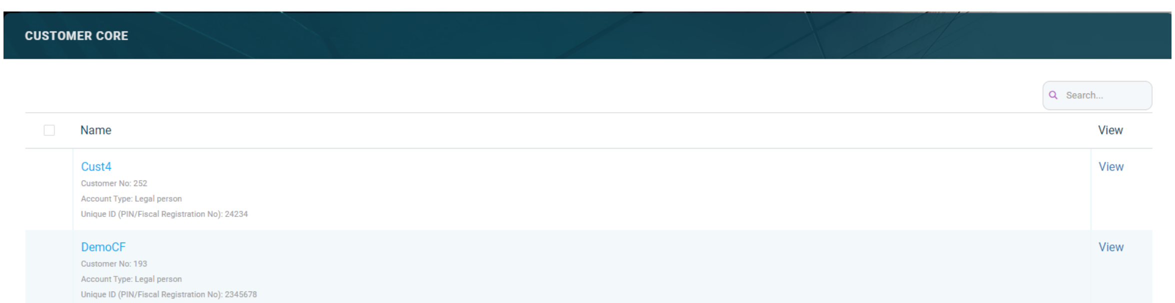
Customers

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. Core Banking requires banks to create a record for each of their customers.

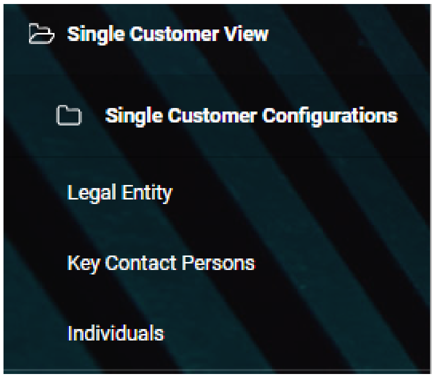
IMPORTANT! Complex customer management is performed by the **Single Customer View** apps. The records are stored in the `Account` entity.

Core Banking also enables you to manage customers from its dedicated **Customer Core** menu, with pages that display customer information relevant to the Core Banking business. Follow these steps to manage customers:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational** menu.
4. Click **Customer Core** menu item to open the **Customer Core** page.



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



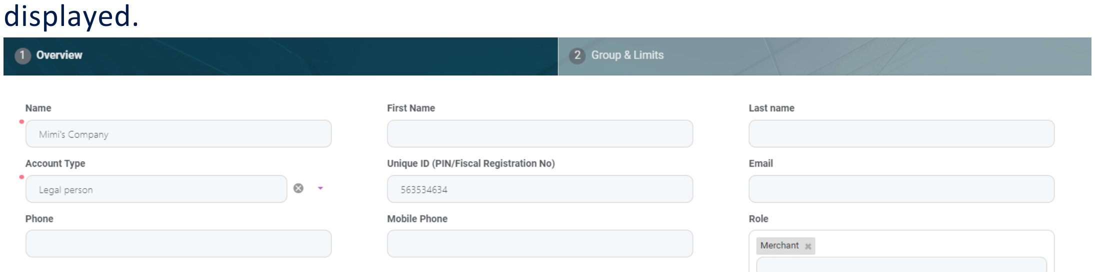
On the **Customer Core** page, you can:

- Create a customer by clicking the **Insert** button at the top right corner and filling in the fields in the newly displayed **Overview** page of the customer creation process.
- Edit a customer from the list by double-clicking it.
- Delete a customer by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in any details of the desired customer in the **Search** box above the customer list.

Creating Customers

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 **Customer Core** page. The **Overview** page of the customer creation process is displayed.



2. Fill in the following fields:

Field	Mandatory	Data Type	Details
Name	Yes	Text	Enter the name of the customer.
First Name	No	Text	Enter the first name of the customer, if this is not a legal person.
Last Name	No	Text	Enter the last name of the customer, if this is not a legal person.
Account Type	Yes	Lookup	Select the customer type from the possible options: `Legal person`, `Individual person` or `Self-employed individual`.
Unique ID (PIN/Fiscal Registration No)	No	Text	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.
Country	Yes	Lookup	Select the country of the customer.

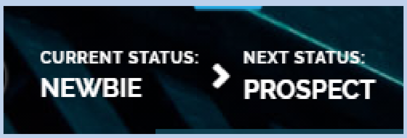
Field	Mandatory	Data Type	Details
Email	No	Text	Enter the email address of the customer.
Phone	No	Text	Enter the phone number of the customer.
Mobile Phone	No	Text	Enter the mobile phone number of the customer.
Role	No	JSON	Select as many roles as you wish for this customer to be able to have within contracts. The values are displayed from the Contract Role option set. Roles can also 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.

3. Click the **Save and Reload** button at the top right corner of the page. The customer is saved in **Newbie** status, with minimum information, such as an auto-generated customer number, but the page displays now a series of sections that assist you in adding or viewing information about the customer:

Company Representatives, **Products**, **Bank Accounts** and **Collateral Register**. A newly displayed tab, **Groups & Limits**, helps you with the configuration of group membership and limits for this customer.

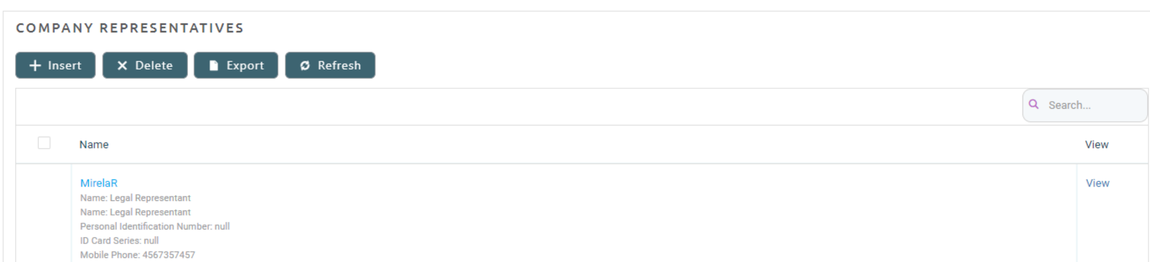
4. Scroll through each of the newly displayed sections and fill in the necessary information, as described within the sections.
5. Select the **Groups & Limits** tab and fill in the necessary information, as described here.

NOTE
A customer has to be in the `Prospect` or `Customer` status to be selected when creating contracts. Make sure you change the customer's status from the top right corner of the screen:



Company Representatives Section

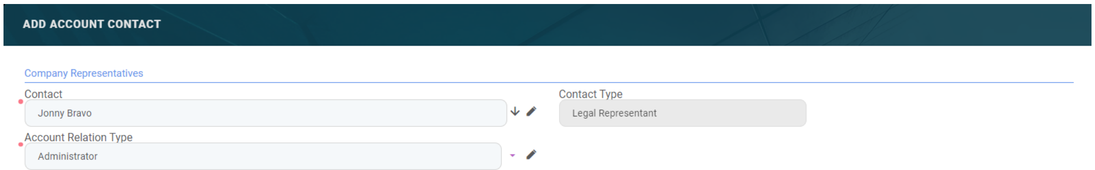
This section lists the customer's legal representatives, such as administrators, affiliates, owners, or other key contact persons.



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. The **Add Account Contact** page is displayed.



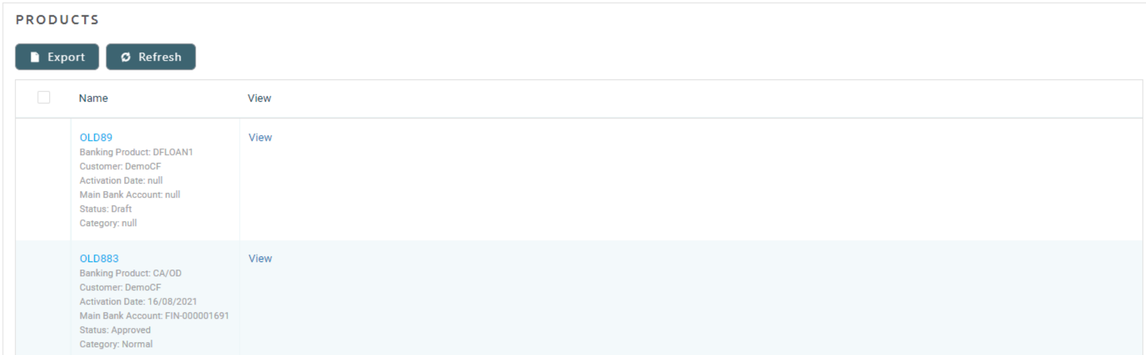
2. Fill in the following fields:

Field	Mandatory	Data Type	Details
Contact	Yes	Lookup	Select an existing customer from the database as your new customer's representative.
Contact Type	No	Option set	This field is automatically completed with the `Legal Representative` contact type and it cannot be changed.
Account Relation Type	Yes	Option set	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 at the top right corner of the page.

Products Section

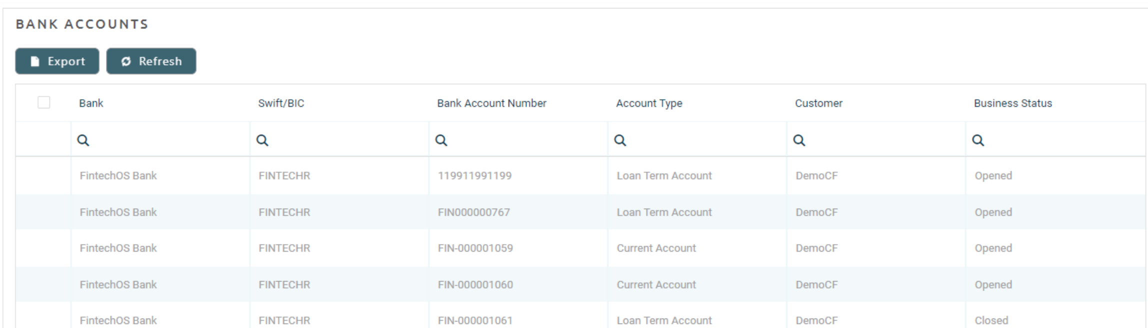
The **Products** section lists the contracts currently used by this customer. Each record displays information about the number of the contracts, the banking product, the customer, the activation date, the main bank account associated to the contract, the status of the contracts and its category.



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

Bank Accounts Section

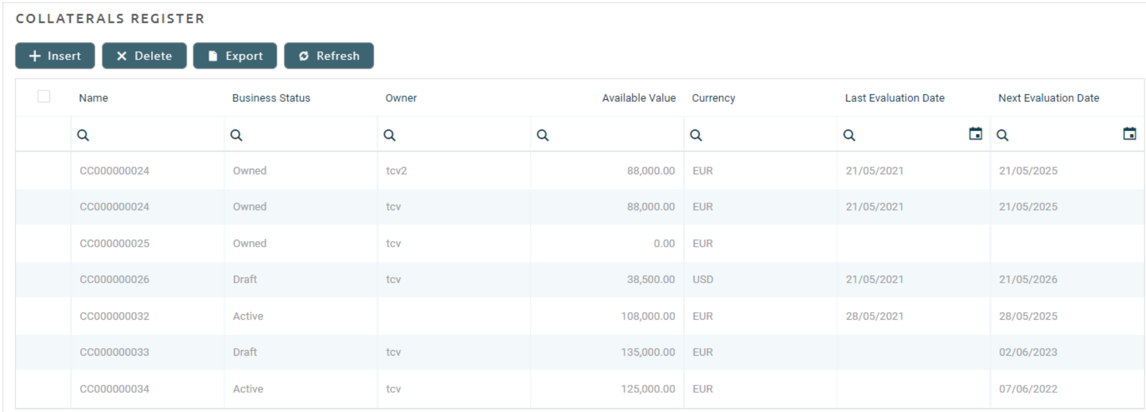
This section lists the company's bank accounts, with details such as name of the bank, Swift/BIC, account number and type, customer, and business status.



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

Collateral Register Section

This section lists the customer's registered collaterals, with details such as name, business status, owner, available value, currency, last and next evaluation dates.

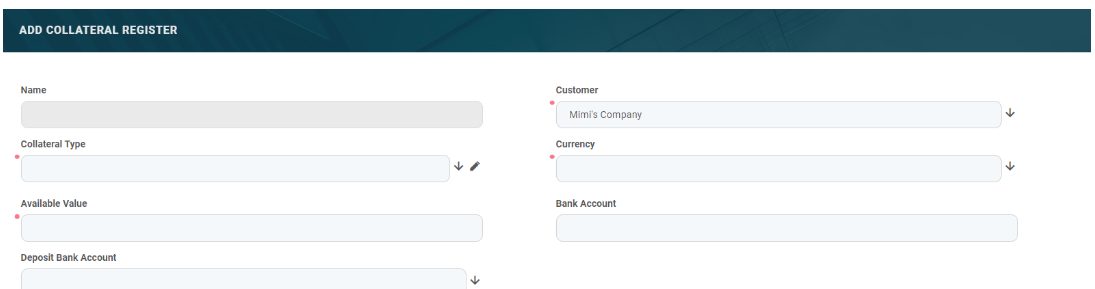


Name	Business Status	Owner	Available Value	Currency	Last Evaluation Date	Next Evaluation Date
CC000000024	Owned	tcv2	88,000.00	EUR	21/05/2021	21/05/2025
CC000000024	Owned	tcv	88,000.00	EUR	21/05/2021	21/05/2025
CC000000025	Owned	tcv	0.00	EUR		
CC000000026	Draft	tcv	38,500.00	USD	21/05/2021	21/05/2026
CC000000032	Active		108,000.00	EUR	28/05/2021	28/05/2025
CC000000033	Draft	tcv	135,000.00	EUR		02/06/2023
CC000000034	Active	tcv	125,000.00	EUR		07/06/2022

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:

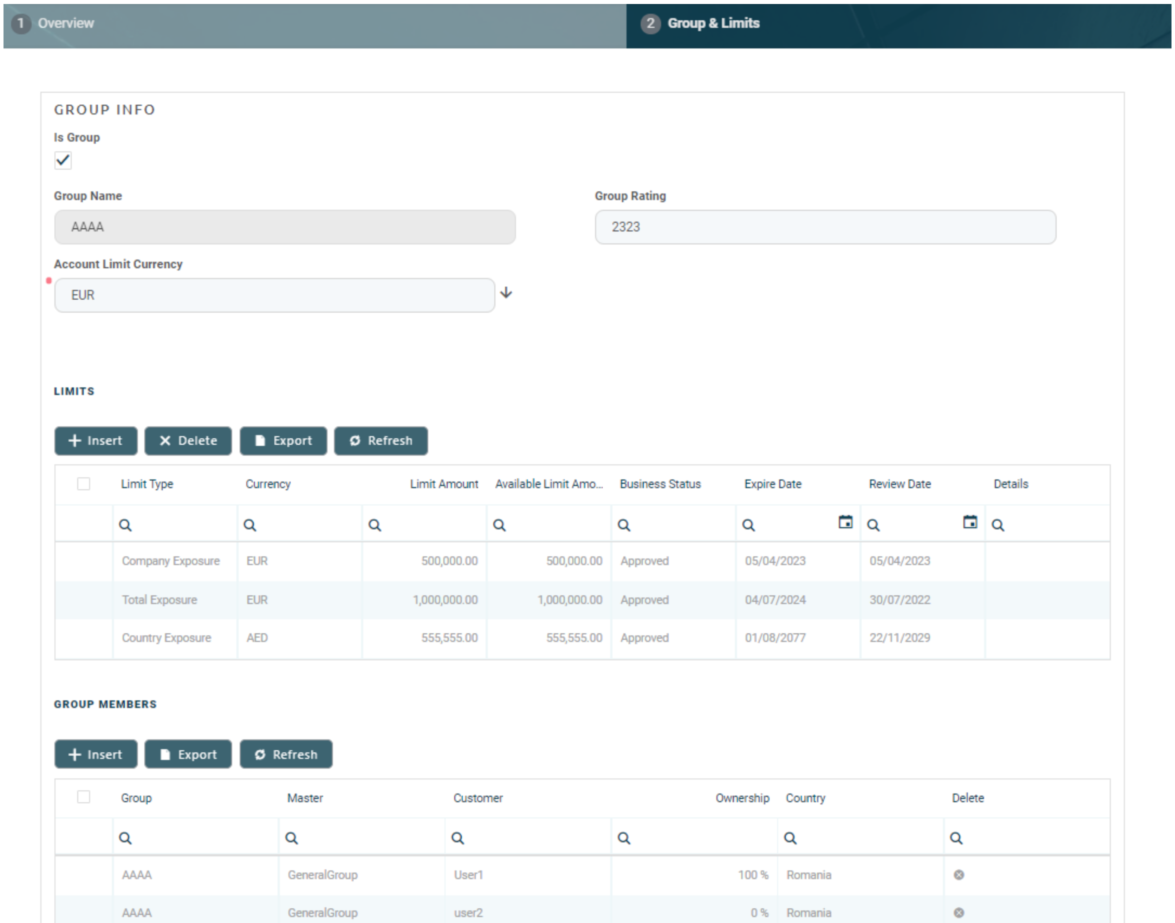
1. Click the **Insert** button within the **Collateral Register** section. The **Add Collateral Register** page is displayed, with the `Customer` field automatically completed with the current customer's name.

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

Groups & Limits Tab

The **Group & Limits** tab provides an overview of 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 in this guide.



NOTE

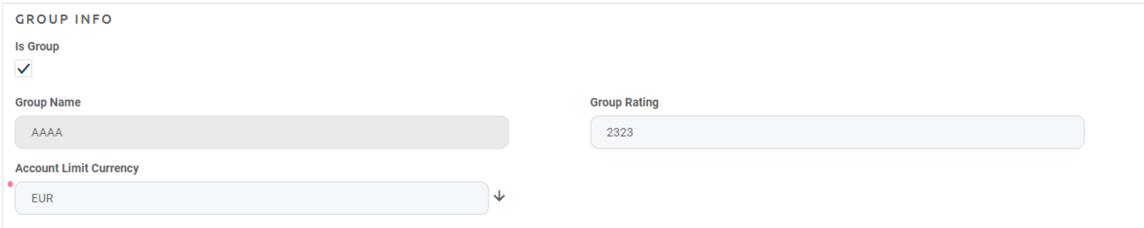
Both legal entity and individual customers can be added to groups. This can be helpful if you need to monitor group exposure for a household or a company and its shareholders together.

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

The following sections within this tab display specific information:

Group Info Section

This is the place where you can specify whether a customer represents a group of companies.



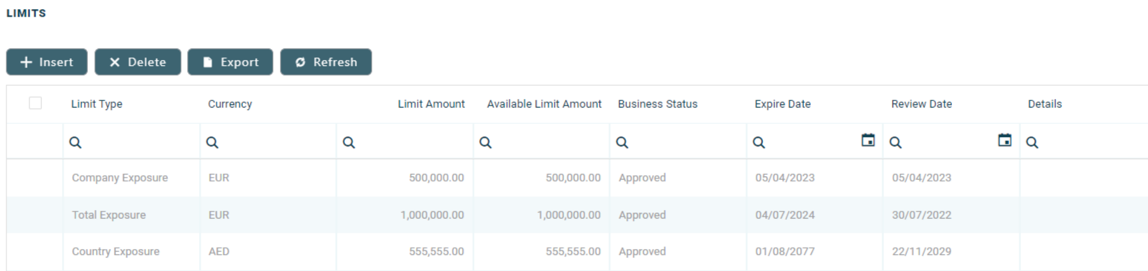
1. Fill in the following information within this section:

Field	Mandatory	Data Type	Description
Is Group	Yes	Boolean	Select the checkbox if the customer represents a group or not.
Group Name	No	Text	This field is displayed only if the customer represents a group. It is automatically completed with the current customer's name.
Group Rating	No	Number	Enter the rating of the group.
Account Limit Currency	Yes	Lookup	Select the currency of the customer limit.

2. Click the **Save and Reload** button at the top right corner of the page.

Limits Section

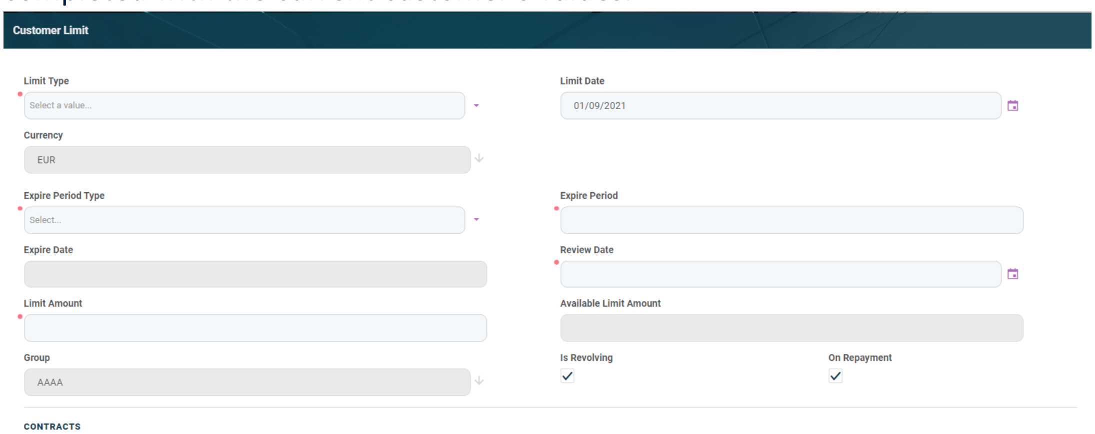
This section lists all the customer's limits. If the customer is a group, then all the limits applicable for the group, coming from group members, are listed here.



In this section, you can add new limit 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 limit record to the customer, follow these steps:

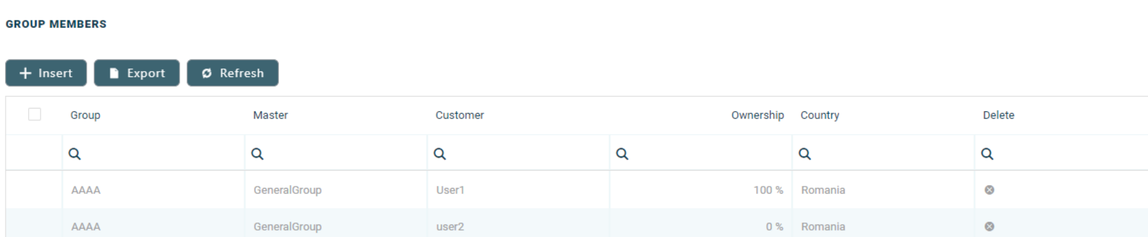
1. Click the **Insert** button within the **Limits** section. The **Customer Limit** page is displayed, with the customer, the group and the currency automatically completed with the current customer's values.



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

Members/ Group Members Section

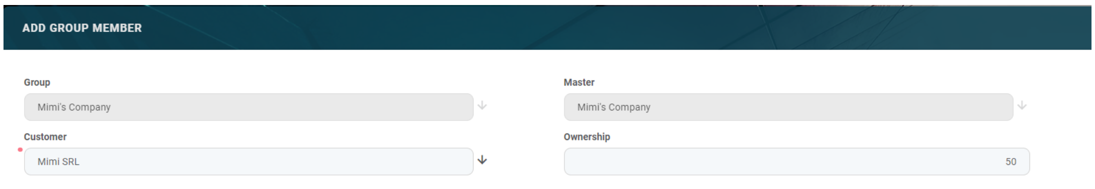
This section lists all the members/ group members' details. To view a specific member, double-click the desired company from the list.



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

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. The **Add Member/ Add Group Member** page is displayed, with the master and the group automatically completed with the current customer's values.



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

Creating Customers Using the Single Customer View Menus

Alternatively, you can create new customer records for customers following the steps described in the Onboarding 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.

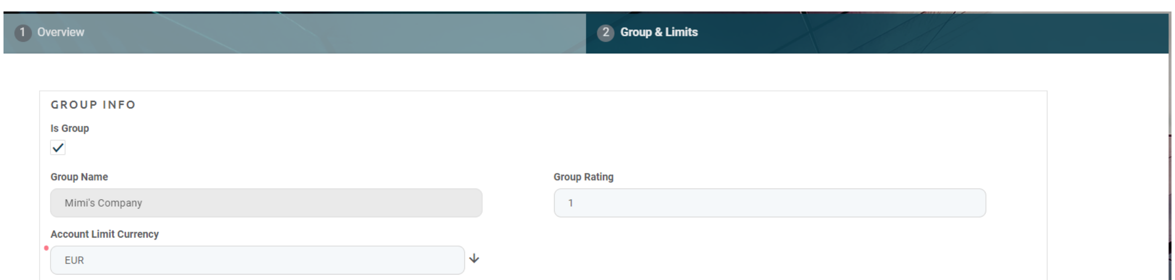
Groups

Core Banking allows users 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. Both legal entity and individual customers can be added 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.

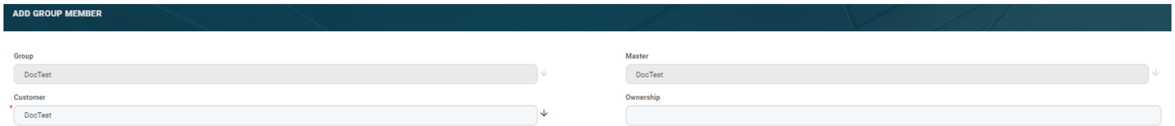
> **NOTE**
> Complex group management operations are performed by the **Single Customer View** apps. For detailed information, see the **Groups Info** section within the Single Customer View Legal Entities user guide.

Alternatively, you can use Core Banking to perform certain operations related to groups.

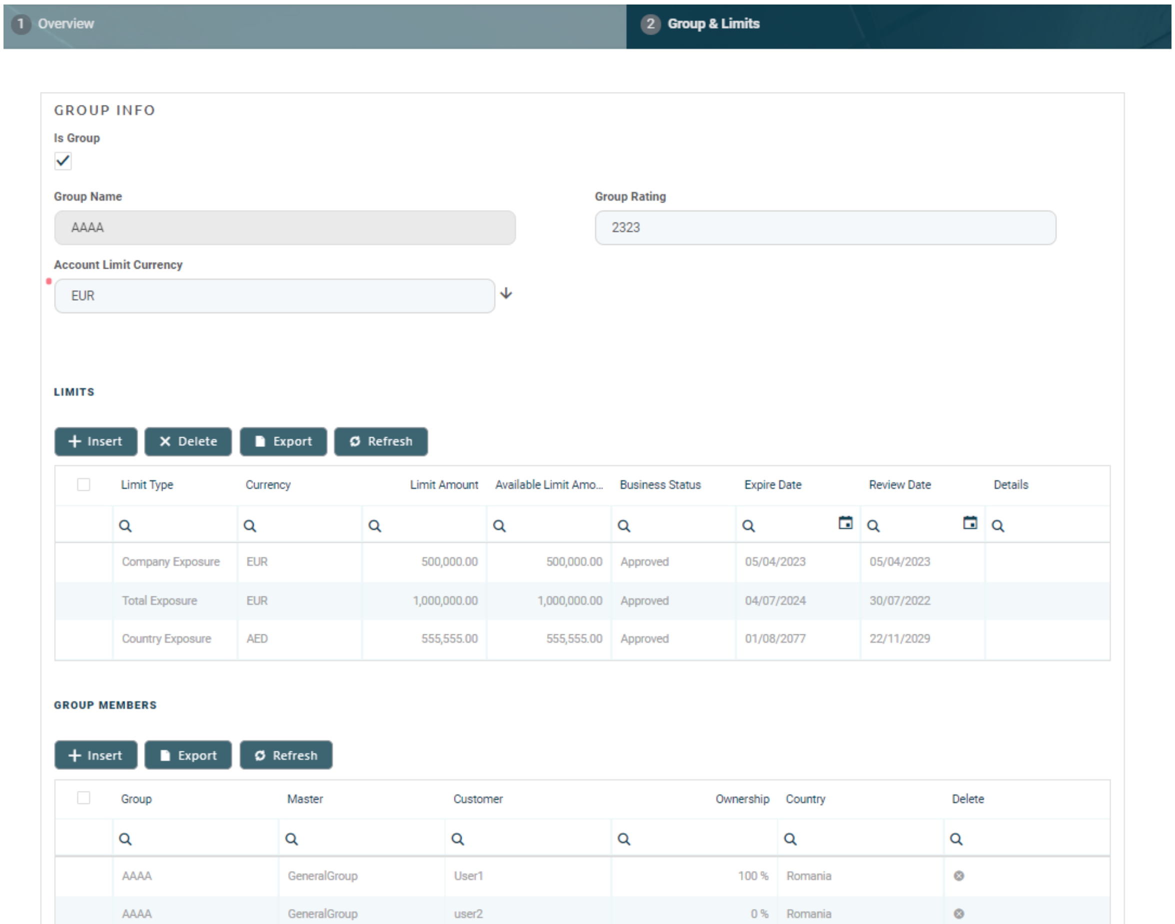
To define a group, select the checkbox **Is Group** from the **Group&Limits** tab of the **Customer** page, accessible through the **Core Banking Operational > Customer Core** menu. After the field is checked, the group name is automatically populated with the customer's name and you can insert a rating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



New members of the group are added 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.



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



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 bank is taking on for writing the loan. Every time a bank grants any type of credit facility to a customer (a loan), the bank monitors its exposure to various financial indicators, which can negatively affect the customer and the bank. The bank 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 bank on the number of loans that can be given to borrowers in a particular country. They are used to control the banks' 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 an institution extends to the customer for a specific type of product.
- **Product Exposure** - the maximum amount of credit an 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.

It is possible to 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.

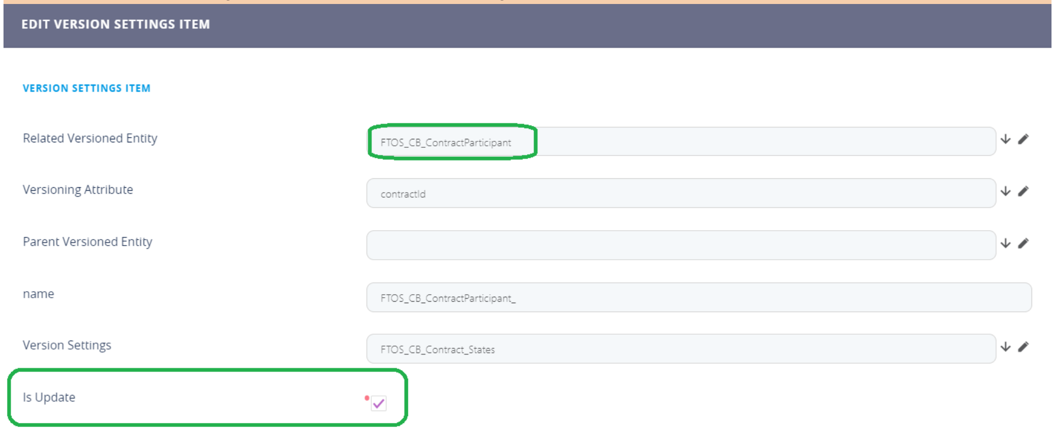
If the `Search Limit` checkbox was selected for the mandatory role at the banking product level, then Core Banking checks whether there is a contract participant whose limit is of the limit type associated with the same role. In the example above, Core Banking checks the existence of a participant who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



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.

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 High Productivity Fintech Infrastructure 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.
- **Approved** - 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

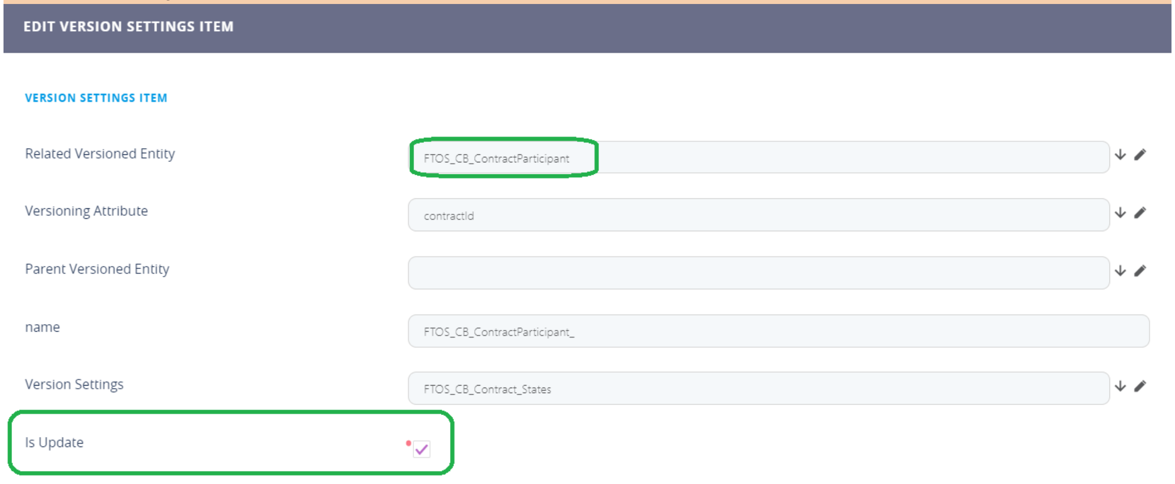
Core Banking allows you to create new versions for an existing limit if you need to modify an existing approved limit.

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.

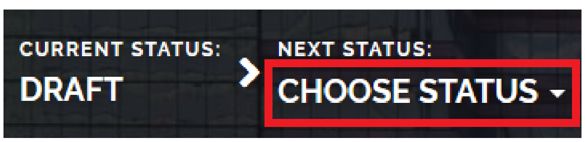
> **IMPORTANT!**
> The way the system is configured by default, there are no validations at **Contract Version** approval for contract participants' limits. If this is desired, the version settings for `Contract Participants` needs to be changed from `IsUpdate=`

`true` to `IsUpdate = false`.

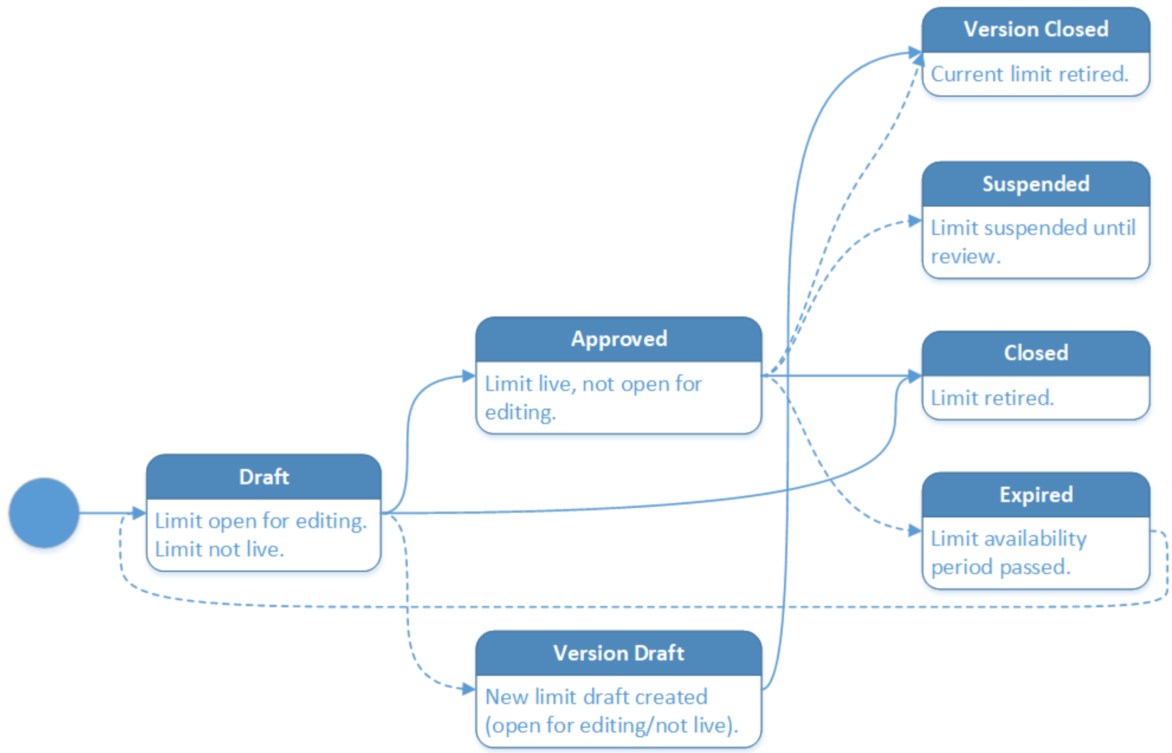


Changing Limit Statuses

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



The limit status transitions are illustrated below:



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.

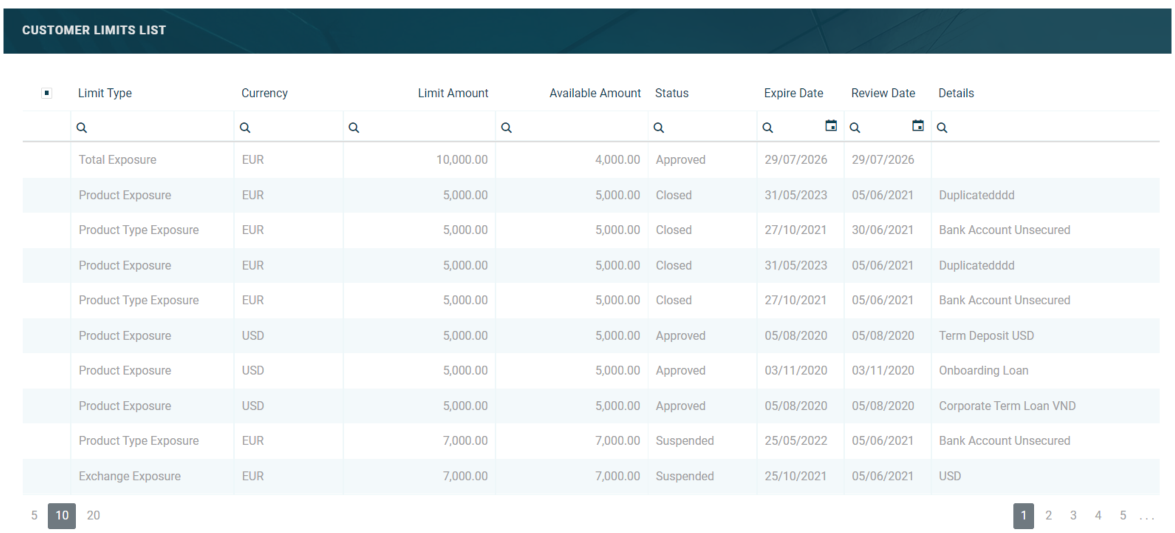
IMPORTANT!
As a best practice, new records or new versions of existing records created on a specific day should be approved on the same day.

Managing Limits

> **NOTE**
> Users with **Corporate Credit Officer**, **Retail Credit Officer**, and **Risk Officer** security roles can add and update limits, while users with other associated roles can only read limits information.

To manage limit records:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational** menu.
4. Click **Customer Limit** menu item to open the **Customer Limits List** page.


CUSTOMER LIMITS LIST

Limit Type	Currency	Limit Amount	Available Amount	Status	Expire Date	Review Date	Details
Total Exposure	EUR	10,000.00	4,000.00	Approved	29/07/2026	29/07/2026	
Product Exposure	EUR	5,000.00	5,000.00	Closed	31/05/2023	05/06/2021	Duplicatedddd
Product Type Exposure	EUR	5,000.00	5,000.00	Closed	27/10/2021	30/06/2021	Bank Account Unsecured
Product Exposure	EUR	5,000.00	5,000.00	Closed	31/05/2023	05/06/2021	Duplicatedddd
Product Type Exposure	EUR	5,000.00	5,000.00	Closed	27/10/2021	05/06/2021	Bank Account Unsecured
Product Exposure	USD	5,000.00	5,000.00	Approved	05/08/2020	05/08/2020	Term Deposit USD
Product Exposure	USD	5,000.00	5,000.00	Approved	03/11/2020	03/11/2020	Onboarding Loan
Product Exposure	USD	5,000.00	5,000.00	Approved	05/08/2020	05/08/2020	Corporate Term Loan VND
Product Type Exposure	EUR	7,000.00	7,000.00	Suspended	25/05/2022	05/06/2021	Bank Account Unsecured
Exchange Exposure	EUR	7,000.00	7,000.00	Suspended	25/10/2021	05/06/2021	USD

5 10 20 1 2 3 4 5 ...

On the **Customer Limits List** page, you can:

- Create a new limit record for a customer by clicking the **Insert** button at the top right corner.

- Edit an existing limit record from the list by double-clicking it. You can directly edit the information for limits in **Draft** or **Version Draft** status, or create new versions for approved limits to change their information.
- Delete a record in **Draft** status by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in any or all the column headers of the displayed records list.

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.

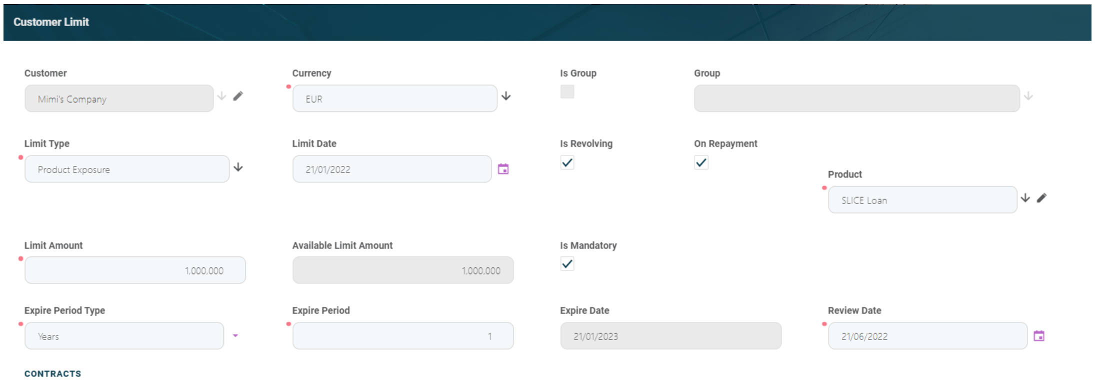
Creating Limits

Customer limit records are created in the FintechOS Portal, on the **Customer Limits List** page.

> **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.

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

1. Click the **Insert** button on the top right side of the **Customer Limits List** page. The **Customer Limit** page is displayed.



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

2. Fill in the following fields:

Field	Data Type	Description
Customer	Lookup	Select the customer to whom the limit is associated.
Currency	Lookup	Select the currency for this limit.
Is Group	Boolean	Select the checkbox if the customer represents a group.
Group	Lookup	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.

Field	Data Type	Description
Limit Type	Option set	Select the type from the list as explained above: • Total Exposure • Product Type Exposure • Product Exposure • Exchange Exposure • Country Exposure • Company Exposure • 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

Field	Data Type	Description
		are available: country and company exposure.
Limit Date	Date	Enter the date when the limit becomes active. It is automatically completed with the current date, but it can be changed.
Is Revolving	Boolean	If this checkbox is selected, 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`.

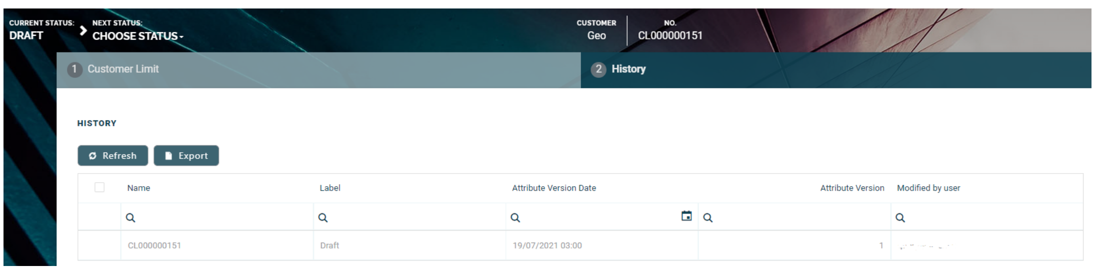
Field	Data Type	Description
On Repayment	Boolean	This field can be selected only if `Is Revolving = True`. If this checkbox is selected, then the Available Amount of the limit is replenished on each repayment of the principal with the repayment value. If the checkbox is not selected for a revolving limit, then the limit amount is replenished on contract closure with the amount of the contract. The default value is `True`. **NOTE** The fields `On Repayment` and `Is Revolving` cannot be modified after limit approval. When these properties must be modified, the limit should be closed and a new limit with the required setup should be opened.
Limit Amount	Numeric	Select the amount representing the limit for the credit.
Available Limit Amount	Numeric	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.

<table>
<tr><th>Field</th><th>Data Type</th><th>Description</th></tr>
<tr><td>Is Mandatory</td><td>Boolean</td><td>This checkbox is set to true by default. If this checkbox is selected, then 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.</td></tr>
<tr><td>Expire Period Type</td><td>Option set</td><td>Select from the list the period type applicable for this limit:
• Days
• Weeks
• Months
• Years
• Once.</td></tr>
</table>

Field	Data Type	Description
Expire Period	Whole number	Insert the number for the period, e.g. 4., i.e. 4 months.
Expire Date	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	Date	Select a date when the limit is reviewed.

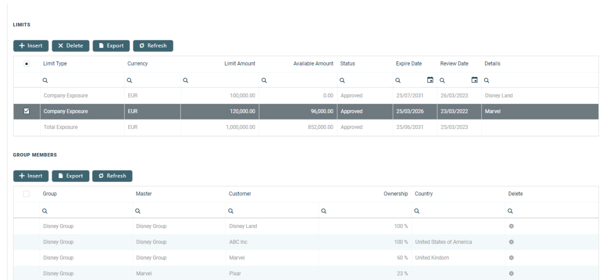
3. Click the **Save and Reload** button at the top right corner of the page. A number is automatically generated for the limit record and the name of the customer is filled in and displayed at the top of the page. The **History** tab is also displayed, containing information about each version of the record.



Depending on the type of exposure selected, each type may display additional fields that must be filled in:

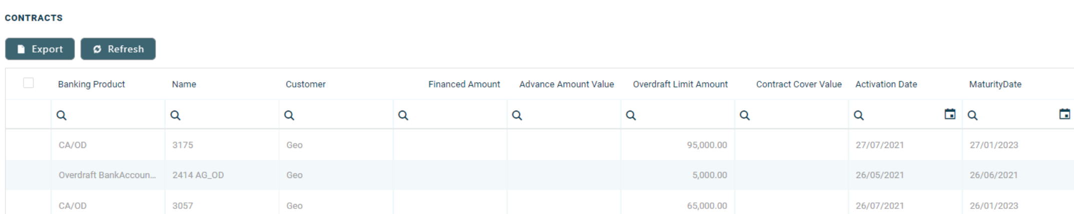
Additional Fields	Data Type	Description
Exchange exposure		
Exchange currency limit	Lookup	Select the currency from the list.
Product Exposure		

Additional Fields	Data Type	Description
Product	Lookup	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.
Product Type Exposure		
Product type	Option set	Select the product type from the list: • bank account • term loan • card • overdraft • leasing • mortgage • credit card • deposit.
Product type is secured	Boolean	If true, then the type is secured by an asset.
Country Exposure		
Country	Lookup	Select from the list the country where the limit is available.
Company Limit		

Additional Fields	Data Type	Description
Company	Lookup	Select from the list of group members the company for which the limit applies. For details on Groups, see Groups. 

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

   In the **Contracts** section, the existing contracts affected by this limit are displayed. To export the list, click the **Export** button.



5. Repeat to add as many limits as needed.

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

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

7. A user with customer limits approval rights must approve the record before it becomes active in the system. The approval can be performed from the **Customer Limits** dashboard **> Customer Limits Approval Requests** tab or from the **Approval Tasks** menu.

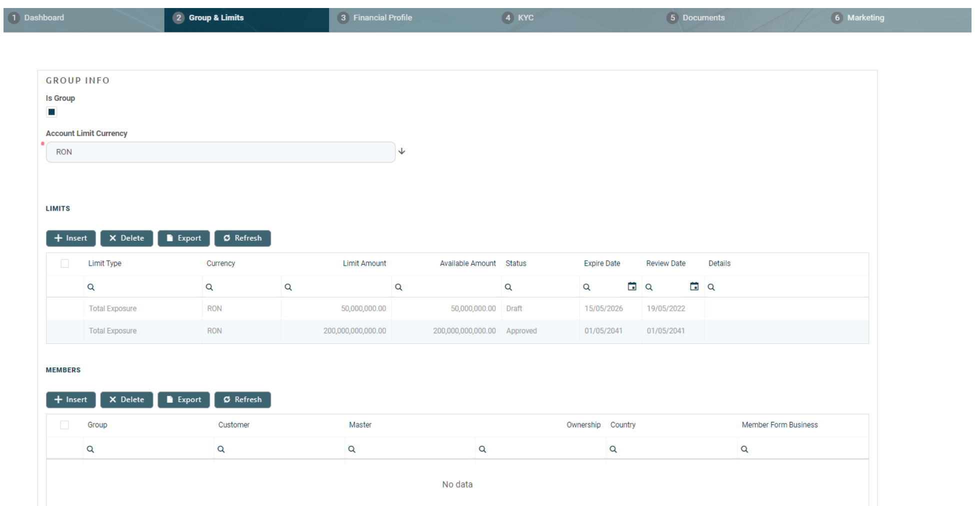
Or, add limits using the Single Customer View -> SME Clients menu

Alternatively, you can also add limits and groups while defining customers using the **Single Customer View** -> **SME Clients** menu, by following these steps:

1. Log into FintechOS Portal. In the main menu, navigate to **Single Customer View** -> **SME Clients** menu option.

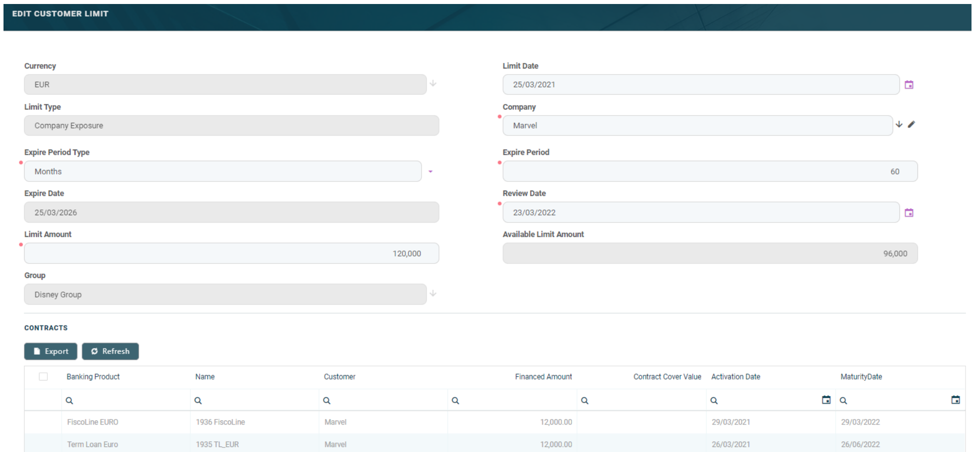
   From the newly opened page, you can add a new company or modify an existing one. To access the limits and groups, once the legal entity has been created and saved in the database, you can access the **Group & Limits** tab.

2. Navigate to the **Group & Limits** tab.

3. Two fields are displayed: the checkbox **is Group** and **Account Limit Currency**. If true, the checkbox marks the legal entity as being a group. The **Account Limit Currency** opens a drop-down to select the currency that is used later on when creating limits. This currency acts as a reference for the limits added further on. Two sections are displayed below, **Limits** and **Members**. **Members** is relevant if the company is a group, because this is where the members of the group are added.

4. In the **Limits** section, the list of existing limits is displayed. To add a customer limit, click the **Insert** button.



5. Fill in the following fields (valid for a legal entity and for a group):

Field	Data Type	Description
Currency	Lookup	Select the currency for the limit in particular.

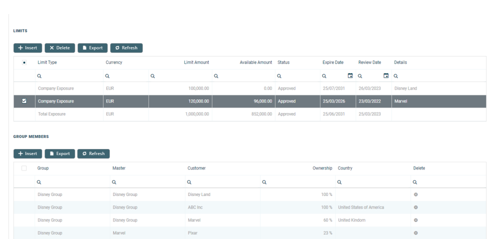
Field	Data Type	Description
Limit Type	Option set	Select the type from the list as explained above: • Total Exposure • Product Type Exposure • Product Exposure • Exchange Exposure • Country Exposure • Company Exposure. **IMPORTANT!** The correlation between the limits and group is important as the limits on the parent entity affect the child entities. If the legal entity is a group, two additional types of exposures are available country and company exposure.

Field	Data Type	Description
Expire Period Type	Option set	Select from the list the period type applicable for this limit: • Days • Weeks • Months • Years • Once.
Expire Period	Whole number	Insert the number for the period, e.g. 4., i.e. 4 months.
Expire Date	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	Date	Select a date when the limit is reviewed.
Limit Amount	Numeric	Select the amount representing the limit for the credit.
Available Limit Amount	Numeric	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.

Field	Data Type	Description
Group	Lookup	If the legal entity is not a group, this field is read-only. If the legal entity is a group, the name of the group will be automatically filled in.

Depending on the type of exposure selected, each type may display additional fields:

Additional Fields	Data Type	Description
Exchange exposure		
Exchange currency limit	Lookup	Select the currency from the list.
Product Exposure		
Product	Lookup	Select the product from the list. From the total exposure amount, a user 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.
Product Type Exposure		

Additional Fields	Data Type	Description
Product type	Option set	Select the product type from the list: • bank account • term loan • card • overdraft • leasing • mortgage • credit card • deposit.
Product type is secured	Boolean	If true, then the type is secured by an asset.
Country Exposure		
Country	Lookup	Select from the list the country where the limit is available.
Company Limit		
Company	Lookup	Select from the list of members the company for which the limit applies. For details on Groups, see Groups. 

6. Click the **Save and reload** button. Repeat to add as many limits as needed.

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

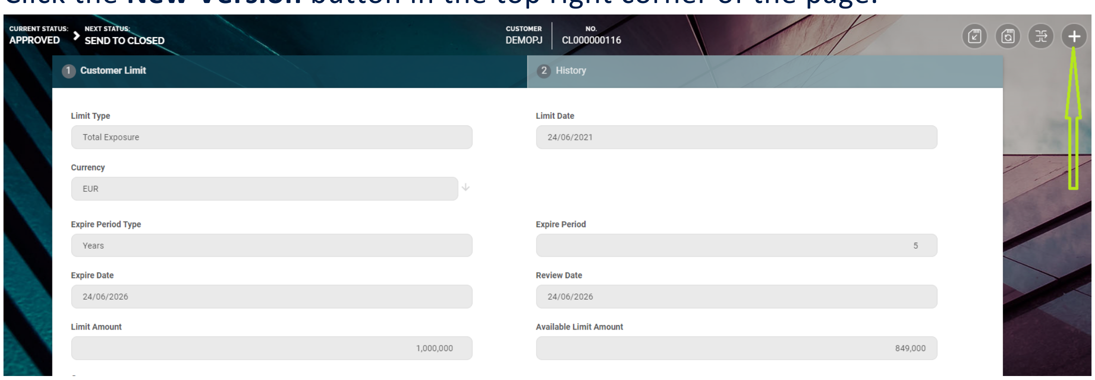
In the **Contracts** section, the existing contracts affected by this limit are displayed. To export the list, click the **Export** button.

Creating New Versions of Existing Limits

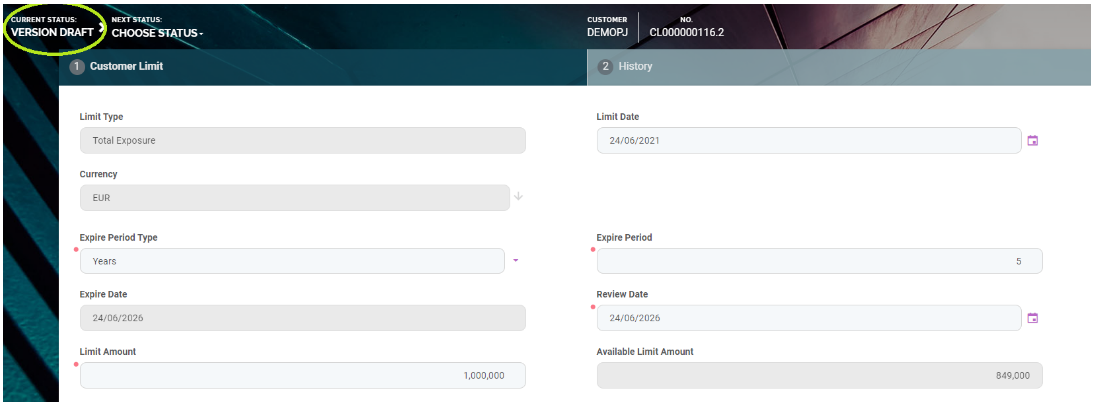
The limits are set up for versioning. Thus, if the details of an approved limit have to be updated, a new version of the record must be created.

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

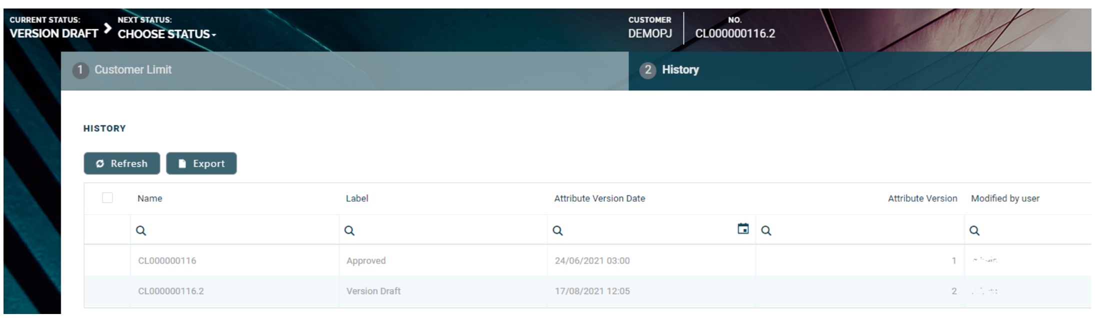
1. Double-click the limit record selected for updates.
2. Click the **New Version** button in the top right corner of the page.



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



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 at the top right corner of the page. 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.



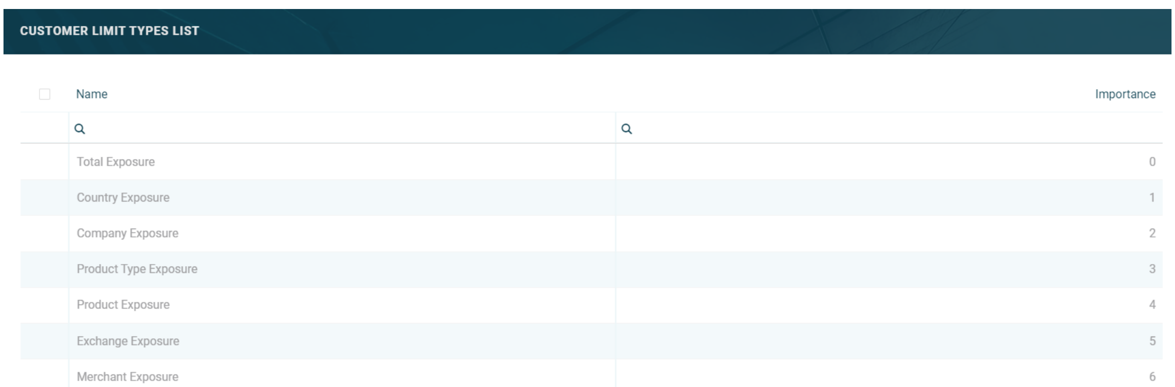
If the version draft record is approved, then the original record transitions into the **Version Closed** status and the secondary version becomes the **Approved** currently active limit record.

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

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. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configurations** menu.
4. Click **Customer Limit Type** menu item to open the **Customer Limit Types List** page.



On the **Customer Limit Types List** page, you can:

- Create a new limit type record to be used as role-based limit by clicking the **Insert** button at the top right corner.
- Edit an existing limit type record from the list by double-clicking it.
- Delete a record by selecting it and clicking the **Delete** button at the top right corner.

> **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.

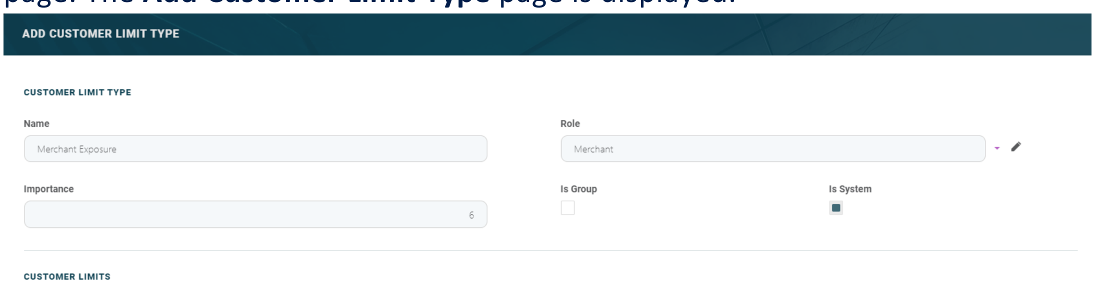
- Search for a specific record by filling in any or all the column headers of the displayed records list.

Creating Limit Types

Limit type records are created in the FintechOS Portal, on the **Customer Limit Types List** page.

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

1. Click the **Insert** button on the top right side of the **Customer Limit Types List** page. The **Add Customer Limit Type** page is displayed.

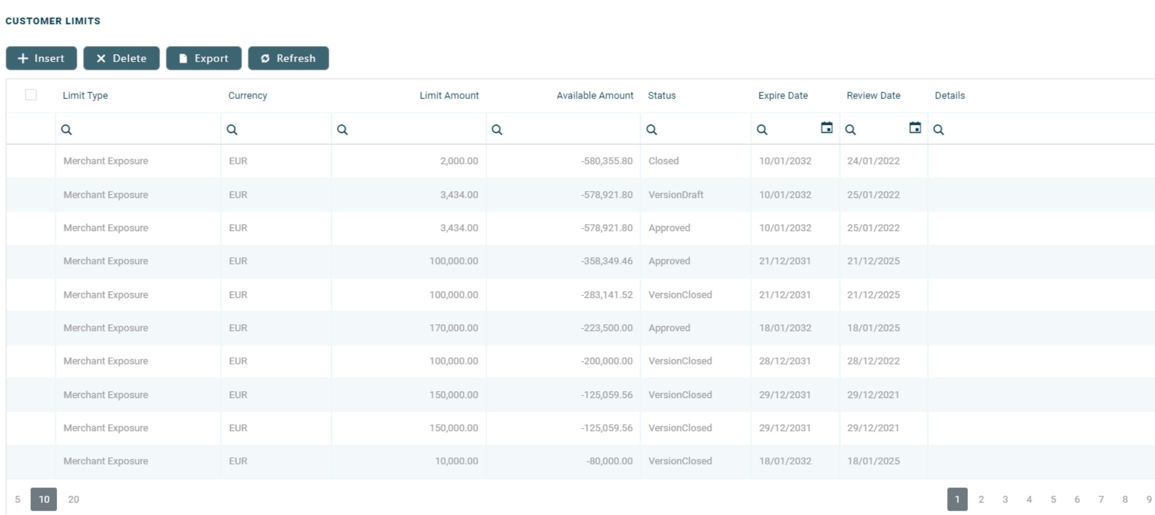


2. Fill in the following fields:

Field	Data Type	Description
Name	Text	Enter the name of the limit type.
Role	Option Set	Select the role of the contract participant for which this limit type can be used.
Importance	Whole Number	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	Boolean	Select this checkbox if the limit type is applicable to groups.
Is System	Boolean	Marks a record as system limit type. This field is read-onlyand cannot be modified. Only the limit types that are incorporated 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 at the top right corner of the page.

In the **Customer Limits** section, the existing customer limits affected by this limit type are displayed. Only customers with the same role selected on their customer record have their customer limit displayed here. To export the list, click the **Export** button.



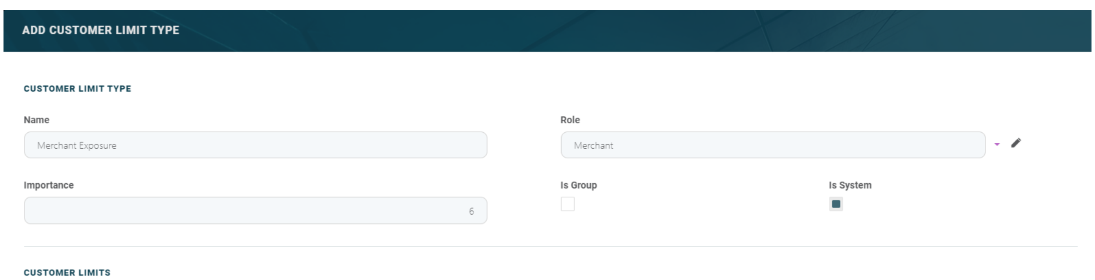
Role-Based Limits

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, make sure you follow these steps:

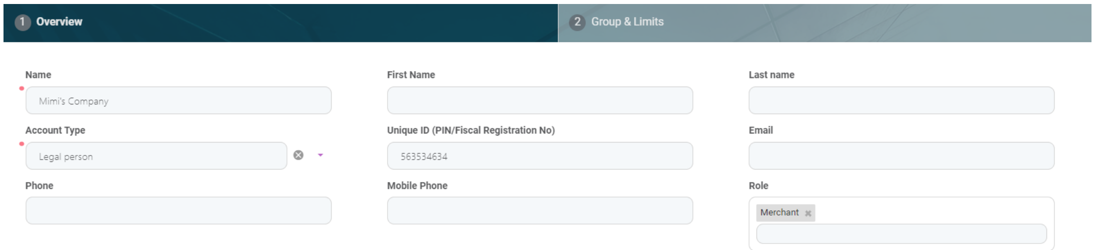
1. Define new limit types that are based on roles associated with contract participants specific to your business.

   These new limit types can be used 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.

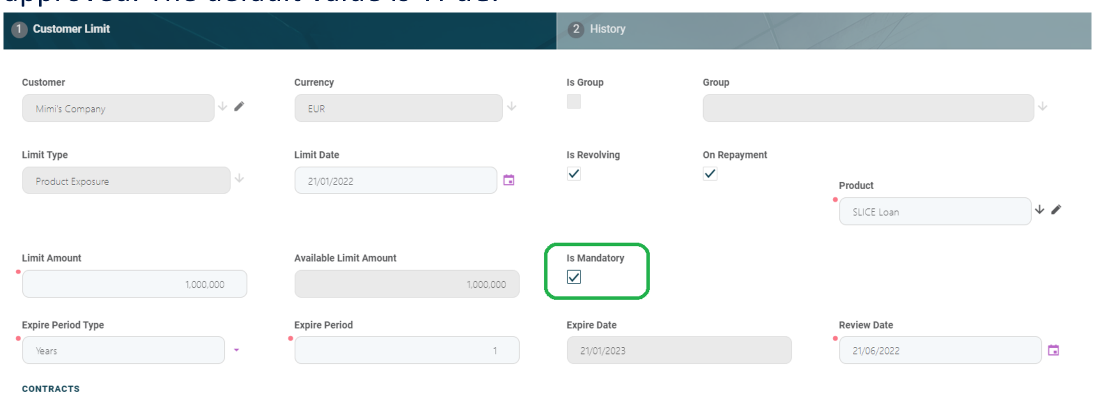
2. Associate the same role to the customer.

   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.



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

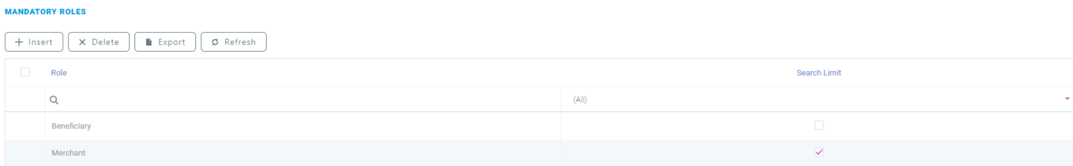
   The `Is Mandatory` field's value within the **Customer Limit** page configures the limit validation at the contract level. When the existing limit's available amount is smaller than the value of the contract, Core Banking checks the limit's `Is Mandatory` field. If `Is Mandatory = True`, then an error 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`.



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.



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 bank'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.

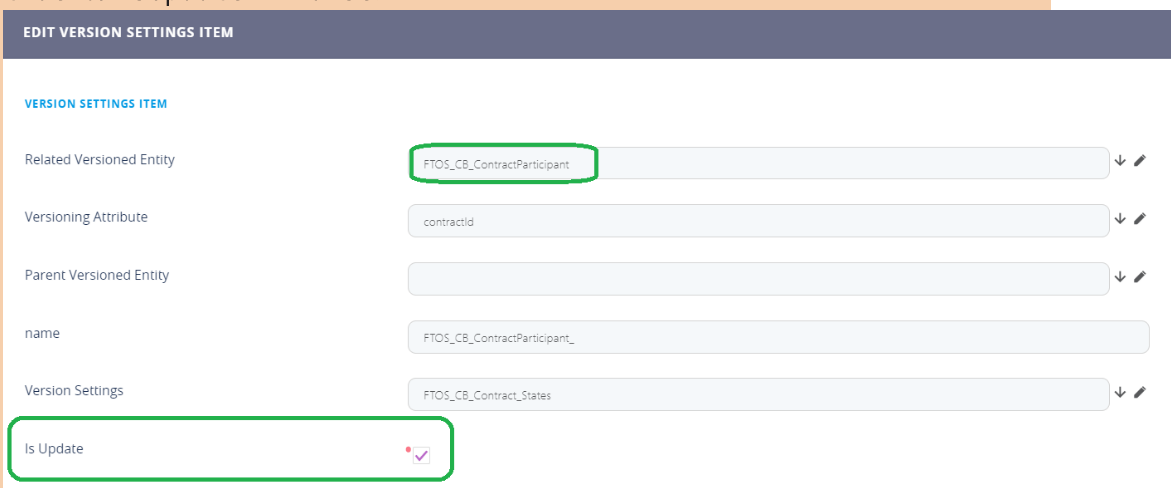
If the existing limit's available amount is smaller than the value of the contract, then Core Banking checks the limit's `Is Mandatory` field. If `Is Mandatory = True`, then an error is raised that the limit is reached and the contract cannot be approved, otherwise, a warning is presented but the contract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



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

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.

The following steps must be done in order to perform collateral management in FintechOS Core Banking:

1. Set the guarantee types.
2. Create collateral types based on the guarantee types.

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 an asset is must be registered as a collateral, to be later on used to cover a contract.

IMPORTANT!
Only after a collateral is registered, it can be used as a guarantee for covering a secured loan contract.

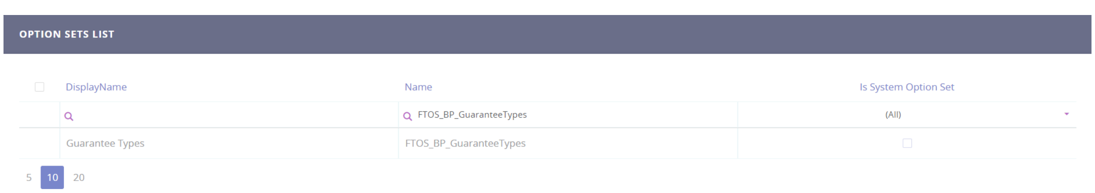
Setting Guarantee Types

Guarantee types are set in Innovation Studio, in the `FTOS_BP_GuaranteeTypes` option set. There are two guarantee types defined by default that cover most of the business requirements:

- Real Estate
- Cash Collateral.

To manage guarantee types:

1. Log into Innovation Studio in Developer mode.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand **Admin** menu.
4. Click **Option Sets** to open the **Option Sets List** page.
5. Type `FTOS_BP_GuaranteeTypes` in the **Name** header of the list to find the option set that stores the guarantee types.



6. Double-click the `FTOS_BP_GuaranteeTypes` option set to open the **Edit Option Set** page.
7. In the **Option Set Items** section, click the **Insert** button to open the **Add Option Set Item** page.
8. Add the details of the new guarantee type by filling in the following fields:

Field	Required	Data Type	Details
Name	Yes	Text	The name of the guarantee type.
Display Name	Yes	Text	The display name of the guarantee type.
Value	No	Whole Number	The value of the guarantee type.
Id	No	Whole Number	Read-only field. The id of the option set item is automatically generated when saving the record.
Status Id	Yes	Bool	The status of the item within the option set: active or inactive. Default value: `Active`.

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

Guarantee types are further used to define collateral types.

Creating Collateral Types

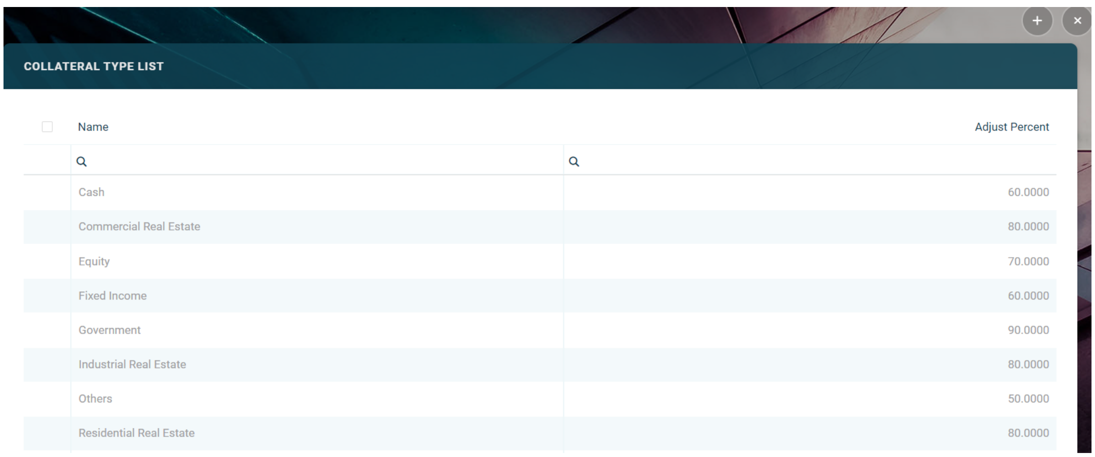
In FintechOS Core Banking there is a large range of predefined collateral types:

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

New types can be created in the `FTOS_CB_CollateralType` entity for your business specific needs.

To manage collateral types:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand **Core Banking Operational** menu.
4. Click **Collateral Type** to open the **Collateral Type List** page.



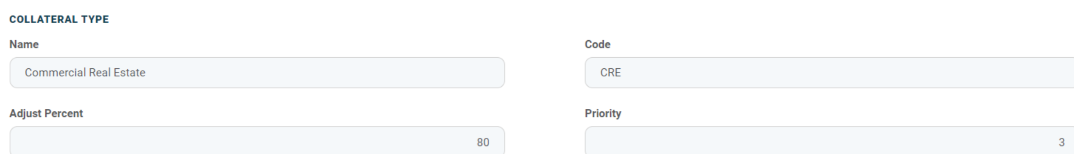
In the **Collateral Type List** page, you can:

- Add a new collateral type by clicking the **Insert** button at the top right corner.
- Edit an existing collateral type from the list by double-clicking it.
- Delete a collateral type by selecting it and clicking the **Delete** button at the top right corner.

To add a new collateral type, click the **Insert** button and fill in the following fields displayed in the **Add Collateral Type** page:

Field	Required	Data Type	Details
Name	Yes	Text	The name of the collateral type.
Code	Yes	Text	The code of the collateral type.

Field	Required	Data Type	Details
Adjust Percent	No	Whole Number	The adjusted value of the collateral type. **NOTE** When a collateral type is defined, you can set an adjustment percent. The adjustment percent is a customization applied for that collateral. Further, when a collateral is linked to a secured loan contract, its market value is automatically adjusted by Core Banking using the adjustment percent.
Priority	No	Whole Number	The priority of the collateral type to be considered within a contract.



5. Click the **Save and Reload** button at the top right corner of the page.

In the newly displayed **Product Guarantee Structure** section, click **Insert**. The **Add Product Guarantee Structure** page is displayed, allowing you to add the product guarantee structure records. Fill in the following fields:

Field	Required	Data Type	Details
Banking Product	No	Lookup	Read-only field. The banking product to which this collateral type applies to.
Guarantee Type	No	Lookup	The collateral type where the structure is applicable. Automatically completed with the previously selected/ added collateral type, but you can change it to the desired collateral type.
Max Accepted Covering Percent	No	Whole Number	The maximum covering percentage from the collateral's value accepted at contract level.
Name	No	Text	The name of the record.

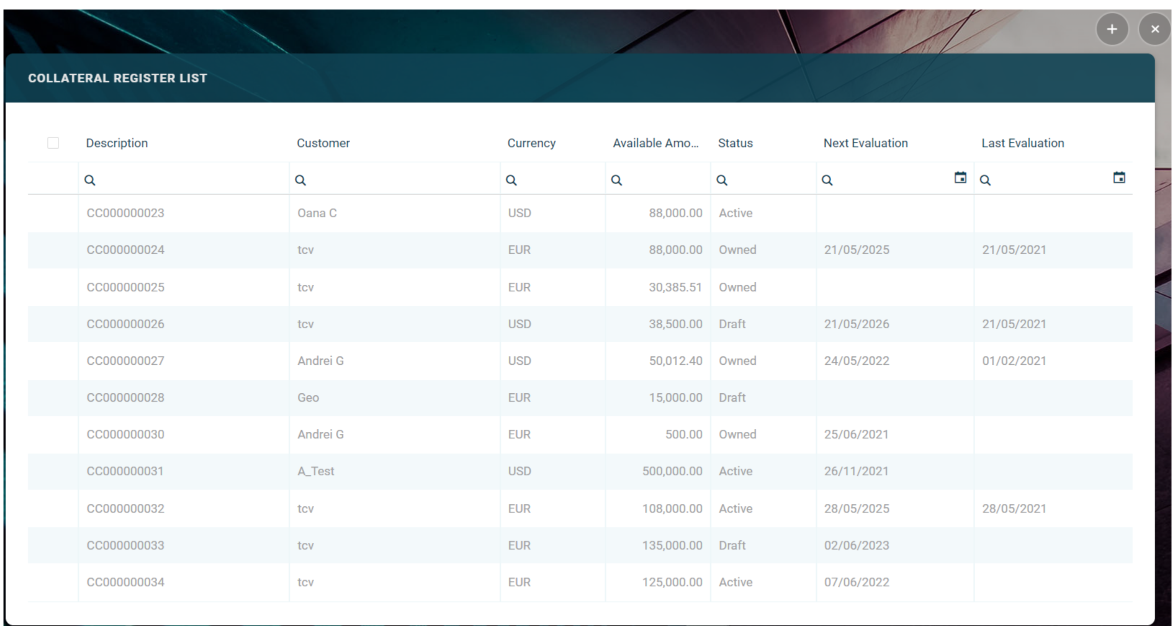
6. Click the **Save and Close** button at the top right corner of the page.

Registering Collaterals

A registered collateral can be attached to multiple contracts if the contracts total amount does not exceed the collateral available amount. Only after a collateral is registered, it can be used for covering a secured loan contract.

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

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand **Core Banking Operational** menu.
4. Click **Collateral Register** to open the **Collateral Register List** page.



COLLATERAL REGISTER LIST

Description	Customer	Currency	Available Amo...	Status	Next Evaluation	Last Evaluation
CC000000023	Oana C	USD	88,000.00	Active		
CC000000024	tcv	EUR	88,000.00	Owned	21/05/2025	21/05/2021
CC000000025	tcv	EUR	30,385.51	Owned		
CC000000026	tcv	USD	38,500.00	Draft	21/05/2026	21/05/2021
CC000000027	Andrei G	USD	50,012.40	Owned	24/05/2022	01/02/2021
CC000000028	Geo	EUR	15,000.00	Draft		
CC000000030	Andrei G	EUR	500.00	Owned	25/06/2021	
CC000000031	A_Test	USD	500,000.00	Active	26/11/2021	
CC000000032	tcv	EUR	108,000.00	Active	28/05/2025	28/05/2021
CC000000033	tcv	EUR	135,000.00	Draft	02/06/2023	
CC000000034	tcv	EUR	125,000.00	Active	07/06/2022	

In the **Collateral Register List** page, you can:

- Add a new record by clicking the **Insert** button at the top right corner.
- Edit an existing record from the list by double-clicking it.
- Delete a record by selecting it and clicking the **Delete** button at the top right corner.

NOTE

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

5. To add a new collateral register, click the **Insert** button on the **Collateral Register List** page.

HINT

As an alternative, add collateral register records directly from the Customer form for the legal entity or individual customers by clicking on the **Insert** button from **Collateral Register** section, as described in the Single Customer View user guide.

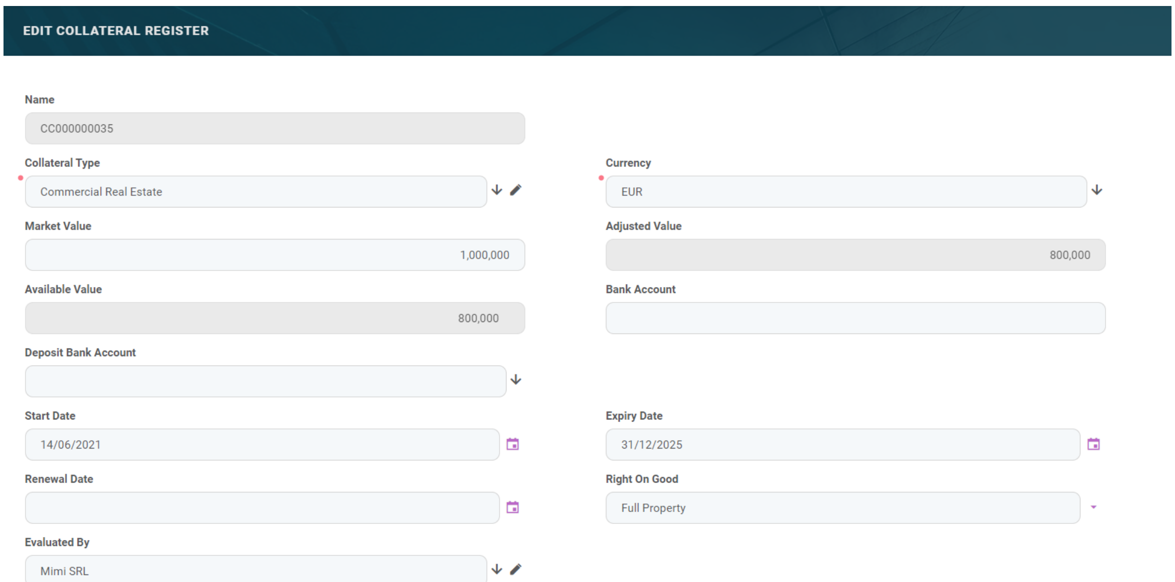
6. In the **Add Collateral Register** page, fill in the following fields:

Field	Required	Data Type	Details
Name	No	Lookup	Read-only field, displaying the id of the collateral. Core Banking generates an id after saving the record.
Customer	Yes	Lookup	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	Yes	Lookup	Select the type of the collateral from the drop-down list.
Currency	Yes	Lookup	Select the currency of the collateral. It can be different from the currency of the contract which uses this collateral as a guarantee.

Field	Required	Data Type	Details
Market Value	No	Numeric	Enter the market value of the collateral which is taken into consideration. Only applicable for Real Estate and Others collateral types.
Adjusted Value	No	Numeric	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. Read-only field, automatically calculated by Core Banking.
Available Value	Yes	Numeric	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	No	Text	Enter the customer's current account so that the funds within the account can serve as a guarantee.
Deposit Bank Account	No	Lookup	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	No	Invariant Date	Select the start date for the collateral registration.
Expiry Date	No	Invariant Date	Select the end date for the collateral registration.
Renewal Date	No	Invariant Date	Select the date when the collateral registration is renewed.
Right On Good	No	Option set	Select the type of rights held on the collateral goods. Possible values: `Full Property`, `Naked Property` and `Usufruct`.
Evaluated By	No	Lookup	Select the customer who evaluated the collateral.
Next Evaluation Date	Yes	Invariant Date	For Real Estate collaterals, you can insert the next evaluation date. Only displayed when editing an existing collateral register.

Field	Required	Data Type	Details
Last Evaluation Date	No	Invariant Date	For Real Estate collaterals, you can insert the previous evaluation date. Only displayed when editing an existing collateral register.
Description	No	Text	Enter a suggestive description for the collateral.
Attached File	No	File	Attach files relevant for the collateral.

7. Click the **Save and Reload** button at the top right corner of the page.



After saving the record, new sections are displayed in the page, with specific information to be filled in:

Collateral Register Rank Section

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

1. To add a rank, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Collateral Register	No	Lookup	Read-only field, displaying the id of the collateral.
Parity On Rank	No	Boolean	Select the checkbox to mark the collateral with parity on rank.
Rank	No	Option set	Select the rank of the collateral.

Field	Required	Data Type	Details
Owner	No	Lookup	Select the customer who owns the collateral.

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

Contract Collateral Section

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:

Field	Details
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.

1. To edit a collateral attached to a contract from this list, double-click the record and perform the desired updates in the **Edit Contract Collateral** page.
2. Click the **Save and Close** button at the top right corner of the page. You are redirected to the **Edit Collateral Register** page where you can continue editing the collateral register record.

Collateral Owners Section

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 can be found in the `FTOS_CB_CollateralRegisterOwner` entity.

1. To add an owner, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Collateral	Yes	Lookup	Automatically filled in by Core Banking with the id of the collateral register record.

Field	Required	Data Type	Details
Customer	Yes	Lookup	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 at the top right corner of the page.

Collateral Register Participants Section

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.

1. To add a participant, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Participant	Yes	Lookup	Select the customer who is a participant to the collateral.
Participant Role	Yes	Option set	Select the role of the customer in this collateral. Possible values: `Notary`, `Valuer`.

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

Collateral Register Documents Section

In the **Collateral Register Documents** section, you can insert, delete or export collateral documents.

1. To add a document, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Document Type	No	Option set	Select the type of the document that is uploaded for the collateral.
Collateral File	Yes	File	Attach the file to be uploaded.

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

Collateral System Statuses

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.

Banking 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 banks 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 Statuses

The four-eyes principle is applicable for all contracts in FintechOS Core Banking, meaning that a record should be approved by a second financial institution employee, with higher authorization rights. This is enabled via approval task High Productivity Fintech Infrastructure 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.

IMPORTANT!
In order for the customer to use the contract, applying transactions to it, it must be in the **Approved** status.

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 approval of the contract should be done after the advance is paid, in the case of loan contracts that have an advance amount or percent specified to be paid on the first disbursement day (merchant loans), in order to avoid having to close newly created contracts if something goes wrong in the process of collecting the advance plus potential fees.

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.

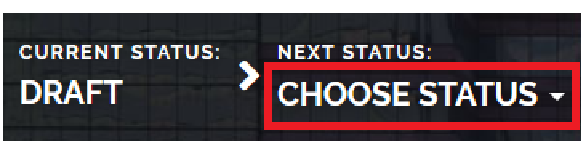
A contract version can have the following statuses:

- **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.

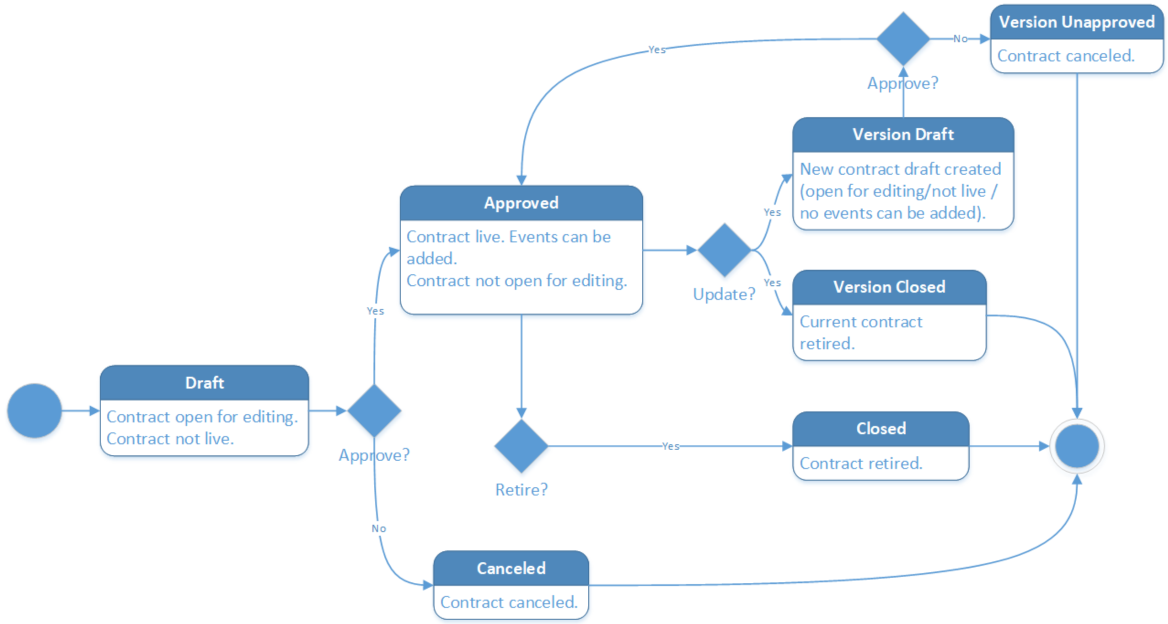
> **NOTE**
> All existing versions of the contract in **Contract Version Draft** status are automatically changed to **Contract Version Closed** when a payment event outside regular schedule is approved for that contract.

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:



Note that:

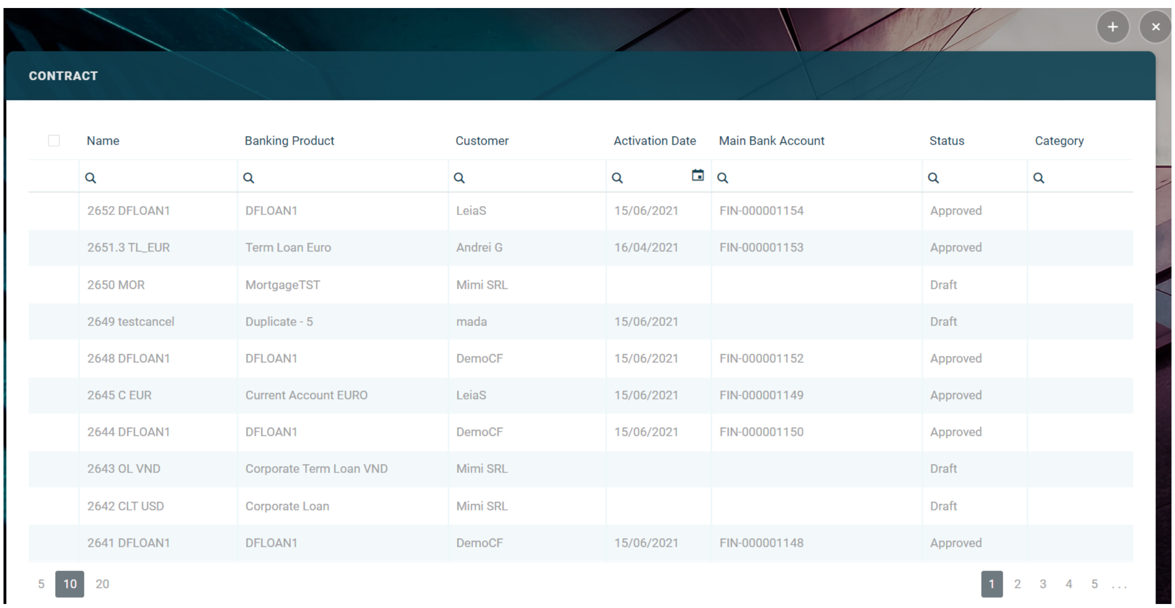
- Once a record is live, its settings can no longer be modified.
- If you want to update the details of a live contract, you must create a new contract version.
- When you create a new contract version, the current version is retired and moved to history; no updates are allowed on the retired version.
- 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.

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

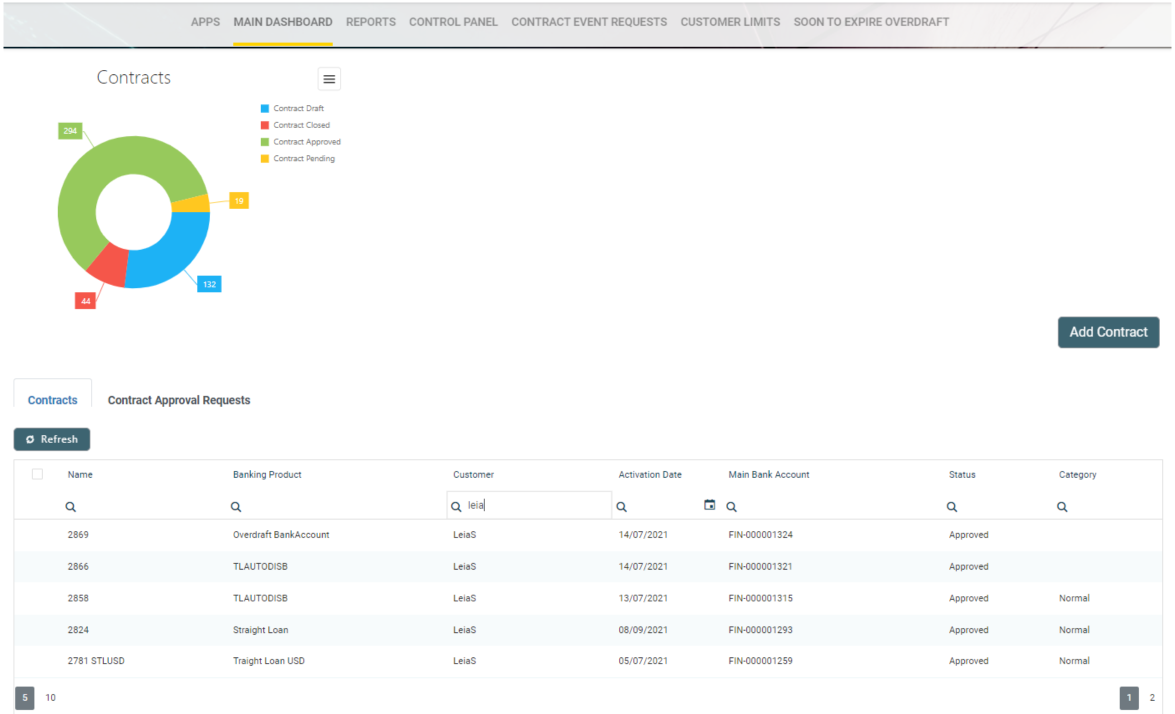
Managing Contracts

To manage contracts:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational** menu.
4. Click **Contract** menu item to open the **Contracts** page.



Alternatively, you can select the **Contracts dashboard**.



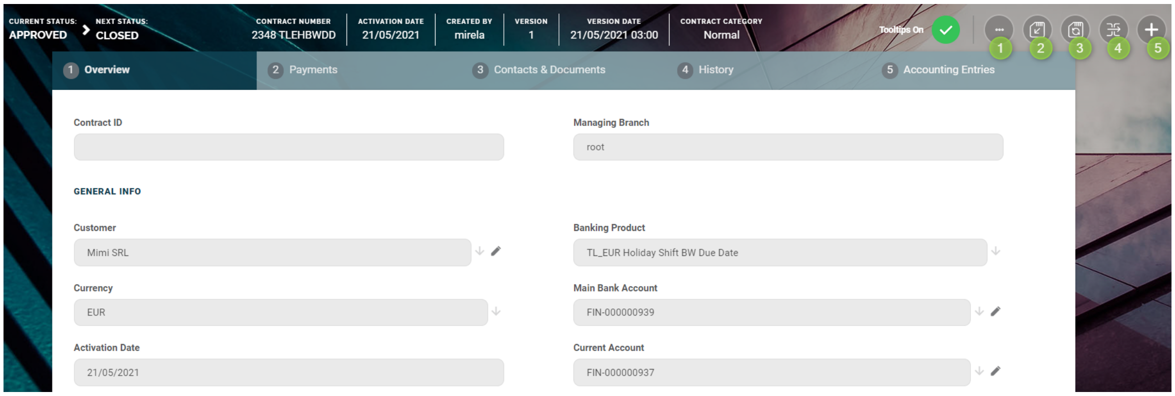
On the **Contracts** page, you can:

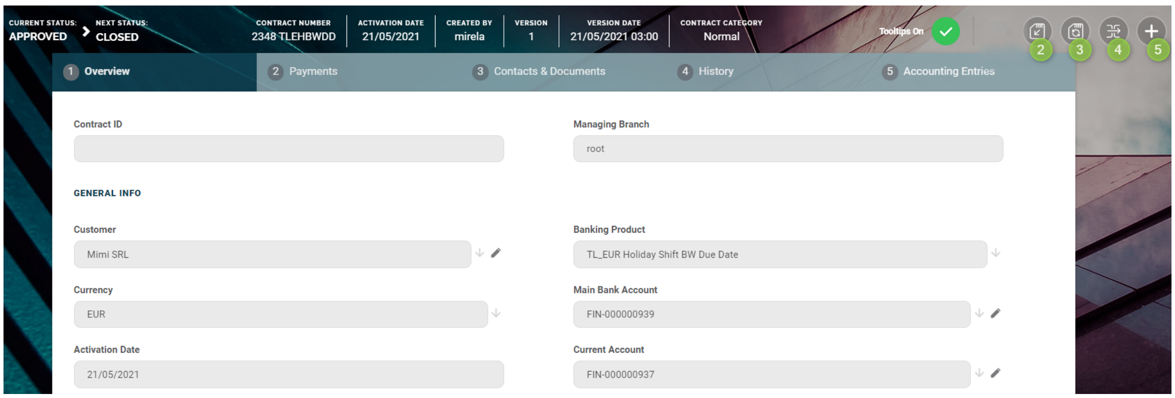
- Create a new contract by clicking the **Insert** button at the top right corner.
- Edit a contract from the list by double-clicking it.
- Delete a contract by selecting it and clicking the **Delete** button at the top right corner. Only draft contracts can be deleted. Once approved, a contract should be closed.
- Search for a specific record by filling in any or all the column headers of the displayed contracts records list.

Actions

Core Banking has a series of buttons that help shorten the processes of managing contracts. Such actions aid the user to 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.





- Button 1 triggers the **report generation** actions. Click it to view a list of reports that can be generated and downloaded as pdf files for the selected contract. Depending on the type of banking product selected in the contract, you can generate one or more of the following reports:
  - Contract Reevaluation Plan
  - Contract Reevaluation Projection Plan
  - Loan Report.

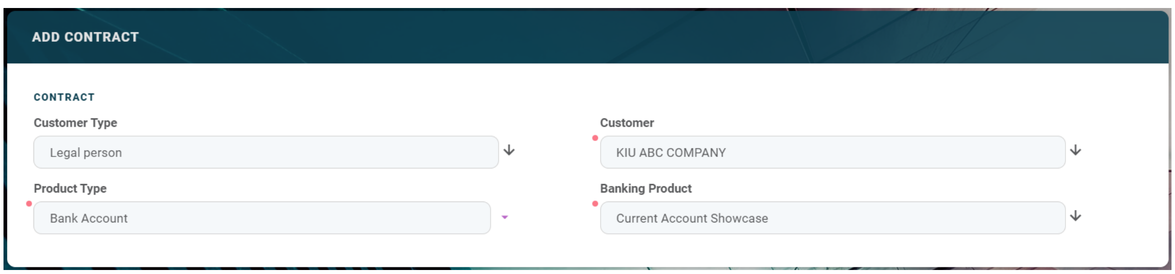
  The selected report is automatically downloaded by your browser.
- Button 2 is the **Save and close** button.
- Button 3 is the **Save and reload** button.
- Button 4 opens the **Contract Business Workflow Transitions List**.

- Button 5 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.

Read about how to perform specific actions within the lists on the dedicated Working with Lists section.

Creating Contracts

Contract records are created in FintechOS Portal, on the **Contracts** page. To create a new contract, click the **Insert** button on the top right side of the page. The **Add Contract** page is displayed.



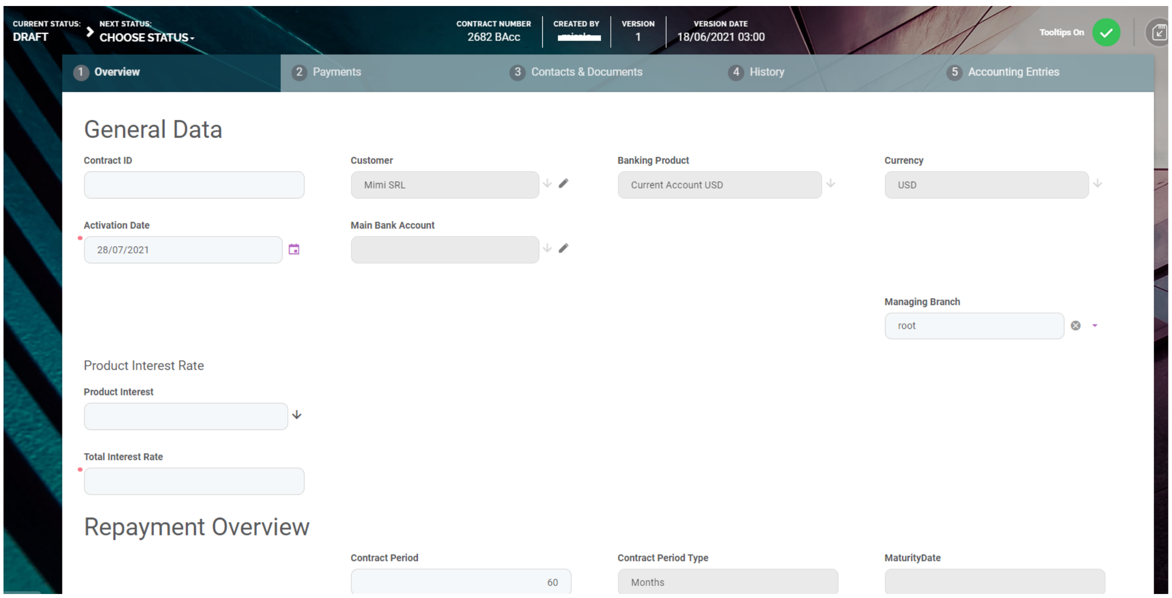
Fill in the following fields:

Field	Mandatory	Data Type	Details
Customer Type	No	Lookup	Select a value from the list: • Legal person • Individual person • Self employed individual.
Customer	Yes	Lookup	Select from the list the customer for whom you are creating a contract.
Product Type	Yes	Lookup	Select from the list the product type.
Banking Product	Yes	Lookup	Select from the list the desired banking product.

IMPORTANT!
When creating a new contract, choose a product type to filter the list of banking

products accordingly.
Be careful when choosing the values for the previously mentioned fields because they cannot be modified after saving the contract!
After saving the contract, all sections of the contract become visible and can be completed.

Click the **Save and Reload** button at the top right corner of the page. The contract is saved in **Draft** status, with minimum information, such as an auto-generated contract number, created by, version and version number, but the page displays now a series of tabs that assist you in configuring the contract:



- **Overview** tab - The first tab requires the basic elements for the creation of a contract such as customer, banking product, account, interest rate, participants, tranches, fees, and contract covenants.
- **Collaterals** tab - This tab, displayed only for contracts where the chosen banking product is secured, contains all the details about collaterals and contract guarantors.
- **Payments** tab - This tab contains all the transactions, payments, penalties, bank account operations, repayment schedules, schedule versions, repayment notifications for a contract. Depending on the contract's chosen banking product, only some of these may be displayed. The tab has no information to display while the contract is in the initial **Draft** status. Approve the contract to

perform any contract event. Meaningful payments information is displayed in this tab only after performing transactions on the contract.

- **Contracts & Documents** tab - This tab holds documents related to the contract. It is meant to be the electronic folder of the contract.
- **History** tab - This tab displays the versions of the contract, along with workflow status and the user who modified the record.
- **Accounting Entries** tab - This tab holds all the accounting entries, accounting totals, and accruals and provisions recorded for a contract. The accounting entries are generated after contract approval and performing transactions.

Depending on the chosen banking product, the contracts have different requirements regarding the fields that must be completed. The following pages exhibit the possible major contracts configurations:

The following configuration requirements generally apply for contracts:

Overview Tab

The **Overview** tab requires the basic elements for the creation of a contract such as customer, banking product, account, interest rate, participants, tranches, fees, and contract covenants.

The following information in the **Overview** tab is common to all contract types:

Field	Mandatory	Data Type	Details
Contract ID	No	Text	A contract ID can be filled in, other than the contract number generated automatically by Core Banking when you saved the contract.

Field	Mandatory	Data Type	Details
Customer	Yes	Lookup	The customer who owns the contract, selected previously, in the initial contract creation page. You cannot modify this information.
Banking Product	Yes	Lookup	The banking product selected previously, in the initial contract creation page. You cannot modify this information.
Currency	Yes	Lookup	The currency of the banking product selected previously, in the initial contract creation page. For the moment the product is defined currency wise, thus each product has an underlying currency. You cannot modify this information.
Activation Date	Yes	Invariant Date	This is the date when the contract is activated. It is automatically completed with the system date.
Main Bank Account	Yes	Lookup	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).

Field	Mandatory	Data Type	Details
Managing Branch	Yes	Option Set	This represents the branch of the organization where the contract was created. It is automatically completed at contract saving time, but you can select another branch from the list.

The following information should be filled in:

Field	Mandatory	Data Type	Details
Product Interest Rate section			
Product Interest	No	Lookup	Select from the list the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Depending on the selected interest, a series of other fields are displayed to be filled in: Margin, Reference Rate Date and Reference Rate.
Margin	No	Numeric	This field is automatically completed with the margin of the previously selected product interest. If the product interest was not selected, you can manually enter the margin.
Reference Rate Date	Yes	Date	The date for the reference rate that is part of the previously selected product interest. This field is automatically completed with the `Activation Date` value. You can edit this field.
Reference Rate	Yes	Numeric	This field is automatically completed with the reference rate valid at the previously selected date.

Field	Mandatory	Data Type	Details
Total Interest Rate	Yes	Numeric	This field 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, you can manually enter the interest rate.
Date for Review Interest Rate	No	Date	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.
Repayment Overview section			
Contract Period	No	Whole Number	This field is automatically completed with the contract period as it was defined at banking product level. You can edit this value.
Contract Period Type	No	Option Set	This field is automatically completed with the contract period type as it was defined at banking product level. You cannot edit this value.

Field	Mandatory	Data Type	Details
Maturity Date	No	Date	This field is automatically completed with the contract maturity date, calculated based on the values of the Contract Period and Contract Period Type. You cannot edit this value.
Repayment at end of month	No	Boolean	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.
Closure Settings section Only displayed for **Term Loan** & **Mortgage** contracts based on banking products having the `Closing Is Flexible = True` setting			

Field	Mandatory	Data Type	Details
Automatic Closure	No	Boolean	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`. If `Automatic Closure = False`, then `Real Time Closure = False` and the contract remains open, regardless of the fulfillment of its maturity and balance criteria, waiting to be manually closed by changing its status to `Closed`. Default value: `True`. **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

Field	Mandatory	Data Type	Details
			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	No	Boolean	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, immediately after the available amount becomes zero and there are no further amounts to be recovered. For more details about the real-time closure, see Close Contracts RealTime (CB) Job. If `Real Time Closure = True`, then `Buffer Close Days = 0` and `Automatic Closure = True`.

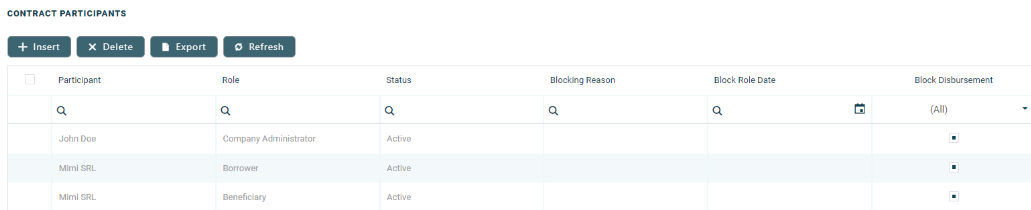
Field	Mandatory	Data Type	Details
Buffer Close Days	No	Whole Number	This field is automatically completed with the value defined at the banking product level, but you can modify it. Enter the number of days used as buffer before automatically closing the contract. If `Buffer Close Days > 0`, then `Real 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. For more detail about closing the contracts automatically when `Real Time Closure = False`, see Close Contracts (CB) Job.

Field	Mandatory	Data Type	Details
Balance Off Date	No	Invariant Date	You can't modify this field. This date is calculated by Core Banking as follows: • For non-revolving banking products, `Balance Off Date` = the date when the contract's balance reaches zero and there are no further amounts to be recovered; • For revolving banking products, if the `Balance Off Date` calculated as above < `Maturity Date`, then `Balance Off Date = Maturity Date`.
Closure Date	No	Invariant Date	You can't modify this field. The date when the contract is closed. For automatic closure, the date is calculated by Core Banking as `Balance Off Date + Buffer Close Days`.

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

Contract Participants Section

In the **Contract Participants** section, you can insert, delete or export customers who participate in this contract or who can be blocked from participation. After the first save operation, the customer is added as beneficiary of the contract. 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.



To add a participant, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Participant	No	Lookup	Select from the list the name of the customer who can access the contract.
Role	No	Option Set	Select from the list the role of the previously selected customer in the contract beneficiary's company.
Blocking Reason	No	Option Set	Select the reason for blocking this participant from accessing the contract, if needed.

IMPORTANT!
For legal entity customers, the participant with the `Company Administrator` role must be added, otherwise, the loan contracts cannot be approved. This is not the case for current account contracts. For individual customers, the borrower and beneficiary of the contract are not mandatory to be added in order for the contract to be approved and disbursed.

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

Contract Tranches Section

NOTE This section is not available for **Deposit** contracts.

In the **Contract Tranches** section, you can view the disbursement tranches configured at the product level. 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. In this section, you can also insert, delete or export disbursement tranches for the contract.

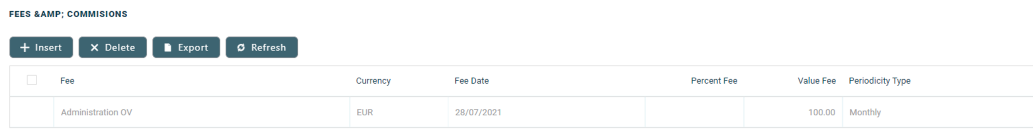
To add a tranche in a contract based on a product that has a disbursement matrix set up, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Tranche Date	Yes	Date	Select the date of the disbursement tranche.
Tranche Percent	Yes	Numeric	Enter the percentage from the contract value that has to be disbursed with this tranche.
Amount	Yes	Numeric	Enter the amount from the contract value that has to be disbursed with this tranche.
Interest Percent	No	Numeric	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	No	Numeric	Enter the commission percent applicable for the unused loan amount from this tranche.
Submitted Document	No	File	Upload the documents related to the tranche disbursement.

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

Fees & Commissions Section

In the **Fees & Commissions** section, 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, all fees that are defined as values are displayed. The fees that are 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 insert, delete or export fees and commissions for the contract.



To add a fee for this contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Contract	Yes	Lookup	This field displays the contract number generated automatically by Core Banking when you saved the contract. You cannot modify this information.
Currency	Yes	Lookup	The currency of the contract. You cannot modify this information.
Fee	Yes	Lookup	Select a commission from the list of commissions defined for the banking product used when creating the contract.
Periodicity Type	No	Option Set	This fields is automatically completed with the periodicity type of the selected fee.
Fee Date	Yes	Date	Specify which value of the commission is to be used by selecting the date of the commission.
Percent Fee	No	Numeric	This field displays the commission percentage applicable for the selected date if the commission was defined as a percentage.
Value Fee	No	Numeric	This field displays the commission value applicable for the selected date if the commission was defined as a value.

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

Automatic Insertion and Calculation of Commissions

Commissions are automatically inserted/ updated 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.

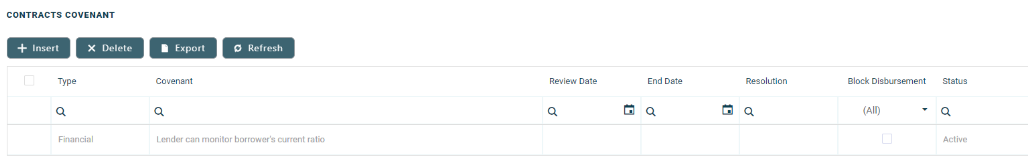
- **Updating a contract in `Contract Version Draft` status**: Core Banking only updates the percentage commissions that are not already notified.

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.

Contract Covenant Section

In the **Contract Covenant** section, you can view 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 also insert, delete or export covenants for the contract.



To add a covenant to a contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Covenant	No	Option Set	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

Field	Required	Data Type	Details
			notification or full knowledge of the process. This covenant is of type negative.
Value	No	Numeric	Enter the value of the covenant.
Covenant Type	No	Option Set	This field is automatically completed with the type of the selected covenant.
Review Frequency (Months)	No	Whole Number	Enter the number of months after which the covenant has to be reviewed.
Review Date	No	Date	Enter the date when the covenant has to be reviewed.

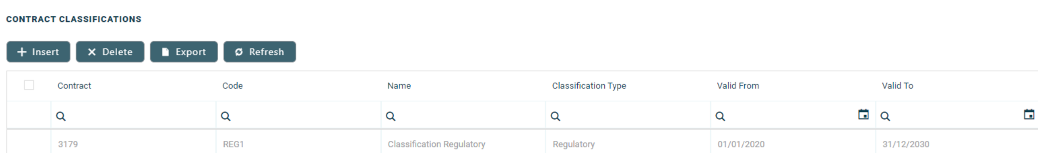
Click the **Save and Reload** button at the top right corner of the page.

Activate the covenant record by changing its status to **Active**.

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

Contract Classifications Section

In the **Contract Classifications** section, you can insert, delete or export classifications for the contract. You can choose to add the classifications defined at banking product level.



To add a classification to a contract, click **Insert** and fill in the following fields:

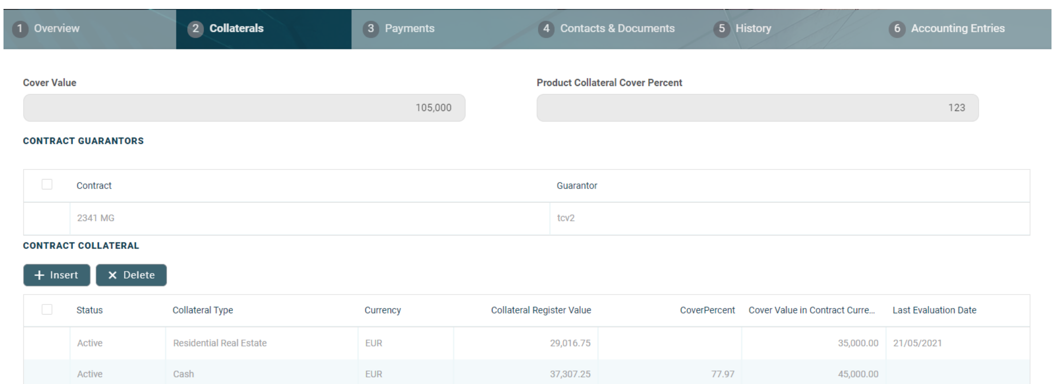
Field	Required	Data Type	Details
Classification	No	Lookup	Select the desired classification for the contract from the list of classifications associated with the banking product.
Contract	Yes	Lookup	This field is automatically completed with the number of the current contract.
Description	No	Text Area	Enter a description for the contract classification.

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

Collaterals Tab

The **Collaterals** tab appears on a contract only if the chosen product is **secured**. The tab is used to set collaterals as guarantees. Collaterals must be previously defined (see Collateral Management) and registered (see Registering Collaterals). Only after a collateral is registered, it can be used for covering a secured loan contract.

NOTE
A registered collateral can be attached to multiple contracts if the contracts total amount does not exceed the collateral available amount.



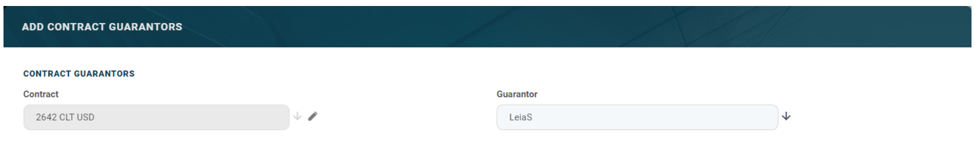
The fields **Cover Value** and **Product Collateral Cover Percent** are automatically populated.

IMPORTANT!
The `Product Collateral Coverage Percent` field is read-only, and set with the value defined at banking product level.

To add a collateral to a secured contract, go to the **Collaterals** tab at contract level. In this tab, you can insert one or more collaterals in order to have the contract covered, as well as contract guarantors.

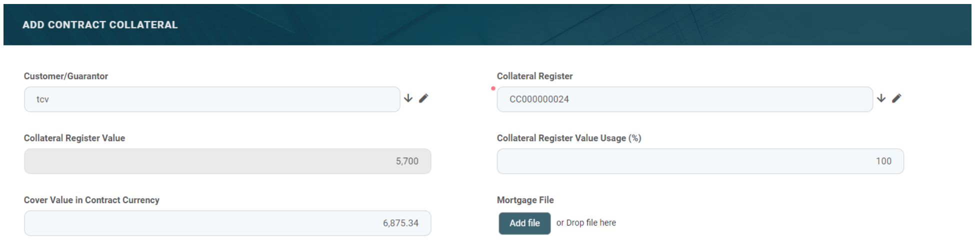
Start by adding guarantors to your contract, if needed. The **Contract Guarantors** section can be used to add a collateral that is not owned by the customer. If a guarantor is added on the loan contract, you can use the collaterals owned by the guarantors in order to cover the contract risk.

1. Click the **Insert** button within the **Contract Guarantor** section.
2. In the newly displayed **Add Contract Guarantors** page, fill in the following fields:



Field	Mandatory	Data Type	Details
Contract	Yes	Lookup	Read-only field, automatically completed with the current contract.
Guarantor	Yes	Lookup	Select the customer who acts as a guarantor for the contract.

3. Click the **Save and Close** button at the top right corner of the page.
4. Click the **Insert** button from the **Contract Collateral** section.
5. In the newly displayed **Add Contract Collateral** page, fill in the following fields:



Field	Mandatory	Data Type	Details
Customer / Guarantor	Yes	Lookup	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.

Field	Mandatory	Data Type	Details
Collateral Register	Yes	Lookup	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** A registered collateral can be attached to multiple contracts if the contracts total amount does not exceed the collateral available amount. **IMPORTAN-**

Field	Mandatory	Data Type	Details
			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`. If the status is changed from Active to Released – the status for Bank account changes to Opened (Only for fixed deposit collateral).

Field	Mandatory	Data Type	Details
Collateral Register Value Usage (%)	Yes	Numeric	The percentage to be used from the registered collateral's total value. The percentage is set at banking product level, in the `Collateral Cover Percent` field. You can modify this percentage. As a result, the `Collateral Register Value` and the `Cover Value in Contract Currency` values are automatically recalculated by Core Banking.

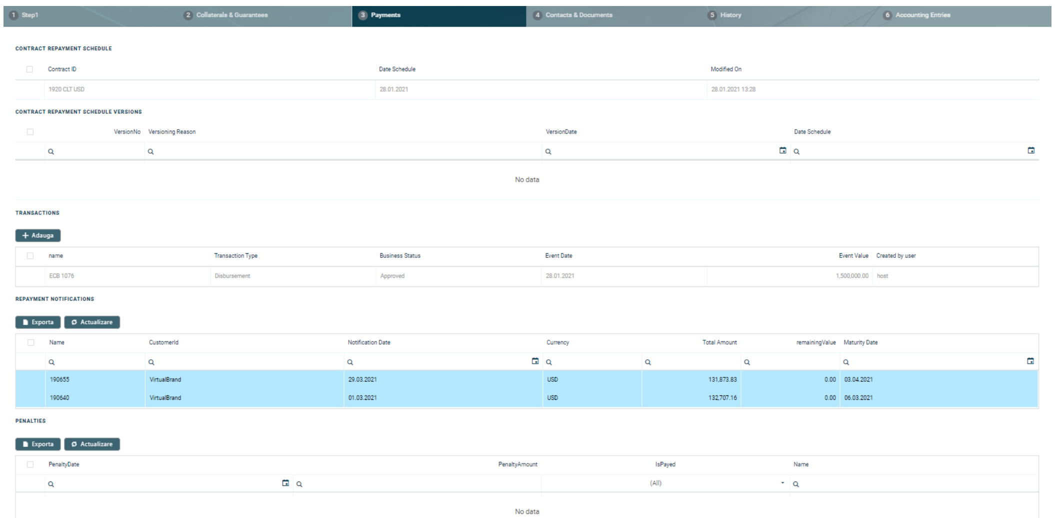
Field	Mandatory	Data Type	Details
Cover Register Value	Yes	Numeric	The value that is taken from collateral, expressed in the collateral's currency. If the collateral is in a different currency than the contract currency, the exchange rate is automatically applied in order to have the available amount correctly calculated. Further, the `Daily recalculation of Collaterals` job runs daily in order to recalculate the available amount for each collateral.
Cover Value in Contract Currency	Yes	Numeric	The cover value converted in the contract's currency at the exchange rate defined in Core Banking.
Mortgage File	No	File	Attach a file relevant for the mortgage.

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

> **NOTE**
> You can send a contract for approval only if Cover Value = Financed Amount * Product Collateral Cover Percent / 100.

Payments Tab

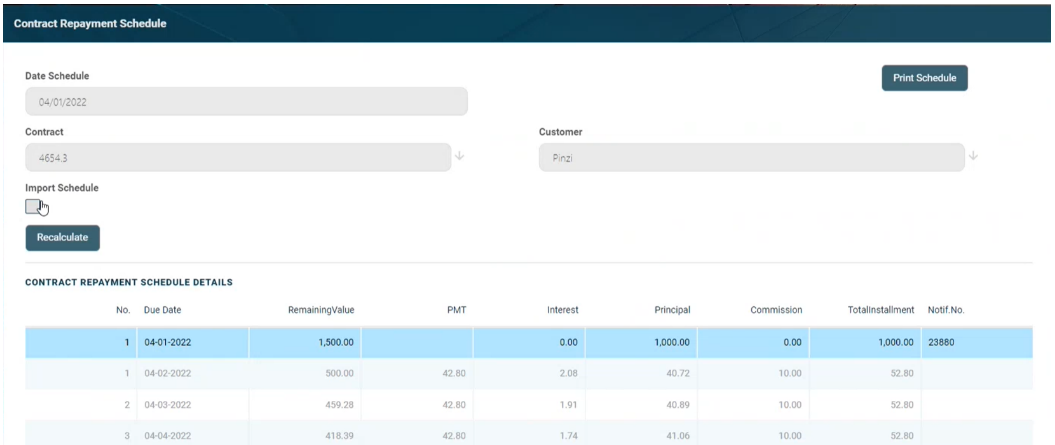
The **Payments** tab contains all the transactions, payments, penalties, bank account operations, repayment schedules, schedule versions, repayment notifications for a contract. Depending on the contact's chosen banking product, only some of these may be displayed. The tab has no information to display in **Draft** status. Approve the contract to perform any contract event. Meaningful payment information is displayed in this tab only after performing transactions on the contract.



Contract Repayment Schedule Section

The **Contract Repayment Schedule** section displays the repayment schedule automatically generated by Core Banking for the approved contract, after performing a disbursement.

The section displays only basic information about the generated schedule, such as contract number, schedule date and last modification date and time. For detailed information and the actual list of the installments, double-click on the schedule. The **Contract Repayment Schedule** page is displayed with the selected schedule and a list with every schedule detail:



You cannot 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.

The following information is displayed about each schedule detail (installment):

Column	Details
No.	The number of the repayment schedule detail.
Due Date	The date when the installment must be paid.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Commission For Undrawn Amount/ or other commissions, depending on the selected contract type	The value of the commission with the specified type calculated for this installment.

Column	Details
Total Repayment	The number of the repayment notification generated for this schedule detail.
Notification No.	The number of the notification where the installment is included, if it 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.

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.

Importing a Repayment Plan Using the Contract Repayment Schedule Page

For cases when the contract needs a schedule that cannot be automatically generated by Core Banking, you can import your custom repayment plan. You can either perform the import at a contract event level (when adding a **Disbursement**, **Early Repayment**, **Payment Holiday**, or **Reschedule Overdues** transaction), or within the **Contract Repayment Schedule** page, for contracts in **Version Draft** status.

To import a custom repayment plan within the **Contract Repayment Schedule** page, perform the following steps:

1. 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*".
2. Click the **Export Schedule Template** button to download a `.xslx` file with the schedule template for this specific contract.
3. Open the downloaded schedule template `.xlsx` file exported from Core Banking and make it editable.
4. Format the **Due Date** column as `Text`

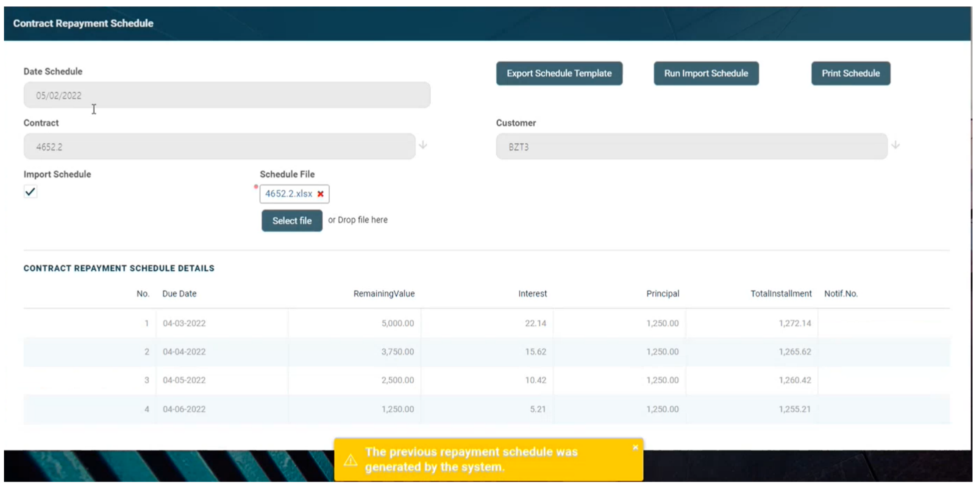
5. Fill in the lines of the template file with the data needed in the contract's custom repayment plan.
   Fill in each installment's type according to your needs.

   > **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.
6. 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.
7. Back in Core Banking's **Contract Repayment Schedule** page, click **Select File**.
8. 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.

9. Click the **Save and Reload** button at the top right corner of the page. Core Banking performs the validations, making sure that the uploaded file meets all the criteria for a correct, functional schedule.
10. 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.

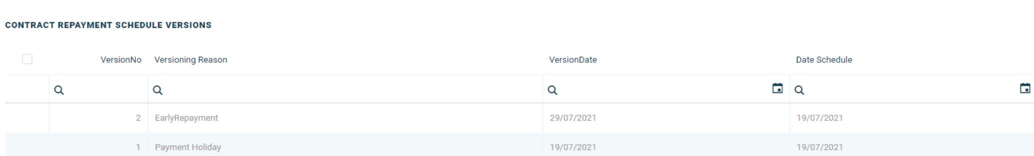


If you click the **Run Import Schedule** button one more time, the values within the **Contract Repayment Schedule Details** section are deleted and reinserted.

Read more about importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Contract Repayment Schedule Versions Section

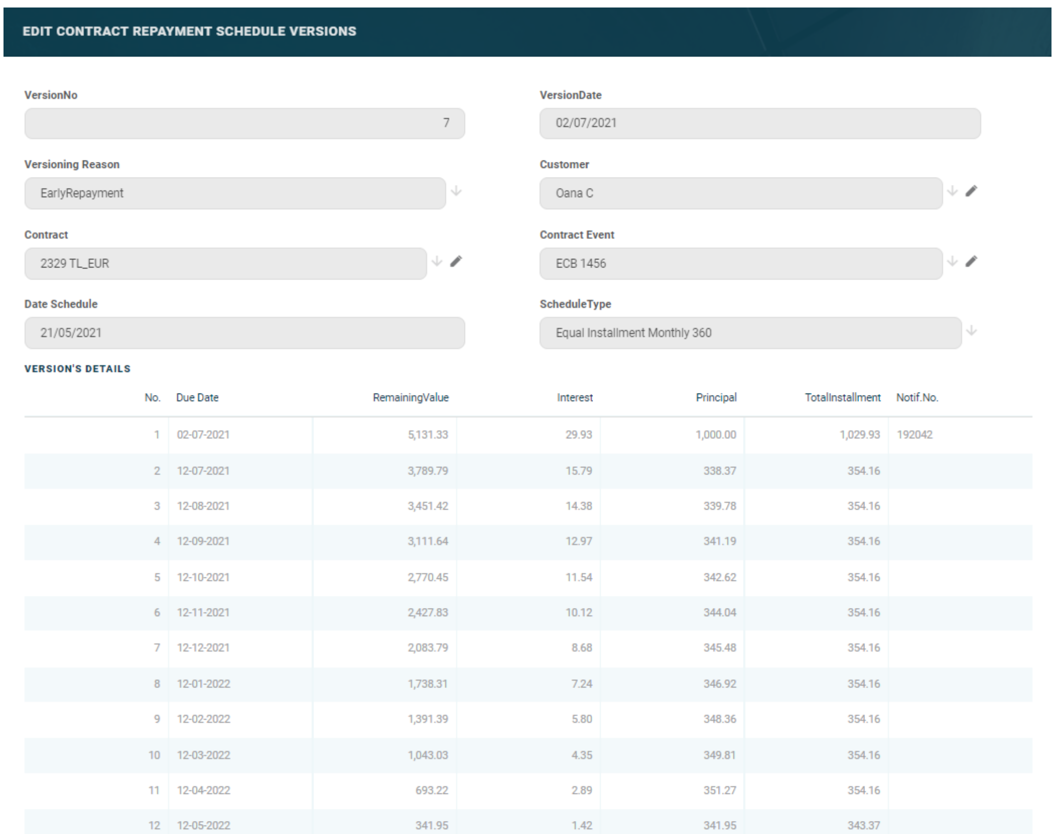
The **Contract Repayment Schedule Versions** section displays the versions of the repayment schedules automatically generated by Core Banking each time when a contract event that changed either the maturity date or the amount of a repayment was performed on the contract. The section is displayed only if such versions exist for the contract.



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.

> **NOTE**
> The most recent repayment schedule version is considered active by Core Banking, while the previous schedule records are kept for historical purposes.

For 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: 7

VersionDate: 02/07/2021

Versioning Reason: EarlyRepayment

Customer: Oana C

Contract: 2329 TL_EUR

Contract Event: ECB 1456

Date Schedule: 21/05/2021

ScheduleType: Equal Installment Monthly 360

VERSION'S DETAILS

No.	Due Date	RemainingValue	Interest	Principal	TotalInstallment	Notif.No.
1	02-07-2021	5,131.33	29.93	1,000.00	1,029.93	192042
2	12-07-2021	3,789.79	15.79	338.37	354.16	
3	12-08-2021	3,451.42	14.38	339.78	354.16	
4	12-09-2021	3,111.64	12.97	341.19	354.16	
5	12-10-2021	2,770.45	11.54	342.62	354.16	
6	12-11-2021	2,427.83	10.12	344.04	354.16	
7	12-12-2021	2,083.79	8.68	345.48	354.16	
8	12-01-2022	1,738.31	7.24	346.92	354.16	
9	12-02-2022	1,391.39	5.80	348.36	354.16	
10	12-03-2022	1,043.03	4.35	349.81	354.16	
11	12-04-2022	693.22	2.89	351.27	354.16	
12	12-05-2022	341.95	1.42	341.95	343.37	

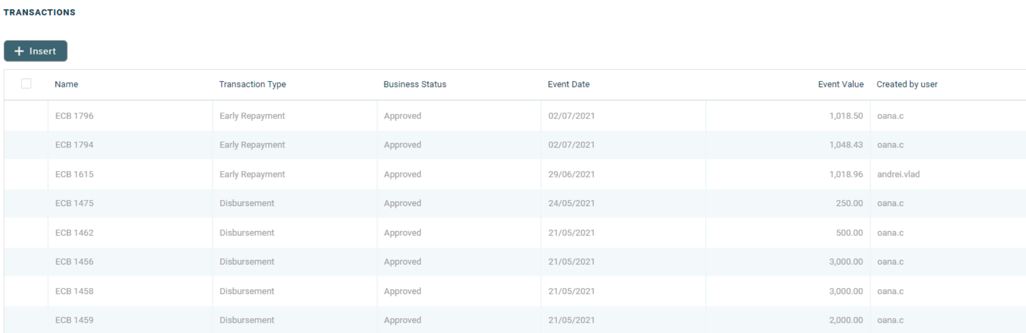
You cannot edit the information displayed on this page.

The following information is displayed about each schedule version:

Column	Details
Version No.	The number of the repayment schedule version.
Version Date	The date when the version was created.
Versioning Reason	The type of contract event that triggered the generation of the version.
Customer	The customer for whom the contract was created.
Contract	The number of the contract for which the repayment schedule version was generated.
Contract Event	The id of the contract event that triggered the generation of the version.
Date Schedule	The date of the previous repayment schedule.
Schedule Type	The type of schedule selected in the contract and used to generate the repayment schedule.
Version's Details List	
No.	The number of the repayment schedule version detail.
Due Date	The date when the installment must be paid.
Remaining Value	The value remaining to be repaid from the contract value at the moment of this installment.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Total Installment	The total value of the installment to be paid.
Notification No.	The number of the notification where the installment is included, if it was already generated.

Transactions Section

The **Transactions** section displays 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. Read detailed information about contract events and how to add an event on the dedicated Contract Events page.

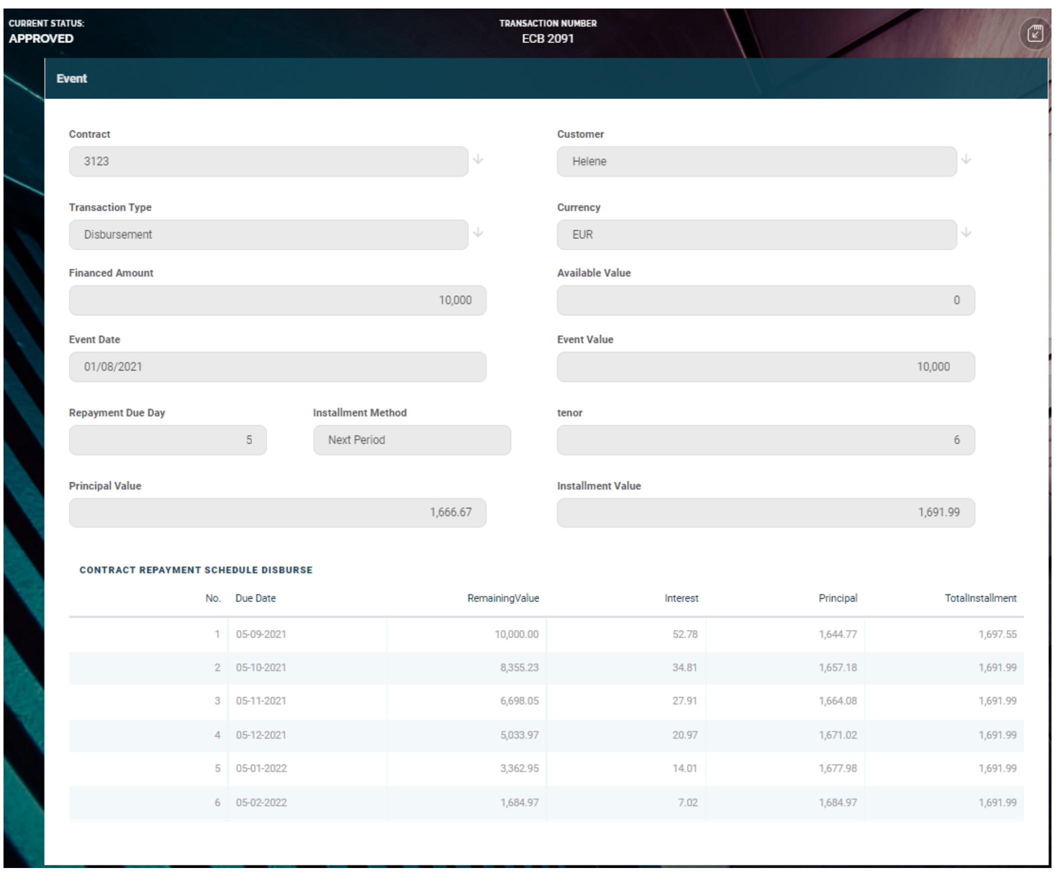


TRANSACTIONS

+ Insert

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB 1796	Early Repayment	Approved	02/07/2021	1,018.50	oana.c
ECB 1794	Early Repayment	Approved	02/07/2021	1,048.43	oana.c
ECB 1615	Early Repayment	Approved	29/06/2021	1,018.96	andrei.vlad
ECB 1475	Disbursement	Approved	24/05/2021	250.00	oana.c
ECB 1462	Disbursement	Approved	21/05/2021	500.00	oana.c
ECB 1456	Disbursement	Approved	21/05/2021	3,000.00	oana.c
ECB 1458	Disbursement	Approved	21/05/2021	3,000.00	oana.c
ECB 1459	Disbursement	Approved	21/05/2021	2,000.00	oana.c

The section displays only basic information about the transaction, such as event number, status, date, transaction type, value and the user who created it. For detailed information about the transaction and the repayment schedule generated for the approved event, double-click on the schedule. The **Event** page is displayed with the selected event and the generated repayment schedule for the event:



CURRENT STATUS:
APPROVED

TRANSACTION NUMBER
ECB 2091

Event

Contract: 3123
Customer: Helene
Transaction Type: Disbursement
Currency: EUR
Financed Amount: 10,000
Available Value: 0
Event Date: 01/08/2021
Event Value: 10,000
Repayment Due Day: 5
Installment Method: Next Period
tenor: 6
Principal Value: 1,666.67
Installment Value: 1,691.99

CONTRACT REPAYMENT SCHEDULE DISBURSE

No.	Due Date	RemainingValue	Interest	Principal	TotalInstallment
1	05-09-2021	10,000.00	52.78	1,644.77	1,697.55
2	05-10-2021	8,355.23	34.81	1,657.18	1,691.99
3	05-11-2021	6,698.05	27.91	1,664.08	1,691.99
4	05-12-2021	5,033.97	20.97	1,671.02	1,691.99
5	05-01-2022	3,362.95	14.01	1,677.98	1,691.99
6	05-02-2022	1,684.97	7.02	1,684.97	1,691.99

You cannot edit the information displayed on this page.

The following information is displayed about each event, with some variations depending on the event type:

Column	Details
Contract	The number of the contract for which the transaction is performed.
Customer	The customer for whom the contract was created.
Transaction Type	The type of the transaction that is performed on the contract.
Currency	The currency of the contract.
Financed Amount	The amount financed by the contract.
Available Value	The amount still available in the contract.
Event Date	The date when the event was created.
Event Value	The amount of the transaction.
Repayment Due Day	The day of the month when the repayment is due.
Installment Method	The method of calculating the installment value.
Tenor	The tenor of the contract in months.
Principal Value	The amount of the principal of the contract.
Installment Value	The amount of the installment.
Contract Repayment Schedule section	
No.	The number of the repayment schedule version detail.
Due Date	The date when the installment must be paid.
Remaining Value	The value remaining to be repaid from the contract value at the moment of this installment.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Total Installment	The total value of the installment to be paid.

NOTE

In order to add transactions to an approved contract, the transactions must be previously defined and associated with the banking product in the **Banking Product** page > **Associated Transactions** tab.

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.

Repayment Notifications Section

The **Repayment Notifications** section displays 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

Export Refresh

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

5 10 20 1 2 3 4

Within the list, the repayment notifications are color coded as follows:

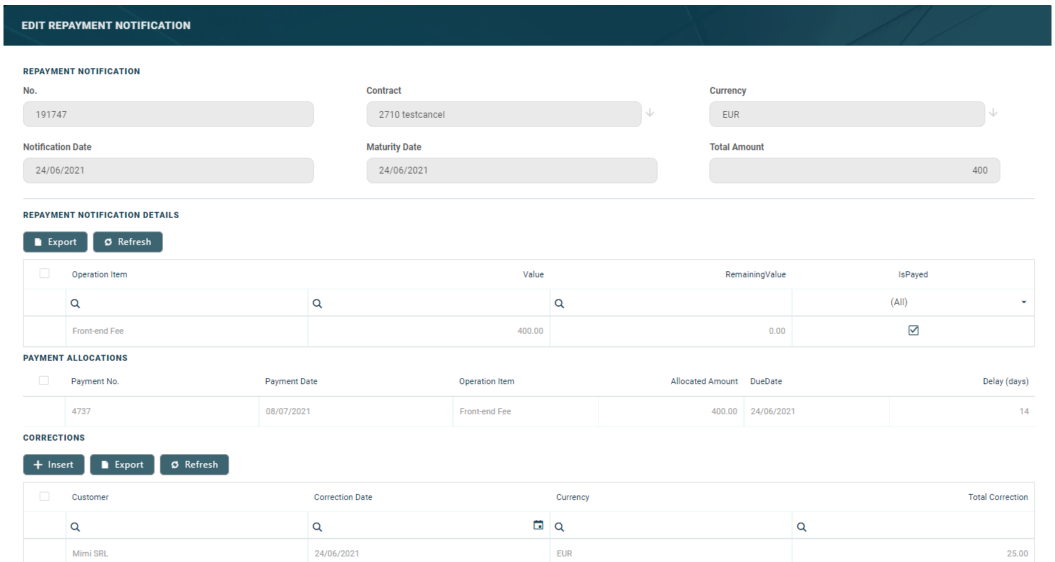
- Repayment notifications highlighted in blue are already paid, allocated or closed to payment.
- Repayment notifications not highlighted (displayed on a white background) remain to be paid.

The following information is displayed about each notification:

Field	Description
No.	The number of the repayment notification record.
Customer	The customer for whom the contract was created.
Date	The date when the notification was generated.
Currency	The currency of the contract.
Amount	The amount of the installment for which the notification was generated.
Remaining	The amount from the installment that remains to be paid.

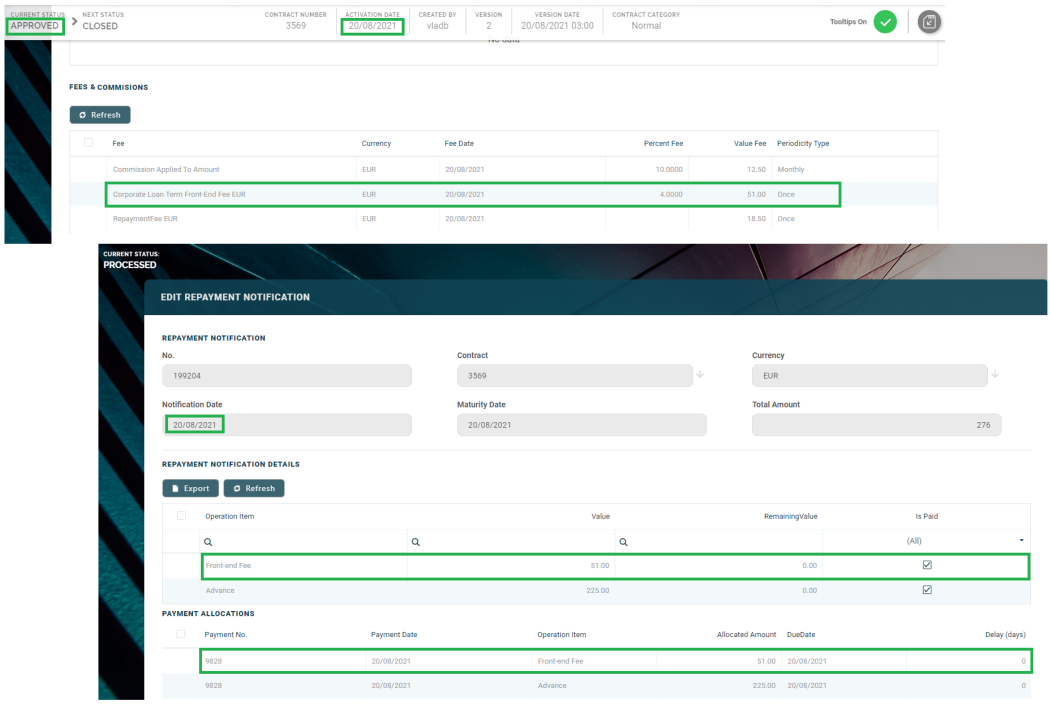
Field	Description
Maturity Date	The maturity date of the notification. This is calculated adding the value of the `Grace period for repayment` field at the banking product level to the notification date.

For detailed information about a repayment notification, double-click on the desired record. The **Repayment Notification** page is displayed with the selected notification:



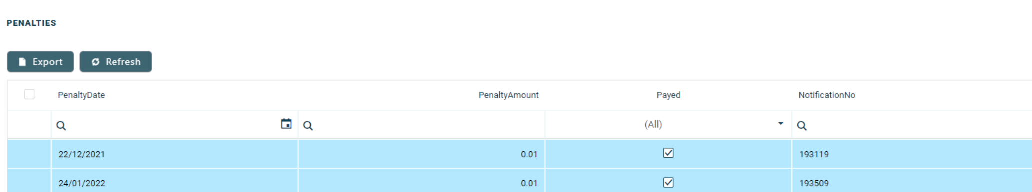
You cannot edit the information displayed on this page. Read detailed information about repayment notifications on the dedicated Repayment Notifications page.

IMPORTANT!
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.

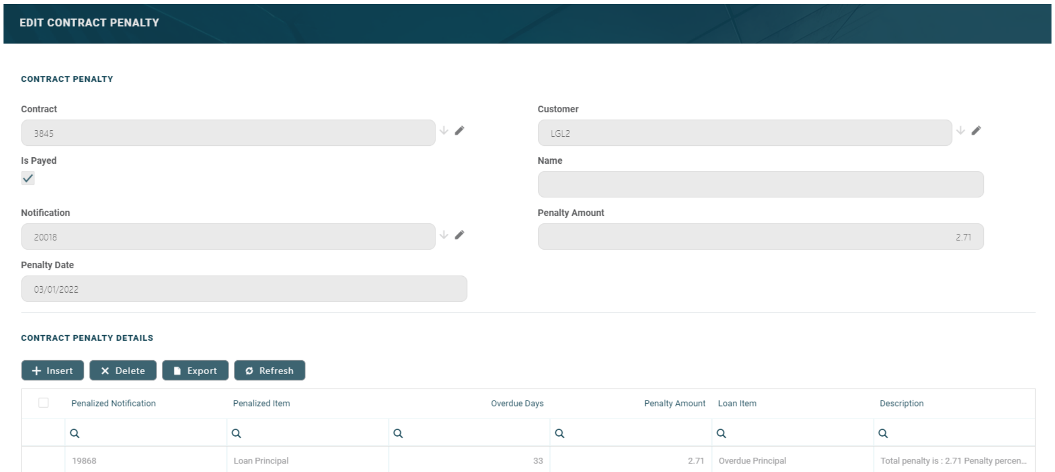


Penalties Section

The **Penalties** section displays the penalty interest applicable to the contract, 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, configured in the Overview tab.



The section displays only basic information about the penalties, such as penalty date, amount, notification number and whether it was paid or not. For detailed information, double-click on the desired penalty record. The **Contract Penalty** page is displayed with the selected penalty's details:

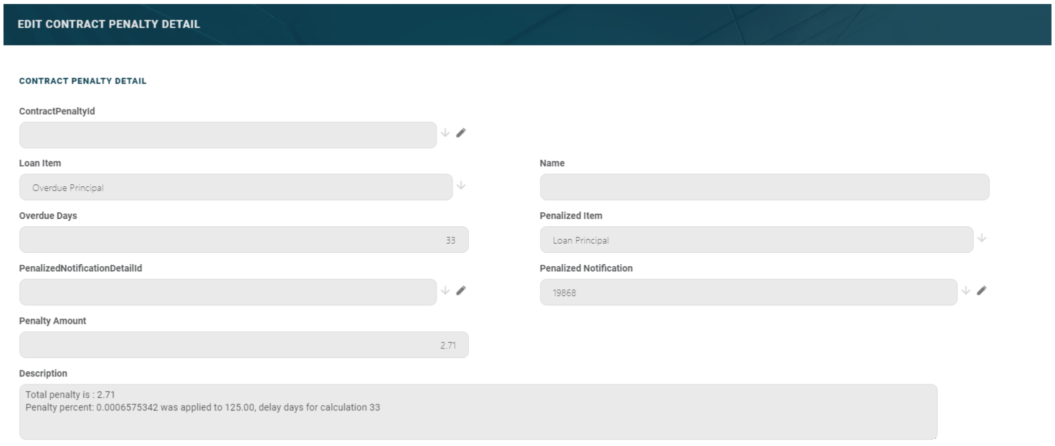


You cannot edit the information displayed on this page.

The following information is displayed about each penalty record:

Column	Details
Contract	The number of the contract for which the transaction is performed.
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.
Contract Penalty Details section	
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.

You can view the details of the penalty on a separate page, named **Edit Contract Penalty Detail**, if you double-click the detail record:

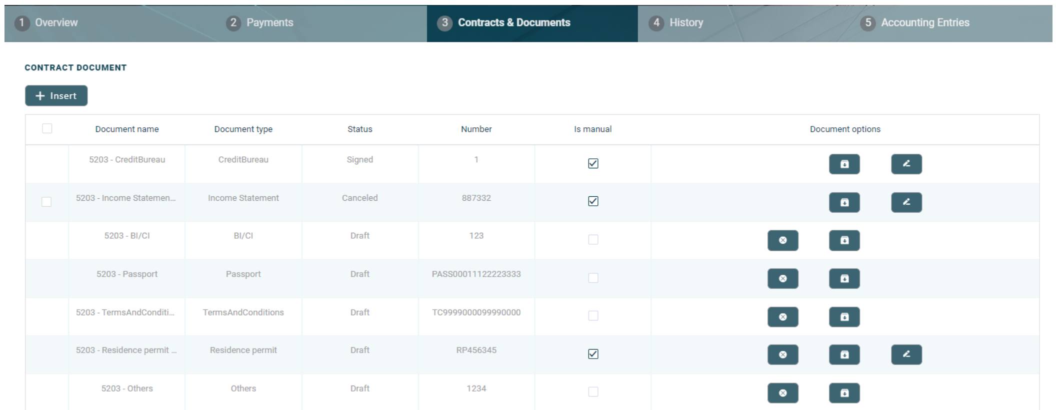


You cannot edit the information displayed on this page.

Depending on the banking product used for the selected contract, other sections may be displayed. Please check the pages corresponding to the desired contract.

Contracts & Documents Tab

This section holds documents related to the contract. It is meant to be the electronic folder of the contract. The section 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.

On the **Contracts & Documents** page, you can:

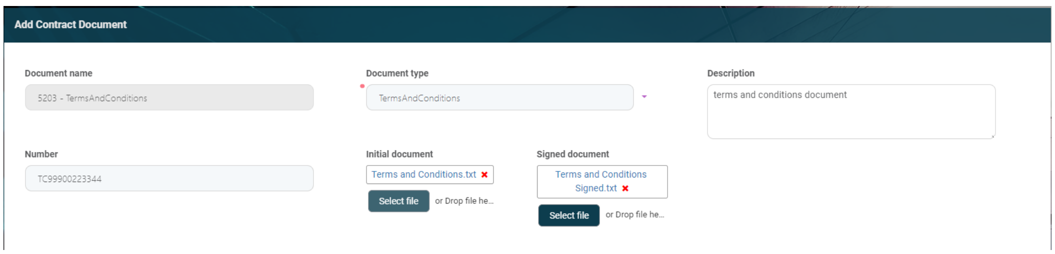
- Add a new contract document record by clicking the **Insert** button on the top left, under the **Contract Document** section.
- Edit a contract document from the list by double-clicking it. You can only edit the fields of a contract document in **Draft** status. For contract document records in **Signed** or **Canceled** status, you can view the record's details.
- Delete a contract document by clicking the **Delete record** button next to the record. Only contract documents in **Draft** status can be deleted. Once **Signed**, a contract document should be canceled if the document is not to be used within the contract.
- Download the initial document by clicking the **Initial document** button next to the record. Open the downloaded file to view its content.
- Download the signed document by clicking the **Signed document** button next to the record, if a signed document was uploaded for that contract document 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.

Adding Contract Documents

To insert a document to the contract, click the **Insert** button in the **Contract Document** section. The **Add Contract Document** page is displayed.



IMPORTANT!
You can't insert documents for contracts in **Contract Closed** or **Contract Version Closed** statuses.

Fill in the following fields:

Field	Mandatory	Data Type	Details
Document name	No	Text	Automatically completed with the name of the document. Core Banking names the document record using the contract name + '-' + the selected document type + '-' + a unique document increment. For example, 5203 - Income Statement - 60.
Document type	Yes	Option set	Select the type of the document.
Description	No	Text Area	Enter the description of the document.
Number	No	Text	Enter the number of the document, if the document has an external identifier number.

Field	Mandatory	Data Type	Details
Initial document	No	File	Select 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	No	File	Select 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.

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

HINT

You can also add, update, and approve contract document records through API integration, using the `FTOS_CB_AddUpdateContractDocument` and `FTOS_CB_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!

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. 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.

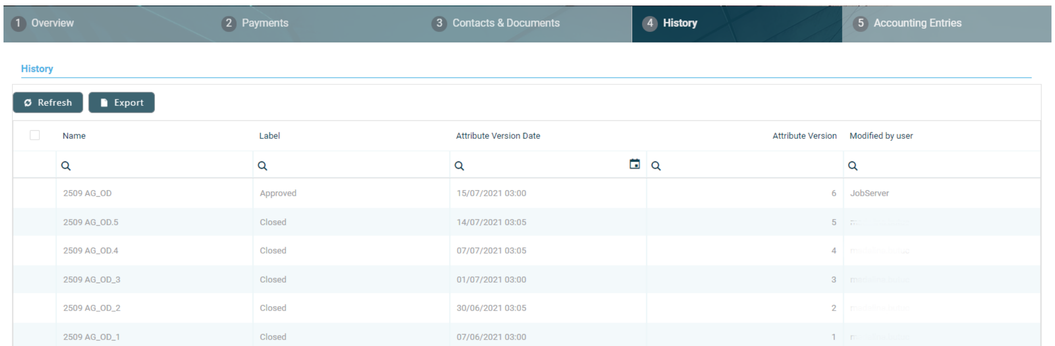
Contract Document Validations

Core Banking performs the following validations for contract document records:

- The uploaded files' specifications follow High Productivity Fintech Infrastructure'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.

History Tab

The **History** tab displays the versions of the contract, along with workflow status and the user who modified the record. A contract can have only one **Draft** version, one **Current** version, but it may have multiple **History** versions, which are displayed in this section. In this tab, you can track the contract's life cycle and review older versions that are no longer active (for details, see Contract Versioning).



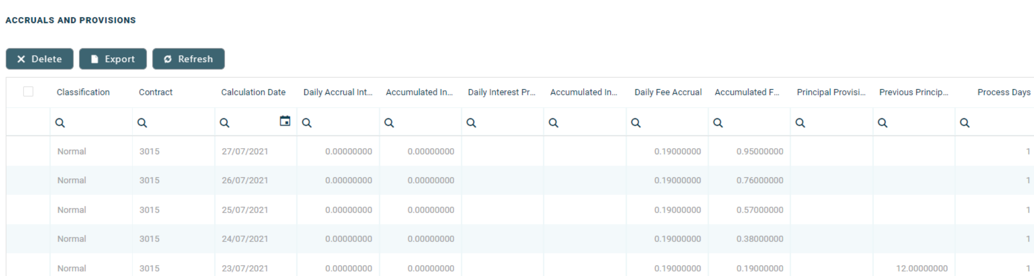
Name	Label	Attribute Version Date	Attribute Version	Modified by user
2509 AG_OD	Approved	15/07/2021 03:00	6	JobServer
2509 AG_OD.5	Closed	14/07/2021 03:05	5	[illegible]
2509 AG_OD.4	Closed	07/07/2021 03:05	4	[illegible]
2509 AG_OD_3	Closed	01/07/2021 03:00	3	[illegible]
2509 AG_OD_2	Closed	30/06/2021 03:05	2	[illegible]
2509 AG_OD_1	Closed	07/06/2021 03:00	1	[illegible]

Accounting Entries Tab

The **Accounting Entries** tab holds all the accounting entries, accounting totals, and accruals and provisions recorded for a contract. These records are automatically generated by the system, after performing transactions for an approved contract.

Accruals and Provisions Section

The records containing daily accrual and provisions are displayed in the **Accruals and Provisions** section. Generated automatically by the system respecting the definition of the contract, product dimensions, system parameters and jobs.



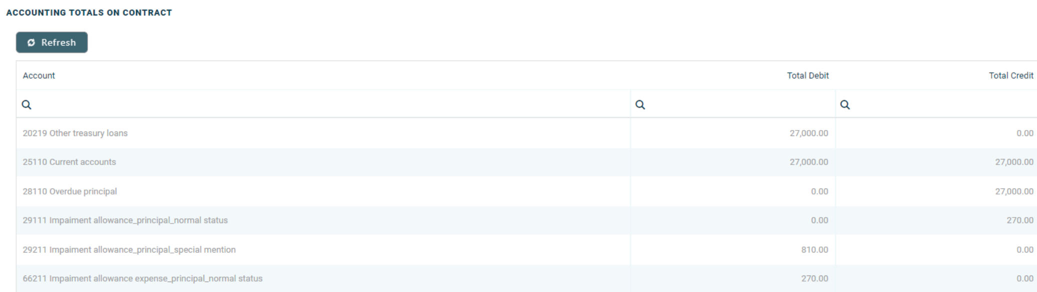
Classification	Contract	Calculation Date	Daily Accrual Int...	Accumulated In...	Daily Interest Pr...	Accumulated In...	Daily Fee Accrual	Accumulated F...	Principal Provisi...	Previous Princip...	Process Days
Normal	3015	27/07/2021	0.00000000	0.00000000			0.19000000	0.95000000			1
Normal	3015	26/07/2021	0.00000000	0.00000000			0.19000000	0.76000000			1
Normal	3015	25/07/2021	0.00000000	0.00000000			0.19000000	0.57000000			1
Normal	3015	24/07/2021	0.00000000	0.00000000			0.19000000	0.38000000			1
Normal	3015	23/07/2021	0.00000000	0.00000000			0.19000000	0.19000000		12.00000000	1

The following information is displayed for each accrual and provision entry:

Column	Details
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.

Accounting Totals on Contract Section

The **Accounting Totals on Contract** section provides an overview of the total amounts specified in accounting records. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.


ACCOUNTING TOTALS ON CONTRACT

Refresh

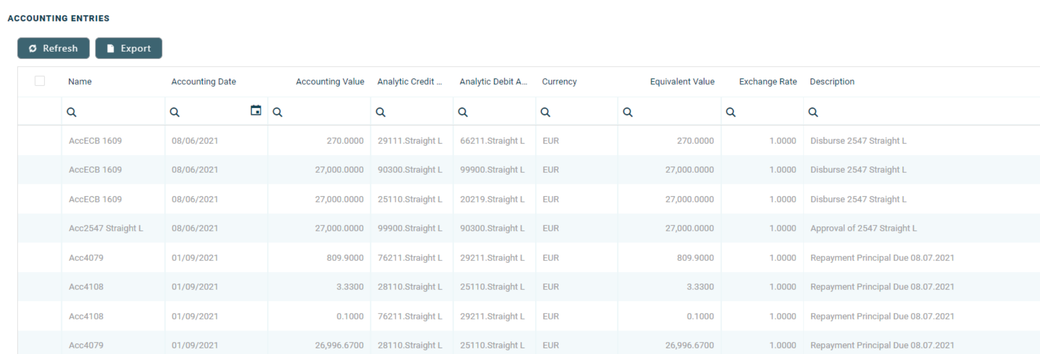
Account	Total Debit	Total Credit
20219 Other treasury loans	27,000.00	0.00
25110 Current accounts	27,000.00	27,000.00
28110 Overdue principal	0.00	27,000.00
29111 Impaiment allowance_principal_normal status	0.00	270.00
29211 Impaiment allowance_principal_special mention	810.00	0.00
66211 Impaiment allowance expense_principal_normal status	270.00	0.00

The following information is displayed for each total amount:

Column	Details
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.

Accounting Entries Section

The **Accounting Entries** section reflects the accounting for the transactions related to the loan contract. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.


ACCOUNTING ENTRIES

Refresh Export

Name	Accounting Date	Accounting Value	Analytic Credit ...	Analytic Debit A...	Currency	Equivalent Value	Exchange Rate	Description
AccECB 1609	08/06/2021	270.0000	29111.Straight L	66211.Straight L	EUR	270.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	90300.Straight L	99900.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	25110.Straight L	20219.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
Acc2547 Straight L	08/06/2021	27,000.0000	99900.Straight L	90300.Straight L	EUR	27,000.0000	1.0000	Approval of 2547 Straight L
Acc4079	01/09/2021	809.9000	76211.Straight L	29211.Straight L	EUR	809.9000	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	3.3300	28110.Straight L	25110.Straight L	EUR	3.3300	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	0.1000	76211.Straight L	29211.Straight L	EUR	0.1000	1.0000	Repayment Principal Due 08.07.2021
Acc4079	01/09/2021	26,996.6700	28110.Straight L	25110.Straight L	EUR	26,996.6700	1.0000	Repayment Principal Due 08.07.2021

The following information is displayed for each accounting entry:

Column	Details
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.

Column	Details
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 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. To create a contract based on a Current Account banking product, follow the steps described in the **Creating Contracts page**, making sure that you select `Bank Account` in the Product Type field and a `Current Account` bank account type banking product in the Banking Product field. After saving the contract, go through each tab and fill in the general and the specific information for this type of contract:

Overview Tab

The **Overview** tab requires the basic elements for the creation of a contract such as customer, banking product, account, interest rate, participants, tranches, fees, and contract covenants.

The following information in the **Overview** tab is common to all contract types:

Field	Mandatory	Data Type	Details
Contract ID	No	Text	A contract ID can be filled in, other than the contract number generated automatically by Core Banking when you saved the contract.

Field	Mandatory	Data Type	Details
Customer	Yes	Lookup	The customer who owns the contract, selected previously, in the initial contract creation page. You cannot modify this information.
Banking Product	Yes	Lookup	The banking product selected previously, in the initial contract creation page. You cannot modify this information.
Currency	Yes	Lookup	The currency of the banking product selected previously, in the initial contract creation page. For the moment the product is defined currency wise, thus each product has an underlying currency. You cannot modify this information.
Activation Date	Yes	Invariant Date	This is the date when the contract is activated. It is automatically completed with the system date.
Main Bank Account	Yes	Lookup	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).

Field	Mandatory	Data Type	Details
Managing Branch	Yes	Option Set	This represents the branch of the organization where the contract was created. It is automatically completed at contract saving time, but you can select another branch from the list.

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

The following information specific to **Current Accounts** contracts should be completed in the **Overview** tab:

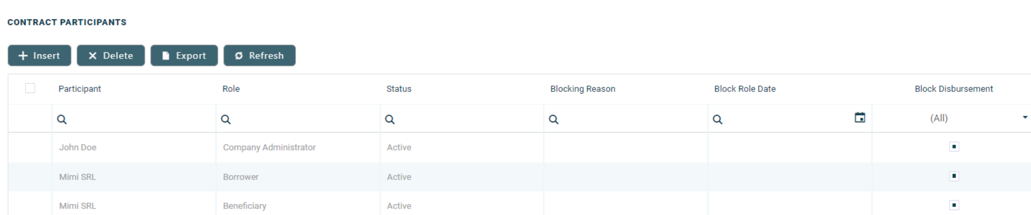
Field	Mandatory	Data Type	Details
Product Interest Rate section			
Product Interest	No	Lookup	Select from the list the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Depending on the selected interest, a series of other fields are displayed to be filled in: Margin, Reference Rate Date and Reference Rate.
Margin	No	Numeric	This field is automatically completed with the margin of the previously selected product interest. If the product interest was not selected, you can manually enter the margin.
Reference Rate Date	Yes	Date	The date for the reference rate that is part of the previously selected product interest. This field is automatically completed with the `Activation Date` value. You can edit this field.

Field	Mandatory	Data Type	Details
Reference Rate	Yes	Numeric	This field is automatically completed with the reference rate valid at the previously selected date.
Total Interest Rate	Yes	Numeric	This field 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.
Date for Review Interest Rate	No	Date	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.
Repayment Overview section			

Field	Mandatory	Data Type	Details
Contract Period	No	Whole Number	This field is automatically completed with the contract period as it was defined at banking product level. You can edit this value.
Contract Period Type	No	Option Set	This field is automatically completed with the contract period type as it was defined at banking product level. You cannot edit this value.
Maturity Date	No	Date	This field is automatically completed with the contract maturity date, calculated based on the values of the Contract Period, Contract Period Type and Activation Date. You cannot edit this value.
Repayment at end of month	No	Boolean	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.

Contract Participants Section

In the **Contract Participants** section, you can insert, delete or export customers who participate in this contract or who can be blocked from participation. After the first save operation, the customer is added as beneficiary of the contract. 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.



To add a participant, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Participant	No	Lookup	Select from the list the name of the customer who can access the contract.
Role	No	Option Set	Select from the list the role of the previously selected customer in the contract beneficiary's company.
Blocking Reason	No	Option Set	Select the reason for blocking this participant from accessing the contract, if needed.

IMPORTANT!
For legal entity customers, the participant with the `Company Administrator` role must be added, otherwise, the loan contracts cannot be approved. This is not the case for current account contracts. For individual customers, the borrower and beneficiary of the contract are not mandatory to be added in order for the contract to be approved and disbursed.

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

Contract Tranches Section

NOTE This section is not available for **Deposit** contracts.

In the **Contract Tranches** section, you can view the disbursement tranches configured at the product level. 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. In this section, you can also insert, delete or export disbursement tranches for the contract.

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:

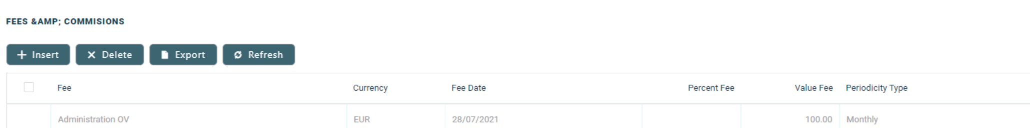
Field	Required	Data Type	Details
Tranche Date	Yes	Date	Select the date of the disbursement tranche.

Field	Required	Data Type	Details
Tranche Percent	Yes	Numeric	Enter the percentage from the contract value that has to be disbursed with this tranche.
Amount	Yes	Numeric	Enter the amount from the contract value that has to be disbursed with this tranche.
Interest Percent	No	Numeric	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	No	Numeric	Enter the commission percent applicable for the unused loan amount from this tranche.
Submitted Document	No	File	Upload the documents related to the tranche disbursement.

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

Fees & Commissions Section

In the **Fees & Commissions** section, 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, all fees that are defined as values are displayed. The fees that are 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 insert, delete or export fees and commissions for the contract.



To add a fee for this contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Contract	Yes	Lookup	This field displays the contract number generated automatically by Core Banking when you saved the contract. You cannot modify this information.
Currency	Yes	Lookup	The currency of the contract. You cannot modify this information.
Fee	Yes	Lookup	Select a commission from the list of commissions defined for the banking product used when creating the contract.
Periodicity Type	No	Option Set	This fields is automatically completed with the periodicity type of the selected fee.
Fee Date	Yes	Date	Specify which value of the commission is to be used by selecting the date of the commission.
Percent Fee	No	Numeric	This field displays the commission percentage applicable for the selected date if the commission was defined as a percentage.
Value Fee	No	Numeric	This field displays the commission value applicable for the selected date if the commission was defined as a value.

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

Automatic Insertion and Calculation of Commissions

Commissions are automatically inserted/ updated 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.

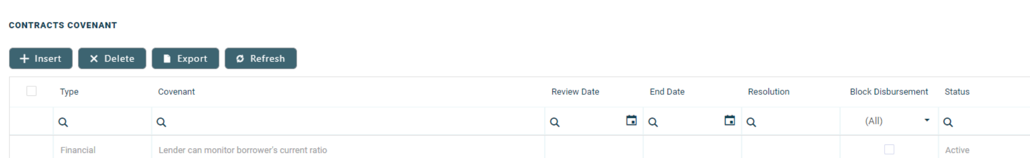
- **Updating a contract in `Contract Version Draft` status**: Core Banking only updates the percentage commissions that are not already notified.

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.

Contract Covenant Section

In the **Contract Covenant** section, you can view 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 also insert, delete or export covenants for the contract.



To add a covenant to a contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Covenant	No	Option Set	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

Field	Required	Data Type	Details
			notification or full knowledge of the process. This covenant is of type negative.
Value	No	Numeric	Enter the value of the covenant.
Covenant Type	No	Option Set	This field is automatically completed with the type of the selected covenant.
Review Frequency (Months)	No	Whole Number	Enter the number of months after which the covenant has to be reviewed.
Review Date	No	Date	Enter the date when the covenant has to be reviewed.

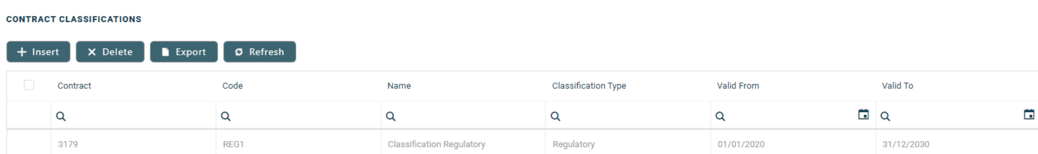
Click the **Save and Reload** button at the top right corner of the page.

Activate the covenant record by changing its status to **Active**.

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

Contract Classifications Section

In the **Contract Classifications** section, you can insert, delete or export classifications for the contract. You can choose to add the classifications defined at banking product level.



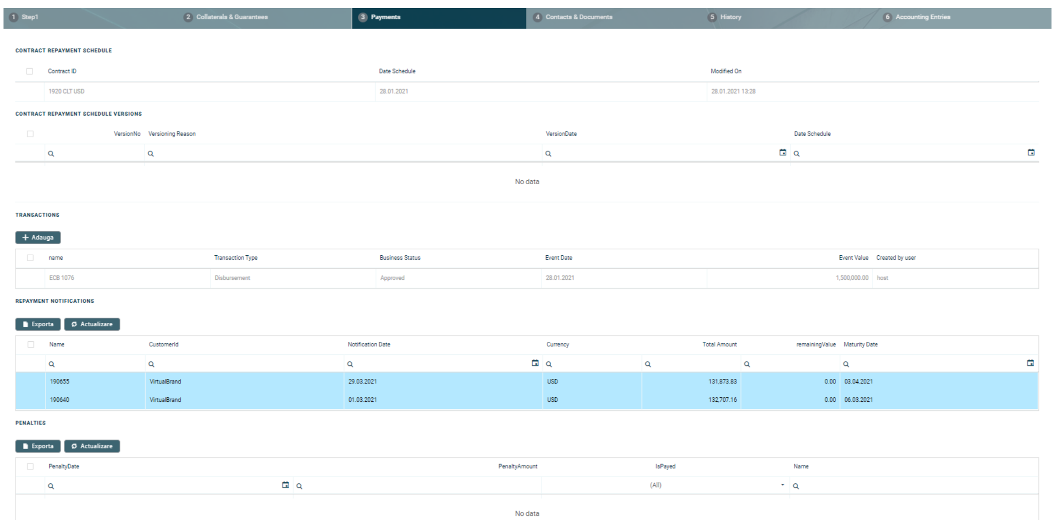
To add a classification to a contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Classification	No	Lookup	Select the desired classification for the contract from the list of classifications associated with the banking product.
Contract	Yes	Lookup	This field is automatically completed with the number of the current contract.
Description	No	Text Area	Enter a description for the contract classification.

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

Payments Tab

The **Payments** tab contains all the transactions, payments, penalties, bank account operations, repayment schedules, schedule versions, repayment notifications for a contract. Depending on the contact's chosen banking product, only some of these may be displayed. The tab has no information to display in **Draft** status. Approve the contract to perform any contract event. Meaningful payment information is displayed in this tab only after performing transactions on the contract.

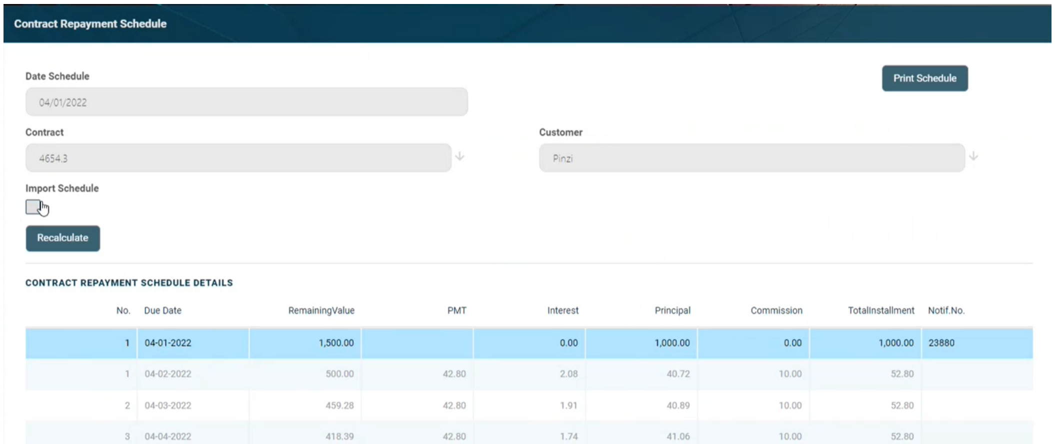


Contract Repayment Schedule Section

The **Contract Repayment Schedule** section displays the repayment schedule automatically generated by Core Banking for the approved contract, after performing a disbursement.

The section displays only basic information about the generated schedule, such as contract number, schedule date and last modification date and time.

For detailed information and the actual list of the installments, double-click on the schedule. The **Contract Repayment Schedule** page is displayed with the selected schedule and a list with every schedule detail:



You cannot 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.

The following information is displayed about each schedule detail (installment):

Column	Details
No.	The number of the repayment schedule detail.
Due Date	The date when the installment must be paid.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.

Column	Details
Commission For Undrawn Amount/ or other commissions, depending on the selected contract type	The value of the commission with the specified type calculated for this installment.
Total Repayment	The number of the repayment notification generated for this schedule detail.
Notification No.	The number of the notification where the installment is included, if it 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.

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.

Importing a Repayment Plan Using the Contract Repayment Schedule Page

For cases when the contract needs a schedule that cannot be automatically generated by Core Banking, you can import your custom repayment plan. You can either perform the import at a contract event level (when adding a **Disbursement**, **Early Repayment**, **Payment Holiday**, or **Reschedule Overdues** transaction), or within the **Contract Repayment Schedule** page, for contracts in **Version Draft** status.

To import a custom repayment plan within the **Contract Repayment Schedule** page, perform the following steps:

1. 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*".
2. Click the **Export Schedule Template** button to download a `.xslx` file with the schedule template for this specific contract.

3. Open the downloaded schedule template `.xlsx` file exported from Core Banking and make it editable.
4. Format the **Due Date** column as `Text`
5. 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 your needs.

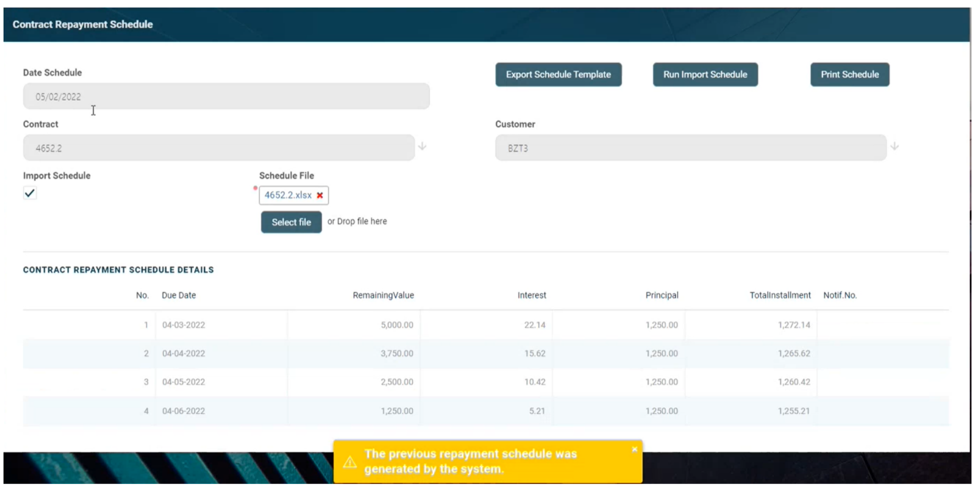
   NOTE

   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.
6. 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.

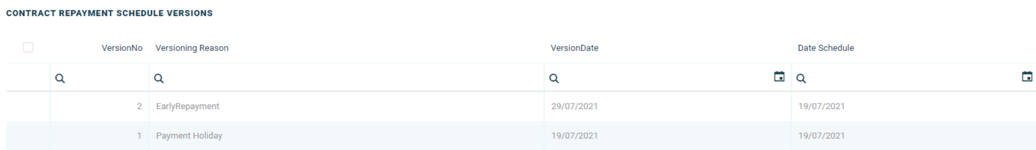
7. Back in Core Banking's **Contract Repayment Schedule** page, click **Select File**.
8. In the newly displayed Explorer window, browse for the `.xlsx` file that contains the custom schedule you've filled in with the contract's repayment plan, then click **Open**.
   The selected file's name is displayed under the **Schedule File** field.
9. Click the **Save and Reload** button at the top right corner of the page. Core Banking performs the validations, making sure that the uploaded file meets all the criteria for a correct, functional schedule.
10. 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.


   If you click the **Run Import Schedule** button one more time, the values within the **Contract Repayment Schedule Details** section are deleted and reinserted.

Read more about importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Contract Repayment Schedule Versions Section

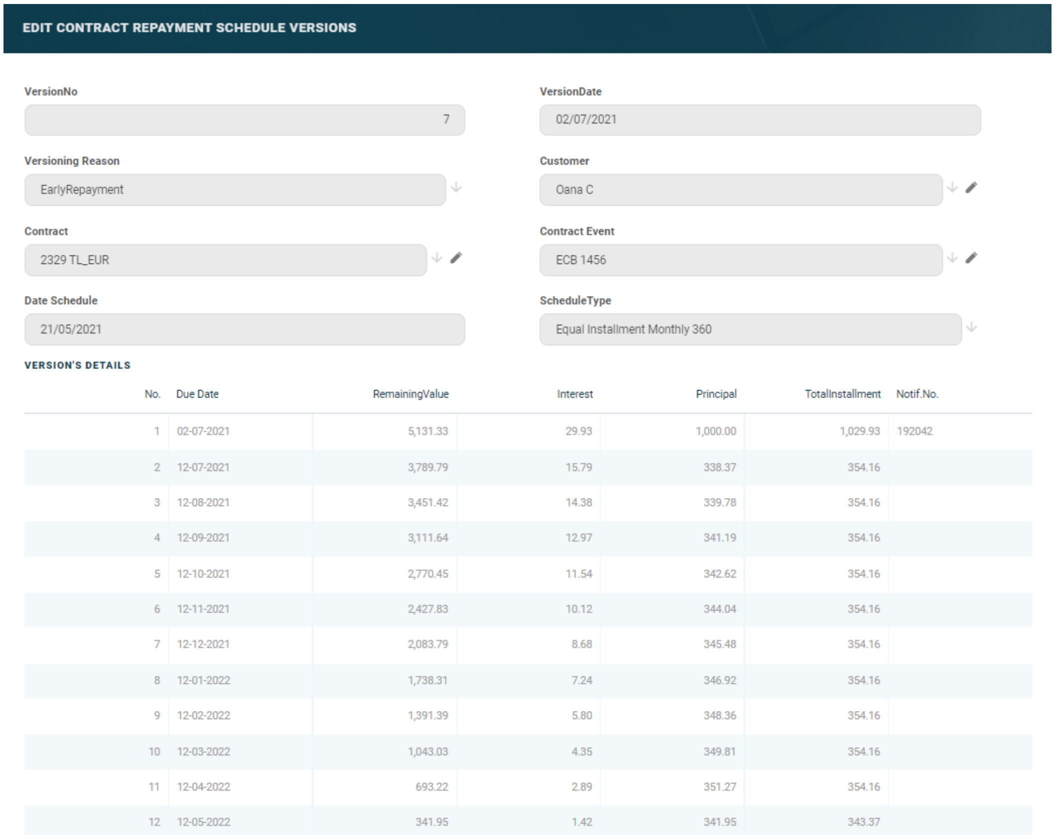
The **Contract Repayment Schedule Versions** section displays the versions of the repayment schedules automatically generated by Core Banking each time when a contract event that changed either the maturity date or the amount of a repayment was performed on the contract. The section is displayed only if such versions exist for the contract.



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.

> **NOTE**
> The most recent repayment schedule version is considered active by Core Banking, while the previous schedule records are kept for historical purposes.

For 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: 7

VersionDate: 02/07/2021

Versioning Reason: EarlyRepayment

Customer: Oana C

Contract: 2329 TL_EUR

Contract Event: ECB 1456

Date Schedule: 21/05/2021

ScheduleType: Equal Installment Monthly 360

VERSION'S DETAILS

No.	Due Date	RemainingValue	Interest	Principal	TotalInstallment	Notif.No.
1	02-07-2021	5,131.33	29.93	1,000.00	1,029.93	192042
2	12-07-2021	3,789.79	15.79	338.37	354.16	
3	12-08-2021	3,451.42	14.38	339.78	354.16	
4	12-09-2021	3,111.64	12.97	341.19	354.16	
5	12-10-2021	2,770.45	11.54	342.62	354.16	
6	12-11-2021	2,427.83	10.12	344.04	354.16	
7	12-12-2021	2,083.79	8.68	345.48	354.16	
8	12-01-2022	1,738.31	7.24	346.92	354.16	
9	12-02-2022	1,391.39	5.80	348.36	354.16	
10	12-03-2022	1,043.03	4.35	349.81	354.16	
11	12-04-2022	693.22	2.89	351.27	354.16	
12	12-05-2022	341.95	1.42	341.95	343.37	

You cannot edit the information displayed on this page.

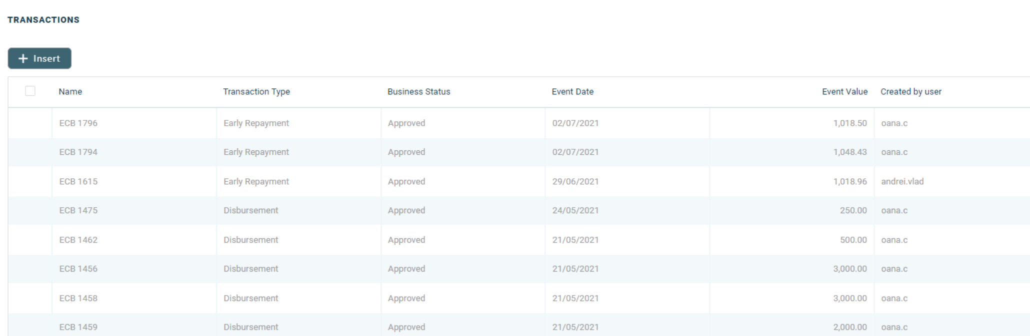
The following information is displayed about each schedule version:

Column	Details
Version No.	The number of the repayment schedule version.
Version Date	The date when the version was created.
Versioning Reason	The type of contract event that triggered the generation of the version.
Customer	The customer for whom the contract was created.
Contract	The number of the contract for which the repayment schedule version was generated.
Contract Event	The id of the contract event that triggered the generation of the version.
Date Schedule	The date of the previous repayment schedule.
Schedule Type	The type of schedule selected in the contract and used to generate the repayment schedule.
Version's Details List	

Column	Details
No.	The number of the repayment schedule version detail.
Due Date	The date when the installment must be paid.
Remaining Value	The value remaining to be repaid from the contract value at the moment of this installment.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Total Installment	The total value of the installment to be paid.
Notification No.	The number of the notification where the installment is included, if it was already generated.

Transactions Section

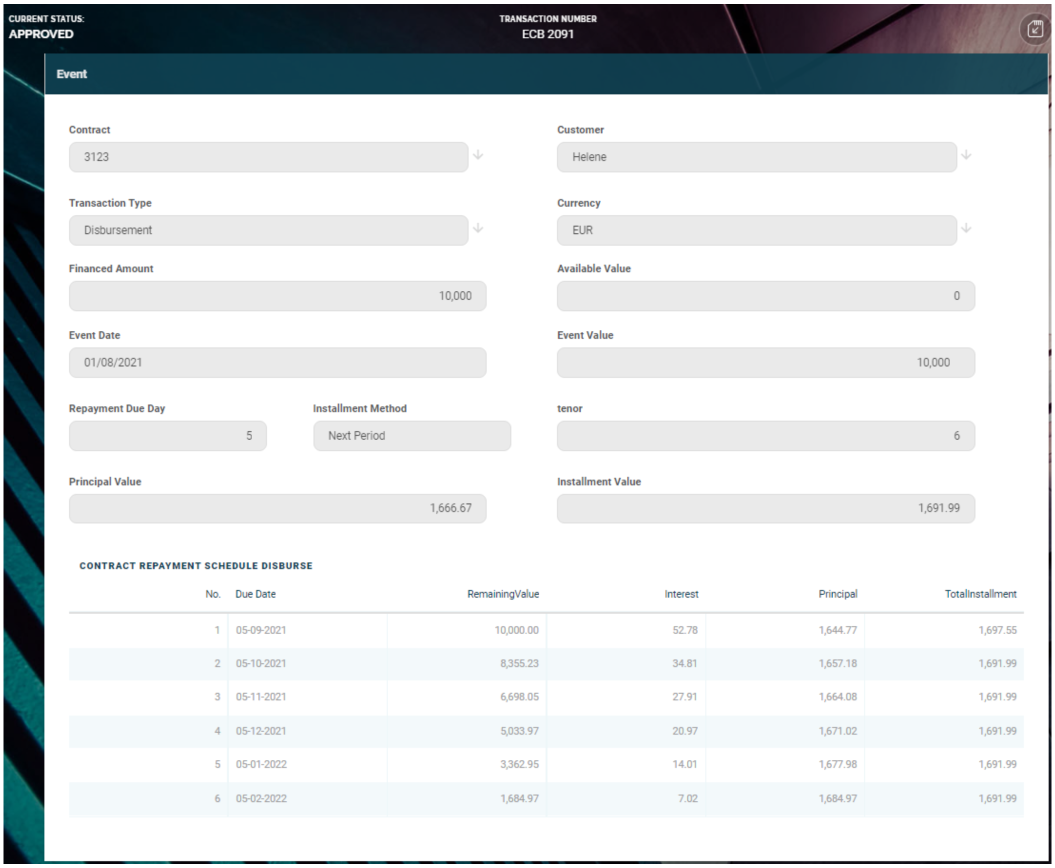
The **Transactions** section displays all the transactions performed at the contract level, in any status. This section only has information if the contract is in **Approved** status and transactions were already created. Read detailed information about contract events and how to add an event on the dedicated Contract Events page.


TRANSACTIONS

+ Insert

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB 1796	Early Repayment	Approved	02/07/2021	1,018.50	oana.c
ECB 1794	Early Repayment	Approved	02/07/2021	1,048.43	oana.c
ECB 1615	Early Repayment	Approved	29/06/2021	1,018.96	andrei.vlad
ECB 1475	Disbursement	Approved	24/05/2021	250.00	oana.c
ECB 1462	Disbursement	Approved	21/05/2021	500.00	oana.c
ECB 1456	Disbursement	Approved	21/05/2021	3,000.00	oana.c
ECB 1458	Disbursement	Approved	21/05/2021	3,000.00	oana.c
ECB 1459	Disbursement	Approved	21/05/2021	2,000.00	oana.c

The section displays only basic information about the transaction, such as event number, status, date, transaction type, value and the user who created it. For detailed information about the transaction and the repayment schedule generated for the approved event, double-click on the schedule. The **Event** page is displayed with the selected event and the generated repayment schedule for the event:



You cannot edit the information displayed on this page.

The following information is displayed about each event, with some variations depending on the event type:

Column	Details
Contract	The number of the contract for which the transaction is performed.
Customer	The customer for whom the contract was created.
Transaction Type	The type of the transaction that is performed on the contract.
Currency	The currency of the contract.
Financed Amount	The amount financed by the contract.
Available Value	The amount still available in the contract.
Event Date	The date when the event was created.
Event Value	The amount of the transaction.

Column	Details
Repayment Due Day	The day of the month when the repayment is due.
Installment Method	The method of calculating the installment value.
Tenor	The tenor of the contract in months.
Principal Value	The amount of the principal of the contract.
Installment Value	The amount of the installment.
Contract Repayment Schedule section	
No.	The number of the repayment schedule version detail.
Due Date	The date when the installment must be paid.
Remaining Value	The value remaining to be repaid from the contract value at the moment of this installment.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Total Installment	The total value of the installment to be paid.

NOTE

In order to add transactions to an approved contract, the transactions must be previously defined and associated with the banking product in the **Banking Product** page > **Associated Transactions** tab.

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.

Repayment Notifications Section

The **Repayment Notifications** section displays 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.

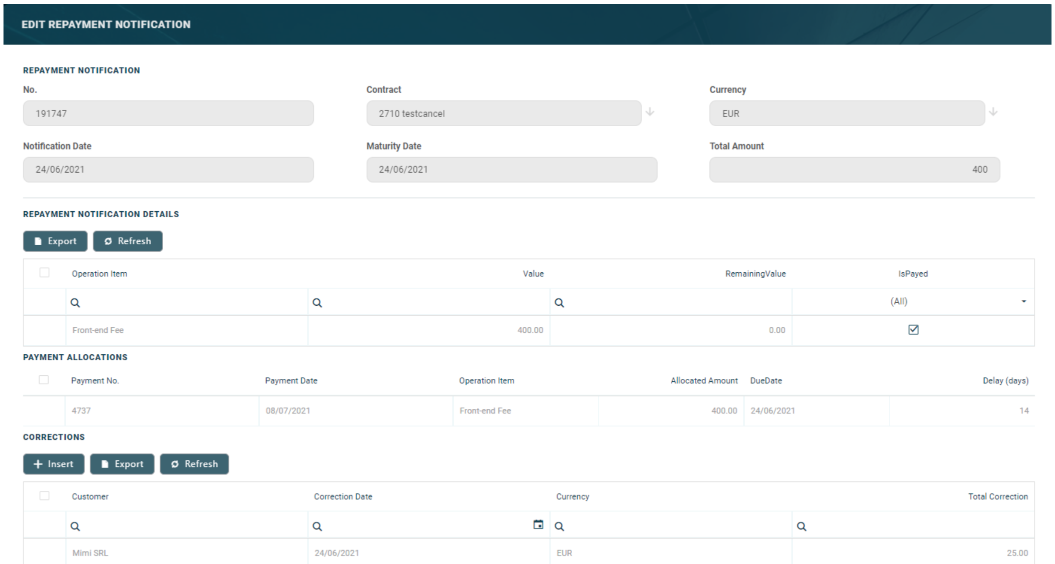
Within the list, the repayment notifications are color coded as follows:

- Repayment notifications highlighted in blue are already paid, allocated or closed to payment.
- Repayment notifications not highlighted (displayed on a white background) remain to be paid.

The following information is displayed about each notification:

Field	Description
No.	The number of the repayment notification record.
Customer	The customer for whom the contract was created.
Date	The date when the notification was generated.
Currency	The currency of the contract.
Amount	The amount of the installment for which the notification was generated.
Remaining	The amount from the installment that remains to be paid.
Maturity Date	The maturity date of the notification. This is calculated adding the value of the `Grace period for repayment` field at the banking product level to the notification date.

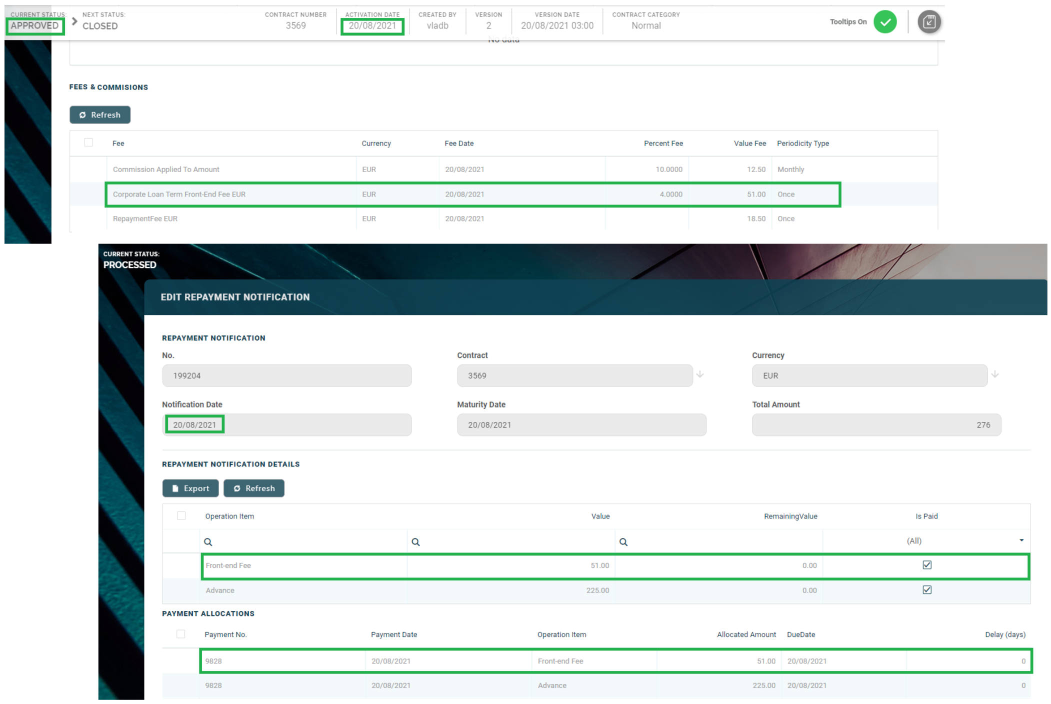
For detailed information about a repayment notification, double-click on the desired record. The **Repayment Notification** page is displayed with the selected notification:



You cannot edit the information displayed on this page. Read detailed information about repayment notifications on the dedicated Repayment Notifications page.

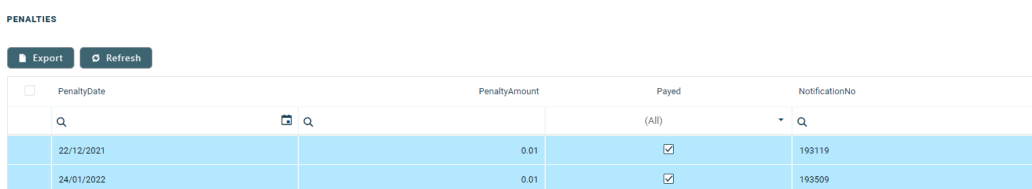
IMPORTANT!

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.

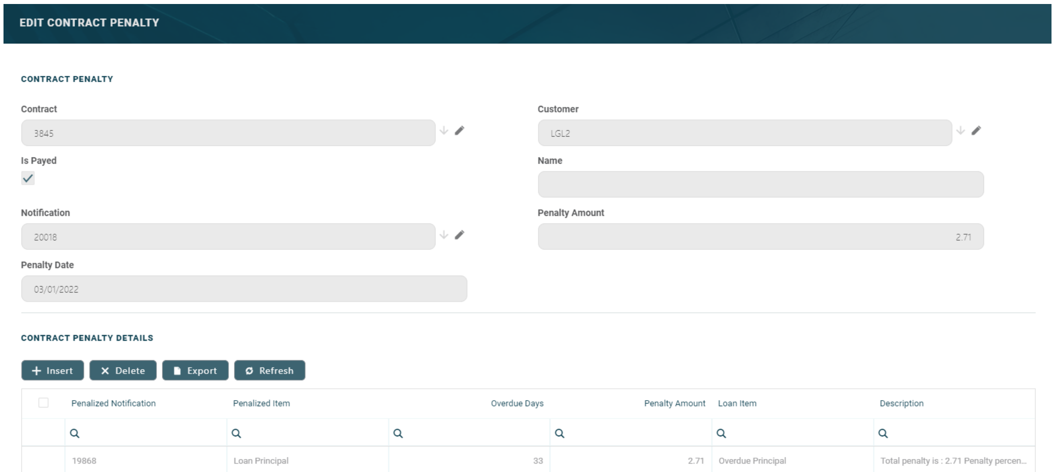


Penalties Section

The **Penalties** section displays the penalty interest applicable to the contract, 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, configured in the Overview tab.



The section displays only basic information about the penalties, such as penalty date, amount, notification number and whether it was paid or not. For detailed information, double-click on the desired penalty record. The **Contract Penalty** page is displayed with the selected penalty's details:

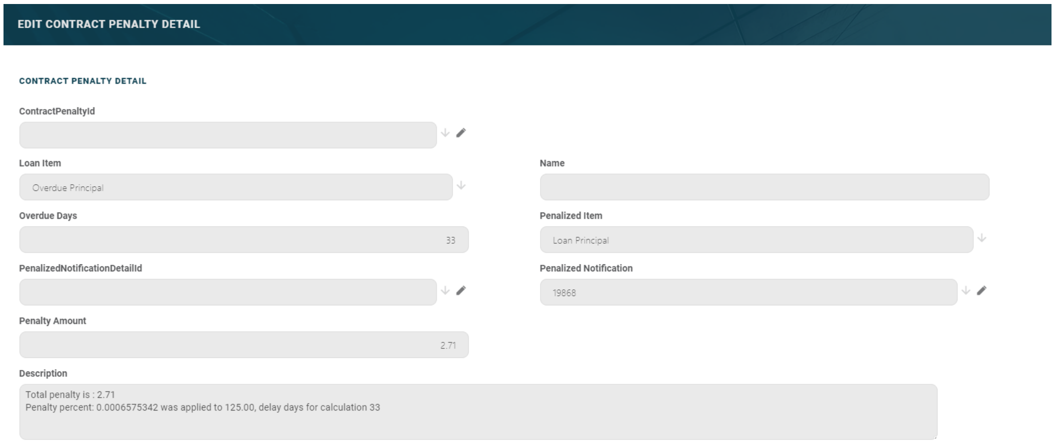


You cannot edit the information displayed on this page.

The following information is displayed about each penalty record:

Column	Details
Contract	The number of the contract for which the transaction is performed.
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.
Contract Penalty Details section	
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.

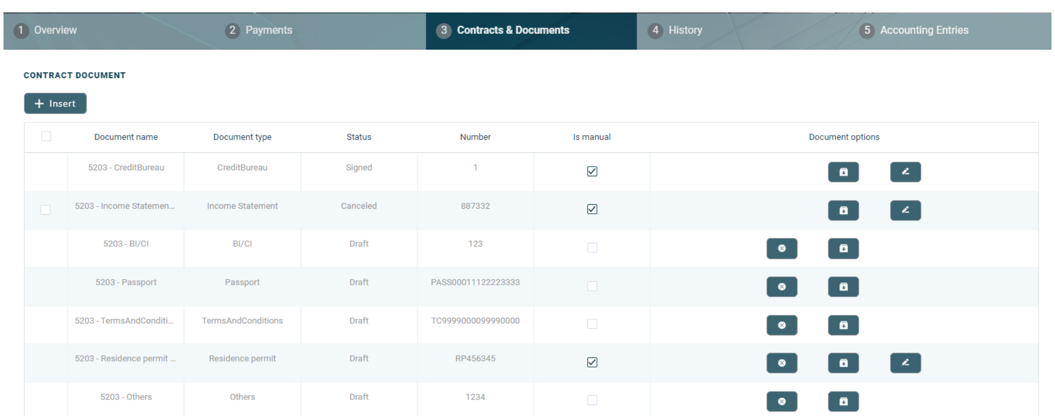
You can view the details of the penalty on a separate page, named **Edit Contract Penalty Detail**, if you double-click the detail record:



You cannot edit the information displayed on this page.

Contracts & Documents Tab

This section holds documents related to the contract. It is meant to be the electronic folder of the contract. The section 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.

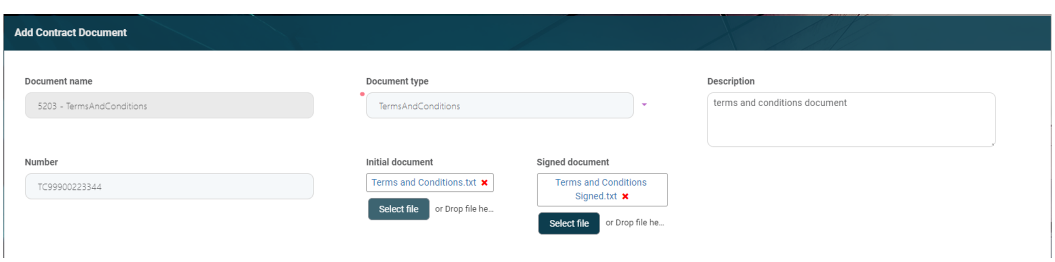
On the **Contracts & Documents** page, you can:

- Add a new contract document record by clicking the **Insert** button on the top left, under the **Contract Document** section.
- Edit a contract document from the list by double-clicking it. You can only edit the fields of a contract document in **Draft** status. For contract document records in **Signed** or **Canceled** status, you can view the record's details.
- Delete a contract document by clicking the **Delete record** button next to the record. Only contract documents in **Draft** status can be deleted. Once **Signed**, a contract document should be canceled if the document is not to be used within the contract.
- Download the initial document by clicking the **Initial document** button next to the record. Open the downloaded file to view its content.
- Download the signed document by clicking the **Signed document** button next to the record, if a signed document was uploaded for that contract document 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.

Adding Contract Documents

To insert a document to the contract, click the **Insert** button in the **Contract Document** section. The **Add Contract Document** page is displayed.



IMPORTANT!
You can't insert documents for contracts in **Contract Closed** or **Contract Version Closed** statuses.

Fill in the following fields:

Field	Mandatory	Data Type	Details
Document name	No	Text	Automatically completed with the name of the document. Core Banking names the document record using the contract name + '-' + the selected document type + '-' + a unique document increment. For example, 5203 - Income Statement - 60.
Document type	Yes	Option set	Select the type of the document.
Description	No	Text Area	Enter the description of the document.
Number	No	Text	Enter the number of the document, if the document has an external identifier number.
Initial document	No	File	Select 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.

Field	Mandatory	Data Type	Details
Signed Document	No	File	Select 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.

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

> **HINT**
> You can also add, update, and approve contract document records through API integration, using the `FTOS_CB_AddUpdateContractDocument` and `FTOS_CB_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!

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. 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.

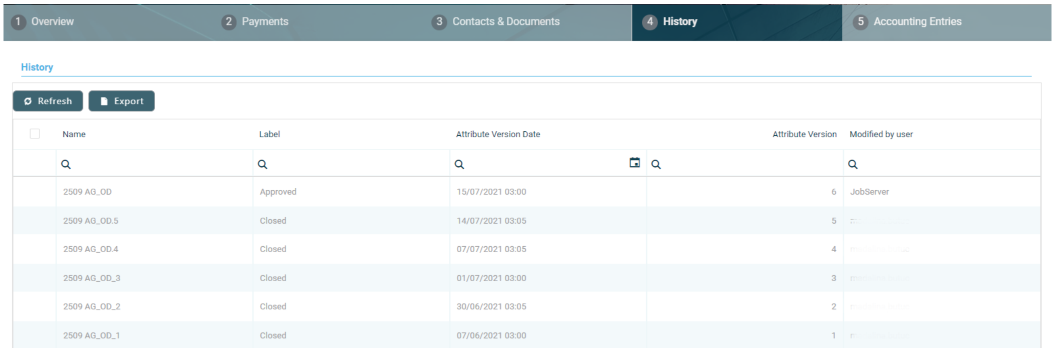
Contract Document Validations

Core Banking performs the following validations for contract document records:

- The uploaded files' specifications follow High Productivity Fintech Infrastructure'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.

History Tab

The **History** tab displays the versions of the contract, along with workflow status and the user who modified the record. A contract can have only one **Draft** version, one **Current** version, but it may have multiple **History** versions, which are displayed in this section. In this tab, you can track the contract's life cycle and review older versions that are no longer active (for details, see Contract Versioning).

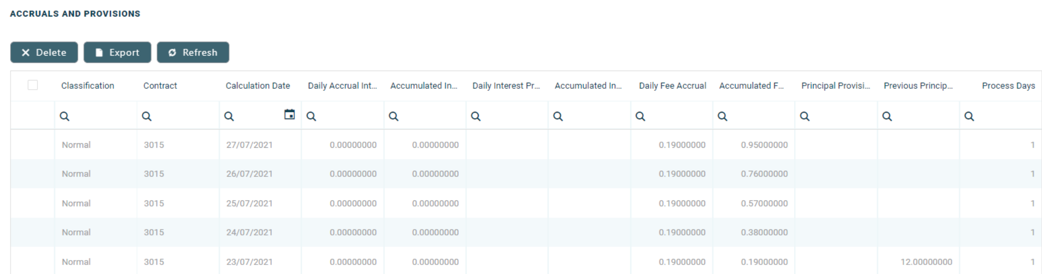


Accounting Entries Tab

The **Accounting Entries** tab holds all the accounting entries, accounting totals, and accruals and provisions recorded for a contract. These records are automatically generated by the system, after performing transactions for an approved contract.

Accruals and Provisions Section

The records containing daily accrual and provisions are displayed in the **Accruals and Provisions** section. Generated automatically by the system respecting the definition of the contract, product dimensions, system parameters and jobs.

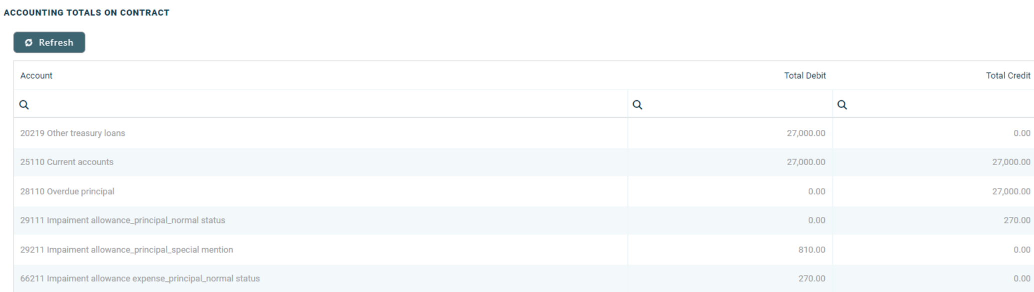


The following information is displayed for each accrual and provision entry:

Column	Details
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.

Accounting Totals on Contract Section

The **Accounting Totals on Contract** section provides an overview of the total amounts specified in accounting records. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.


ACCOUNTING TOTALS ON CONTRACT

Refresh

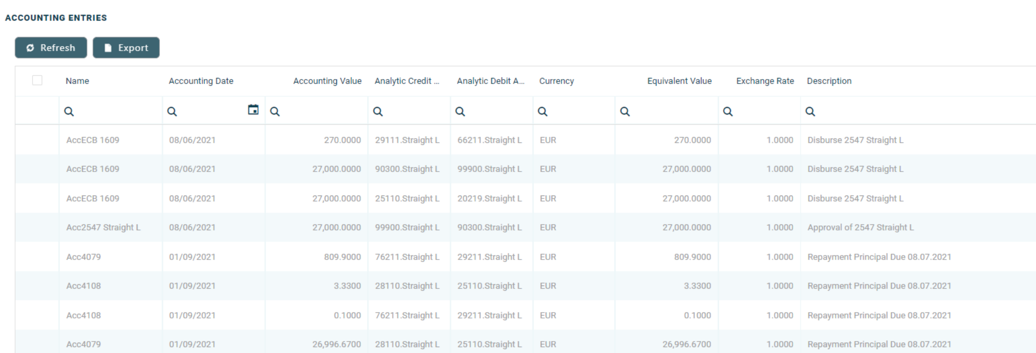
Account	Total Debit	Total Credit
20219 Other treasury loans	27,000.00	0.00
25110 Current accounts	27,000.00	27,000.00
28110 Overdue principal	0.00	27,000.00
29111 Impaiment allowance_principal_normal status	0.00	270.00
29211 Impaiment allowance_principal_special mention	810.00	0.00
66211 Impaiment allowance expense_principal_normal status	270.00	0.00

The following information is displayed for each total amount:

Column	Details
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.

Accounting Entries Section

The **Accounting Entries** section reflects the accounting for the transactions related to the loan contract. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.


ACCOUNTING ENTRIES

Refresh Export

Name	Accounting Date	Accounting Value	Analytic Credit ...	Analytic Debit A...	Currency	Equivalent Value	Exchange Rate	Description
AccECB 1609	08/06/2021	270.0000	29111.Straight L	66211.Straight L	EUR	270.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	90300.Straight L	99900.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	25110.Straight L	20219.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
Acc2547 Straight L	08/06/2021	27,000.0000	99900.Straight L	90300.Straight L	EUR	27,000.0000	1.0000	Approval of 2547 Straight L
Acc4079	01/09/2021	809.9000	76211.Straight L	29211.Straight L	EUR	809.9000	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	3.3300	28110.Straight L	25110.Straight L	EUR	3.3300	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	0.1000	76211.Straight L	29211.Straight L	EUR	0.1000	1.0000	Repayment Principal Due 08.07.2021
Acc4079	01/09/2021	26,996.6700	28110.Straight L	25110.Straight L	EUR	26,996.6700	1.0000	Repayment Principal Due 08.07.2021

The following information is displayed for each accounting entry:

Column	Details
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.

Column	Details
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 Account with Overdraft

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 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.

When such a contract is closed, first the costs linked to the overdraft need to be settled, the account balance transferred and only then the account can be closed. To close such a contract before its maturity date, create a new contract version where the expiration date is changed to an agreed upon date and the repayment schedule is recalculated to have the last installment due on that date, with all the accrued amount added into the designated columns. At the end of that day, the installment is notified. After settling the last installment, the current account can be closed. Read more about closing contracts based on Current Account with Overdraft banking products on this page's dedicated chapter.

Creating Current Account with Overdraft Contracts

To create a contract based on a Current Account with Overdraft banking product, follow the steps described in the **Creating Contracts page**, making sure that you select `Bank Account` in the Product Type field and a `Current Account with Overdraft` banking product in the Banking Product field. After saving the contract, go through each tab and fill in the general and the specific information for this type of contract:

Overview Tab

The **Overview** tab requires the basic elements for the creation of a contract such as customer, banking product, account, interest rate, participants, tranches, fees, and contract covenants.

The following information in the **Overview** tab is common to all contract types:

Field	Mandatory	Data Type	Details
Contract ID	No	Text	A contract ID can be filled in, other than the contract number generated automatically by Core Banking when you saved the contract.
Customer	Yes	Lookup	The customer who owns the contract, selected previously, in the initial contract creation page. You cannot modify this information.
Banking Product	Yes	Lookup	The banking product selected previously, in the initial contract creation page. You cannot modify this information.

Field	Mandatory	Data Type	Details
Currency	Yes	Lookup	The currency of the banking product selected previously, in the initial contract creation page. For the moment the product is defined currency wise, thus each product has an underlying currency. You cannot modify this information.
Activation Date	Yes	Invariant Date	This is the date when the contract is activated. It is automatically completed with the system date.
Main Bank Account	Yes	Lookup	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).
Managing Branch	Yes	Option Set	This represents the branch of the organization where the contract was created. It is automatically completed at contract saving time, but you can select another branch from the list.

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

The following information specific to **Current Account with Overdraft** contracts should be completed in the **Overview** tab:

Field	Mandatory	Data Type	Details
General Data section			

Field	Mandatory	Data Type	Details
Start Calculation Date For Amount Unused	Yes	Date	Select the date when the amount not drawn from the overdraft limit amount starts to be calculated with commissions with `Commission Undrawn Amount (overdraft)` type. This field is displayed and required to be filled in only when the `Overdraft Limit Amount` value is >`0`.
Product Interest Rate section			
Product Interest	No	Lookup	Select from the list the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Depending on the selected interest, a series of other fields are displayed to be filled in: Margin, Reference Rate Date and Reference Rate.
Margin	No	Numeric	This field is automatically completed with the margin of the previously selected product interest. If the product interest was not selected, you can manually enter the margin.
Reference Rate Date	Yes	Date	The date for the reference rate that is part of the previously selected product interest. This field is automatically completed with the `Activation Date` value. You can edit this field.

Field	Mandatory	Data Type	Details
Reference Rate	Yes	Numeric	This field is automatically completed with the reference rate valid at the previously selected date.
Total Interest Rate	Yes	Numeric	This field 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.
Date for Review Interest Rate	No	Date	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.
Overdraft section			

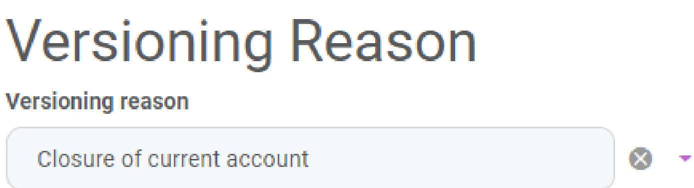
Field	Mandatory	Data Type	Details
Overdraft Limit Amount	Yes	Numeric	Enter the limit for the overdraft amount applicable for this contract. If the overdraft limit amount is greater than 0, then all the fields related to the overdraft interest rate are mandatory to be completed.
Expire Date for Overdraft	Yes	Date	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	No	Date	Enter the date for reviewing the interest rate applicable for the overdraft.

Field	Mandatory	Data Type	Details
Overdraft Interest	Yes	Lookup	Select from the list the interest to be applied for the overdraft amount of this contract. Only the interests marked as `Is For Overdraft` are displayed within the list.
Overdraft Margin	No	Numeric	This field is automatically completed with the margin of the previously selected overdraft interest. If the overdraft interest was not selected, you can manually enter the margin applicable for overdraft amounts.
Overdraft Reference Rate Date	Yes	Date	Select the date for the overdraft reference rate that is part of the previously selected overdraft interest.
Overdraft Reference Rate	Yes	Numeric	This field is automatically completed with the overdraft reference rate valid at the previously selected date.
Overdraft Total Interest Rate	No	Numeric	This field is automatically completed with the calculated total overdraft interest rate of the previously selected overdraft interest and any values entered for overdraft margin and overdraft reference rate. If the overdraft interest was not selected, you can manually enter the interest rate.
Minimum Overdraft Interest Rate	No	Numeric	Enter the minimum interest rate applicable for overdraft amounts for this contract.

Field	Mandatory	Data Type	Details
Overdraft Interest Type	No	Option set	This field is automatically completed with the interest type of the overdraft. Possible values: Fixed, Variable, Base Type, Collection, Banking Formula and Banded. Read more about interests on the Interests page.
Repayment Overview section			
Contract Period	No	Whole Number	This field is automatically completed with the contract period as it was defined at banking product level. You can edit this value.
Contract Period Type	No	Option Set	This field is automatically completed with the contract period type as it was defined at banking product level. You cannot edit this value.
Maturity Date	No	Date	This field is automatically completed with the contract maturity date, in this case the maturity date of the current account and not of the overdraft functionality attached to the account, calculated based on the values of the Contract Period, Contract Period Type and Activation Date. You cannot edit this value.
Repayment at end of month	No	Boolean	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.

Versioning Reason Section

The **Versioning Reason** section is displayed only when you create a new version of an already approved contract by clicking the **New Version** button in the top right side of the **Contract** page. Thus, this section is editable for contracts in **Contract Version Draft** status, and the information within this section is read-only for contracts in **Contract Version Closed** status.



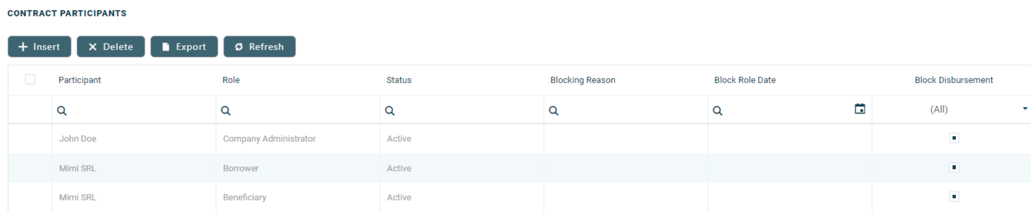
To add a reason for manually creating the new version of the contract, you can select an option from the **Versioning reason** drop-down. The `Closure of current account` reason must be selected when the current account with overdraft contract is closed, as it signals Core Banking to perform the procedures needed in order to settle all the costs of the overdraft and of the current account.

To close the contract, first the costs linked to the overdraft need to be settled, the account balance transferred and only then the account can be closed. In the new contract version, the expiration date should be changed to the agreed upon date and the repayment schedule recalculated to have the last installment due on that date, with all the accrued amount added into the designated columns. At the end of that day, the installment is notified. After settling the last installment, the current account can be closed. Read more about closing contracts based on Current Account with Overdraft banking products on this page's dedicated chapter.

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

Contract Participants Section

In the **Contract Participants** section, you can insert, delete or export customers who participate in this contract or who can be blocked from participation. After the first save operation, the customer is added as beneficiary of the contract. 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.



To add a participant, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Participant	No	Lookup	Select from the list the name of the customer who can access the contract.
Role	No	Option Set	Select from the list the role of the previously selected customer in the contract beneficiary's company.
Blocking Reason	No	Option Set	Select the reason for blocking this participant from accessing the contract, if needed.

IMPORTANT!
For legal entity customers, the participant with the `Company Administrator` role must be added, otherwise, the loan contracts cannot be approved. This is not the case for current account contracts.
For individual customers, the borrower and beneficiary of the contract are not mandatory to be added in order for the contract to be approved and disbursed.

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

Contract Tranches Section

NOTE This section is not available for **Deposit** contracts.

In the **Contract Tranches** section, you can view the disbursement tranches configured at the product level. 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. In this section, you can also insert, delete or export disbursement tranches for the contract.

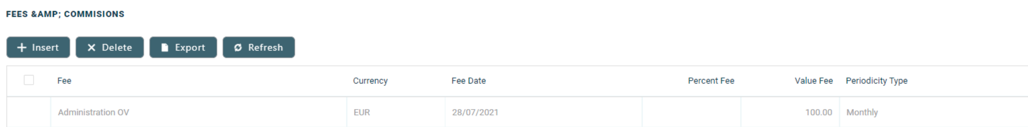
To add a tranche in a contract based on a product that has a disbursement matrix set up, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Tranche Date	Yes	Date	Select the date of the disbursement tranche.
Tranche Percent	Yes	Numeric	Enter the percentage from the contract value that has to be disbursed with this tranche.
Amount	Yes	Numeric	Enter the amount from the contract value that has to be disbursed with this tranche.
Interest Percent	No	Numeric	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	No	Numeric	Enter the commission percent applicable for the unused loan amount from this tranche.
Submitted Document	No	File	Upload the documents related to the tranche disbursement.

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

Fees & Commissions Section

In the **Fees & Commissions** section, 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, all fees that are defined as values are displayed. The fees that are 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 insert, delete or export fees and commissions for the contract.



To add a fee for this contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Contract	Yes	Lookup	This field displays the contract number generated automatically by Core Banking when you saved the contract. You cannot modify this information.
Currency	Yes	Lookup	The currency of the contract. You cannot modify this information.
Fee	Yes	Lookup	Select a commission from the list of commissions defined for the banking product used when creating the contract.
Periodicity Type	No	Option Set	This fields is automatically completed with the periodicity type of the selected fee.
Fee Date	Yes	Date	Specify which value of the commission is to be used by selecting the date of the commission.
Percent Fee	No	Numeric	This field displays the commission percentage applicable for the selected date if the commission was defined as a percentage.
Value Fee	No	Numeric	This field displays the commission value applicable for the selected date if the commission was defined as a value.

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

Automatic Insertion and Calculation of Commissions

Commissions are automatically inserted/ updated 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.

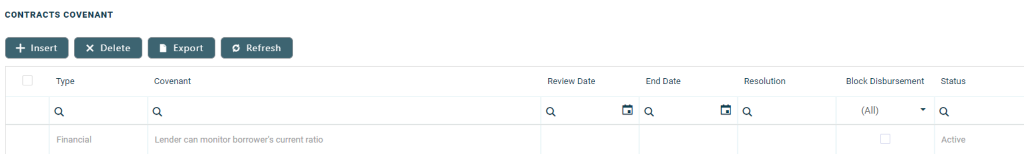
- **Updating a contract in `Contract Version Draft` status**: Core Banking only updates the percentage commissions that are not already notified.

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.

Contract Covenant Section

In the **Contract Covenant** section, you can view 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 also insert, delete or export covenants for the contract.



To add a covenant to a contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Covenant	No	Option Set	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

Field	Required	Data Type	Details
			notification or full knowledge of the process. This covenant is of type negative.
Value	No	Numeric	Enter the value of the covenant.
Covenant Type	No	Option Set	This field is automatically completed with the type of the selected covenant.
Review Frequency (Months)	No	Whole Number	Enter the number of months after which the covenant has to be reviewed.
Review Date	No	Date	Enter the date when the covenant has to be reviewed.

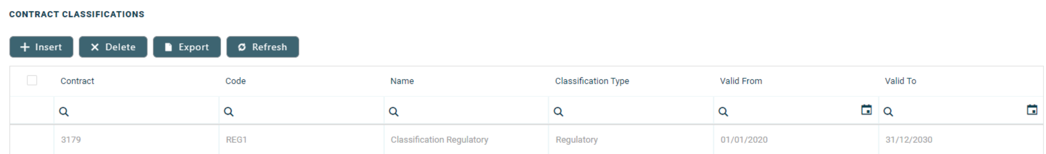
Click the **Save and Reload** button at the top right corner of the page.

Activate the covenant record by changing its status to **Active**.

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

Contract Classifications Section

In the **Contract Classifications** section, you can insert, delete or export classifications for the contract. You can choose to add the classifications defined at banking product level.



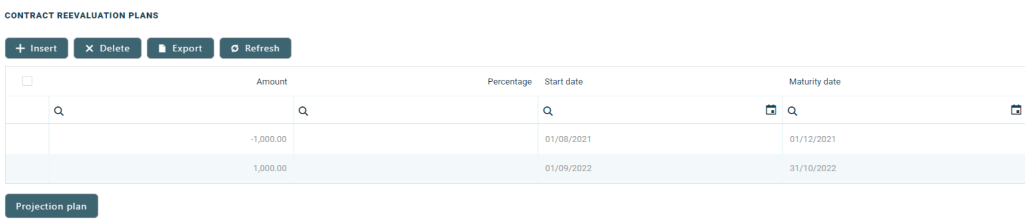
To add a classification to a contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Classification	No	Lookup	Select the desired classification for the contract from the list of classifications associated with the banking product.
Contract	Yes	Lookup	This field is automatically completed with the number of the current contract.
Description	No	Text Area	Enter a description for the contract classification.

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

Contract Reevaluation Plans Section

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.



To add a reevaluation plan to a contract based on a current account with overview, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Amount	Yes	Numeric	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	Yes	Numeric	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.

Field	Required	Data Type	Details
Start date	Yes	Date	Enter the start date when the overdraft limit increase or decrease should be performed.
Periodicity type	Yes	Option Set	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	No	Numeric	Enter how many times the overdraft limit increase or decrease should be performed.
Holiday shift method	No	Option Set	Select the desired holiday shift method from the possible values: Forward or Backward.

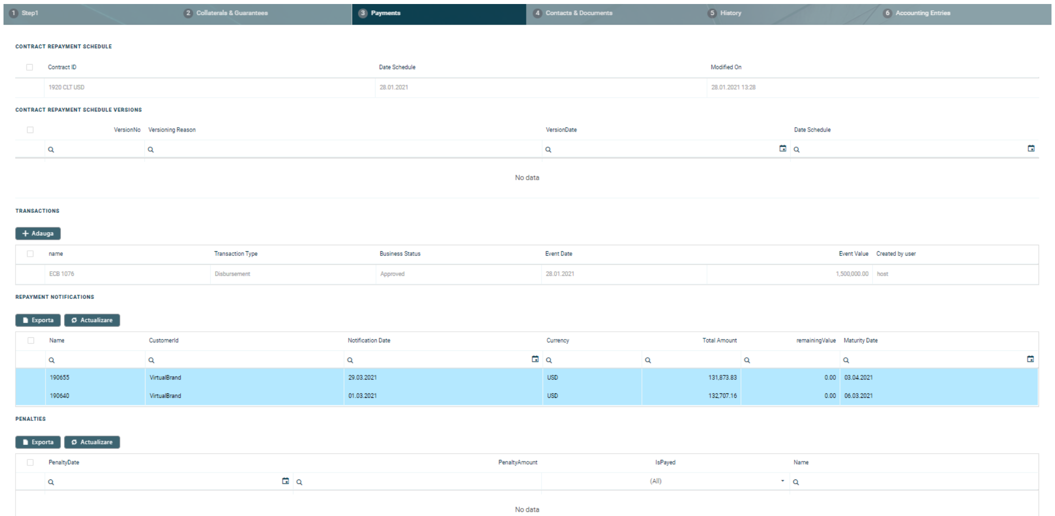
Click the **Save and Close** button at the top right corner of the page.

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.

To view the projection of the overdraft limit reevaluation plan, click the **Projection Plan** button. A `.pdf` file containing a detailed overview of the overdraft limit fluctuations in time is automatically downloaded by your browser.

Payments Tab

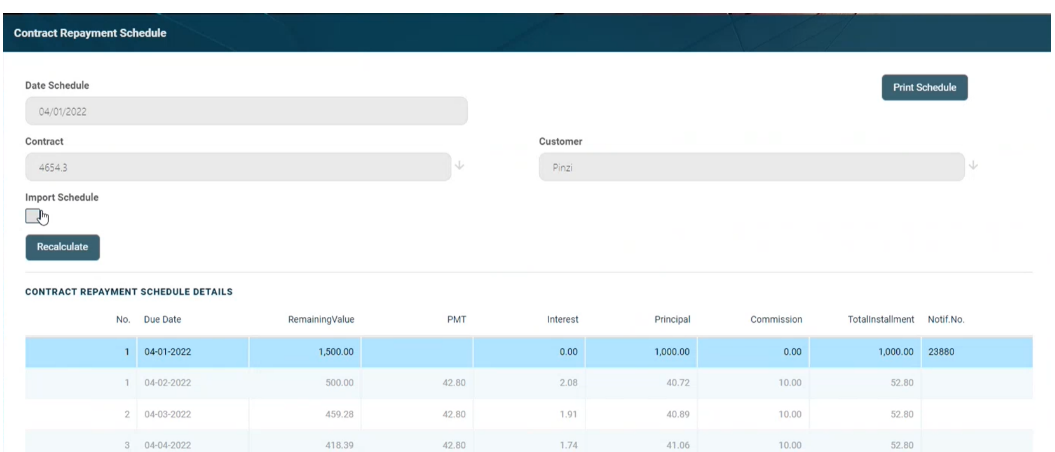
The **Payments** tab contains all the transactions, payments, penalties, bank account operations, repayment schedules, schedule versions, repayment notifications for a contract. Depending on the contact's chosen banking product, only some of these may be displayed. The tab has no information to display in **Draft** status. Approve the contract to perform any contract event. Meaningful payment information is displayed in this tab only after performing transactions on the contract.



Contract Repayment Schedule Section

The **Contract Repayment Schedule** section displays the repayment schedule automatically generated by Core Banking for the approved contract, after performing a disbursement.

The section displays only basic information about the generated schedule, such as contract number, schedule date and last modification date and time. For detailed information and the actual list of the installments, double-click on the schedule. The **Contract Repayment Schedule** page is displayed with the selected schedule and a list with every schedule detail:



You cannot 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.

The following information is displayed about each schedule detail (installment):

Column	Details
No.	The number of the repayment schedule detail.
Due Date	The date when the installment must be paid.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Commission For Undrawn Amount/ or other commissions, depending on the selected contract type	The value of the commission with the specified type calculated for this installment.
Total Repayment	The number of the repayment notification generated for this schedule detail.
Notification No.	The number of the notification where the installment is included, if it 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.

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.

Importing a Repayment Plan Using the Contract Repayment Schedule Page

For cases when the contract needs a schedule that cannot be automatically generated by Core Banking, you can import your custom repayment plan. You can either perform the import at a contract event level (when adding a **Disbursement**, **Early Repayment**, **Payment Holiday**, or **Reschedule Overdues** transaction), or within the **Contract Repayment Schedule** page, for contracts in **Version Draft** status.

To import a custom repayment plan within the **Contract Repayment Schedule** page, perform the following steps:

1. 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*".
2. Click the **Export Schedule Template** button to download a `.xslx` file with the schedule template for this specific contract.
3. Open the downloaded schedule template `.xlsx` file exported from Core Banking and make it editable.
4. Format the **Due Date** column as `Text`
5. 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 your needs.

   > **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

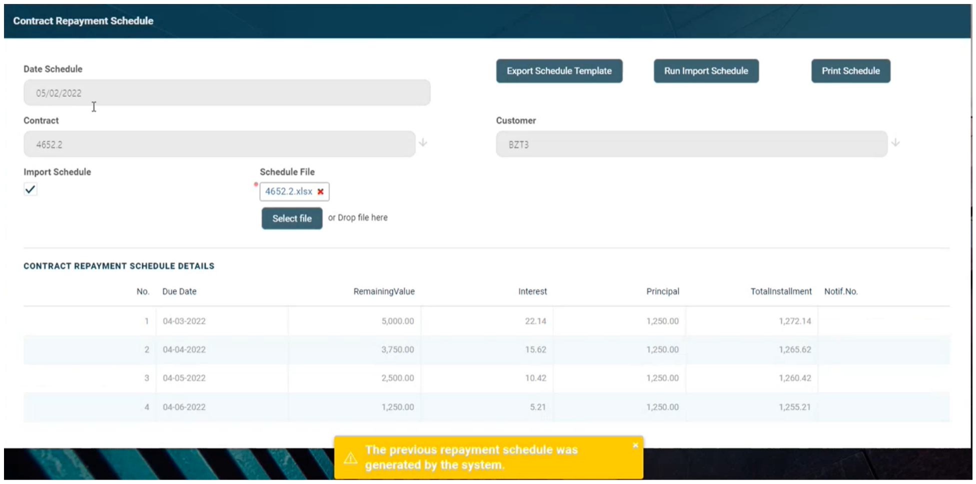
saved, and incorrect formats or data are not accepted, then error messages are shown for such files.

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.

6. 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.
7. Back in Core Banking's **Contract Repayment Schedule** page, click **Select File**.
8. 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.
9. Click the **Save and Reload** button at the top right corner of the page. Core Banking performs the validations, making sure that the uploaded file meets all the criteria for a correct, functional schedule.
10. 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.

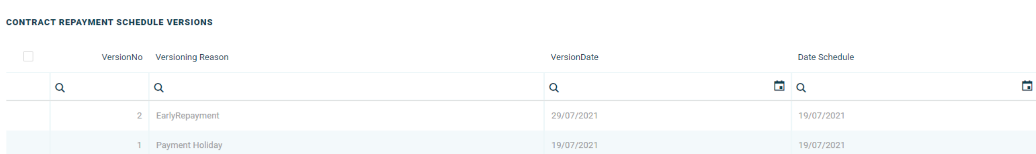


If you click the **Run Import Schedule** button one more time, the values within the **Contract Repayment Schedule Details** section are deleted and reinserted.

Read more about importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Contract Repayment Schedule Versions Section

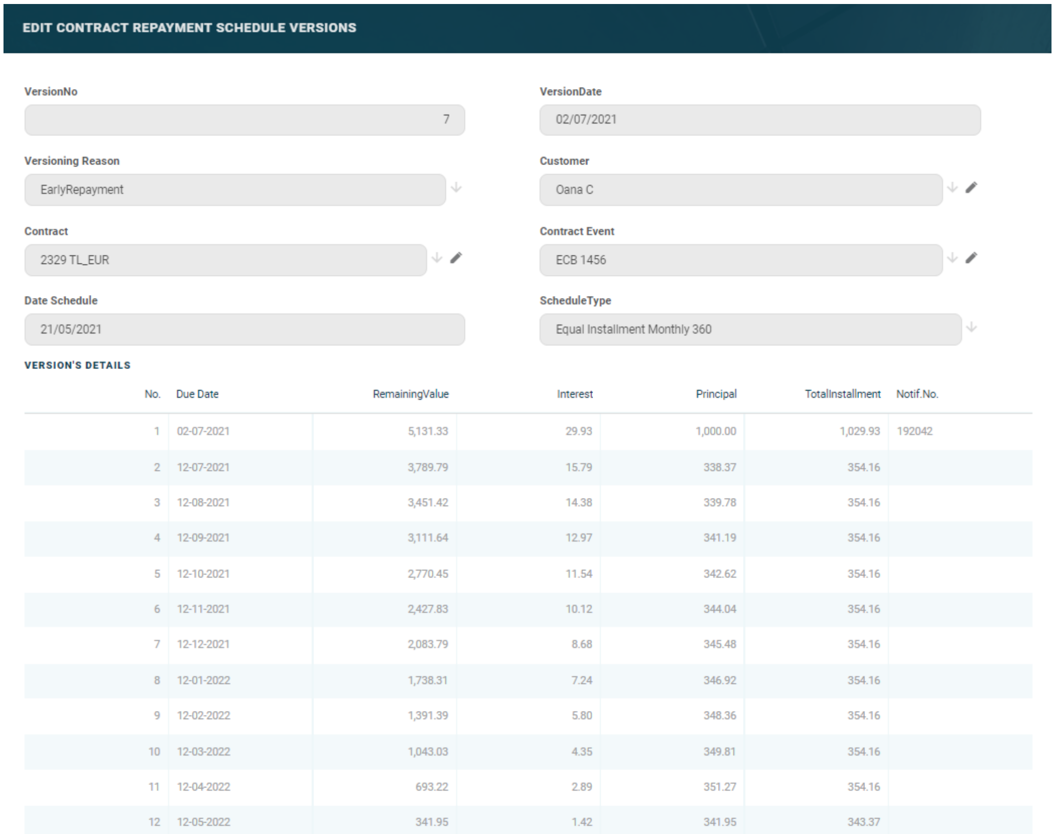
The **Contract Repayment Schedule Versions** section displays the versions of the repayment schedules automatically generated by Core Banking each time when a contract event that changed either the maturity date or the amount of a repayment was performed on the contract. The section is displayed only if such versions exist for the contract.



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.

> **NOTE**
> The most recent repayment schedule version is considered active by Core Banking, while the previous schedule records are kept for historical purposes.

For 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: 7
VersionDate: 02/07/2021
Versioning Reason: EarlyRepayment
Customer: Oana C
Contract: 2329 TL_EUR
Contract Event: ECB 1456
Date Schedule: 21/05/2021
ScheduleType: Equal Installment Monthly 360

VERSION'S DETAILS

No.	Due Date	RemainingValue	Interest	Principal	TotalInstallment	Notif.No.
1	02-07-2021	5,131.33	29.93	1,000.00	1,029.93	192042
2	12-07-2021	3,789.79	15.79	338.37	354.16	
3	12-08-2021	3,451.42	14.38	339.78	354.16	
4	12-09-2021	3,111.64	12.97	341.19	354.16	
5	12-10-2021	2,770.45	11.54	342.62	354.16	
6	12-11-2021	2,427.83	10.12	344.04	354.16	
7	12-12-2021	2,083.79	8.68	345.48	354.16	
8	12-01-2022	1,738.31	7.24	346.92	354.16	
9	12-02-2022	1,391.39	5.80	348.36	354.16	
10	12-03-2022	1,043.03	4.35	349.81	354.16	
11	12-04-2022	693.22	2.89	351.27	354.16	
12	12-05-2022	341.95	1.42	341.95	343.37	

You cannot edit the information displayed on this page.

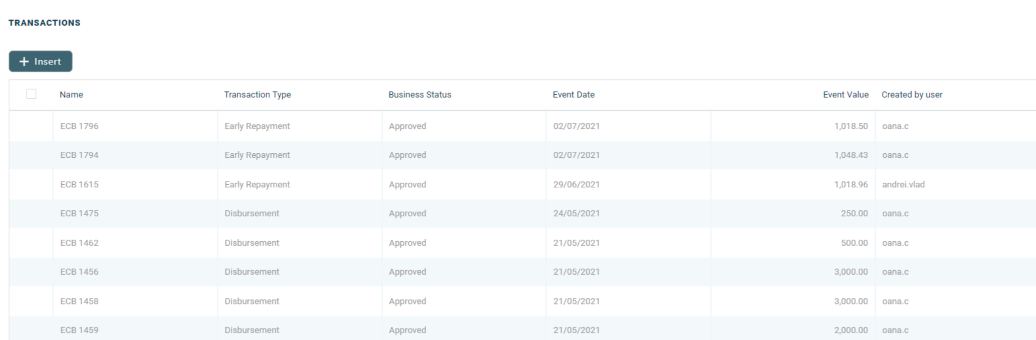
The following information is displayed about each schedule version:

Column	Details
Version No.	The number of the repayment schedule version.
Version Date	The date when the version was created.
Versioning Reason	The type of contract event that triggered the generation of the version.
Customer	The customer for whom the contract was created.
Contract	The number of the contract for which the repayment schedule version was generated.
Contract Event	The id of the contract event that triggered the generation of the version.
Date Schedule	The date of the previous repayment schedule.

Column	Details
Schedule Type	The type of schedule selected in the contract and used to generate the repayment schedule.
Version's Details List	
No.	The number of the repayment schedule version detail.
Due Date	The date when the installment must be paid.
Remaining Value	The value remaining to be repaid from the contract value at the moment of this installment.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Total Installment	The total value of the installment to be paid.
Notification No.	The number of the notification where the installment is included, if it was already generated.

Transactions Section

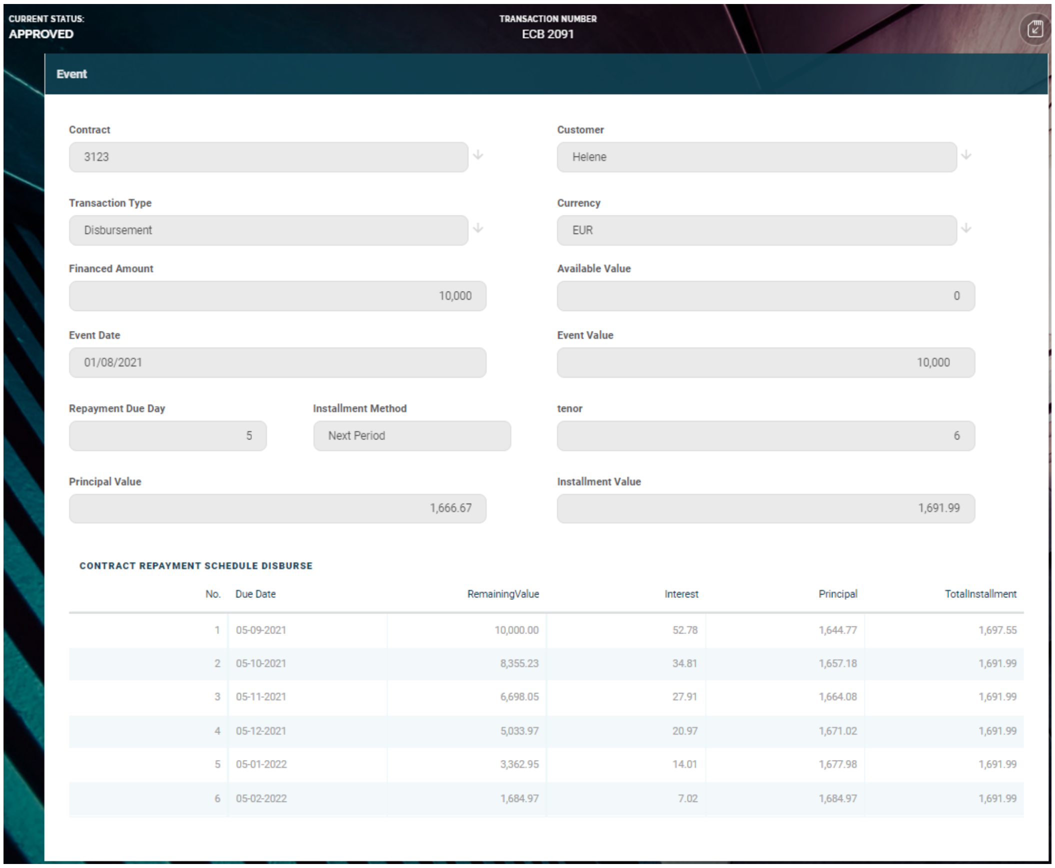
The **Transactions** section displays all the transactions performed at the contract level, in any status. This section only has information if the contract is in **Approved** status and transactions were already created. Read detailed information about contract events and how to add an event on the dedicated Contract Events page.


TRANSACTIONS

+ Insert

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB 1796	Early Repayment	Approved	02/07/2021	1,018.50	oana.c
ECB 1794	Early Repayment	Approved	02/07/2021	1,048.43	oana.c
ECB 1615	Early Repayment	Approved	29/06/2021	1,018.96	andrei.vlad
ECB 1475	Disbursement	Approved	24/05/2021	250.00	oana.c
ECB 1462	Disbursement	Approved	21/05/2021	500.00	oana.c
ECB 1456	Disbursement	Approved	21/05/2021	3,000.00	oana.c
ECB 1458	Disbursement	Approved	21/05/2021	3,000.00	oana.c
ECB 1459	Disbursement	Approved	21/05/2021	2,000.00	oana.c

The section displays only basic information about the transaction, such as event number, status, date, transaction type, value and the user who created it. For detailed information about the transaction and the repayment schedule generated for the approved event, double-click on the schedule. The **Event** page is displayed with the selected event and the generated repayment schedule for the event:



You cannot edit the information displayed on this page.

The following information is displayed about each event, with some variations depending on the event type:

Column	Details
Contract	The number of the contract for which the transaction is performed.
Customer	The customer for whom the contract was created.
Transaction Type	The type of the transaction that is performed on the contract.
Currency	The currency of the contract.
Financed Amount	The amount financed by the contract.
Available Value	The amount still available in the contract.
Event Date	The date when the event was created.
Event Value	The amount of the transaction.

Column	Details
Repayment Due Day	The day of the month when the repayment is due.
Installment Method	The method of calculating the installment value.
Tenor	The tenor of the contract in months.
Principal Value	The amount of the principal of the contract.
Installment Value	The amount of the installment.
Contract Repayment Schedule section	
No.	The number of the repayment schedule version detail.
Due Date	The date when the installment must be paid.
Remaining Value	The value remaining to be repaid from the contract value at the moment of this installment.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Total Installment	The total value of the installment to be paid.

NOTE

In order to add transactions to an approved contract, the transactions must be previously defined and associated with the banking product in the **Banking Product** page > **Associated Transactions** tab.

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.

Repayment Notifications Section

The **Repayment Notifications** section displays 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

Export Refresh

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

5 10 20 1 2 3 4

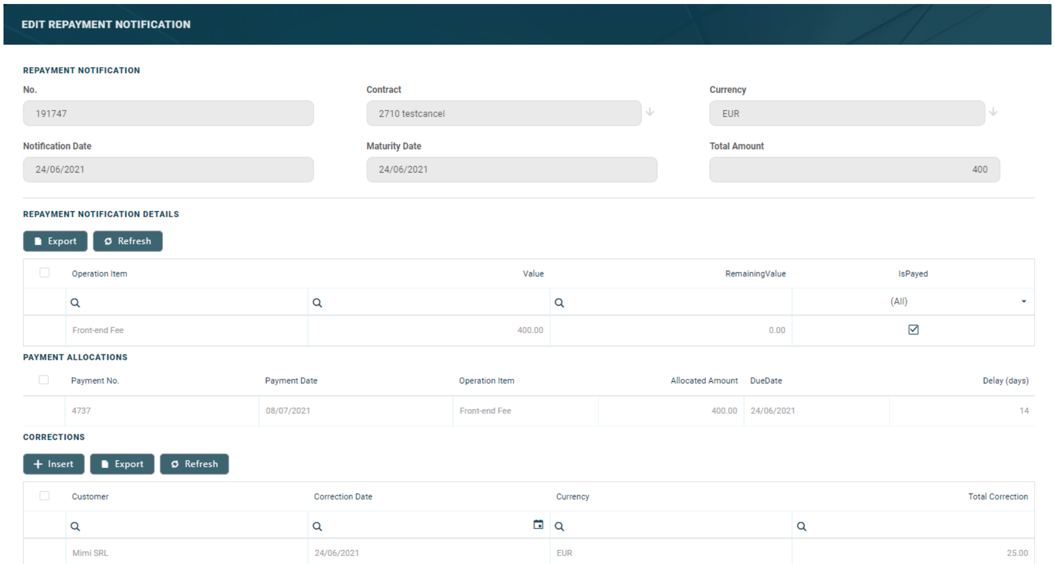
Within the list, the repayment notifications are color coded as follows:

- Repayment notifications highlighted in blue are already paid, allocated or closed to payment.
- Repayment notifications not highlighted (displayed on a white background) remain to be paid.

The following information is displayed about each notification:

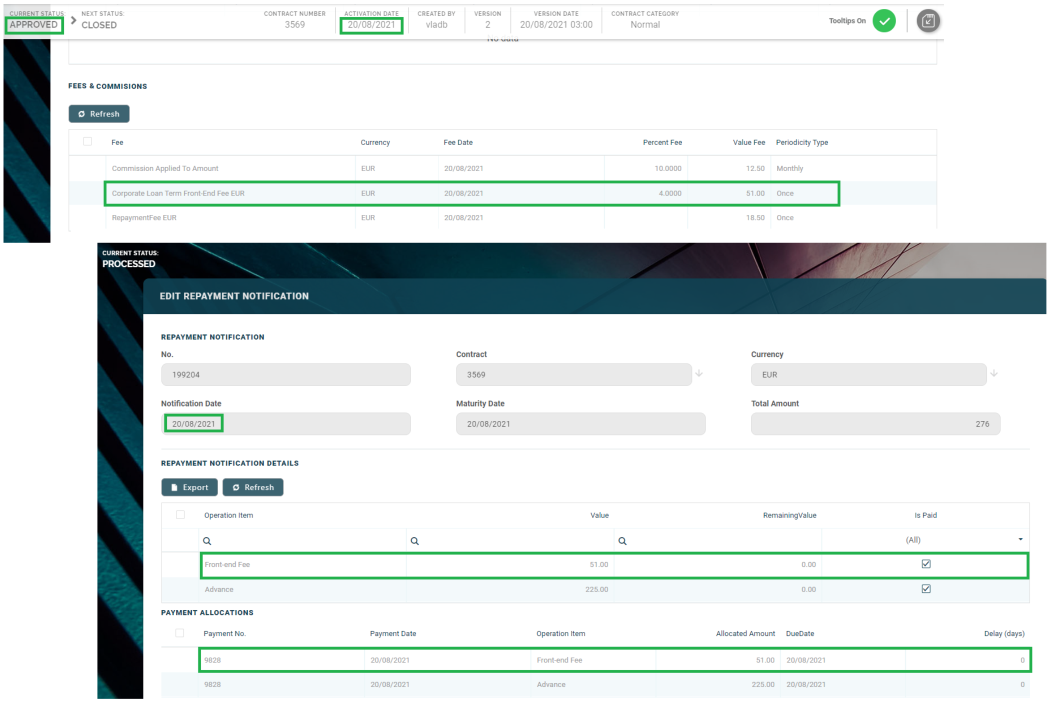
Field	Description
No.	The number of the repayment notification record.
Customer	The customer for whom the contract was created.
Date	The date when the notification was generated.
Currency	The currency of the contract.
Amount	The amount of the installment for which the notification was generated.
Remaining	The amount from the installment that remains to be paid.
Maturity Date	The maturity date of the notification. This is calculated adding the value of the `Grace period for repayment` field at the banking product level to the notification date.

For detailed information about a repayment notification, double-click on the desired record. The **Repayment Notification** page is displayed with the selected notification:



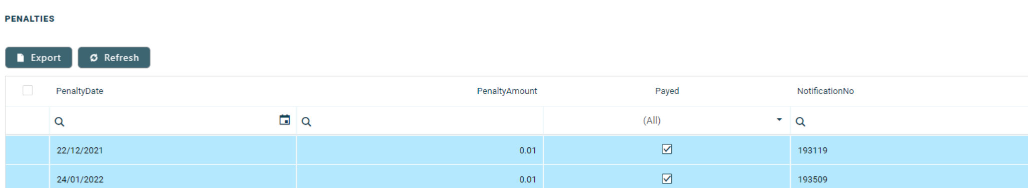
You cannot edit the information displayed on this page. Read detailed information about repayment notifications on the dedicated Repayment Notifications page.

> **IMPORTANT!**
> 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.

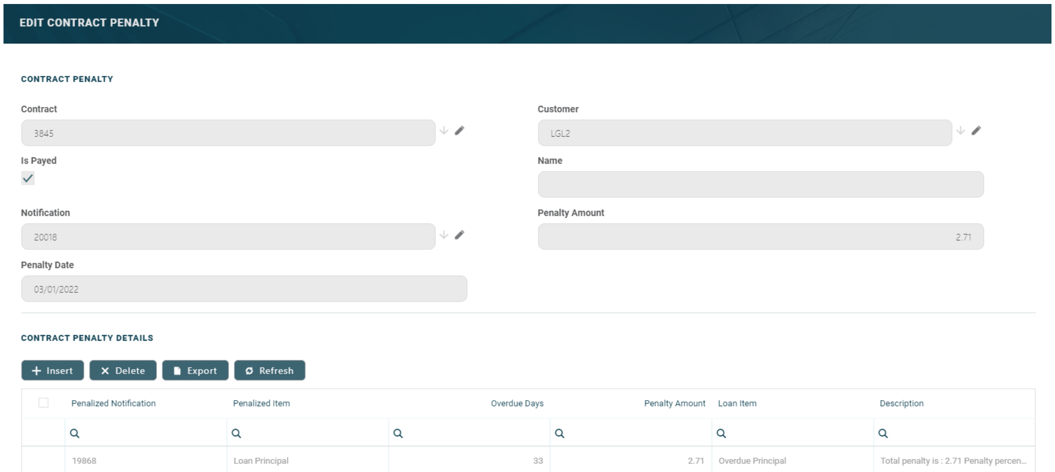


Penalties Section

The **Penalties** section displays the penalty interest applicable to the contract, 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, configured in the Overview tab.



The section displays only basic information about the penalties, such as penalty date, amount, notification number and whether it was paid or not. For detailed information, double-click on the desired penalty record. The **Contract Penalty** page is displayed with the selected penalty's details:

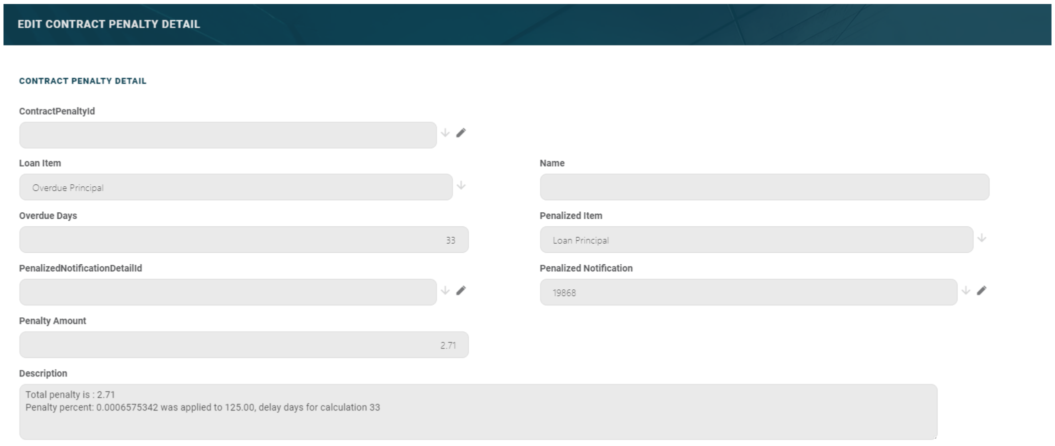


You cannot edit the information displayed on this page.

The following information is displayed about each penalty record:

Column	Details
Contract	The number of the contract for which the transaction is performed.
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.
Contract Penalty Details section	
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.

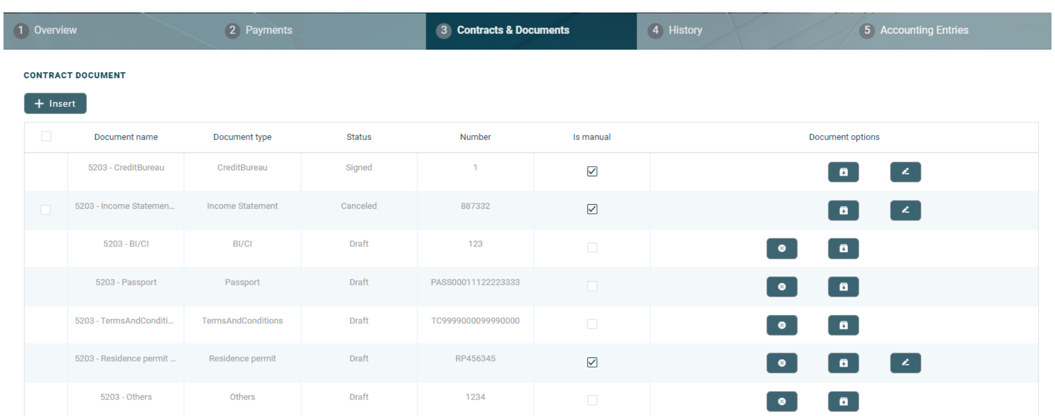
You can view the details of the penalty on a separate page, named **Edit Contract Penalty Detail**, if you double-click the detail record:



You cannot edit the information displayed on this page.

Contracts & Documents Tab

This section holds documents related to the contract. It is meant to be the electronic folder of the contract. The section 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.

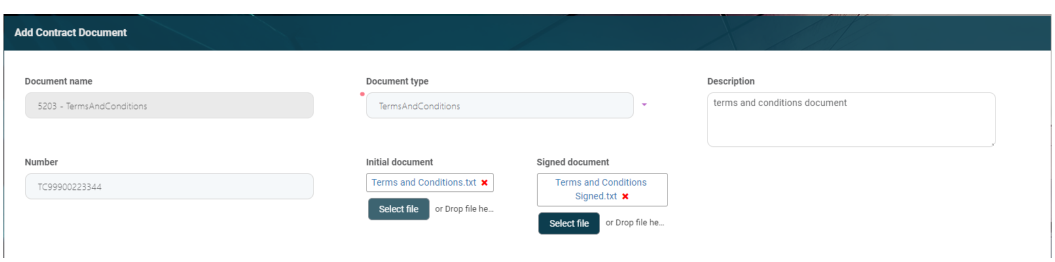
On the **Contracts & Documents** page, you can:

- Add a new contract document record by clicking the **Insert** button on the top left, under the **Contract Document** section.
- Edit a contract document from the list by double-clicking it. You can only edit the fields of a contract document in **Draft** status. For contract document records in **Signed** or **Canceled** status, you can view the record's details.
- Delete a contract document by clicking the **Delete record** button next to the record. Only contract documents in **Draft** status can be deleted. Once **Signed**, a contract document should be canceled if the document is not to be used within the contract.
- Download the initial document by clicking the **Initial document** button next to the record. Open the downloaded file to view its content.
- Download the signed document by clicking the **Signed document** button next to the record, if a signed document was uploaded for that contract document 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.

Adding Contract Documents

To insert a document to the contract, click the **Insert** button in the **Contract Document** section. The **Add Contract Document** page is displayed.



IMPORTANT!
You can't insert documents for contracts in **Contract Closed** or **Contract Version Closed** statuses.

Fill in the following fields:

Field	Mandatory	Data Type	Details
Document name	No	Text	Automatically completed with the name of the document. Core Banking names the document record using the contract name + '-' + the selected document type + '-' + a unique document increment. For example, 5203 - Income Statement - 60.
Document type	Yes	Option set	Select the type of the document.
Description	No	Text Area	Enter the description of the document.
Number	No	Text	Enter the number of the document, if the document has an external identifier number.
Initial document	No	File	Select 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.

Field	Mandatory	Data Type	Details
Signed Document	No	File	Select 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.

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

> **HINT**
> You can also add, update, and approve contract document records through API integration, using the `FTOS_CB_AddUpdateContractDocument` and `FTOS_CB_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!

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. 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.

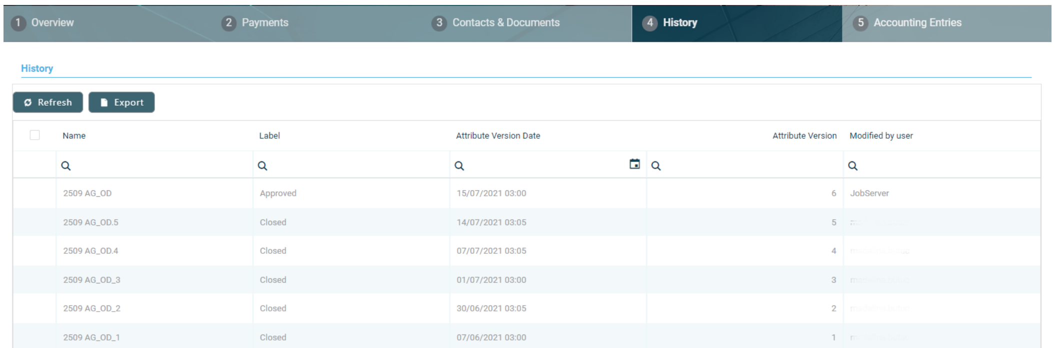
Contract Document Validations

Core Banking performs the following validations for contract document records:

- The uploaded files' specifications follow High Productivity Fintech Infrastructure'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.

History Tab

The **History** tab displays the versions of the contract, along with workflow status and the user who modified the record. A contract can have only one **Draft** version, one **Current** version, but it may have multiple **History** versions, which are displayed in this section. In this tab, you can track the contract's life cycle and review older versions that are no longer active (for details, see Contract Versioning).



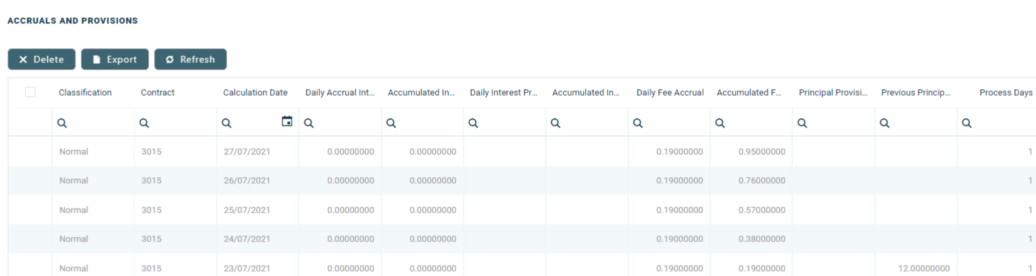
Name	Label	Attribute Version Date	Attribute Version	Modified by user
2509 AG_OD	Approved	15/07/2021 03:00	6	JobServer
2509 AG_OD.5	Closed	14/07/2021 03:05	5	[illegible]
2509 AG_OD.4	Closed	07/07/2021 03:05	4	[illegible]
2509 AG_OD_3	Closed	01/07/2021 03:00	3	[illegible]
2509 AG_OD_2	Closed	30/06/2021 03:05	2	[illegible]
2509 AG_OD_1	Closed	07/06/2021 03:00	1	[illegible]

Accounting Entries Tab

The **Accounting Entries** tab holds all the accounting entries, accounting totals, and accruals and provisions recorded for a contract. These records are automatically generated by the system, after performing transactions for an approved contract.

Accruals and Provisions Section

The records containing daily accrual and provisions are displayed in the **Accruals and Provisions** section. Generated automatically by the system respecting the definition of the contract, product dimensions, system parameters and jobs.



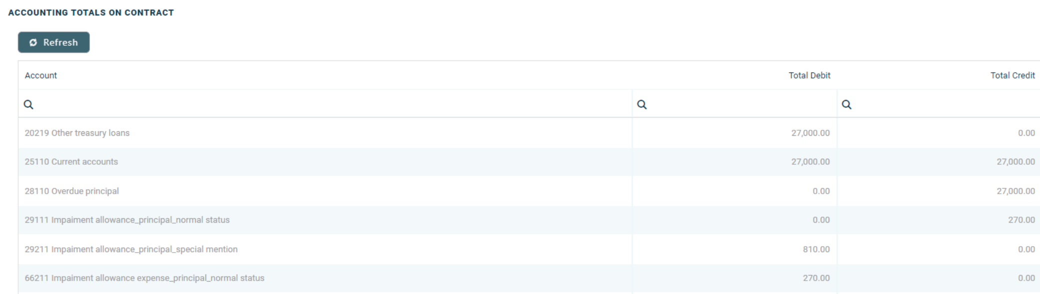
Classification	Contract	Calculation Date	Daily Accrual Int...	Accumulated In...	Daily Interest Pr...	Accumulated In...	Daily Fee Accrual	Accumulated F...	Principal Provisi...	Previous Princip...	Process Days
Normal	3015	27/07/2021	0.00000000	0.00000000			0.19000000	0.95000000			1
Normal	3015	26/07/2021	0.00000000	0.00000000			0.19000000	0.76000000			1
Normal	3015	25/07/2021	0.00000000	0.00000000			0.19000000	0.57000000			1
Normal	3015	24/07/2021	0.00000000	0.00000000			0.19000000	0.38000000			1
Normal	3015	23/07/2021	0.00000000	0.00000000			0.19000000	0.19000000		12.00000000	1

The following information is displayed for each accrual and provision entry:

Column	Details
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.

Accounting Totals on Contract Section

The **Accounting Totals on Contract** section provides an overview of the total amounts specified in accounting records. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.



ACCOUNTING TOTALS ON CONTRACT

Refresh

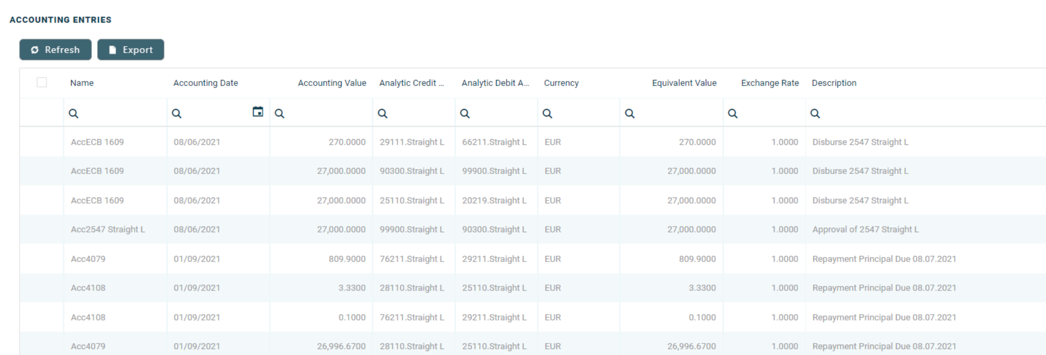
Account	Total Debit	Total Credit
20219 Other treasury loans	27,000.00	0.00
25110 Current accounts	27,000.00	27,000.00
28110 Overdue principal	0.00	27,000.00
29111 Impaiment allowance_principal_normal status	0.00	270.00
29211 Impaiment allowance_principal_special mention	810.00	0.00
66211 Impaiment allowance expense_principal_normal status	270.00	0.00

The following information is displayed for each total amount:

Column	Details
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.

Accounting Entries Section

The **Accounting Entries** section reflects the accounting for the transactions related to the loan contract. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.



ACCOUNTING ENTRIES

Refresh Export

Name	Accounting Date	Accounting Value	Analytic Credit ...	Analytic Debit A...	Currency	Equivalent Value	Exchange Rate	Description
AccECB 1609	08/06/2021	270.0000	29111.Straight L	66211.Straight L	EUR	270.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	90300.Straight L	99900.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	25110.Straight L	20219.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
Acc2547 Straight L	08/06/2021	27,000.0000	99900.Straight L	90300.Straight L	EUR	27,000.0000	1.0000	Approval of 2547 Straight L
Acc4079	01/09/2021	809.9000	76211.Straight L	29211.Straight L	EUR	809.9000	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	3.3300	28110.Straight L	25110.Straight L	EUR	3.3300	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	0.1000	76211.Straight L	29211.Straight L	EUR	0.1000	1.0000	Repayment Principal Due 08.07.2021
Acc4079	01/09/2021	26,996.6700	28110.Straight L	25110.Straight L	EUR	26,996.6700	1.0000	Repayment Principal Due 08.07.2021

The following information is displayed for each accounting entry:

Column	Details
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.

Column	Details
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.

Closing Current Account with Overdraft Contracts

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.

You can trigger the closure of the contract before its initial maturity date by creating a new version of the **Approved** contract and filling in a `Versioning Reason`. Remember to change the `Maturity Date` of the contract to an agreed upon date. If the `Expire Date for Overdraft` was not reached yet, then you must also change it to the same date. The repayment schedule must be recalculated to have the last installment due on that date, with all the accrued amount added into the designated columns.

At the end of that day, the installment is notified. After settling the last installment, the current account can be closed.

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.

Fixed Deposit

A deposit account is a saving product that offers the possibility to the customer to place an amount of money for a period of time initially established. Banking Product comes with a dedicated product, called `Deposit`.

Overview Tab

The **Overview** tab requires the basic elements for the creation of a contract such as customer, banking product, account, interest rate, participants, tranches, fees, and contract covenants.

The following information in the **Overview** tab is common to all contract types:

Field	Mandatory	Data Type	Details
Contract ID	No	Text	A contract ID can be filled in, other than the contract number generated automatically by Core Banking when you saved the contract.
Customer	Yes	Lookup	The customer who owns the contract, selected previously, in the initial contract creation page. You cannot modify this information.
Banking Product	Yes	Lookup	The banking product selected previously, in the initial contract creation page. You cannot modify this information.
Currency	Yes	Lookup	The currency of the banking product selected previously, in the initial contract creation page. For the moment the product is defined currency wise, thus each product has an underlying currency. You cannot modify this information.
Activation Date	Yes	Invariant Date	This is the date when the contract is activated. It is automatically completed with the system date.

Field	Mandatory	Data Type	Details
Main Bank Account	Yes	Lookup	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).
Managing Branch	Yes	Option Set	This represents the branch of the organization where the contract was created. It is automatically completed at contract saving time, but you can select another branch from the list.

The following information specific to **Deposit** contracts should be completed in the **Overview** tab:

Field	Mandatory	Data Type	Details
General Data section			

Field	Mandatory	Data Type	Details
Current Account	Yes	Lookup	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.
Financed Amount	Yes	Numeric	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.
Product Interest Rate section			

Field	Mandatory	Data Type	Details
Product Interest	No	Lookup	Select from the list the interest to be applied for this contract. Only the interests associated to the selected banking product are displayed within the list. Depending on the selected interest, a series of other fields are displayed to be filled in: Margin, Reference Rate Date and Reference Rate.
Interest for Sight	No	Numeric	This field is displayed only if a sight interest is configured on the banking product and it is editable only if the `Allow negociated IR` checkbox is selected at the banking product level. If a sight interest is configured, the percentage of this interest is also displayed and it will be applied only if a withdrawal, transfer or liquidation before maturity operation is made before maturity.
Interest Payment Type	No	Option Set	This field is automatically completed with the `Interest Payment Type` value selected at the banking product level. The possible values are: Maturity, Daily, Monthly, Quarterly, Yearly.
Margin	No	Numeric	This field is automatically completed with the margin of the previously selected product interest. If the product interest was not selected, you can manually enter the margin.

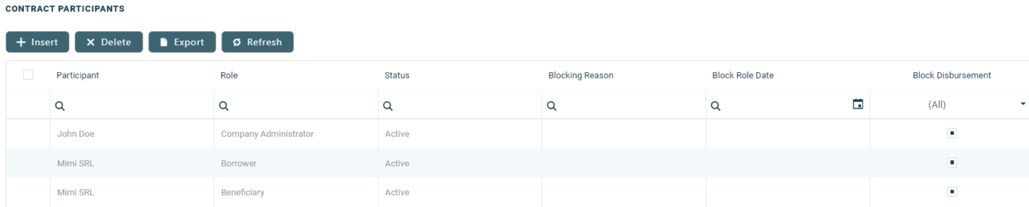
Field	Mandatory	Data Type	Details
Reference Rate Date	Yes	Date	The date for the reference rate that is part of the previously selected product interest. This field is automatically completed with the `Activation Date` value. You can edit this field.
Reference Rate	Yes	Numeric	This field is automatically completed with the reference rate valid at the previously selected date.
Total Interest Rate	Yes	Numeric	This field 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 `Allow negociated IR`, you can manually enter the interest rate.

Field	Mandatory	Data Type	Details
Date for Review Interest Rate	No	Date	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.
Repayment Overview section			
Contract Period	No	Whole Number	This field is automatically completed with the maximum contract period as it was defined at banking product level. You can edit this value as long as it remains between the minimum and maximum limits set on the banking product.
Contract Period Type	No	Option Set	This field is automatically completed with the contract period type as it was defined at banking product level. You cannot edit this value.

Field	Mandatory	Data Type	Details
Maturity Date	No	Date	This field is automatically completed with the contract maturity date, calculated based on the values of the Contract Period, Contract Period Type and Activation Date. You cannot edit this value.
Due Day	No	Whole Number	This field is not displayed for a contract deposit with interest payment type on maturity date. Enter the day of the month when the interest payment should be made. It is automatically completed with the current date, but it can be changed with any value between 1 and 31
Repayment at end of month	No	Boolean	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.

Contract Participants Section

In the **Contract Participants** section, you can insert, delete or export customers who participate in this contract or who can be blocked from participation. After the first save operation, the customer is added as beneficiary of the contract. 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.



To add a participant, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Participant	No	Lookup	Select from the list the name of the customer who can access the contract.
Role	No	Option Set	Select from the list the role of the previously selected customer in the contract beneficiary's company.
Blocking Reason	No	Option Set	Select the reason for blocking this participant from accessing the contract, if needed.

IMPORTANT!
For legal entity customers, the participant with the `Company Administrator` role must be added, otherwise, the loan contracts cannot be approved. This is not the case for current account contracts. For individual customers, the borrower and beneficiary of the contract are not mandatory to be added in order for the contract to be approved and disbursed.

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

Contract Tranches Section

NOTE This section is not available for **Deposit** contracts.

In the **Contract Tranches** section, you can view the disbursement tranches configured at the product level. 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. In this section, you can also insert, delete or export disbursement tranches for the contract.

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:

Field	Required	Data Type	Details
Tranche Date	Yes	Date	Select the date of the disbursement tranche.
Tranche Percent	Yes	Numeric	Enter the percentage from the contract value that has to be disbursed with this tranche.
Amount	Yes	Numeric	Enter the amount from the contract value that has to be disbursed with this tranche.
Interest Percent	No	Numeric	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	No	Numeric	Enter the commission percent applicable for the unused loan amount from this tranche.
Submitted Document	No	File	Upload the documents related to the tranche disbursement.

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

Fees & Commissions Section

In the **Fees & Commissions** section, 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, all fees that are defined as values are displayed. The fees that are 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 insert, delete or export fees and commissions for the contract.

To add a fee for this contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Contract	Yes	Lookup	This field displays the contract number generated automatically by Core Banking when you saved the contract. You cannot modify this information.
Currency	Yes	Lookup	The currency of the contract. You cannot modify this information.
Fee	Yes	Lookup	Select a commission from the list of commissions defined for the banking product used when creating the contract.
Periodicity Type	No	Option Set	This fields is automatically completed with the periodicity type of the selected fee.
Fee Date	Yes	Date	Specify which value of the commission is to be used by selecting the date of the commission.
Percent Fee	No	Numeric	This field displays the commission percentage applicable for the selected date if the commission was defined as a percentage.
Value Fee	No	Numeric	This field displays the commission value applicable for the selected date if the commission was defined as a value.

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

Automatic Insertion and Calculation of Commissions

Commissions are automatically inserted/ updated 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.

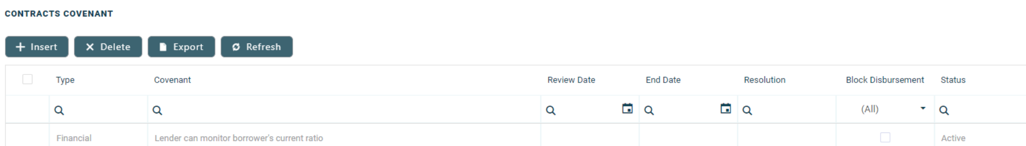
- **Updating a contract in `Contract Version Draft` status**: Core Banking only updates the percentage commissions that are not already notified.

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.

Contract Covenant Section

In the **Contract Covenant** section, you can view 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 also insert, delete or export covenants for the contract.



To add a covenant to a contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Covenant	No	Option Set	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

Field	Required	Data Type	Details
			notification or full knowledge of the process. This covenant is of type negative.
Value	No	Numeric	Enter the value of the covenant.
Covenant Type	No	Option Set	This field is automatically completed with the type of the selected covenant.
Review Frequency (Months)	No	Whole Number	Enter the number of months after which the covenant has to be reviewed.
Review Date	No	Date	Enter the date when the covenant has to be reviewed.

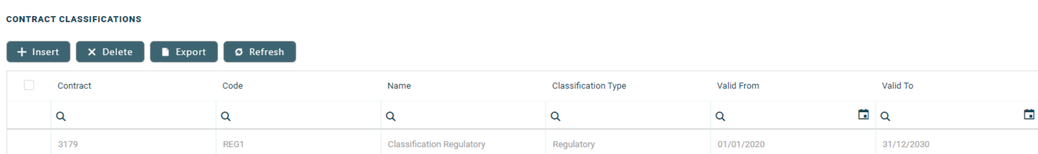
Click the **Save and Reload** button at the top right corner of the page.

Activate the covenant record by changing its status to **Active**.

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

Contract Classifications Section

In the **Contract Classifications** section, you can insert, delete or export classifications for the contract. You can choose to add the classifications defined at banking product level.



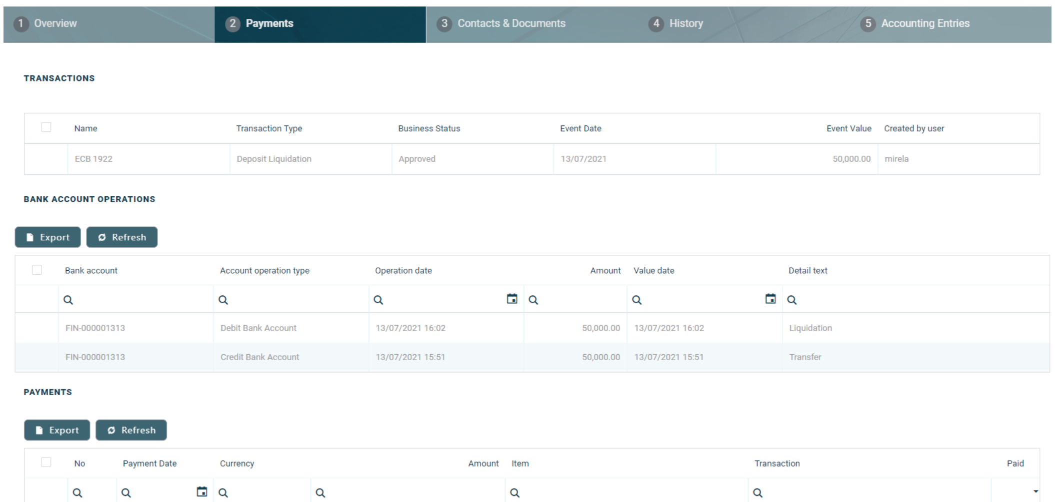
To add a classification to a contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Classification	No	Lookup	Select the desired classification for the contract from the list of classifications associated with the banking product.
Contract	Yes	Lookup	This field is automatically completed with the number of the current contract.
Description	No	Text Area	Enter a description for the contract classification.

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

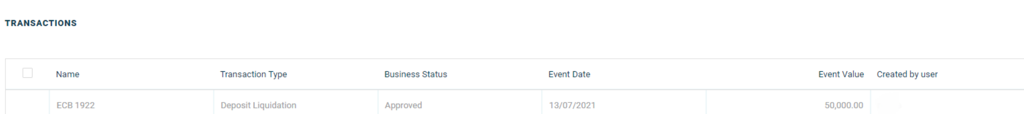
Payments Tab

The **Payments** tab contains all the transactions, payments and bank account operations for a **Deposit** contract. The tab has no information to display in **Draft** status. Approve the contract to perform any contract event. Meaningful payment information is displayed in this tab only after performing transactions on the contract.

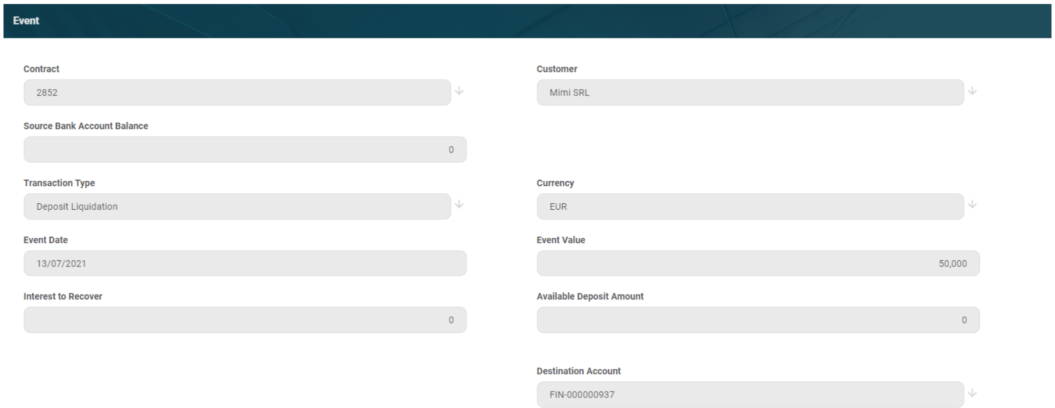


Transactions Section

The **Transactions** section displays 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. Read detailed information about contract events and how to add an event on the dedicated Contract Events page.



The section displays only basic information about the transaction, such as event number, status, date, transaction type, value and the user who created it. For detailed information about the transaction, double-click on the transaction. The **Event** page is displayed with the selected event:



You cannot edit the information displayed on this page.

The following information is displayed about each event, with some variations depending on the event type:

Column	Details
Contract	The number of the contract for which the transaction is performed.
Customer	The customer for whom the contract was created.
Source Bank Account Balance	The balance of the bank account that was the source of the transaction.
Transaction Type	The type of the transaction that is performed on the contract.
Currency	The currency of the contract.
Financed Amount	The amount financed by the contract.
Available Value	The amount still available in the contract.
Event Date	The date when the event was created.
Event Value	The amount of the transaction.
Interest to Recover	The amount of interest to recover.
Available Deposit Amount	The amount available in the deposit account.
Destination Account	The destination account of the transaction.

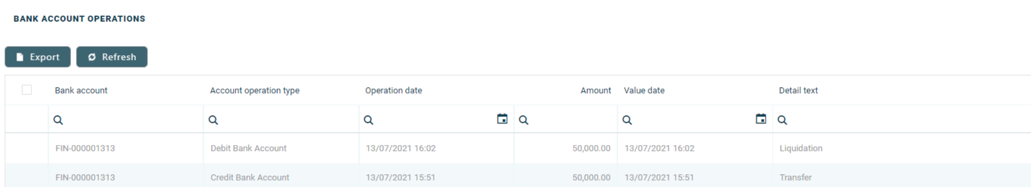
NOTE

In order to add transactions to an approved contract, the transactions must be previously defined and associated with the banking product in the **Banking Product** page > **Associated Transactions** tab.
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.

Bank Account Operations Section

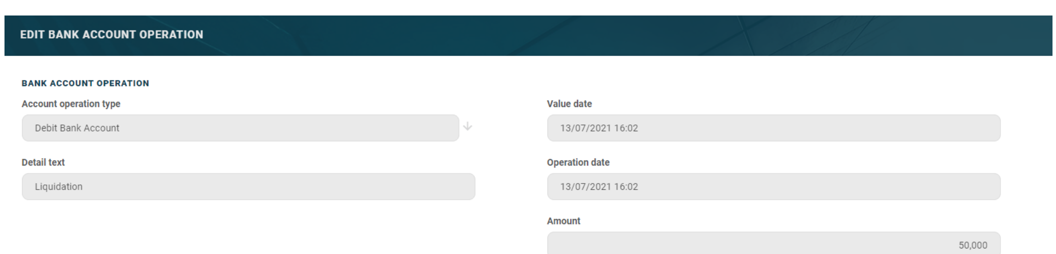
The **Bank Account Operations** section displays all the operations performed on the deposit account associated to the contract. This section only has information if the contract is in **Approved** status and operations were already performed.



The following information is displayed about each operation:

Field	Description
Bank account	The number of the bank account associated to the contract.
Account operation type	The operation type performed on the contract's associated bank account.
Operation date	The date when the operation was performed.
Amount	The amount of the performed operation.
Value date	The date when the amount was extracted / added from/ to the account.
Detail text	The description of the operation.

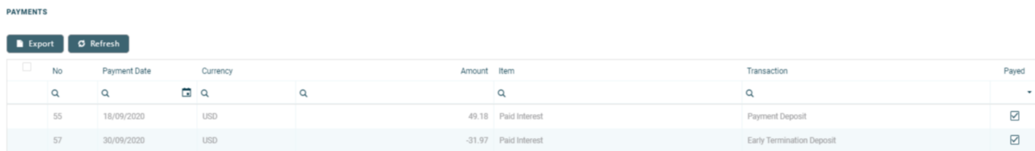
For detailed information about an operation, double-click on the desired record. The **Bank Account Operation** page is displayed with the selected operation record:



You cannot edit the information displayed on this page.

Payments Section

The **Payments** section displays information about the payments performed at the contract level. This section only has information if the contract is in **Approved** status and payments were already performed.



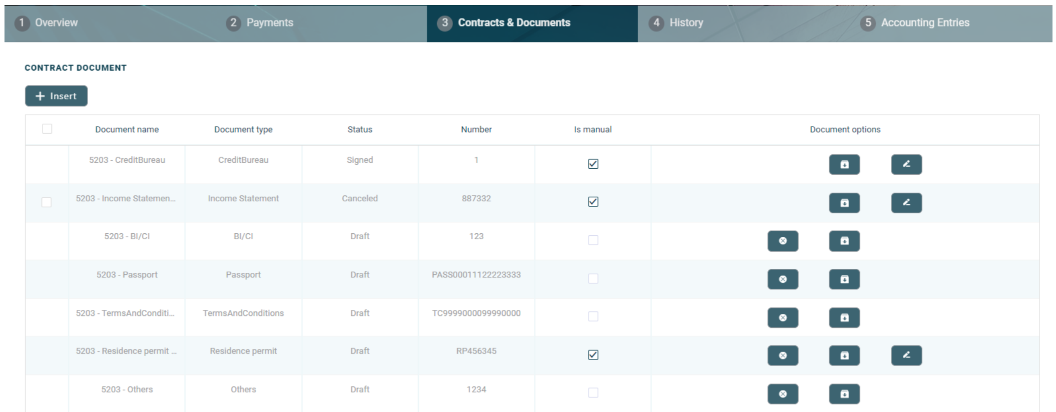
The following information is displayed about each operation:

Field	Details
No	The number of the payment operated at contract level.
Payment Date	The date of the payment transaction.
Currency	The currency of the payment.
Amount	This field displays the amount of the payment.
Item	This field displays the transaction item to be paid.
Transaction	The transaction type associated to the payment.
Paid	This field displays whether the payment was performed into/ from the deposit account or not.

For detailed information about an operation, double-click on the desired record.

Contracts & Documents Tab

This section holds documents related to the contract. It is meant to be the electronic folder of the contract. The section 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.

On the **Contracts & Documents** page, you can:

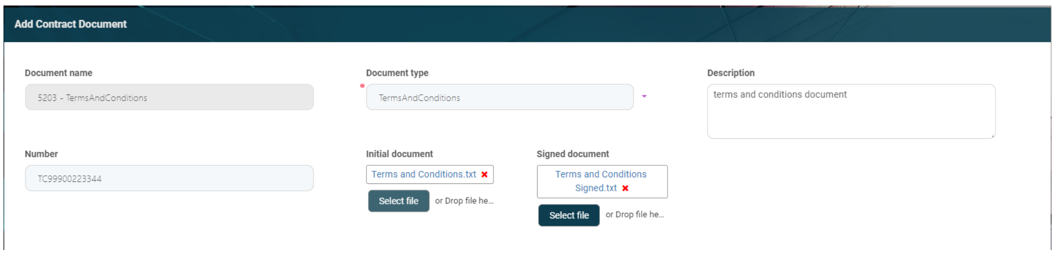
- Add a new contract document record by clicking the **Insert** button on the top left, under the **Contract Document** section.
- Edit a contract document from the list by double-clicking it. You can only edit the fields of a contract document in **Draft** status. For contract document records in **Signed** or **Canceled** status, you can view the record's details.
- Delete a contract document by clicking the **Delete record** button next to the record. Only contract documents in **Draft** status can be deleted. Once **Signed**, a contract document should be canceled if the document is not to be used within the contract.
- Download the initial document by clicking the **Initial document** button next to the record. Open the downloaded file to view its content.
- Download the signed document by clicking the **Signed document** button next to the record, if a signed document was uploaded for that contract document 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.

Adding Contract Documents

To insert a document to the contract, click the **Insert** button in the **Contract Document** section. The **Add Contract Document** page is displayed.



IMPORTANT!
You can't insert documents for contracts in **Contract Closed** or **Contract Version Closed** statuses.

Fill in the following fields:

Field	Mandatory	Data Type	Details
Document name	No	Text	Automatically completed with the name of the document. Core Banking names the document record using the contract name + '-' + the selected document type + '-' + a unique document increment. For example, 5203 - Income Statement - 60.
Document type	Yes	Option set	Select the type of the document.
Description	No	Text Area	Enter the description of the document.
Number	No	Text	Enter the number of the document, if the document has an external identifier number.

Field	Mandatory	Data Type	Details
Initial document	No	File	Select 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	No	File	Select 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.

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

HINT

You can also add, update, and approve contract document records through API integration, using the `FTOS_CB_AddUpdateContractDocument` and `FTOS_CB_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!

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. 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.

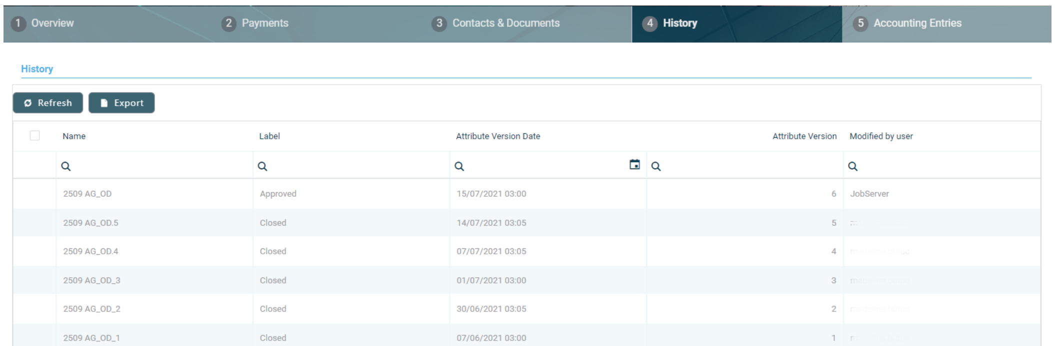
Contract Document Validations

Core Banking performs the following validations for contract document records:

- The uploaded files' specifications follow High Productivity Fintech Infrastructure'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.

History Tab

The **History** tab displays the versions of the contract, along with workflow status and the user who modified the record. A contract can have only one **Draft** version, one **Current** version, but it may have multiple **History** versions, which are displayed in this section. In this tab, you can track the contract's life cycle and review older versions that are no longer active (for details, see Contract Versioning).



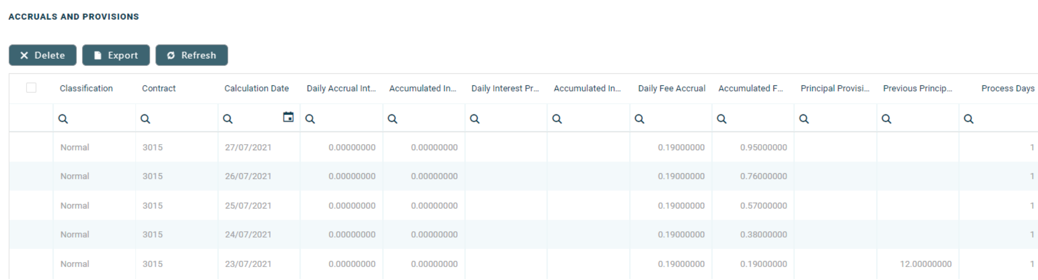
The deposit versions displayed in **History** tab represent the previous renewals of the deposit contract.

Accounting Entries Tab

The **Accounting Entries** tab holds all the accounting entries, accounting totals, and accruals and provisions recorded for a contract. These records are automatically generated by the system, after performing transactions for an approved contract.

Accruals and Provisions Section

The records containing daily accrual and provisions are displayed in the **Accruals and Provisions** section. Generated automatically by the system respecting the definition of the contract, product dimensions, system parameters and jobs.

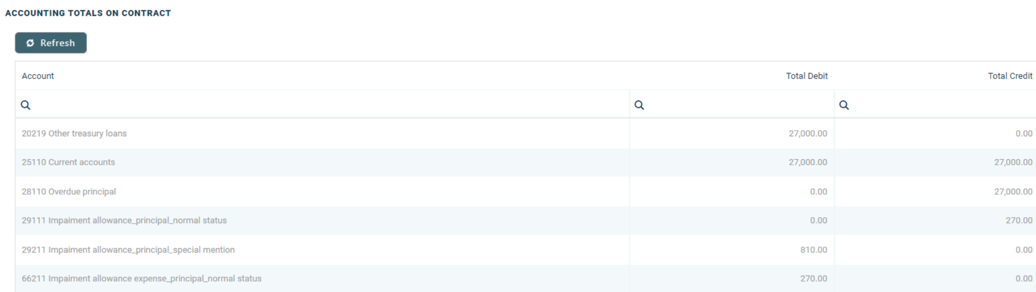


The following information is displayed for each accrual and provision entry:

Column	Details
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.

Accounting Totals on Contract Section

The **Accounting Totals on Contract** section provides an overview of the total amounts specified in accounting records. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.


ACCOUNTING TOTALS ON CONTRACT

Refresh

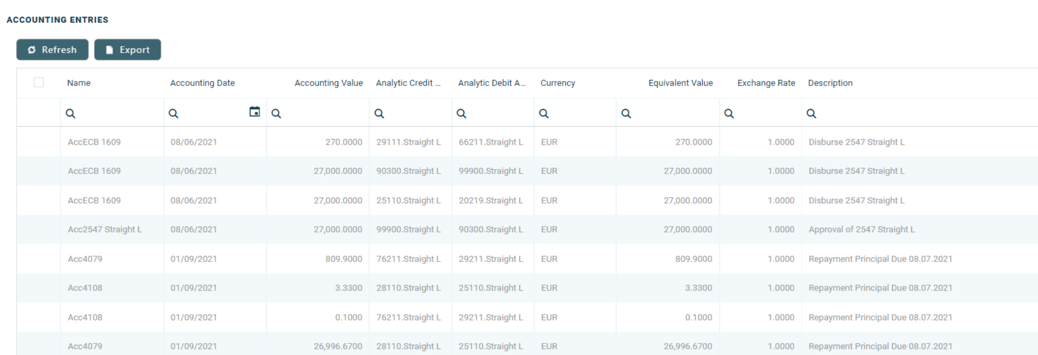
Account	Total Debit	Total Credit
20219 Other treasury loans	27,000.00	0.00
25110 Current accounts	27,000.00	27,000.00
28110 Overdue principal	0.00	27,000.00
29111 Impaiment allowance_principal_normal status	0.00	270.00
29211 Impaiment allowance_principal_special mention	810.00	0.00
66211 Impaiment allowance expense_principal_normal status	270.00	0.00

The following information is displayed for each total amount:

Column	Details
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.

Accounting Entries Section

The **Accounting Entries** section reflects the accounting for the transactions related to the loan contract. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.


ACCOUNTING ENTRIES

Refresh Export

Name	Accounting Date	Accounting Value	Analytic Credit ...	Analytic Debit A...	Currency	Equivalent Value	Exchange Rate	Description
AccECB 1609	08/06/2021	270.0000	29111.Straight L	66211.Straight L	EUR	270.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	90300.Straight L	99900.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	25110.Straight L	20219.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
Acc2547 Straight L	08/06/2021	27,000.0000	99900.Straight L	90300.Straight L	EUR	27,000.0000	1.0000	Approval of 2547 Straight L
Acc4079	01/09/2021	809.9000	76211.Straight L	29211.Straight L	EUR	809.9000	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	3.3300	28110.Straight L	25110.Straight L	EUR	3.3300	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	0.1000	76211.Straight L	29211.Straight L	EUR	0.1000	1.0000	Repayment Principal Due 08.07.2021
Acc4079	01/09/2021	26,996.6700	28110.Straight L	25110.Straight L	EUR	26,996.6700	1.0000	Repayment Principal Due 08.07.2021

The following information is displayed for each accounting entry:

Column	Details
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.

Deposit Interest Calculation

The interest calculation depends on the contract and banking product configuration.

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 would have been 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.

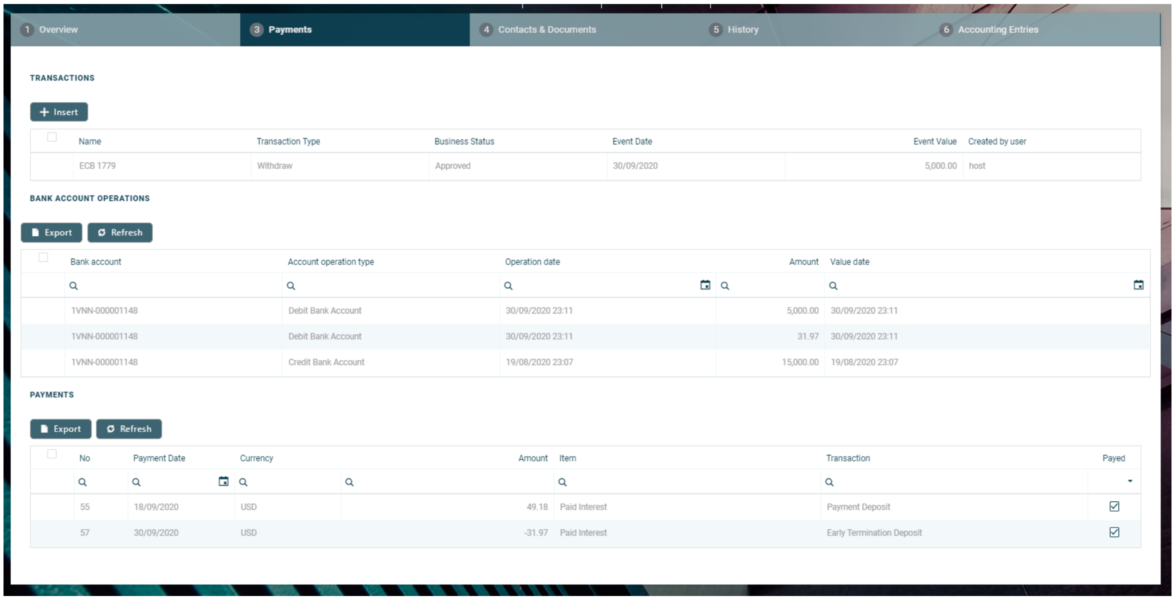
If the deposit contract doesn’t reach the maturity because it is liquidated in advance, but one or more interest payments were already made, the system recovers the interest paid from the deposit amount. The interest recovery is made if the deposit contract reaches maturity, but during the deposit contract's 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**, the system 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 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.



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.

Secured or Unsecured Term Loan

A term 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. To create a contract based on a Term Loan banking product, follow the steps described in the **Creating Contracts page**, making sure that you select `Term Loan` in the Product Type field and a `Unsecured Loan` or `Secured Loan` banking product in the Banking Product field. After saving the contract, go through each tab and fill in the general and the specific information for this type of contract:

Overview Tab

The **Overview** tab requires the basic elements for the creation of a contract such as customer, banking product, account, interest rate, participants, tranches, fees, and contract covenants.

The following information in the **Overview** tab is common to all contract types:

Field	Mandatory	Data Type	Details
Contract ID	No	Text	A contract ID can be filled in, other than the contract number generated automatically by Core Banking when you saved the contract.
Customer	Yes	Lookup	The customer who owns the contract, selected previously, in the initial contract creation page. You cannot modify this information.
Banking Product	Yes	Lookup	The banking product selected previously, in the initial contract creation page. You cannot modify this information.
Currency	Yes	Lookup	The currency of the banking product selected previously, in the initial contract creation page. For the moment the product is defined currency wise, thus each product has an underlying currency. You cannot modify this information.
Activation Date	Yes	Invariant Date	This is the date when the contract is activated. It is automatically completed with the system date.

Field	Mandatory	Data Type	Details
Main Bank Account	Yes	Lookup	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).
Managing Branch	Yes	Option Set	This represents the branch of the organization where the contract was created. It is automatically completed at contract saving time, but you can select another branch from the list.

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

The following information specific to **Term Loan** contracts should be completed in the **Overview** tab:

Field	Mandatory	Data Type	Details
General Data section			
Current Account	No	Lookup	Select the current account to be used for collecting the installments and for performing the disbursements.
Destination Bank Account	No	Lookup	Enter the destination bank account number, the account where the disbursements should be performed, if it's different from the current account selected previously.
Amount	No	Numeric	Enter the actual amount of credit for the contract.

Field	Mandatory	Data Type	Details
Advance Amount Percentage	Yes	Numeric	If you have not entered a value in the Advance Amount Value, enter the first installment percent for the contract, otherwise, this field is automatically calculated and filled in. This amount is calculated as a percentage from the contract's value, is due on the first disbursement date, being used by Core Banking to calculate the schedule and create a notification for that amount on the disbursement event. The default value is zero, as it is not always applicable.

Field	Mandatory	Data Type	Details
Advance Amount Value	Yes	Numeric	If you have not entered a percentage in the Advance Amount Percentage, enter the first installment value for the contract, otherwise, this field is automatically calculated and filled in. This amount is due on the first disbursement date, being used by Core Banking to calculate the schedule and create a notification for that amount on the disbursement event. The default value is zero, as it is not always applicable. **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

Field	Mandatory	Data Type	Details
			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.
Start Calculation Date For Amount Unused	Yes	Date	Select the date when the amount not used from the financed amount starts to be calculated with commissions with `Commission Unsuage` type.
Maximum Disburse Date	No	Date	Select the maximum date when a disbursement can be performed for the approved contract.

Field	Mandatory	Data Type	Details
Auto disbursement	No	Bool	Select this checkbox if the financed amount must be automatically disbursed on the approval of the contract. 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

Field	Mandatory	Data Type	Details
			new version for the contract.
Product Interest Rate section			
Product Interest	No	Lookup	Select from the list 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. Depending on the selected interest, a series of other fields are displayed to be filled in: Margin, Reference Rate Date and Reference Rate.
Margin	No	Numeric	This field is automatically completed with the margin of the previously selected product interest. If the product interest was not selected, you can manually enter the margin.
Reference Rate Date	Yes	Date	The date for the reference rate that is part of the previously selected product interest. This field is automatically completed with the `Activation Date` value. You can edit this field.
Reference Rate	Yes	Numeric	This field is automatically completed with the interest type's definition's reference rate valid at the previously selected date.

Field	Mandatory	Data Type	Details
Total Interest Rate	Yes	Numeric	This field 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.
Minimum Interest Rate	No	Numeric	This field is automatically completed with the minimum interest rate applicable for the contract, defined at the banking product level.
Date for Review Interest Rate	No	Date	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.
Repayment Overview section			

Field	Mandatory	Data Type	Details
Schedule Type	Yes	Lookup	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 banking product in the **Details** tab > **Associated Payment Schedule Types** list.
Contract Period	Yes	Whole Number	This field is automatically completed with the number of contract period of contract period type as it was defined at banking product level. You can edit this value.
Contract Period Type	No	Option Set	This field is automatically completed with the contract period type as it was defined at banking product level. You cannot edit this value.
Maturity Date	No	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 cannot edit this value.
Due Day	Yes	Whole Number	Enter the exact day of month for installment repayment. If it is set to 31, then the system takes the last day of months. If you manually select the `First Due Date`, then this field is automatically completed and not editable.

Field	Mandatory	Data Type	Details
Periodicity Type	Yes	Lookup	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	Yes	Option set	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.

Field	Mandatory	Data Type	Details
First Due Date	No	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	No	Numeric	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	No	Numeric	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.

Field	Mandatory	Data Type	Details
Number of installments	Yes	Whole Number	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)	No	Whole Number	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)	No	Whole Number	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	No	Boolean	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.

Field	Mandatory	Data Type	Details
Is Manual Value	No	Boolean	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.
Closure Settings section Only displayed for contracts based on banking products having the `Closing Is Flexible = True` setting			

Field	Mandatory	Data Type	Details
Automatic Closure	No	Boolean	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`. If `Automatic Closure = False`, then `Real Time Closure = False` and the contract remains open, regardless of the fulfillment of its maturity and balance criteria, waiting to be manually closed by changing its status to `Closed`. Default value: `True`. **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

Field	Mandatory	Data Type	Details
			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	No	Boolean	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, immediately after the available amount becomes zero and there are no further amounts to be recovered. For more details about the real-time closure, see Close Contracts RealTime(CB) Job. If `Real Time Closure = True`, then `Buffer Close Days = 0` and `Automatic Closure = True`.

Field	Mandatory	Data Type	Details
Buffer Close Days	No	Whole Number	This field is automatically completed with the value defined at the banking product level, but you can modify it. 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. For more detail about closing the contracts automatically when `Real Time Closure = False`, see Close Contracts (CB) Job.

Field	Mandatory	Data Type	Details
Balance Off Date	No	Invariant Date	You can't modify this field. This date is calculated by Core Banking as follows: • For non-revolving banking products, `Balance Off Date` = the date when the contract's balance reaches zero and there are no further amounts to be recovered; • For revolving banking products, if the `Balance Off Date` calculated as above < `Maturity Date`, then `Balance Off Date = Maturity Date`.
Closure Date	No	Invariant Date	You can't modify this field. The date when the contract is closed. For automatic closure, the date is calculated by Core Banking as `Balance Off Date + Buffer Close Days`.

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

Contract Participants Section

In the **Contract Participants** section, you can insert, delete or export customers who participate in this contract or who can be blocked from participation. After the first save operation, the customer is added as beneficiary of the contract. 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.

To add a participant, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Participant	No	Lookup	Select from the list the name of the customer who can access the contract.
Role	No	Option Set	Select from the list the role of the previously selected customer in the contract beneficiary's company.
Blocking Reason	No	Option Set	Select the reason for blocking this participant from accessing the contract, if needed.

IMPORTANT!
For legal entity customers, the participant with the `Company Administrator` role must be added, otherwise, the loan contracts cannot be approved. This is not the case for current account contracts. For individual customers, the borrower and beneficiary of the contract are not mandatory to be added in order for the contract to be approved and disbursed.

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

Contract Tranches Section

NOTE This section is not available for **Deposit** contracts.

In the **Contract Tranches** section, you can view the disbursement tranches configured at the product level. 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. In this section, you can also insert, delete or export disbursement tranches for the contract.

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:

Field	Required	Data Type	Details
Tranche Date	Yes	Date	Select the date of the disbursement tranche.
Tranche Percent	Yes	Numeric	Enter the percentage from the contract value that has to be disbursed with this tranche.
Amount	Yes	Numeric	Enter the amount from the contract value that has to be disbursed with this tranche.
Interest Percent	No	Numeric	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	No	Numeric	Enter the commission percent applicable for the unused loan amount from this tranche.
Submitted Document	No	File	Upload the documents related to the tranche disbursement.

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

Fees & Commissions Section

In the **Fees & Commissions** section, 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, all fees that are defined as values are displayed. The fees that are 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 insert, delete or export fees and commissions for the contract.

To add a fee for this contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Contract	Yes	Lookup	This field displays the contract number generated automatically by Core Banking when you saved the contract. You cannot modify this information.
Currency	Yes	Lookup	The currency of the contract. You cannot modify this information.
Fee	Yes	Lookup	Select a commission from the list of commissions defined for the banking product used when creating the contract.
Periodicity Type	No	Option Set	This fields is automatically completed with the periodicity type of the selected fee.
Fee Date	Yes	Date	Specify which value of the commission is to be used by selecting the date of the commission.
Percent Fee	No	Numeric	This field displays the commission percentage applicable for the selected date if the commission was defined as a percentage.
Value Fee	No	Numeric	This field displays the commission value applicable for the selected date if the commission was defined as a value.

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

Automatic Insertion and Calculation of Commissions

Commissions are automatically inserted/ updated 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.

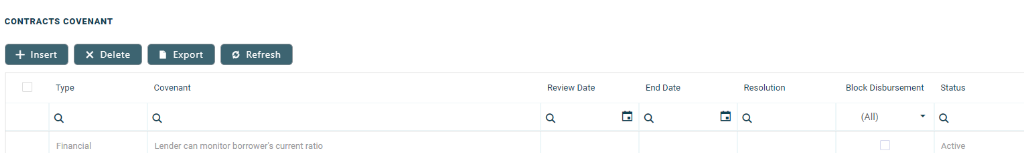
- **Updating a contract in `Contract Version Draft` status**: Core Banking only updates the percentage commissions that are not already notified.

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.

Contract Covenant Section

In the **Contract Covenant** section, you can view 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 also insert, delete or export covenants for the contract.



To add a covenant to a contract, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Covenant	No	Option Set	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

Field	Required	Data Type	Details
			notification or full knowledge of the process. This covenant is of type negative.
Value	No	Numeric	Enter the value of the covenant.
Covenant Type	No	Option Set	This field is automatically completed with the type of the selected covenant.
Review Frequency (Months)	No	Whole Number	Enter the number of months after which the covenant has to be reviewed.
Review Date	No	Date	Enter the date when the covenant has to be reviewed.

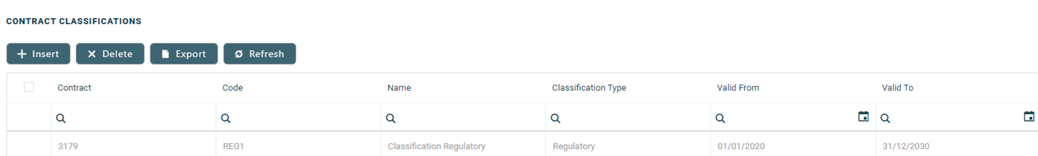
Click the **Save and Reload** button at the top right corner of the page.

Activate the covenant record by changing its status to **Active**.

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

Contract Classifications Section

In the **Contract Classifications** section, you can insert, delete or export classifications for the contract. You can choose to add the classifications defined at banking product level.



To add a classification to a contract, click **Insert** and fill in the following fields:

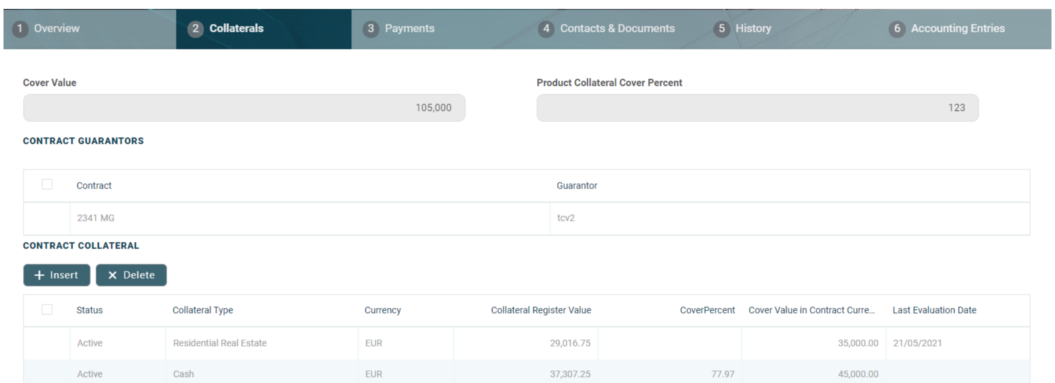
Field	Required	Data Type	Details
Classification	No	Lookup	Select the desired classification for the contract from the list of classifications associated with the banking product.
Contract	Yes	Lookup	This field is automatically completed with the number of the current contract.
Description	No	Text Area	Enter a description for the contract classification.

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

Collaterals Tab

The **Collaterals** tab appears on a contract only if the chosen product is **secured**. The tab is used to set collaterals as guarantees. Collaterals must be previously defined (see Collateral Management) and registered (see Registering Collaterals). Only after a collateral is registered, it can be used for covering a secured loan contract.

> **NOTE**
> A registered collateral can be attached to multiple contracts if the contracts total amount does not exceed the collateral available amount.



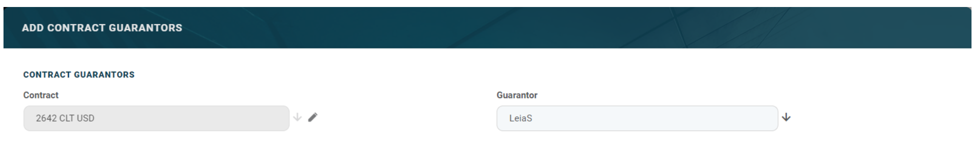
The fields **Cover Value** and **Product Collateral Cover Percent** are automatically populated.

> **IMPORTANT!**
> The `Product Collateral Coverage Percent` field is read-only, and set with the value defined at banking product level.

To add a collateral to a secured contract, go to the **Collaterals** tab at contract level. In this tab, you can insert one or more collaterals in order to have the contract covered, as well as contract guarantors.

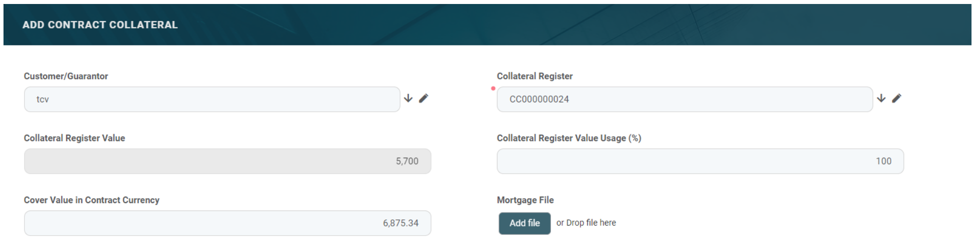
Start by adding guarantors to your contract, if needed. The **Contract Guarantors** section can be used to add a collateral that is not owned by the customer. If a guarantor is added on the loan contract, you can use the collaterals owned by the guarantors in order to cover the contract risk.

1. Click the **Insert** button within the **Contract Guarantor** section.
2. In the newly displayed **Add Contract Guarantors** page, fill in the following fields:



Field	Mandatory	Data Type	Details
Contract	Yes	Lookup	Read-only field, automatically completed with the current contract.
Guarantor	Yes	Lookup	Select the customer who acts as a guarantor for the contract.

3. Click the **Save and Close** button at the top right corner of the page.
4. Click the **Insert** button from the **Contract Collateral** section.
5. In the newly displayed **Add Contract Collateral** page, fill in the following fields:



Field	Mandatory	Data Type	Details
Customer / Guarantor	Yes	Lookup	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.

Field	Mandatory	Data Type	Details
Collateral Register	Yes	Lookup	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** A registered collateral can be attached to multiple contracts if the contracts total amount does not exceed the collateral available amount. **IMPORTAN-**

Field	Mandatory	Data Type	Details
			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`. If the status is changed from Active to Released – the status for Bank account changes to Opened (Only for fixed deposit collateral).

Field	Mandatory	Data Type	Details
Collateral Register Value Usage (%)	Yes	Numeric	The percentage to be used from the registered collateral's total value. The percentage is set at banking product level, in the `Collateral Cover Percent` field. You can modify this percentage. As a result, the `Collateral Register Value` and the `Cover Value in Contract Currency` values are automatically recalculated by Core Banking.

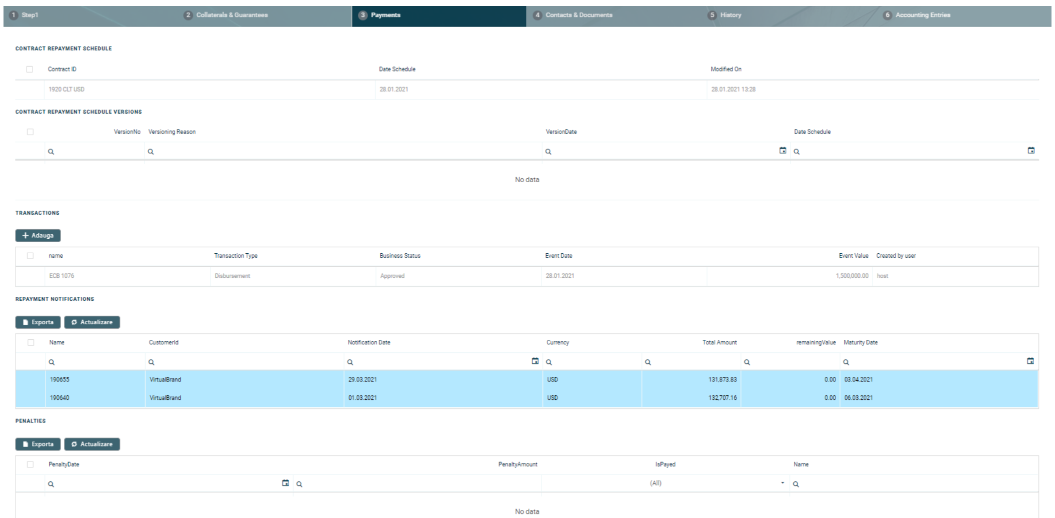
Field	Mandatory	Data Type	Details
Cover Register Value	Yes	Numeric	The value that is taken from collateral, expressed in the collateral's currency. If the collateral is in a different currency than the contract currency, the exchange rate is automatically applied in order to have the available amount correctly calculated. Further, the `Daily recalculation of Collaterals` job runs daily in order to recalculate the available amount for each collateral.
Cover Value in Contract Currency	Yes	Numeric	The cover value converted in the contract's currency at the exchange rate defined in Core Banking.
Mortgage File	No	File	Attach a file relevant for the mortgage.

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

> **NOTE**
> You can send a contract for approval only if Cover Value = Financed Amount * Product Collateral Cover Percent / 100.

Payments Tab

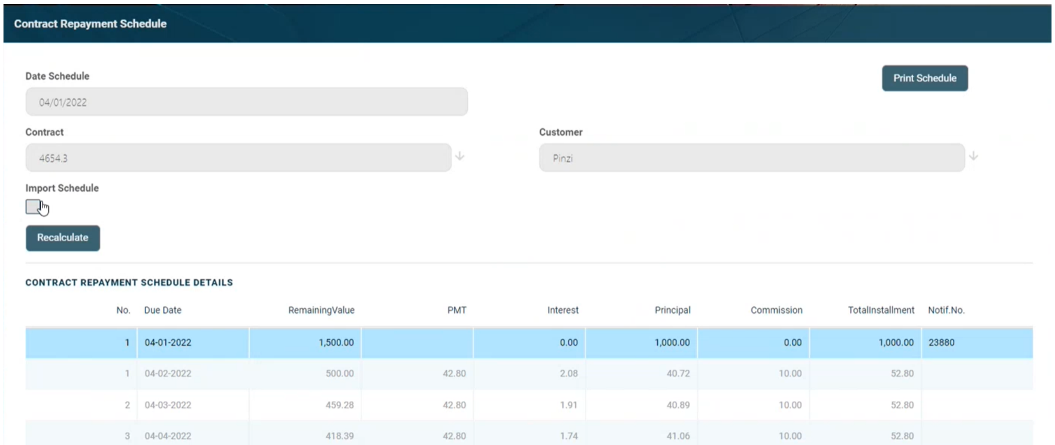
The **Payments** tab contains all the transactions, payments, penalties, bank account operations, repayment schedules, schedule versions, repayment notifications for a contract. Depending on the contact's chosen banking product, only some of these may be displayed. The tab has no information to display in **Draft** status. Approve the contract to perform any contract event. Meaningful payment information is displayed in this tab only after performing transactions on the contract.



Contract Repayment Schedule Section

The **Contract Repayment Schedule** section displays the repayment schedule automatically generated by Core Banking for the approved contract, after performing a disbursement.

The section displays only basic information about the generated schedule, such as contract number, schedule date and last modification date and time. For detailed information and the actual list of the installments, double-click on the schedule. The **Contract Repayment Schedule** page is displayed with the selected schedule and a list with every schedule detail:



You cannot 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.

The following information is displayed about each schedule detail (installment):

Column	Details
No.	The number of the repayment schedule detail.
Due Date	The date when the installment must be paid.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Commission For Undrawn Amount/ or other commissions, depending on the selected contract type	The value of the commission with the specified type calculated for this installment.

Column	Details
Total Repayment	The number of the repayment notification generated for this schedule detail.
Notification No.	The number of the notification where the installment is included, if it 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.

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.

Importing a Repayment Plan Using the Contract Repayment Schedule Page

For cases when the contract needs a schedule that cannot be automatically generated by Core Banking, you can import your custom repayment plan. You can either perform the import at a contract event level (when adding a **Disbursement**, **Early Repayment**, **Payment Holiday**, or **Reschedule Overdues** transaction), or within the **Contract Repayment Schedule** page, for contracts in **Version Draft** status.

To import a custom repayment plan within the **Contract Repayment Schedule** page, perform the following steps:

1. 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*".
2. Click the **Export Schedule Template** button to download a `.xslx` file with the schedule template for this specific contract.
3. Open the downloaded schedule template `.xlsx` file exported from Core Banking and make it editable.
4. Format the **Due Date** column as `Text`

5. 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 your needs.

   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.

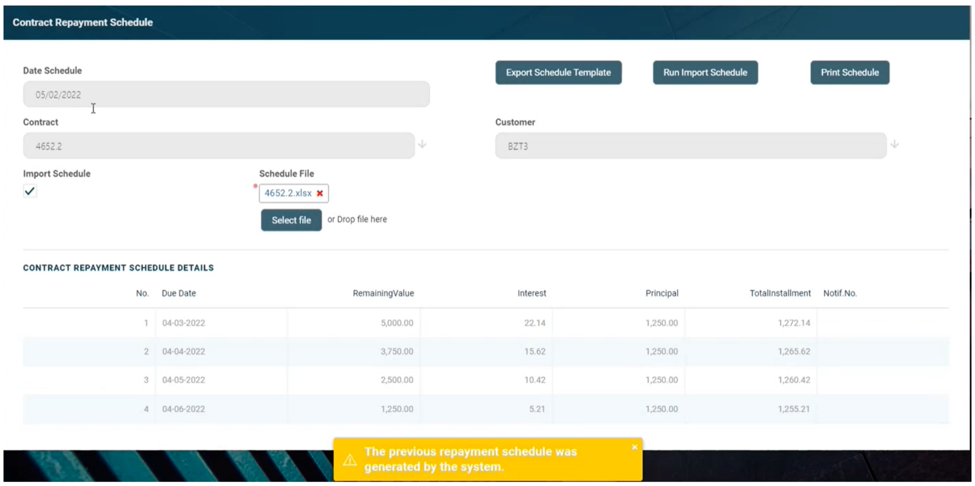
   IMPORTANT!

   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.

6. 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.
7. Back in Core Banking's **Contract Repayment Schedule** page, click **Select File**.
8. 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.

9. Click the **Save and Reload** button at the top right corner of the page. Core Banking performs the validations, making sure that the uploaded file meets all the criteria for a correct, functional schedule.
10. 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.

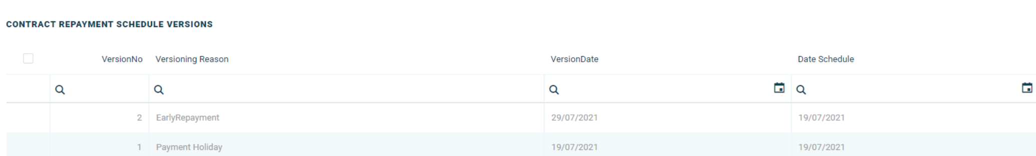


If you click the **Run Import Schedule** button one more time, the values within the **Contract Repayment Schedule Details** section are deleted and reinserted.

Read more about importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Contract Repayment Schedule Versions Section

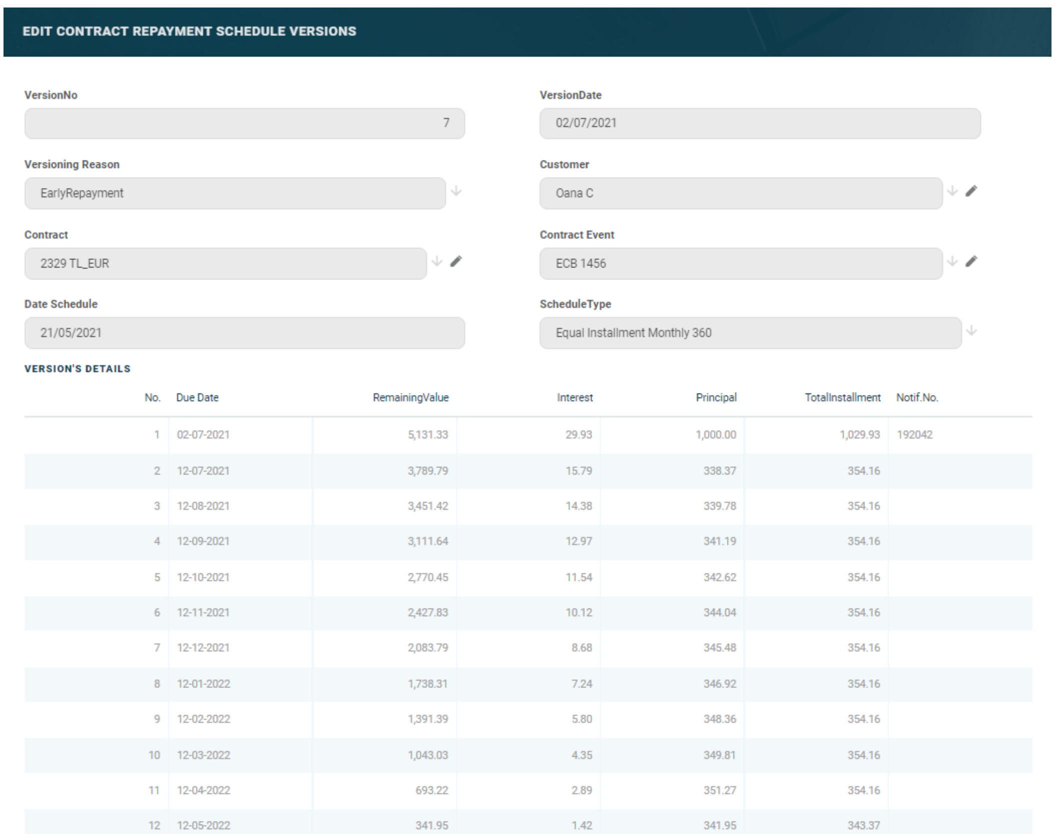
The **Contract Repayment Schedule Versions** section displays the versions of the repayment schedules automatically generated by Core Banking each time when a contract event that changed either the maturity date or the amount of a repayment was performed on the contract. The section is displayed only if such versions exist for the contract.



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.

> **NOTE**
> The most recent repayment schedule version is considered active by Core Banking, while the previous schedule records are kept for historical purposes.

For 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: 7

VersionDate: 02/07/2021

Versioning Reason: EarlyRepayment

Customer: Oana C

Contract: 2329 TL_EUR

Contract Event: ECB 1456

Date Schedule: 21/05/2021

ScheduleType: Equal Installment Monthly 360

VERSION'S DETAILS

No.	Due Date	RemainingValue	Interest	Principal	TotalInstallment	Notif.No.
1	02-07-2021	5,131.33	29.93	1,000.00	1,029.93	192042
2	12-07-2021	3,789.79	15.79	338.37	354.16	
3	12-08-2021	3,451.42	14.38	339.78	354.16	
4	12-09-2021	3,111.64	12.97	341.19	354.16	
5	12-10-2021	2,770.45	11.54	342.62	354.16	
6	12-11-2021	2,427.83	10.12	344.04	354.16	
7	12-12-2021	2,083.79	8.68	345.48	354.16	
8	12-01-2022	1,738.31	7.24	346.92	354.16	
9	12-02-2022	1,391.39	5.80	348.36	354.16	
10	12-03-2022	1,043.03	4.35	349.81	354.16	
11	12-04-2022	693.22	2.89	351.27	354.16	
12	12-05-2022	341.95	1.42	341.95	343.37	

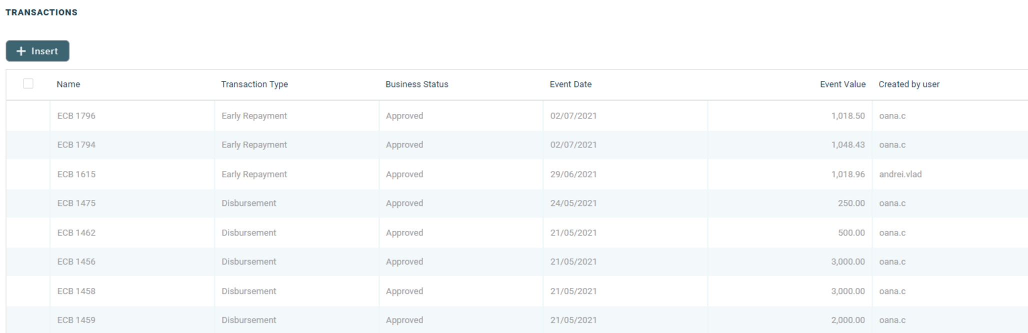
You cannot edit the information displayed on this page.

The following information is displayed about each schedule version:

Column	Details
Version No.	The number of the repayment schedule version.
Version Date	The date when the version was created.
Versioning Reason	The type of contract event that triggered the generation of the version.
Customer	The customer for whom the contract was created.
Contract	The number of the contract for which the repayment schedule version was generated.
Contract Event	The id of the contract event that triggered the generation of the version.
Date Schedule	The date of the previous repayment schedule.
Schedule Type	The type of schedule selected in the contract and used to generate the repayment schedule.
Version's Details List	
No.	The number of the repayment schedule version detail.
Due Date	The date when the installment must be paid.
Remaining Value	The value remaining to be repaid from the contract value at the moment of this installment.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Total Installment	The total value of the installment to be paid.
Notification No.	The number of the notification where the installment is included, if it was already generated.

Transactions Section

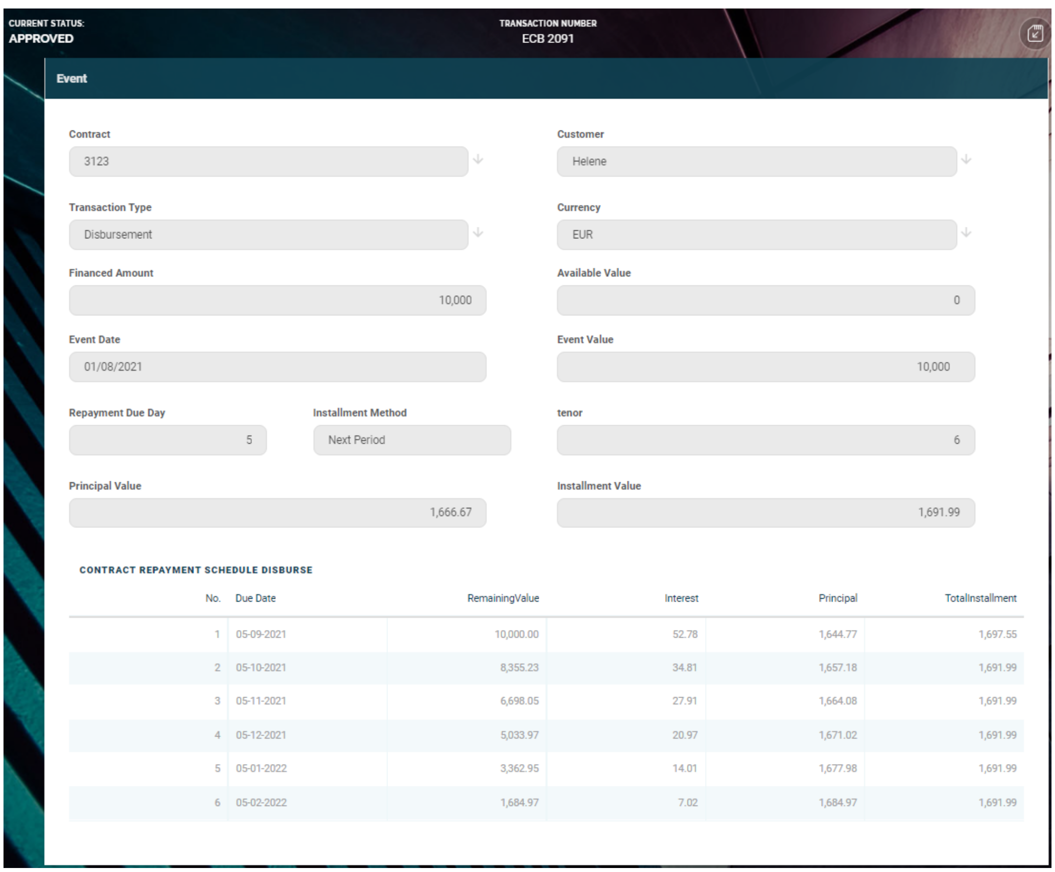
The **Transactions** section displays all the transactions performed at the contract level, in any status. This section only has information if the contract is in **Approved** status and transactions were already created. Read detailed information about contract events and how to add an event on the dedicated Contract Events page.


TRANSACTIONS

+ Insert

Name	Transaction Type	Business Status	Event Date	Event Value	Created by user
ECB 1796	Early Repayment	Approved	02/07/2021	1,018.50	oana.c
ECB 1794	Early Repayment	Approved	02/07/2021	1,048.43	oana.c
ECB 1615	Early Repayment	Approved	29/06/2021	1,018.96	andrei.vlad
ECB 1475	Disbursement	Approved	24/05/2021	250.00	oana.c
ECB 1462	Disbursement	Approved	21/05/2021	500.00	oana.c
ECB 1456	Disbursement	Approved	21/05/2021	3,000.00	oana.c
ECB 1458	Disbursement	Approved	21/05/2021	3,000.00	oana.c
ECB 1459	Disbursement	Approved	21/05/2021	2,000.00	oana.c

The section displays only basic information about the transaction, such as event number, status, date, transaction type, value and the user who created it. For detailed information about the transaction and the repayment schedule generated for the approved event, double-click on the schedule. The **Event** page is displayed with the selected event and the generated repayment schedule for the event:


CURRENT STATUS:
APPROVED

TRANSACTION NUMBER
ECB 2091

Event

Contract: 3123
Customer: Helene
Transaction Type: Disbursement
Currency: EUR
Financed Amount: 10,000
Available Value: 0
Event Date: 01/08/2021
Event Value: 10,000
Repayment Due Day: 5
Installment Method: Next Period
tenor: 6
Principal Value: 1,666.67
Installment Value: 1,691.99

CONTRACT REPAYMENT SCHEDULE DISBURSE

No.	Due Date	RemainingValue	Interest	Principal	TotalInstallment
1	05-09-2021	10,000.00	52.78	1,644.77	1,697.55
2	05-10-2021	8,355.23	34.81	1,657.18	1,691.99
3	05-11-2021	6,698.05	27.91	1,664.08	1,691.99
4	05-12-2021	5,033.97	20.97	1,671.02	1,691.99
5	05-01-2022	3,362.95	14.01	1,677.98	1,691.99
6	05-02-2022	1,684.97	7.02	1,684.97	1,691.99

You cannot edit the information displayed on this page.

The following information is displayed about each event, with some variations depending on the event type:

Column	Details
Contract	The number of the contract for which the transaction is performed.
Customer	The customer for whom the contract was created.
Transaction Type	The type of the transaction that is performed on the contract.
Currency	The currency of the contract.
Financed Amount	The amount financed by the contract.
Available Value	The amount still available in the contract.
Event Date	The date when the event was created.
Event Value	The amount of the transaction.
Repayment Due Day	The day of the month when the repayment is due.
Installment Method	The method of calculating the installment value.
Tenor	The tenor of the contract in months.
Principal Value	The amount of the principal of the contract.
Installment Value	The amount of the installment.
Contract Repayment Schedule section	
No.	The number of the repayment schedule version detail.
Due Date	The date when the installment must be paid.
Remaining Value	The value remaining to be repaid from the contract value at the moment of this installment.
Interest	The value of the interest calculated for this installment.
Principal	The value of the principal calculated for this installment.
Total Installment	The total value of the installment to be paid.

NOTE

In order to add transactions to an approved contract, the transactions must be previously defined and associated with the banking product in the **Banking Product** page > **Associated Transactions** tab.

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.

Repayment Notifications Section

The **Repayment Notifications** section displays 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

Export Refresh

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

5 10 20 1 2 3 4

Within the list, the repayment notifications are color coded as follows:

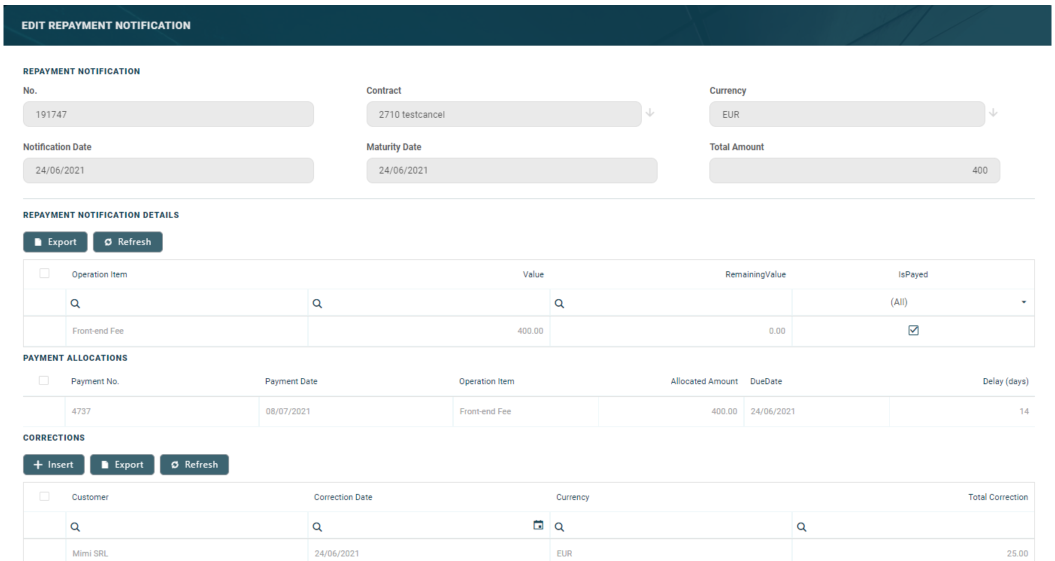
- Repayment notifications highlighted in blue are already paid, allocated or closed to payment.
- Repayment notifications not highlighted (displayed on a white background) remain to be paid.

The following information is displayed about each notification:

Field	Description
No.	The number of the repayment notification record.
Customer	The customer for whom the contract was created.
Date	The date when the notification was generated.
Currency	The currency of the contract.
Amount	The amount of the installment for which the notification was generated.
Remaining	The amount from the installment that remains to be paid.

Field	Description
Maturity Date	The maturity date of the notification. This is calculated adding the value of the `Grace period for repayment` field at the banking product level to the notification date.

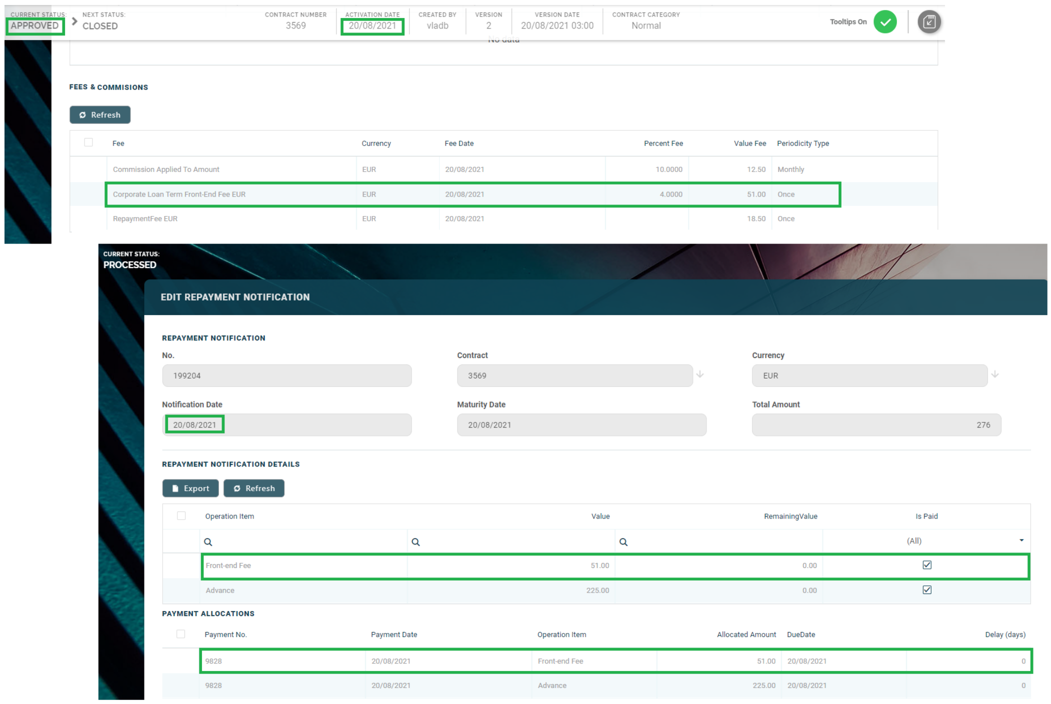
For detailed information about a repayment notification, double-click on the desired record. The **Repayment Notification** page is displayed with the selected notification:



You cannot edit the information displayed on this page. Read detailed information about repayment notifications on the dedicated Repayment Notifications page.

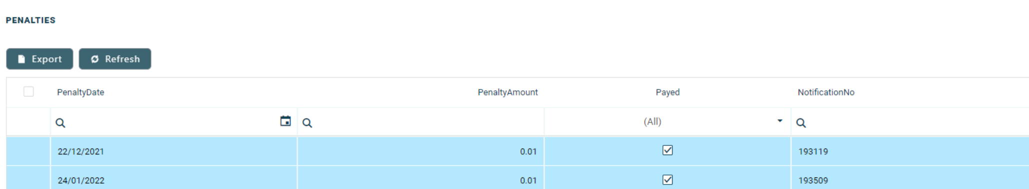
IMPORTANT!

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.

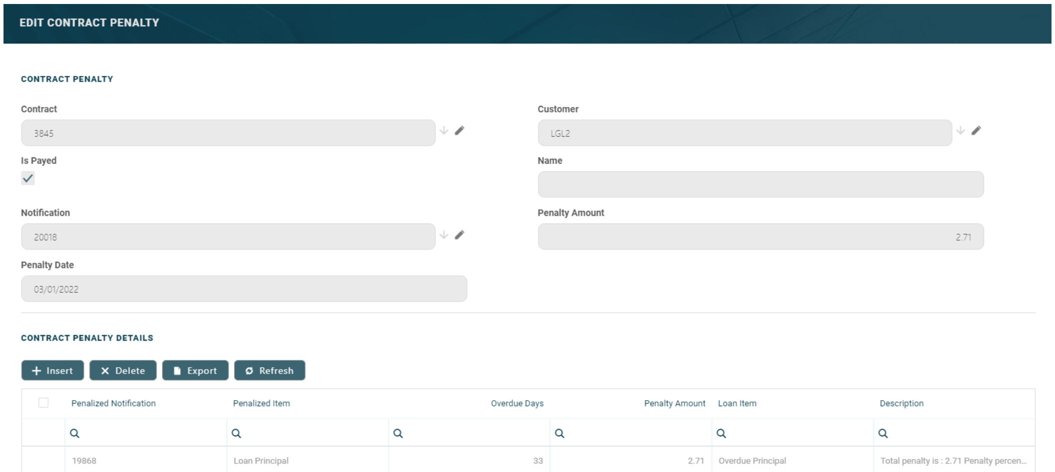


Penalties Section

The **Penalties** section displays the penalty interest applicable to the contract, 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, configured in the Overview tab.



The section displays only basic information about the penalties, such as penalty date, amount, notification number and whether it was paid or not. For detailed information, double-click on the desired penalty record. The **Contract Penalty** page is displayed with the selected penalty's details:

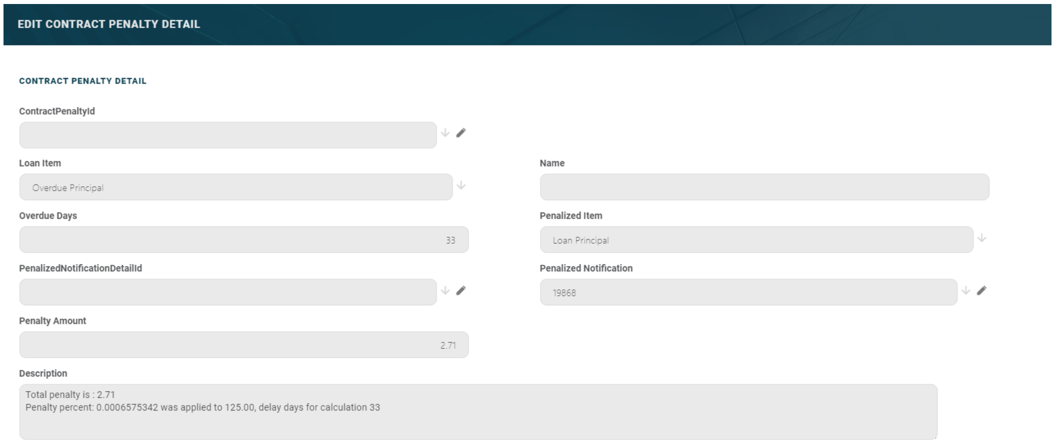


You cannot edit the information displayed on this page.

The following information is displayed about each penalty record:

Column	Details
Contract	The number of the contract for which the transaction is performed.
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.
Contract Penalty Details section	
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.

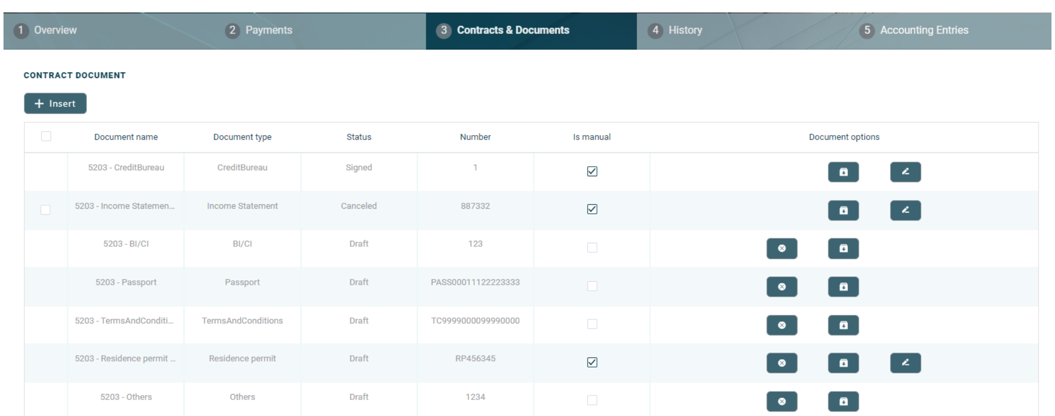
You can view the details of the penalty on a separate page, named **Edit Contract Penalty Detail**, if you double-click the detail record:



You cannot edit the information displayed on this page.

Contracts & Documents Tab

This section holds documents related to the contract. It is meant to be the electronic folder of the contract. The section 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.

On the **Contracts & Documents** page, you can:

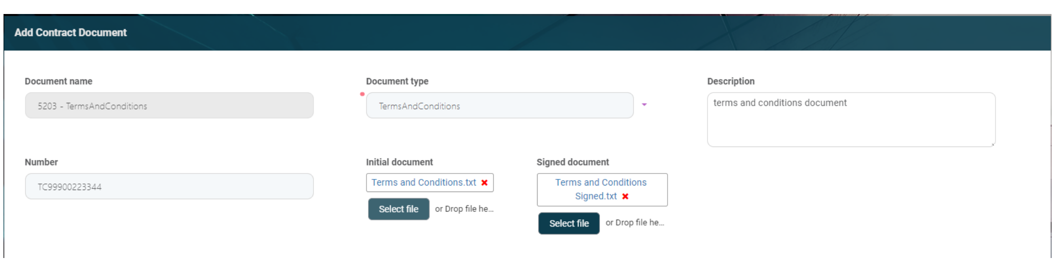
- Add a new contract document record by clicking the **Insert** button on the top left, under the **Contract Document** section.
- Edit a contract document from the list by double-clicking it. You can only edit the fields of a contract document in **Draft** status. For contract document records in **Signed** or **Canceled** status, you can view the record's details.
- Delete a contract document by clicking the **Delete record** button next to the record. Only contract documents in **Draft** status can be deleted. Once **Signed**, a contract document should be canceled if the document is not to be used within the contract.
- Download the initial document by clicking the **Initial document** button next to the record. Open the downloaded file to view its content.
- Download the signed document by clicking the **Signed document** button next to the record, if a signed document was uploaded for that contract document 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.

Adding Contract Documents

To insert a document to the contract, click the **Insert** button in the **Contract Document** section. The **Add Contract Document** page is displayed.



IMPORTANT!
You can't insert documents for contracts in **Contract Closed** or **Contract Version Closed** statuses.

Fill in the following fields:

Field	Mandatory	Data Type	Details
Document name	No	Text	Automatically completed with the name of the document. Core Banking names the document record using the contract name + '-' + the selected document type + '-' + a unique document increment. For example, 5203 - Income Statement - 60.
Document type	Yes	Option set	Select the type of the document.
Description	No	Text Area	Enter the description of the document.
Number	No	Text	Enter the number of the document, if the document has an external identifier number.
Initial document	No	File	Select 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.

Field	Mandatory	Data Type	Details
Signed Document	No	File	Select 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.

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

HINT

You can also add, update, and approve contract document records through API integration, using the `FTOS_CB_AddUpdateContractDocument` and `FTOS_CB_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!

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. 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.

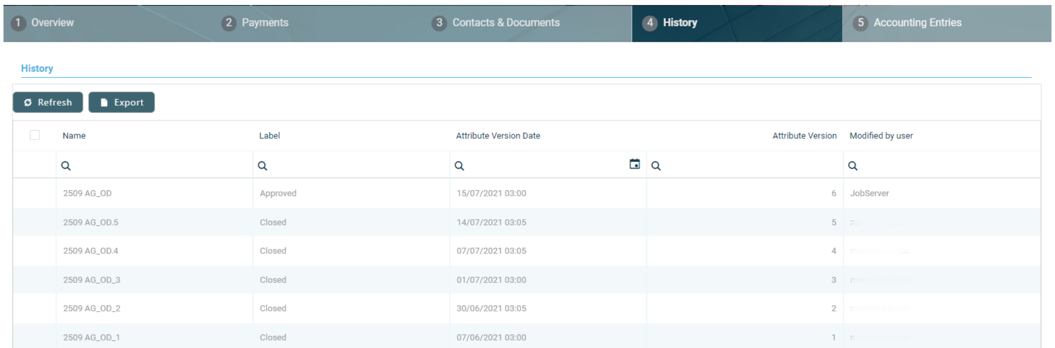
Contract Document Validations

Core Banking performs the following validations for contract document records:

- The uploaded files' specifications follow High Productivity Fintech Infrastructure'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.

History Tab

The **History** tab displays the versions of the contract, along with workflow status and the user who modified the record. A contract can have only one **Draft** version, one **Current** version, but it may have multiple **History** versions, which are displayed in this section. In this tab, you can track the contract's life cycle and review older versions that are no longer active (for details, see Contract Versioning).



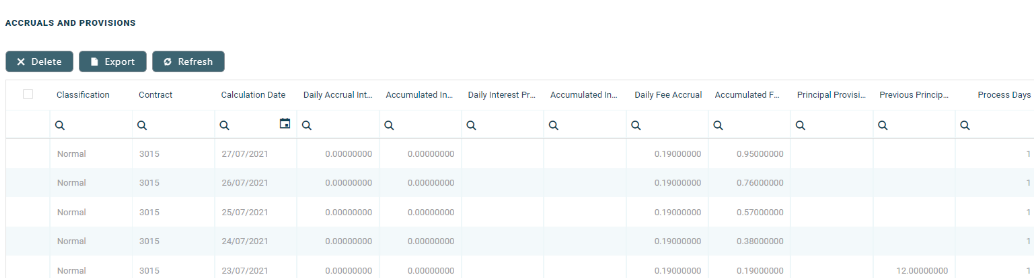
Name	Label	Attribute Version Date	Attribute Version	Modified by user
2509 AG_OD	Approved	15/07/2021 03:00	6	JobServer
2509 AG_OD.5	Closed	14/07/2021 03:05	5	
2509 AG_OD.4	Closed	07/07/2021 03:05	4	
2509 AG_OD_3	Closed	01/07/2021 03:00	3	
2509 AG_OD_2	Closed	30/06/2021 03:05	2	
2509 AG_OD_1	Closed	07/06/2021 03:00	1	

Accounting Entries Tab

The **Accounting Entries** tab holds all the accounting entries, accounting totals, and accruals and provisions recorded for a contract. These records are automatically generated by the system, after performing transactions for an approved contract.

Accruals and Provisions Section

The records containing daily accrual and provisions are displayed in the **Accruals and Provisions** section. Generated automatically by the system respecting the definition of the contract, product dimensions, system parameters and jobs.



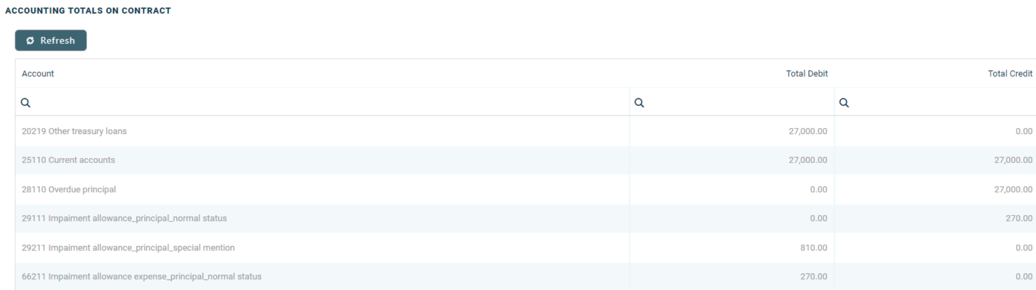
Classification	Contract	Calculation Date	Daily Accrual Int...	Accumulated In...	Daily Interest Pr...	Accumulated In...	Daily Fee Accrual	Accumulated F...	Principal Provisi...	Previous Princip...	Process Days
Normal	3015	27/07/2021	0.00000000	0.00000000			0.19000000	0.95000000			1
Normal	3015	26/07/2021	0.00000000	0.00000000			0.19000000	0.76000000			1
Normal	3015	25/07/2021	0.00000000	0.00000000			0.19000000	0.57000000			1
Normal	3015	24/07/2021	0.00000000	0.00000000			0.19000000	0.38000000			1
Normal	3015	23/07/2021	0.00000000	0.00000000			0.19000000	0.19000000		12.00000000	1

The following information is displayed for each accrual and provision entry:

Column	Details
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.

Accounting Totals on Contract Section

The **Accounting Totals on Contract** section provides an overview of the total amounts specified in accounting records. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.



ACCOUNTING TOTALS ON CONTRACT

Refresh

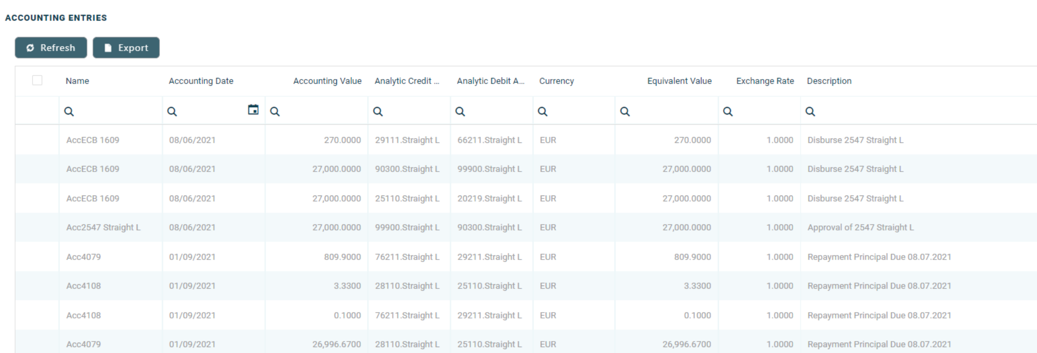
Account	Total Debit	Total Credit
20219 Other treasury loans	27,000.00	0.00
25110 Current accounts	27,000.00	27,000.00
28110 Overdue principal	0.00	27,000.00
29111 Impaiment allowance_principal_normal status	0.00	270.00
29211 Impaiment allowance_principal_special mention	810.00	0.00
66211 Impaiment allowance expense_principal_normal status	270.00	0.00

The following information is displayed for each total amount:

Column	Details
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.

Accounting Entries Section

The **Accounting Entries** section reflects the accounting for the transactions related to the loan contract. The accounting entries are generated by the **Generate Accounting Entries** service in the Core Banking END OF DAY (CB) daily job . The job runs automatically at the end of day.



ACCOUNTING ENTRIES

Refresh Export

Name	Accounting Date	Accounting Value	Analytic Credit ...	Analytic Debit A...	Currency	Equivalent Value	Exchange Rate	Description
AccECB 1609	08/06/2021	270.0000	29111.Straight L	66211.Straight L	EUR	270.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	90300.Straight L	99900.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
AccECB 1609	08/06/2021	27,000.0000	25110.Straight L	20219.Straight L	EUR	27,000.0000	1.0000	Disburse 2547 Straight L
Acc2547 Straight L	08/06/2021	27,000.0000	99900.Straight L	90300.Straight L	EUR	27,000.0000	1.0000	Approval of 2547 Straight L
Acc4079	01/09/2021	809.9000	76211.Straight L	29211.Straight L	EUR	809.9000	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	3.3300	28110.Straight L	25110.Straight L	EUR	3.3300	1.0000	Repayment Principal Due 08.07.2021
Acc4108	01/09/2021	0.1000	76211.Straight L	29211.Straight L	EUR	0.1000	1.0000	Repayment Principal Due 08.07.2021
Acc4079	01/09/2021	26,996.6700	28110.Straight L	25110.Straight L	EUR	26,996.6700	1.0000	Repayment Principal Due 08.07.2021

The following information is displayed for each accounting entry:

Column	Details
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.

Column	Details
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.

Possible Changes in New Contract Versions

The changes that can be made to a new version of an unsecured/ secured loan contract are:

- The **Financed Amount** can either be increased or decreased. The amount can be decreased with a number less than or equal to the Available amount. Financed amount can be increased up to the maximum value specified on the banking product.
- **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 on the banking product.
- **Schedule type** can be changed with ant other type set on the banking product.
- **Contract period** cannot exceed the maximum set on the banking product.
- **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 on the banking product.
- After any of the above changes, in order to approve the new version of contract, you must recalculate the **Contract Repayment Schedule**.

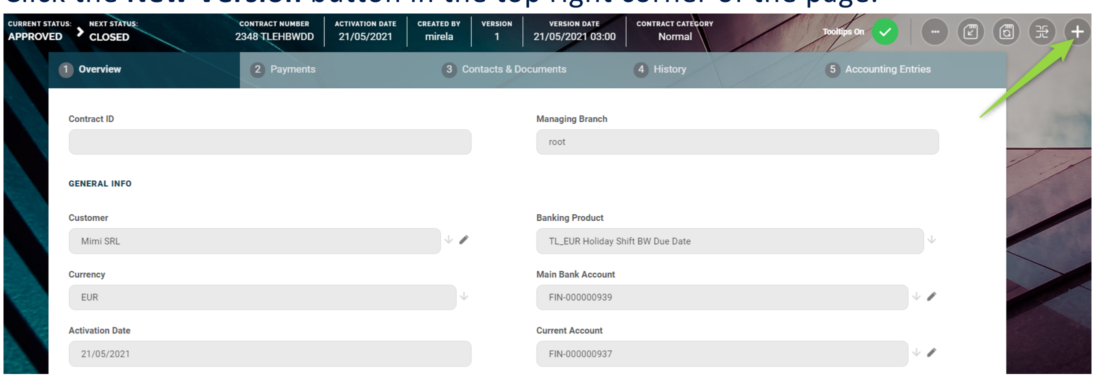
Creating New Versions of Existing Contracts

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

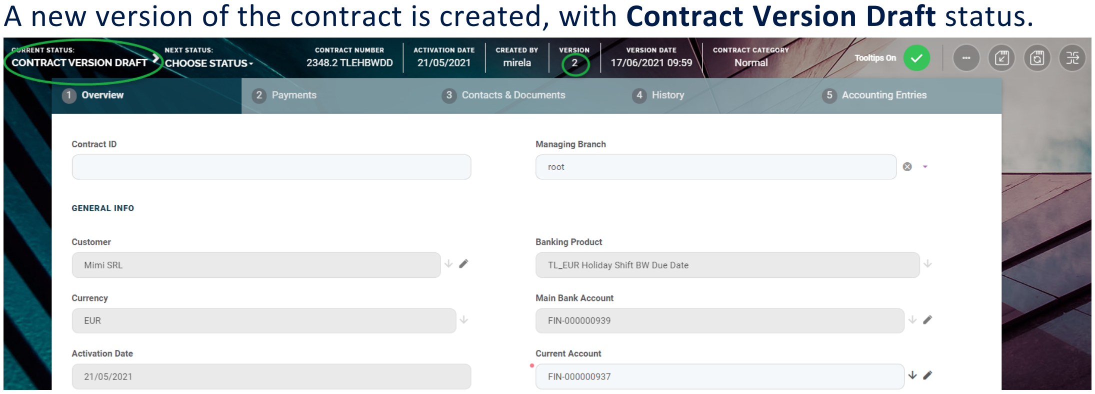
> **NOTE**
> New versions are automatically created when the payment schedule is modified. When versioning a contract that has an imported repayment plan, the schedule recalculation is not mandatory. You can choose between recalculating and importing an updated repayment plan.

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

1. Double-click the contract record selected for updates.
2. Click the **New Version** button in the top right corner of the page.



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



3. Edit the desired fields in the **Overview** tab. You can only edit a set of fields for contracts based on specific banking products. Consult the Possible Changes on New Contract Versions chapter.
4. Click the **Save and Reload** button at the top right corner of the page.

If the version draft is approved, 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 Contract Versions

For new versions of contracts based on secured or unsecured loan banking products:

- 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.

For new versions of contracts based on overdraft or current account with overdraft banking products:

- 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.

Contract Events

Contract events are transactions/ changes performed at the contract level. Such events are disbursements, early repayments, transfers of funds between the customer's accounts, and so on.

In a contract based on a specific banking product, you can only add events with the transaction types predefined at that banking product level. Other changes may be performed by versioning the contract. This page covers those changes enabled via events, created via the **Insert** button above the **Transactions** section in the **Contract** > **Payments** tab.

IMPORTANT!
Only contracts with **Approved** status allow you to perform transactions.

The transactions must be previously defined and associated with the banking product in the **Banking Product** page > **Associated Transactions** tab.

Only events with **Approved** status operate changes at the contract level.

Event Statuses

An event record has the following statuses, visible in the top left corner of the **Event** page:

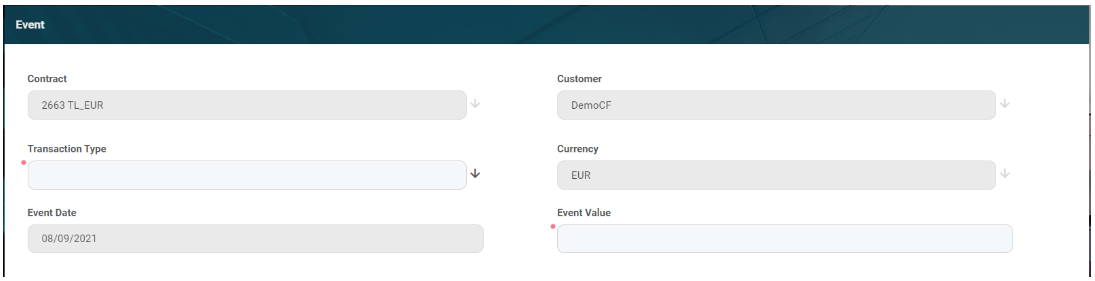
- **Draft** - the status of a newly created event record that was not yet sent for approval. The event value is not applied to the contract while the event is still in this status. While in this status, you can edit some fields. Approve after editing all the necessary details.
- **Approved** - the status 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.

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

Adding Events To Approved Contracts

In order to add events to a contract, follow these steps:

1. In FintechOS Portal, on the **Contracts List** page, 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. Click the **Insert** button above the **Transactions** section. The **Event** page is displayed.



HINT

You can also add events through API calls, using the Core Banking endpoints. Read more about these endpoints in the Core Banking Developer Guide.

5. Fill in the following fields, common to every transaction type, noting that the fields that are not mandatory, are read-only:

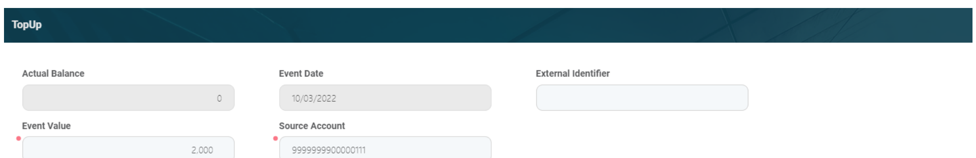
Field	Mandatory	Data Type	Details
Contract	No	Lookup	Automatically completed with the selected contract's number. You cannot edit this field.
Customer	No	Lookup	Automatically completed with the selected contract's customer. You cannot edit this field.

Field	Mandatory	Data Type	Details
Currency	No	Lookup	Automatically completed with the selected contract's currency. You cannot edit this field.
Event Date	No	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.
Transaction Type	Yes	Lookup	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. Read here more information about transaction types. **NOTE** Depending on the selected transaction type, a series of new fields are displayed that require to be filled in.

6. Click the **Save and Reload** button at the top right corner of the page.
   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.
7. Depending on the selected transaction type, fill in the following fields, noting that the fields that are not mandatory, are read-only:

Top-Up Account

It represents adding amounts to the account before the value drains down to zero.

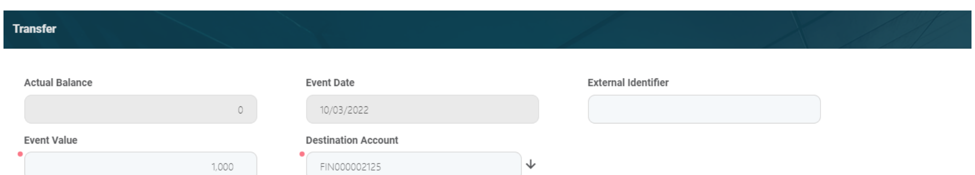


Field	Mandatory	Data Type	Details
Actual Balance	No	Numeric	This field displays the available balance of the account associated with the contract. You cannot edit this field.
Event Date	No	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.

Field	Mandatory	Data Type	Details
External Identifier	No	Text	Enter an external identifier of the transaction, if available.
Event Value	Yes	Numeric	Enter the value of the transaction.
Source Account	Yes	Text	Enter the source account for the respective amount.

Transfer between my bank accounts

It represents the process of moving funds between the same customer's bank accounts.

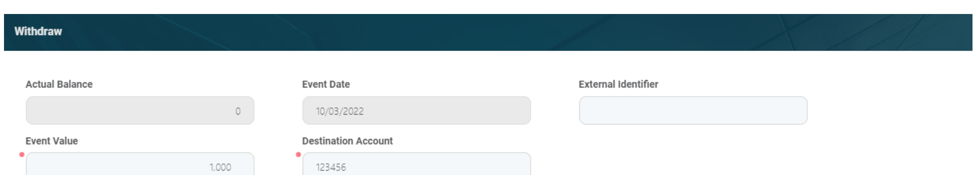


Field	Mandatory	Data Type	Details
Actual Balance	No	Numeric	This field displays the available balance of the account associated with the contract. You cannot edit this field.

Field	Mandatory	Data Type	Details
Event Date	No	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.
External Identifier	No	Text	Enter an external identifier of the transaction, if available.
Event Value	Yes	Numeric	Enter the value of the transaction.
Destination Account	Yes	Lookup	Select the destination account from the list of accounts that belong to the contract's customer.

Withdraw

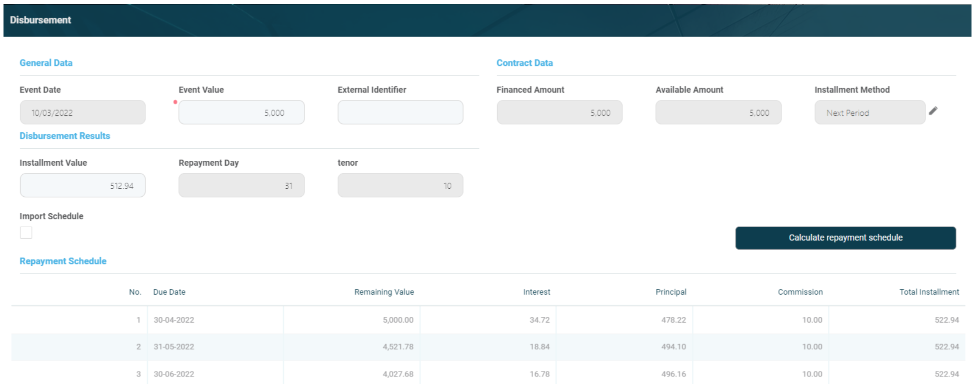
It represents removing funds from a bank account.



Field	Mandatory	Data Type	Details
Actual Balance	No	Numeric	This field displays the available balance of the account associated with the contract. You cannot edit this field.
Event Date	No	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.
External Identifier	No	Text	Enter an external identifier of the transaction, if available.
Event Value	Yes	Numeric	Enter the value of the transaction.
Destination Account	Yes	Lookup	Select the destination account from the list of accounts that belong to the contract's customer.

Disbursement

It represents the actual delivery of funds from a bank account to the customer. The repayment schedule gets calculated or recalculated.



Field	Mandatory	Data Type	Details
General Data			
Event Date	No	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.
External Identifier	No	Text	Enter an external identifier of the transaction, if available.
Event Value	Yes	Numeric	Enter the value of the transaction. Other value fields are automatically calculated based on the event value and their values are displayed.

Field	Mandatory	Data Type	Details
Contract Data			
Financed Amount	No	Numeric	This field displays the contract's financed amount. You cannot edit this field.
Available Value	No	Numeric	This field displays the amount still available within the contract. You cannot edit this field.
Installment Method	No	Lookup	This field displays the contract's selected installment method. You cannot edit this field.
Disbursement Results			
Installment Value	Yes	Numeric	This field displays the installment value calculated for the entered event value. You can modify this value.

Field	Mandatory	Data Type	Details
Repayment Due Day	No	Whole Number	This field displays the day of the month when the repayment is due, if it was specified previously. You cannot edit this field.
Tenor	No	Whole Number	This field displays the duration left in the contract. You cannot edit this field.
Import Schedule			

Field	Mandatory	Data Type	Details
Import Schedule	No	Bool	This field specifies whether you are importing a custom repayment plan (for the selected checkbox), or the schedule generated by the system (for the checkbox left unselected) is to be used further within the contract. The checkbox is unselected by default, meaning that the schedule generated automatically by the system is to be used after approving the event. Select the checkbox to display the **Export Schedule Template** and the **Schedule File - Select File** buttons, otherwise, these buttons are not displayed. Read more about

Field	Mandatory	Data Type	Details
			importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Field	Mandatory	Data Type	Details
Schedule File - Select File	No	File	This field contains the imported custom repayment plan. New events don't contain the file. In order for a file to be displayed here, you should first select the desired file with your custom schedule. Click **Select File** and, in the newly displayed Explorer window, browse for the `.xlsx` file that contains the custom schedule, then click **Open**. **NOTE** Before selecting the file, make sure you fill in the custom schedule

Field	Mandatory	Data Type	Details
			according to the schedule template exported from Core Banking (click the **Export Schedule Template** button to download an `.xslx` file with the approved schedule template). Save the event record in order to save the schedule file to Core Banking, then click **Run Import Schedule** to

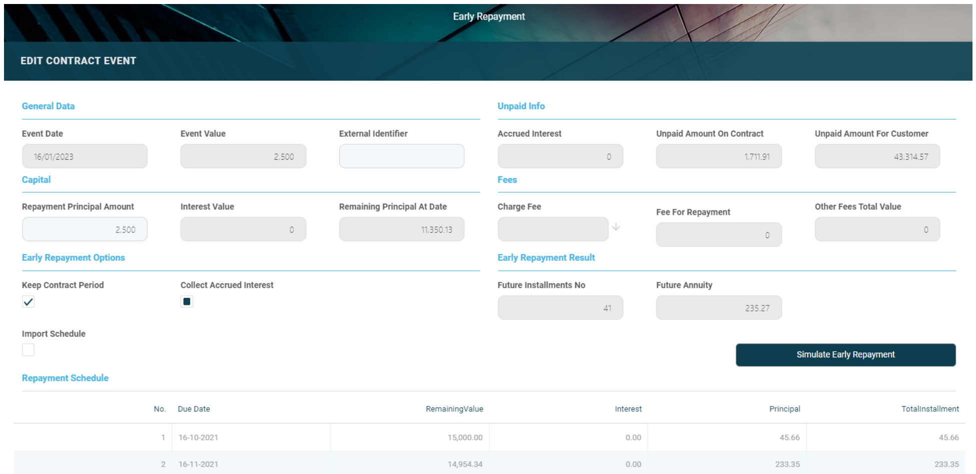
Field	Mandatory	Data Type	Details
			perform the import of the new custom schedule to the contract through the event. Remember to approve the event for the new repayment plan to be in effect on the contract. Read more about importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Early Repayment

It represents the early return of funds previously borrowed from a lender. The repayment schedule is updated. Only for contracts that have an approved disbursement event.

NOTE

When an approved early repayment event covers a contract's entire outstanding amount resulting in zero amounts on the contract, that contract is automatically closed by Core Banking.



Field	Mandatory	Data Type	Details
General Data			
Event Date	Yes	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.

Field	Mandatory	Data Type	Details
Event Value	Yes	Numeric	This field displays the value of the transaction, calculated and displayed after saving the record, based on the information filled in a series of other fields. You cannot edit this field. For an early repayment transaction, `Event Value = Repayment Principal + Accrued Interest + Fees`. The `Accrued Interest` value is added when the `Collect Accrued Interest` field is selected.
External Identifier	No	Text	Enter an external identifier of the transaction, if available.
Unpaid Info			

Field	Mandatory	Data Type	Details
Accrued Interest	No	Numeric	This field displays the interest accrued up until the event date for an early repayment contract event. You cannot edit this field.
Unpaid Amount On Contract	No	Numeric	This field is displayed after saving the record. It shows the value of the unpaid amount still on the contract. You cannot edit this field.
Unpaid Amount For Customer	No	Numeric	This field is displayed after saving the record. It shows the value of the unpaid amount for the customer. You cannot edit this field.
Capital			
Repayment Principal Amount	Yes	Numeric	This field displays the principal amount to be repaid with this event. You can modify this value.

Field	Mandatory	Data Type	Details
Interest Value	Yes	Numeric	This field displays the interest value applicable to the payment. You cannot edit this field.
Remaining Principal At Date	Yes	Numeric	This field displays the remaining value of the principal at the current date. You can modify this value.
Fees			
Charge Fee	No	Lookup	This field displays the transaction fee applicable for a repayment transaction. See Transaction Fees for more details. You cannot edit this field.

Field	Mandatory	Data Type	Details
Repayment Fee Percent	No	Lookup	This field displays the repayment fee percentage applicable for the contract. Depending on the `ManualRepaymentFee` Core Banking system parameter's value, the system may allow you to change the percentage. See Transaction Fees for more details.
Fee For Repayment	No	Lookup	This field displays the repayment fee value applicable for the contract. Depending on the `ManualRepaymentFee` Core Banking system parameter's value, the system may allow you to change the value. See Transaction Fees for more details.

Field	Mandatory	Data Type	Details
Other Fees Total Value	Yes	Numeric	This field displays other fees and commissions applicable to the payment. You cannot edit this field.
Early Repayment Options			
Keep Contract Period	No	Bool	This field displays whether the system should keep the period of the contract (if the checkbox is selected) or recalculate it. You can modify this checkbox.

Field	Mandatory	Data Type	Details
Collect accrued interest	No	Boolean	This field indicates the behavior of the accrued interest on the early repayment contract events, respectively if the payment schedule type calculation should collect the interest accrued up to date or not. If the checkbox is not selected, then `Accrued Interest` = the value of accrued interest until the event's date. If the checkbox is selected, then the `Accrued Interest` = 0.00. The payment schedule projection takes into consideration both the payment schedule type defined at the banking product level, and whether to collect the

Field	Mandatory	Data Type	Details
			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.
Accrued interest	No	Numeric	This field displays the interest accrued up until the event date for an early repayment contract event. You cannot edit this field.
Early Repayment Result			
Future Installments No	Yes	Whole Number	This field displays the number of installments to be paid in the future. You cannot edit this field.

Field	Mandatory	Data Type	Details
Future Annuity	Yes	Numeric	This field displays the future value of the installment as recalculated after this payment. You cannot edit this field.
Future Principal For Installment	Yes	Numeric	This field displays the future value of the principal as recalculated after this payment. You cannot edit this field.
Import Schedule			

Field	Mandatory	Data Type	Details
Import Schedule	No	Bool	This field specifies whether you are importing a custom repayment plan (for the selected checkbox), or the schedule generated by the system (for the checkbox left unselected) is to be used further within the contract. The checkbox is unselected by default, meaning that the schedule generated automatically by the system is to be used after approving the event. Select the checkbox to display the **Export Schedule Template** and the **Schedule File - Select File** buttons, otherwise, these buttons are not displayed. Read more about

Field	Mandatory	Data Type	Details
			importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Field	Mandatory	Data Type	Details
Schedule File - Select File	No	File	This field contains the imported custom repayment plan. New events don't contain the file. In order for a file to be displayed here, you should first select the desired file with your custom schedule. Click **Select File** and, in the newly displayed Explorer window, browse for the `.xlsx` file that contains the custom schedule, then click **Open**. **NOTE** Before selecting the file, make sure you fill in the custom schedule

Field	Mandatory	Data Type	Details
			according to the schedule template exported from Core Banking (click the **Export Schedule Template** button to download an `.xslx` file with the approved schedule template). Save the event record in order to save the schedule file to Core Banking, then click **Run Import Schedule** to perform the import of

Field	Mandatory	Data Type	Details
			the new custom schedule to the contract through the event. Remember to approve the event for the new repayment plan to be in effect on the contract. Read more about importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Returned Amount or Goods

Only for contracts that have an approved disbursement event. The transaction through which a customer returns all or part of a loan or mortgage in a short while after contract creation and the commissions already paid by the customer as front-end fees marked as returnable are paid back.

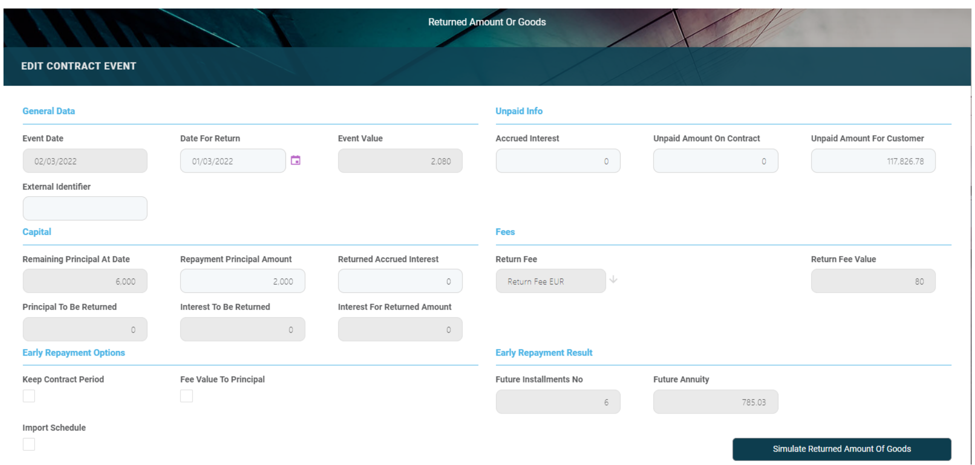
It only accepts `Return Fee` commission types. Upon transaction approval, a new contract version is automatically created.

Business Information

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.

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.



Field	Mandatory	Data Type	Details
General Data			

Field	Mandatory	Data Type	Details
Event Date	Yes	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.
Date For Return	Yes	Invariant Date	The date of the return. By default = `Activation Date`. You cannot edit this field. It is validated against `Activation Date` and `Current Date` (it cannot be before `Activation Date` and after `Current Date`).

Field	Mandatory	Data Type	Details
Event Value	Yes	Numeric	The value of the transaction, calculated and displayed after saving the record, based on the information filled in a series of other fields. For a Returned Amount or Goods transaction, `Event Value = Principal + Commission Value + Interest To Be Returned`.
External Identifier	No	Text	An external identifier of the transaction, if available.
Unpaid Info			
Accrued Interest	No	Numeric	This field displays the interest accrued up until the event date for an early repayment contract event. You cannot edit this field.

Field	Mandatory	Data Type	Details
Unpaid Amount On Contract	No	Numeric	This field is displayed after saving the record. It shows the value of the unpaid amount still on the contract. You cannot edit this field.
Unpaid Amount For Customer	No	Numeric	This field is displayed after saving the record. It shows the value of the unpaid amount for the customer. You cannot edit this field.
Capital			
Repayment Principal Amount	Yes	Numeric	This field displays the principal amount to be repaid with this event. You can modify this value.
Principal To Be Returned	Yes	Numeric	This field displays the principal to be returned with this event. You cannot edit this field.

Field	Mandatory	Data Type	Details
Remaining Principal At Date	Yes	Numeric	This field displays the remaining value of the principal at the current date. You can modify this value.
Returned Accrued Interest	Yes	Numeric	This field displays the returned accrued interest. You can modify this value.
Interest For Returned Amount	Yes	Numeric	This field displays the interest for the returned amount. You cannot edit this field.
Interest To Be Returned	Yes	Numeric	This field displays the interest to be returned with this event. You cannot edit this field.
Fees			

Field	Mandatory	Data Type	Details
Return Fee	Yes	Lookup	This field displays the transaction fee applicable for a Returned Amount or Goods transaction on this contract. See Transaction Fees for more details. You cannot edit this field.
Return Fee Percent	Yes	Lookup	This field displays the return fee percentage applicable for the contract. You cannot edit this field.
Return Fee Value	Yes	Lookup	This field displays the repayment fee value applicable for the contract. You cannot edit this field.
Early Repayment Options			

Field	Mandatory	Data Type	Details
Keep Contract Period	No	Bool	This field displays whether the system should keep the period of the contract (if the checkbox is selected) or recalculate it. You can modify this checkbox.
Fee Value To Principal	No	Bool	This field displays whether the value of the return fee should be applied to the principal (if the checkbox is selected), using its value to include it in the repayment amount and diminishing the outstanding principal, or not. You can modify this checkbox.
Early Repayment Result			
Future Installments No	Yes	Whole Number	This field displays the number of installments to be paid in the future. You cannot edit this field.

Field	Mandatory	Data Type	Details
Future Annuity	Yes	Numeric	This field displays the future value of the installment as recalculated after this payment. You cannot edit this field.
Future Principal For Installment	Yes	Numeric	This field displays the future value of the principal as recalculated after this payment. You cannot edit this field.
Import Schedule			

Field	Mandatory	Data Type	Details
Import Schedule	No	Bool	This field specifies whether you are importing a custom repayment plan (for the selected checkbox), or the schedule generated by the system (for the checkbox left unselected) is to be used further within the contract. The checkbox is unselected by default, meaning that the schedule generated automatically by the system is to be used after approving the event. Select the checkbox to display the **Export Schedule Template** and the **Schedule File - Select File** buttons, otherwise, these buttons are not displayed. Read more about

Field	Mandatory	Data Type	Details
			importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Field	Mandatory	Data Type	Details
Schedule File - Select File	No	File	This field contains the imported custom repayment plan. New events don't contain the file. In order for a file to be displayed here, you should first select the desired file with your custom schedule. Click **Select File** and, in the newly displayed Explorer window, browse for the `.xlsx` file that contains the custom schedule, then click **Open**. **NOTE** Before selecting the file, make sure you fill in the custom

Field	Mandatory	Data Type	Details
			schedule according to the schedule template exported from Core Banking (click the **Export Schedule Template** button to download an `.xslx` file with the approved schedule template). Save the event record in order to save the schedule file to Core Banking, then click **Run**

Field	Mandatory	Data Type	Details
			Import Schedule to perform the import of the new custom schedule to the contract through the event. Remember to approve the event for the new repayment plan to be in effect on the contract. Read more about importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

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.

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.

After Event Validation Information:

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.

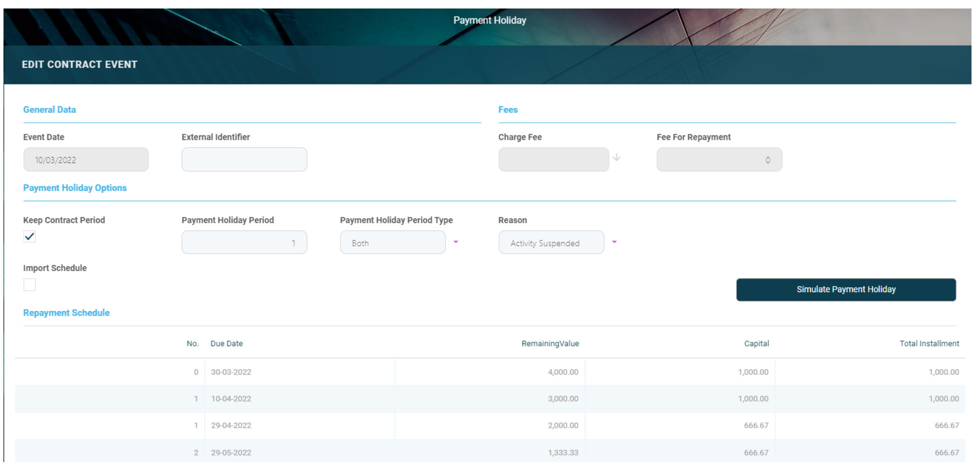
In the Contract Repayment Schedule, Core Banking creates an installment with all columns = 0, except Principal, Remaining Value and Total Installment, with `Is Early Repayment = True` and `Is Return = True`. The Principal amount is:

- 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.

Payment Holiday

It represents taking a break of any number of installments for the generated schedule.



Field	Mandatory	Data Type	Details
General Data			

Field	Mandatory	Data Type	Details
Event Date	Yes	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.
External Identifier	No	Text	Enter an external identifier of the transaction, if available.
Fees			
Charge Fee	No	Lookup	This field displays the transaction fee applicable for the transaction. See Transaction Fees for more details. You cannot edit this field.

Field	Mandatory	Data Type	Details
Repayment Fee Percent	No	Lookup	This field displays the repayment fee percentage applicable for the contract. Depending on the `ManualRepaymentFee` Core Banking system parameter's value, the system may allow you to change the percentage. See Transaction Fees for more details.
Fee For Repayment	No	Lookup	This field displays the repayment fee value applicable for the contract. Depending on the `ManualRepaymentFee` Core Banking system parameter's value, the system may allow you to change the value. See Transaction Fees for more details.
Payment Holiday Options			

Field	Mandatory	Data Type	Details
Keep Contract Period	No	Bool	This field displays whether the system should keep the period of the contract (if the checkbox is selected) or recalculate it. You can modify this checkbox.
Payment Holiday Period (Months)	Yes	Whole Number	Enter the number of months for which you request a break from the payments.
Payment Holiday Period Type	Yes	Option Set	Select the type of payment holiday to be applied for the contract. Possible values: • `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.

Field	Mandatory	Data Type	Details
Reason	Yes	Option Set	Select the reason for requesting the event. Possible values: • Activity suspended • Major force • Financial restructuring.
Import Schedule			

Field	Mandatory	Data Type	Details
Import Schedule	No	Bool	This field specifies whether you are importing a custom repayment plan (for the selected checkbox), or the schedule generated by the system (for the checkbox left unselected) is to be used further within the contract. The checkbox is unselected by default, meaning that the schedule generated automatically by the system is to be used after approving the event. Select the checkbox to display the **Export Schedule Template** and the **Schedule File - Select File** buttons, otherwise, these buttons are not displayed. Read more about

Field	Mandatory	Data Type	Details
			importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

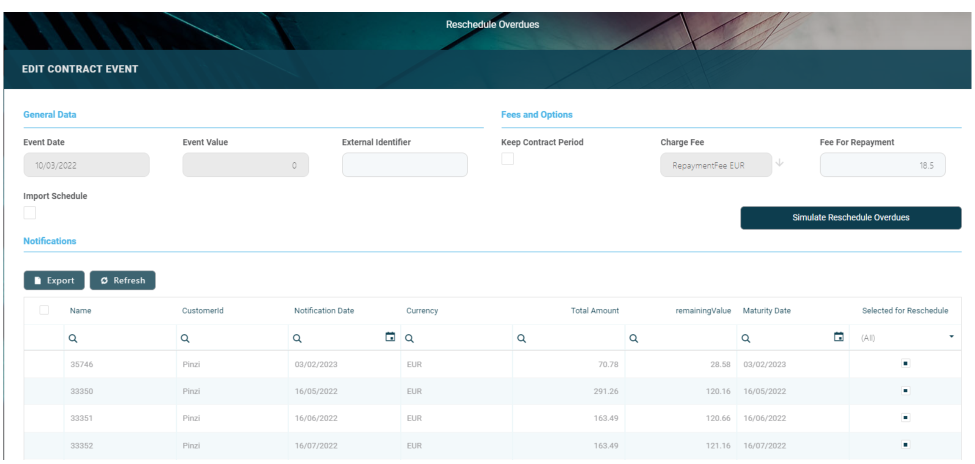
Field	Mandatory	Data Type	Details
Schedule File - Select File	No	File	This field contains the imported custom repayment plan. New events don't contain the file. In order for a file to be displayed here, you should first select the desired file with your custom schedule. Click **Select File** and, in the newly displayed Explorer window, browse for the `.xlsx` file that contains the custom schedule, then click **Open**. **NOTE** Before selecting the file, make sure you fill in the custom schedule according to

Field	Mandatory	Data Type	Details
			the schedule template exported from Core Banking (click the **Export Schedule Template** button to download an `.xslx` file with the approved schedule template). Save the event record in order to save the schedule file to Core Banking, then click **Run Import Schedule** to perform the import of the new custom

Field	Mandatory	Data Type	Details
			schedule to the contract through the event. Remember to approve the event for the new repayment plan to be in effect on the contract. Read more about importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

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.



Field	Mandatory	Data Type	Details
General Data			
Event Date	Yes	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.
Event Value	Yes	Numeric	Automatically completed with 0. You cannot edit this field.
External Identifier	No	Text	Enter an external identifier of the transaction, if available.
Fees and Options			
Keep Contract Period	No	Bool	This field displays whether the system should keep the period of the contract (if the checkbox is selected) or recalculate it. You can modify this checkbox.

Field	Mandatory	Data Type	Details
Charge Fee	No	Lookup	This field displays the transaction fee applicable for the transaction. See Transaction Fees for more details. You cannot edit this field.
Fee For Repayment	No	Lookup	This field displays the repayment fee value applicable for the contract. Depending on the `ManualRepaymentFee` Core Banking system parameter's value, the system may allow you to change the value. See Transaction Fees for more details.
Import Schedule			

Field	Mandatory	Data Type	Details
Import Schedule	No	Bool	This field specifies whether you are importing a custom repayment plan (for the selected checkbox), or the schedule generated by the system (for the checkbox left unselected) is to be used further within the contract. The checkbox is unselected by default, meaning that the schedule generated automatically by the system is to be used after approving the event. Select the checkbox to display the **Export Schedule Template** and the **Schedule File - Select File** buttons, otherwise, these buttons are not displayed. Read more about

Field	Mandatory	Data Type	Details
			importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

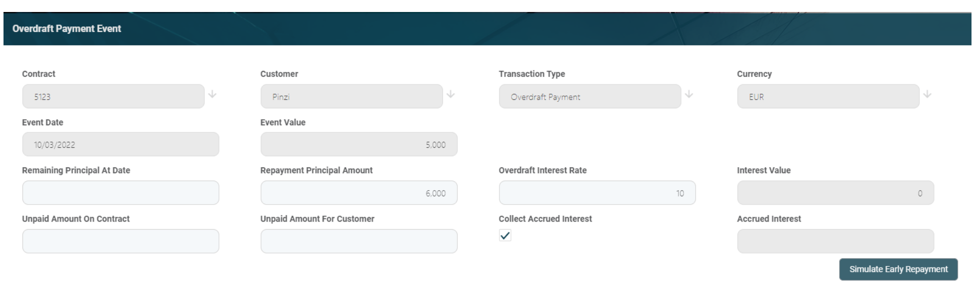
Field	Mandatory	Data Type	Details
Schedule File - Select File	No	File	This field contains the imported custom repayment plan. New events don't contain the file. In order for a file to be displayed here, you should first select the desired file with your custom schedule. Click **Select File** and, in the newly displayed Explorer window, browse for the `.xlsx` file that contains the custom schedule, then click **Open**. **NOTE** Before selecting the file, make sure you fill in the custom schedule according to

Field	Mandatory	Data Type	Details
			the schedule template exported from Core Banking (click the **Export Schedule Template** button to download an `.xslx` file with the approved schedule template). Save the event record in order to save the schedule file to Core Banking, then click **Run Import Schedule** to perform the import of the new custom

Field	Mandatory	Data Type	Details
			schedule to the contract through the event. Remember to approve the event for the new repayment plan to be in effect on the contract. Read more about importing a custom schedule file in the **Import Repayment Plan** section of the user guide.

Overdraft Payment

It represents an amount of money that a customer with a bank account is temporarily allowed to owe to the bank.



Field	Mandatory	Data Type	Details
Contract	No	Lookup	Automatically completed with the selected contract's number. You cannot edit this field.
Customer	No	Lookup	Automatically completed with the selected contract's customer. You cannot edit this field.
Transaction Type	No	Lookup	Automatically completed with the selected transaction type. You cannot edit this field.
Currency	No	Lookup	Automatically completed with the selected contract's currency. You cannot edit this field.

Field	Mandatory	Data Type	Details
Event Date	No	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.

Field	Mandatory	Data Type	Details
Event Value	No	Numeric	This field displays the value of the transaction, calculated and displayed after saving the record, based on the information filled in a series of other fields. You cannot edit this field. For an overdraft transaction, `Event Value = Repayment Principal + Accrued Interest`. The `Accrued Interest` value is added when the `Collect Accrued Interest` field is selected.

Field	Mandatory	Data Type	Details
Remaining Principal At Date	Yes	Numeric	This field displays the remaining value of the principal at the current date. You can modify this value.
Repayment Principal Amount	Yes	Numeric	This field displays the principal amount to be repaid with this event. You can modify this value.
Overdraft Interest Rate	Yes	Numeric	This field displays the value of the interest rate applicable for overdraft payments for the contract. You can modify this value.
Interest Value	Yes	Numeric	This field displays the interest value applicable to the payment. You cannot edit this field.

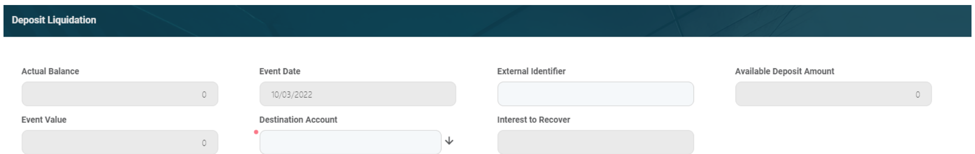
Field	Mandatory	Data Type	Details
Unpaid Amount On Contract	No	Numeric	This field is displayed after saving the record. It shows the value of the unpaid amount still on the contract. You cannot edit this field.
Unpaid Amount For Customer	No	Numeric	This field is displayed after saving the record. It shows the value of the unpaid amount for the customer. You cannot edit this field.

Field	Mandatory	Data Type	Details
Collect accrued interest	No	Boolean	This field indicates the behavior of the accrued interest on the contract events, respectively if the payment schedule type calculation should collect the interest accrued up to date or not. If the checkbox is not selected, then `Accrued Interest` = the value of accrued interest until the event's date. If the checkbox is selected, then the `Accrued Interest` = 0.00. The payment schedule projection takes into consideration both the payment

Field	Mandatory	Data Type	Details
			schedule type defined at the banking product level, and whether to collect the interest accrued on the contract until the date of an event, thus repaying the accrued interest, or not, thus adding the accrued interest to the next installment due after the early repayment event.
Accrued interest	No	Numeric	This field displays the interest accrued up until the event date for a contract event. You cannot edit this field.

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).



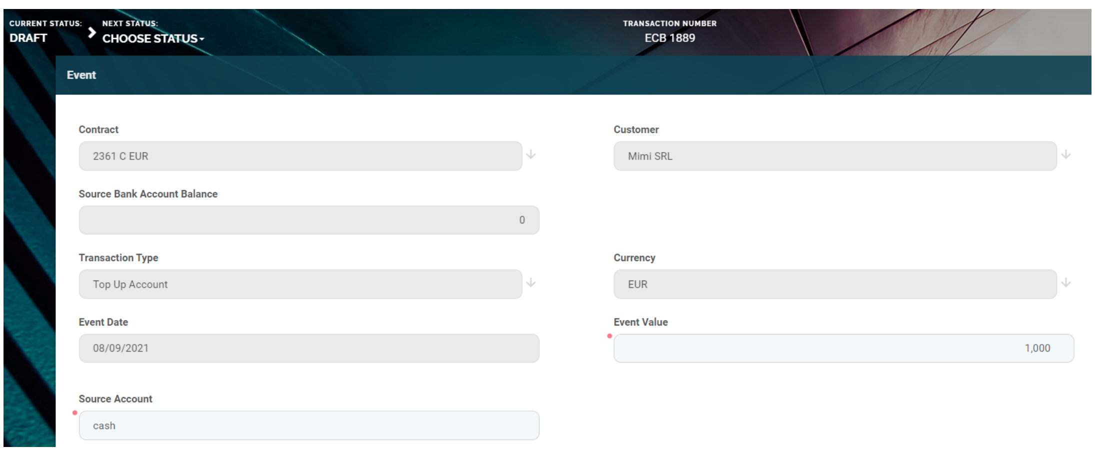
Field	Mandatory	Data Type	Details
Actual Balance	No	Numeric	This field displays the available balance of the account associated with the contract. You cannot edit this field.
Event Date	No	Invariant Date	Automatically completed with the Core Banking system's current date. You cannot edit this field.
External Identifier	No	Text	Enter an external identifier of the transaction, if available.

Field	Mandatory	Data Type	Details
Available Deposit Amount	No	Numeric	This field displays the available value in the deposit at the current date. You cannot edit this field.
Event Value	Yes	Numeric	This field displays the automatically completed value of the deposit liquidation transaction. You cannot edit this field.
Destination Account	Yes	Lookup	Select from the list the account where the available deposit amount has to be moved upon liquidation. The list contains the contract customer's current accounts.

Field	Mandatory	Data Type	Details
Interest to Recover	No	Numeric	This field displays the calculated interest to recover at the current date. You cannot edit this field.

8. Click the **Save and Reload** button at the top right corner of the page.
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, all the event's fields except **Transaction Type** can be modified. The event value is not applied to the contract while the event is still in this status.



NOTE

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.

Click the **Calculate/ Simulate repayment schedule / Simulate reschedule**

overdues buttons (the displayed button depends on the selected transaction type) to view the details of each installment. If the **Import Schedule** checkbox is selected, the **Calculate** button is not displayed. If the **Import Schedule** checkbox is unselected, then the repayment schedule is recalculated using the standard Core Banking logic.

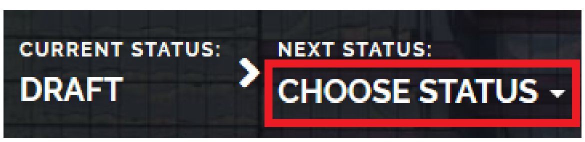
For **Reschedule Overdue** transaction type, select from the list the overdue payment notifications that you wish to reschedule.

Calculate Repayment Schedule

CONTRACT REPAYMENT SCHEDULE DISBURSE

No.	Due Date	RemainingValue	Interest	Principal	TotalInstallment
1	05-08-2021	60.00	0.22	0.91	1.13
2	05-09-2021	59.09	0.25	0.88	1.13
3	05-10-2021	58.21	0.24	0.89	1.13
4	05-11-2021	57.32	0.24	0.89	1.13
5	05-12-2021	56.43	0.24	0.89	1.13

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.

    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
	ECB 1887	Top Up Account	Approved	08/09/2021	1,000.00	mirela

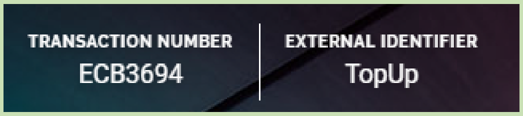
NOTE

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.

HINT

Contract events added through API calls also contain an `External Identifier`, displayed in the header of the event, next to the `Transaction Number`.



Importing Repayment Plans

To accommodate cases when a contract's repayment plan cannot be built using any of the existing Core Banking automated logic, you can import a custom-built schedule on a contract. After importing a custom repayment plan on a contract through a `.xlsx` file whose template must be first exported, the system 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 cases when the contract needs a schedule that cannot be automatically generated by Core Banking, you can import your customized repayment plan. 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.

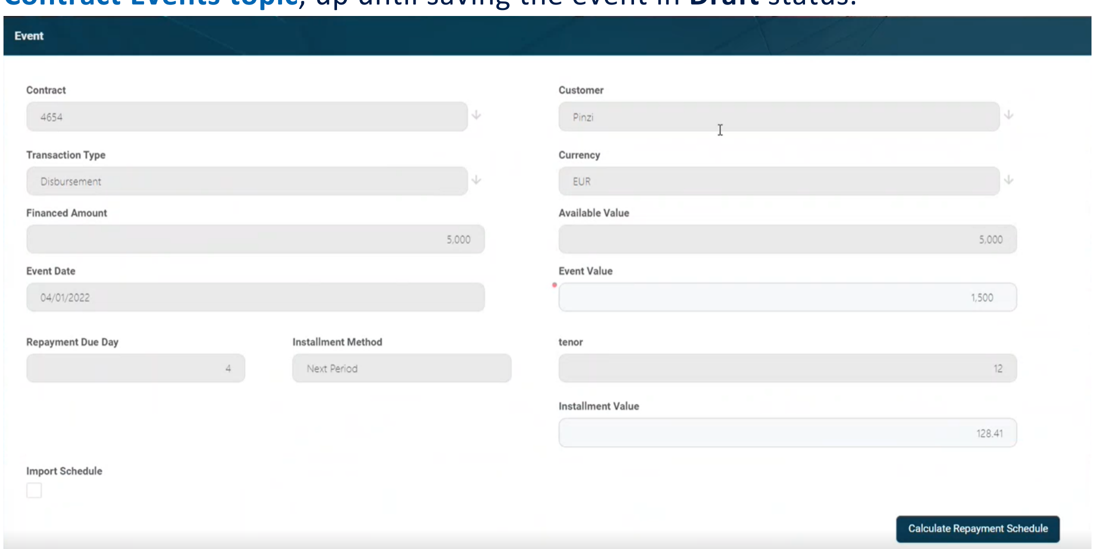
For example, you could use such imported schedules for contracts that require seasonal repayment plans. For seasonal credits in agriculture, you could have due dates only in April or September. You could build a schedule to have installments only in these months, to accommodate such situations.

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 as described in the **Contract Events topic**, up until saving the event in **Draft** status.



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*".

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.

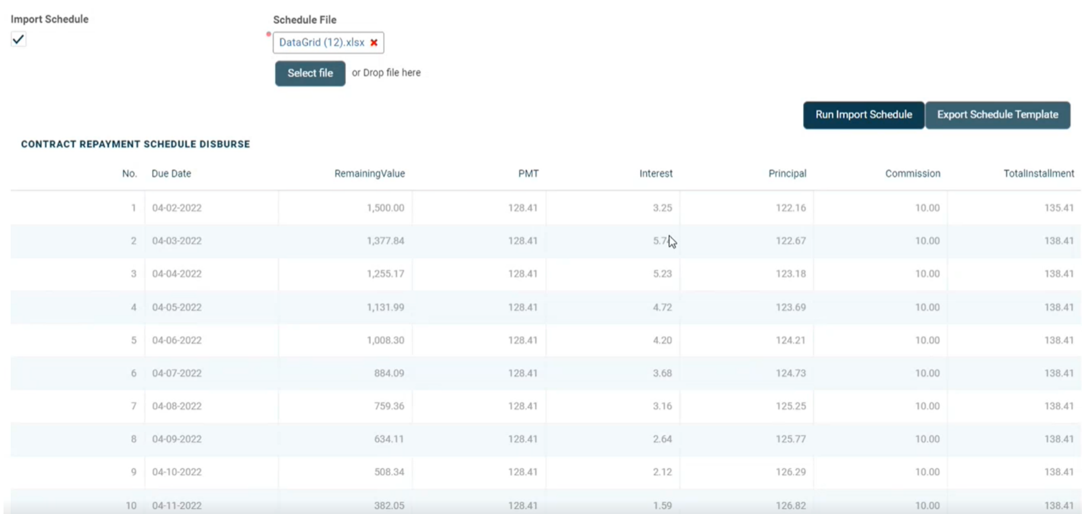
   IMPORTANT!

   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.

13. Click the **Save and Reload** button at the top right corner of the page. 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.

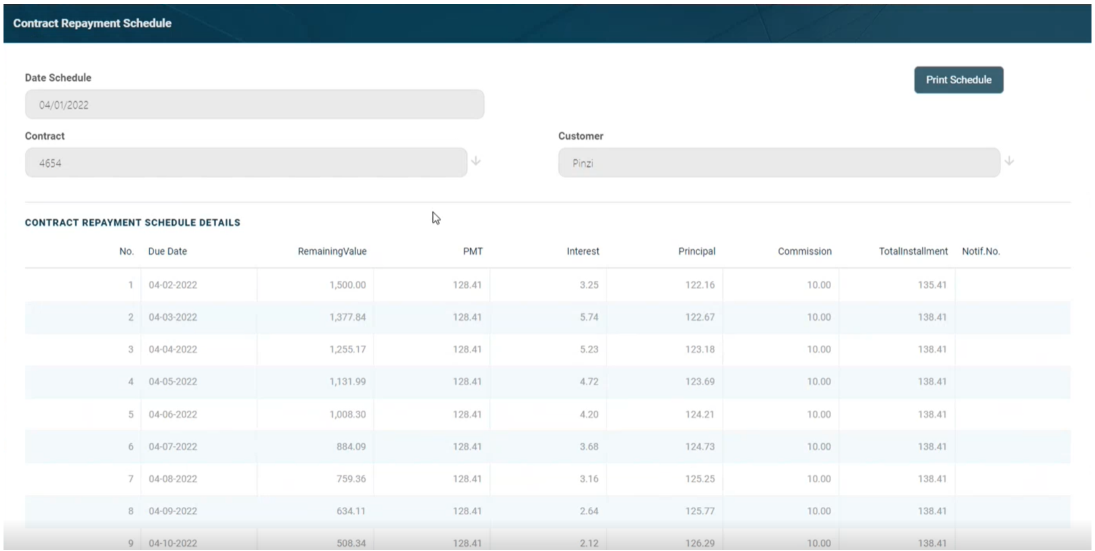


No.	Due Date	RemainingValue	PMT	Interest	Principal	Commission	TotalInstallment
1	04-02-2022	1,500.00	128.41	3.25	122.16	10.00	135.41
2	04-03-2022	1,377.84	128.41	5.7[illegible]	122.67	10.00	138.41
3	04-04-2022	1,255.17	128.41	5.23	123.18	10.00	138.41
4	04-05-2022	1,131.99	128.41	4.72	123.69	10.00	138.41
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.



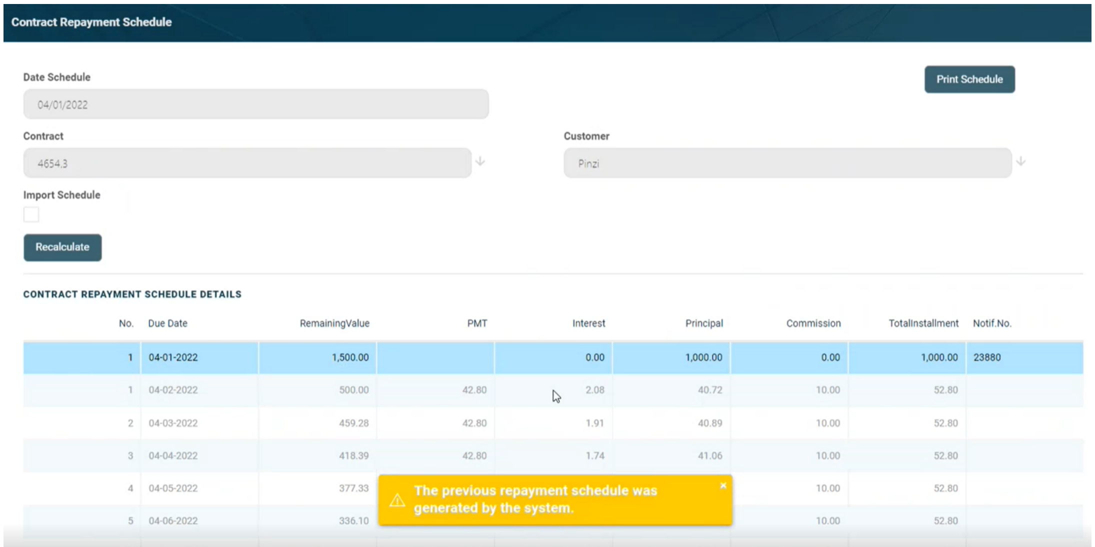
No.	Due Date	RemainingValue	PMT	Interest	Principal	Commission	TotalInstallment	Notif.No.
1	04-02-2022	1,500.00	128.41	3.25	122.16	10.00	135.41	
2	04-03-2022	1,377.84	128.41	5.74	122.67	10.00	138.41	
3	04-04-2022	1,255.17	128.41	5.23	123.18	10.00	138.41	
4	04-05-2022	1,131.99	128.41	4.72	123.69	10.00	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.



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

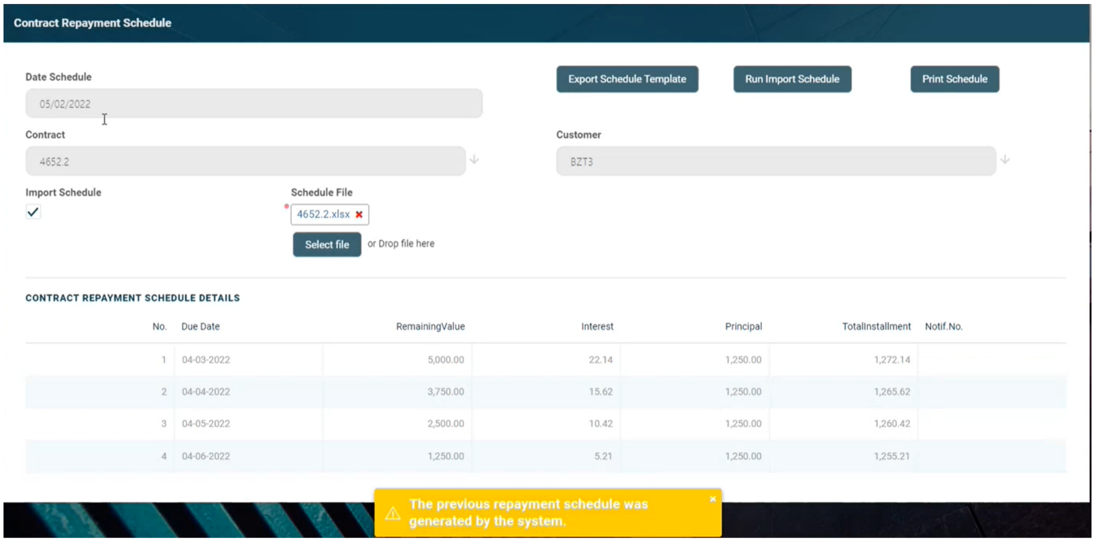
for the **Due Date** column which needs to be `Text`. Do not change the headings. Validations are performed for the file after uploading it to Core Banking, when the record is saved, and incorrect formats or data are not accepted, then error messages are shown for such files.

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 at the top right corner of the page. 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.



If you click the **Run Import Schedule** button one more time, the values within the **Contract Repayment Schedule Details** section are deleted and reinserted.

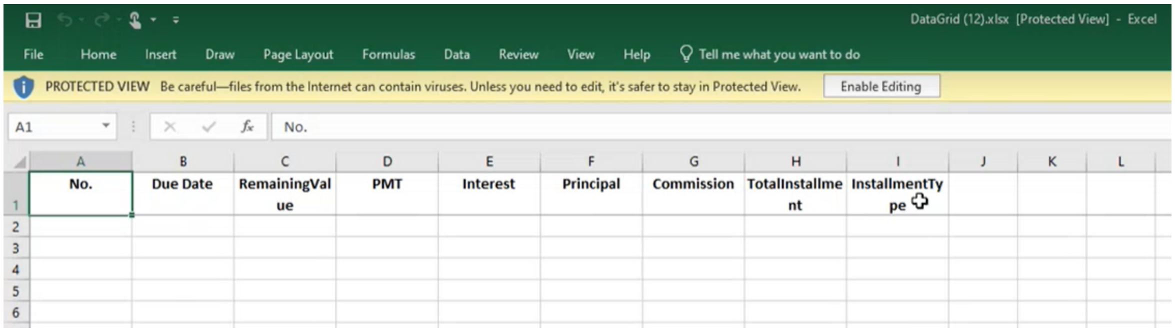
> **NOTE**
> When versioning a contract that has an imported repayment plan, the schedule recalculation is not mandatory. You can choose between recalculating and importing an updated repayment plan.

Repayment Plan Template File

Each time you need to import a custom schedule to a contract, you must export its template file first. You can do this by clicking 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.

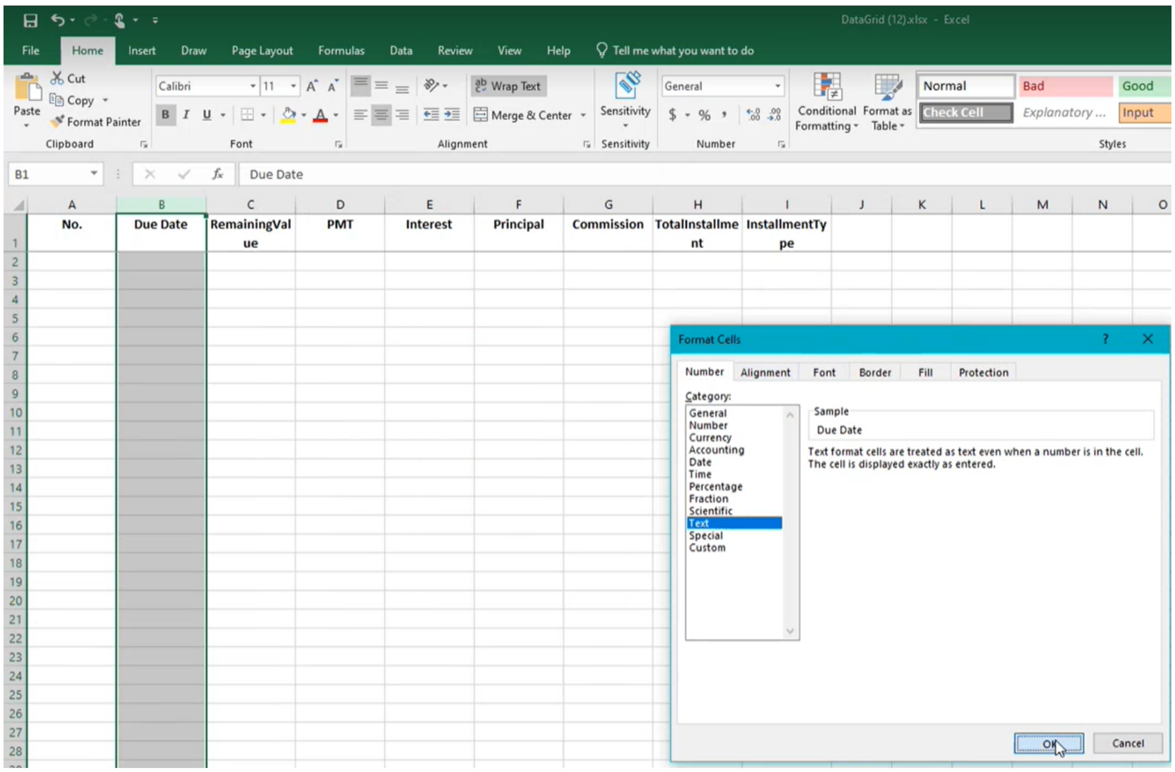
> **NOTE**
> Each contract type may have a different schedule type definition, so make sure you download the template!

This is an example of an exported repayment plan template file:

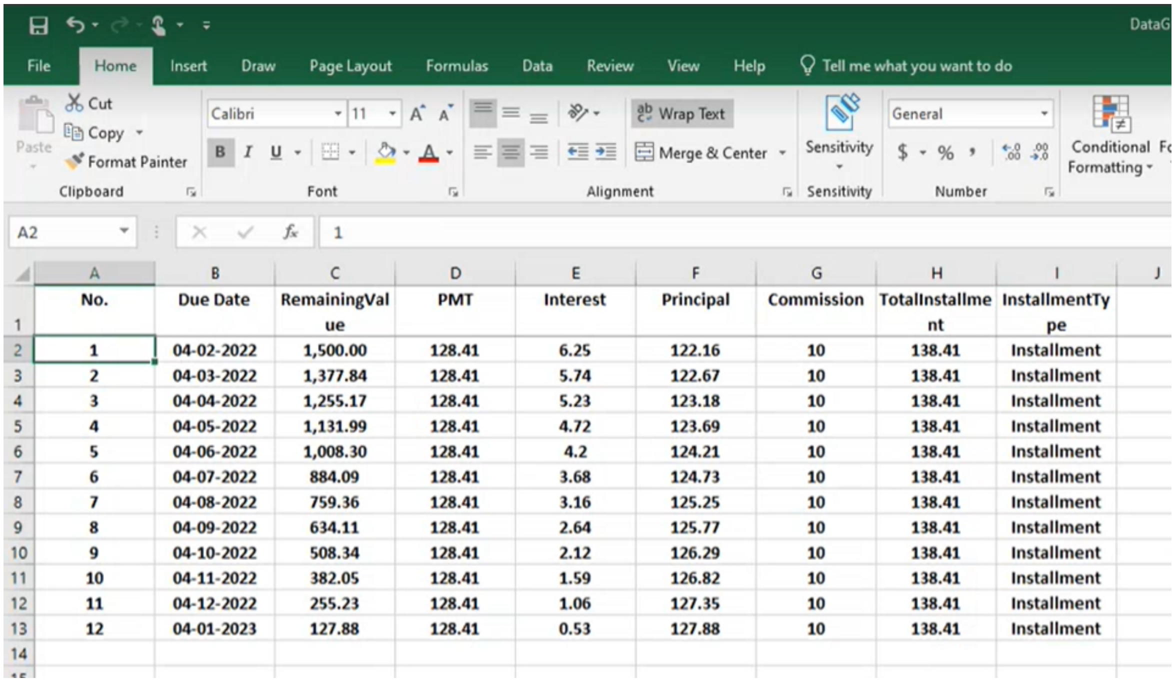


After opening the downloaded schedule template `.xlsx` file, make it editable so that you can perform changes within its cells.

Format the **Due Date** column as `Text`.



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`.



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.

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.

Validations

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.

Warning messages notify you if "*The previous repayment schedule was generated by the system*" or if "*The previous repayment schedule was imported*". These warnings are for your information and do not affect the import process.

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.

The following error appears when you try to change an installment's Due Date (within the contract's Overview section) starting with the second disbursement: "*You are not able to change Due Date that is already saved in the consolidated repayment schedule!*".

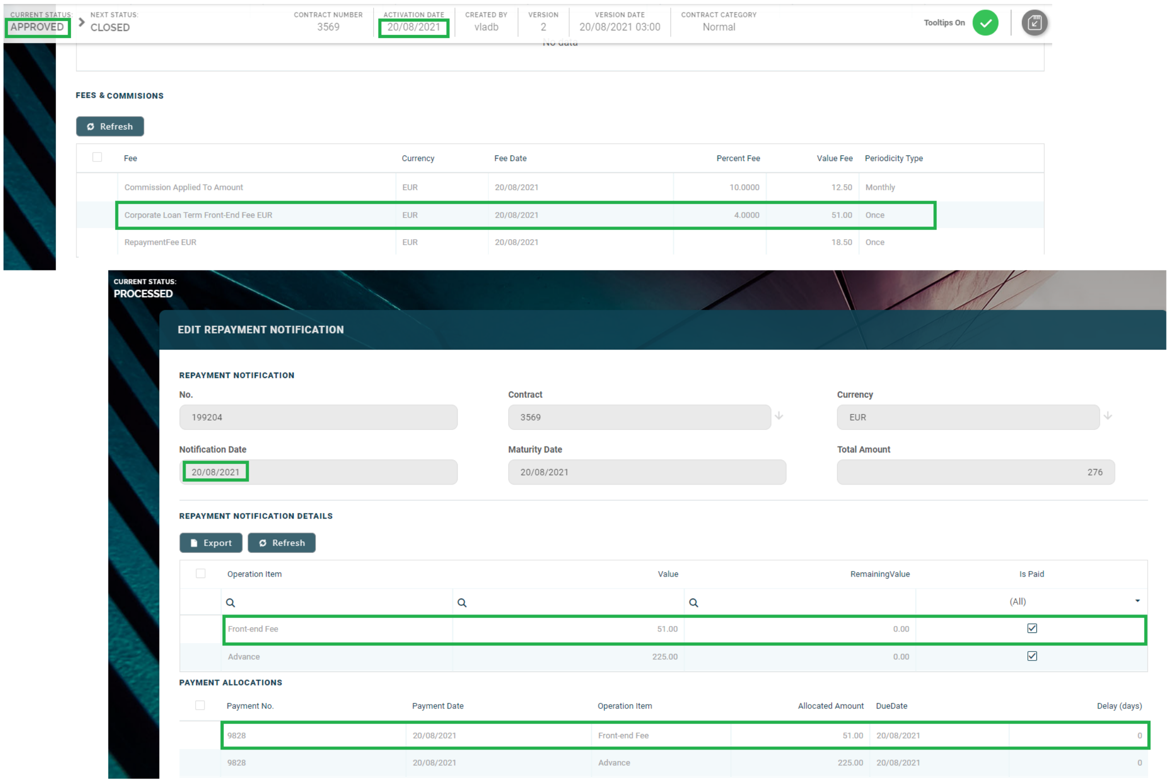
IMPORTANT!
For contracts with imported schedules where the second disbursement with repayment contract was automatically generated by Core Banking, the workaround is to:

1. Create a new version of the contract.
2. Recalculate the repayment plan.
3. Approve the contract version.
4. Create a new disbursement.

Repayment Notifications

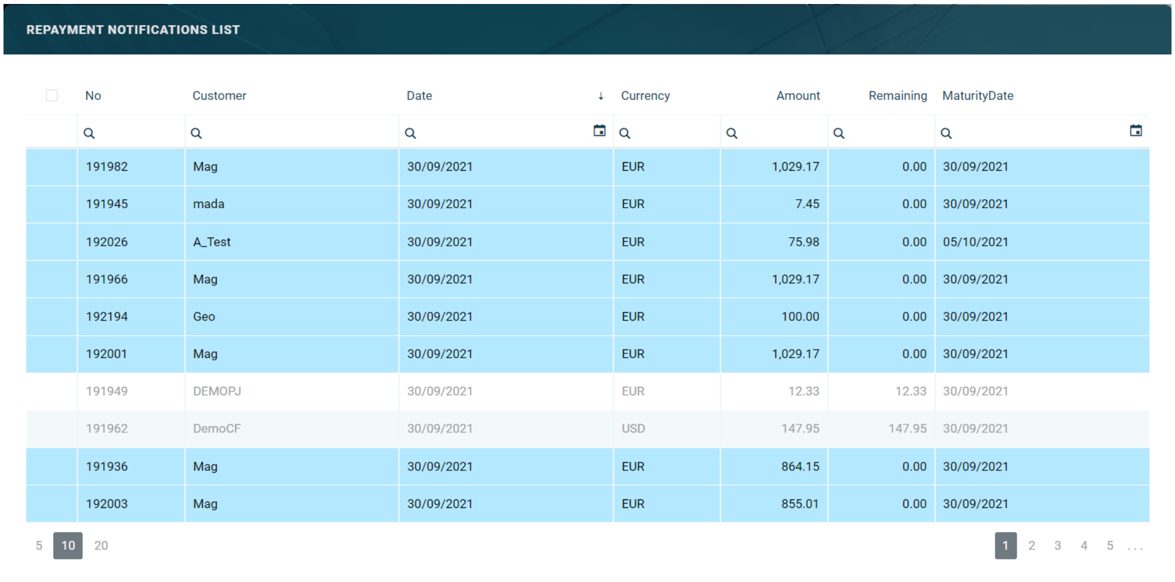
Core Banking automatically generates notifications for each installment that has to be paid for existing contracts that disbursed various amounts to customers. There can be various types of notifications generated for fees, commissions, payment holidays, and so on.

IMPORTANT!
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.



To view the list of notifications already generated in your system, follow these steps:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational** menu.
4. Click **Repayment Notification** menu item to open the **Repayment Notifications List** page.



REPAYMENT NOTIFICATIONS LIST

No	Customer	Date	Currency	Amount	Remaining	MaturityDate
191982	Mag	30/09/2021	EUR	1,029.17	0.00	30/09/2021
191945	mada	30/09/2021	EUR	7.45	0.00	30/09/2021
192026	A_Test	30/09/2021	EUR	75.98	0.00	05/10/2021
191966	Mag	30/09/2021	EUR	1,029.17	0.00	30/09/2021
192194	Geo	30/09/2021	EUR	100.00	0.00	30/09/2021
192001	Mag	30/09/2021	EUR	1,029.17	0.00	30/09/2021
191949	DEMOPJ	30/09/2021	EUR	12.33	12.33	30/09/2021
191962	DemoCF	30/09/2021	USD	147.95	147.95	30/09/2021
191936	Mag	30/09/2021	EUR	864.15	0.00	30/09/2021
192003	Mag	30/09/2021	EUR	855.01	0.00	30/09/2021

5 10 20 1 2 3 4 5 ...

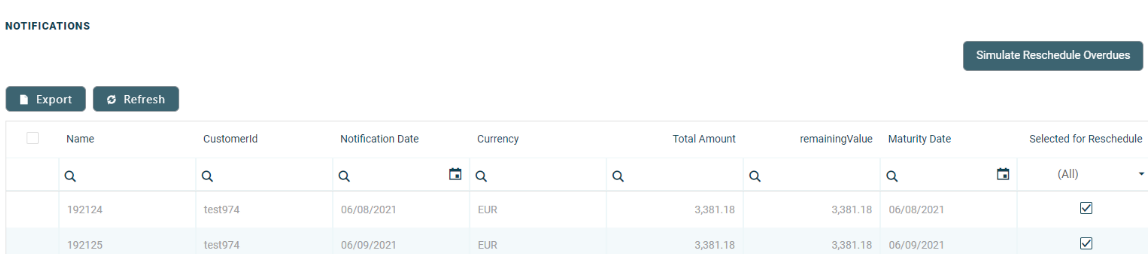
On the **Repayment Notifications List** page, you can:

- View a notification from the list by double-clicking it.
- Enter corrections for a notification by double-clicking it and inserting a correction.
- Search for a specific record by filling in any or all the column headers of the displayed notification records list.

Within the list, the notifications are color-coded as follows:

- Notifications highlighted in blue are already paid, allocated or closed to payment.
- Notifications not highlighted (displayed on a white background) remain to be paid.

You can also view the notifications generated for a specific contract on the **Contract** page, in the **Payments tab** > **Repayment Notifications** section, or when adding a **Reschedule Overdue** transaction type contract event:



NOTIFICATIONS

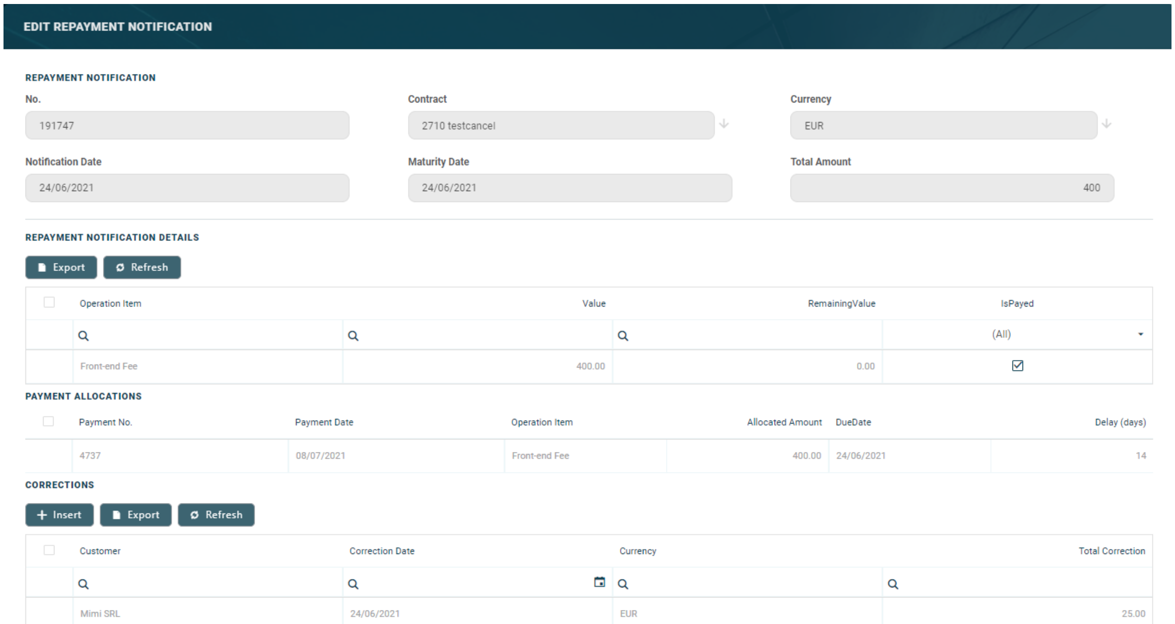
Simulate Reschedule Overdues

Export Refresh

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	☑

Viewing Repayment Notifications

To view the details of a generated repayment notification, double-click the desired record. The **Edit Repayment Notification** page is displayed.



You cannot edit any of the fields from this page.

The following sections contain notification specific data:

Repayment Notification Section

This section contains the following information about the notification:

Field	Description
No.	The number of the repayment notification record.
Contract	The number of the contract for which the notification was generated.
Currency	The currency of the contract.
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.
Total Amount	The total amount to be paid within the notification (the sum of all the details' values).

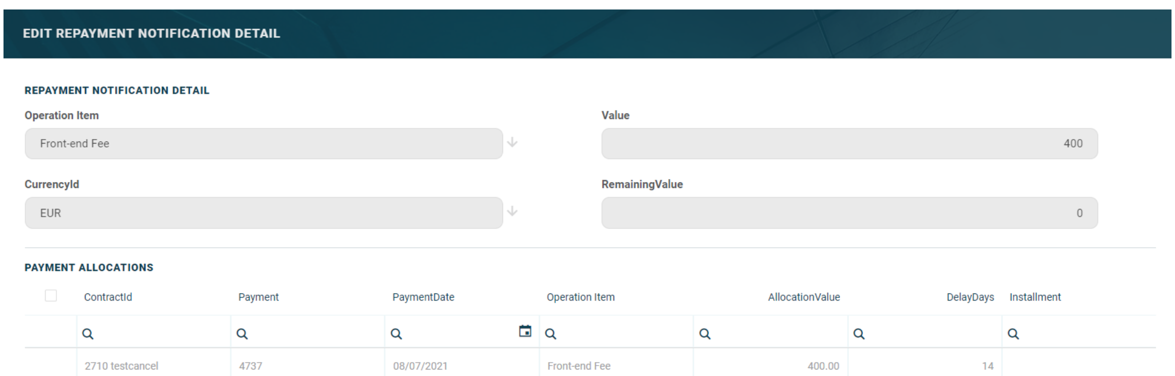
Repayment Notification Details Section

This section contains the following information about the details (lines) of the notification:

Field	Description
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.

To view more information about a notification detail, double-click it to open the **Repayment Notification Details** page:



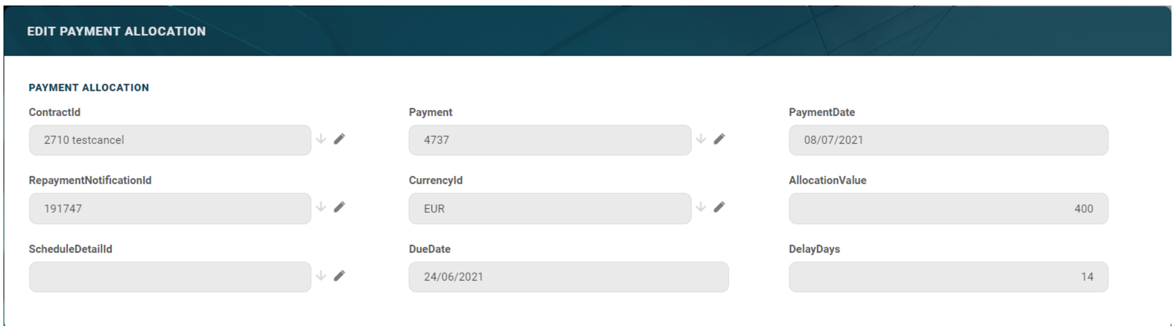
Payment Allocation Section

This section contains the following information about the payments allocated for the notification details:

Field	Description
Payment No.	The number of the payment.
Payment Date	The date when the payment was performed.

Field	Description
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.

To view more information about a notification detail, double-click it to open the **Edit Payment Allocation** page:



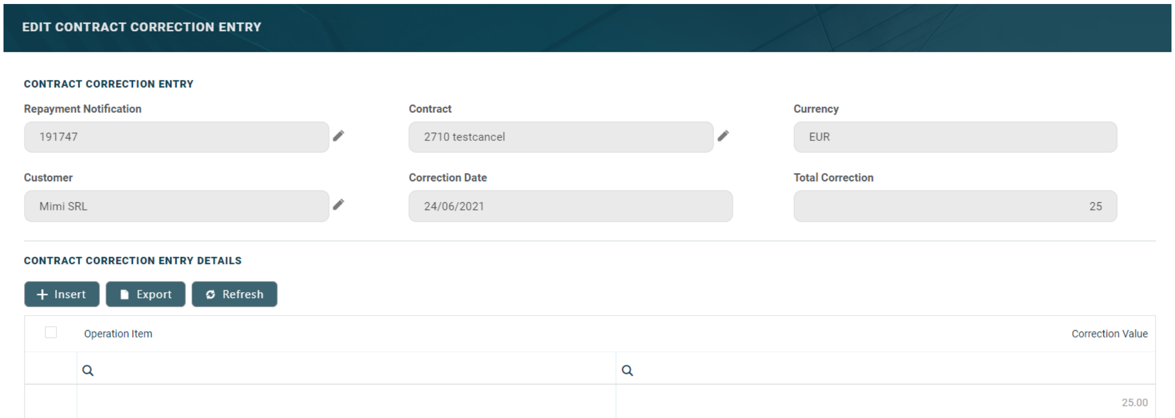
You cannot edit any of the fields from this page.

Corrections

Contract correction entries are automatically generated for now, for notifications that are overdue, when creating a **Reschedule Overdue** transaction type contract event. This section contains the following information about any correction entries created for the notification:

Field	Description
Customer	The customer of the contract.
Correction Date	The date when the correction was created.
Currency	The currency of the correction.
Total Correction	The total amount of the correction (the sum of all the correction details' values).

To view more information about a correction entry, double-click it to open the **Edit Contract Correction Entry** page:



The following data is displayed for each contract correction entry on the **Edit Contract Correction Entry** page:

Field	Details
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.

In the **Contract Correction Entry Details** section, the following data is displayed about each detail within the correction:

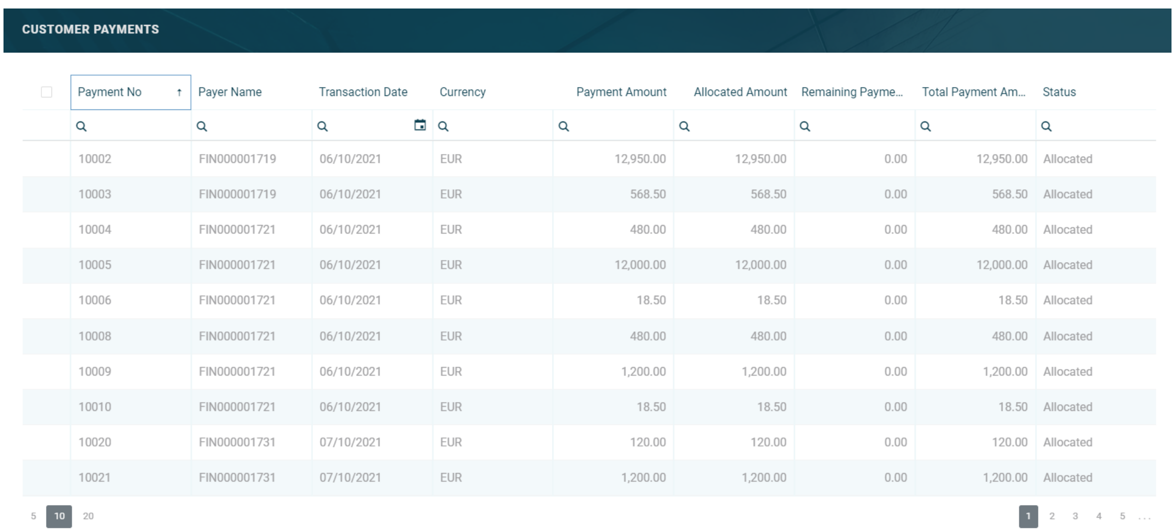
Field	Details
Operation Value	The operation item of the transaction for which the correction entry detail was inserted.
Correction Value	The value of the correction entry detail, in the correction entry's currency.

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.

To manage the list of payments, follow these steps:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational** menu.
4. 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

5 10 20 — 1 2 3 4 5 ...

On the **Customer Payments** page, you can:

- Search for a specific record by filling in any or all the column headers of the displayed records list.
- Open a specific a payment from the list by double-clicking it. The payment record itself can only be viewed, and not edited.

- Delete a payment in **Draft** status by selecting it and clicking the **Delete** button at the top right corner. Any payment with a status different than **Draft** cannot be deleted.

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.

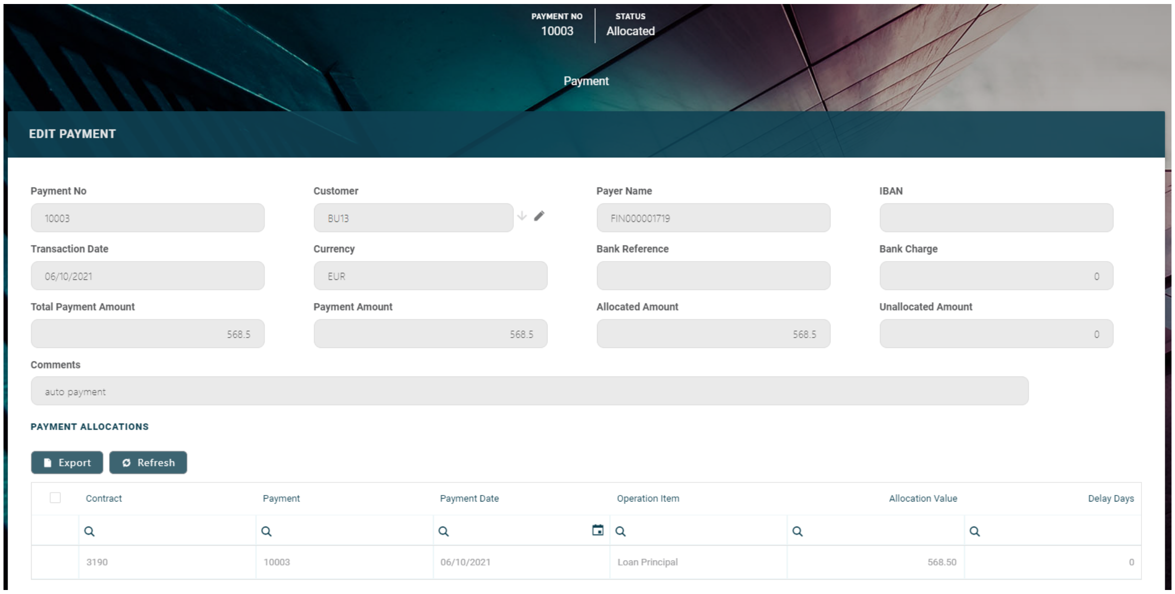
IMPORTANT!
Only payments with **Allocated** status operate changes at the contract repayment notification level.

Viewing Payment Records

Payment records can be viewed in the FintechOS Portal, on the **Edit Payment** page.

NOTE
You cannot edit any of the fields of a payment.

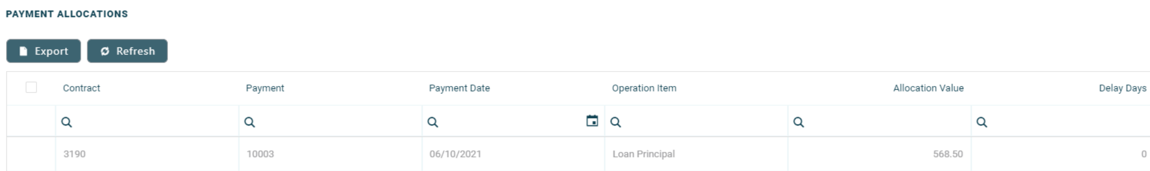
1. To view a record, double-click the desired payment on the **Customer Payments** page. The **Payment** page is displayed.



2. View the following information about the selected payment:

Field	Details
Payment No	The number of the payment.
Customer	The name of the customer associated with the payment.
Payer Name	The name of the payer.
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.

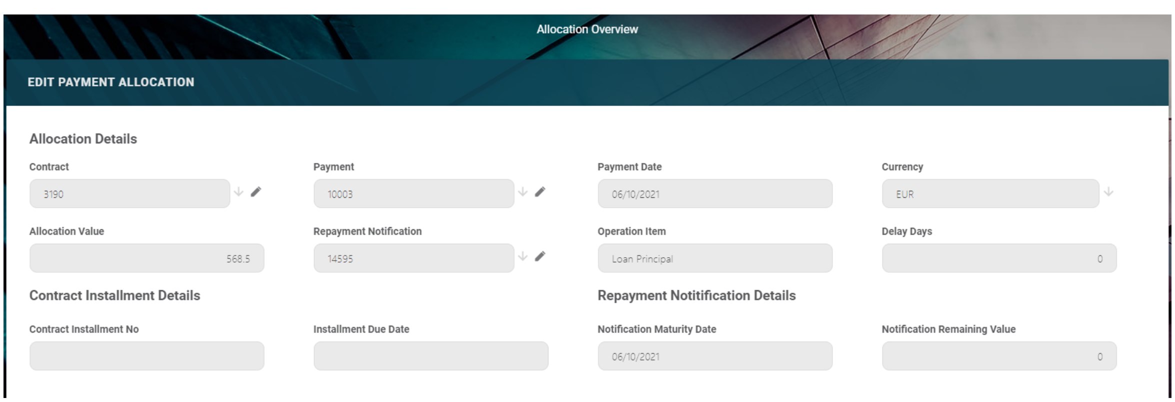
The page also displays the **Payment Allocation** section. This section is empty for payments in **Draft** or **Unallocated** status. The payment allocations for due repayment notifications are automatically calculated by Core Banking and they are displayed after the record reaches the **Allocated** or **Partially Allocated** status.



3. View more details about each allocation by double-clicking it.

The payment allocation record opens in the **Allocation Overview** page, displaying the following information:

Field	Details
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 cannot edit any of the fields of a payment allocation record.

Credit Facilities

A credit facility is a grouping of multiple credit products that a client has arranged with a bank under a single credit limit. Banks 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 bank, because individual loans no longer need separate risk assessments.

FintechOS Core Banking allows banks to create credit facility agreements for their customers based on approvals.

IMPORTANT!
Credit facility management is available via the **Core Banking Corporate 3.2** package, which has to be installed on top of the **Core Banking 3.2** package.

Business Logic

Let's say a bank 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 bank and a customer (total exposure limit). This limit will be 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:
    - Unutilized 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.

Credit Facility Statuses

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** - this is a system status applied to credit facilities sent for approval, but not yet approved. No updates are available 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 cannot 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 will not be performed by the system.

- **Closed** - the last status of a credit facility, after manually closing it or after creating a new version based on the current version. No updates are allowed on the record.

IMPORTANT!
In order to use the credit facility, it must be in the **Approved** status.

Credit Facility Life Cycle

First, an agreement is made between a bank 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 bank'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 bank, 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.

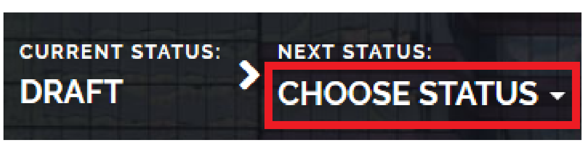
Fee values and accruals are calculated for the approved utilizations and displayed in the **Credit Facility Utilizations** tab, along with any repayment notifications.

Credit facilities can be manually closed if needed. Records in **Closed** status cannot be altered in any way.

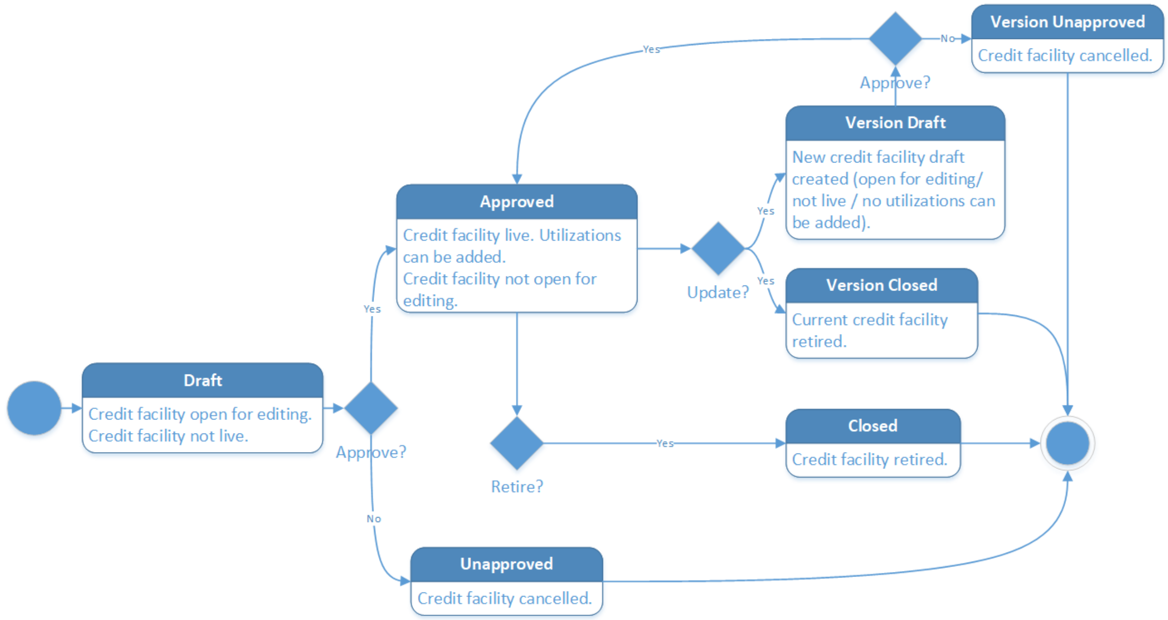
If the details of an approved credit facility have to be updated, then a new version of the record must be created. The new version of the record is created in Draft status, thus restarting the life cycle.

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:



Note that:

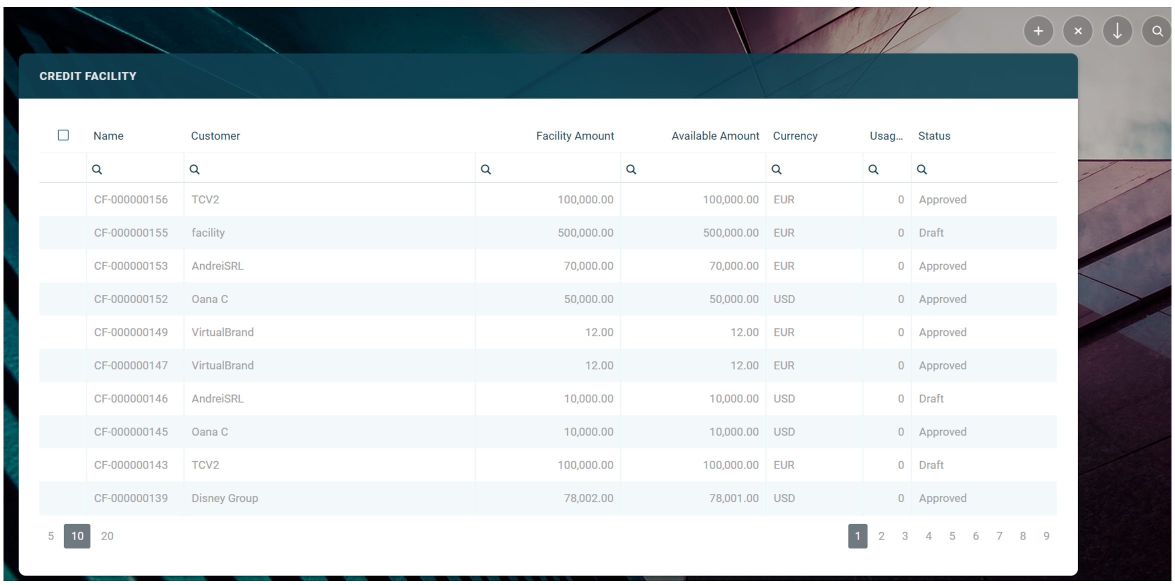
- Once a record is live, its settings can no longer be modified.
- If you want to update the details of a live credit facility, you must create a new credit facility version.
- When you create a new credit facility version, the current version is retired; no updates are allowed on the retired version.
- 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.

IMPORTANT!
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 Credit Facilities

To manage credit facilities:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational** menu.
4. Click **Credit Facility** menu item to open the **Credit Facility** page.



On the **Credit Facility** page, you can:

- Create a new credit facility by clicking the **Insert** button at the top right corner.
- Edit a credit facility from the list by double-clicking it.
- Delete a credit facility by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in any or all the column headers of the displayed credit facility records list.

Creating Credit Facilities for Legal Entities

Credit facility records are created in FintechOS Portal, on the **Credit Facility** page. To create a new credit facility, click the **Insert** button on the top right side of the page. A new page opens, with a series of tabs that assist you in configuring the credit facility:

- Credit Facility tab - The first tab requires the basic elements for the creation of a credit facility such as customer, facility amount and currency, period, attached customer limit, participants, products, plans, fees, and contract covenants.
- Credit Facility Utilizations tab - This tab contains all the details of the credit facility such as facility utilizations, fee values, accruals and repayment notifications.
- History tab - The last tab displays the versions of the credit facility, along with workflow status and the user who modified the product.

Credit Facility Tab

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.

Credit Facility Details Section

The following fields are available for completion when creating or updating a record in **Draft** status:

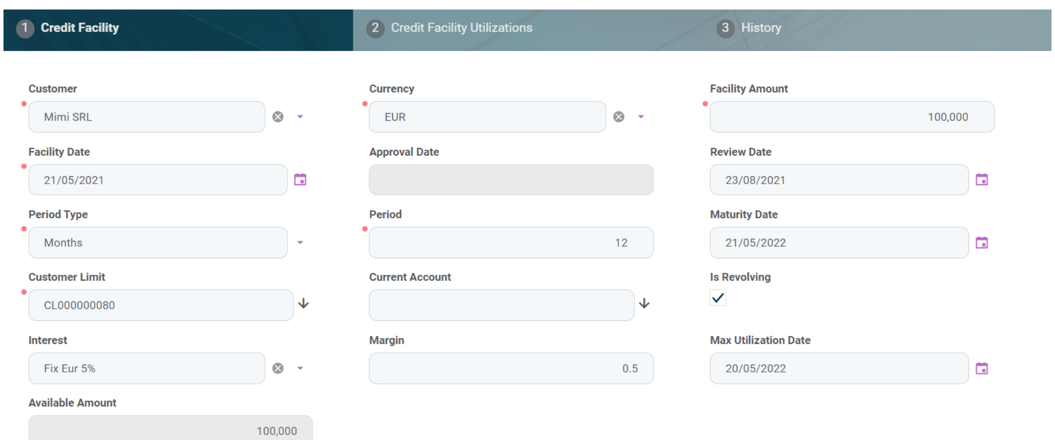
Field	Required	Data Type	Details
Customer	Yes	Lookup	Select from the list the name of the customer with whom the bank agreed upon the credit facility. Changing the selected customer at a later point of the record creation process leads to emptying the `Current Account` and `Customer Limit` fields, if these were already selected.
Currency	Yes	Lookup	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 will be 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	Yes	Numeric	Enter the amount agreed upon to grant within the credit facility, expressed in the currency selected above. **NOTE** The facility amount cannot exceed the selected customer limit's value.

Field	Required	Data Type	Details
Facility Date	Yes	Invariant Date	Select the date when the facility becomes active. The maturity date is automatically calculated following the formula: `Facility Date` + (`Period` * `Period Type`).
Approval Date	No	Invariant Date	Read-only field. It displays 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	No	Invariant Date	Enter the date when the credit facility's amount will be reviewed for possible adjustments.
Period Type	Yes	Option Set	Select from the list the period type for the facility's validity. The maturity date is automatically calculated following the formula: `Facility Date` + (`Period` * `Period Type`).
Period	Yes	Whole Number	Enter the number of periods during which the facility is valid. The maturity date is automatically calculated after filling this field, following the formula: `Facility Date` + (`Period` * `Period Type`).
Maturity Date	No	Invariant Date	This field displays the automatically calculated maturity date of the credit facility. You can modify this date from the attached calendar, if needed.

Field	Required	Data Type	Details
Customer Limit	Yes	Lookup	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' value.
Current Account	No	Lookup	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 account in the currency selected before for the credit facility.
Is Revolving	No	Boolean	If the checkbox is selected, then the credit facility is marked 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.

Field	Required	Data Type	Details
Interest	No	Lookup	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	No	Numeric	Enter a margin for the credit facility amount.
Max Utilization Date	No	Invariant Date	Select from the calendar the maximum date when the credit facility's available amount can be disbursed through utilizations.
Available Amount	No	Numeric	Read-only field. It displays 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`.

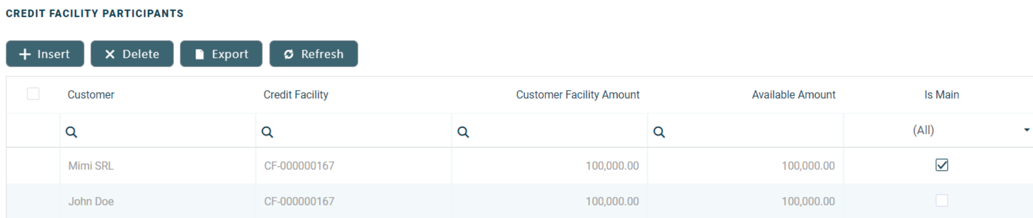
Click the **Save and Reload** button at the top right corner of the page.



IMPORTANT!
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.

Credit Facility Participants Section

In the **Credit Facility Participants** section, you can insert, delete or export customers who can participate in this credit facility. After the first save operation, the customer is added as the main facility participant. If the customer is a group, then all the group members are also added.



To add a participant, click **Insert** and fill in the following fields:

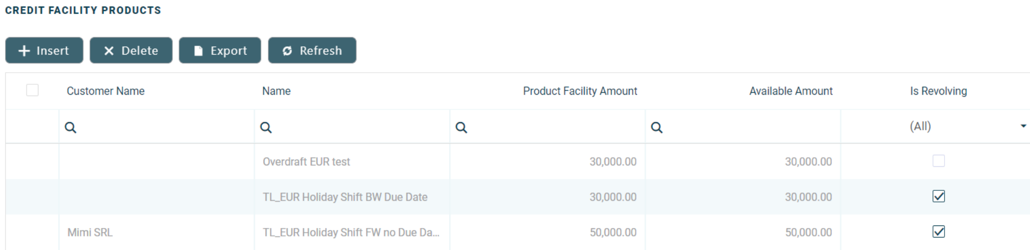
Field	Required	Data Type	Details
Customer	Yes	Lookup	Select from the list the name of the customer who can participate to the selected credit facility.
Customer Facility Amount	Yes	Numeric	Automatically filled with the facility amount. You can modify the amount that this specific participant can use within the credit facility. The entered amount cannot exceed the available amount of the facility.
Available Amount	No	Numeric	Read-only field. It displays the available amount of the facility.

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.

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

Credit Facility Products Section

In the **Credit Facility Products** section, you can insert, delete or export banking products which can be utilized through this credit facility.



Customer Name	Name	Product Facility Amount	Available Amount	Is Revolving
	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, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Product Facility Amount	Yes	Numeric	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	No	Numeric	Read-only field. It displays the available amount of the facility.
Allowed Customer	No	Lookup	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	Yes	Lookup	Select from the list the banking product that can be used through credit facility utilizations.

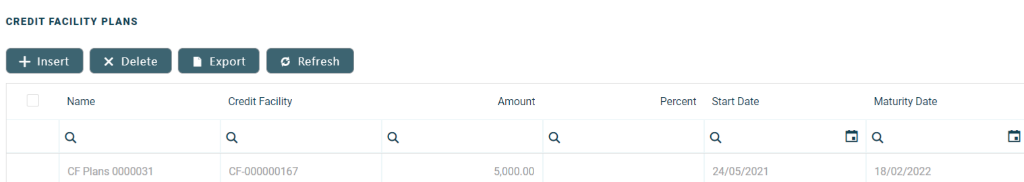
Field	Required	Data Type	Details
Is revolving	Yes	Boolean	If the checkbox is selected, then the banking product used through the credit facility utilizations is marked as revolving. This means that the customer can borrow money repeatedly up to the entered product facility amount while repaying a portion of the current balance due in regular installments. Each payment, minus the interest and fees charged, replenishes the available amount.

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.

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

Credit Facility Plans Section

In the **Credit Facility Plans** section, you can insert, delete or export plans for the increase or decrease of the facility amount during the credit facility's duration.



To add a plan, click **Insert** and fill in the following fields:

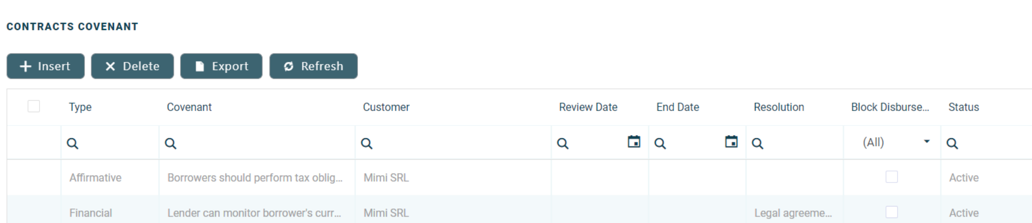
Field	Required	Data Type	Details
Amount	Yes	Numeric	Mandatory only if `Percent` is not filled in, otherwise, it can't be completed. Enter the amount which affects the credit facility plan. Use negative values if you wish to decrease the facility amount. Positive values increase the facility amount.
Periodicity Type	Yes	Option set	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	Yes	Whole Number	Enter the number of times the plan should increase or decrease of the facility amount, until the credit facility's maturity date.

Field	Required	Data Type	Details
Percent	Yes	Numeric	Mandatory only if `Amount` is not filled in, otherwise, it can't be completed. 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.
Start Date	Yes	Invariant 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	No	Invariant Date	Read-only field. It displays the plan's maturity date based on the start date, periodicity type and number of times already completed for plan execution.

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

Contract Covenants Section

In the **Contract Covenants** section, you can insert, delete or export covenants, certain conventions that customers must abide by after getting the facility.



NOTE

You can block any further disbursements of the facility utilizations if you select the `Block Disbursements` checkbox next to a covenant in **Active** status within this section.

To add a covenant, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Covenant	No	Lookup	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 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

Field	Required	Data Type	Details
			right to prevent merges of acquisitions without proper notification or full knowledge of the process. This covenant is of type negative.
Value	No	Numeric	Enter the value for the covenant.
Covenant Type	No	Option set	This field displays the type of the selected covenant. You can edit it, selecting one the possible values: • Financial • Affirmative • Negative.
Review Frequency (Months)	No	Whole Number	Enter the number of months applicable for the covenant review frequency.
Review Date	No	Invariant Date	Enter the date when the covenant should be reviewed.
Customer	Yes	Lookup	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.

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

A series of fields are displayed for completion after the save operation:

Field	Required	Data Type	Details
Grace Period (Months)	No	Whole Number	Enter the number of months acting as grace period for this covenant's resolution, if applicable.

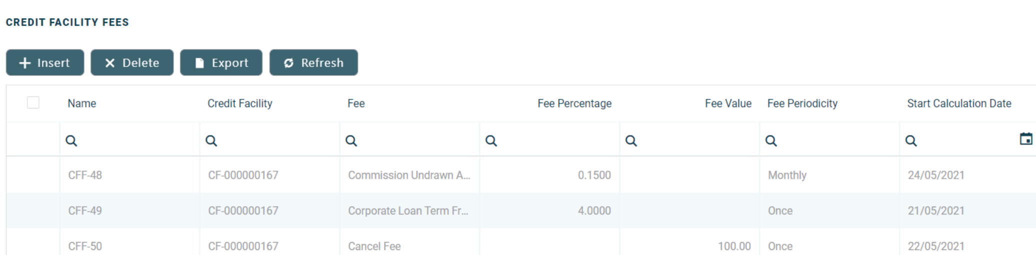
Field	Required	Data Type	Details
Resolution	No	Lookup	Select from the list the resolution of this covenant, if applicable.
Resolve Date	No	Invariant Date	Enter the date when the covenant is achieved, if applicable.
End Date	No	Invariant Date	Enter the last day when this covenant is applicable.
Start Early Termination	No	Boolean	If you select this checkbox, then the credit facility agreement is terminated before its maturity date.
Block Disbursement	No	Boolean	If you select this checkbox, then Core Banking blocks any further disbursements if the covenant is not achieved after end date.

IMPORTANT!
Remember to activate the covenant by changing its status to **Active**.

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

Credit Facility Fees Section

In the **Credit Facility Fees** section, you can insert, delete or export fees or commissions that are added to this credit facility.


CREDIT FACILITY FEES

Insert Delete Export Refresh

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, click **Insert** and fill in the following fields:

Field	Required	Data Type	Details
Credit Facility	No	Lookup	Read-only field. It displays the id of the selected credit facility record.
Start Calculation Date	Yes	Invariant Date	Enter the start date for fee calculation.
Fee	Yes	Lookup	Select a fee to apply to the credit facility from the list of defined fees & commissions.
Fee Value	No	Numeric	Read-only field. It displays the value of the selected fee, as defined in Core Banking.
Fee Percentage	No	Numeric	Read-only field. It displays the percentage of the selected fee, as defined in Core Banking.
Fee Periodicity	No	Option set	Read-only field. It displays the periodicity of the selected fee, as defined in Core Banking.
Use specific day for aggregation	No	Whole Number	Enter a day of the month when the fee accrual should be aggregated.
Use End Of Month for Aggregation	Yes	Boolean	Mandatory only if the `Use specific day for aggregation` field is not completed. Select the checkbox to mark the last day of the month as aggregation day for the fee accrual.

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

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.

IMPORTANT!

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. You can add utilizations only for credit facility records with **Approved** status.

Credit Facility Utilizations Tab

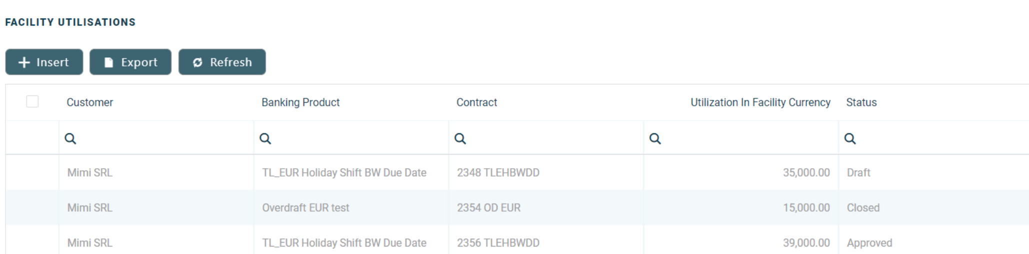
A credit facility utilization is a contract opened for banking products attached to the facility.

The **Credit Facility Utilizations** tab contains details of the credit facility such as facility utilizations, fee values, accruals and repayment notifications. There is no information here to display for records in **Draft** status. You can add utilizations only after the record reaches **Approved** status.

The following sections are available for completion when adding utilizations to a credit facility record in **Approved** status:

Facility Utilizations Section

In the **Facility Utilizations** section, you can view, insert or export contracts based on the banking products added to this credit facility. These contracts are known as utilizations.



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:

Field	Details
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.

Field	Details
Contract	The number of the contract holding this credit facility utilization, either selected when adding the utiization, 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. 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.

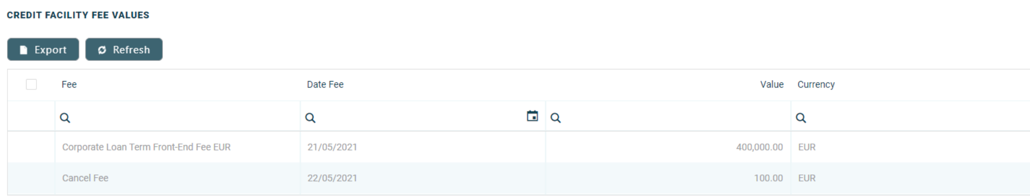
You can update utilizations in **Draft** status by double-clicking them and updating their editable fields on the newly displayed **Credit Utilization** page.

IMPORTANT!
Credit facility utilizations must be approved so that the amount of the contract can be disbursed in the customer's account. 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).

Remember to send the utilizations to approval after creating them by changing their statuses to **Send for Approved**!

Credit Facility Fee Values Section

In the **Credit Facility Fee Values** section, you can see or export the fee values already applied to this credit facility.



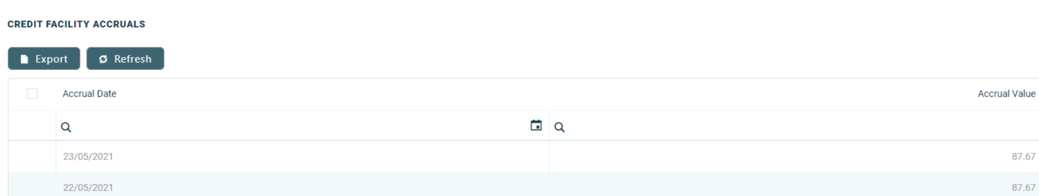
To view the details of a fee, double-click it to display the **Credit Facility Fee Value** page. For each fee, the following fields are displayed:

Field	Details
Credit Facility	The id of the selected credit facility record. This field is displayed on the **Credit Facility Fee Value** page.
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. This field is displayed on the **Credit Facility Fee Value** page.
Currency	The currency of the fee.
Repayment Notification	The number of the repayment notification automatically generated by Core Banking. This field is displayed on the **Credit Facility Fee Value** page.
Loan Item	The type of the fee. This field is displayed on the **Credit Facility Fee Value** page.
Value	The value of the fee, expressed in the fee's currency.

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

Credit Facility Accruals Section

In the **Credit Facility Accruals** section, you can see or export the values of the accrual automatically calculated by Core Banking for this credit facility.



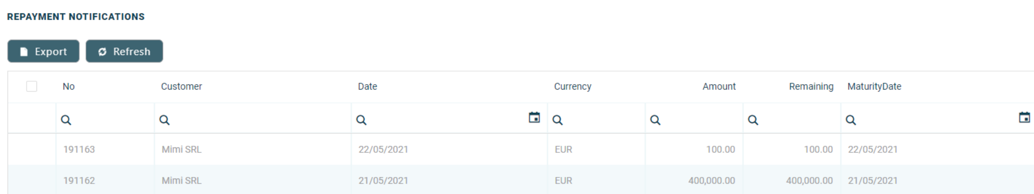
For each accrual, the following fields are displayed:

Field	Details
Accrual Date	The date of the accrual calculation.

Field	Details
Accrual Value	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.

Repayment Notifications Section

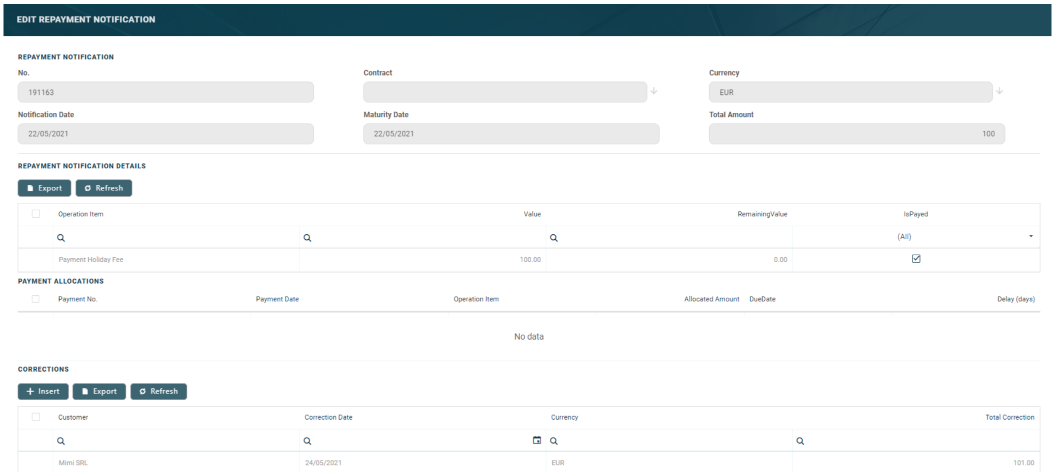
In the **Repayment Notifications** section, you can see, update or export the repayment notifications automatically issued by Core Banking for this credit facility.



For each repayment notification, the following information is displayed:

Field	Details
No	The number of the repayment notification issued by Core Banking.
Customer	The name of the customer participant to the credit facility for whom the repayment notification was issued.
Date	The date when the repayment notification was issued.
Currency	The currency of the issued repayment notification.
Amount	The amount of the issued repayment notification.
Remaining	The amount that remains to be paid by the customer for this repayment notification.
Maturity Date	The due date of the repayment notification.

To update a repayment notification, double-click it to open the **Edit Repayment Notification** page.



Here you can view the details of the repayment notification and you can insert corrections. Add a correction to the repayment notification by clicking the **Insert** button next to the **Corrections** section and filling in the details on the newly displayed **Add Contract Correction Entry** page.

Field	Required	Data Type	Details
Repayment Notification	No	Lookup	Read-only field. It displays the id of the selected repayment notification record.
Contract	No	Lookup	Read-only field. It displays the id of the contract attached to the selected credit facility.
Currency	No	Lookup	Read-only field. It displays the currency of the selected repayment notification record.
Customer	No	Lookup	Read-only field. It displays the name of the customer.
Correction Date	No	Invariant Date	Read-only field. It displays the date when the correction entry is saved.
Total Correction	No	Numeric	Read-only field. It displays the sum of values entered for in the correction entry details section.
Contract Correction Entry Details Section			
Repayment Notification Detail	No	Lookup	Select the repayment notification detail to be corrected.

Field	Required	Data Type	Details
Operation Item	No	Option set	Select the operation item for the correction entry detail.
Correction Value	No	Numeric	Enter the desired value for the contract correction entry detail.

The correction entries must be approved in order to be processed. Change the record's status to **Approved**.

Click the **Save and Reload** button at the top right corner of the page after performing the desired updates.

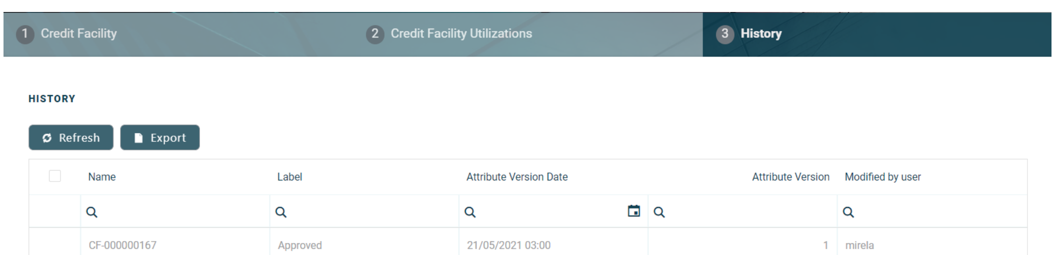
The repayment notification is automatically marked as paid (the **IsPaid** checkbox in the **Repayment Notification details** section is selected) after the payment is processed, either by a Core Banking process or by adding a manual correction.

History Tab

The **History** tab displays the versions of the credit facility, their workflow status and the user who modified the record.

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.



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).

The record must first be sent for approval to an employee of the bank with corresponding competencies, following the 4-eyes principle.

As a clerk, you should change the credit facility's status to **Send to Approved**. The system 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.

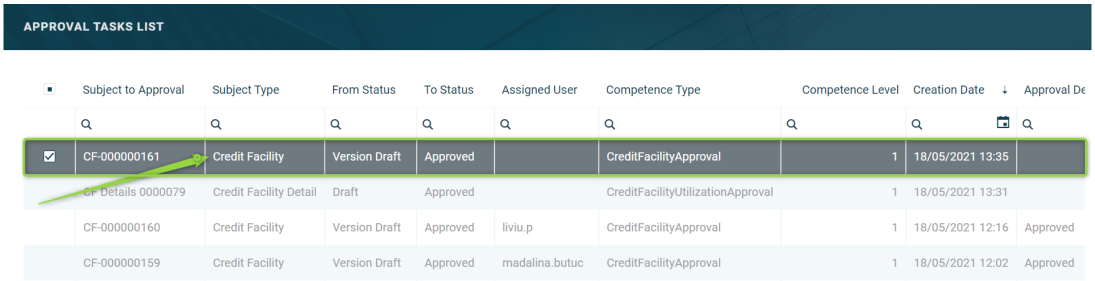
Approving Credit Facilities

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.



4. Click the **Approve** button.

Follow the steps described on the Approve Workflow Transitions page for more detailed instructions.

After approving a credit facility, users cannot edit the record's details, but they 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 in the **Insert credit Utilization** page:

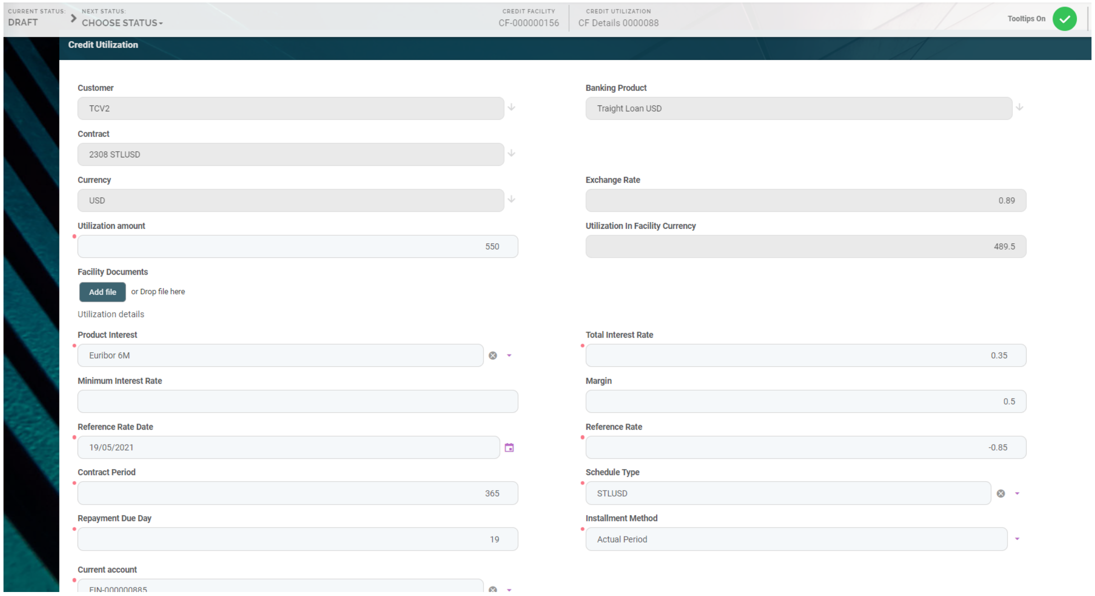
Field	Required	Data Type	Details
Customer	Yes	Lookup	Select the customer who will become the owner of this utilization. The list is already filtered to display only the customers entered as participants in the credit facility.
Banking Product	Yes	Lookup	Choose the banking product which is the object of this credit facility utilization. The list is already filtered to display only the banking products attached to the credit facility.

Field	Required	Data Type	Details
Contract	No	Lookup	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. **NOTE** The contract's start date cannot precede the utilization's start date. If no contract is selected, Core Banking automatically creates a new contract for this credit facility utilization.
Currency	No	Lookup	This is a read-only field displaying the selected banking product's defined currency.

Field	Required	Data Type	Details
Exchange Rate	No	Numeric	This is a read-only field displaying the exchange rate for the selected banking product's currency.
Utilization amount	Yes	Numeric	Enter the amount to be disbursed through this utilization, expressed in the selected banking product's currency.
Utilization In Facility Currency	No	Numeric	This is a read-only field displaying the utilization amount expressed in the credit facility's currency, calculated using the exchange rate displayed above.
Facility Documents	No	File	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 at the top right corner of the page. 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:



Field	Required	Data Type	Details
Product Interest	Yes	Lookup	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	Yes	Numeric	This field displays the total interest rate of the utilization, as it was calculated for the selected banking product. You can edit the value.

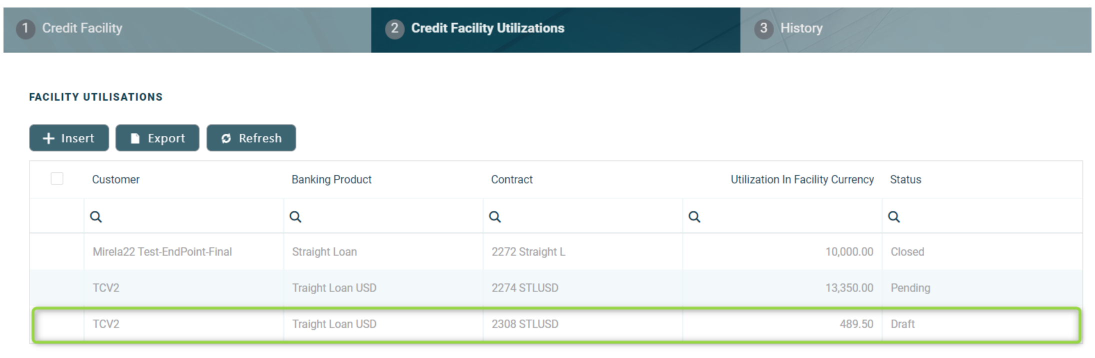
Field	Required	Data Type	Details
Minimum Interest Rate	No	Numeric	Enter a minimum interest rate applicable for this utilization, if needed.
Margin	No	Numeric	Enter a margin applicable for this utilization, if needed.
Reference Rate Date	Yes	Invariant Date	Select from the calendar the date for the exchange 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	Yes	Numeric	This field displays the value of the selected exchange reference rate. You can edit the value.
Contract Period	Yes	Numeric	This field displays the contract period in days, as it was defined for the selected banking product. You can edit the value.

Field	Required	Data Type	Details
Schedule Type	Yes	Lookup	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	Yes	Numeric	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.

Field	Required	Data Type	Details
Installment Method	Yes	Option set	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.

Field	Required	Data Type	Details
Current account	Yes	Lookup	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 at the top right corner of the page. The utilization record is saved in **Draft** status.



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.

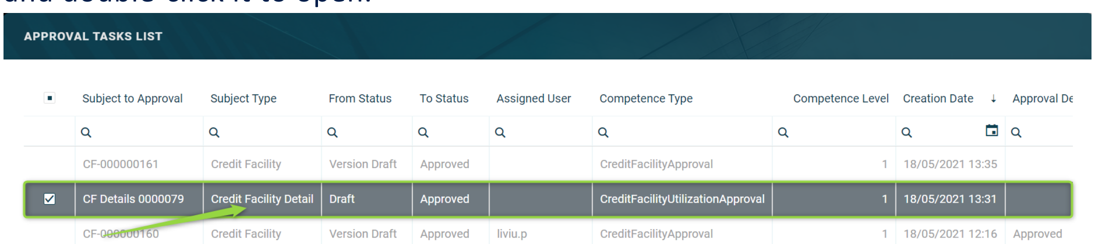
IMPORTANT! Each facility utilization must be approved by a user with credit facility utilization approval competencies, otherwise, the disbursement of the utilization will not be performed by the system.
At any given time, the available amount of the credit facility = the facility amount - (the sum of 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.



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, users cannot edit the utilization's details. An approved utilization disburses its amount in the customer's account. This amount is taken 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, cannot exceed the amount approved in the credit facility, calculated in the facility's currency based on the exchange rate valid on each day.

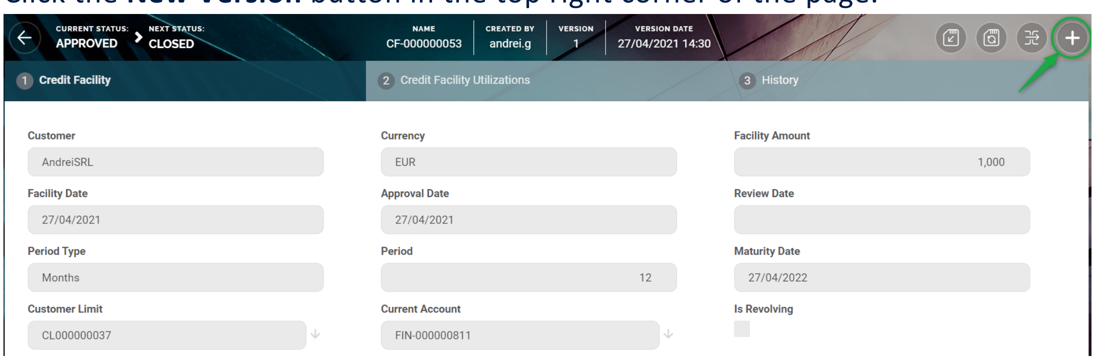
Fee values and accruals are calculated for the approved utilizations, and displayed in the **Credit Facility Utilizations** tab, along with any repayment notifications.

Creating New Versions of Existing Credit Facilities

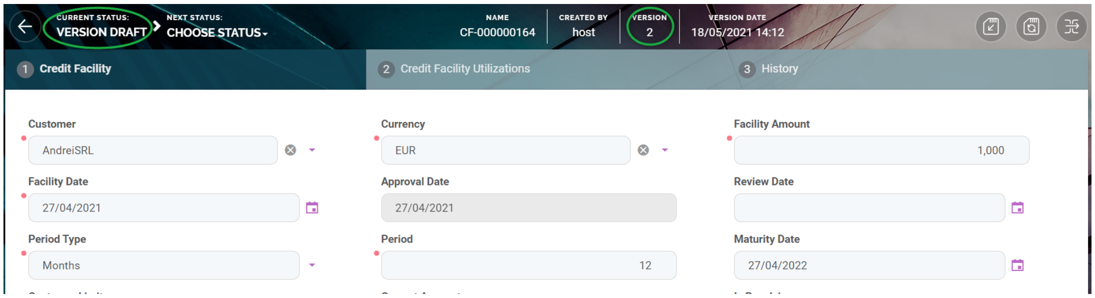
The credit facilities are set up for versioning. Thus, if the details of an approved credit facility have to be updated, a new version of the record must be created.

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

1. Double-click the credit facility record selected for updates.
2. Click the **New Version** button in the top right corner of the page.



A new version of the credit facility is created, with **Version Draft** status, thus restarting the life cycle.



3. Edit the desired fields in the **Credit Facility** tab.
4. Click the **Save and Reload** button at the top right corner of the page.

If the version draft is approved, 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.

Third-Party Management

The third-party management functionality of Core Banking refers to third-party entities (agents, brokers, insurers, etc.) which are 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.

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 into the system, 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.

Third-Party Agreements Statuses

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 High Productivity Fintech Infrastructure 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 no invoice details are attached to it by Core Banking. 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). No updates are available 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 cannot 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. No updates are allowed on the record.
- **Canceled** - the status of a record after manually canceling it straight from the Draft status. No updates are allowed on the record.

Third-Party Agreements Versioning

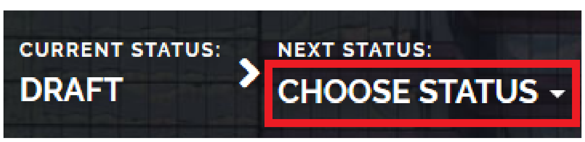
Core Banking allows you to create new versions for an existing agreement if you need to modify an existing approved record.

A third-party agreement version can have the following statuses:

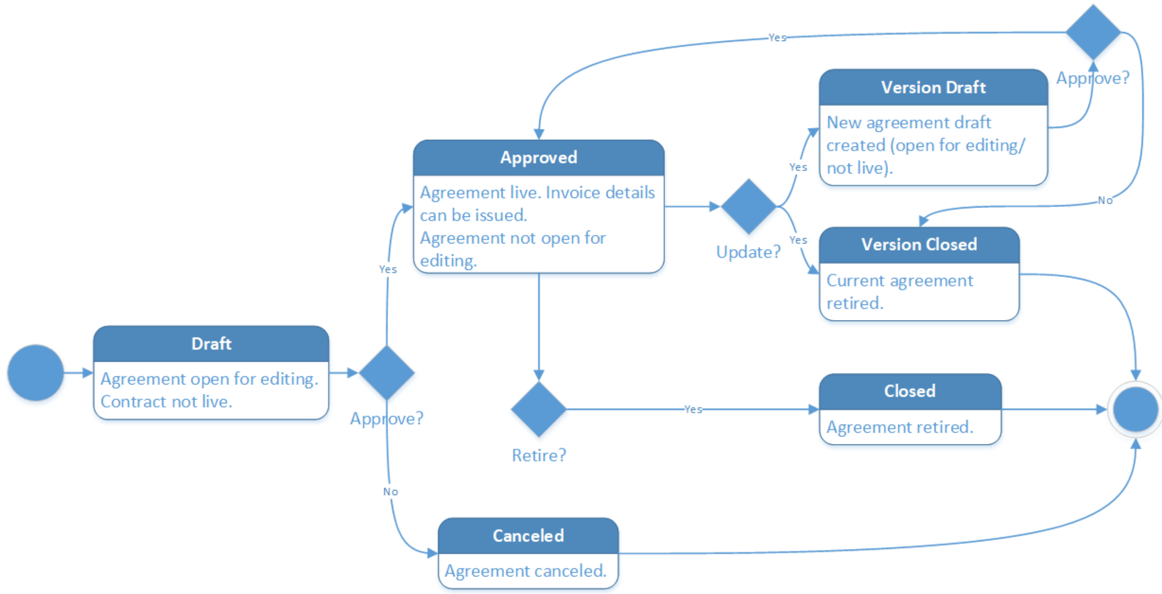
- **Version Draft** - the status of a newly created agreement version record that was not yet sent for approval. While in this status, you can edit some fields. Send the record to approval after editing all the necessary details.
- **Approved** - the status of an agreement version record after being authorized by a user with approval competencies. While in this status, you cannot 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. No updates are allowed on the record.

Changing Third-Party Agreement Statuses

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



The third-party agreement status transitions are illustrated below:



Note that:

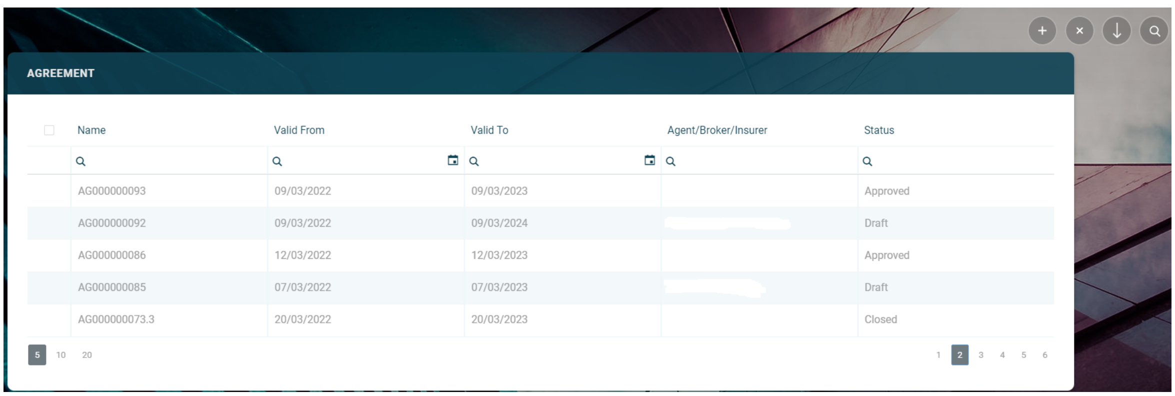
- Once a record is live, its settings can no longer be modified.
- If you want to update the details of a live agreement, you must create a new agreement version.
- When you create a new agreement version, the current version is retired; no updates are allowed on the retired version.
- Every agreement 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.

IMPORTANT!
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 Third-Party Agreements

To manage third-party agreements:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational > Third-Party Agreements** menu.
4. Click the **Agreements** menu item to open the **Agreements** page.



On the **Agreements** page, you can:

- Create a new agreement by clicking the **Insert** button at the top right corner.
- Edit a **Draft** agreement from the list by double-clicking it.
- Delete an agreement in **Draft** status by selecting it and clicking the **Delete** button at the top right corner
- Search for a specific record by filling in any or all of the column headers of the displayed agreements records list.

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.

HINT
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

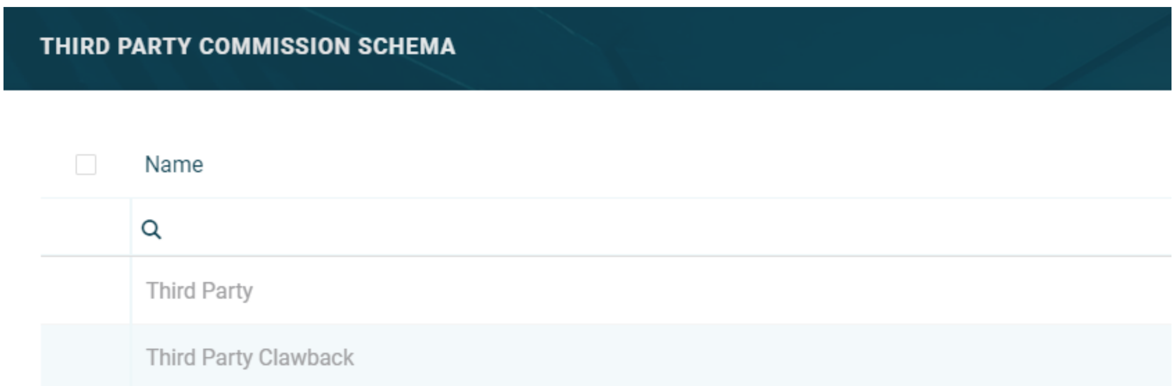
Third-party commission schema records are commission schemas that can be used only for the third-party management processes within Core Banking. They are used to categorize third-party commission types. For example, there are two schemas that come out-of-the-box with Core Banking: `Third Party` and `Third 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. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configurations** menu.
4. Click the **Third-Party Commission Schema** menu item to open the **Third-Party Commission Schema** page.



On the **Third-Party Commission Schema** page, you can:

- Add a new third-party commission schema by clicking the **Insert** button at the top right corner of the page.
- Edit an existing third-party commission schema by double-clicking it.
- Delete a third-party commission schema by selecting it and clicking the **Delete** button at the top right corner of the page. You can't delete schemas already used to define commissions.
- Search for a specific record by filling in any of the column headers of the displayed records list.

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.

2. Fill in the following fields:

Field	Mandatory	Data Type	Details
Name	Yes	Text	Enter the name of the third-party commission schema.

3. Click the **Save and Reload** button at the top right corner of the page. The new third-party commission schema is created and ready to be used.

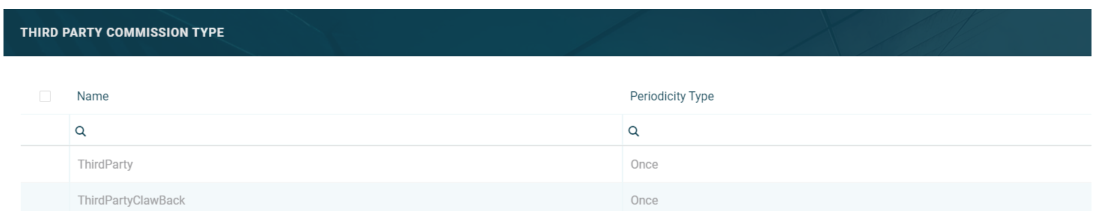
Third-Party Commission Type

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. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configurations** menu.
4. Click the **Third-Party Commission Type** menu item to open the **Third-Party Commission Type** page.



On the **Third-Party Commission Type** page, you can:

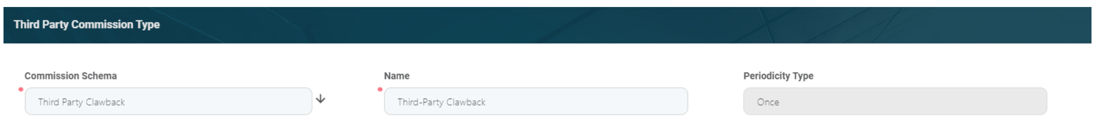
- Add a new third-party commission type by clicking the **Insert** button at the top right corner of the page.
- Edit an existing third-party commission type by double-clicking it.
- Delete a third-party commission type by selecting it and clicking the **Delete** button at the top right corner of the page. You can't delete commission types already used to define commissions.
- Search for a specific record by filling in any of the column headers of the displayed records list.

> **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.



2. Fill in the following fields from the **Commission Type** section:

Field	Mandatory	Data Type	Details
Commission Schema	Yes	Lookup	Select the schema to which this third-party commission type belongs.
Name	Yes	Text	Enter the name of the third-party commission type.

Field	Mandatory	Data Type	Details
Periodicity type	No	Option set	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. Click the **Save and Close** button at the top right corner of the page. 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.

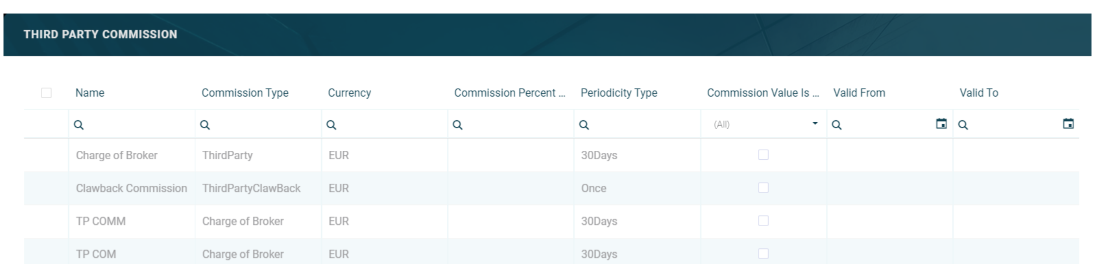
To prevent losing profits, there may be situations when the financial institution claims back all or some of the commission already paid out to third-party entities, due to the fact that the affected contracts were closed before their due date.

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 cannot be selected in Commission Lists.
> Third-party commissions and third-party commission types cannot be used in Payment Schedule Type Details.

To manage third-party commissions:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Admin Configurations** menu.
4. Click the **Third-Party Commission** menu item to open the **Third-Party Commission** page.



On the **Third-Party Commission** page, you can:

- Add a new third-party commission by clicking the **Insert** button at the top right corner of the page.
- Edit an existing third-party commission by double-clicking it.
- Delete a third-party commission by selecting it and clicking the **Delete** button at the top right corner of the page. You can't delete commissions already used by other records.

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.

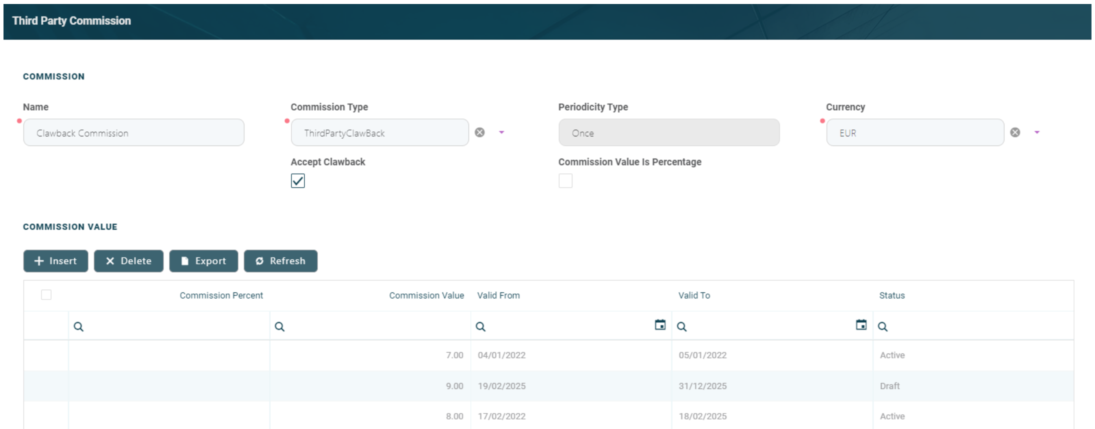
IMPORTANT!

The value of a third-party commission used in active contracts cannot 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.

Creating Third-Party Commissions

Follow these steps to create new third-party commission records:

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.



2. Fill in the following fields from the **Commission** section:

Field	Mandatory	Data Type	Details
Name	Yes	Text	Enter the name of the commission.

Field	Mandatory	Data Type	Details
Commission Type	Yes	Option set	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. **IMPORTANT!** The types have a periodicity already set: once/ monthly/ trimester etc. For `ThirdParty Clawback` commission type, `Periodicity Type = Once`.
Periodicity type	No	Option set	Automatically filled-in when you choose the commission type. You cannot change this value.

Field	Mandatory	Data Type	Details
Currency	Yes	Option set	Select the currency of the commission from the drop-down.
Accept Clawback	Yes	Boolean	Select this checkbox if the commission accepts a clawback commission during agreement pricing definition.
Commission Value Is Percentage	No	Boolean	Select this checkbox if the commission is measured by percentage, not as a fixed value.

Field	Mandatory	Data Type	Details
Commission Percent Applied To	Yes	Option set	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. • `Paid value` - the percentage applies to the anticipated payment performed on the contract. • `Unused amount` - the percentage applies to the contract's unused amount from the granted value. • `Used amount` - the percentage applies to the contract's used amount from the granted value. • `Overdraft limit amount`

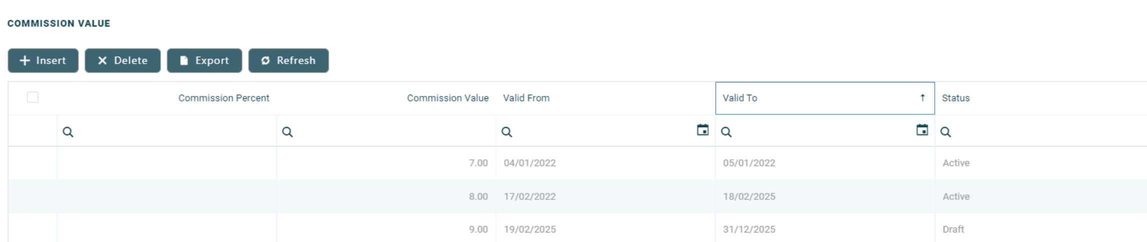
Field	Mandatory	Data Type	Details
			- the percentage applies to the contract's overdraft limit amount. • `Amount` - the percentage applies to the contract's amount. For **Term Loan**, **Mortgage** or **Overdraft** banking products the calculation method is as follows: If `percentAppliedTo = financedAmount`, 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:

Field	Mandatory	Data Type	Details
			If `percentAppliedTo = overdraftLimitAmount`, then `financedAmount = overdraftLimitAmount`; If `percentAppliedTo = usedAmount`, then if `(periodType == Once)`, `financedAmount = overdraftLimitAmount - availableAmountForOverdraft`, else `financedAmount = null`. Default value `financedAmount = null`.

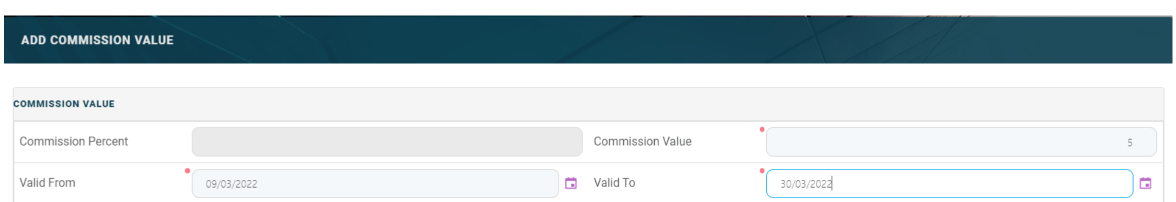
3. Click the **Save and Reload** button at the top right corner of the page.

Commission Value Section

The **Commission Value** section holds the actual values of the third-party commission.



To add a new commission value, click **Insert** and fill in the following fields in the newly opened **Add Commission Value** page:



Field	Mandatory	Data Type	Details
Commission Percent	No	Numeric	The percent representing the commission. If the commission percentage > 100, Core Banking displays a warning message: "`Make sure percent value is accurate.`"
Commission Value	Yes	Numeric	The value of the commission.
Valid From	Yes	Date	Select the first day when the commission value becomes applicable.
Valid To	Yes	Date	Select the last day when the commission value is applicable.

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

Creating Agreements For Third-Parties

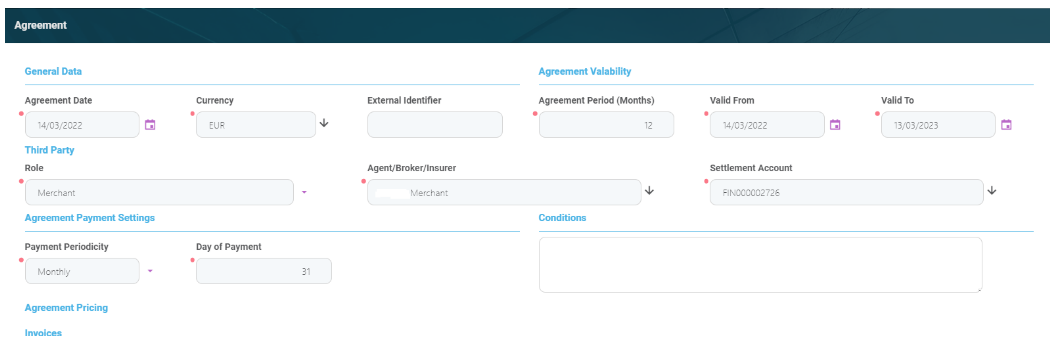
Third-party agreements records are created in FintechOS Portal, on the **Agreements** page. To create a new agreement, click the **Insert** button on the top right side of the page. A new page opens, with tabs that assist you in configuring the agreement:

- Agreement tab - The first tab requires the information for the creation of an agreement validity, currency, third-party, payment settings, agreement pricing, and invoices.

- History tab - This tab only appears after saving the agreement record. It displays the versions of the agreement, along with workflow status and the user who modified the product.

Agreement Tab

The **Agreement** tab requires the elements for the creation of an agreement validity, currency, third-party, payment settings, agreement pricing, and invoices.



The following fields are available for completion when creating or updating a record in **Draft** status:

Field	Mandatory	Data Type	Details
General Data			
Agreement Date	Yes	Invariant Date	The date of the agreement. Automatically filled-in with the system's date. You can change this value.
Currency	Yes	Lookup	Select from the list the currency of the agreement.
External Identifier	No	Text	Enter an external identifier of the agreement record, if available.
Agreement Validity			

Field	Mandatory	Data Type	Details
Agreement Period (Months)	Yes	Whole Number	Enter the number of months for the agreement's validity. **NOTE** 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	Yes	Invariant Date	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`).

Field	Mandatory	Data Type	Details
Valid To	Yes	Invariant Date	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.
Third-Party			
Role	Yes	Option Set	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. **NOTE** Once an agreement is saved, this field can only be changed through versioning.

Field	Mandatory	Data Type	Details
Agent/ Broker/ Insurer/ Merchant	Yes	Lookup	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, this field can only be changed through versioning.
Settlement Account	Yes	Lookup	Select the entity's bank account that acts as settlement account, where the commissions payable based on this agreement will be disbursed and/ or from where the financial institution will 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.
Agreement Payment Settings			

Field	Mandatory	Data Type	Details
Payment Periodicity	Yes	Option Set	Select from the list the periodicity for processing the payments calculated based on this agreement. Possible values: • `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	No	Boolean	Only displayed if `Payment Periodicity = Daily`. If you select the checkbox, then the payment is processed in real-time.

Field	Mandatory	Data Type	Details
Week Day	Yes	Lookup	Only displayed if `Payment Periodicity = Weekly`. Select the day of the week when the payment should be processed.
Day of Payment	Yes	Whole Number	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	No	Text Area	Enter any other conditions applicable to the agreement.

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

NOTE

When creating an agreement, fill in all the mandatory fields. 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 versioning information. All the other sections of the **Agreement** page (**Agreement Pricing** and **Invoices**) become visible and can be filled-in.

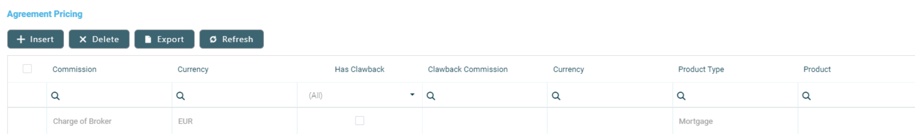
IMPORTANT!

After filling in all the mandatory details in the **Agreement** tab, the record is still in **Draft** status. Change its status to **Approved** after adding at least one pricing record. You can add invoices only for agreement records with **Approved** status.

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.

Agreement Pricing Section

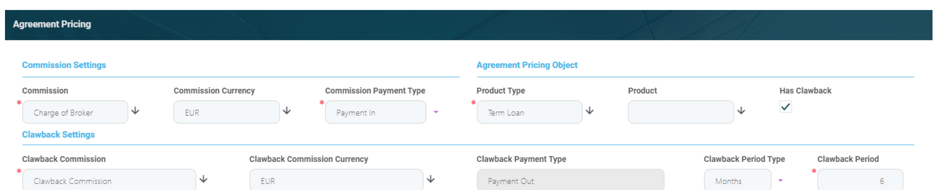
In the **Agreement Pricing** section, displayed after saving the agreement, you can insert, update, delete or export pricing records for an agreement in **Draft** status.



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.

Adding Agreement Pricing Records

To add a pricing record, click **Insert** and fill in the following fields on the newly opened **Agreement Pricing** page:



Field	Mandatory	Data Type	Details
Commission Settings			
Commission	Yes	Lookup	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	No	Lookup	This field is automatically completed with the selected commission's currency. You can't change this value.

Field	Mandatory	Data Type	Details
Commission Payment Type	No	Lookup	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.
Agreement Pricing Object			

Field	Mandatory	Data Type	Details
Product Type	Yes	Lookup	Select from the list the product type that must be present in a contract in order for the for the agreement pricing to be applicable. If `Product` is not selected, then `Product Type` is mandatory to be selected.
Product	Yes	Lookup	Select from the list the product that must be present in a contract in order for the for the agreement pricing to be applicable. If `Product Type` is not selected, then `Product` is mandatory to be selected.

Field	Mandatory	Data Type	Details
Has Clawback	No	Boolean	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`. **NOTE** This checkbox is displayed only if the selected commission was defined with `Accept Clawback = True`.
Clawback Settings			
Clawback Commission	Yes	Numeric	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.

Field	Mandatory	Data Type	Details
Clawback Commission Currency	No	Lookup	If displayed, this field is automatically completed with the selected clawback commission's currency. You can't change this value.

Field	Mandatory	Data Type	Details
Clawback Payment Type	No	Lookup	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	No	Option Set	If displayed, select from the list the period type for the clawback commission.

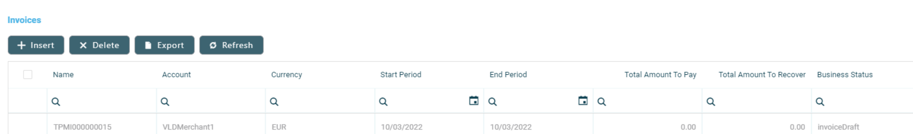
Field	Mandatory	Data Type	Details
Clawback Period	Yes	Whole Number	Mandatory if `Clawback Period Type` was selected. If displayed, enter the number of periods during which the clawback commission can be reclaimed by the financial institution in case a contract subject to the agreement pricing was closed earlier.

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

You can add as many pricing records as you need for an agreement.

Invoices Section

In the **Invoices** section, displayed after saving the agreement, you can insert, delete or export invoices for an agreement in **Approved** status.

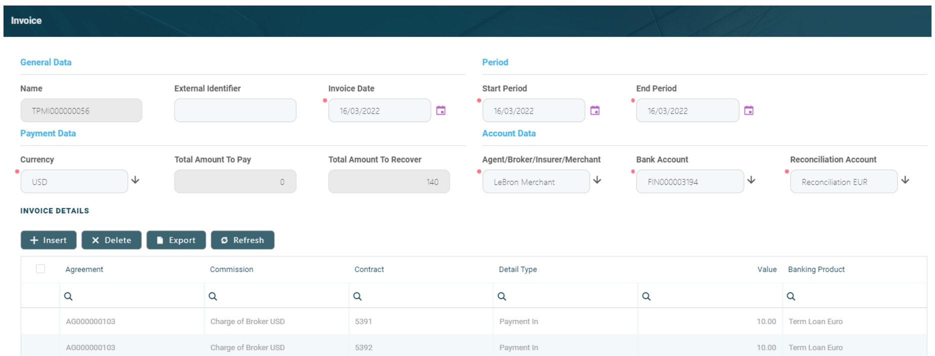


The section displays information about the invoice: name, third-party, currency, start and end period, total amount to pay to the third-party and to recover by the financial institution, record's business status.

NOTE
Read detailed information about how invoices are managed on the "Third-Party Invoices" on page 673 page.

Adding Invoices to Agreements

To add an invoice to the third-party agreement directly from the **Agreement** page, click **Insert** and fill in the following fields on the newly opened **Invoice** page:



Field	Mandatory	Data Type	Details
General Data			
Name	No	Text	Automatically filled in with the name of the invoice record, after saving the record. You can't modify this field.
External Identifier	No	Text	Enter an external identifier for the invoice, if needed.
Invoice Date	Yes	Invariant Date	Automatically filled in with the current date of the system. You can modify this date.
Period			

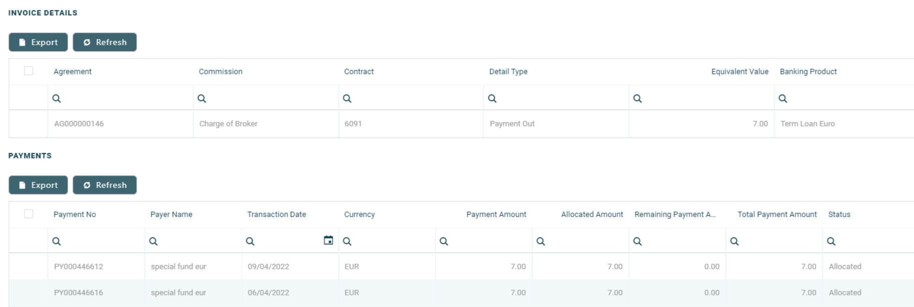
Field	Mandatory	Data Type	Details
Start Period	Yes	Invariant Date	Select the starting date of the interval during which Core Banking filters the contracts that are subject to invoicing.
End Period	Yes	Invariant Date	Select the ending date of the interval during which Core Banking filters the contracts that are subject to invoicing. The `Start Period` must be <= `End Period`.
Payment Data			
Currency	Yes	Lookup	Select the currency in which the invoice is to be paid.

Field	Mandatory	Data Type	Details
Total Amount To Pay	No	Numeric	The total amount to pay to the third-party, expressed in the selected currency. You can't modify this field. It is automatically calculated by Core Banking based on the invoice details entered later, after saving the invoice record.
Total Amount To Recover	No	Numeric	The total amount to recover from the third-party, expressed in the selected currency. You can't modify this field. It is automatically calculated by Core Banking based on the invoice details entered later, after saving the invoice record.
Account Data			

Field	Mandatory	Data Type	Details
Agent/ Broker/ Insurer/ Merchant	Yes	Lookup	Automatically filled in with the third-party entity for whom you are creating the invoice. You can't modify this field.
Bank Account	Yes	Lookup	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	Yes	Lookup	Select the financial institution's reconciliation account. You can only choose from the list of the accounts opened in the selected currency.

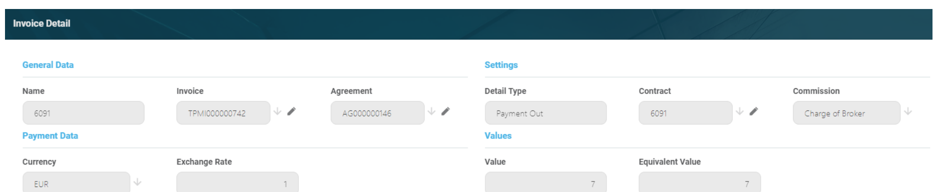
Click the **Save and Reload** button at the top right corner of the page.

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 payment performed by Core Banking.



Adding Invoice Details to an Invoice

To add an invoice detail to an invoice, click **Insert** within the **Invoice Details** section and fill in the following fields on the newly opened **Invoice Detail** page:



Field	Mandatory	Data Type	Details
General Data			
Name	Yes	Text	Automatically filled in with the name of the invoice detail record, after saving the record. You can't modify this field. This is the contract number.
Invoice	Yes	Text	Automatically filled in with the name of the invoice record. You can't modify this field.

Field	Mandatory	Data Type	Details
Agreement	Yes	Lookup	Select the agreement for which you are inserting the invoice detail. You can only choose from the list of agreements with **Approved** status created for the third-party mentioned in the invoice record.
Settings			

Field	Mandatory	Data Type	Details
Detail Type	Yes	Option Set	Select the type of payment to be performed for the invoice detail: • `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.

Field	Mandatory	Data Type	Details
Contract	Yes	Lookup	Select the contract that is the object of the invoice detail. You can only choose from the list of contracts with the third-party having the role specified in the selected agreement, and having the activation date during the period of the invoice, for commissions with `Once` periodicity type. If the commission is applied to contract installments, than the due date of the installment must be within the period of the invoice. **NOTE** For commissions with `Once` periodicity type, the contract can't be attached to an invoice detail more than once.

Field	Mandatory	Data Type	Details
Commission	Yes	Lookup	Select the commission to be applied for this invoice detail. You can only choose from the list of commissions mentioned in the selected agreement, that have a valid value during the invoice's period. **NOTE** If the selected commission is of `Third-Party Clawback` commission type, then `Detail Type = Payment In`.
Payment Data			
Currency	Yes	Lookup	Automatically filled in with the currency selected at the commission level. You can't modify this field.

Field	Mandatory	Data Type	Details
Exchange Rate	Yes	Lookup	Automatically filled in with 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. You can't modify this field.
Values			
Value	Yes	Numeric	Automatically filled in with the commission value for the selected contract at the current date, calculated by Core Banking. You can't modify this field.

Field	Mandatory	Data Type	Details
Equivalent Value	Yes	Numeric	Automatically filled in with the commission's equivalent value in the invoice's currency, calculated by Core Banking as (`Exchange Rate * Value`). You can't modify this field. **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`.

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

> **NOTE**
> You can create only one invoice detail for the combination between a contract, a commission and a detail type. An error message prevents you to create duplicate invoice detail records

containing the same combination of `Contract`, `Commission`, and `Detail Type` values.

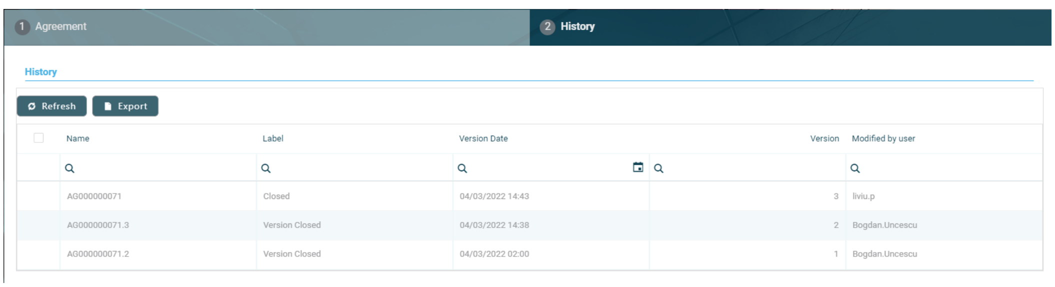
IMPORTANT! Change the status of the invoice record to **Approved** to allow Core Banking to process the payments.

History Tab

The **History** tab displays the versions of the agreement, their workflow status, the version creation date, and the user who modified the record.

Here you can track the record's life-cycle and review older versions that are no longer active. To view a version of the record, double-click it.

There are no edits allowed in this tab.



IMPORTANT!
Third-party agreements must be approved so that invoices can be generated to pay out the commissions to the third-party entity and/ or the financial institution.

Remember to approve the agreement after creating it by changing its status to **Approved**!

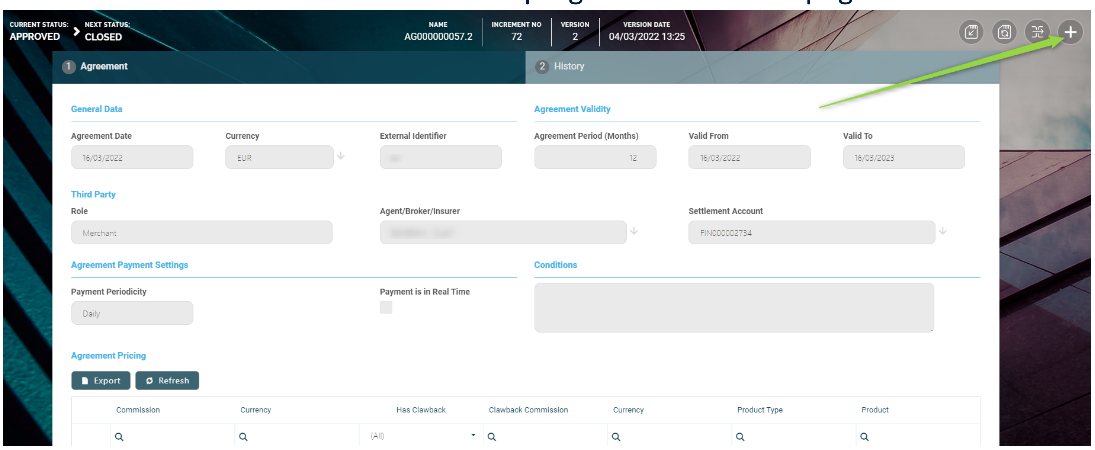
Creating New Versions Of Third-Party Agreements

The third-party agreements are set up for versioning. Thus, if the details of an approved agreement have to be updated, a new version of the record must be created.

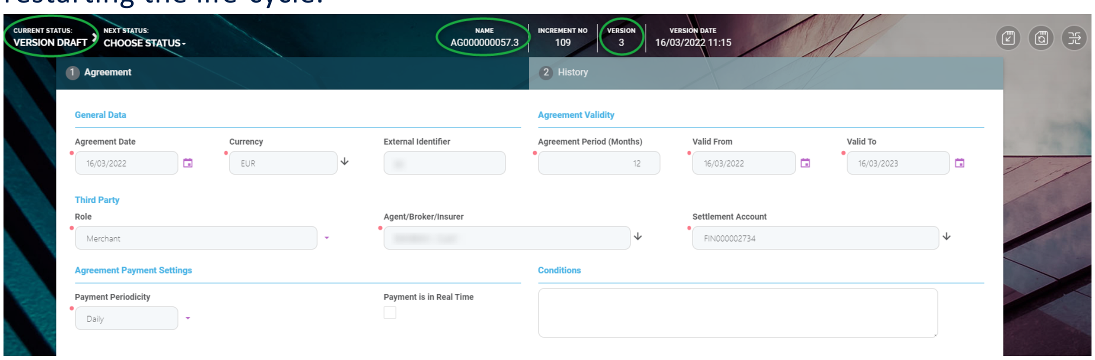
To create a new version for a record with the **Approved** status, follow these steps:

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

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



A new version of the agreement is created, with **Version Draft** status, thus restarting the life-cycle.



3. Edit the desired fields in the **Agreement** tab.
4. Click the **Save and Reload** button at the top right corner of the page.

If the version draft 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.

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, using the **Invoice** menu, or allow Core Banking to create the invoices automatically, using a dedicated scheduled job.

Third-Party Invoice Statuses

The four-eyes principle is applicable for status transitions of an invoice, meaning that a record should be approved by a second financial institution employee, with higher authorization rights. This is enabled via approval task High Productivity Fintech Infrastructure 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.

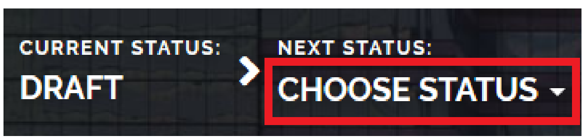
A third-party invoice record has the following business workflow statuses:

- **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.

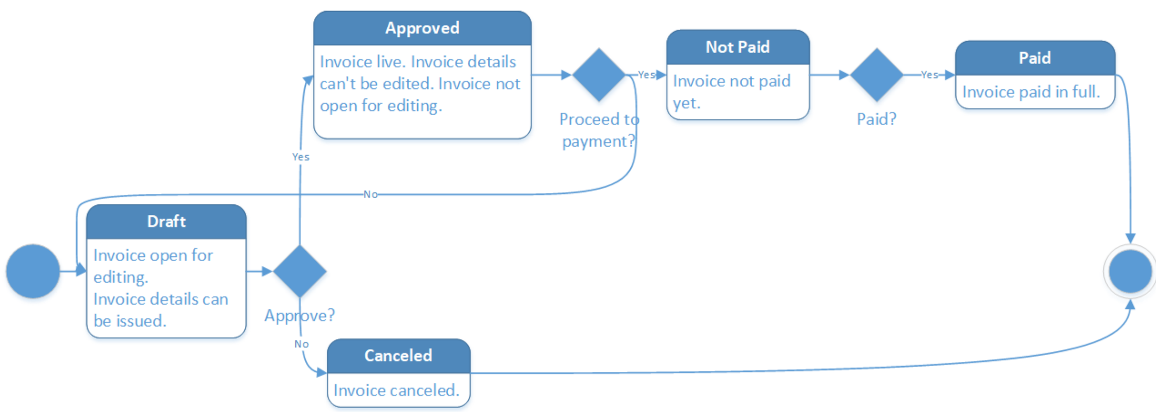
- **Approved** - the status of an invoice record after being authorized by a user with approval competencies. While in this status, you cannot edit the record's details. If you need to alter the record's details, change its status back to Draft.
- **Not Paid** - the status of an invoice record after 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.



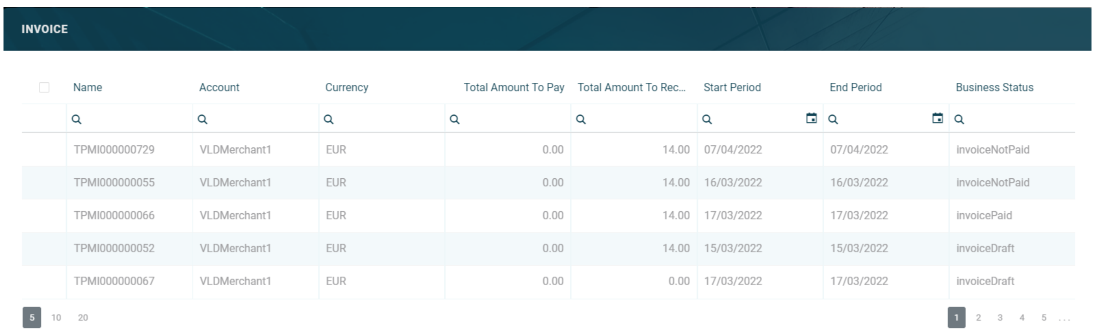
The third-party invoice status transitions are illustrated below:



Managing Invoices For Third-Parties

To manage third-party invoices:

1. Log into FintechOS Portal.
2. Click the main menu icon at the top left corner.
3. In the main menu, expand the **Core Banking Operational** menu.
4. 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

5 10 20 1 2 3 4 5 ...

On the **Invoices** page, you can:

- Create a new invoice manually by clicking the **Insert** button at the top right corner of the page.

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)

- Edit an invoice in **Draft** status by double-clicking it.
- Delete a **Draft** invoice by selecting it and clicking the **Delete** button at the top right corner of the page. You can't delete invoices already used by other records.
- Search for a specific record by filling in any or all of the column headers of the displayed agreements records list.

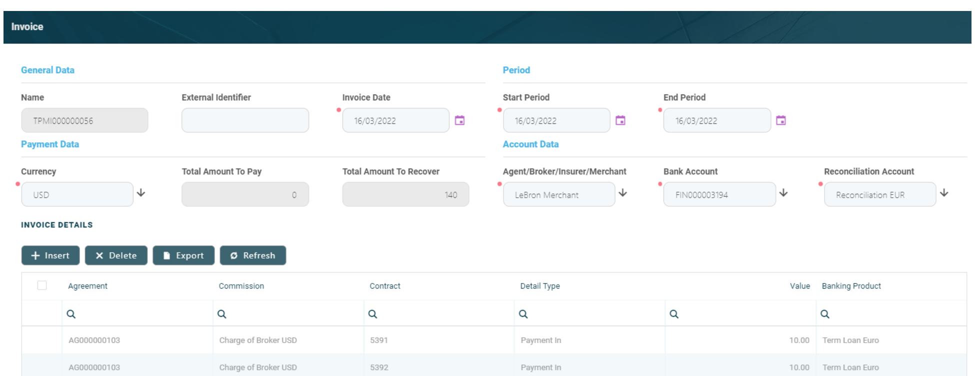
NOTE
Users with the associated role of Loan Admin Officer or Retail Credit Officer can insert, update, or delete third-party invoice records. Users with the other associated Core Banking security roles can only view such records.

HINT
You can also add an invoice to the third-party agreement directly from the **Agreement** page, following the instructions detailed here.

Creating Invoices Manually

Follow these steps to create new third-party invoice records:

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



> **NOTE**
>
> To add an invoice to the third-party agreement directly from the **Agreement** page, follow the instructions detailed here.

2. Fill in the following fields on the newly opened **Invoice** page:

Field	Mandatory	Data Type	Details
General Data			
Name	No	Text	Automatically filled in with the name of the invoice record, after saving the record. You can't modify this field.
External Identifier	No	Text	Enter an external identifier for the invoice, if needed.
Invoice Date	Yes	Invariant Date	Automatically filled in with the current date of the system. You can modify this date.
Period			

Field	Mandatory	Data Type	Details
Start Period	Yes	Invariant Date	Select the starting date of the interval during which Core Banking filters the contracts that are subject to invoicing.
End Period	Yes	Invariant Date	Select 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`.
Payment Data			
Currency	Yes	Lookup	Select the currency in which the invoice is to be paid.

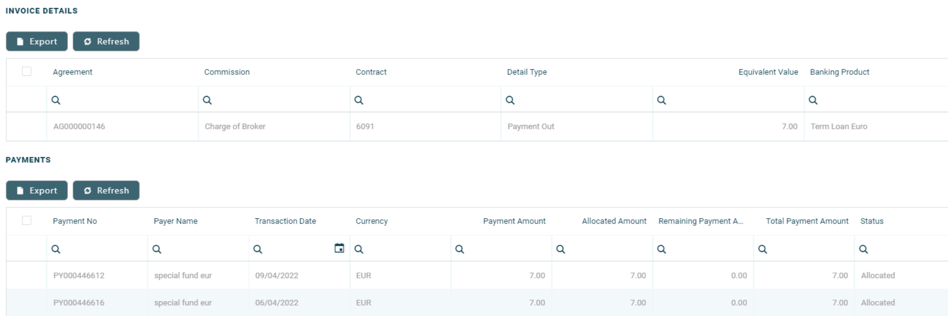
Field	Mandatory	Data Type	Details
Total Amount To Pay	No	Numeric	The total amount to pay to the third-party, expressed in the selected currency. You can't modify this field. It is automatically calculated by Core Banking based on the invoice details entered later, after saving the invoice record.

Field	Mandatory	Data Type	Details
Total Amount To Recover	No	Numeric	The total amount to recover from the third-party, expressed in the selected currency. You can't modify this field. It is automatically calculated by Core Banking based on the invoice details entered later, after saving the invoice record.
Account Data			
Agent/ Broker/ Insurer/ Merchant	Yes	Lookup	Select the third-party entity for whom you are creating the invoice.

Field	Mandatory	Data Type	Details
Bank Account	Yes	Lookup	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	Yes	Lookup	Select the financial institution's reconciliation account. You can only choose from the list of the accounts opened in the selected currency.

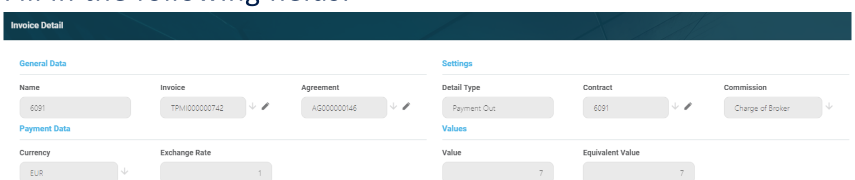
3. Click the **Save and Reload** button at the top right corner of the page.

   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.



Adding Invoice Details to an Invoice

1. To add an invoice detail to an invoice in **Draft** status, click **Insert** within the **Invoice Details** section in the **Invoice** page. The **Invoice Detail** page is displayed.
2. Fill in the following fields:



Field	Mandatory	Data Type	Details
General Data			
Name	Yes	Text	Automatically filled in with the name of the invoice detail record, after saving the record. You can't modify this field. This is the contract number.

Field	Mandatory	Data Type	Details
Invoice	Yes	Text	Automatically filled in with the name of the invoice record. You can't modify this field.
Agreement	Yes	Lookup	Select the agreement for which you are inserting the invoice detail. You can only choose from the list of agreements with **Approved** status created for the third-party mentioned in the invoice record.
Settings			

Field	Mandatory	Data Type	Details
Detail Type	Yes	Option Set	Select the type of payment to be performed for the invoice detail: • `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

Field	Mandatory	Data Type	Details
			settlement account.

Field	Mandatory	Data Type	Details
Contract	Yes	Lookup	Select the contract that is the object of the invoice detail. You can only choose from the list of contracts with the third-party having the role specified in the selected agreement, and having the activation date during the period of the invoice, for commissions with Once periodicity type. If the commission is applied to contract installments, than the due date of the installment must be within the period of the invoice.

Field	Mandatory	Data Type	Details
			NOTE For commissions with Once periodicity type, the contract can't be attached to an invoice detail more than once.

Field	Mandatory	Data Type	Details
Commission	Yes	Lookup	Select the commission to be applied for this invoice detail. You can only choose from the list of commissions mentioned in the selected agreement, that have a valid value during the invoice's period. **NOTE** If the selected commission is of `Third-Party Clawback` commission type, then

Field	Mandatory	Data Type	Details
			`Detail Type = Payment In.`
Payment Data			
Currency	Yes	Lookup	Automatically filled in with the currency selected at the commission level. You can't modify this field.
Exchange Rate	Yes	Lookup	Automatically filled in with 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. You can't modify this field.

Field	Mandatory	Data Type	Details
Values			
Value	Yes	Numeric	Automatically filled in with the commission value for the selected contract at the current date, calculated by Core Banking. You can't modify this field.

Field	Mandatory	Data Type	Details
Equivalent Value	Yes	Numeric	Automatically filled in with the commission's equivalent value in the invoice's currency, calculated by Core Banking as (`Exchange Rate * Value`). You can't modify this field. **NOTE** `Equivalent Value` is summed up to `Total Amount To Pay` if `Detail Type =`

Field	Mandatory	Data Type	Details
			Payment Out. Equivalent Value is summed up to Total Amount To Recover if Detail Type = Payment In.

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

NOTE
You can create only one invoice detail for the combination between a contract, a commission and a detail type. An error message prevents you to create duplicate invoice detail records containing the same combination of `Contract`, `Commission`, and `Detail Type` values.
You can create as many invoice details as needed for an invoice.

IMPORTANT! Change the status of the invoice record to **Approved** to allow Core Banking to process the payments.

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**, one or two bank account transactions are generated 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**.

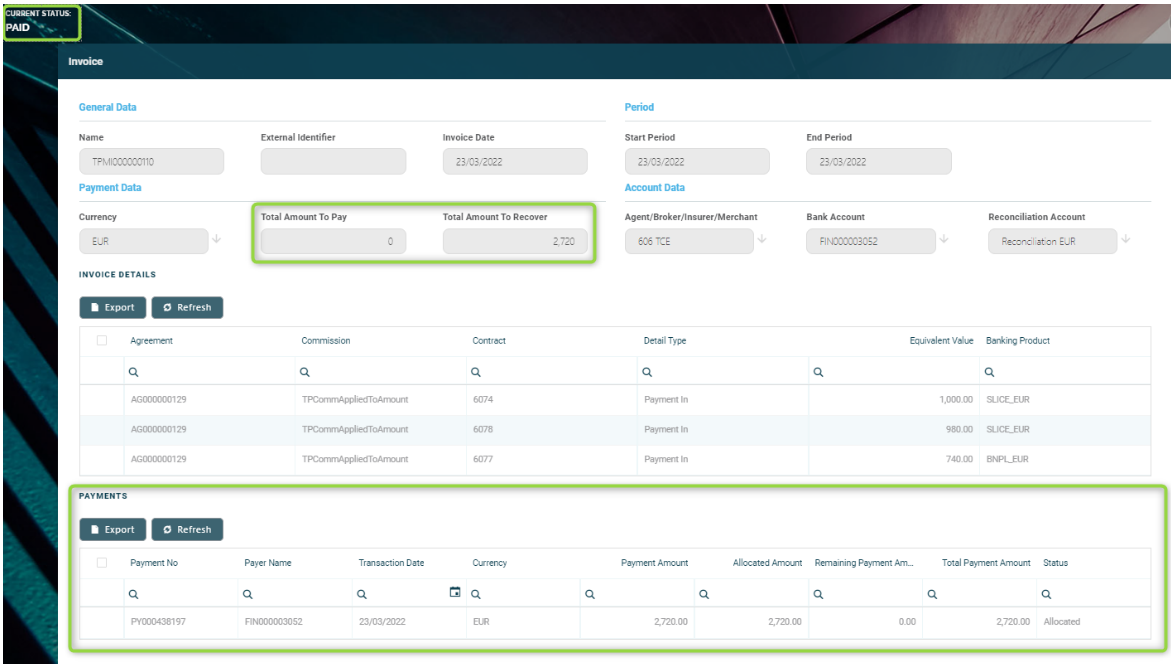
ThirdPartyPaymentIsNet = True

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 creating the payment records, Core Banking displays them for each invoice in the **Invoice** page's **Payments** section:



Each payment record in the list displays information about the payment number, payer bank account name, transaction date, currency, payment amount, allocated amount, remaining payment amount, total payment amount, and status.

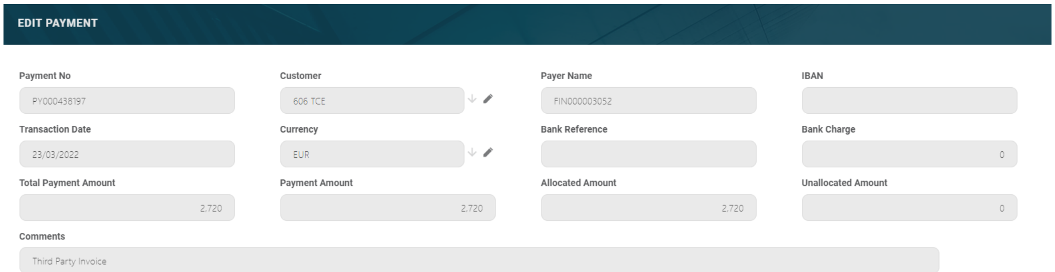
In the **Payments** section, you can:

- Search for a specific record by filling in any or all the column headers of the displayed records list.
- Open a specific a payment from the list by double-clicking it. The payment record itself can only be viewed, and not edited.
- Delete a payment in **Draft** status by selecting it and clicking the **Delete** button at the top right corner. Any payment with a status different than **Draft** cannot be deleted.

NOTE
You cannot edit any of the fields of a payment.

Viewing Third-Party Invoice Payments

1. To view a record, double-click the desired payment on the **Invoice** page. The **Payment** page is displayed.



2. View the following information about the selected payment:

Field	Details
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.