Tryton By Example

A tutorial explaining by example
Tryton installation & usage
for first time administrators & users
of the system
-
Usage : Basic Functionality

Github - [GitHub - mrmarcrottiers/tryton-101: Learn Tryton by example]
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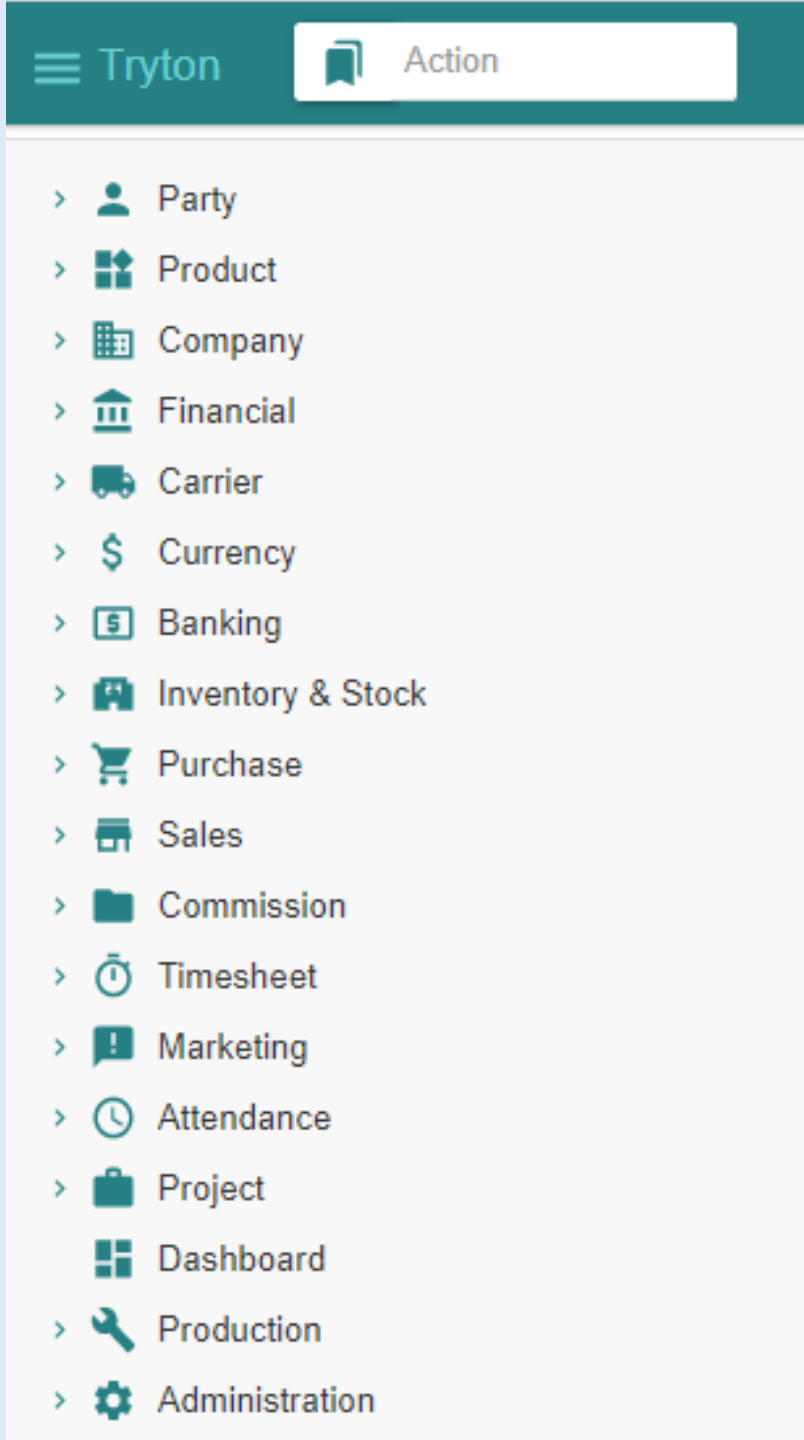
Version of Tryton : 5.8
Verified for installation on : Windows 10 & Powershell 7
Documentation : GNU GPL
Author : Marc Rottiers

Table of Contents



TOC

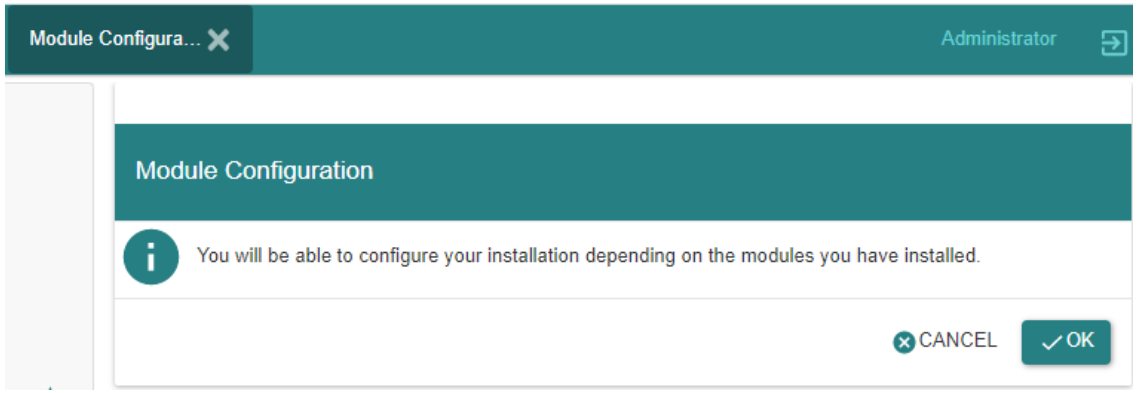
Initial Configuration Wizard	Performing Initial Configuration : language, user, module
Operations	Explaining how to perform Operations
Modules	Explaining the concept of Modules
Basic Configuration	Basic Configuration
Country & Currency	Installing Country & Currency
Party & Company & Employee	Installing Party & Company & Employee
User	Installing additional Users
Accounting	Activating Financial modules
Logins	Demonstrate user privileges

Initial Configuration Wizard

Configuration Wizard

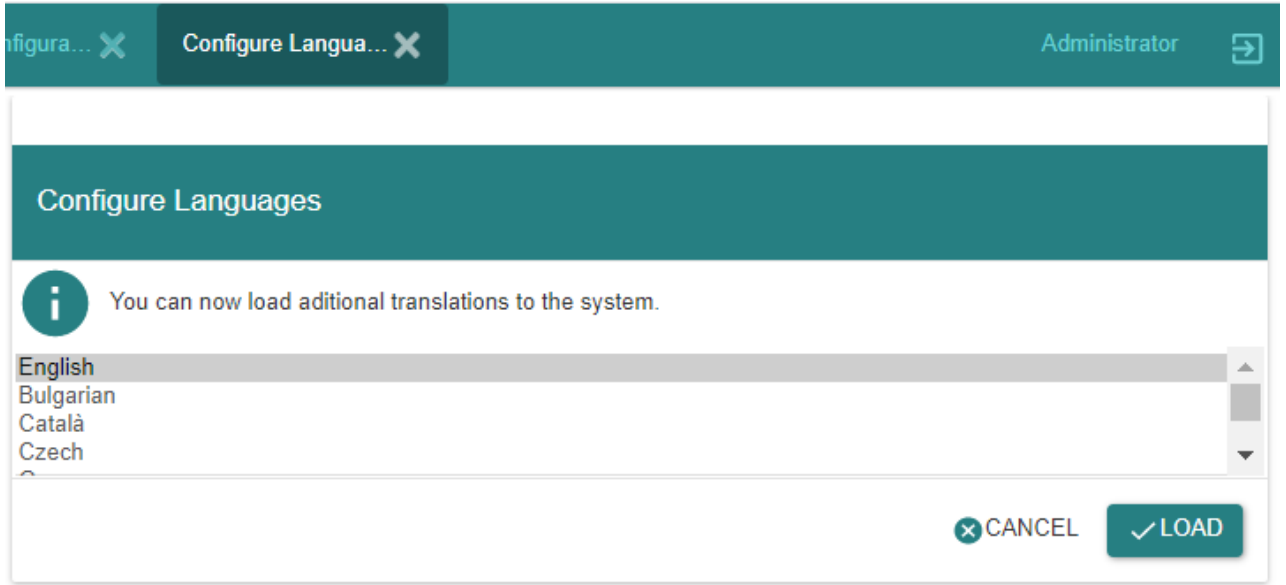
This wizard allows :

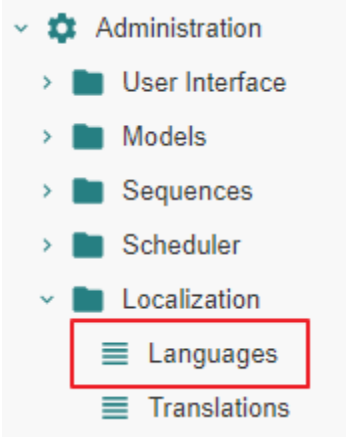
- To add languages,
- To define new users and
- To activate functional modules



Adding « Languages »

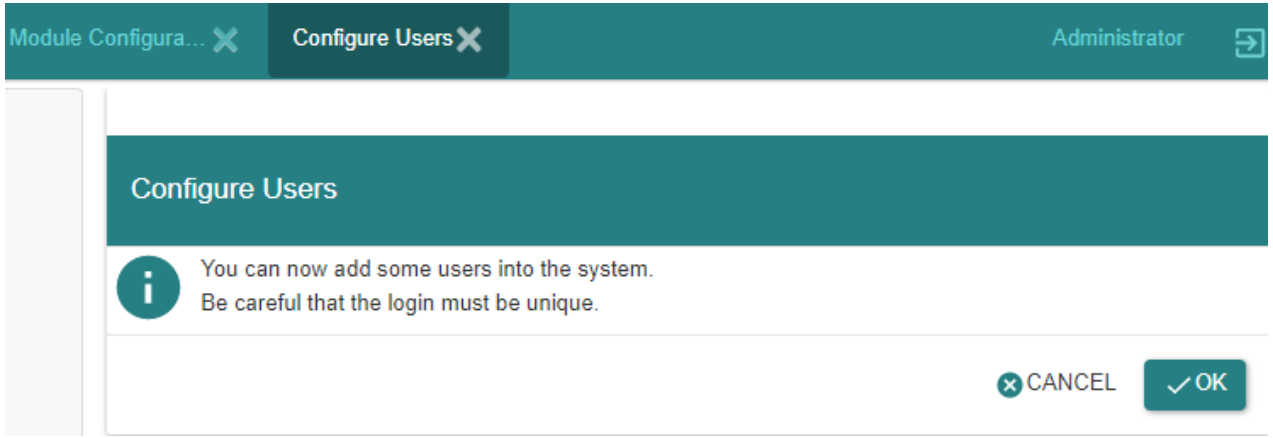
This wizard allows to define new languages

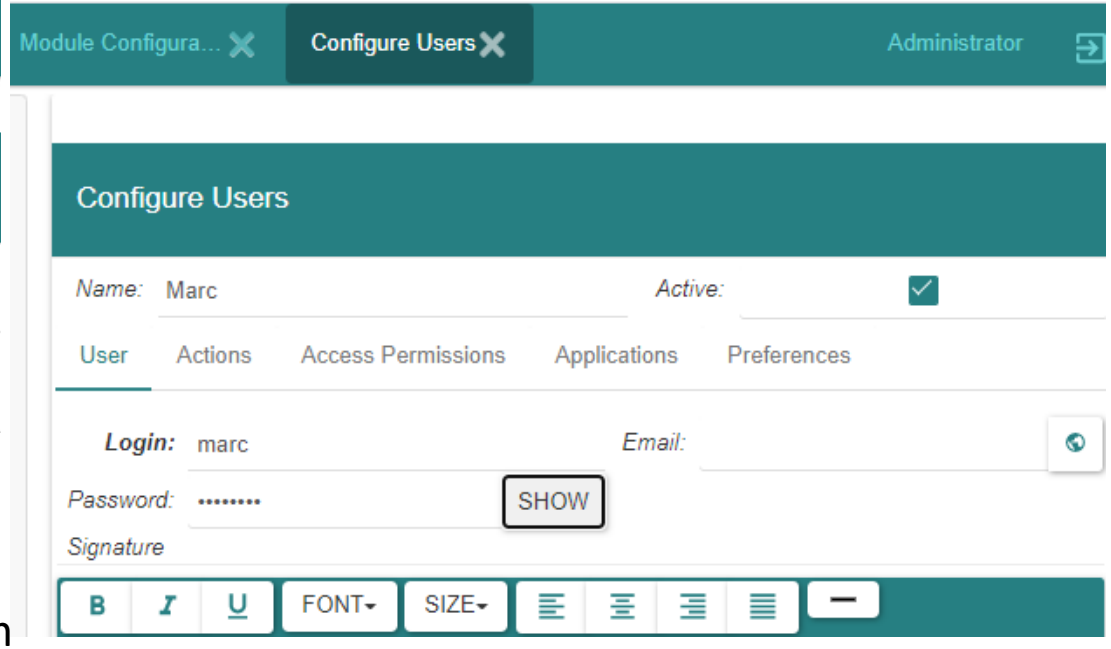




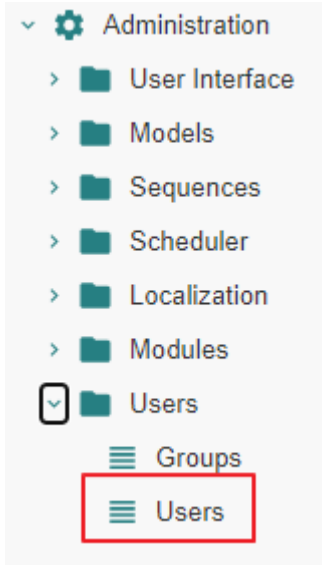
If languages should be added later on, we can access the menu item « Languages »

Defining « Users »

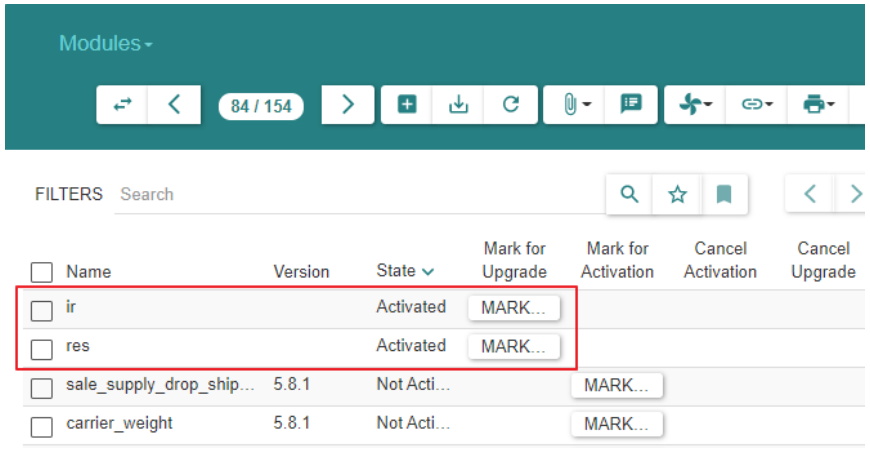


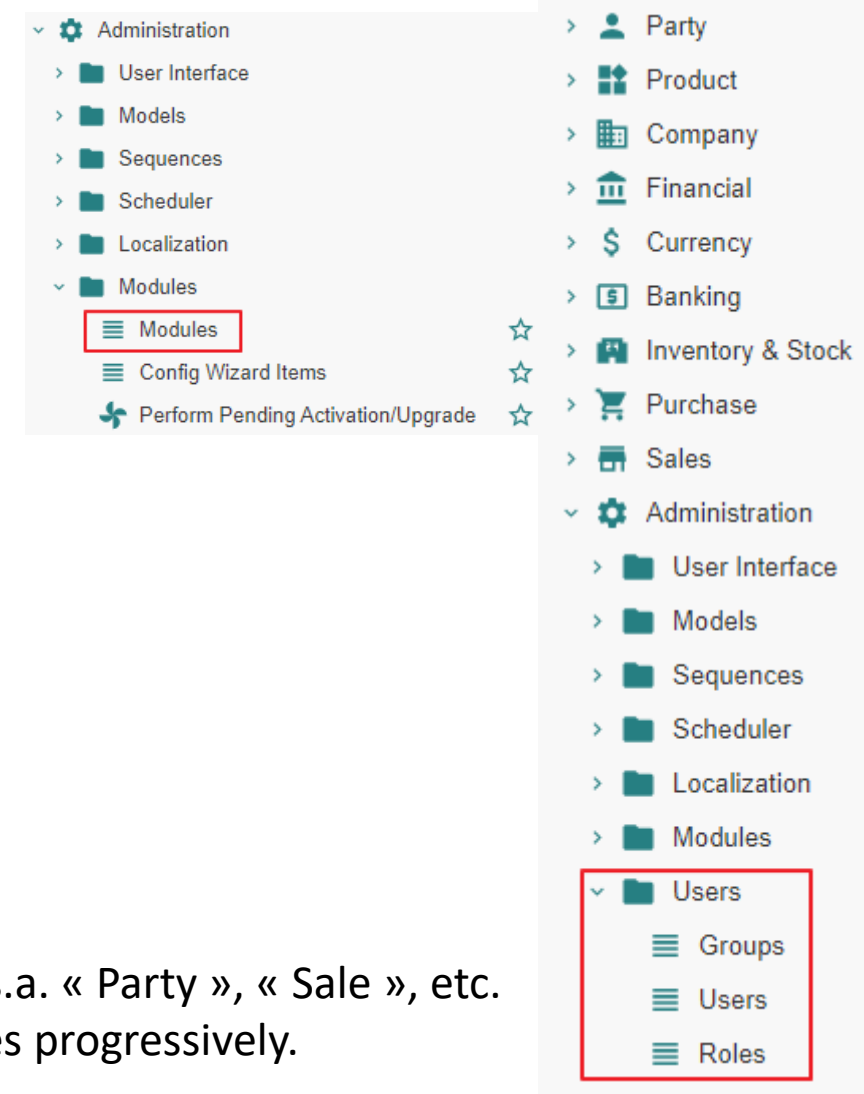


- « User Administrator » is initially used to log into the system
- It is then possible to define additional users
- In this introductory documentation, we nevertheless perform most (if not all) operations with « User Administrator »
- Additional users can be defined later : we access the menu item « Users »
- Note that users cannot be deleted ; they can only be deactivated



Activating « Modules »





Initially

- Initially, all but two modules are activated : « ir » and « res »
- We do not activate additional modules at this stage

User Administrator

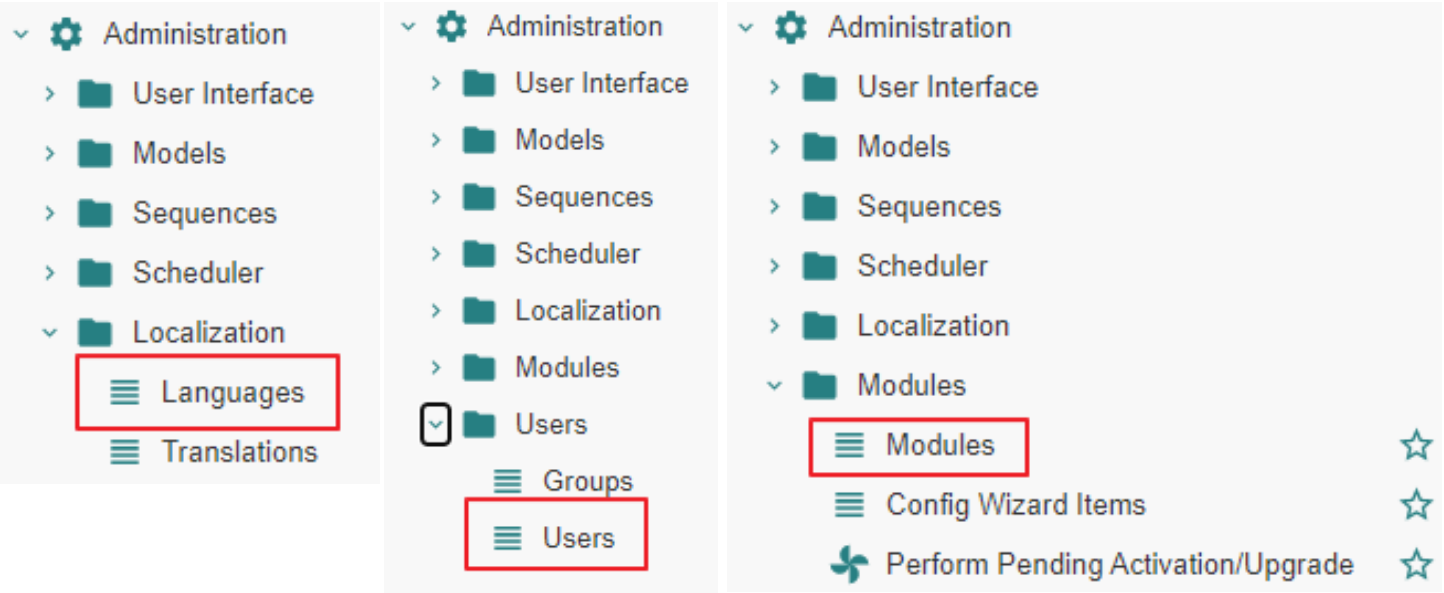
- Modules must be activated for this user to access functional subject areas s.a. « Party », « Sale », etc.
- As we progress in our understanding of the system, we will activate modules progressively.
- We do this by refering to the menu item « Modules ».

Other users

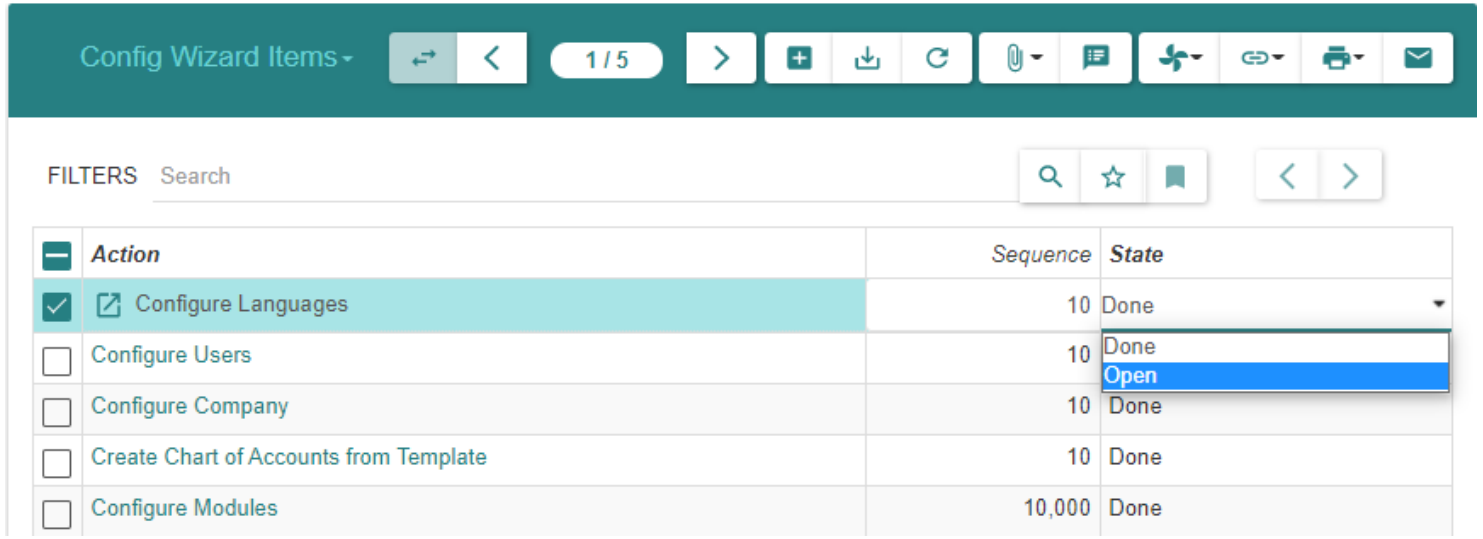
- At the end of this document, we will show how to activate access to subject areas by other users.
- We will do so thru Menu Tree Items « User Groups » or « User Roles ».

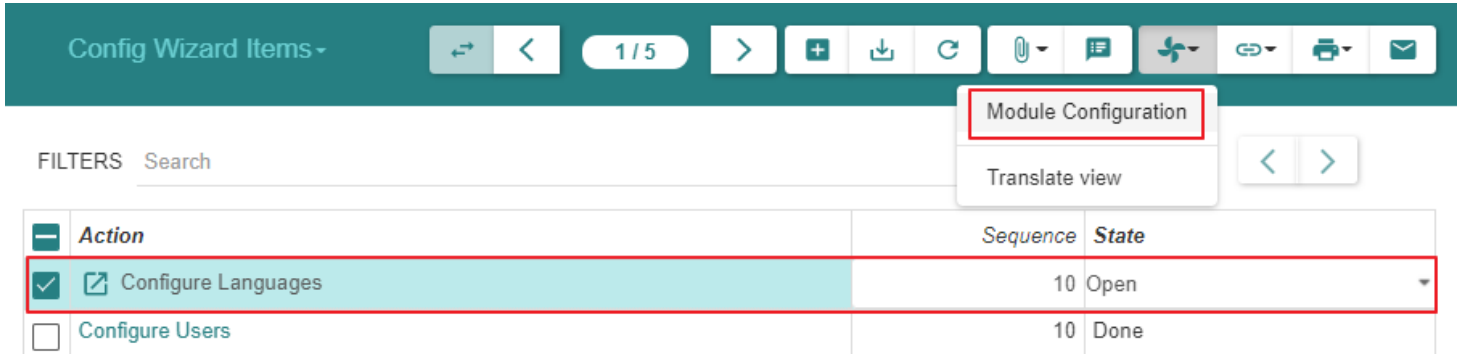
Re-executing wizards - Method 1

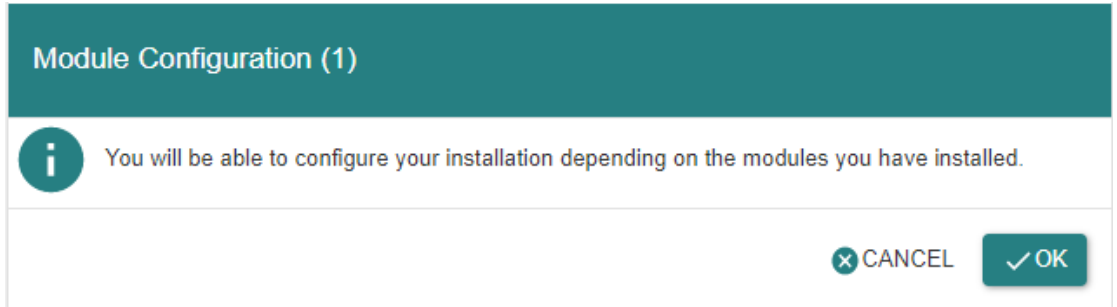
Wizard operations can be repeated later as well, using Menu items in the Tree on the left of the screen



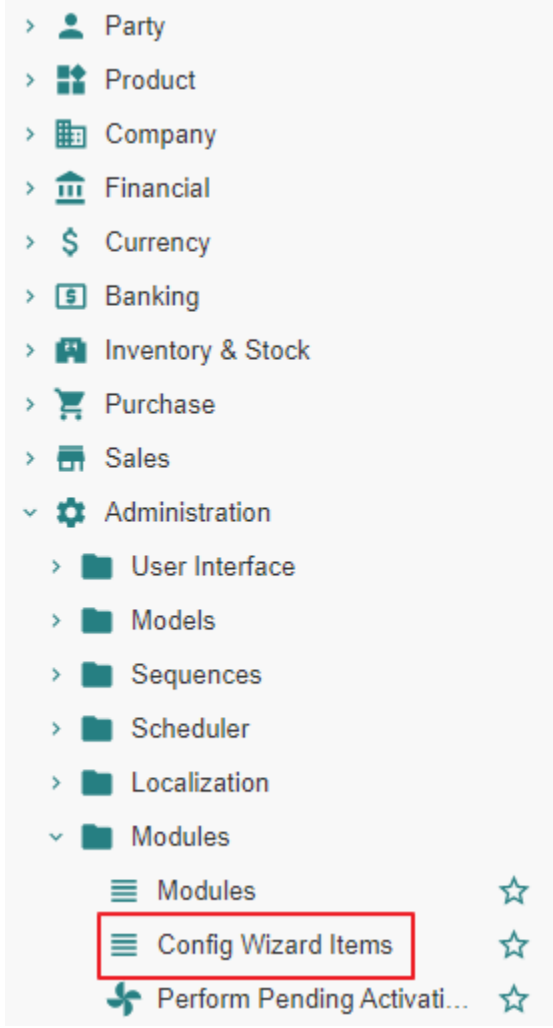
Re-executing wizards - Method 2







We need to reopen the wizard in order to execute it again

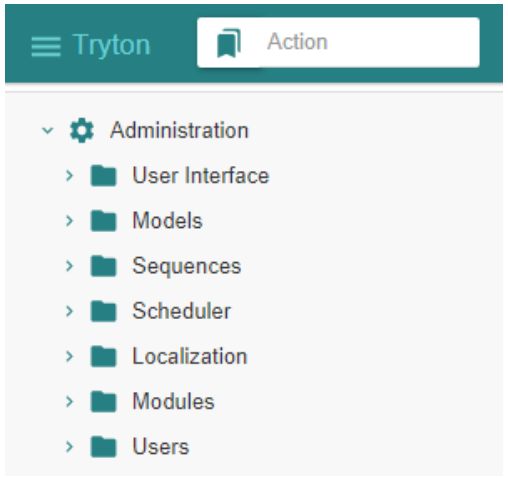


Operations

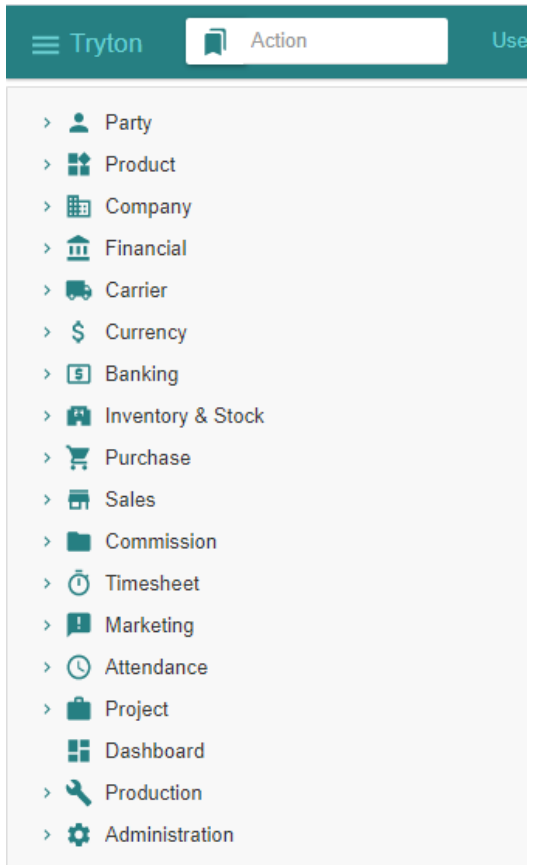
Motivation

- Before exploring the functional aspects of the system, we explain the different widgets that support navigation in the system and trigger operations on items and item lists.
- Please revisit this section whilst getting acquainted with the system subject areas.

Application - Menu Tree - Triggering operations



State of Menu Tree
when
Initial modules activated

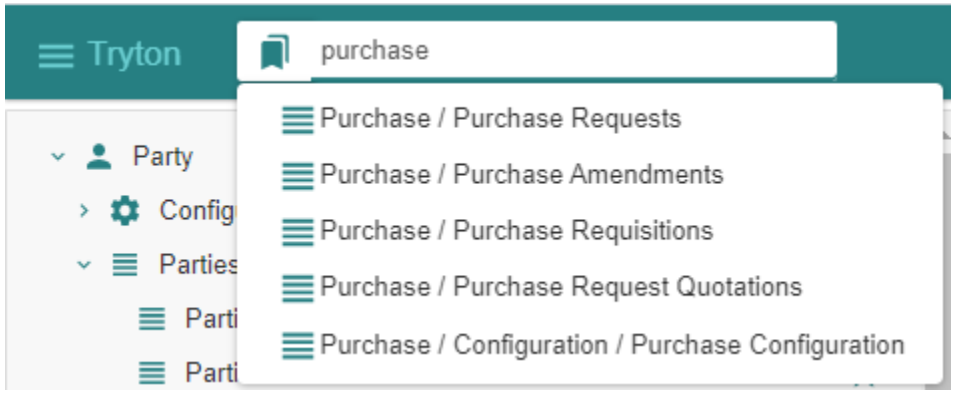


State of Menu Tree
when
All modules activated

- The amplitude of the menu tree depends on which application modules have been activated (i.e. installed) for a given user. See next section.
- Application modules belong to functional subject areas that are reflected in the Menu Tree : « Party », « Product », etc.

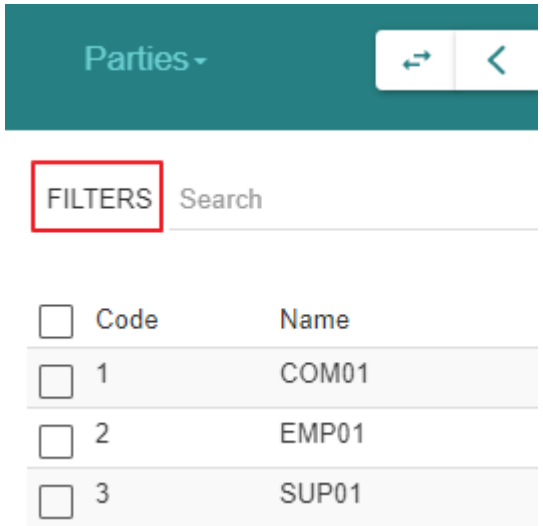
Application - Menu Tree - Search for menu item containing e.g. « Purchase »

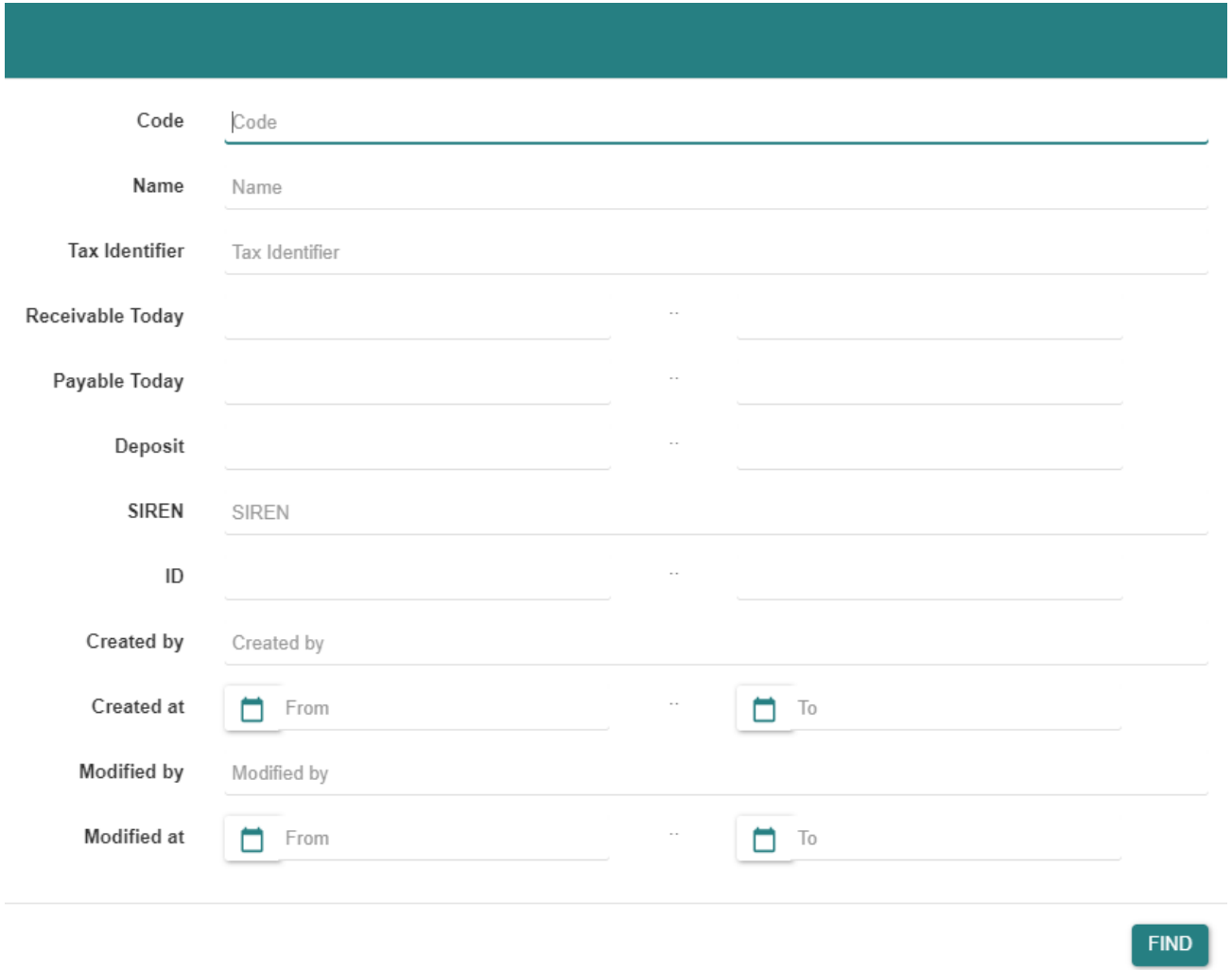
- A search mechanism exists for the tree of menu items
- Here we assume that the « Purchase » modules have been activated and search for some related functionality



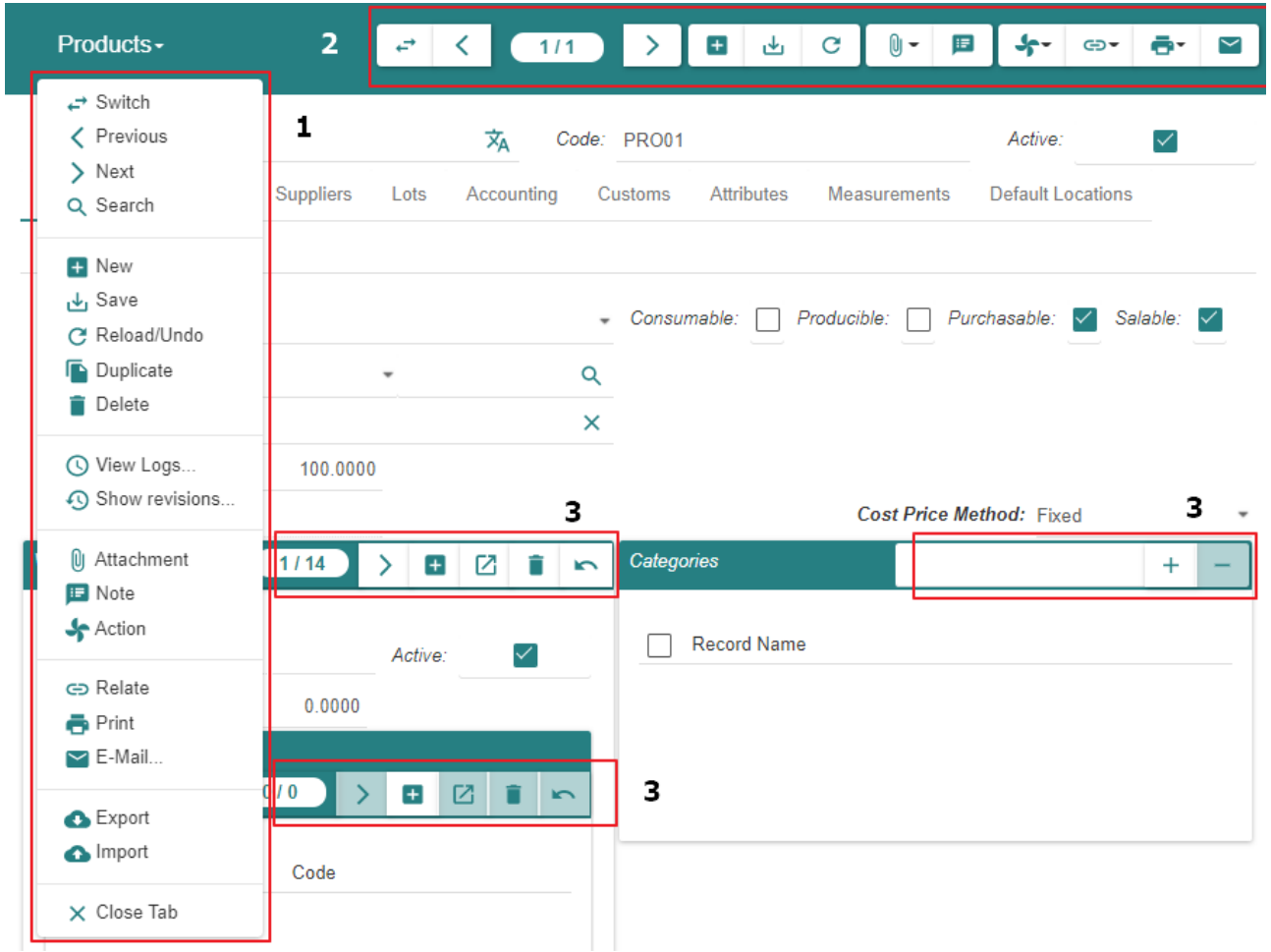
Entity - Filters

- The proposed filter depends on the entity properties
- Here an example for the entity « Party »



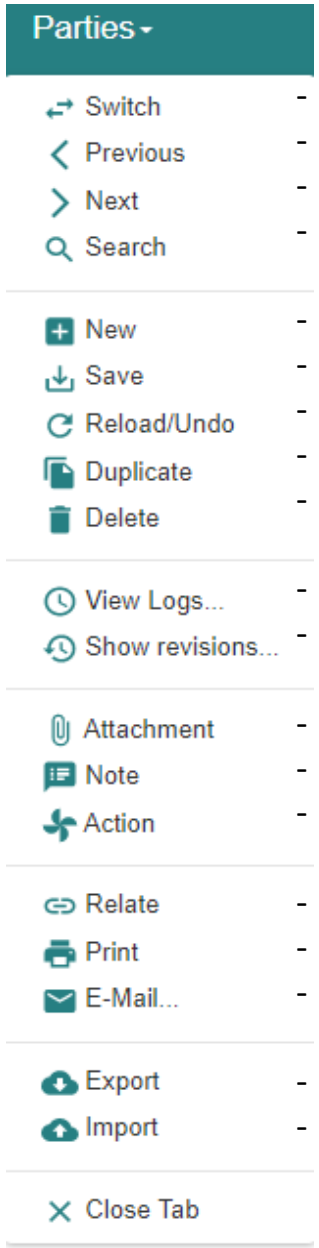


Entity - Menu Bars - An overview



1. Vertical menu bar
   displays all possible operations
2. Horizontal menu bar
   displays some entity or list operations
3. Horizontal menu bars
   display intra-entity operations

Entity - Menu Bars - Vertical Menu Bar



- 1 switch view from « item list » to « item »
- 2 « item » : previous in list
- 3 « item » : position in list
- 4 « item » : next in list
- 5 « item » : start adding
- 6 « item » : save
- 7 « item list » or « item » : reload / undo / refresh
- 8 « item » : duplicate
- 9 « item » : delete
- 10 « item list » : perform operation that is specific of this list
- 11
- 12 « item » : attach one or more documents (e.g. of type docx, xlsx, etc.)
- 13 « item » : attach a note
- 14 « item » : actions that are specific of the entity
- 15
- 16 « item » : print
- 17
- 18
- 19

Entity - Menu Bars - Horizontal Menu Bar

1 2 3 4 5 6 7 8 9 10 11 12 13

- 1 switch view from « item list » to « item » (*)
- 2 « individual record » : previous in list
- 3 « individual record » : position in list
- 4 « individual record » : next in list
- 5 « individual record » : start adding
- 6 « individual record » : save
- 7 « individual record » and « record list » : reload / undo / refresh
- 8
- 9
- 10 « record list » : perform operation that is specific of this list
- 11
- 12 « individual record » : print
- 13

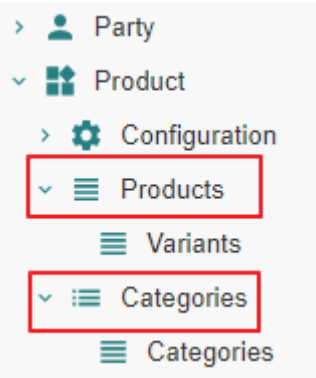
Entity - « Item Double-Click » vs « Menu Item Navigation »

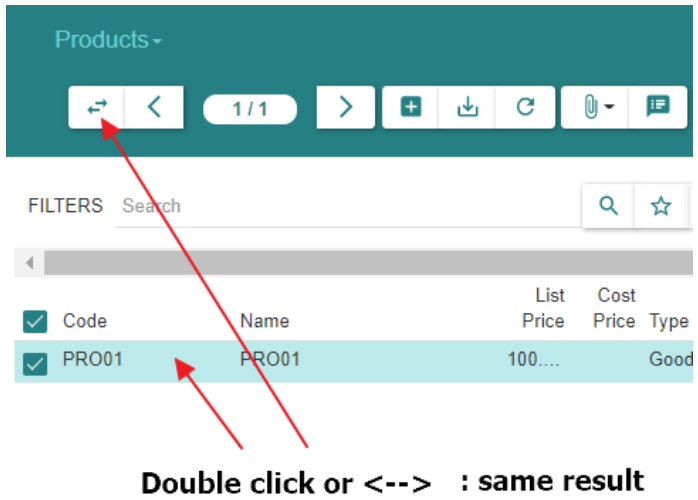
When displaying a list of items, double-click on one of them mostly generates the same result as « <- -> ».

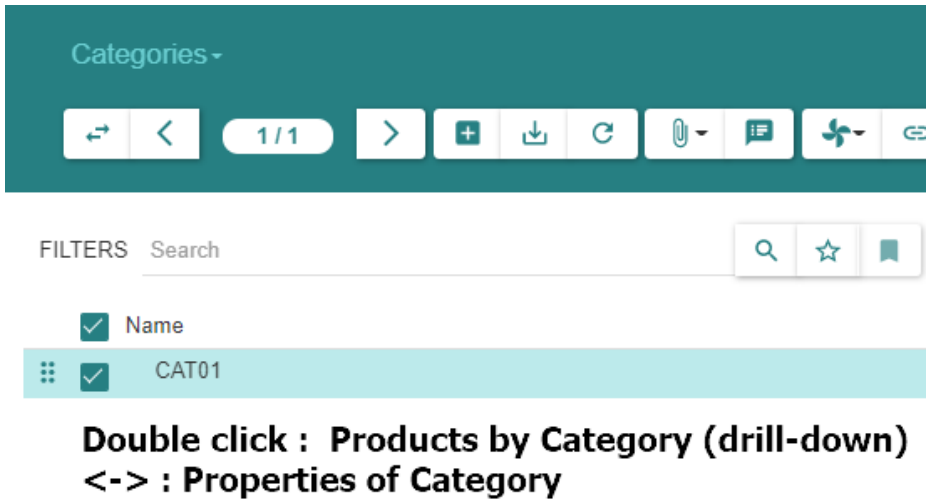
There are however exceptions whereby :
- « <- -> » displays either nothing or details about the item itself.
- « double-click » provides a « drill-down view » of objects belonging to the item

Examples

- « Chart of Accounts » <- -> : displays nothing
- « Chart of Accounts » double-click : displays the transactions for that account
- « Product Category » <- -> : displays details about the category
- « Product Category » double-click : displays the « Products » that belong to this « Category »





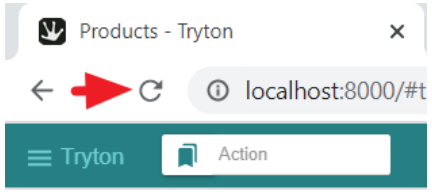


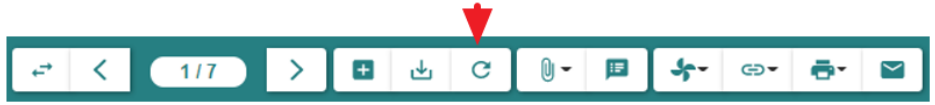
Application or Entity - Data Refresh Requirements

Sometimes it is necessary to refresh the screen using the « Browser Page Reload » button or the relevant menu item (see below).

This may happen e.g.

- In the case of « Switching » from « Item » view to « List » view. For instance, when state information in a « Sales Order », e.g. « Draft », has been changed in the « Item » view it might incorrectly persist in the « List » view though it has evolved e.g. to « Confirmed ».
- In the case of updating the « List of Product » sold by a « Supplier » then displaying the « Product » to show the « List of Suppliers »
- In the case of adding a « Product Variant » in the « List of Variants », it is necessary to refresh the « Product » itself to take the variant into account on the screen





Modules

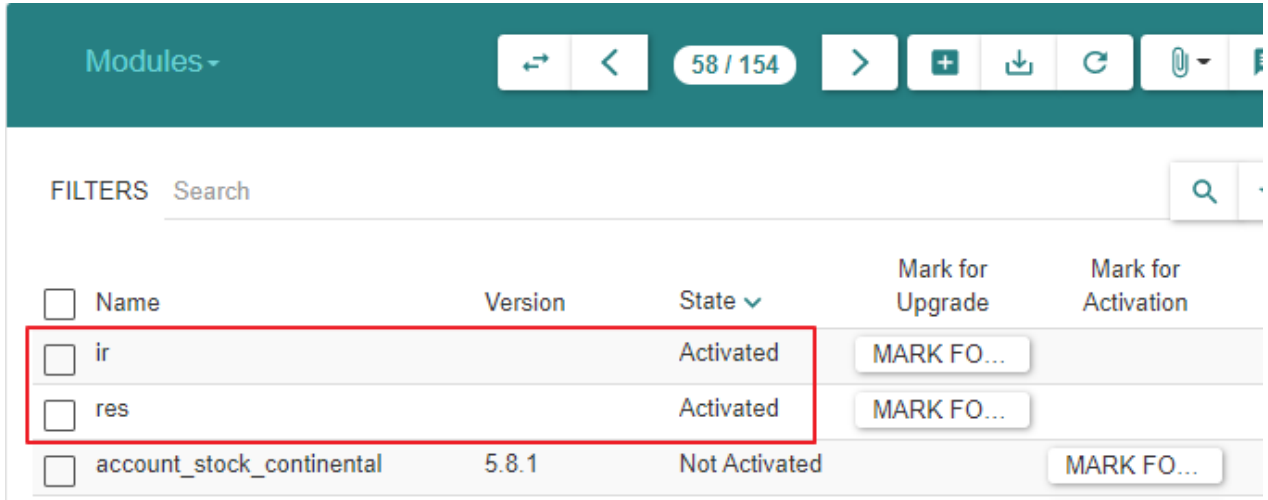
Motivation

The « Application » is implemented by « Modules » that use « Database Tables » and « Files » optionally.
Modules are not *explicitly* grouped into functional subject areas.

Initially, all but two modules (« ir » & « res ») are inactivated : see below.

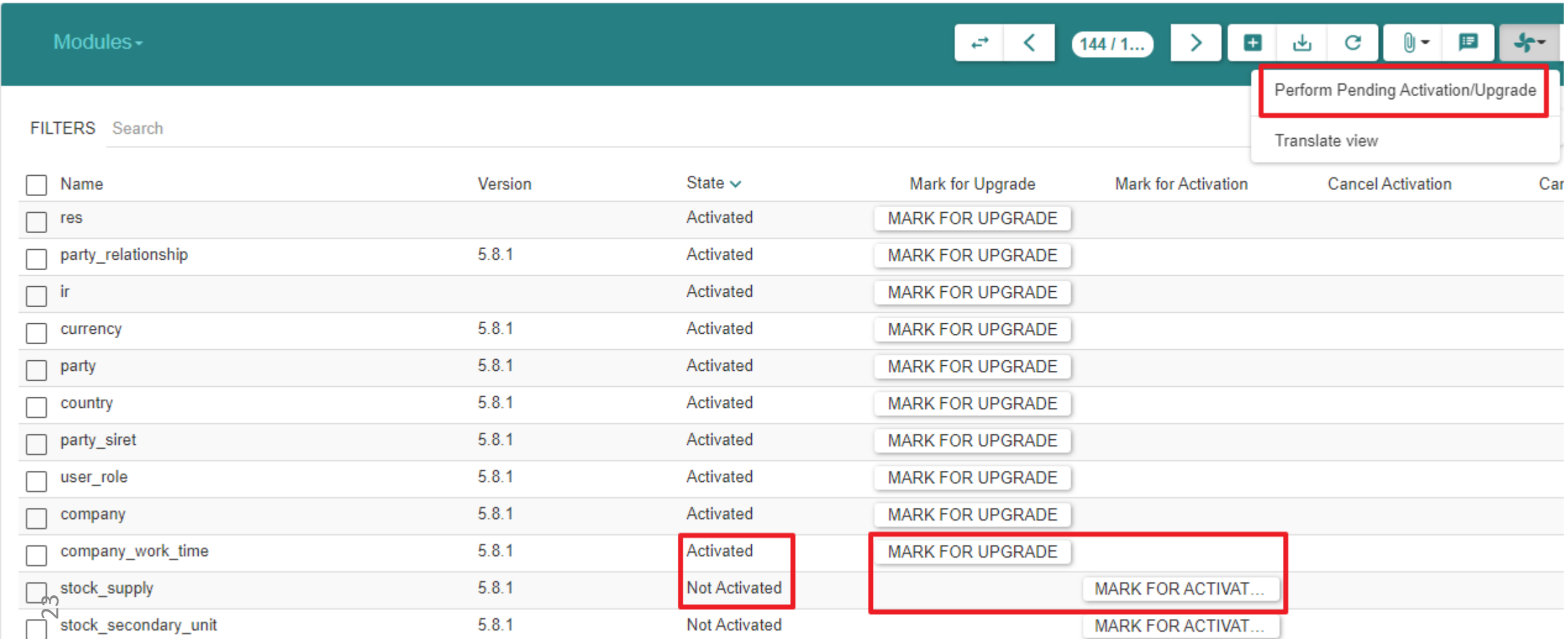
The activation relies technically
- Either on the usage of wizards and a mutual dependency mechanism.
- Or based on their name by grouping them based on their prefix.

When modules are activated,
- The database tables they use are created if required.
- The menu items are added in the Tree on the left of the screen.



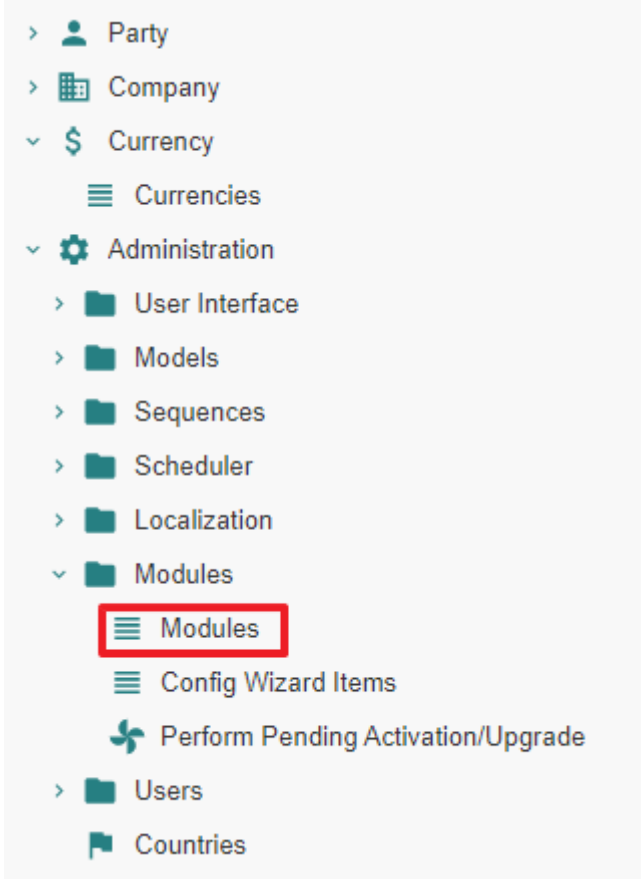
Modules

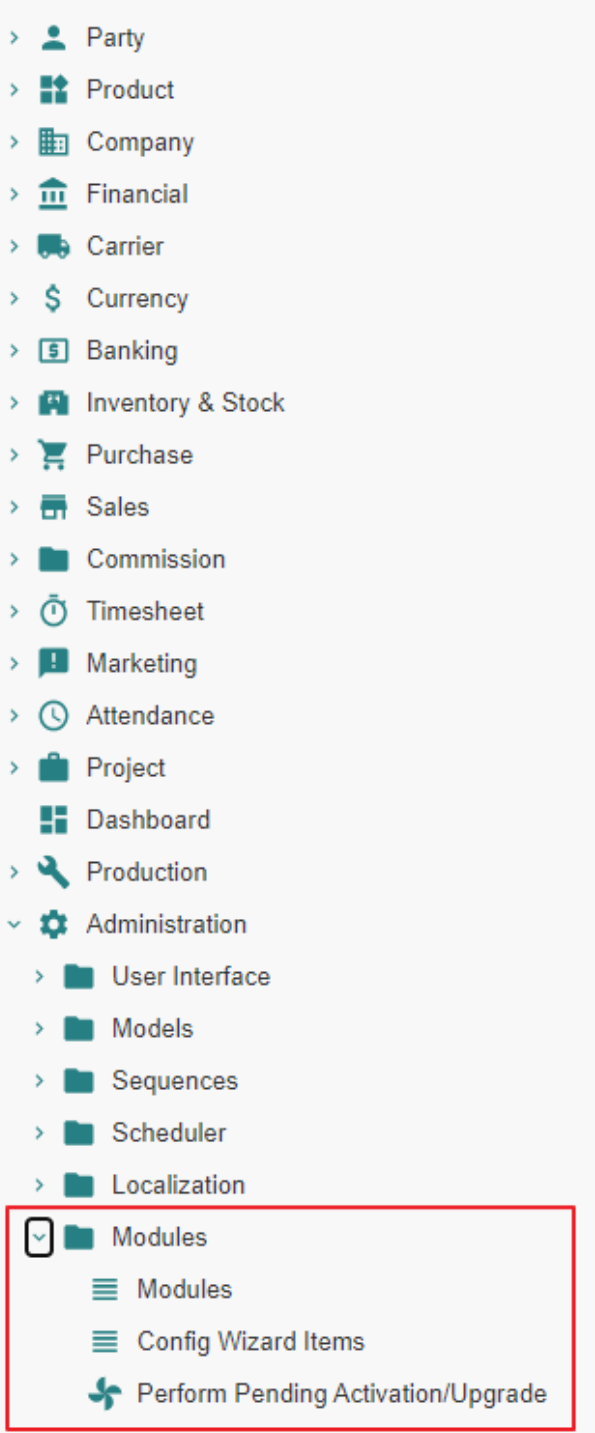
- Tryton optimizes operations by requiring activation of application modules.
- We will activate modules as we progress instead of activating all modules at once



Modules

Growing list of menu items : initial & final list of menu items as modules are being installed





Modules

Entity	Module activation	User handling
Product	product-*	Creating product & variants
Party associated with Purchase	purchase-*	Creating supplier
Supplier Invoice		
Supplier Shipment	stock-*	
Purchase	purchase-*	Creating purchase order
Supplier Shipment		Creating supplier shipment
Supplier Invoice		Creating supplier invoice

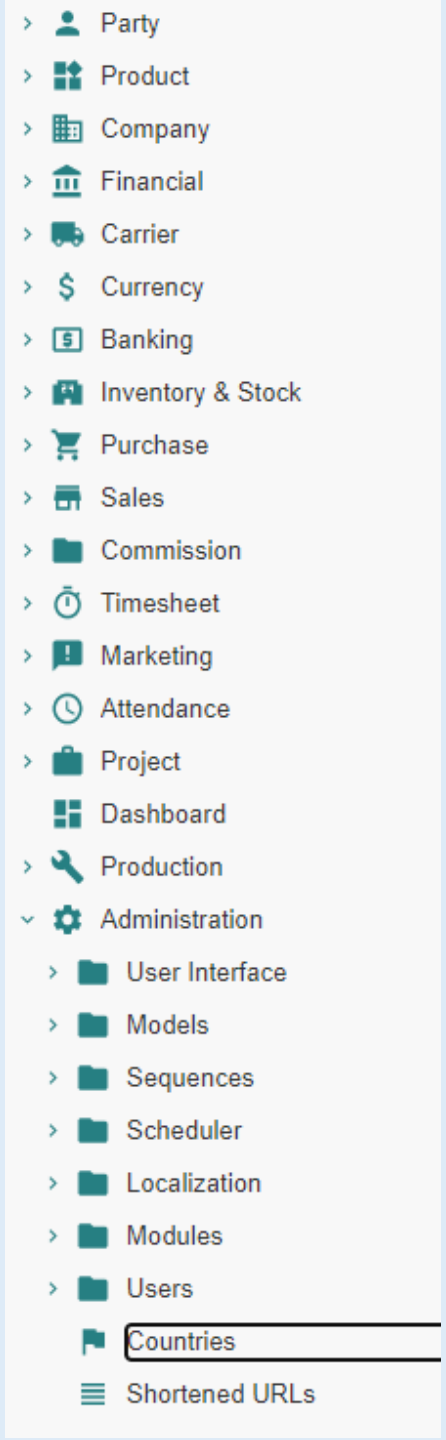
Functional intent of module can be derived from its name

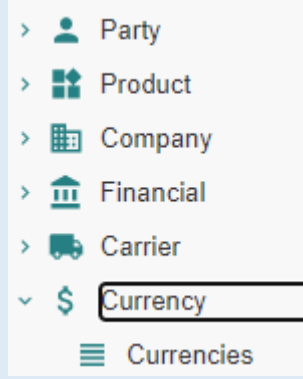
Basic Configuration

Motivation

- Before examining the typical ERP transactions like « Sales », etc. we need to activate modules that support the different subject areas.
- This link refers to official documentation about a « basic configuation » : https://tryton-administration-manual.readthedocs.io/en/latest/basic_config.html

« Country » & « Currency »





Motivation

The TRYTON database and application contain minimal database tables and application modules.

« Countries » and « Currencies » are extensively used. Hence, it is advised to :

1. Activate the corresponding application modules thereby also creating the required tables in the database.
2. Load the created tables with ISO normalised « Currency » and « Country » data

Documentation

https://docs.tryton.org/projects/modules-country/en/latest/

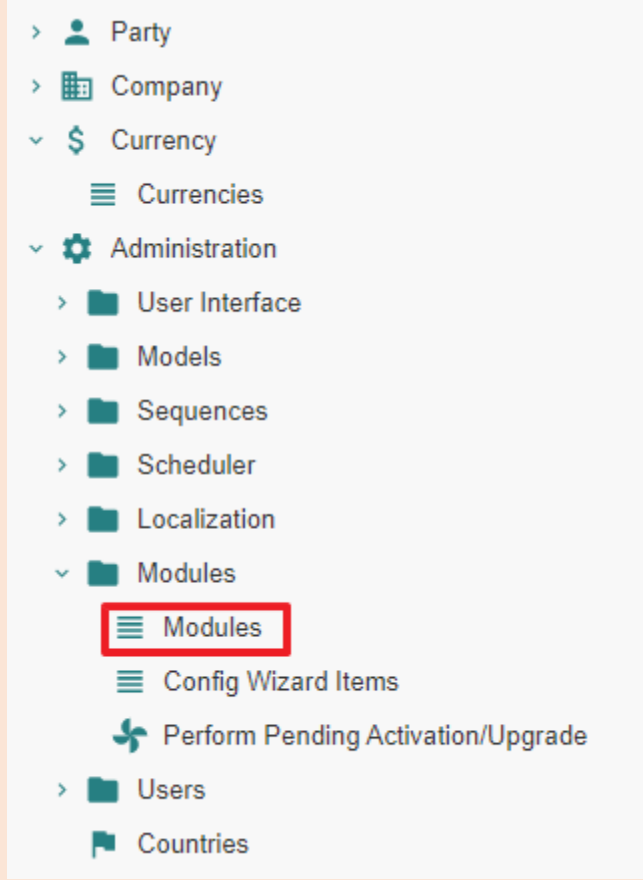
Country	Alpha-2 code	Alpha-3 code	Numeric
Afghanistan	AF	AFG	004
Albania	AL	ALB	008
Belgium	BE	BEL	056
Congo (the Democratic Republic of the)	CD	COD	180

Documentation

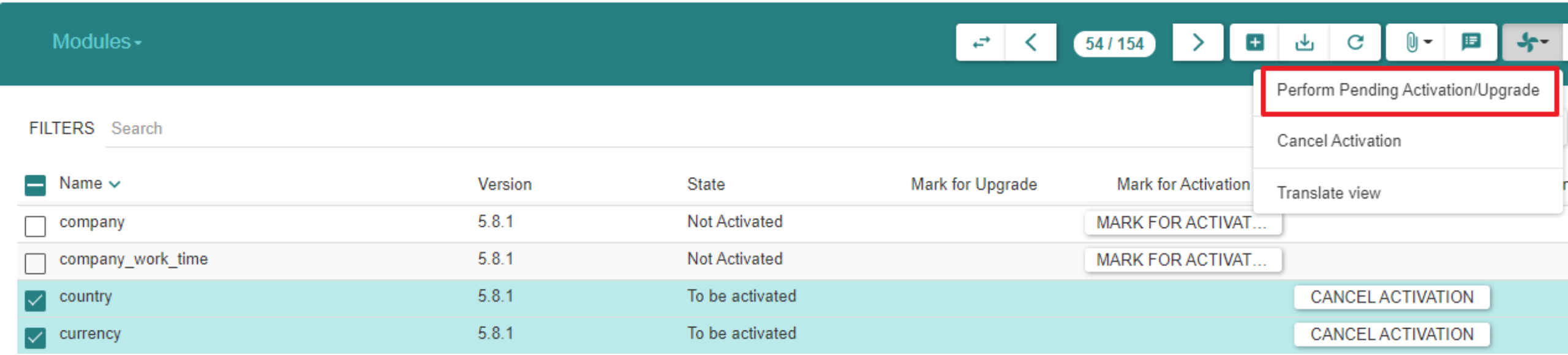
https://docs.tryton.org/projects/modules-currency/en/latest/

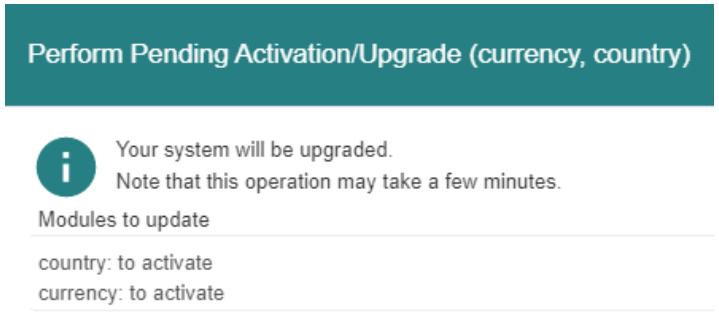
Country	Currency	Code	Number
AFGHANISTAN	Afghani	AFN	971
ALBANIA	Lek	ALL	008
CONGO (THE DEMOCRATIC REPUBLIC OF THE)	Congolese Franc	CDF	976
UNITED STATES OF AMERICA (THE)	US Dollar	USD	840
UNITED STATES OF AMERICA (THE)	US Dollar (Next day)	USN	997

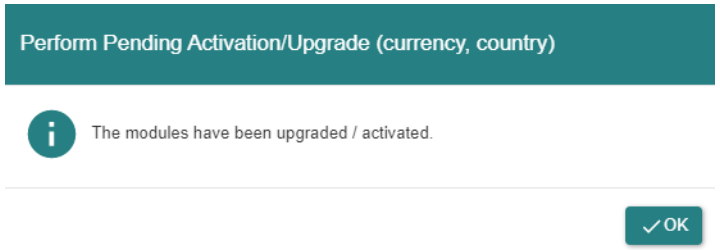
Application - Activating the Modules



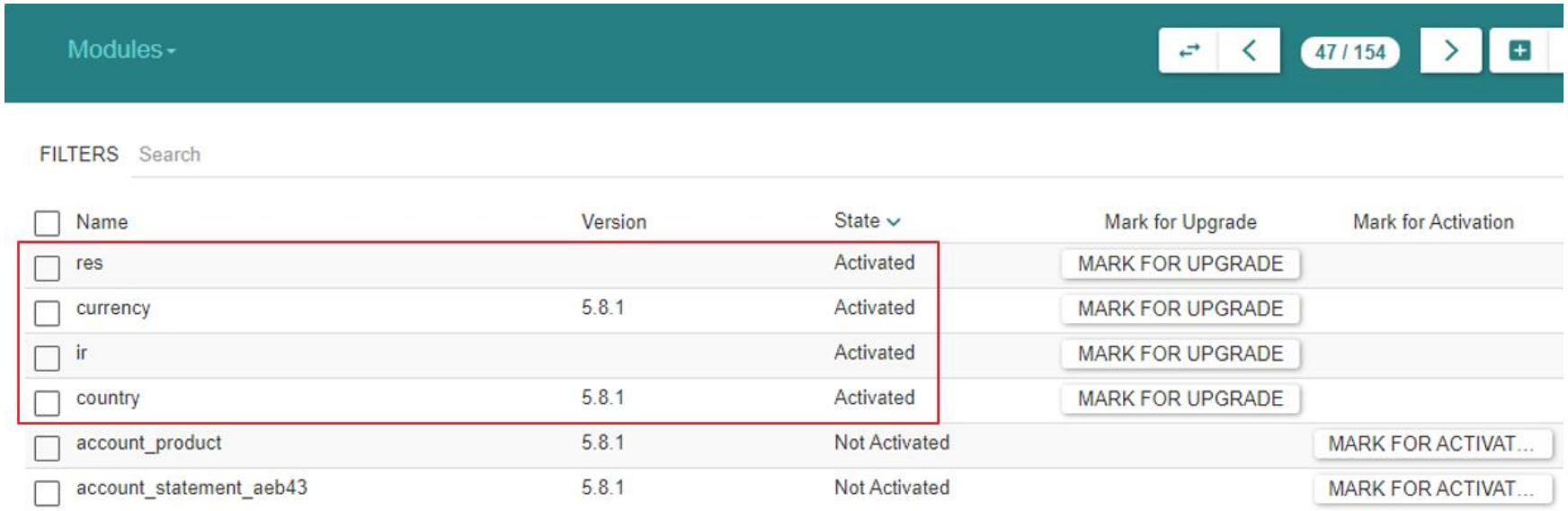
Mark « Country » & « Currency » For Activation then Execute

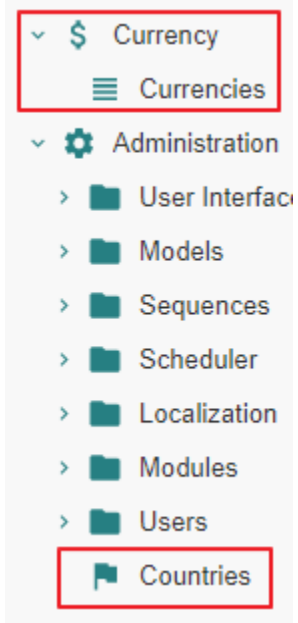






State « Post »



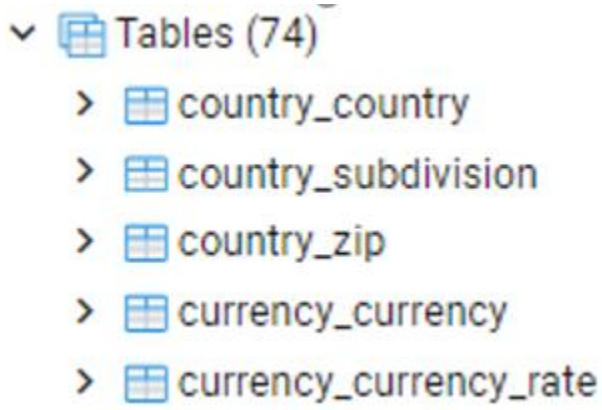


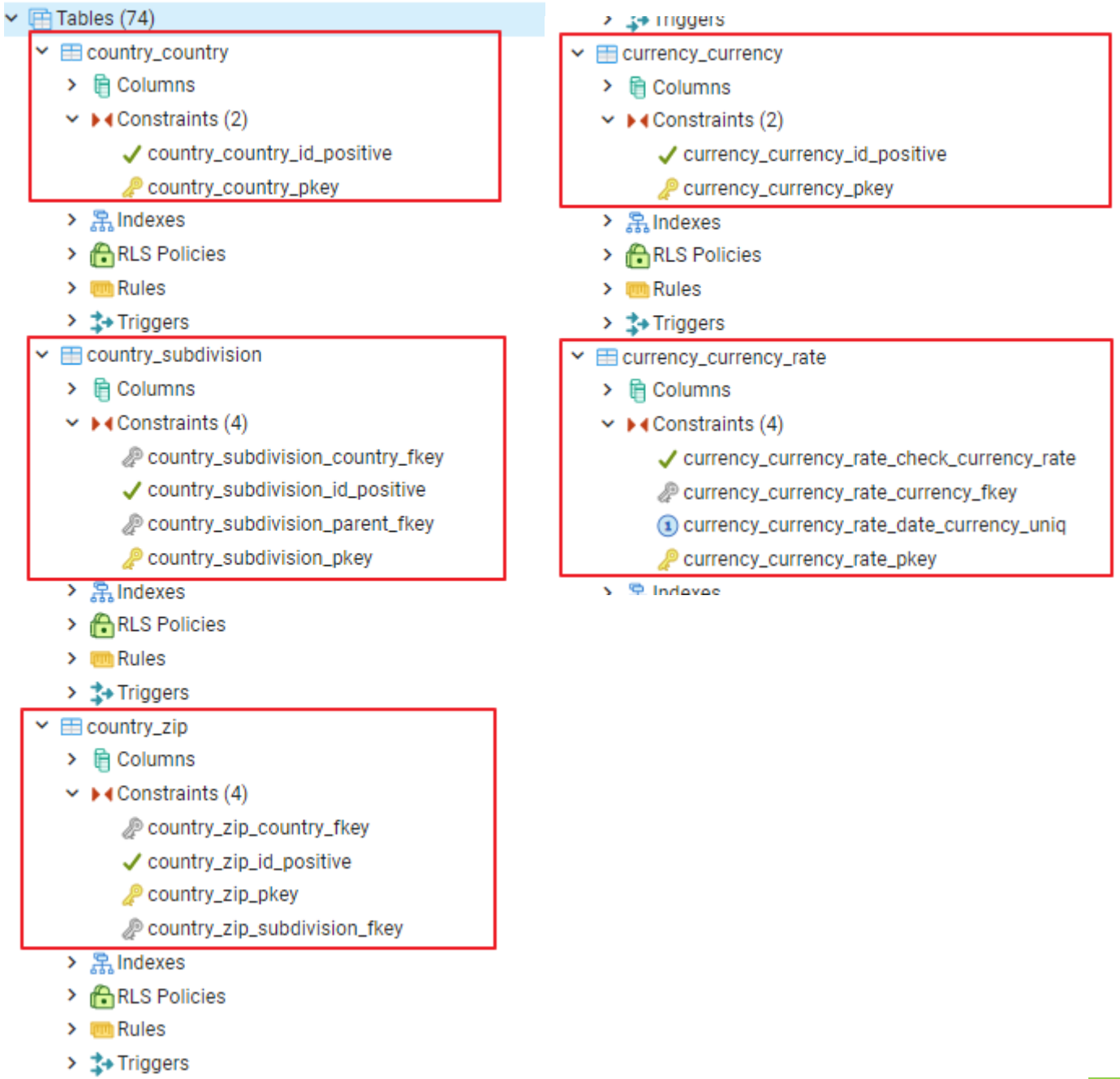
Note :

- Use TRYTON « Reload » operation to refresh and display
- « Countries » & « Currencies » appear in the Tree Menus
- When clicking on « Countries or « Currencies », the data panel remains empty : we still need to load the database tables

State « Post »

- There are 3 additional « country » tables
- There are 2 additional « currency » tables
- All tables are still empty





Database – Loading the Tables

Documentation

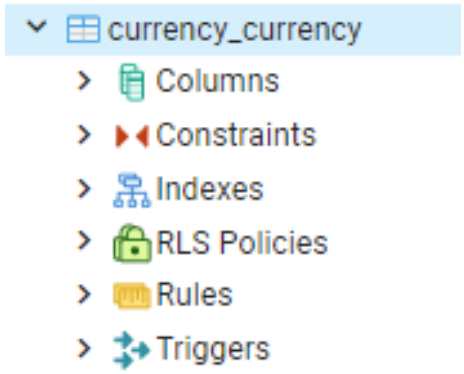
[https://discuss.tryton.org/t/data-base-importing-countries-or-currencies/3811/7]

« Currency » - Load data

docker exec --interactive --tty tryton /entrypoint.sh python3 -m trytond.modules.currency.scripts.import_currencies -d tryton

```
PS C:\tryt.01\tuto.01> docker exec --interactive --tty tryton /entrypoint.sh python3 -m trytond.modules.currency.scripts.import_currencies -d tryton
/usr/lib/python3/dist-packages/werkzeug/routing.py:1431: DeprecationWarning: invalid escape sequence \s
  """
/usr/lib/python3/dist-packages/passlib/context.py:231: DeprecationWarning: invalid escape sequence \;
  elif any(c in source for c in "\n\r\t") or not source.strip(" \t./\;:"):
/usr/lib/python3/dist-packages/passlib/context.py:2240: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/passlib/context.py:2323: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/passlib/context.py:2406: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/ldap3/utils/ciDict.py:30: DeprecationWarning: Using or importing the ABCs from 'collections' instead of from 'collections.abc' is deprecated, and
in 3.8 it will stop working
  class CaseInsensitiveDict(collections.MutableMapping):
/usr/lib/python3/dist-packages/pyasn1/type/constraint.py:130: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/pyasn1/type/constraint.py:175: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/pyasn1/type/constraint.py:334: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/pyasn1/type/constraint.py:494: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/pyasn1/type/constraint.py:538: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/pyasn1/type/namedval.py:54: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3.7/importlib/_bootstrap.py:219: ImportWarning: can't resolve package from __spec__ or __package__, falling back on __name__ and __path__
  return f(*args, **kwds)
/usr/lib/python3/dist-packages/zeep/xsd/visitor.py:428: DeprecationWarning: invalid escape sequence \[
  match = re.match('([^\[]+)', array_type)
/usr/lib/python3/dist-packages/PyPDF2/generic.py:357: DeprecationWarning: invalid escape sequence \c
  tok = b_("\c")
Update currencies
PS C:\tryt.01\tuto.01>
```

« Currency » - Load data



Data Output | Explain | Messages | Notifications

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1	1	true	AED	2021-03-07 16:47:11.140739	1	2	UAE Dirham	784	0.01	د.إ;
2	2	true	AFN	2021-03-07 16:47:11.140739	1	2	Afghani	971	0.01	Afs
3	3	true	ALL	2021-03-07 16:47:11.140739	1	2	Lek	008	0.01	L
4	4	true	AMD	2021-03-07 16:47:11.140739	1	2	Armenian Dram	051	0.01	AMD
5	5	true	ANG	2021-03-07 16:47:11.140739	1	2	Netherlands Antillean ...	532	0.01	NAf
6	6	true	AOA	2021-03-07 16:47:11.140739	1	2	Kwanza	973	0.01	Kz
7	7	true	ARS	2021-03-07 16:47:11.140739	1	2	Argentine Peso	032	0.01	$
8	8	true	AUD	2021-03-07 16:47:11.140739	1	2	Australian Dollar	036	0.01	$
9	9	true	AWG	2021-03-07 16:47:11.140739	1	2	Aruban Florin	533	0.01	ƒ
10	10	true	AZN	2021-03-07 16:47:11.140739	1	2	Azerbaijanian Manat	944	0.01	AZN
11	11	true	BAM	2021-03-07 16:47:11.140739	1	2	Convertible Mark	977	0.01	KM
12	12	true	BBD	2021-03-07 16:47:11.140739	1	2	Barbados Dollar	052	0.01	Bds$

« Country » - Load data

docker exec --interactive --tty tryton /entrypoint.sh python3 -m trytond.modules.country.scripts.import_countries -d tryton

```
PS C:\tryt.01\tuto.01> docker exec --interactive --tty tryton /entrypoint.sh python3 -m trytond.modules.country.scripts.import_countries -d tryton
/usr/lib/python3/dist-packages/werkzeug/routing.py:1431: DeprecationWarning: invalid escape sequence \s
  """
/usr/lib/python3/dist-packages/passlib/context.py:231: DeprecationWarning: invalid escape sequence \;
  elif any(c in source for c in "\n\r\t") or not source.strip(" \t./\;:"):
/usr/lib/python3/dist-packages/passlib/context.py:2240: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/passlib/context.py:2323: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/passlib/context.py:2406: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/ldap3/utils/ciDict.py:30: DeprecationWarning: Using or importing the ABCs from 'collections' instead of from 'collections.abc' is deprecated, and
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  """
/usr/lib/python3/dist-packages/pyasn1/type/constraint.py:175: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/pyasn1/type/constraint.py:334: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/pyasn1/type/constraint.py:494: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/pyasn1/type/constraint.py:538: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3/dist-packages/pyasn1/type/namedval.py:54: DeprecationWarning: invalid escape sequence \*
  """
/usr/lib/python3.7/importlib/_bootstrap.py:219: ImportWarning: can't resolve package from __spec__ or __package__, falling back on __name__ and __path__
  return f(*args, **kwds)
/usr/lib/python3/dist-packages/zeep/xsd/visitor.py:428: DeprecationWarning: invalid escape sequence \[
  match = re.match('([^\[]+)', array_type)
/usr/lib/python3/dist-packages/PyPDF2/generic.py:357: DeprecationWarning: invalid escape sequence \c
  tok = b_("\c")
Update countries
Update subdivisions
Update subdivisions parent
Update subdivisions en
PS C:\tryt.01\tuto.01>
```
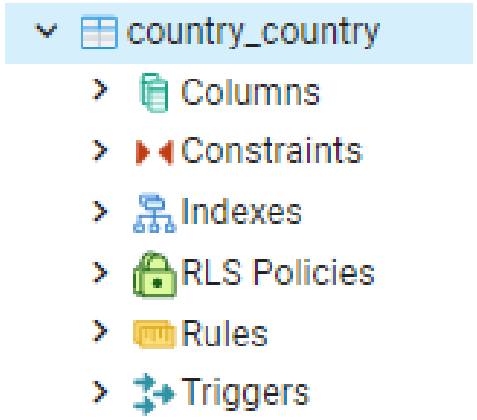
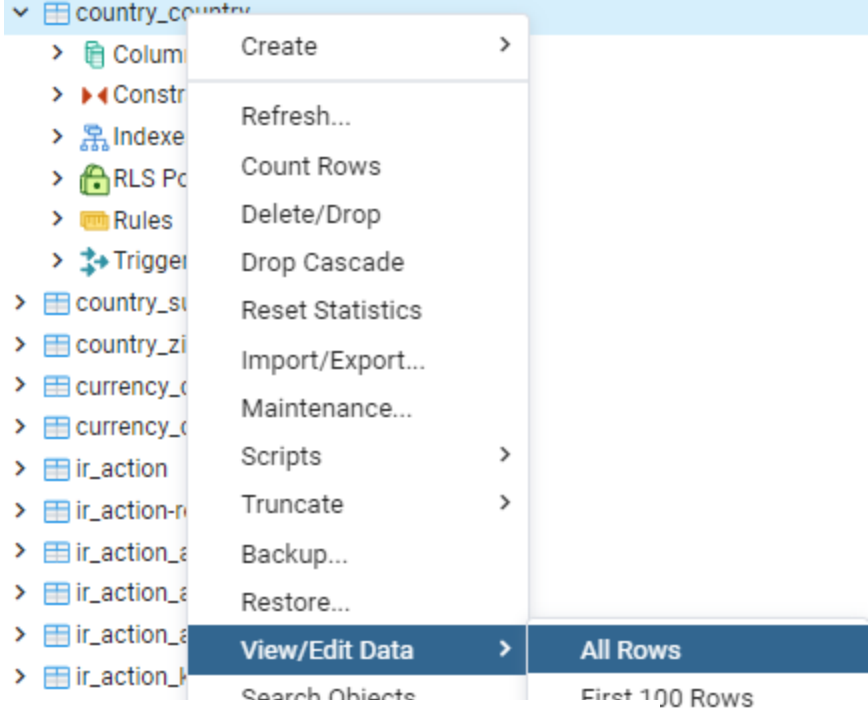

« Country » - Load data

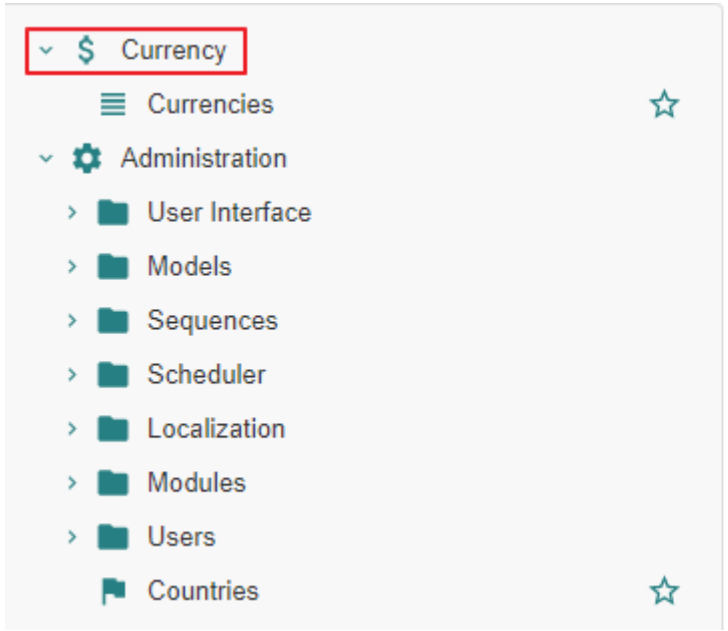


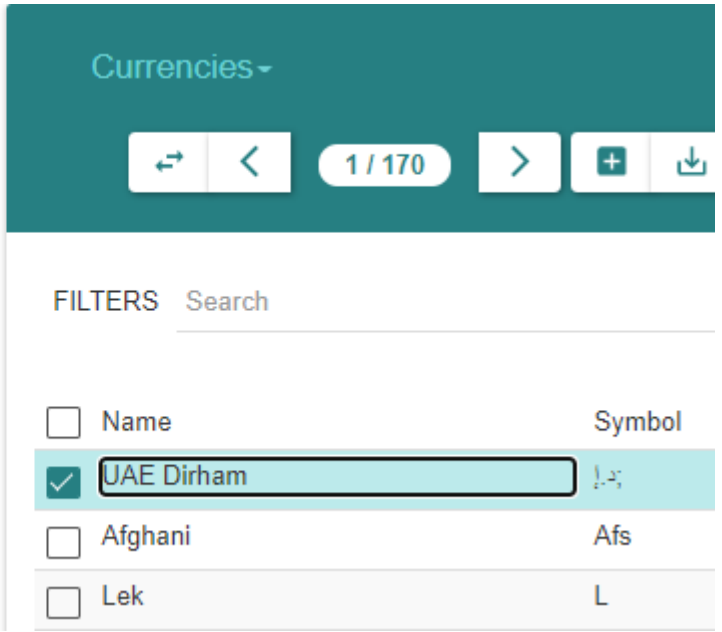


Data Output | Explain | Messages | Notifications

	id [PK] integer	active boolean	code character varying (2)	code3 character varying (3)	code_numeric character varying	create_date timestamp without time zone	create_uid integer	name character varying
1	1	true	AW	ABW	533	2021-03-07 16:50:01.80037	1	Aruba
2	2	true	AF	AFG	004	2021-03-07 16:50:01.80037	1	Afghanistan
3	3	true	AO	AGO	024	2021-03-07 16:50:01.80037	1	Angola
4	4	true	AI	AIA	660	2021-03-07 16:50:01.80037	1	Anguilla
5	5	true	AX	ALA	248	2021-03-07 16:50:01.80037	1	Åland Islands
6	6	true	AL	ALB	008	2021-03-07 16:50:01.80037	1	Albania
7	7	true	AD	AND	020	2021-03-07 16:50:01.80037	1	Andorra
8	8	true	AE	ARE	784	2021-03-07 16:50:01.80037	1	United Arab Emirates
9	9	true	AR	ARG	032	2021-03-07 16:50:01.80037	1	Argentina
10	10	true	AM	ARM	051	2021-03-07 16:50:01.80037	1	Armenia
11	11	true	AS	ASM	016	2021-03-07 16:50:01.80037	1	American Samoa
12	12	true	AQ	ATA	010	2021-03-07 16:50:01.80037	1	Antarctica
13	13	true	TF	ATF	260	2021-03-07 16:50:01.80037	1	French Southern Territ...

State « Post »


Currency
Currencies
Administration
User Interface
Models
Sequences
Scheduler
Localization
Modules
Users
Countries


Currencies
1 / 170
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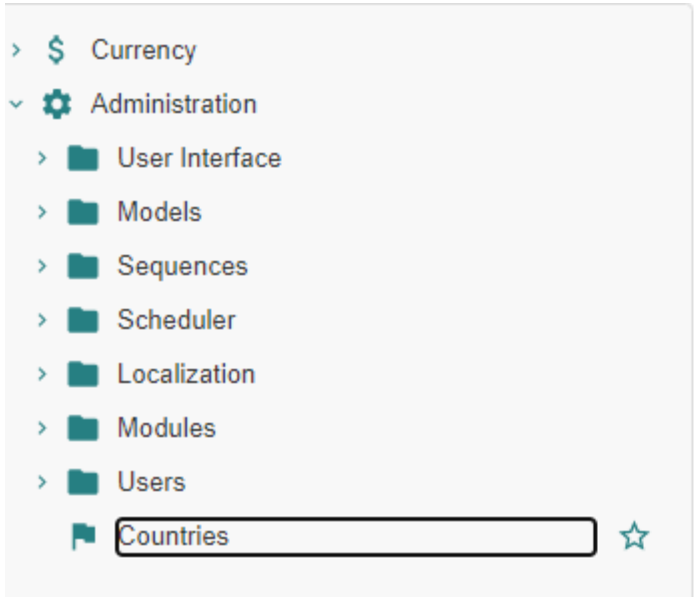
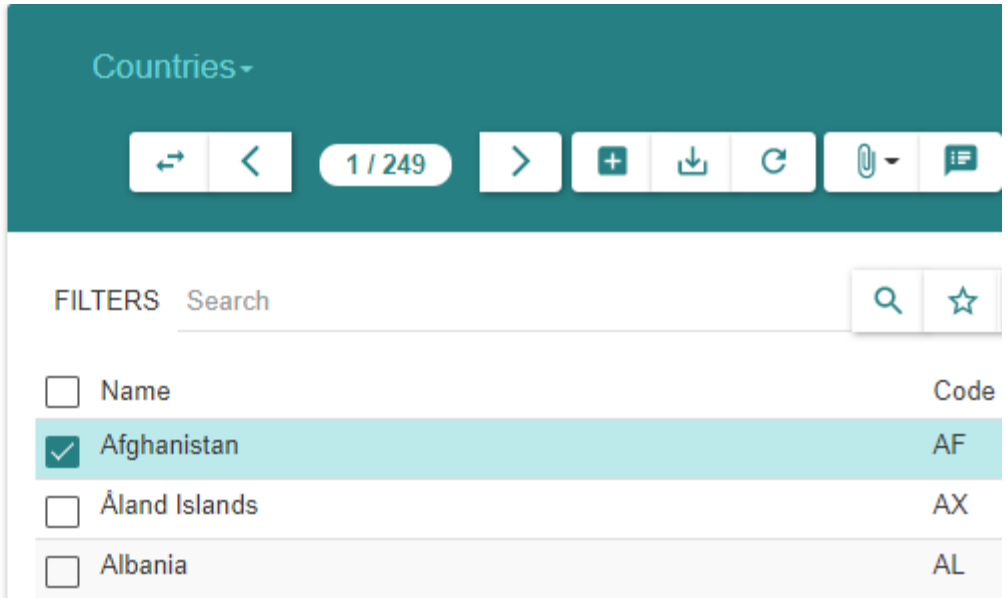
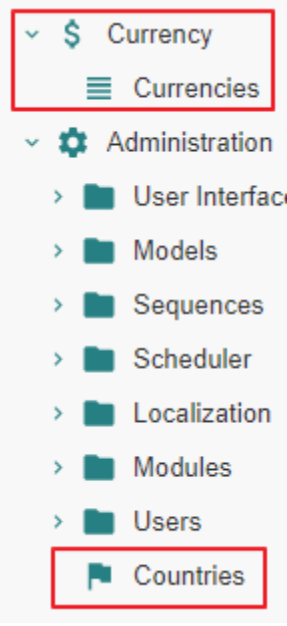

Currency
Administration
User Interface
Models
Sequences
Scheduler
Localization
Modules
Users
Countries


Countries
1 / 249
FILTERS
Search
Name
Code
Afghanistan
AF
Åland Islands
AX
Albania
AL

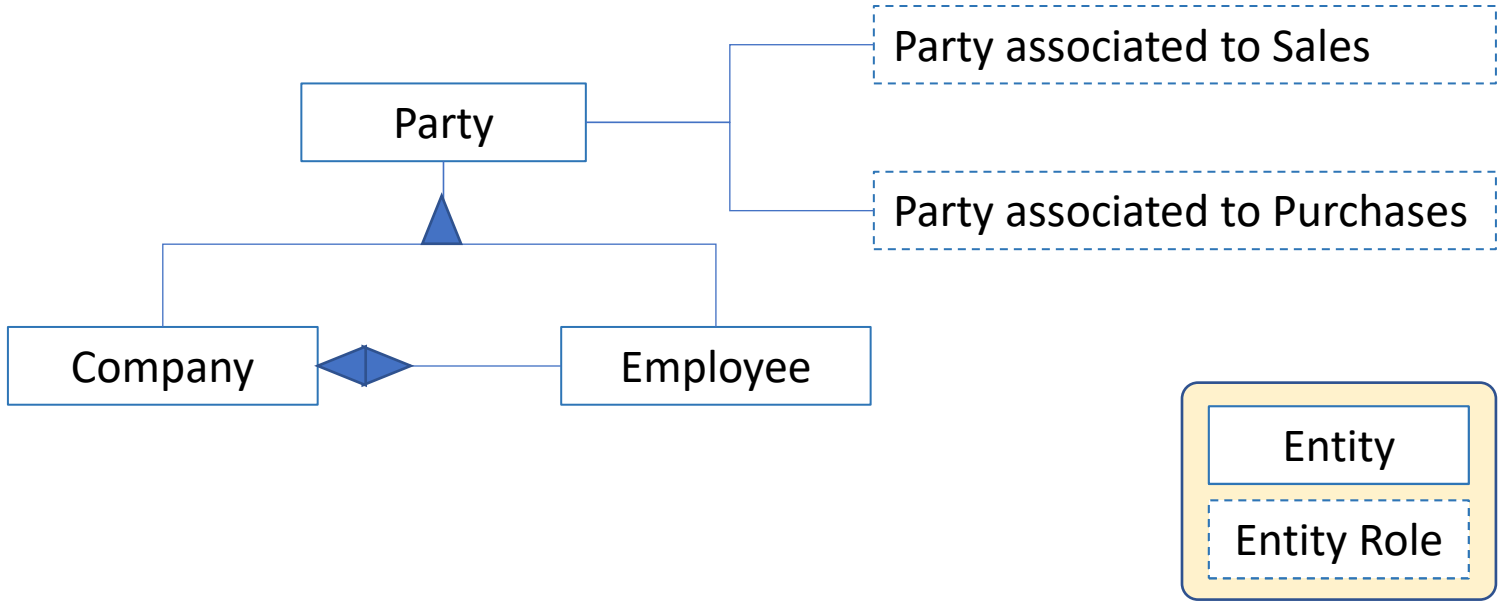

Currency
Currencies
Administration
User Interfac
Models
Sequences
Scheduler
Localization
Modules
Users
Countries

« Party » & « Company » & « Employee »

Motivation

We activate modules and create database content related to the following entities :

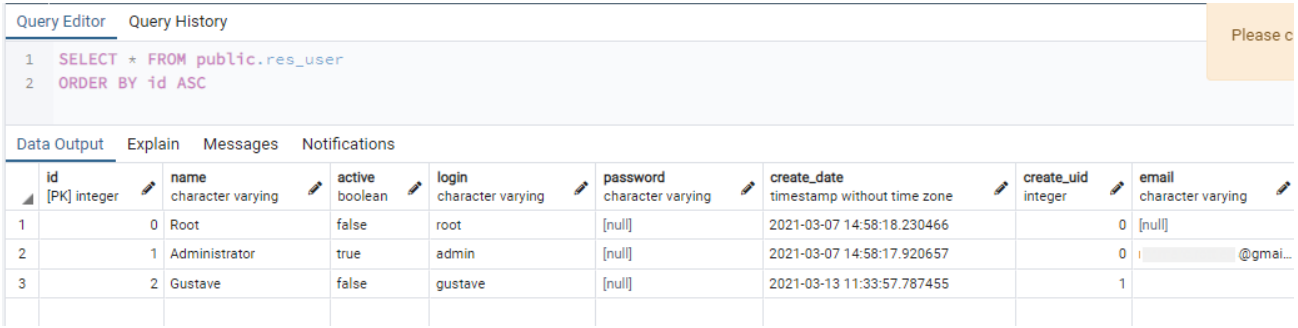
1. « Party » : an entity that represents some ERP-relevant actor
2. « Company » : a specialized « Party » entity
3. « Employee » : a specialized « Party » entity
4. « Parties associated to Sales » : a « Party » role (activated and installed later)
5. « Parties associated to Purchases » : a « Party » role (activated and installed later)



Motivation

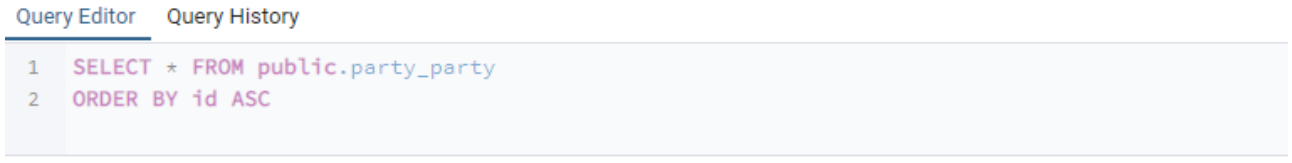
« User » vs. « Party »

- A « User » is a user of the system with login and password.
- A « User » is not a « Party ».
- A « User » is not necessarily an « Employee » of the « Company ». F.i. he/she can be a consultant.
- The default user is « admin ».



	id [PK] integer	name character varying	active boolean	login character varying	password character varying	create_date timestamp without time zone	create_uid integer	email character varying
1	0	Root	false	root	[null]	2021-03-07 14:58:18.230466	0	[null]
2	1	Administrator	true	admin	[null]	2021-03-07 14:58:17.920657	0	@gmai...
3	2	Gustave	false	gustave	[null]	2021-03-13 11:33:57.787455	1	

The content of the « res_user » database table with « User » entities



	id [PK] integer	active boolean	code character varying	create_date timestamp without time zone	create_uid integer	name character varying
1	1	true	1	2021-03-08 10:36:31.925876	1	COM01
2	2	true	2	2021-03-08 10:50:59.083771	1	EMP01
3	3	true	3	2021-03-09 09:44:48.52222	1	SUP01

The content of the « party_party » database table with « Company », « Employee » and « Supplier » (installed later) entities

« Party »

Motivation

A « Party » is an abstract entity that stands for the common properties of a speciliazed concrete entity such as « Company », « Employee », « Party associated to Purchase », etc.

We activate the modules that relate to « Party ». Subsequently, we define concrete parties :

The first approach for defining a specialized entity is :

- First define a « Party » with the idea that it will be referenced by a specialized entity.
- Subsequently define the specialized entity (e.g. a « Company ») with reference to its generic « Party » parent.

The second approach for defining a specialized entity is :

- Define the specialized entity like « Company »
- Doing so, the system lets you create the generic « Party » entity on the fly

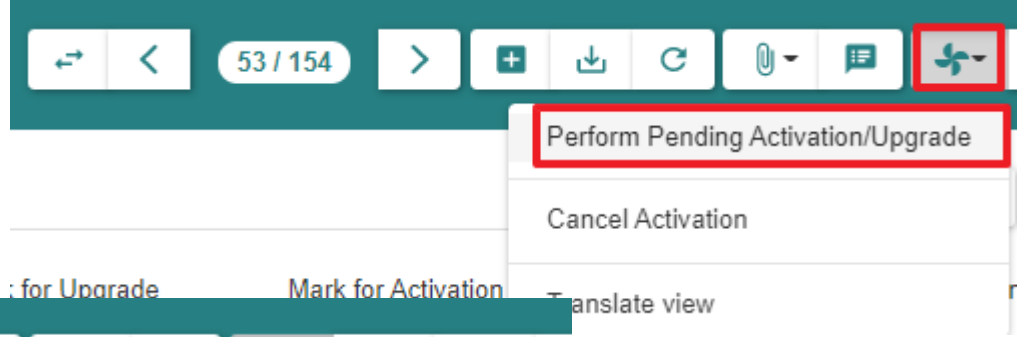
Module Activation

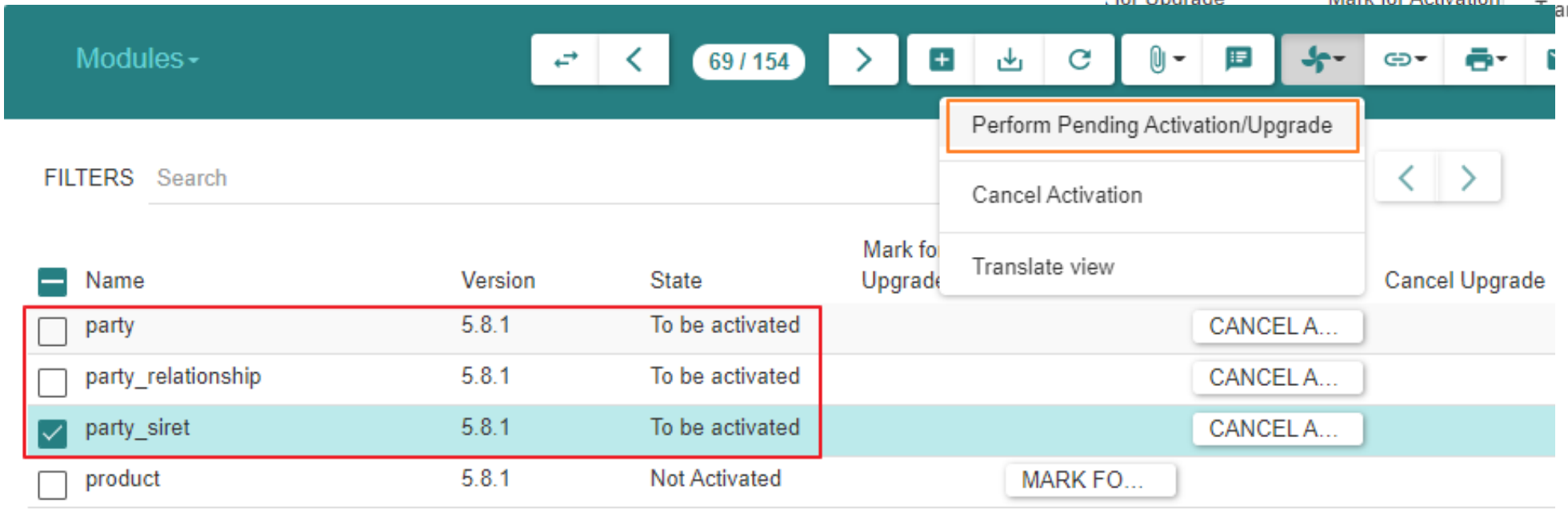
Documentation

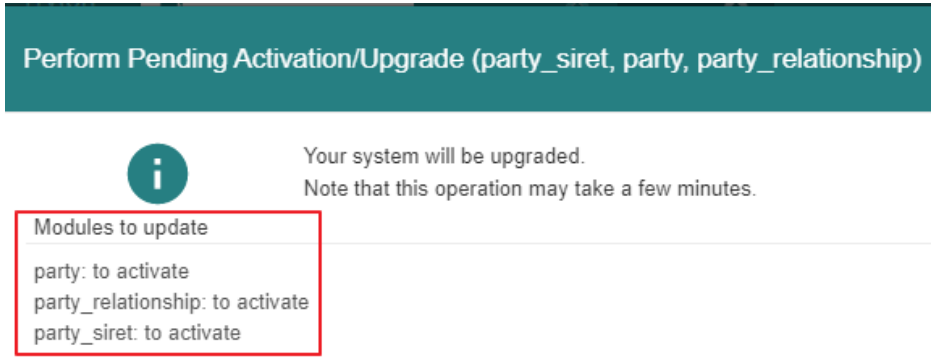
[https://docs.tryton.org/en/latest/party.html#index-party]

Modules - Activation

We ensure that all « Party » modules are activated

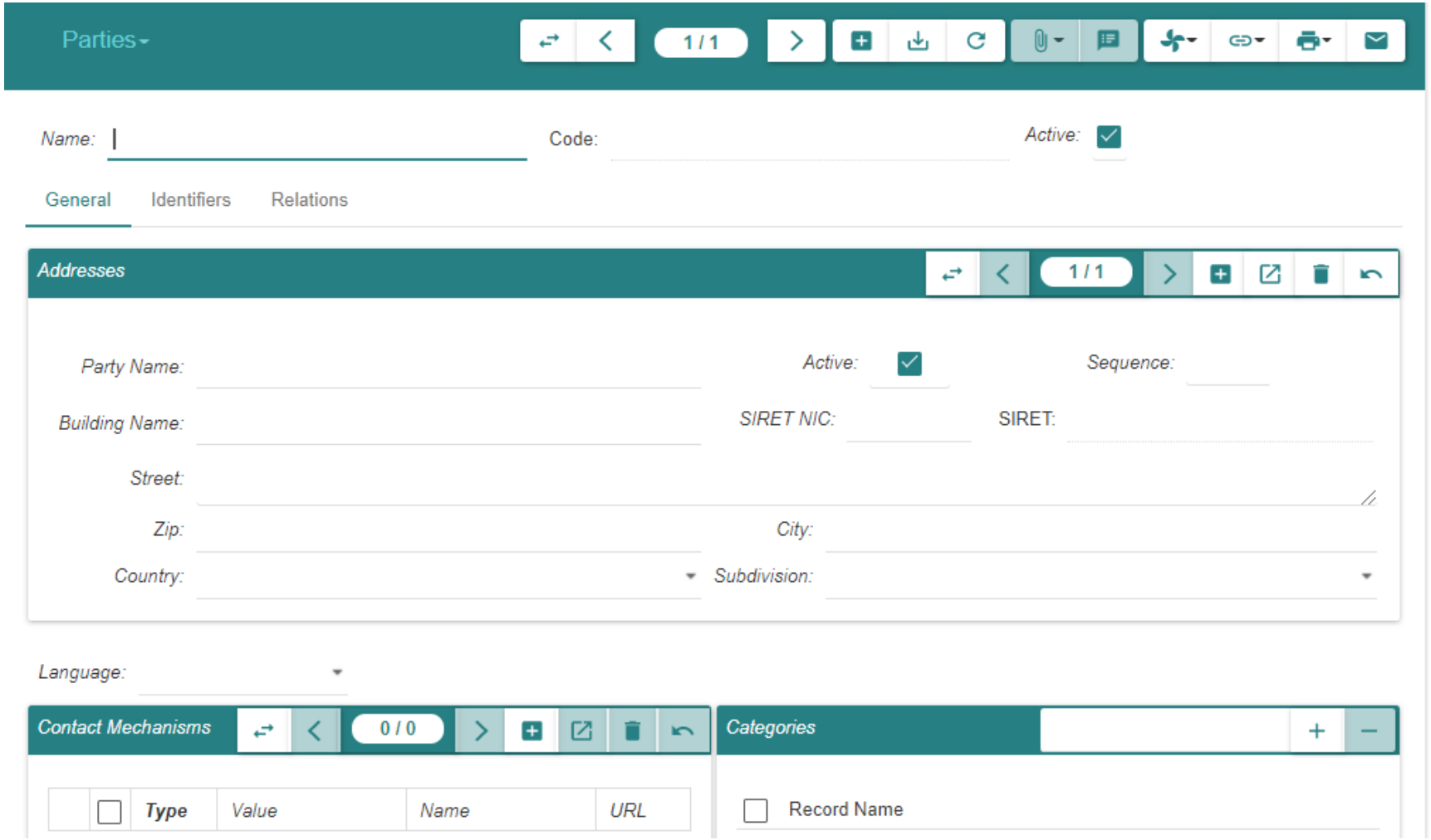




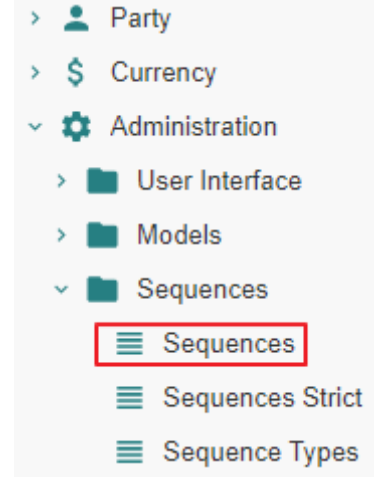


Status Post - Menu Tree Items « Party »

Menu Tree Items « Party »



Status Post - Menu Tree Item « Sequence »



Sequences

1 / 1

FILTERS Search

Sequence Name	Sequence Code	Type
Party	Party	Incremental

Sequences

1 / 1

Sequence Name: Party

Sequence Code: Party *Active:*

Prefix: *Suffix:*

Type: Incremental

Incremental

Number padding: 0 ***Increment Number:*** 1

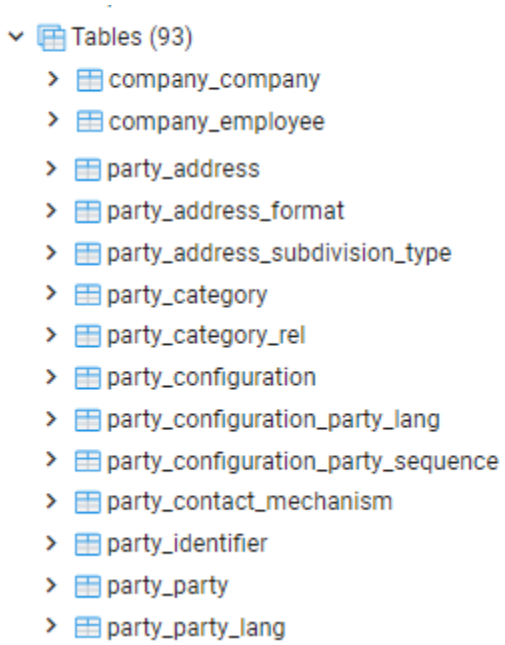
Next Number: 1

Legend (Placeholders for prefix, suffix)

Year: ${year}
Month: ${month}
Day: ${day}

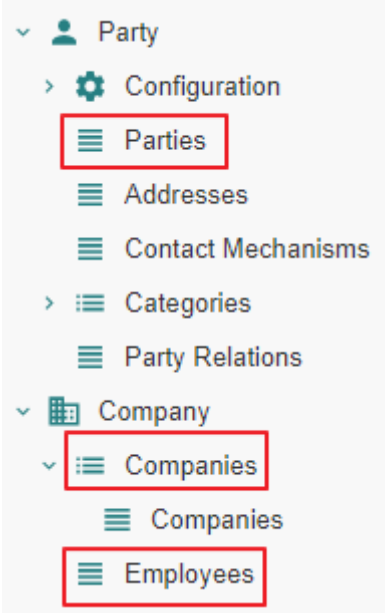
It is possible to integrate this information within the prefix or the suffix number

Database tables created



Creation of Parties

« Party », « Company » & « Employee »



- A « Party » is an abstract entity.
- Its concrete subentities are of type « Company », « Employee », etc.
- We can define the corresponding abstract and concrete entities in two ways :

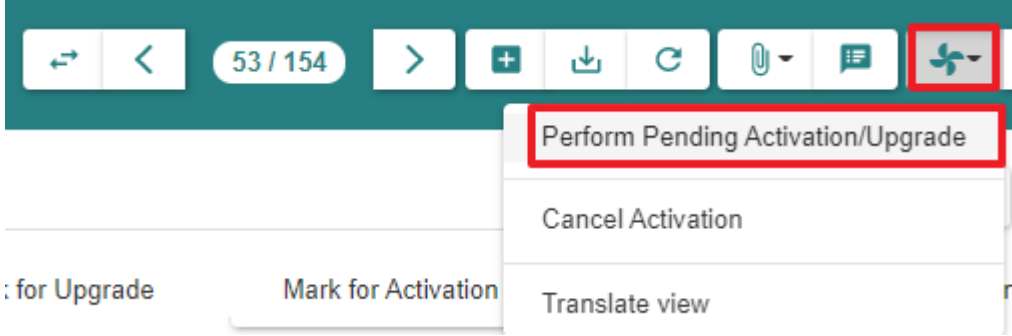
- **Method 1** :
  - We define a « Party » « X » or « Y » by clicking on « Parties », and fill their properties conformant those inherited by the concrete entity
  - Subsequently, we define :
  - The « Company » « X » by referencing its corresponding « Party » « X »
  - The « Employee » « Y » by referencing its corresponding « Party » « Y »
- **Method 2** :
  - We define a « Party » « X » or « Y » by clicking on « Parties », and fill their properties conformant those inherited by the concrete entity
  - We define the « Company » « X » by clicking on « Companies » and in doing so we create « Party » « X » in the process
  - We define the « Employee » « Y » by clicking on «Employees » and in doing so we create « Party » « Y » in the process

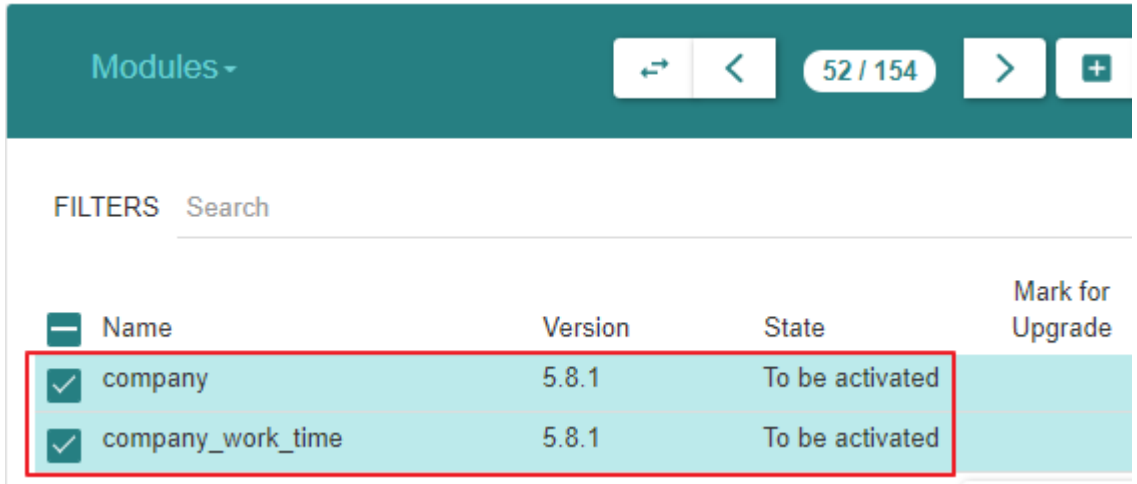
- We will use Method 1 for defining a « Company » COM01
- We will use Method 2 for defining an « Employee » EMP01

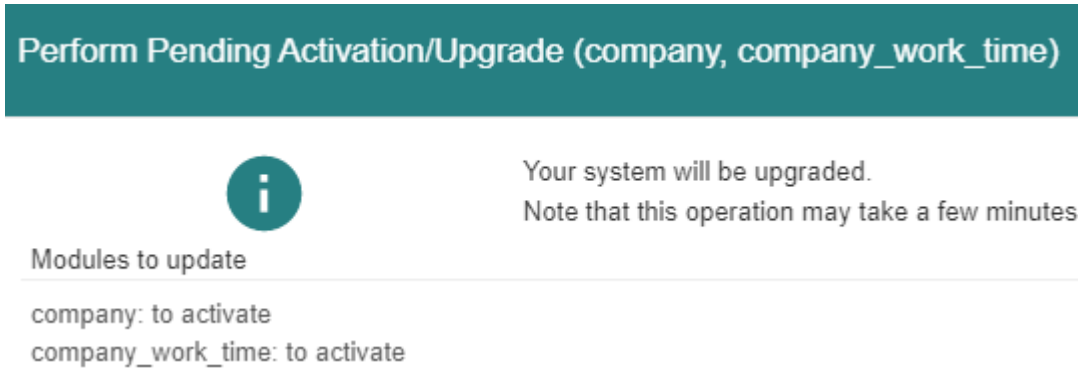
« Company »

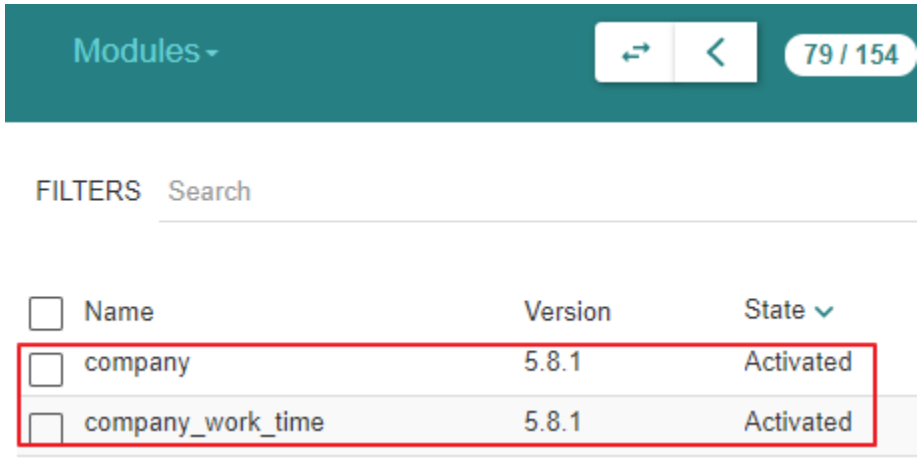
Modules - Activation

We ensure that all « Company » modules are activated

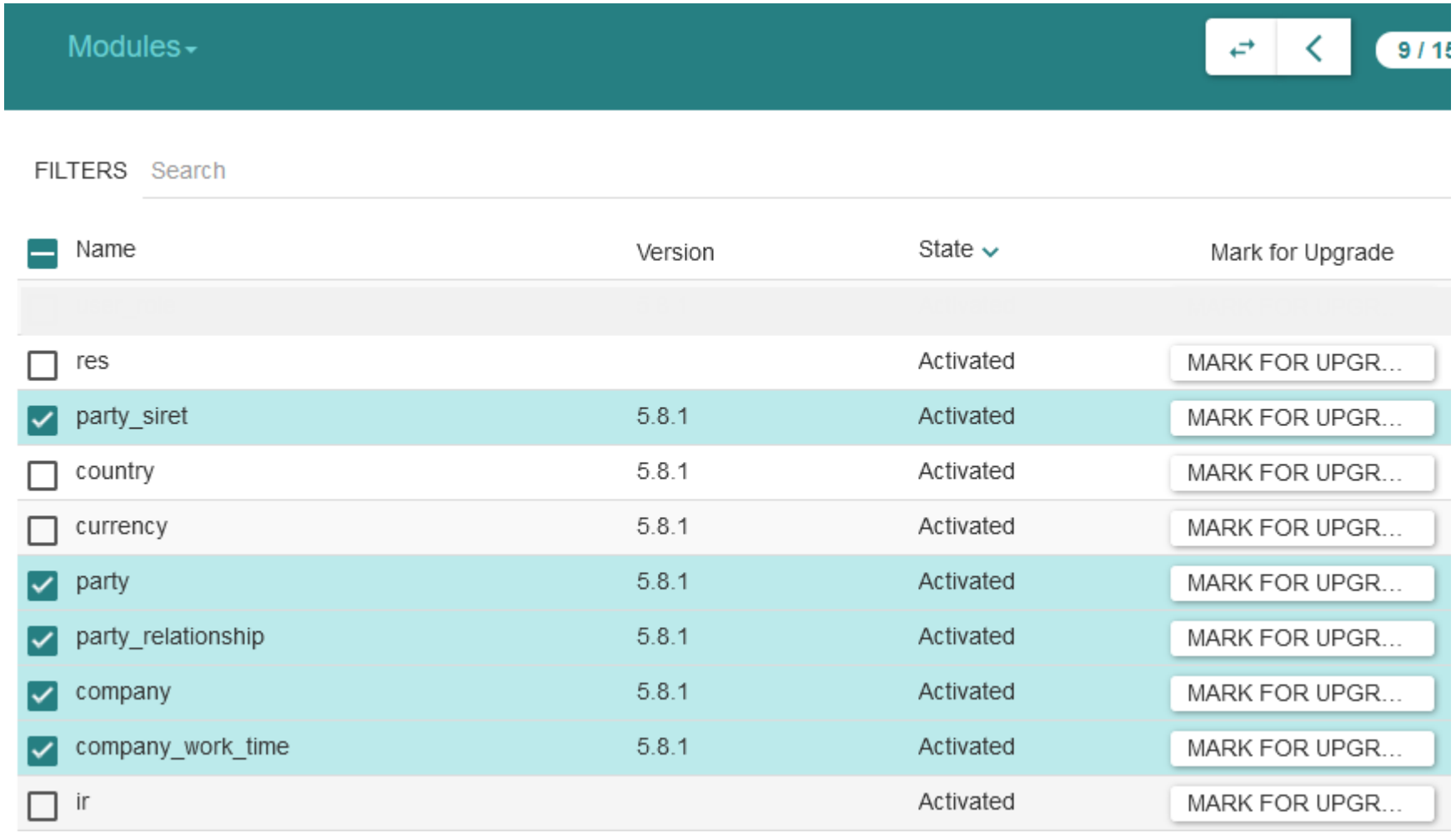




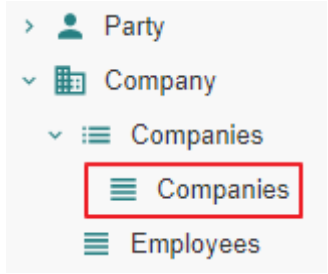




Modules - Activation - Summary State

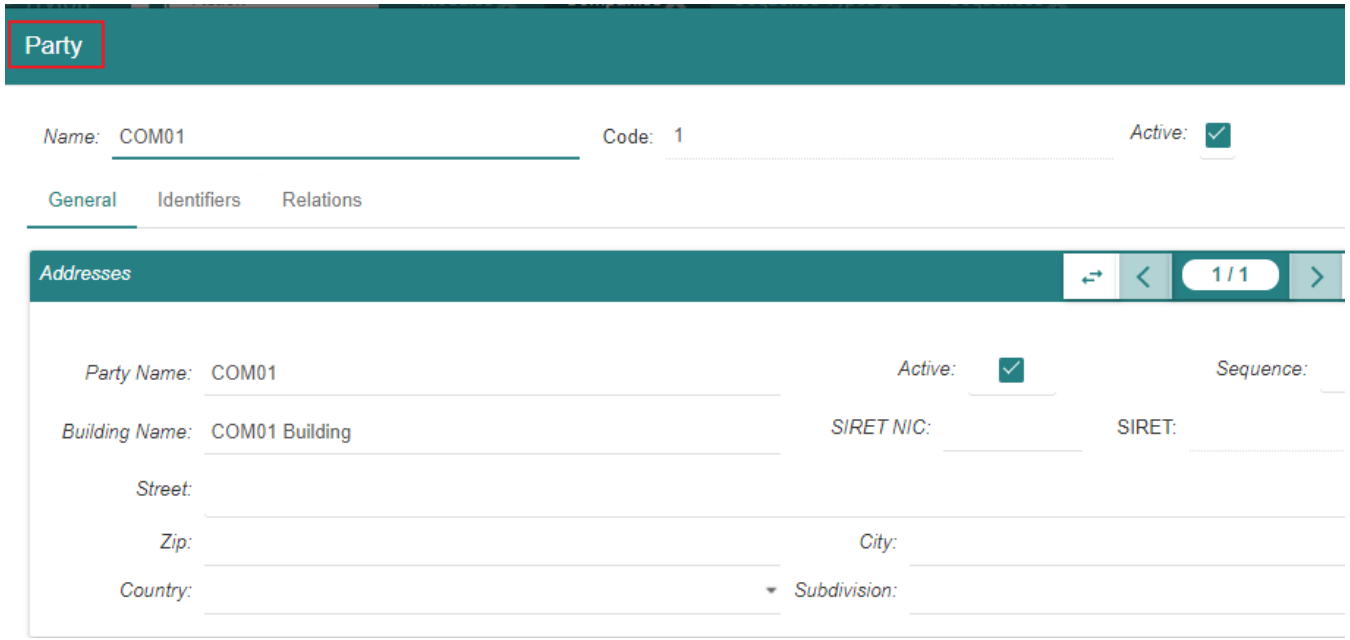


Modules - Activation

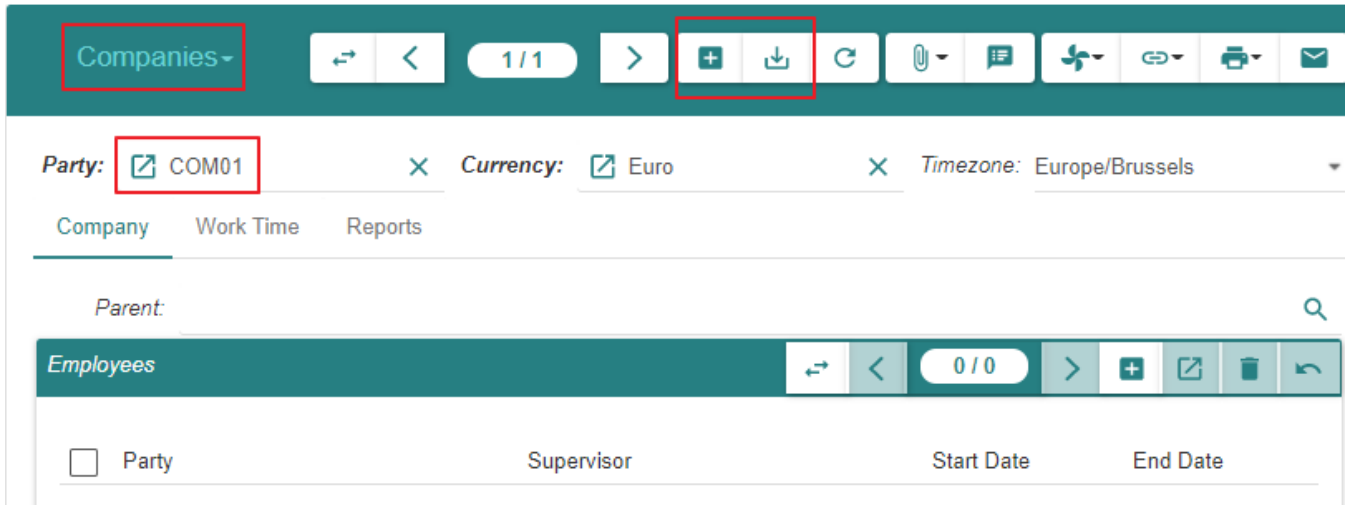


- Activating the « Company » modules creates the Menu Tree Items for « Company » as well as « Employee »
- When an indented Menu Tree Item construction exists, it means that e.g. « Companies » can be displayed as a tree of « Companies » as well as a list.
  - The top level « Company » menu will display the « Companies » in a tree manner.
  - The bottom level « Company » will display the « Companies » in a list manner.

Create « Company » COM01



Step 1
Create the « Party » COM01



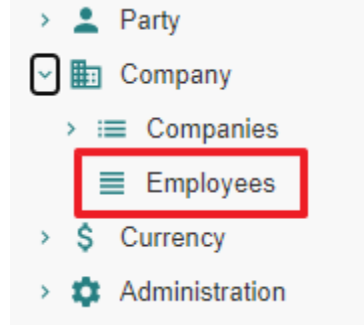
Step 2
Create the concrete « Company » entity COM01 that references the abstract « Party » entity COM01

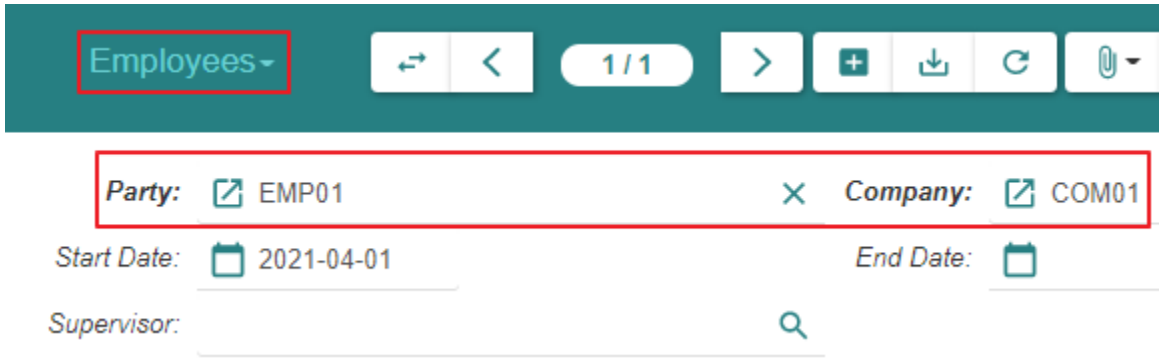
« Employee »

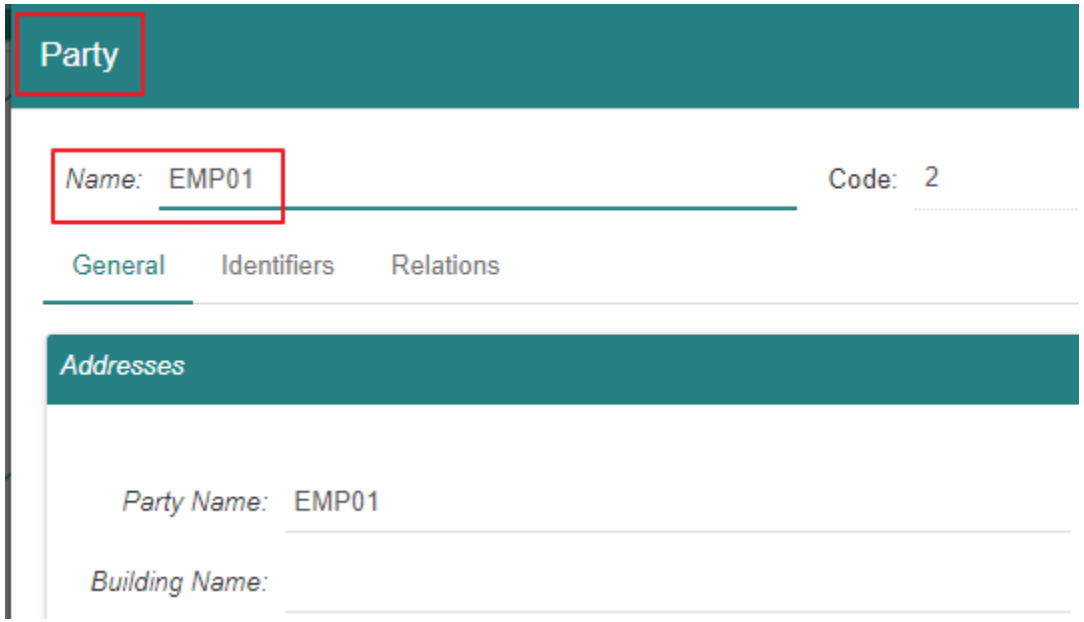
Modules - Activation

- By activating the « Company » modules, both the « Company » and « Employee » parties are made available
- There are no « Employee » modules to activate

Creating « Employee » EMP01

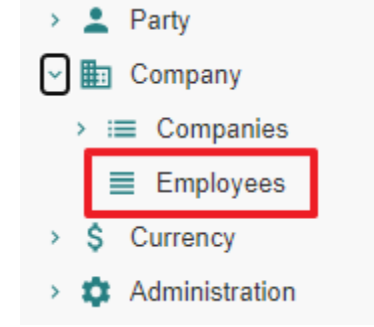






- We create « Employee » EMP01
- In the process,
  - We create its corresponding « Party » EMP01
  - We reference the existing « Company » COM01

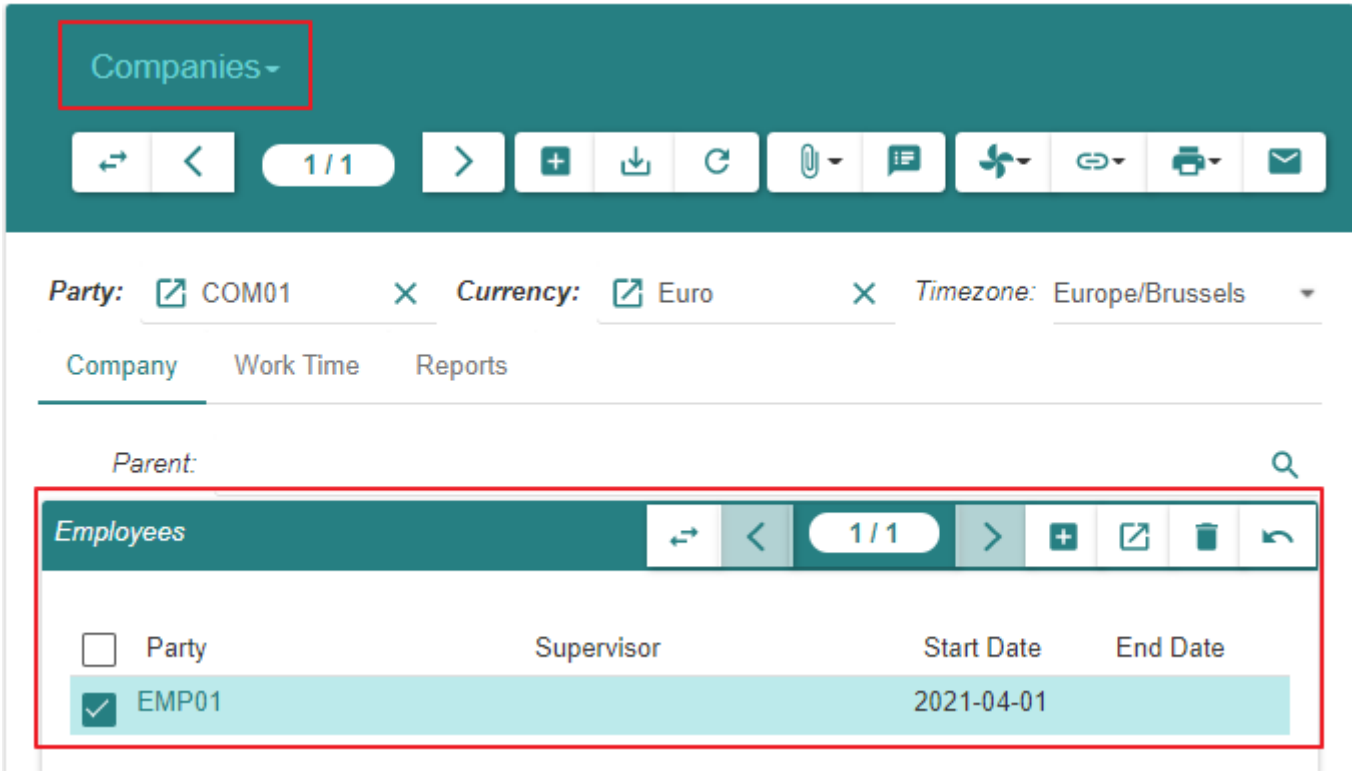
Creating « Employee » EMP01



- The « Employee » appears now
  - In the list of employees
  - In the list of employees for « Company » COM01

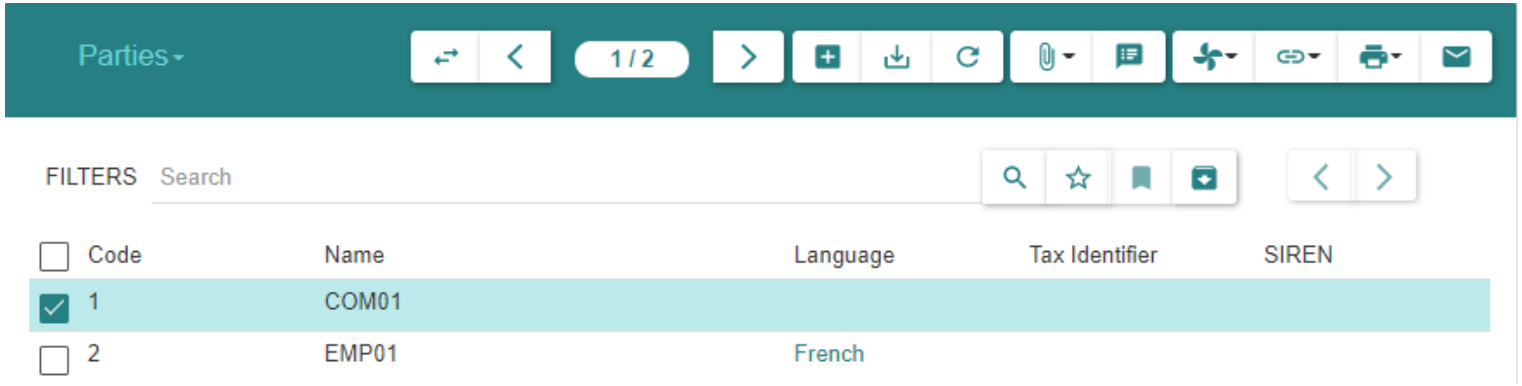
FILTERS Search

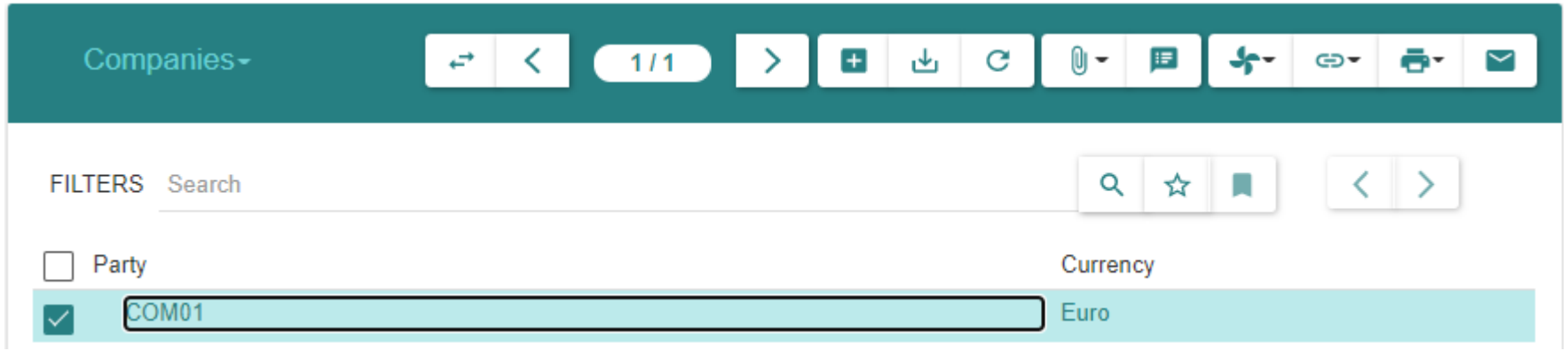
Party	Company
EMP01	COM01

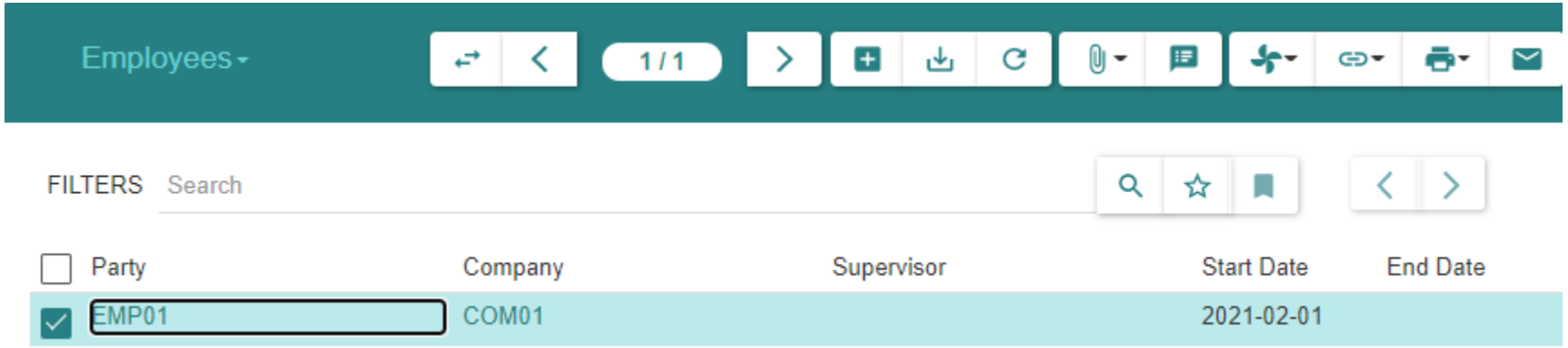


Final State

« Party », « Company », « Employee »







Note : this is one of these cases where you need to refresh the browser in order to appropriately display the parties that were just defined.

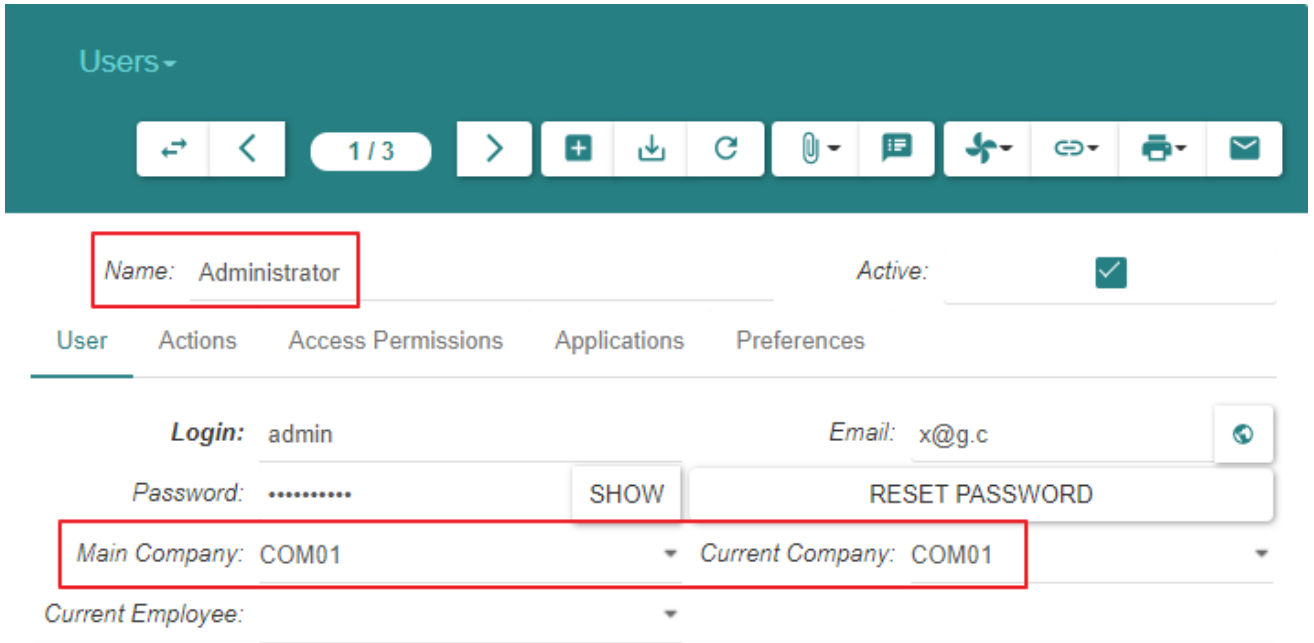
« User »

Definitions : « User » and « Employee »

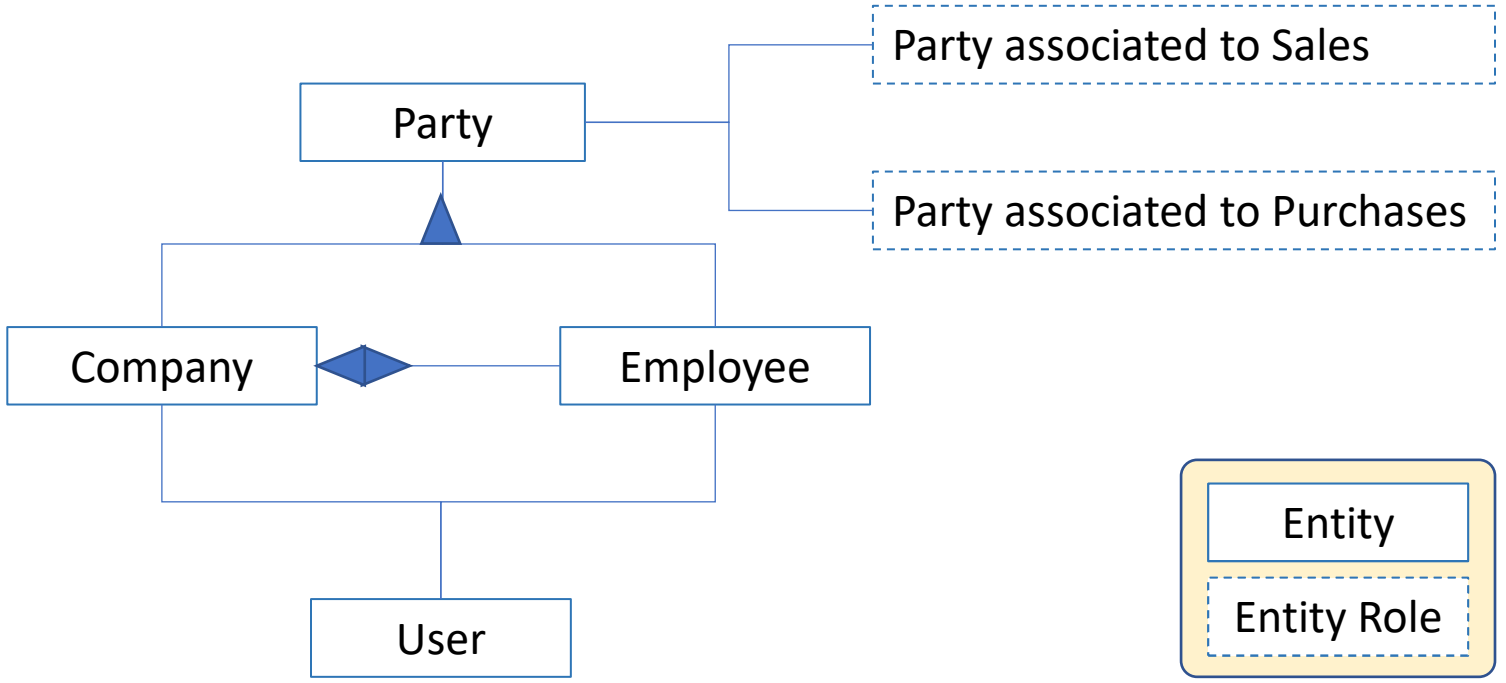
- An « Employee » is a « Party », a « User » is not
- A « Company » aggregates « Employees », not « Users »
- A « User » references a « Current Company », a « Main Company » and an « Employee »

- A « User » is someone who logs into the system with his/her user id and password
- Thanks to the « User » - « Company » link, the user has the permission to install and display relevant company records

- We will use this relationship to create a Chart of Accounts for « Company » COM01

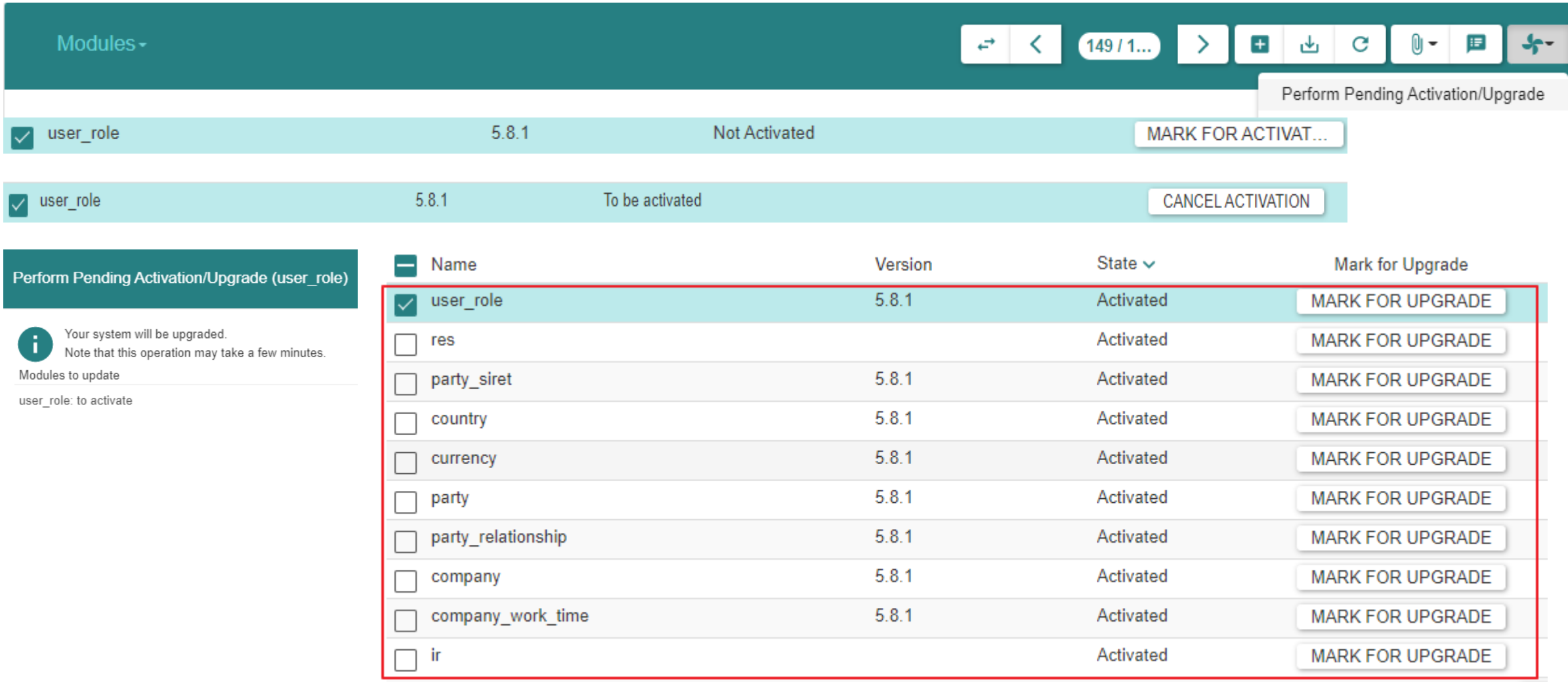


Definitions : « User » and « Employee »



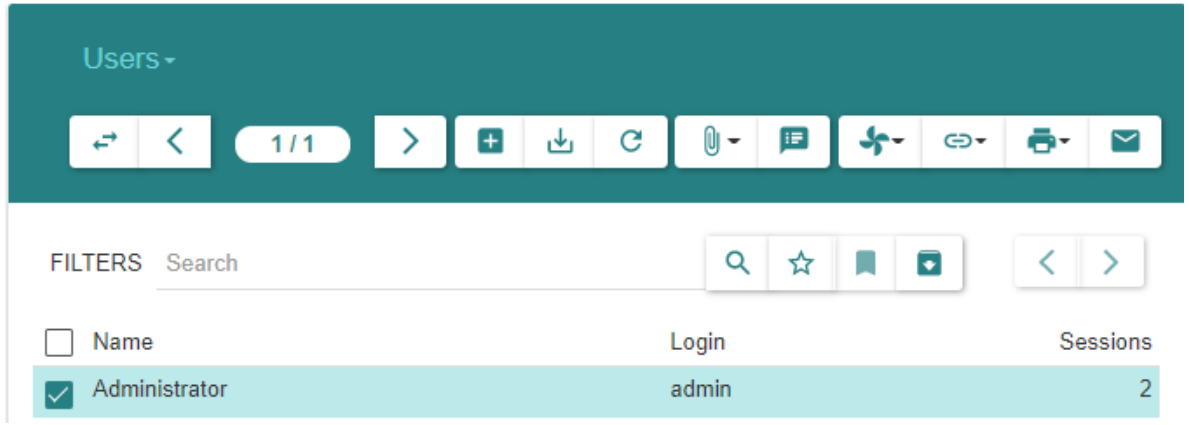
Application - Activating Modules

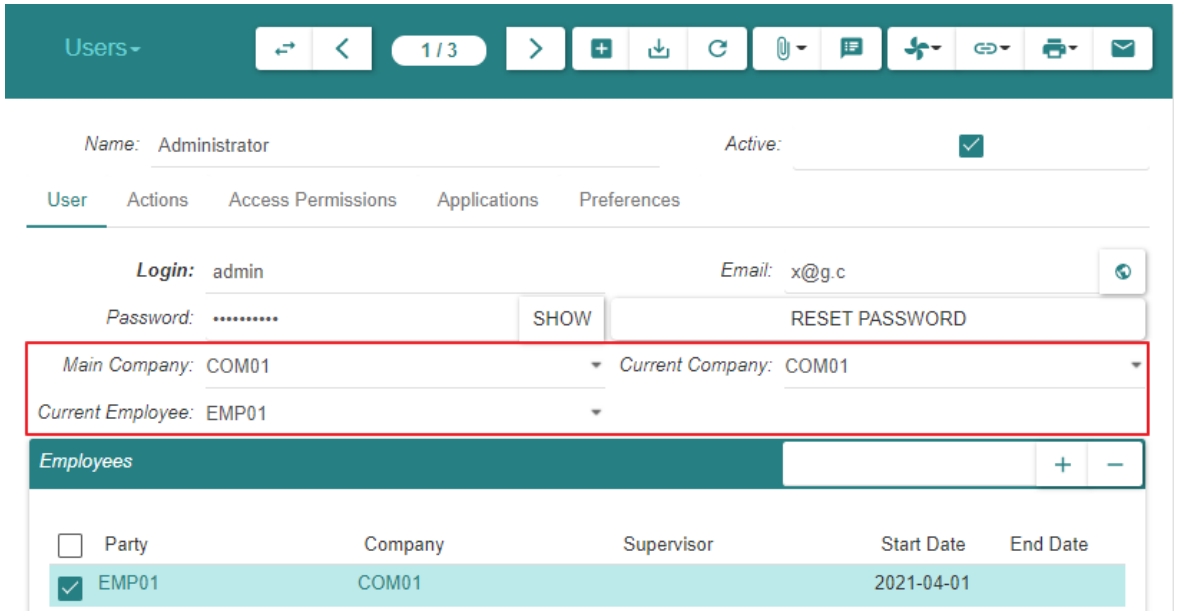
Activating module « User_role »

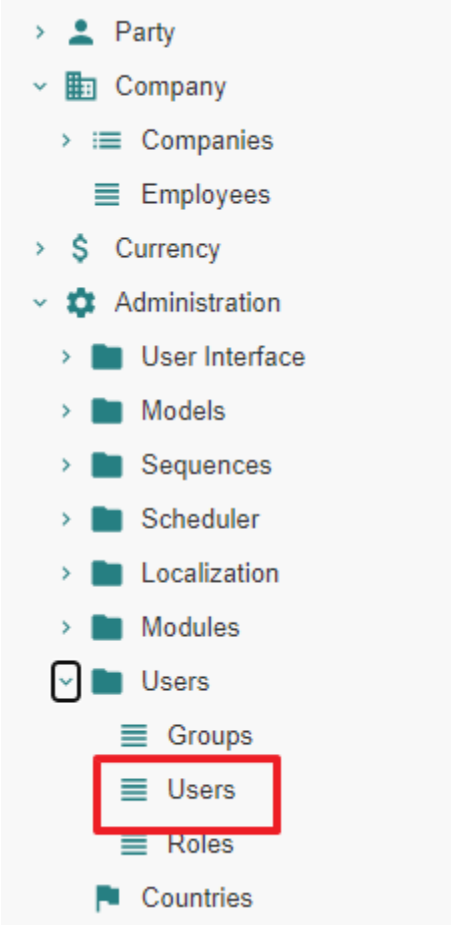


« User » Administrator

User « Administrator »







- « User Administrator» is installed by default
- We add a reference to « Company COM01 » and « Employee EMP01 »

« User » Marc & Paula

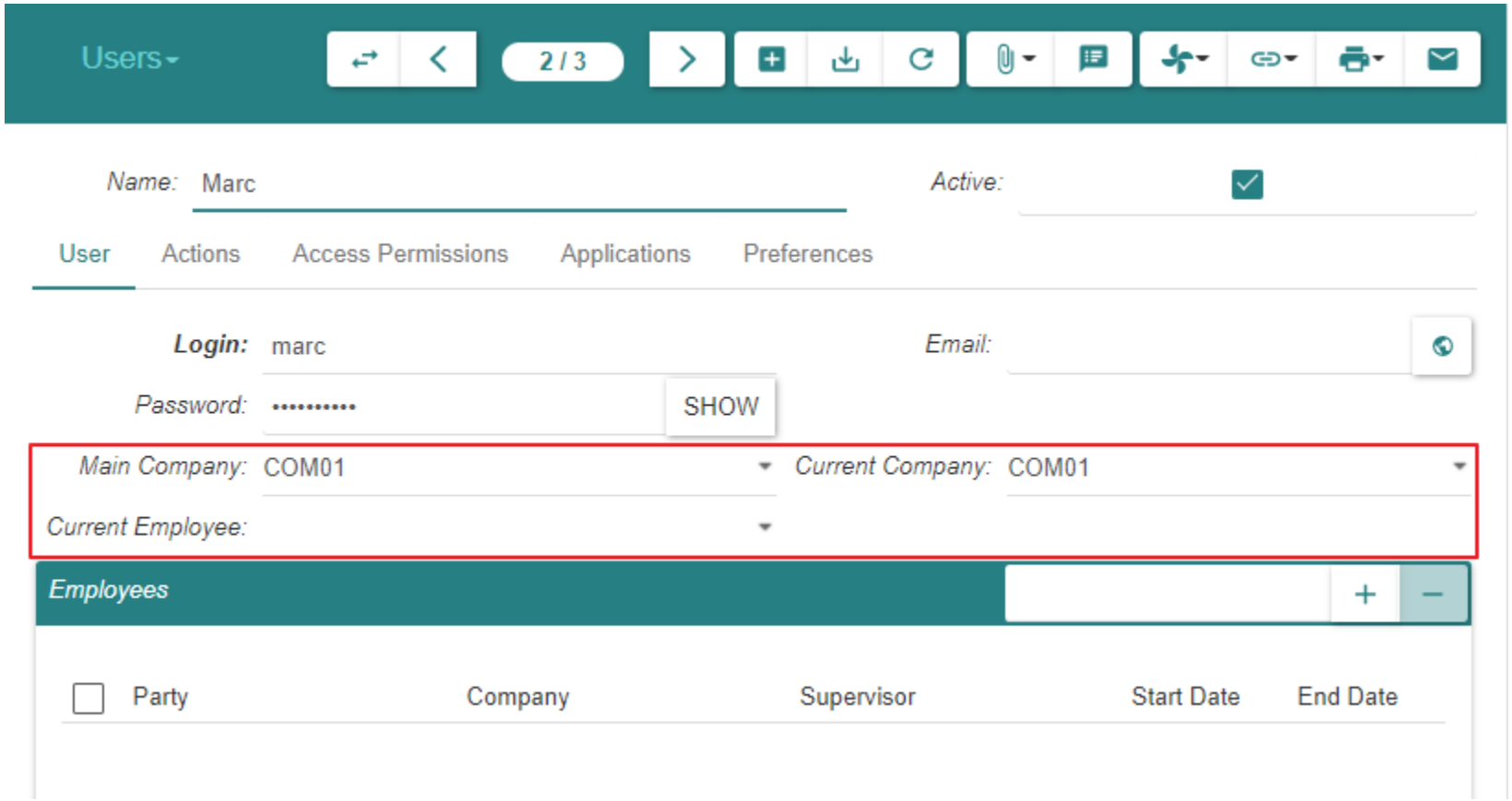
Motivation

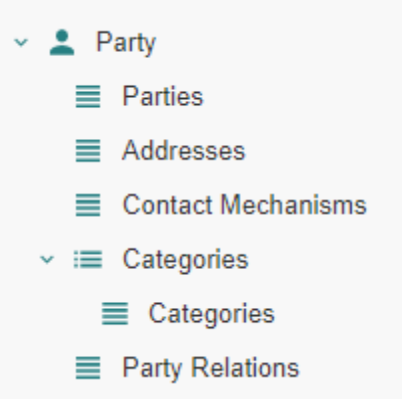
- A « User » is a user of the system with a login and a password.
- The default user is « admin ». I use the password « Password ».

- We install additional users « Marc » & « Paula » without special privileges
- And briefly login then logout to see what is permitted

- From now on, all operations are performed in this basic introduction with « User » « Administrator »

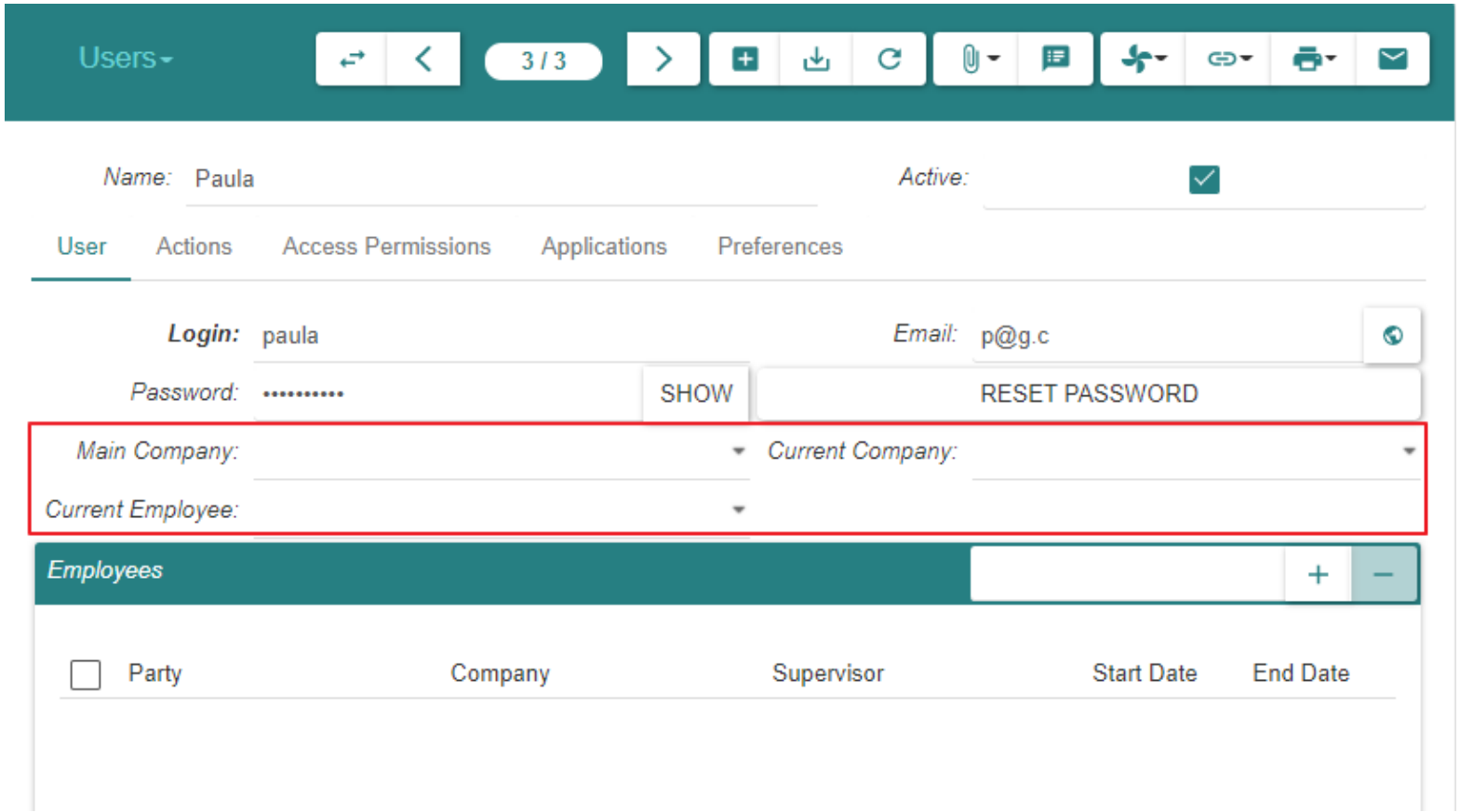
« User Administrator » installs « User Marc »

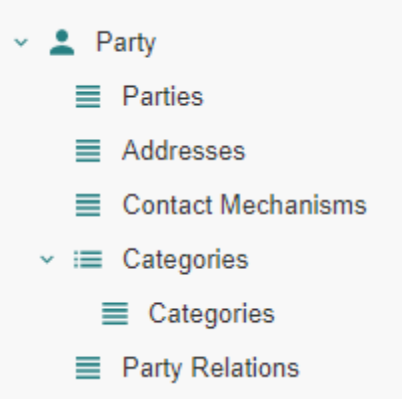




- User « Marc » is installed with reference to « Company COM01 »
- When loging in with « User Marc », we observe that the menu tree is reduced.

« User Administrator » installs « User Paula »

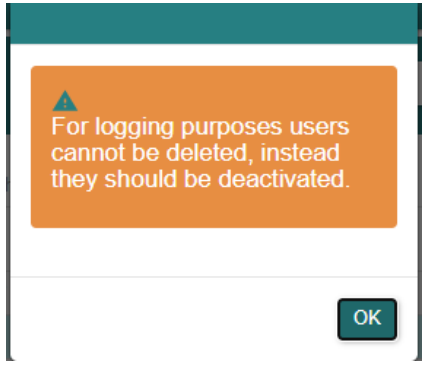


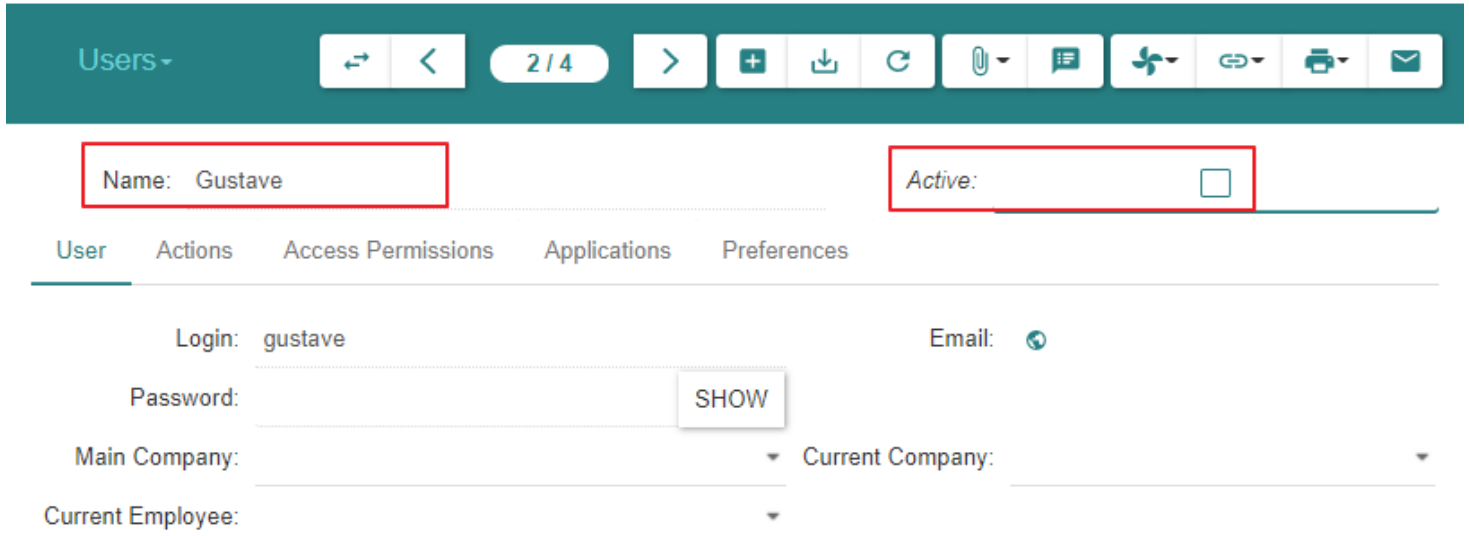


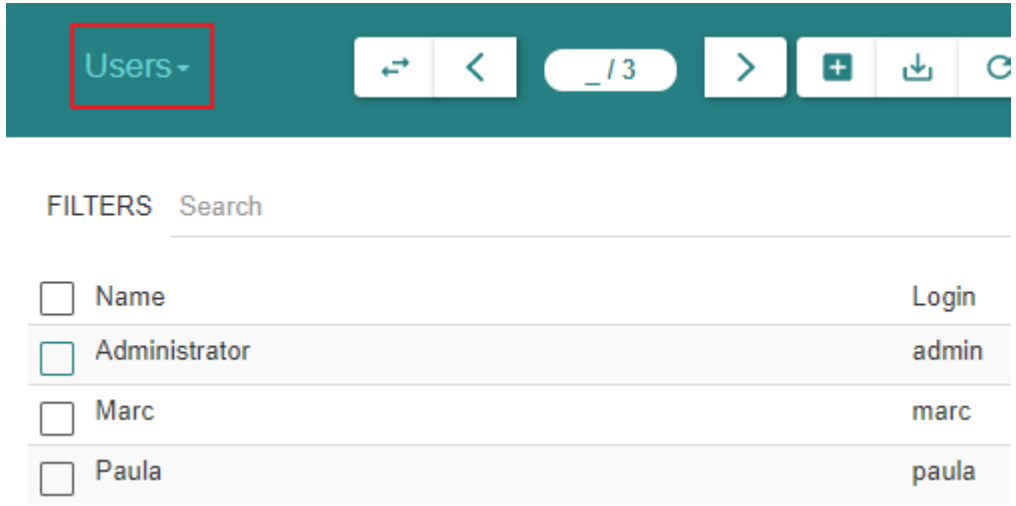
- User « Paula » is installed without references to « Company COM01 » and « Employee EMP01 »
- When loging in with « User Paula », we observe that the menu tree is reduced.

« User » Gustave

« User Administtrator » creates then deactivates « User Gustave »



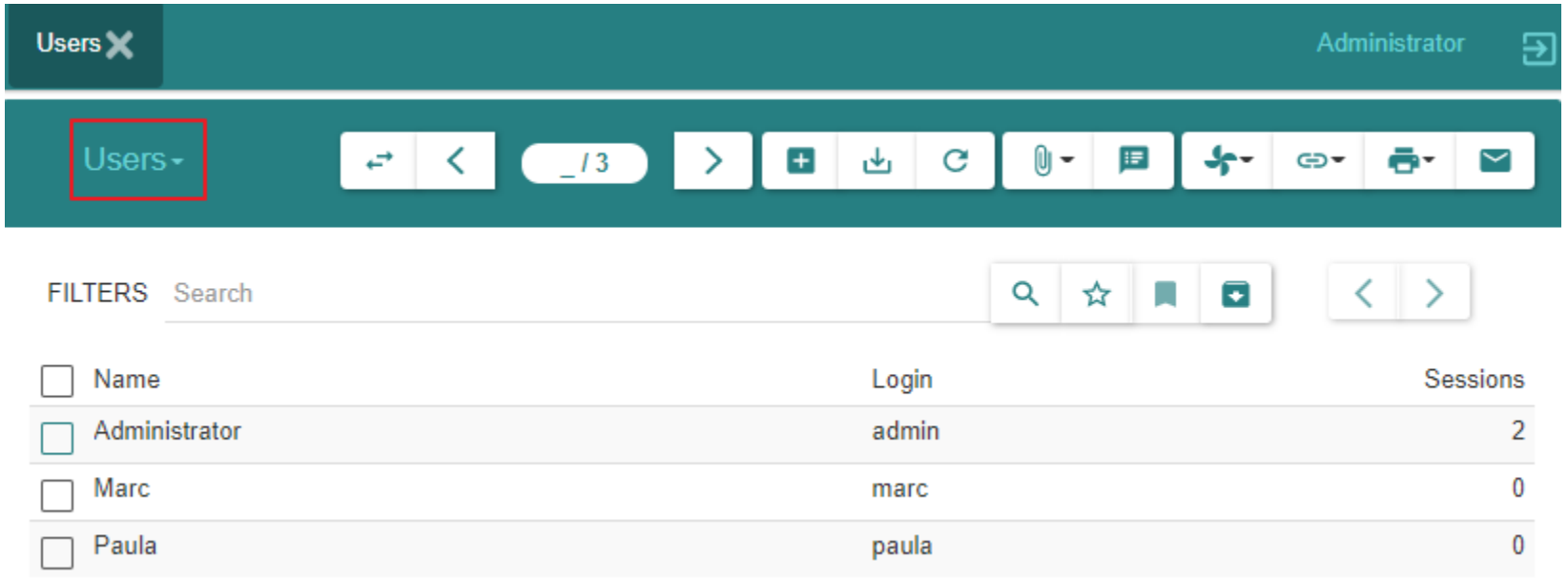




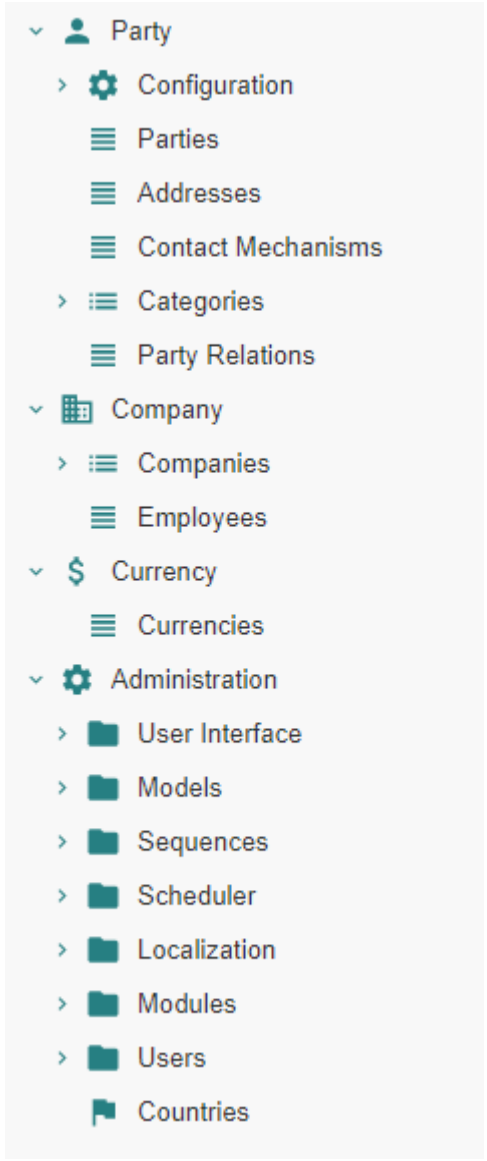
- User « Gustave » is installed then deactivated
- This demonstrates that a user cannot be deleted

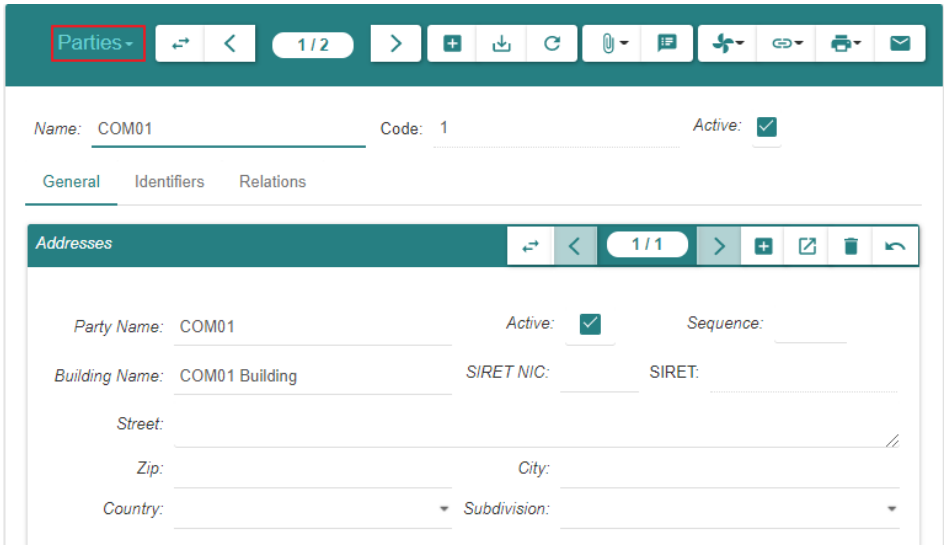
State Post

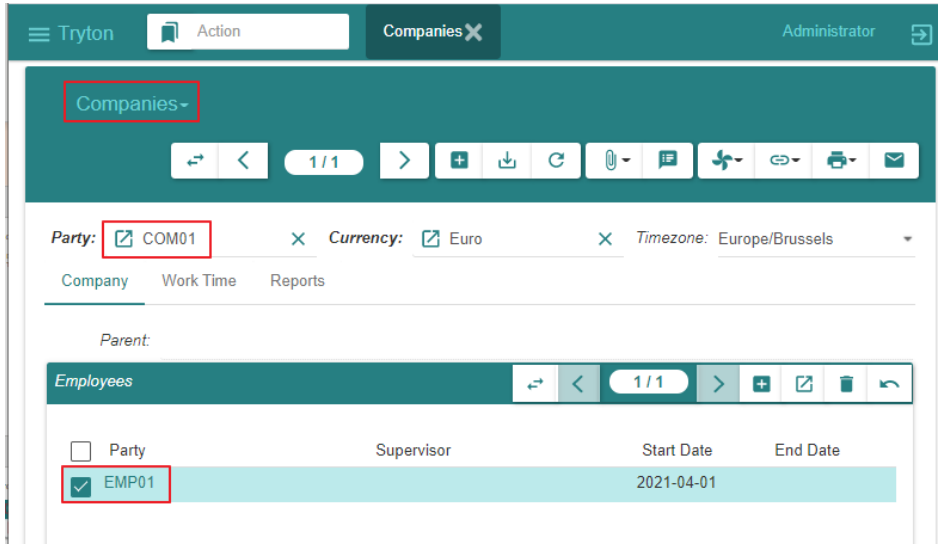
State « Post » - Users

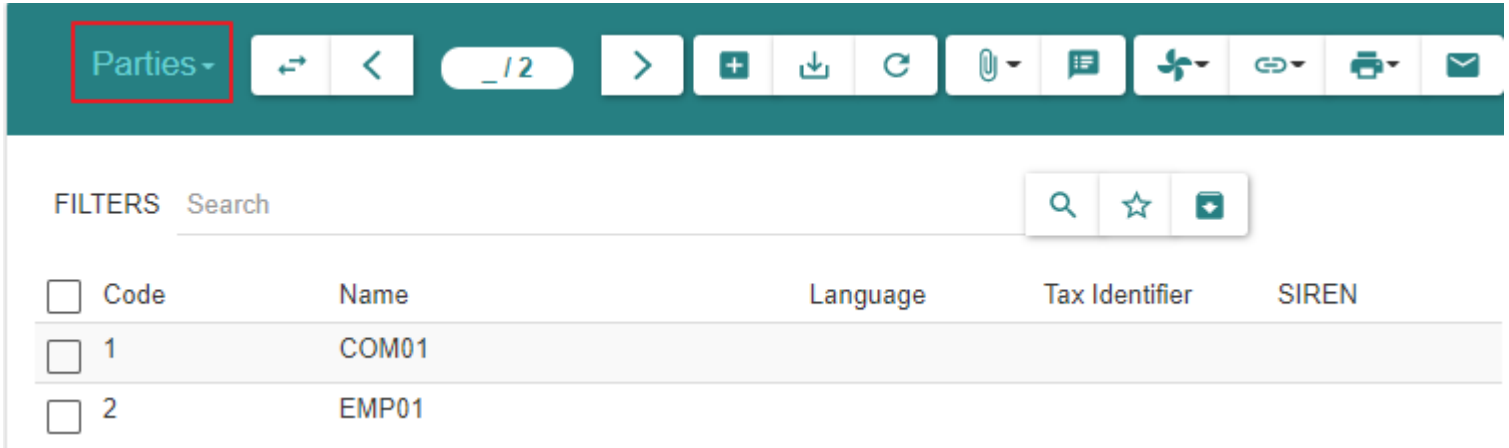


State « Post » - User « Admin »

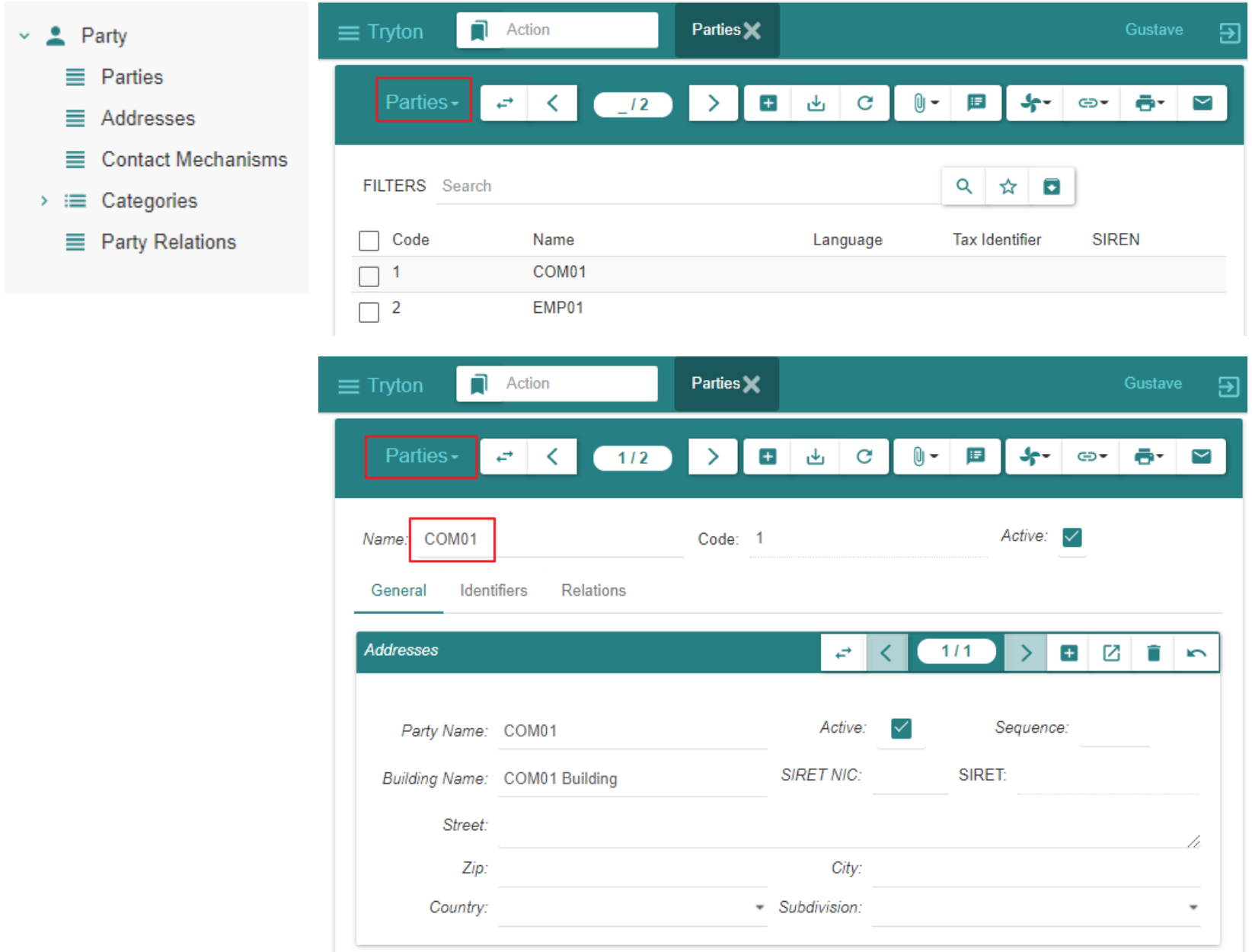




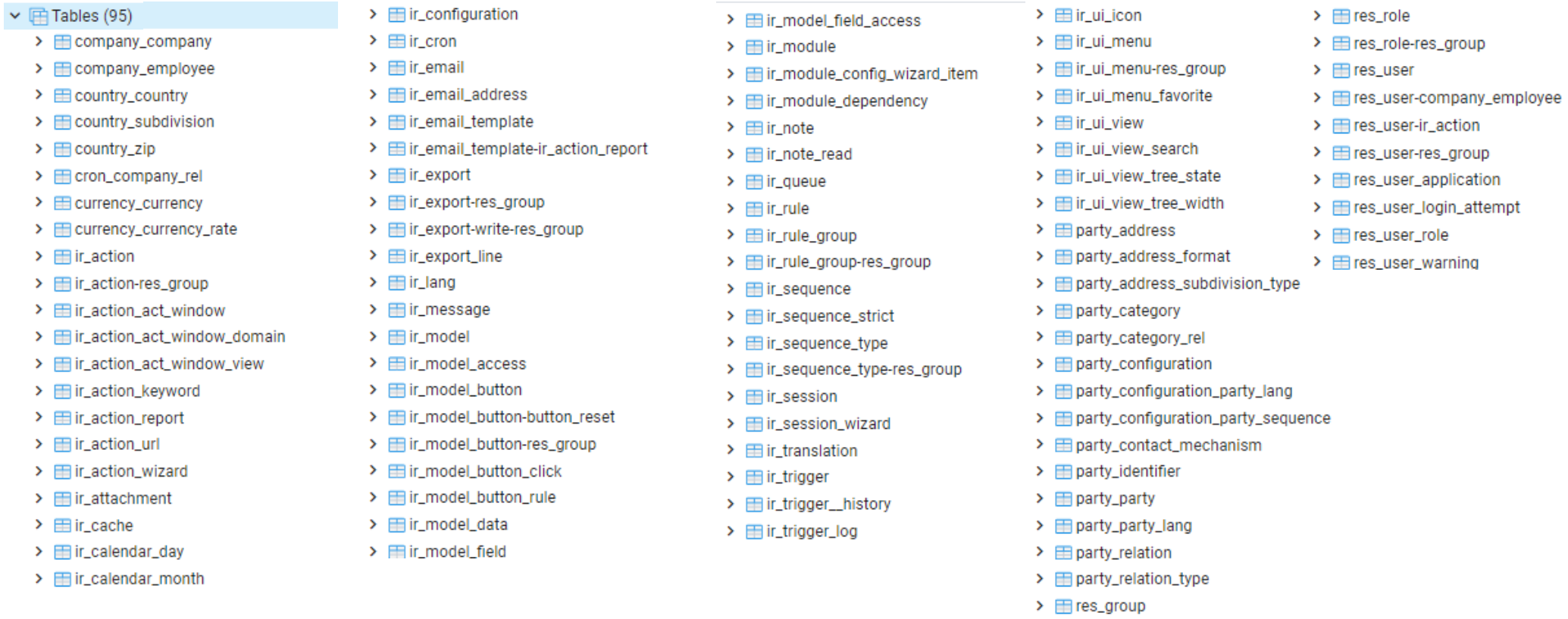




State « Post » - User « Paula », « Marc »



State « Post » - Database



« Financials »

« Chart of Accounts » & « Fiscal Year and Period » & « Journal »

Documentation

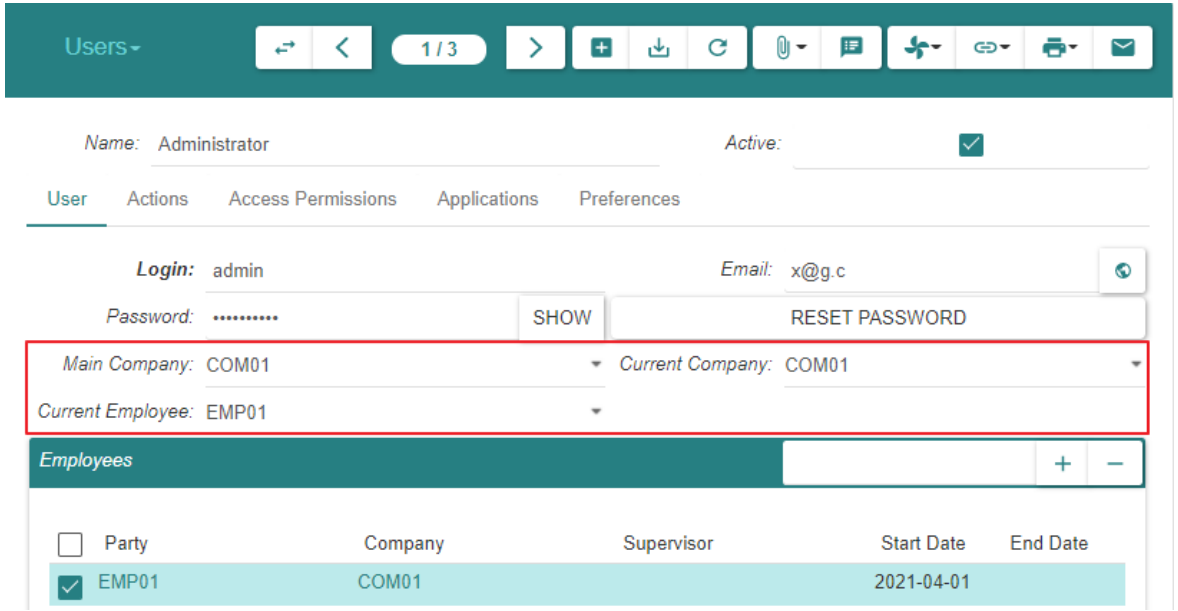
[https://tryton-administration-manual.readthedocs.io/en/latest/basic_config.html#installing-a-chart-of-accounts]
[https://tryton-administration-manual.readthedocs.io/en/latest/accounts.html]

Precondition

- Before activating the Financial Modules, it is advised to properly configure the « Administrator » user

- The user should reference :
  - The « Current Company » field with e.g. « COM01 » i.e. the company for which the « Chart of Accounts » will be created.
  - An « Employee » field with e.g. « EMP01 » who is part of « Company COM01 »

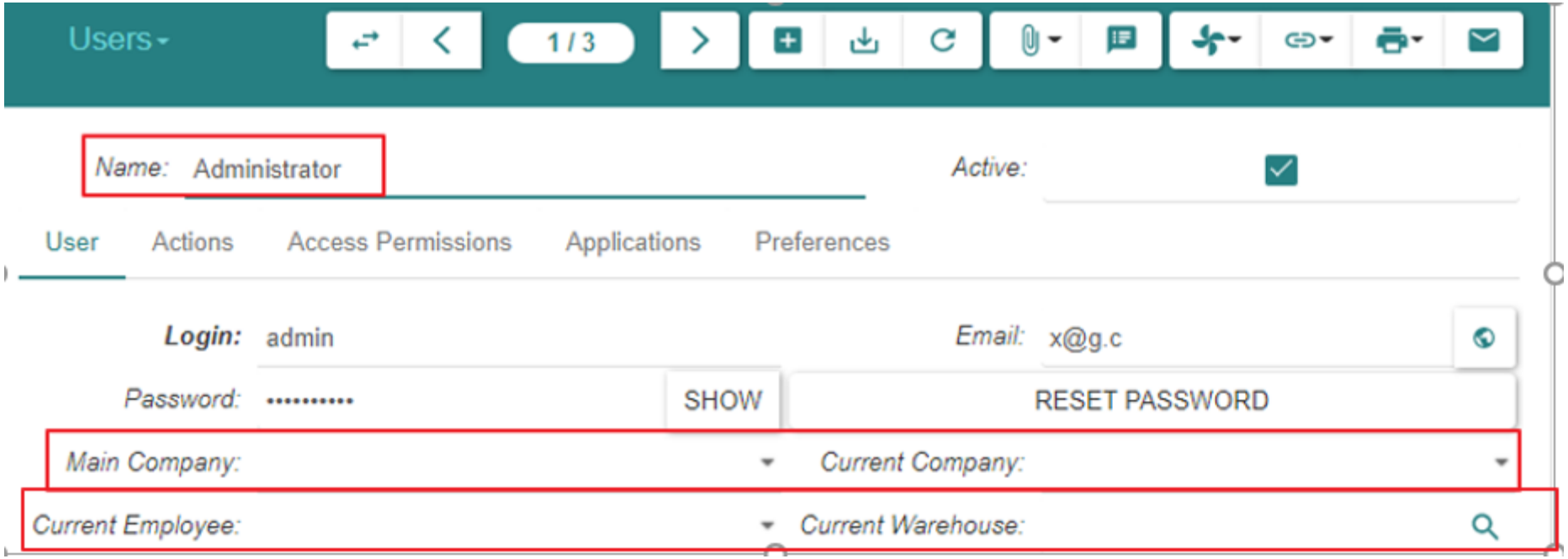
- Under those conditions, at the end of module activation, a « Create Chart of Accounts » wizard will be able to reference « COM01 » and create the chart of accounts appropriately.



Error conditions

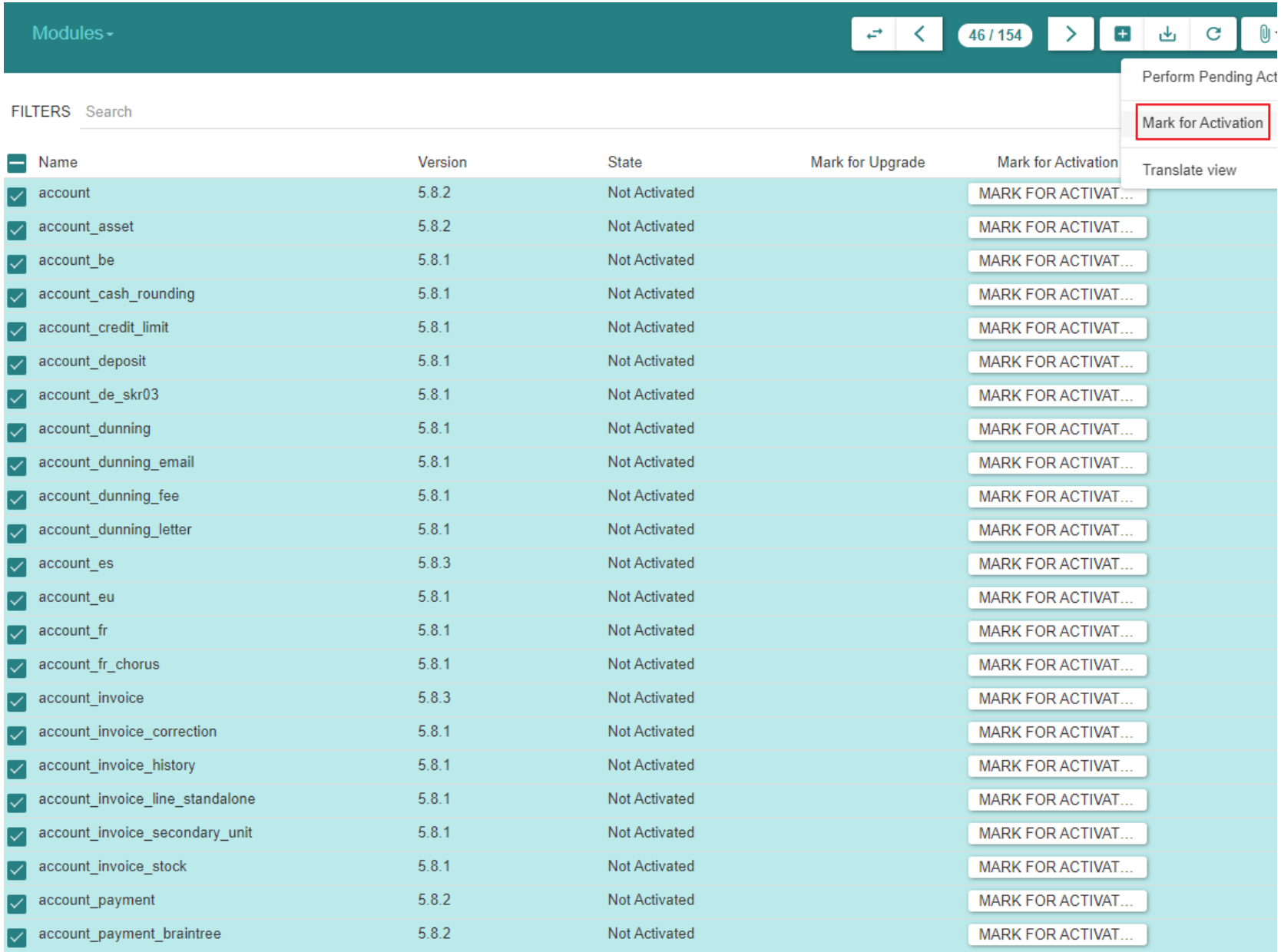
- If « User Administrator » activates financial modules without referencing « Company COM01 », the creation of the « Chart of Accounts » will have to be aborted. Should this be the case, we will show how to recover from this situation and, more generally, show how to execute once again a previously aborted wizard.

- If « User Administrator » activates financial modules without referencing « Employee EMP01 », the Menu Tree Item « Financial » is not created in the left pane. We have not found a way to recover from this error situation besides restoring the database in a state « before »



Activating Modules

Documentation



Name	Version	State	Mark for Upgrade	Mark for Activation
account	5.8.2	Not Activated		MARK FOR ACTIVAT...
account_asset	5.8.2	Not Activated		MARK FOR ACTIVAT...
account_be	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_cash_rounding	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_credit_limit	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_deposit	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_de_skr03	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_dunning	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_dunning_email	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_dunning_fee	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_dunning_letter	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_es	5.8.3	Not Activated		MARK FOR ACTIVAT...
account_eu	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_fr	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_fr_chorus	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_invoice	5.8.3	Not Activated		MARK FOR ACTIVAT...
account_invoice_correction	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_invoice_history	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_invoice_line_standalone	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_invoice_secondary_unit	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_invoice_stock	5.8.1	Not Activated		MARK FOR ACTIVAT...
account_payment	5.8.2	Not Activated		MARK FOR ACTIVAT...
account_payment_braintree	5.8.2	Not Activated		MARK FOR ACTIVAT...

Documentation

☑	account_payment_sepa	5.8.1	Not Activated	MARK FOR ACTIVAT...
☑	account_payment_sepa_cfonb	5.8.1	Not Activated	MARK FOR ACTIVAT...
☑	account_payment_stripe	5.8.2	Not Activated	MARK FOR ACTIVAT...
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☑	account_statement	5.8.1	Not Activated	MARK FOR ACTIVAT...
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☑	account_statement_coda	5.8.1	Not Activated	MARK FOR ACTIVAT...
☑	account_statement_ofx	5.8.2	Not Activated	MARK FOR ACTIVAT...
☑	account_statement_rule	5.8.2	Not Activated	MARK FOR ACTIVAT...
☑	account_stock_anglo_saxon	5.8.1	Not Activated	MARK FOR ACTIVAT...
☑	account_stock_continental	5.8.1	Not Activated	MARK FOR ACTIVAT...
☑	account_stock_landed_cost	5.8.1	Not Activated	MARK FOR ACTIVAT...
☑	account_stock_landed_cost_weight	5.8.1	Not Activated	MARK FOR ACTIVAT...
☑	account_tax_cash	5.8.1	Not Activated	MARK FOR ACTIVAT...
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☑	analytic_purchase	5.8.1	Not Activated	MARK FOR ACTIVAT...
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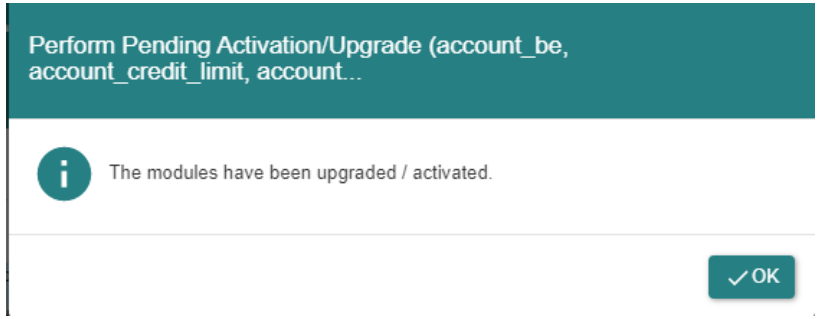
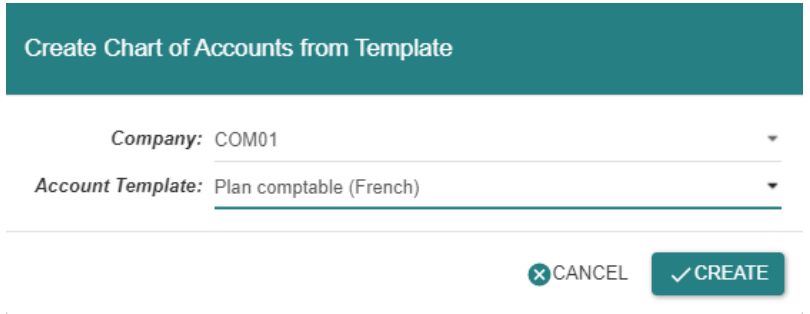
☐	attendance	5.8.2	Not Activated	MARK FOR ACTIVAT...
☐	authentication_sms	5.8.1	Not Activated	MARK FOR ACTIVAT...
☑	bank	5.8.1	Not Activated	MARK FOR ACTIVAT...

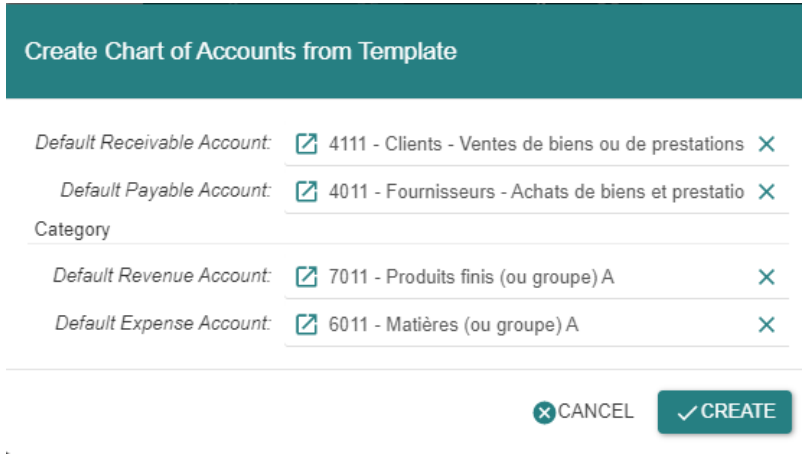
Documentation

Modules to update

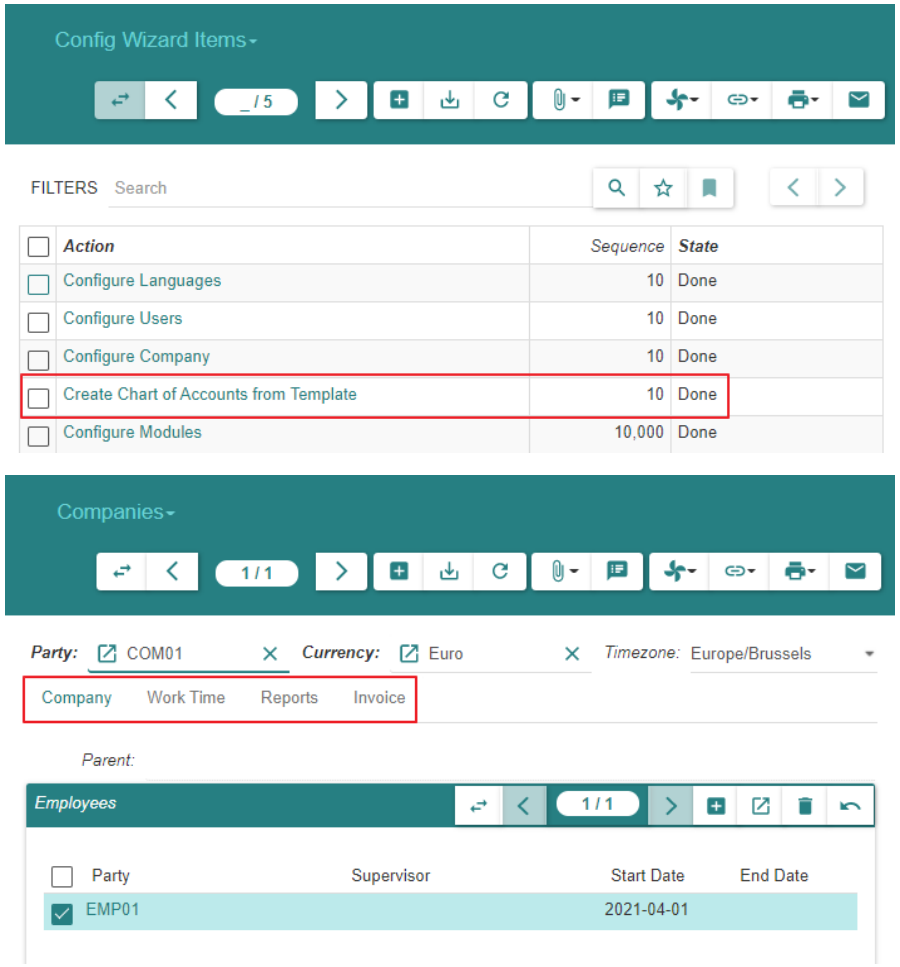
account: to activate
account_asset: to activate
account_be: to activate
account_cash_rounding: to activate
account_credit_limit: to activate
account_deposit: to activate
account_de_skr03: to activate
account_dunning: to activate
account_dunning_email: to activate
account_dunning_fee: to activate
account_dunning_letter: to activate
account_es: to activate
account_eu: to activate
account_fr: to activate
account_fr_chorus: to activate
account_invoice: to activate
account_invoice_correction: to activate
account_invoice_history: to activate
account_invoice_line_standalone: to activate
account_invoice_secondary_unit: to activate
account_invoice_stock: to activate
account_payment: to activate
account_payment_braintree: to activate
account_payment_clearing: to activate
account_payment_sepa: to activate
account_payment_sepa_cfonb: to activate
account_payment_stripe: to activate
account_product: to activate
account_statement: to activate
account_statement_aeb43: to activate
account_statement_coda: to activate
account_statement_ofx: to activate
account_statement_rule: to activate
account_stock_anglo_saxon: to activate
account_stock_continental: to activate
account_stock_landed_cost: to activate
account_stock_landed_cost_weight: to activate
account_tax_cash: to activate
account_tax_rule_country: to activate
analytic_account: to activate
analytic_invoice: to activate
analytic_purchase: to activate
analytic_sale: to activate
bank: to activate
product: to activate
product_measurements: to activate
purchase: to activate

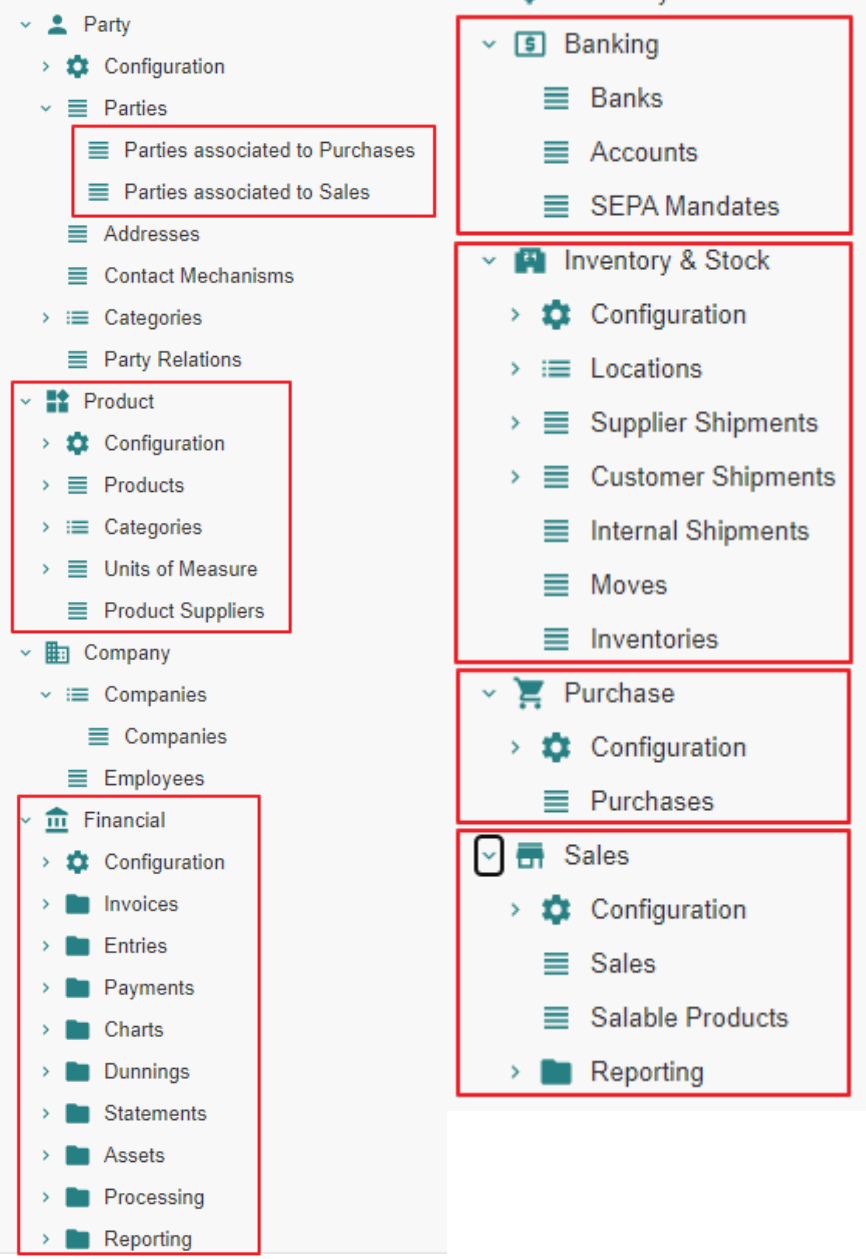






State Post

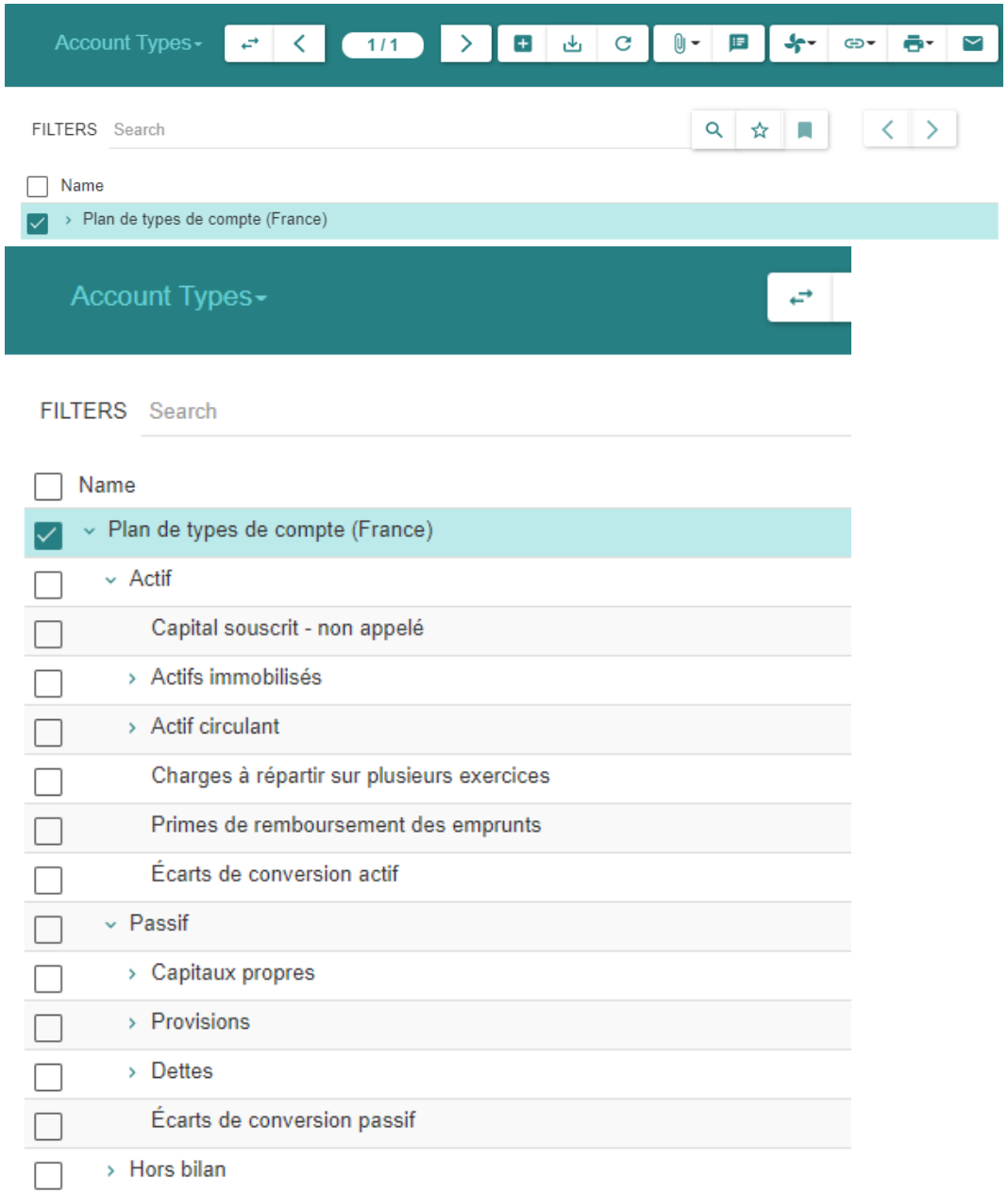


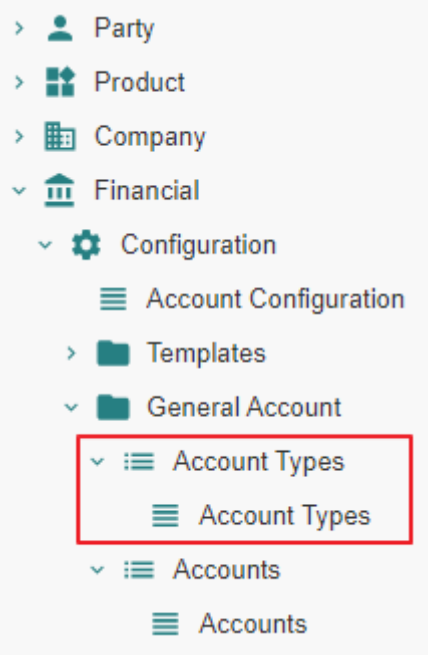


Notice :

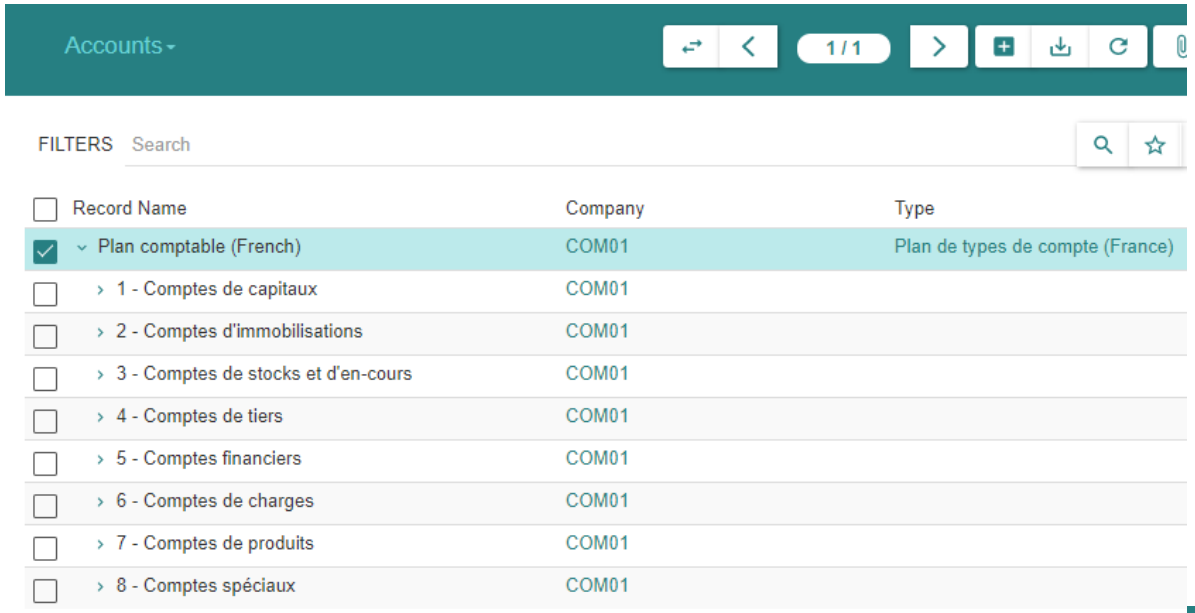
- The « Create Chart of Accounts from Template » wizard Item is « done »
- The « Company COM01 » has no « Accounting » Tab
- There are additional Menu Items in the Menu Tree

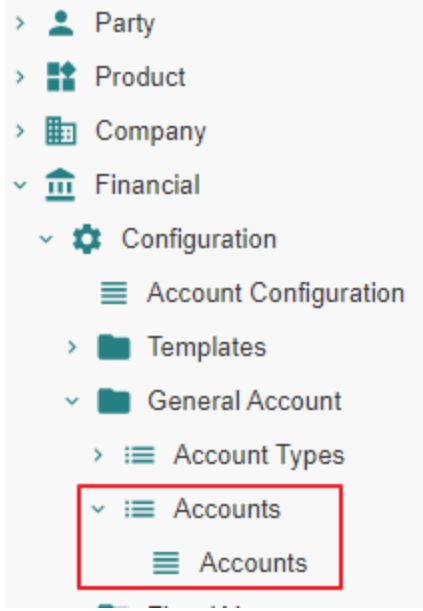
Situation finale

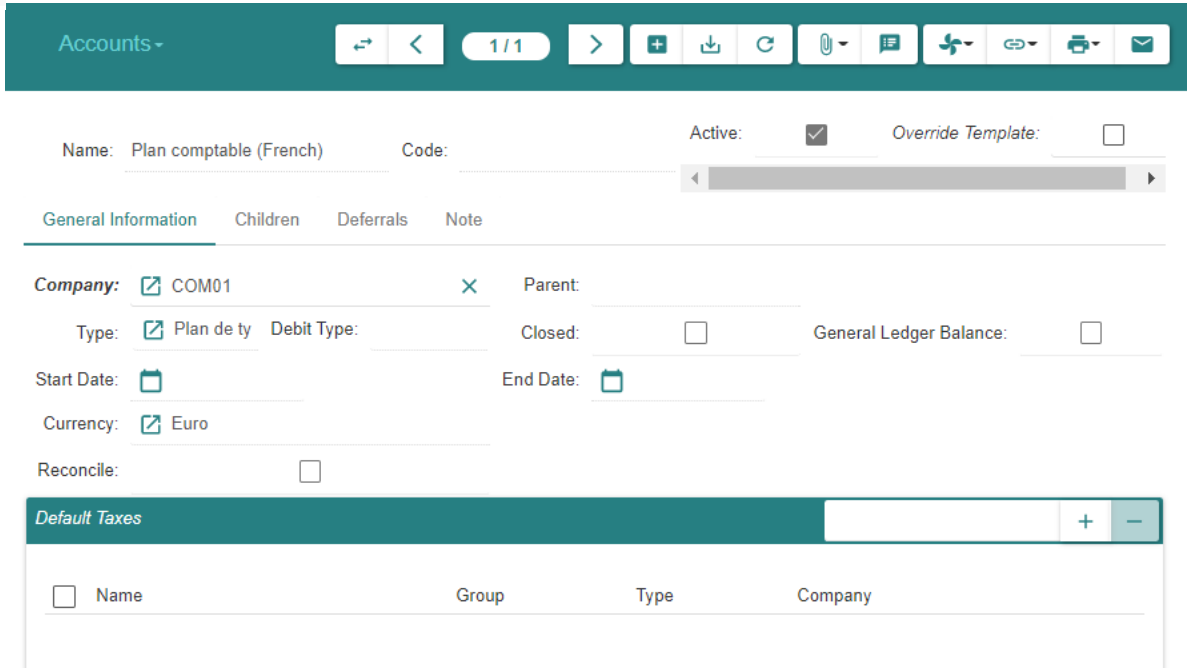




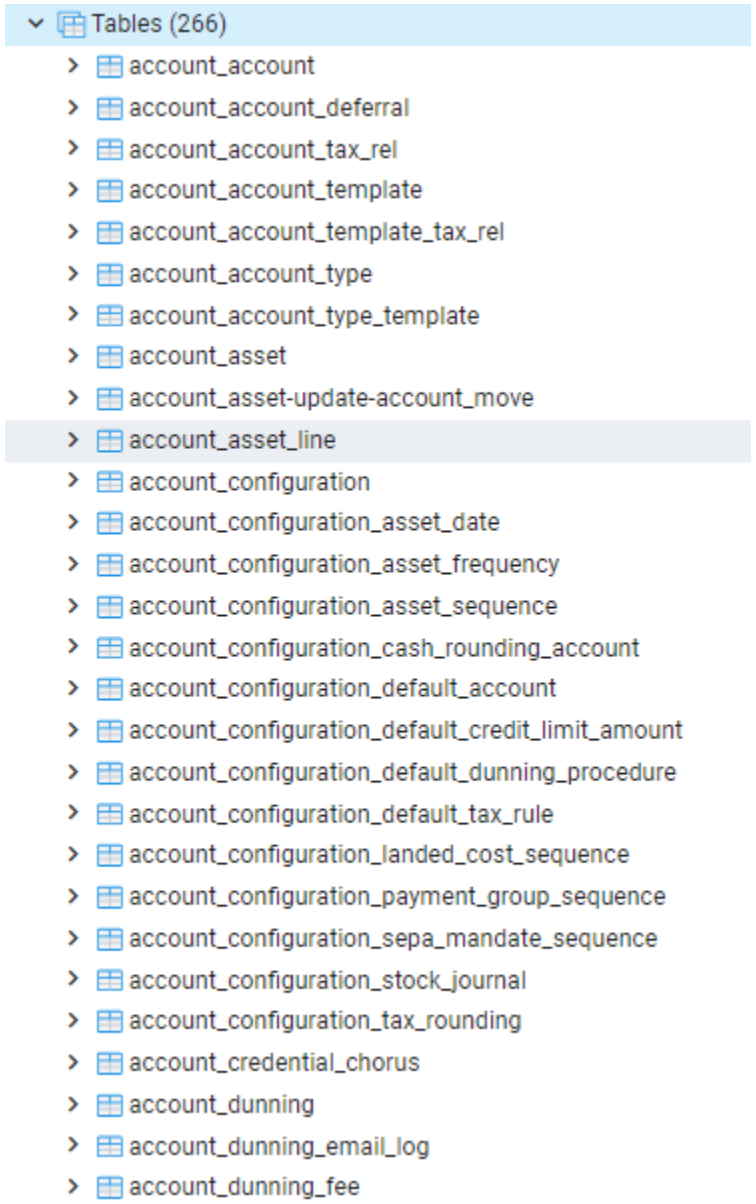
Situation finale





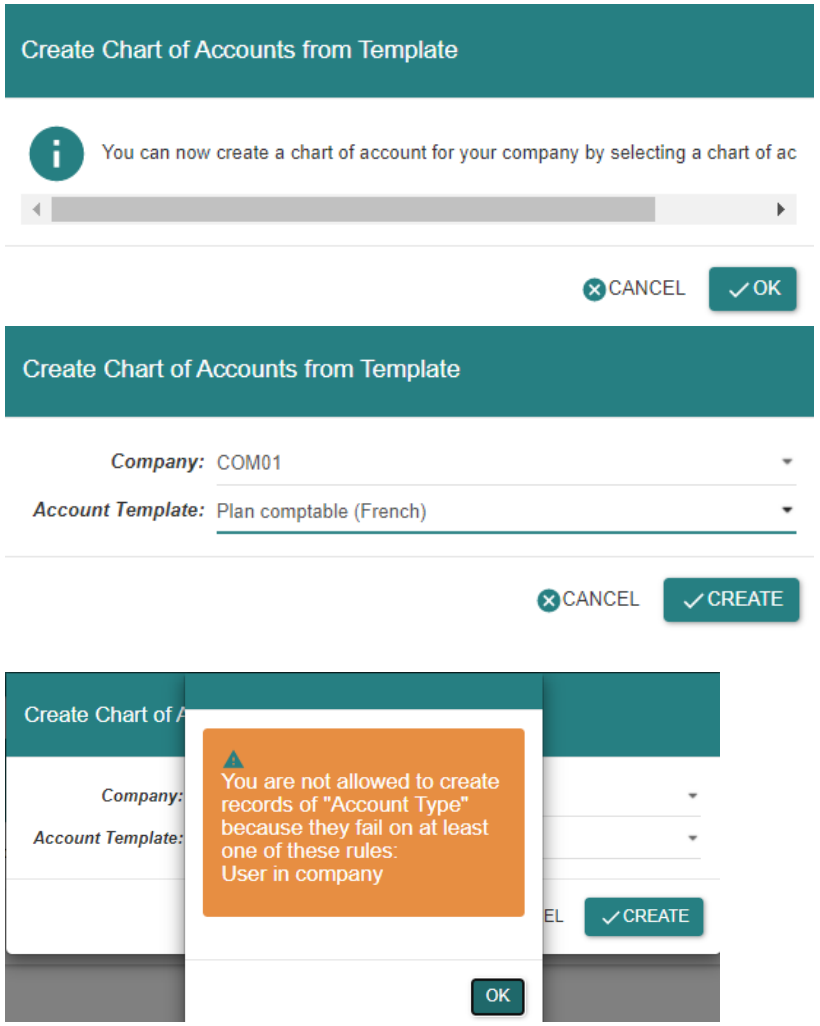


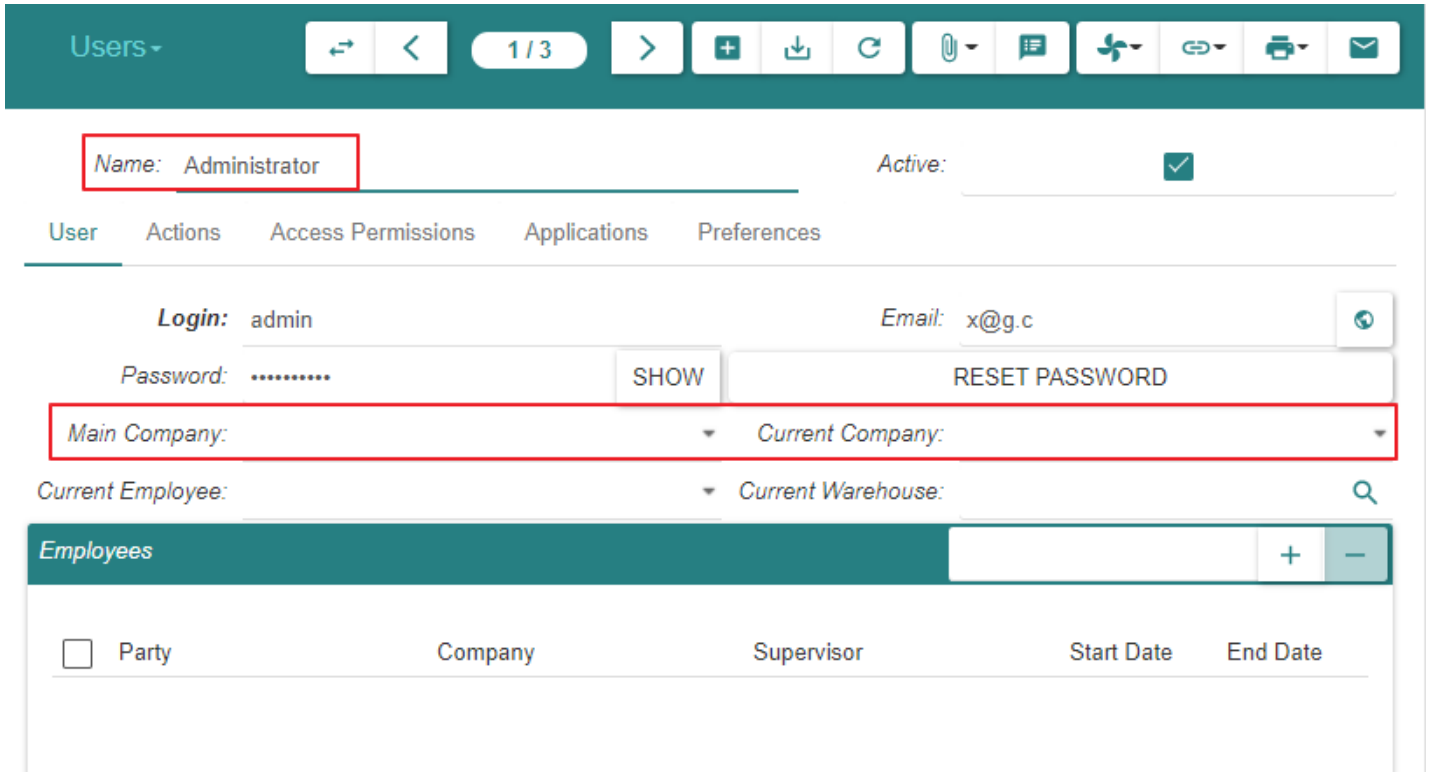
Situation finale



Error Case

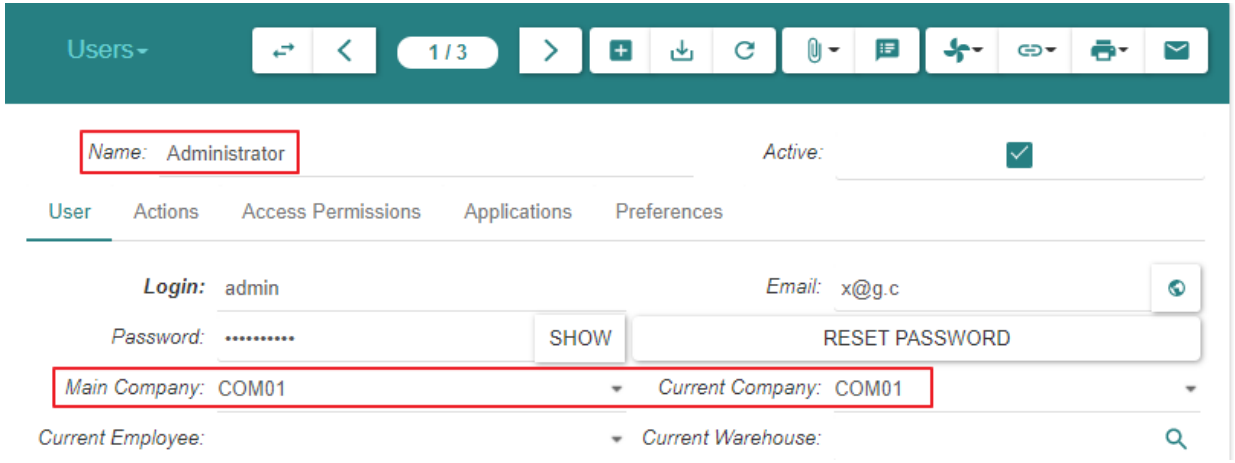
Error case - « User Administration » is not linked to « Company COM01 »

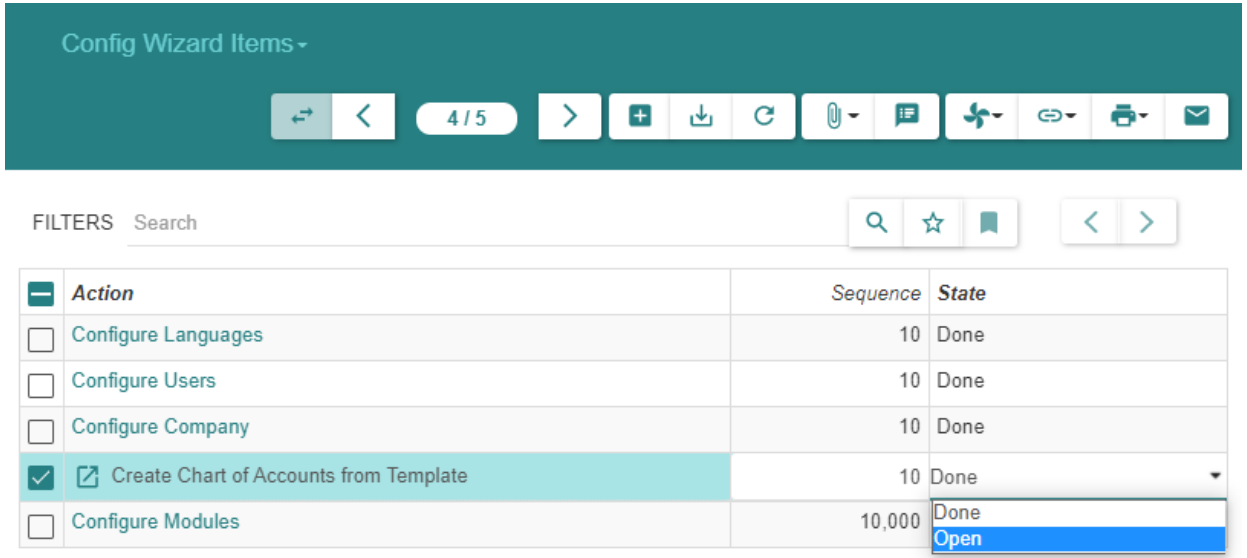


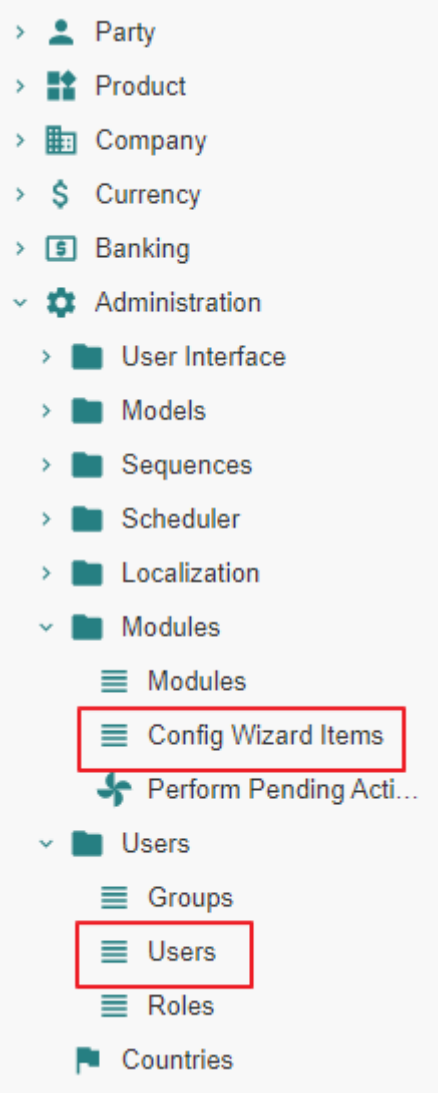


How to recover

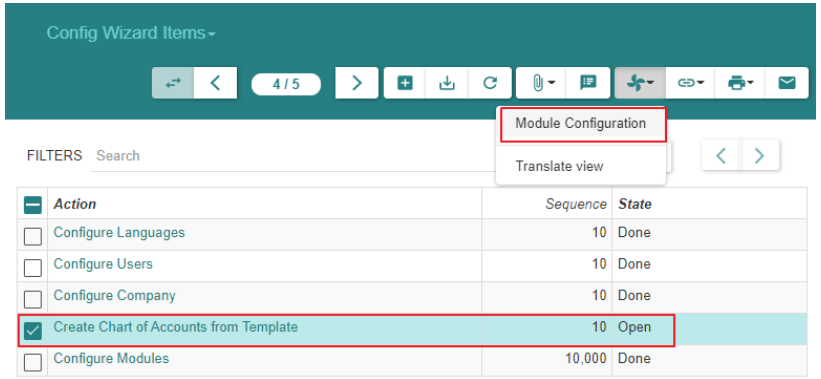
- A announced in the « Precondition », we set the link to our company « COM01 »
- We modify the wizard state from « done » to « open »

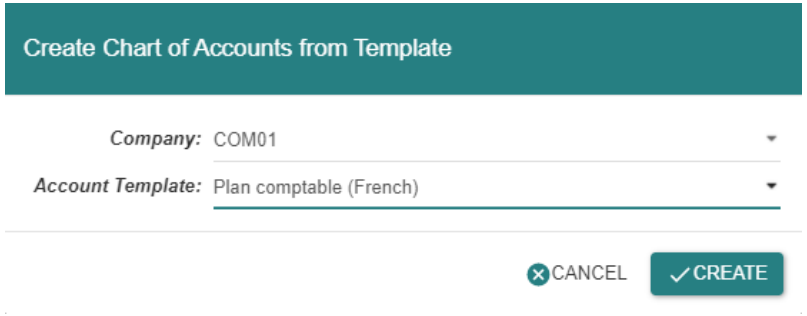


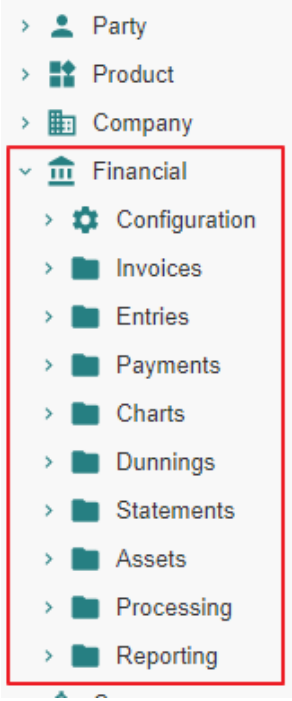




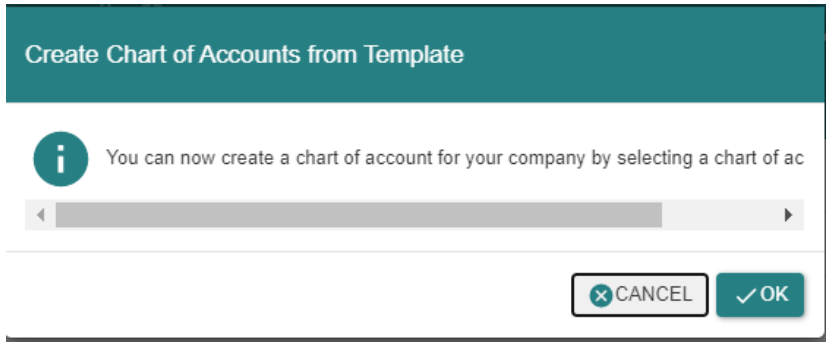
How to recover - method 1

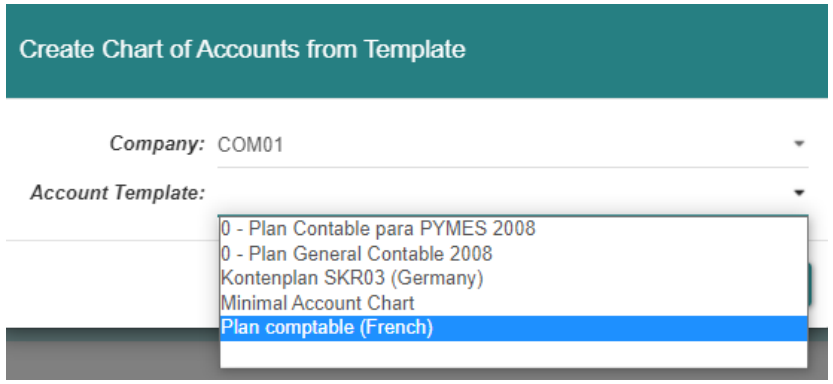


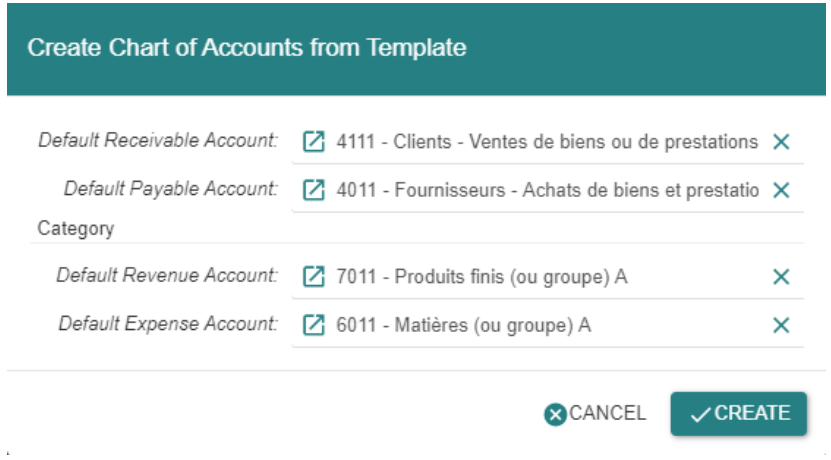


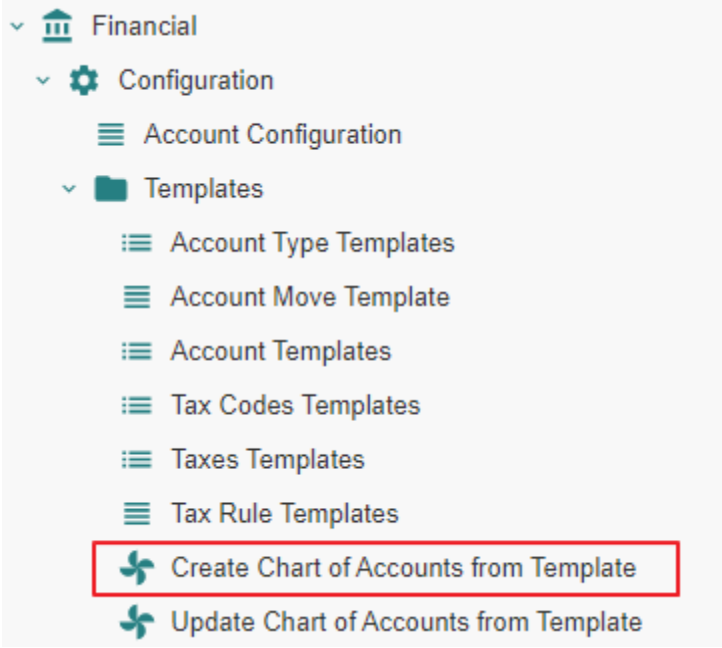


How to recover - method 2



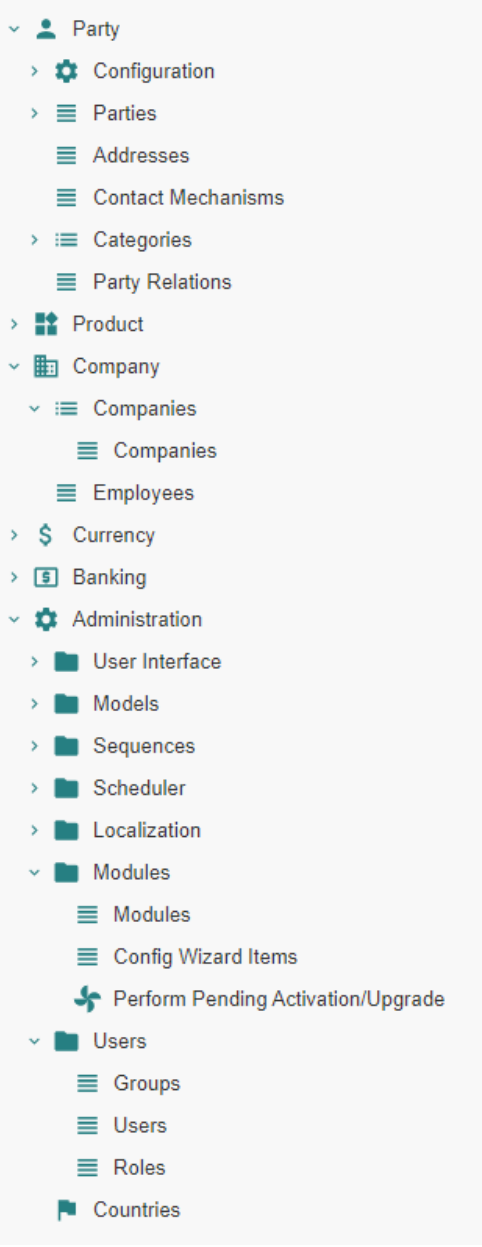




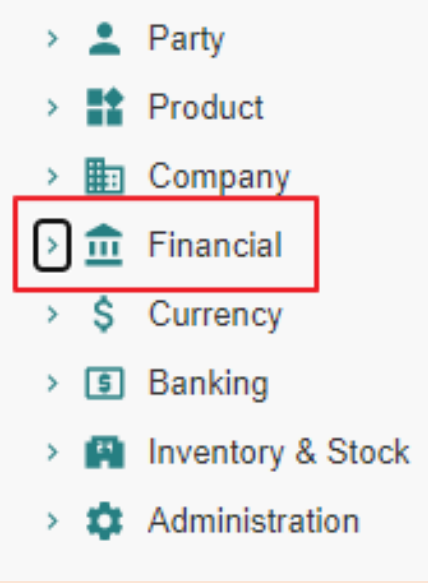


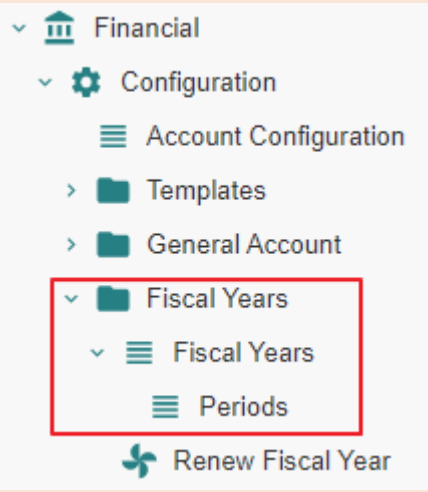
Error case - « User Administration » is not linked to « Employee EMP01 »

- The Menu Tree Item « Financial » is not created
- There is apparently no way to recover except to restore the database in a prior state and to update the « User Administrator » with the appropriate « Company COM01 » and « Employee EMP01 » links



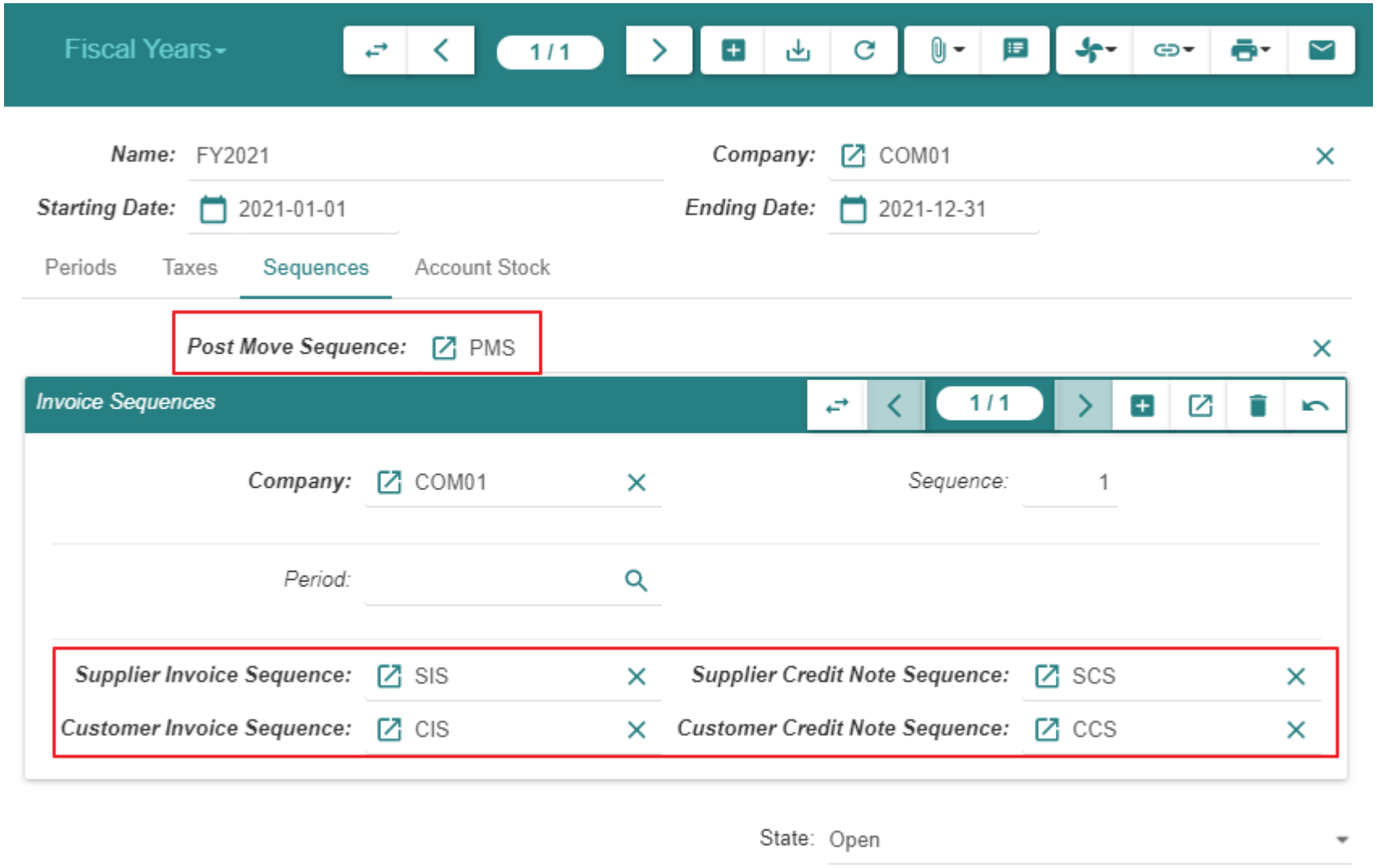
Financial - Fiscal Years & Periods

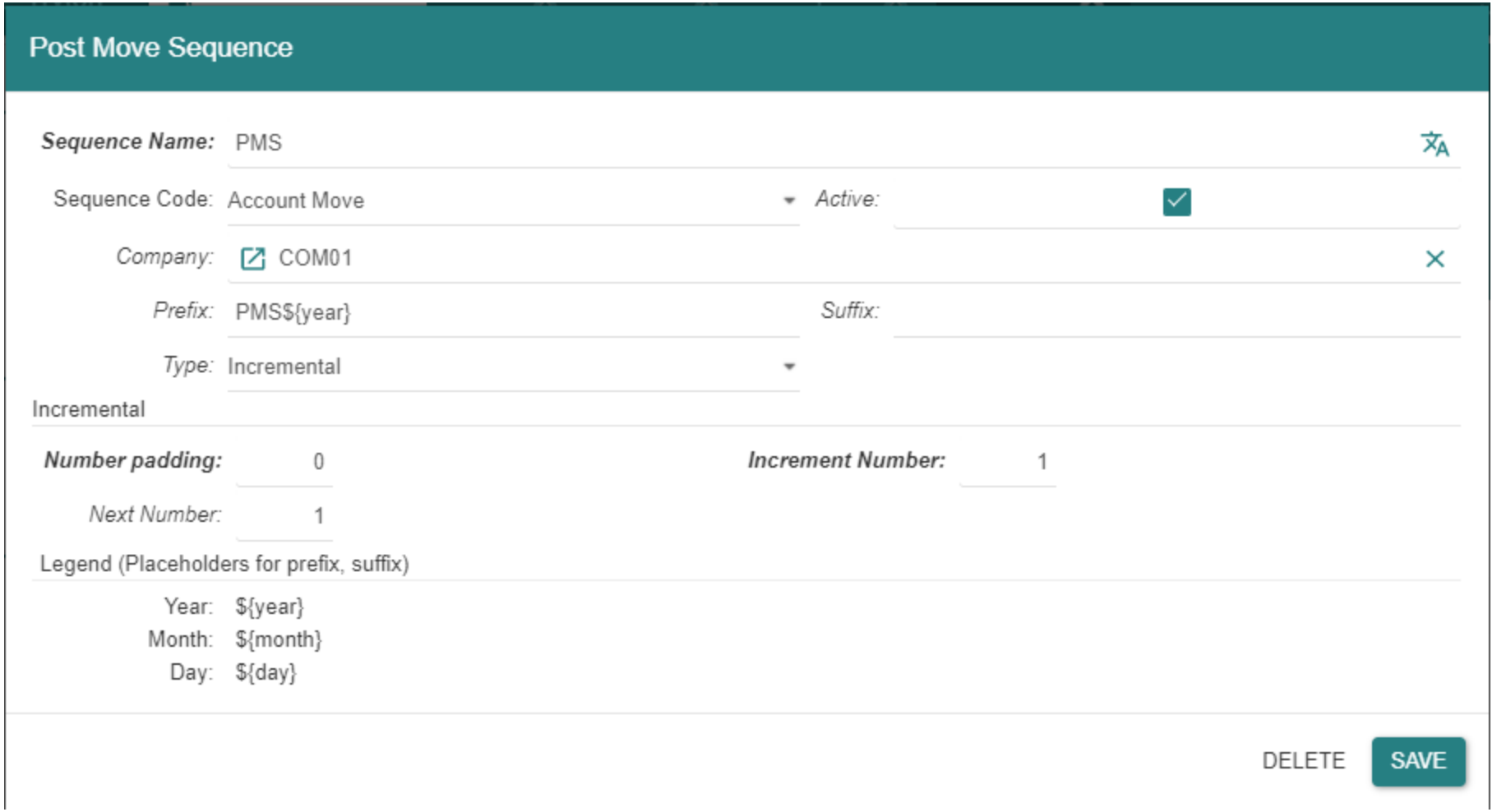




Documentation

Accounts :
[https://tryton-administration-manual.readthedocs.io/en/latest/accounts.html]
Post Move Sequence :
[https://groups.google.com/g/tryton/c/a4fobeaYn48]
Opening a Fiscal Year :
[https://discuss.tryton.org/t/how-to-create-a-fiscalyear/2380]


Fiscal Years
1 / 1
Name: FY2021
Company: COM01
Starting Date: 2021-01-01
Ending Date: 2021-12-31
Periods
Taxes
Sequences
Account Stock
Post Move Sequence: PMS
Invoice Sequences
1 / 1
Company: COM01
Sequence: 1
Period:
Supplier Invoice Sequence: SIS
Supplier Credit Note Sequence: SCS
Customer Invoice Sequence: CIS
Customer Credit Note Sequence: CCS
State: Open


Post Move Sequence
Sequence Name: PMS
Sequence Code: Account Move
Active:
Company: COM01
Prefix: PMS${year}
Suffix:
Type: Incremental
Incremental
Number padding: 0
Increment Number: 1
Next Number: 1
Legend (Placeholders for prefix, suffix)
Year: ${year}
Month: ${month}
Day: ${day}
DELETE
SAVE

Supplier Invoice Sequence

Sequence Name: SIS

Sequence Code: Invoice *Active:* ☑

Company: COM01

Prefix: SIS${year} *Suffix:*

Type: Incremental

Incremental

Number padding: 0 **Increment Number:** 1

Next Number: 1

Legend (Placeholders for prefix, suffix)

Year: ${year}
Month: ${month}
Day: ${day}

DELETE SAVE

Customer Invoice Sequence

Sequence Name: CIS

Sequence Code: Invoice *Active:* ☑

Company: COM01

Prefix: CIS${year} *Suffix:*

Type: Incremental

Incremental

Number padding: 0 **Increment Number:** 1

Next Number: 1

Legend (Placeholders for prefix, suffix)

Year: ${year}
Month: ${month}
Day: ${day}

DELETE SAVE

Supplier Credit Note Sequence

Sequence Name: SCS

Sequence Code: Invoice *Active:* ☑

Company: COM01

Prefix: SCS${year} *Suffix:*

Type: Incremental

Incremental

Number padding: 0 **Increment Number:** 1

Next Number: 1

Legend (Placeholders for prefix, suffix)

Year: ${year}
Month: ${month}
Day: ${day}

CANCEL SAVE

Customer Credit Note Sequence

Sequence Name: CCS

Sequence Code: Invoice *Active:* ☑

Company: COM01

Prefix: CCS${year} *Suffix:*

Type: Incremental

Incremental

Number padding: 0 **Increment Number:** 1

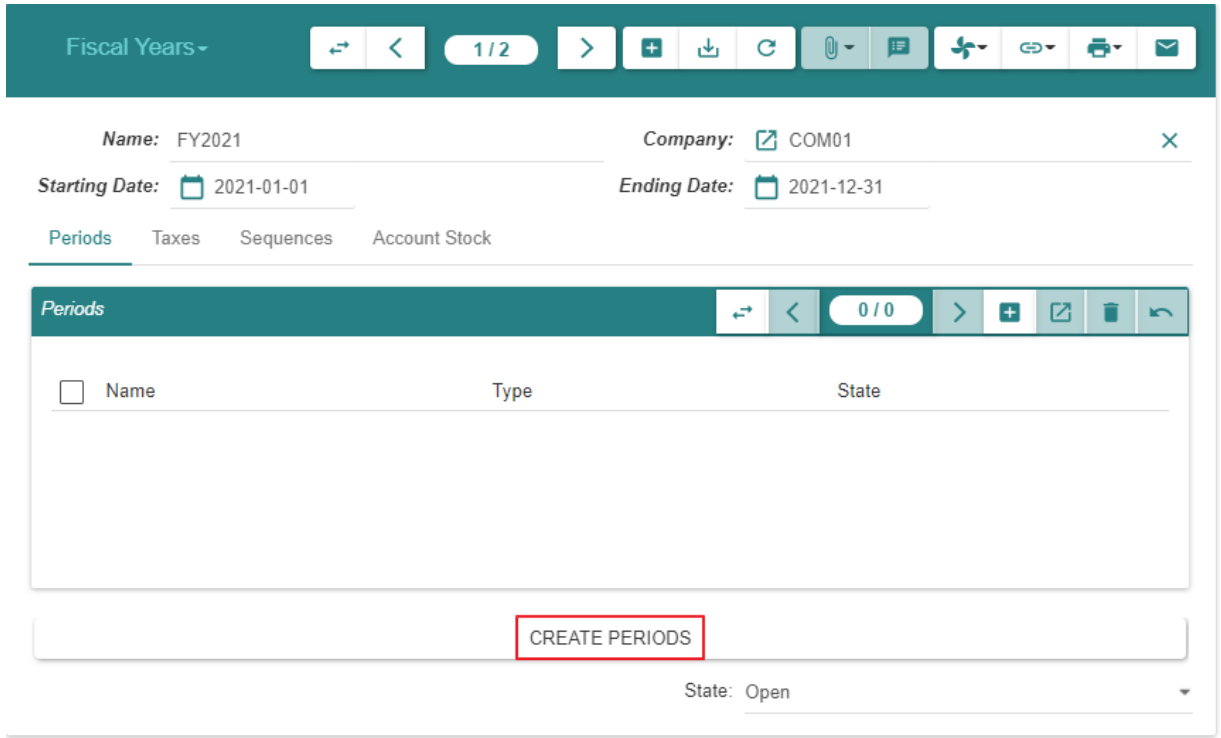
Next Number: 1

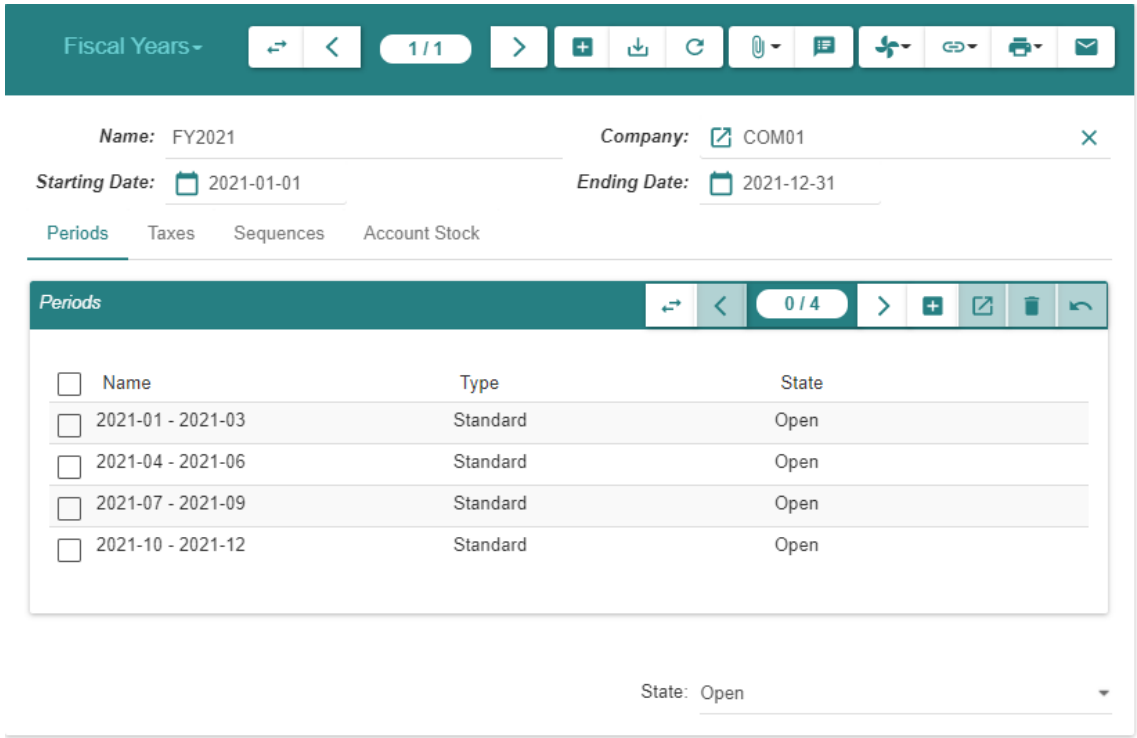
Legend (Placeholders for prefix, suffix)

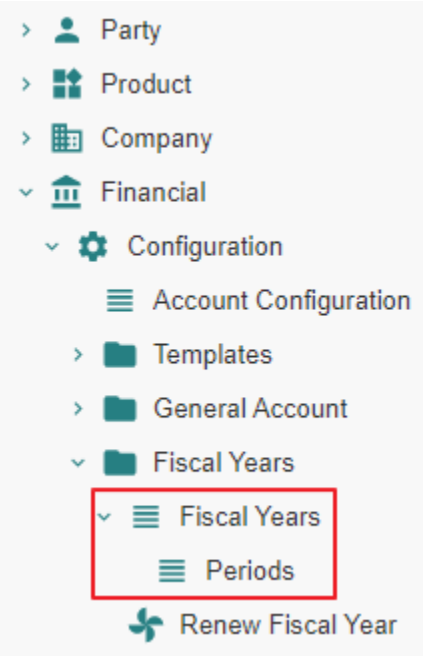
Year: ${year}
Month: ${month}
Day: ${day}

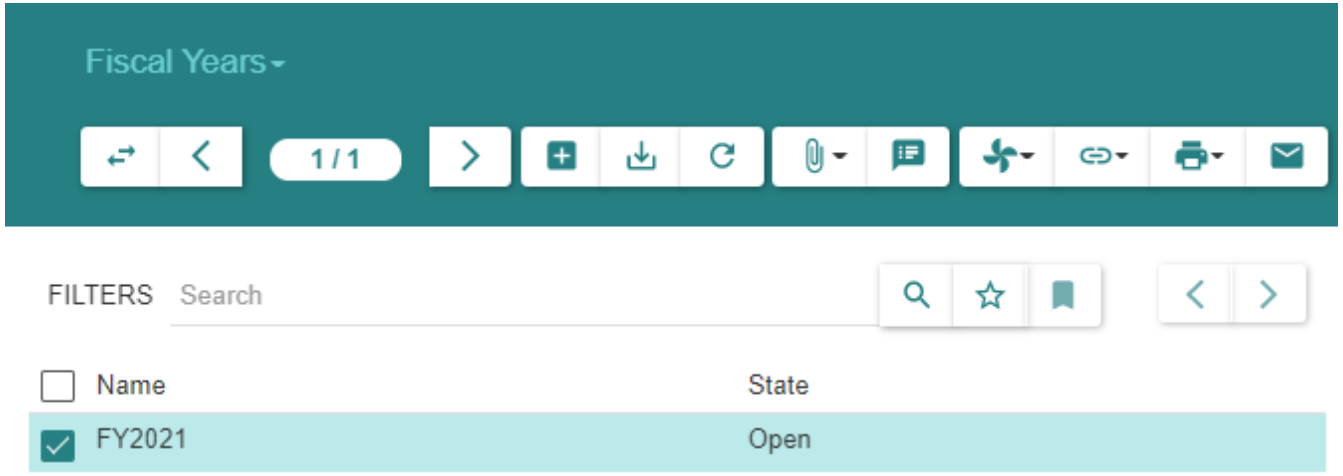
CANCEL SAVE

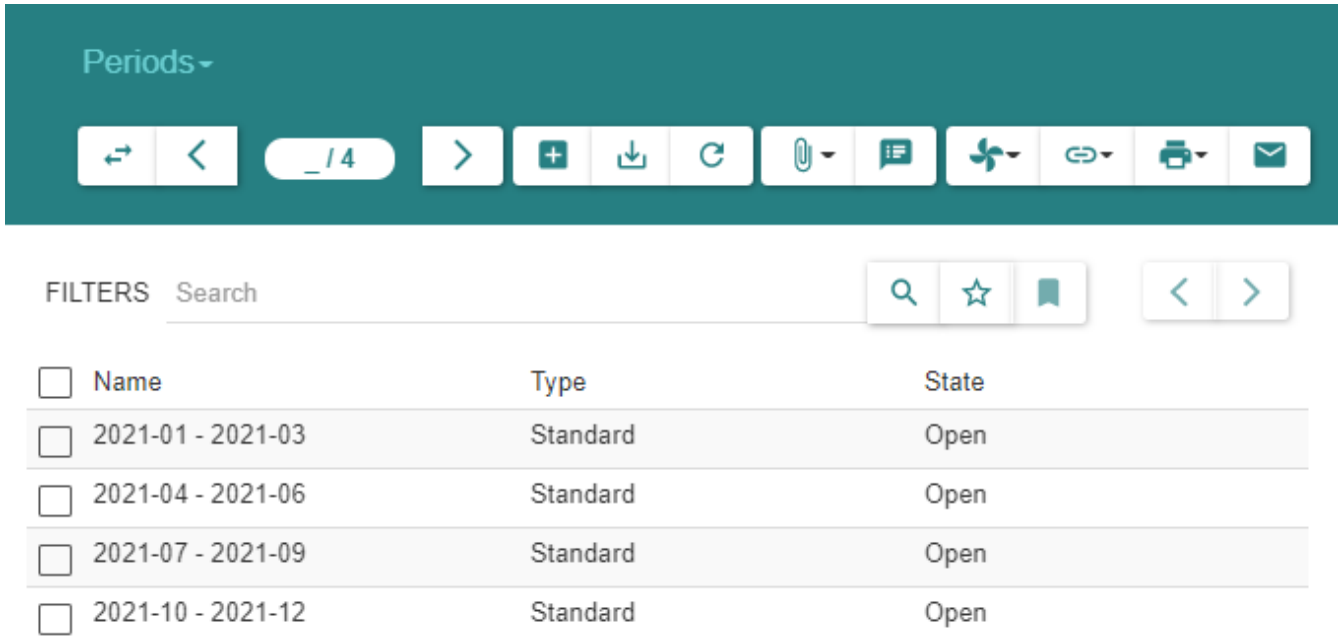
Create Periods

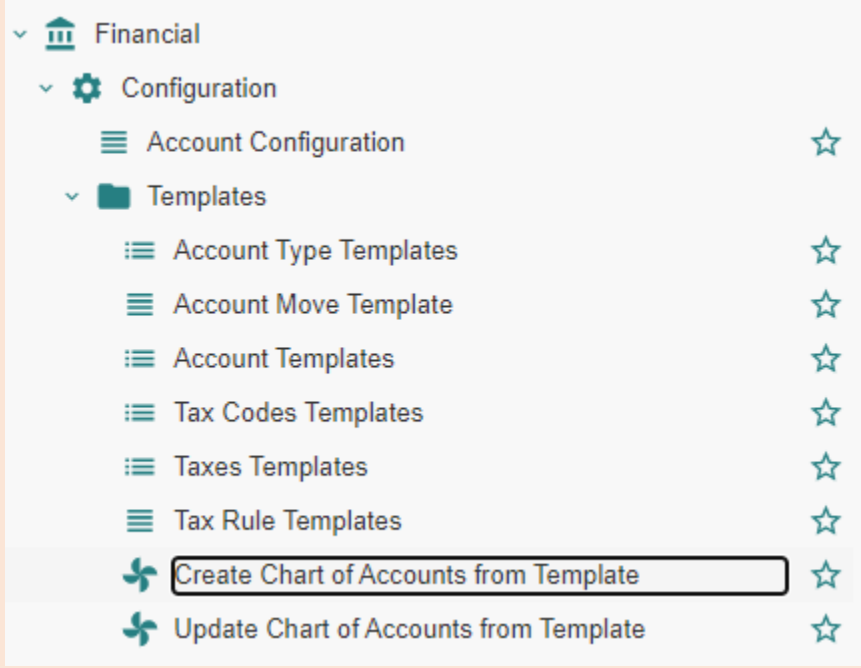





Party
Product
Company
Financial
Configuration
Account Configuration
Templates
General Account
Fiscal Years
Fiscal Years
Periods
Renew Fiscal Year

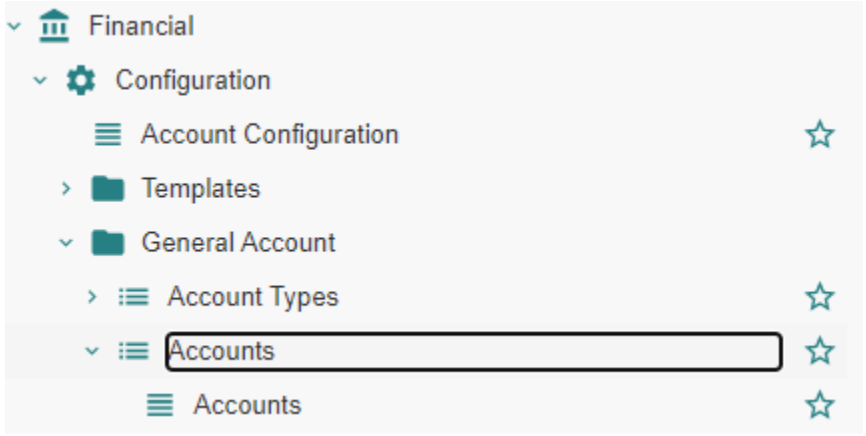

Fiscal Years
1 / 1
FILTERS
Search
Name
State
FY2021
Open

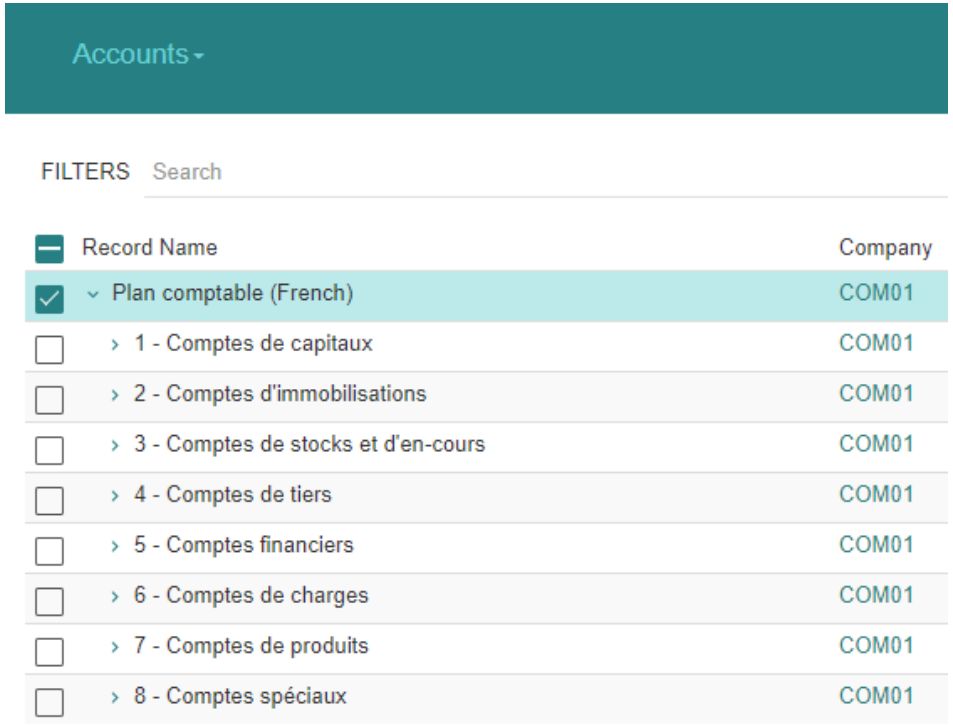

Periods
_ / 4
FILTERS
Search
Name
Type
State
2021-01 - 2021-03
Standard
Open
2021-04 - 2021-06
Standard
Open
2021-07 - 2021-09
Standard
Open
2021-10 - 2021-12
Standard
Open



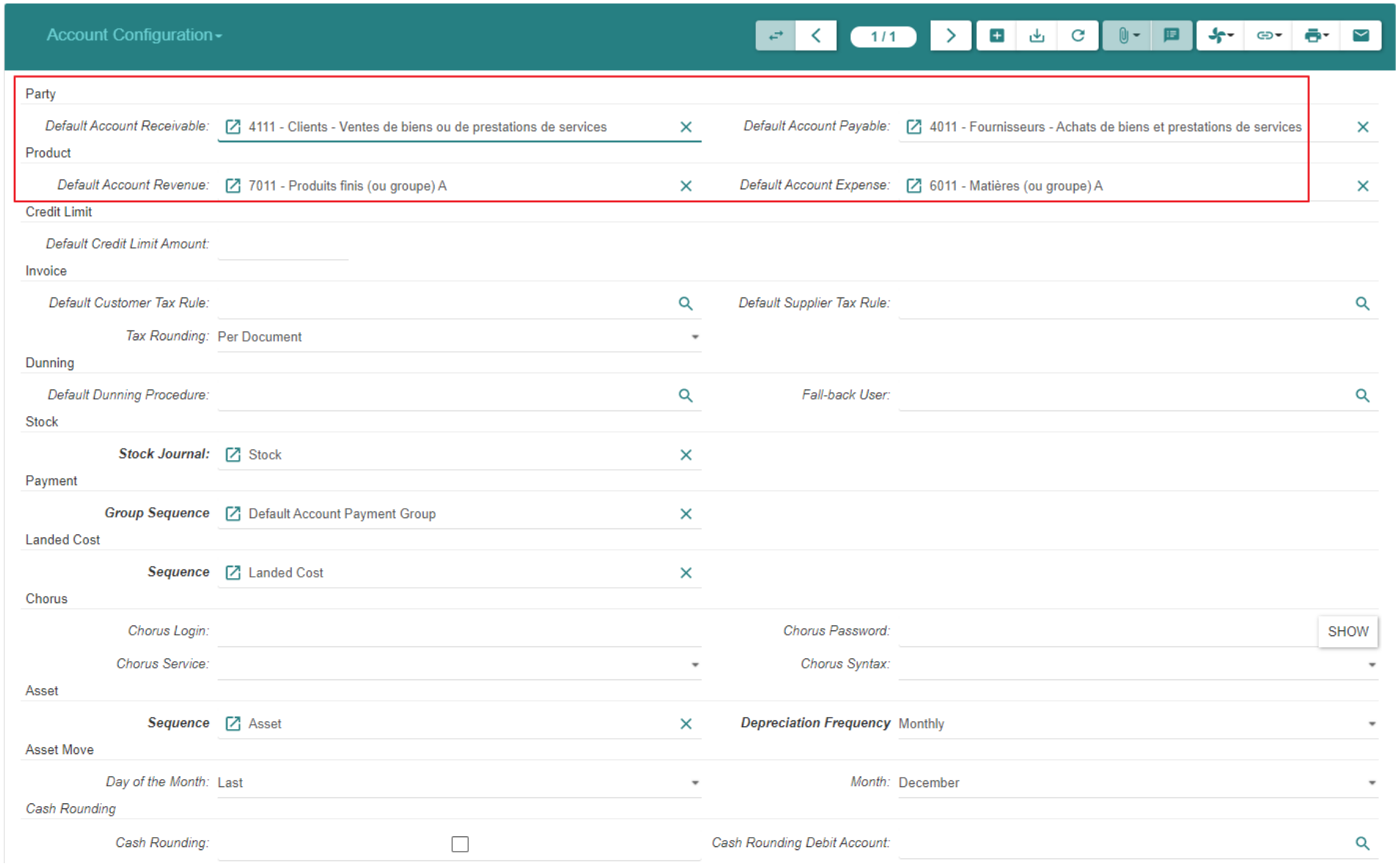
Financial - Chart of Accounts

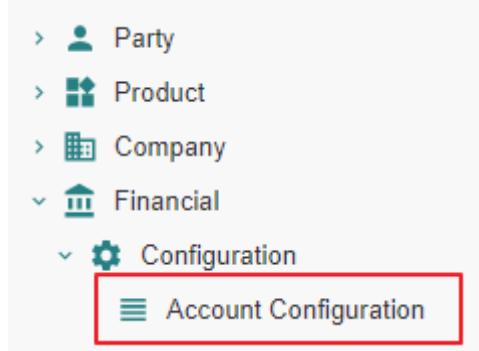
Execute


Financial
Configuration
Account Configuration
Templates
General Account
Account Types
Accounts
Accounts


Accounts
FILTERS
Search
Record Name
Company
Plan comptable (French)
COM01
1 - Comptes de capitaux
COM01
2 - Comptes d'immobilisations
COM01
3 - Comptes de stocks et d'en-cours
COM01
4 - Comptes de tiers
COM01
5 - Comptes financiers
COM01
6 - Comptes de charges
COM01
7 - Comptes de produits
COM01
8 - Comptes spéciaux
COM01

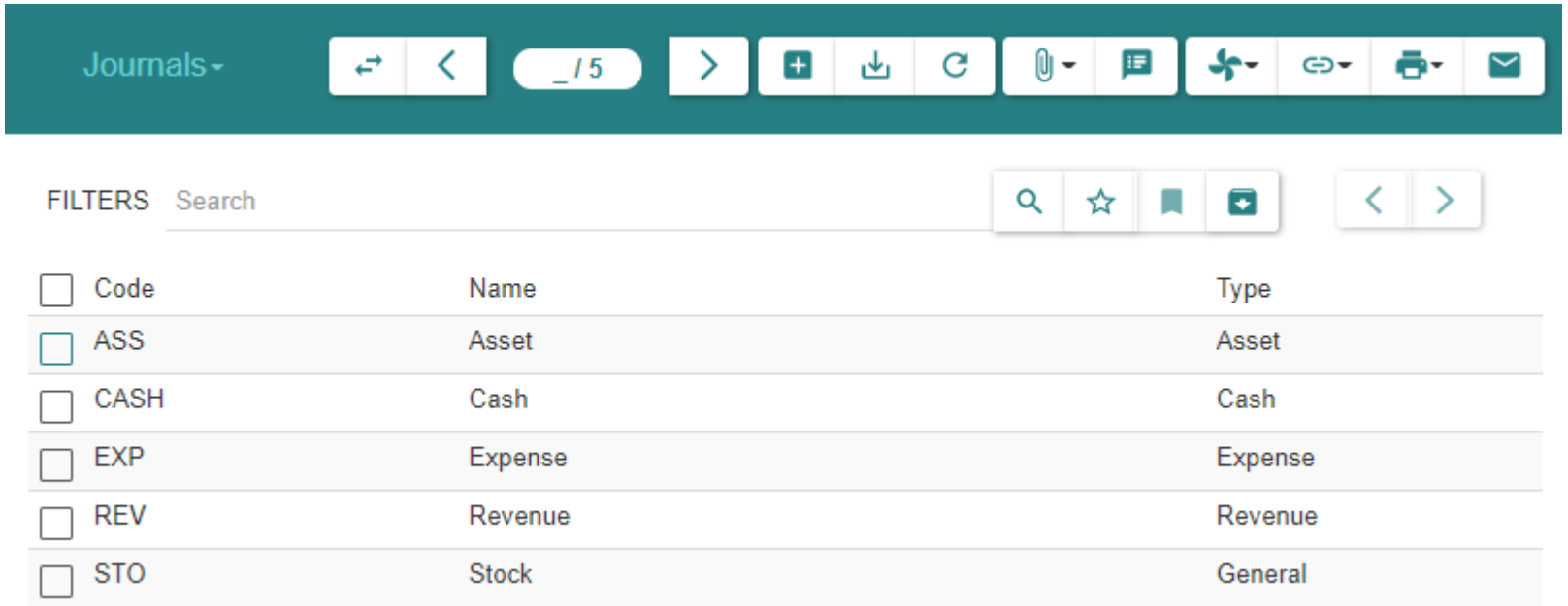
Account configuration

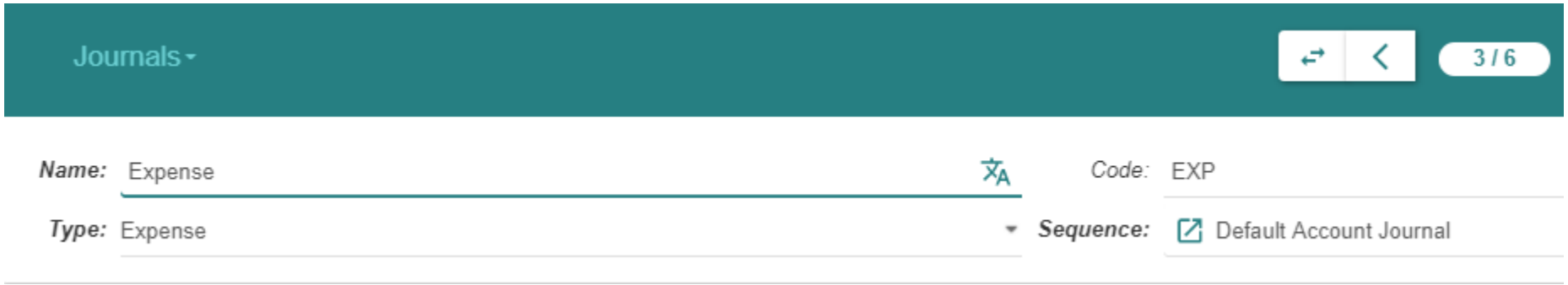


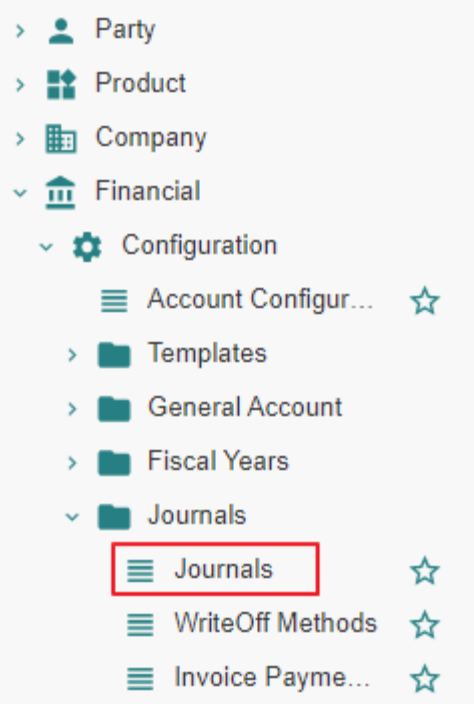


Financial - Journals

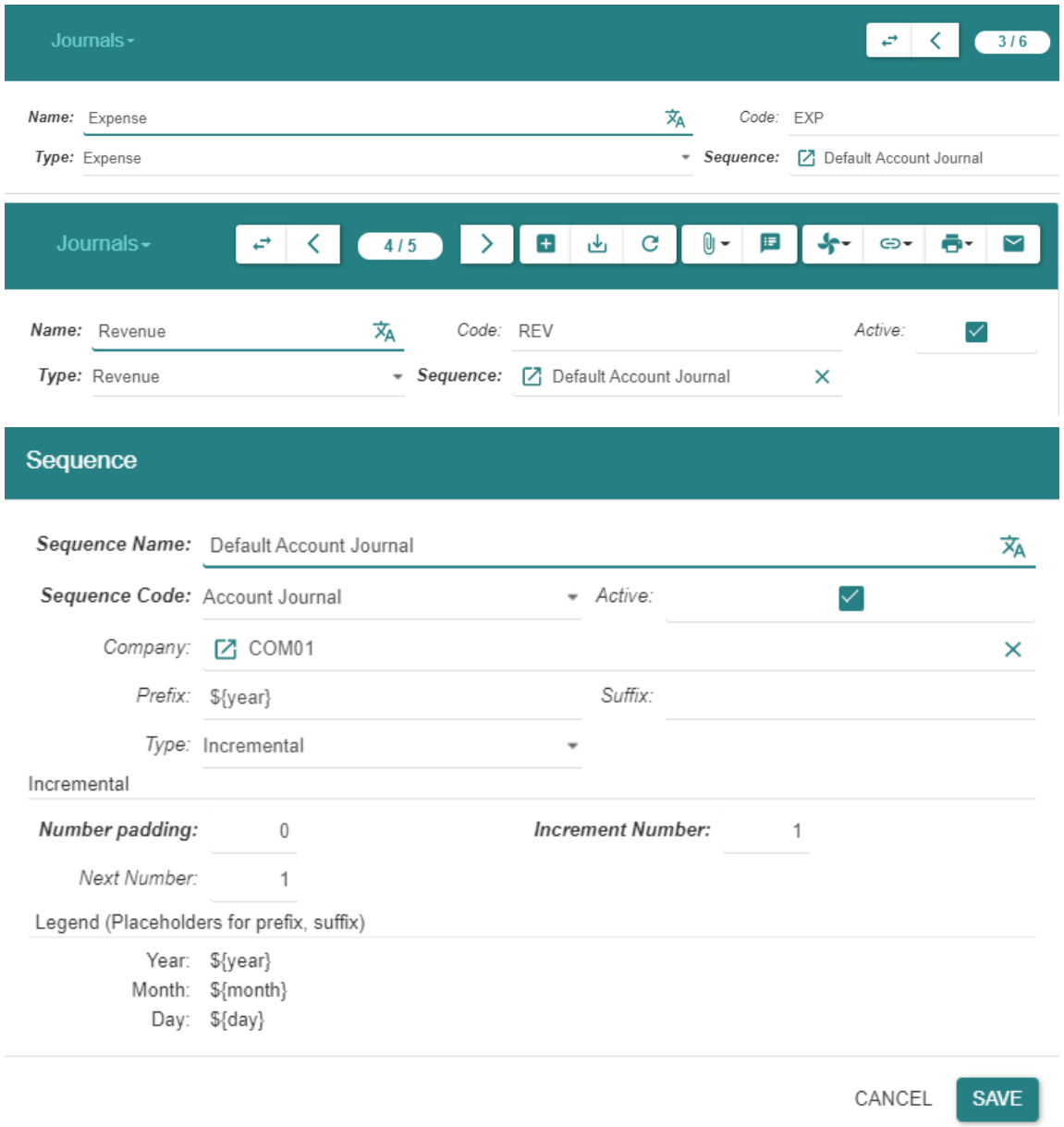
Journals


Journals
_ / 5
FILTERS
Search
Code
Name
Type
ASS
Asset
Asset
CASH
Cash
Cash
EXP
Expense
Expense
REV
Revenue
Revenue
STO
Stock
General

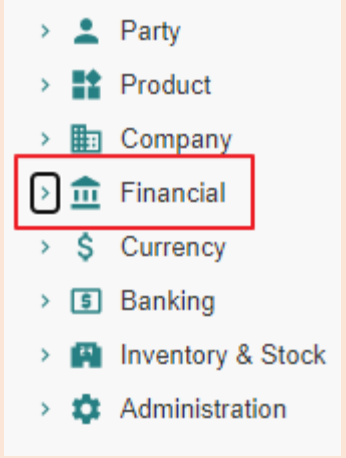

Journals
3 / 6
Name:
Expense
Code:
EXP
Type:
Expense
Sequence:
Default Account Journal

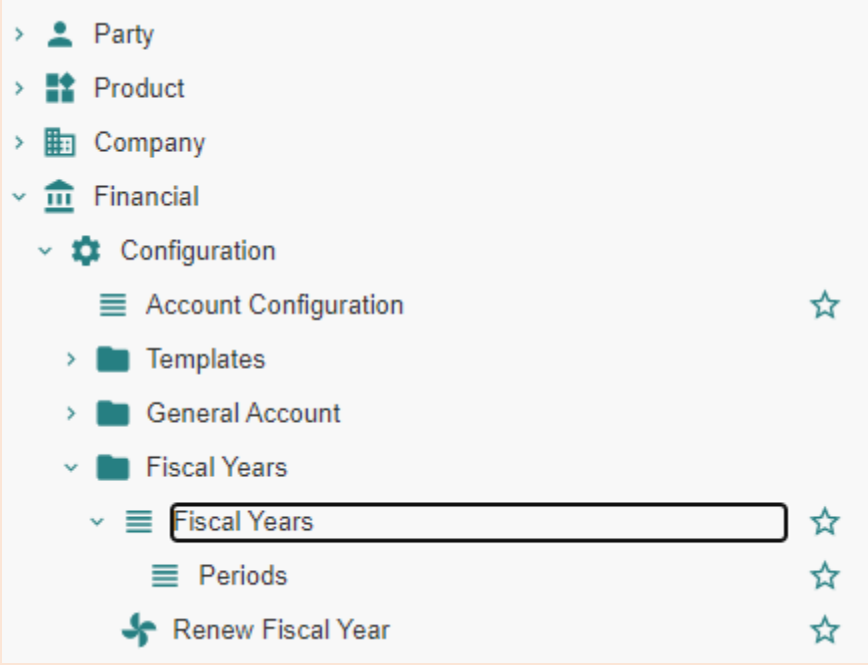

Party
Product
Company
Financial
Configuration
Account Configur...
Templates
General Account
Fiscal Years
Journals
Journals
WriteOff Methods
Invoice Payme...

Journals


Journals
3 / 6
Name: Expense
Code: EXP
Type: Expense
Sequence: Default Account Journal
Journals
4 / 5
Name: Revenue
Code: REV
Active:
Type: Revenue
Sequence: Default Account Journal
Sequence
Sequence Name: Default Account Journal
Sequence Code: Account Journal
Active:
Company: COM01
Prefix: ${year}
Suffix:
Type: Incremental
Incremental
Number padding: 0
Increment Number: 1
Next Number: 1
Legend (Placeholders for prefix, suffix)
Year: ${year}
Month: ${month}
Day: ${day}
CANCEL
SAVE

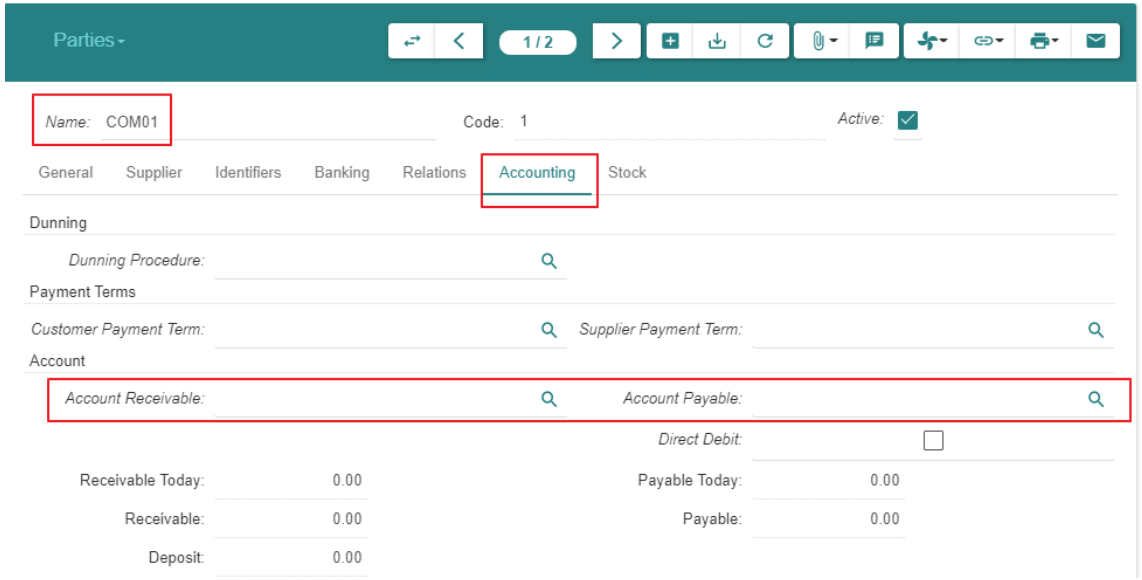
Party

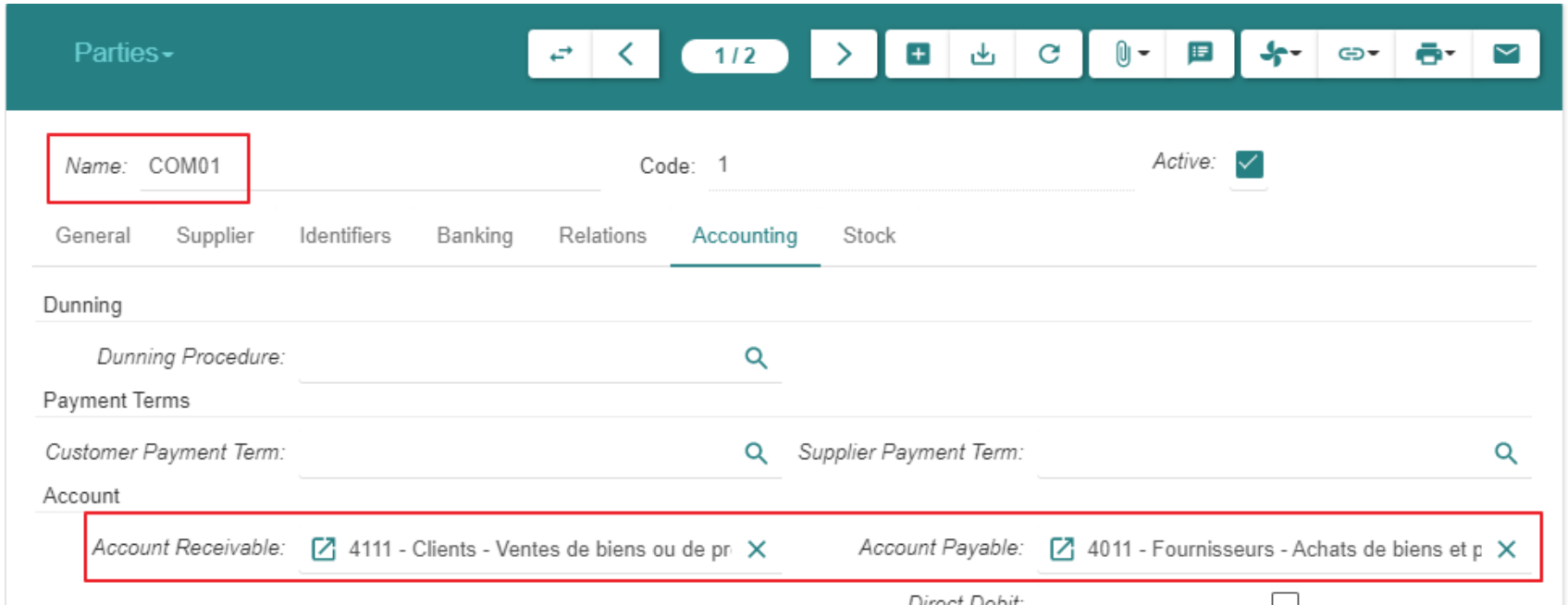

Party
Product
Company
Financial
Currency
Banking
Inventory & Stock
Administration

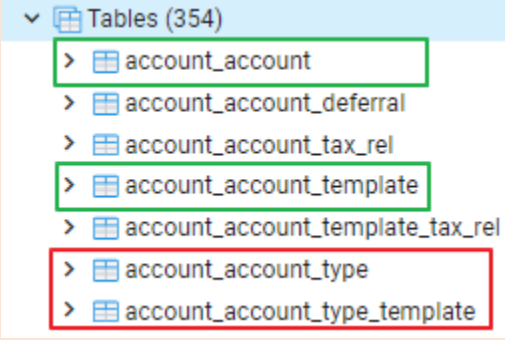

Party
Product
Company
Financial
Configuration
Account Configuration
Templates
General Account
Fiscal Years
Fiscal Years
Periods
Renew Fiscal Year

Financial
Configuration
Account Configuration
Templates
General Account
Fiscal Years
Fiscal Years
Periods
Renew Fiscal Year

How to recover

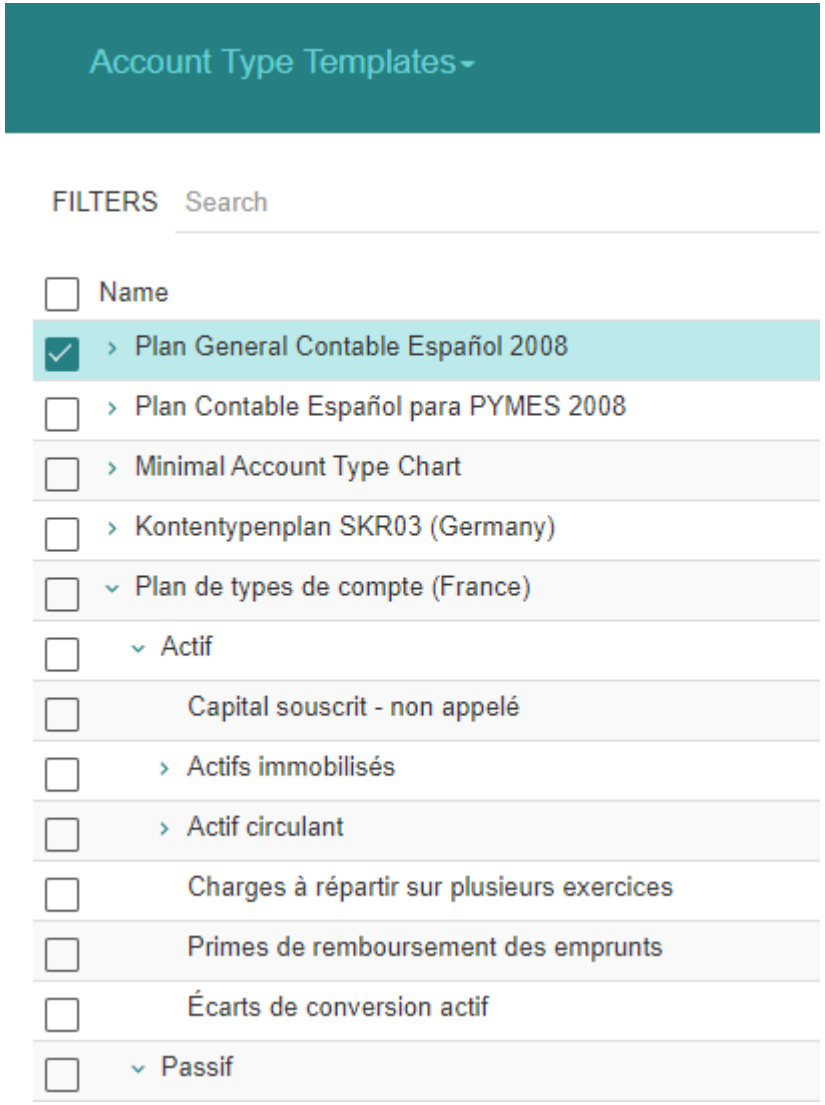


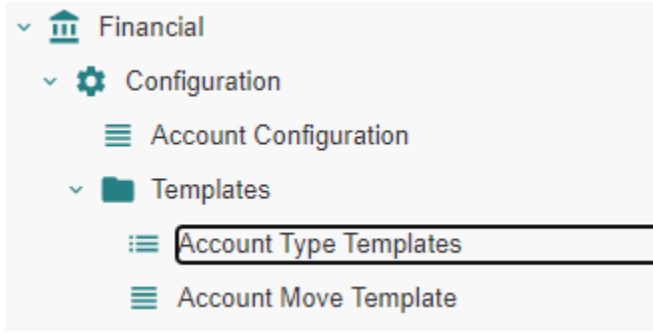



Tables (354)
account_account
account_account_deferral
account_account_tax_rel
account_account_template
account_account_template_tax_rel
account_account_type
account_account_type_template

Database

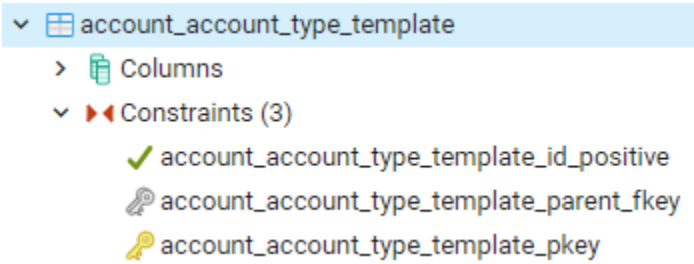
Account Type Templates (1/2)





Account Type Templates (2/2)

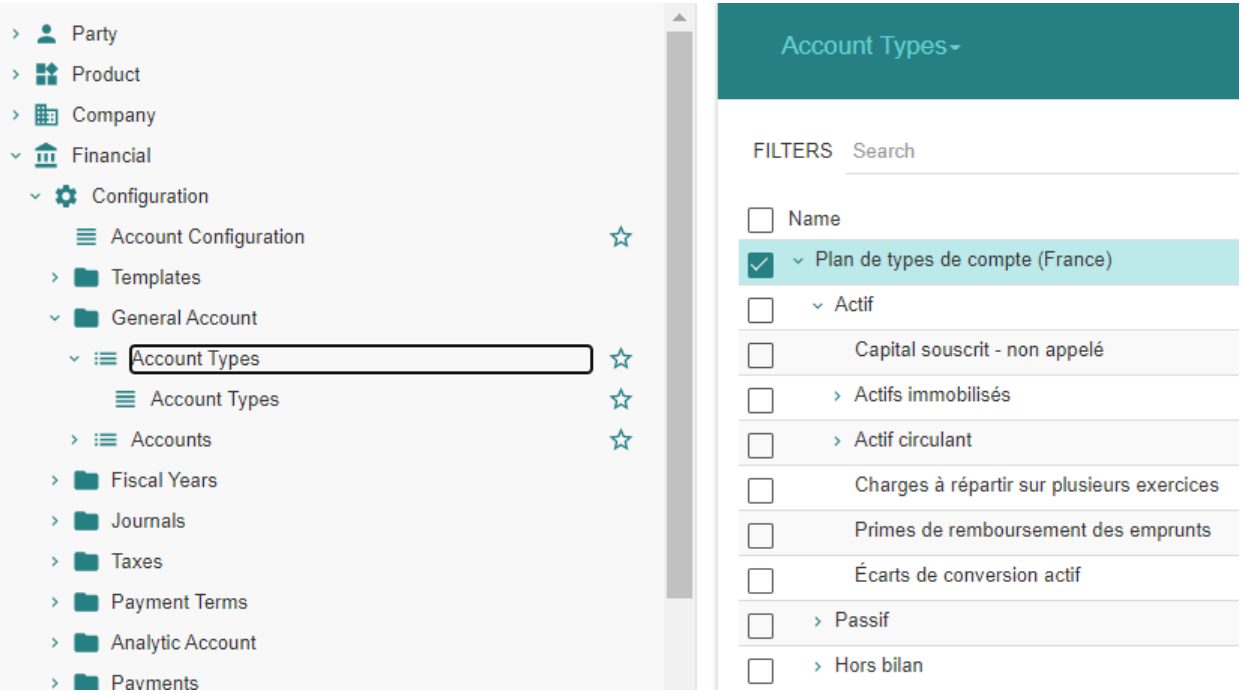
Templates are used to generate the actual « Chart of Account ».
As such, there is no reference to a « Company »

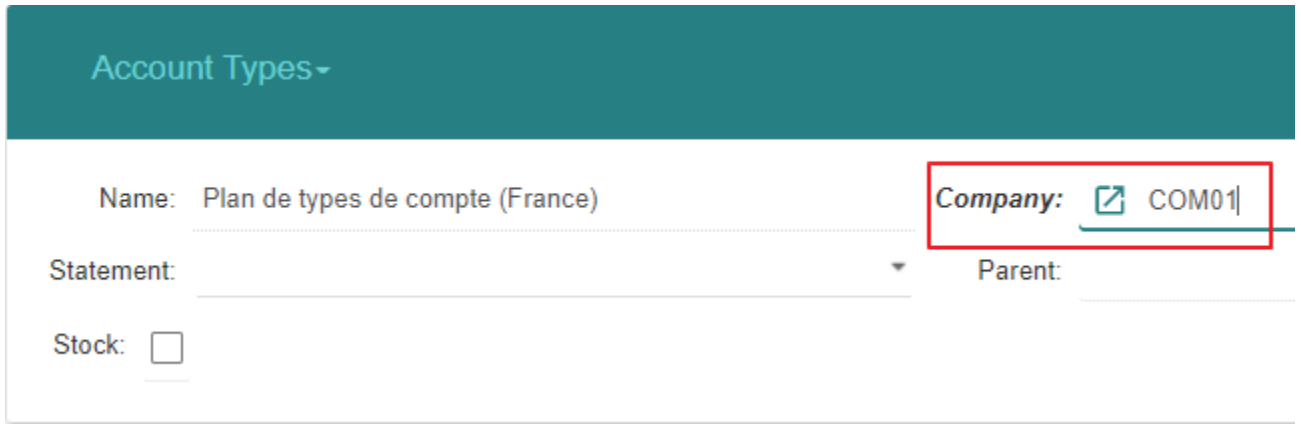


Data Output | Explain | Messages | Notifications

	id [PK] integer	assets boolean	create_date timestamp without time zone	create_uid integer	expense boolean	name character varying	parent integer	payable boolean	receivable boolean	revenue boolean	sequence integer	statement character varying	stock boolean
1	1	false	2021-03-08 11:42:32.073204	0	false	Minimal Account Type ...	[null]	false	false	false	10	[null]	false
2	2	true	2021-03-08 11:42:32.073204	0	false	Asset	1	false	false	false	10	balance	false
3	3	true	2021-03-08 11:42:32.073204	0	false	Current	2	false	false	false	10	balance	false
4	4	true	2021-03-08 11:42:32.073204	0	false	Cash	3	false	false	false	10	balance	false
5	5	true	2021-03-08 11:42:32.073204	0	false	Receivable	3	false	true	false	20	balance	false
6	6	true	2021-03-08 11:42:32.073204	0	false	Long-term	2	false	false	false	20	balance	false
7	7	false	2021-03-08 11:42:32.073204	0	false	Liability	1	false	false	false	20	balance	false
8	8	false	2021-03-08 11:42:32.073204	0	false	Current	7	false	false	false	10	balance	false
9	9	false	2021-03-08 11:42:32.073204	0	false	Payable	8	true	false	false	10	balance	false
10	10	false	2021-03-08 11:42:32.073204	0	false	Tax	8	false	false	false	20	balance	false
11	11	false	2021-03-08 11:42:32.073204	0	false	Long-term	7	false	false	false	20	balance	false
12	12	false	2021-03-08 11:42:32.073204	0	false	Equity	1	false	false	false	30	balance	false
13	13	false	2021-03-08 11:42:32.073204	0	false	Income	12	false	false	false	40	income	false
14	14	false	2021-03-08 11:42:32.073204	0	false	Revenue	13	false	false	true	10	income	false
15	15	false	2021-03-08 11:42:32.073204	0	true	Expense	13	false	false	false	20	income	false
16	16	false	2021-03-08 11:42:32.073204	0	false	Off-Balance	1	false	false	false	60	off-balance	false
17	17	false	2021-03-08 11:42:51.929697	0	false	Kontentypenplan SKR0...	[null]	false	false	false	10	[null]	false
18	18	false	2021-03-08 11:42:51.929697	0	false	Aktiva	17	false	false	false	10	balance	false

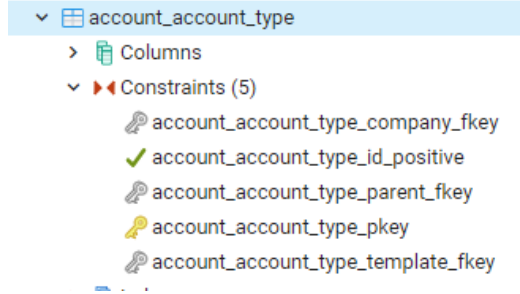
Account Types (1/2)





The « Account Type » contains a reference to the « Company ».
This contrasts with the « Account Type Template » which does not

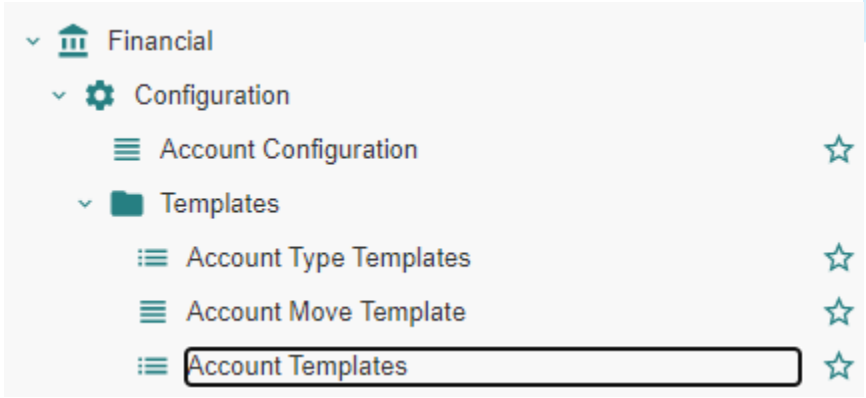
Account Types (2/2)

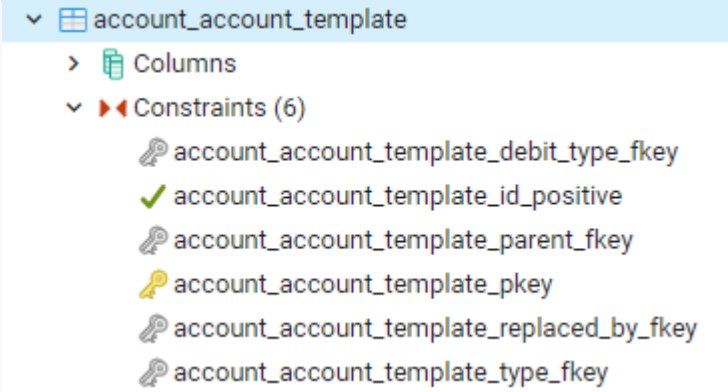


Data Output | Explain | Messages | Notifications

	id [PK] integer	assets boolean	company integer	create_date timestamp without time zone	create_uid integer	expense boolean	name character varying	parent integer	payable boolean	receivable boolean	revenue boolean	sequence integer	statement character varying
1	1	false	1	2021-03-08 16:49:00.218444	1	false	Plan de types de comp...	[null]	false	false	false	10	[null]
2	2	true	1	2021-03-08 16:49:00.218444	1	false	Actif	1	false	false	false	10	balance
3	3	false	1	2021-03-08 16:49:00.218444	1	false	Passif	1	false	false	false	20	balance
4	4	false	1	2021-03-08 16:49:00.218444	1	false	Hors bilan	1	false	false	false	30	off-balance
5	5	true	1	2021-03-08 16:49:00.218444	1	false	Capital souscrit - non a...	2	false	false	false	10	balance
6	6	true	1	2021-03-08 16:49:00.218444	1	false	Actifs immobilisés	2	false	false	false	20	balance
7	7	true	1	2021-03-08 16:49:00.218444	1	false	Actif circulant	2	false	false	false	30	balance
8	8	true	1	2021-03-08 16:49:00.218444	1	false	Charges à répartir sur ...	2	false	false	false	40	balance
9	9	true	1	2021-03-08 16:49:00.218444	1	false	Primes de rembourse...	2	false	false	false	50	balance
10	10	true	1	2021-03-08 16:49:00.218444	1	false	Écarts de conversion a...	2	false	false	false	60	balance
11	11	false	1	2021-03-08 16:49:00.218444	1	false	Capitaux propres	3	false	false	false	10	balance

Account Templates (1/3)



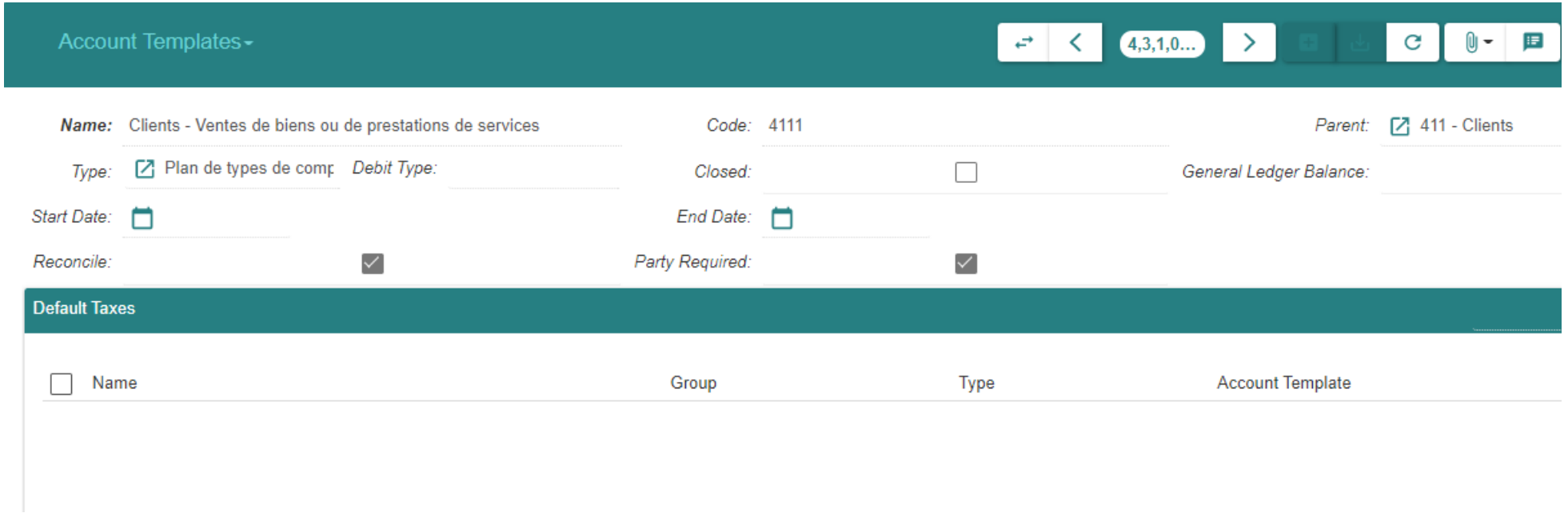


Account Templates ▾ 1 / 5

FILTERS Search

Record Name	Type
0 - Plan Contable para PYMES 2008	Plan Contable Español para PYMES 2008
0 - Plan General Contable 2008	Plan General Contable Español 2008
Kontenplan SKR03 (Germany)	Kontentypenplan SKR03 (Germany)
Minimal Account Chart	Minimal Account Type Chart
Plan comptable (French)	Plan de types de compte (France)
1 - Comptes de capitaux	
10 - Capital et réserves	
11 - Report à nouveau (solde créditeur ou débiteur)	
12 - Résultat de l'exercice (bénéfice ou perte)	
13 - Subventions d'investissement	
14 - Provisions réglementées	Plan de types de compte (France)\Passif\Capitaux propres\Pr…
15 - Provisions	Plan de types de compte (France)\Passif\Provisions\Provision…
16 - Emprunts et dettes assimilées	

Account Templates (2/3)

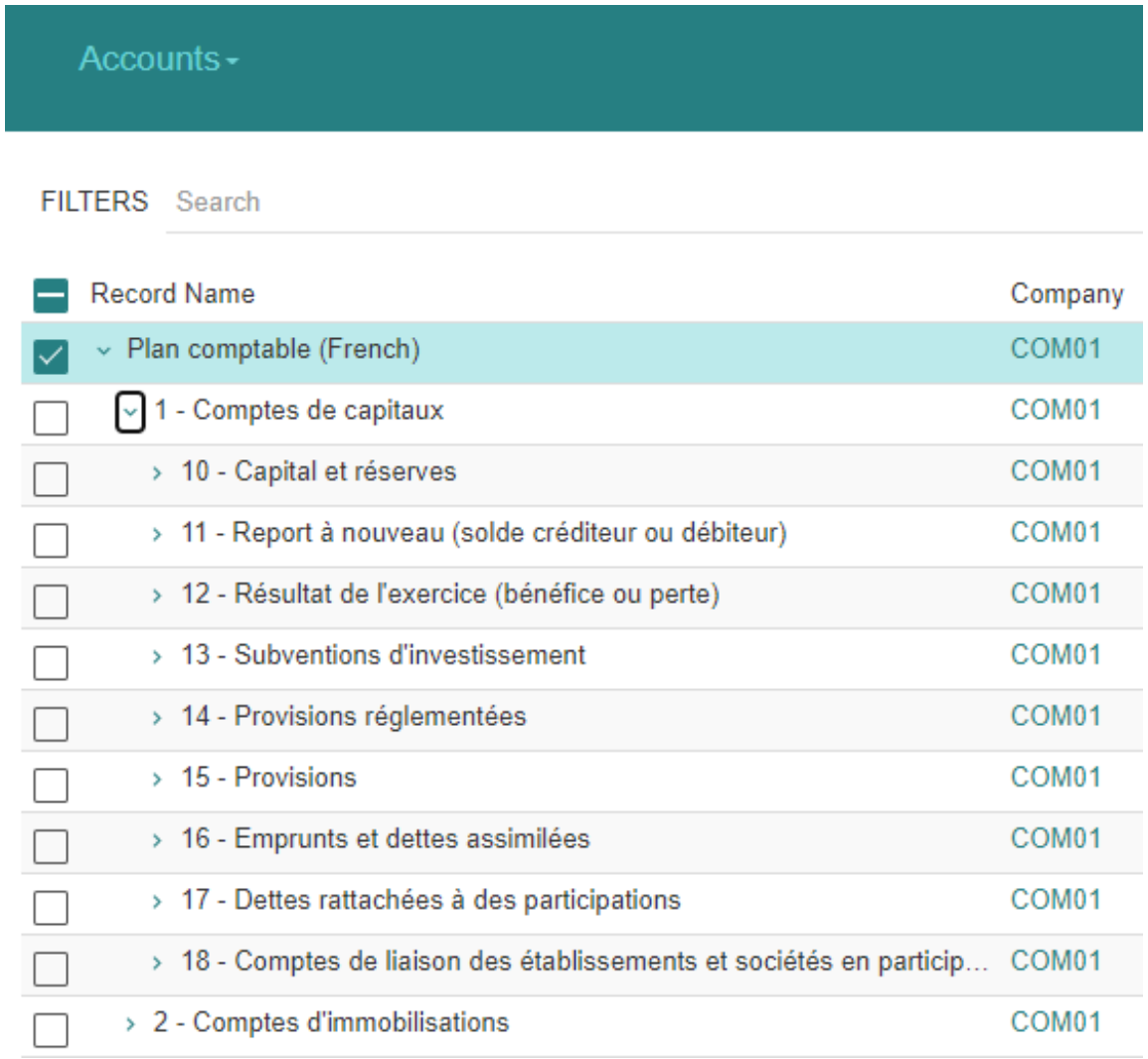


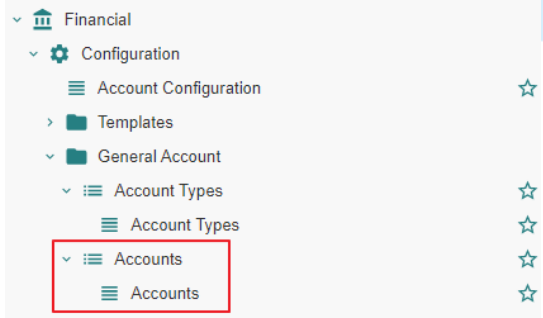
Account Templates (3/3) - Note

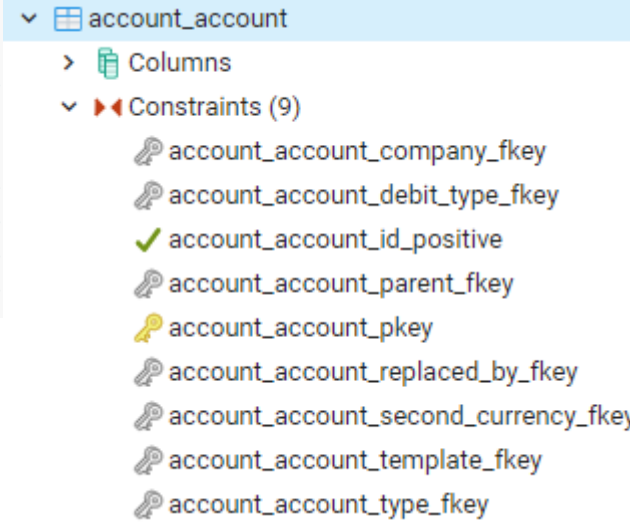
Data Output | Explain | Messages | Notifications

	id [PK] integer	closed boolean	code character varying	create_date timestamp without time zone	create_uid integer	debit_type integer	end_date date	general_ledger_balance boolean	name character varying
1	1	true	[null]	2021-03-08 11:42:32.073204	0	[null]	[null]	false	Minimal Account Chart
2	2	false	[null]	2021-03-08 11:42:32.073204	0	[null]	[null]	false	Main Receivable
3	3	false	[null]	2021-03-08 11:42:32.073204	0	[null]	[null]	false	Main Payable
4	4	false	[null]	2021-03-08 11:42:32.073204	0	[null]	[null]	false	Main Revenue

Accounts (1/2)


Accounts
FILTERS
Search
Record Name
Company
Plan comptable (French)
COM01
1 - Comptes de capitaux
COM01
10 - Capital et réserves
COM01
11 - Report à nouveau (solde créditeur ou débiteur)
COM01
12 - Résultat de l'exercice (bénéfice ou perte)
COM01
13 - Subventions d'investissement
COM01
14 - Provisions réglementées
COM01
15 - Provisions
COM01
16 - Emprunts et dettes assimilées
COM01
17 - Dettes rattachées à des participations
COM01
18 - Comptes de liaison des établissements et sociétés en particip...
COM01
2 - Comptes d'immobilisations
COM01


Financial
Configuration
Account Configuration
Templates
General Account
Account Types
Account Types
Accounts
Accounts


account_account
Columns
Constraints (9)
account_account_company_fkey
account_account_debit_type_fkey
account_account_id_positive
account_account_parent_fkey
account_account_pkey
account_account_replaced_by_fkey
account_account_second_currency_fkey
account_account_template_fkey
account_account_type_fkey

Accounts (2/2)

Query Editor | Query History | Scratch P

```
1  SELECT * FROM public.account_account
2  ORDER BY id ASC
```

Data Output | Explain | Messages | Notifications

	id [PK] integer	closed boolean	code character varying	company integer	template integer	t time zone	create_uid integer	debit_type integer	end_date date	general_ledger_balance boolean	left integer	name character varying	note text
1	1	false	[null]	1	1175	f 0.218444	1	[null]	[null]	false	1	Plan comptable (French)	[null]
2	2	false	1	1	1176	f 0.218444	1	[null]	[null]	false	2	Comptes de capitaux	[null]
3	3	false	2	1	1325	f 0.218444	1	[null]	[null]	false	300	Comptes d'immobilisat...	[null]
4	4	false	3	1	1689	f 0.218444	1	[null]	[null]	false	1028	Comptes de stocks et ...	[null]
5	5	false	4	1	1781	f 0.218444	1	[null]	[null]	false	1212	Comptes de tiers	[null]
6	6	false	5	1	1945	f 0.218444	1	[null]	[null]	false	1540	Comptes financiers	[null]
7	7	false	6	1	1998	f 0.218444	1	[null]	[null]	false	1646	Comptes de charges	[null]

Problem with closed accounts

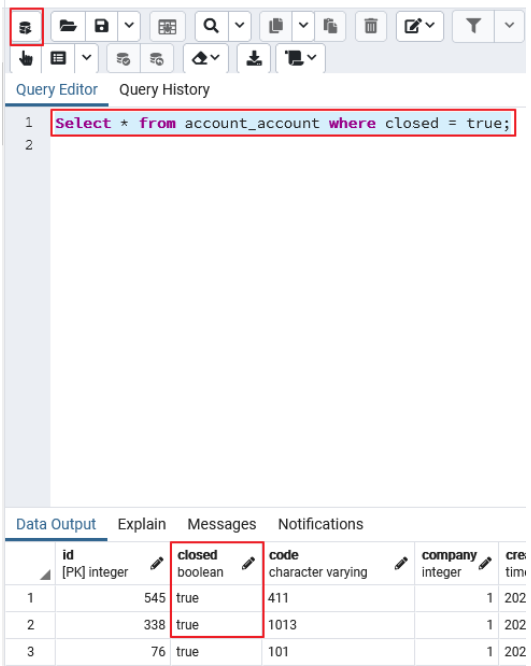
[https://discuss.tryton.org/t/value-for-field-account-is-not-valid/3106/9]

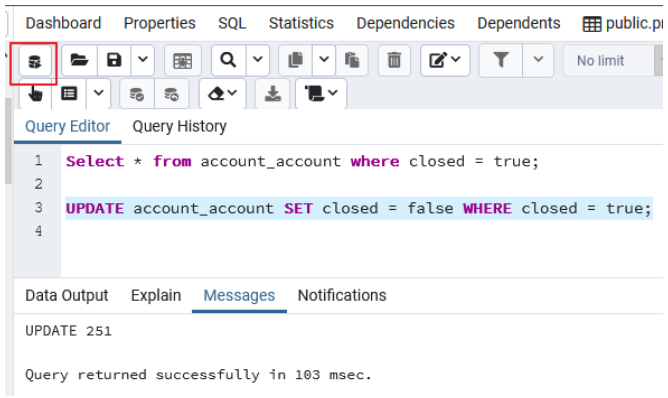
Select * from account_account where closed = true;
UPDATE account_account SET closed = false WHERE closed = true;

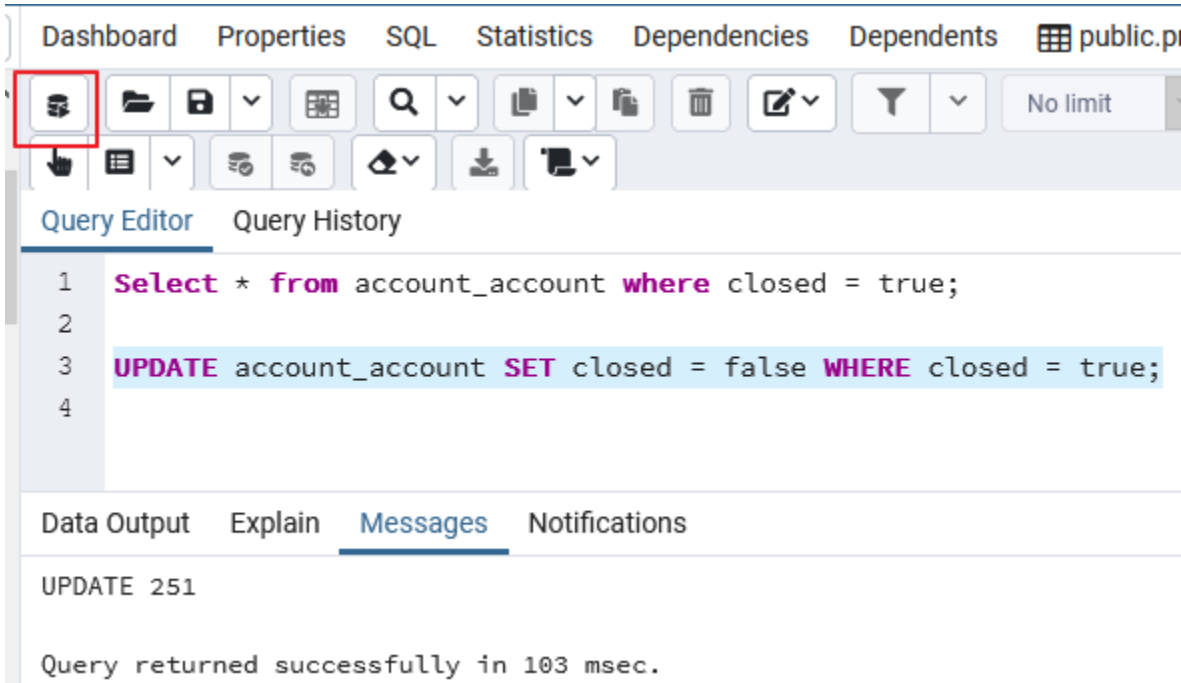
Marc 4d

I hit the same problem with the « French » chart of account whilst creating a Sales Order. What I did :

- Run the query « Select * from account_account where closed = true; » in « Postgres / pgadmin4 »
- This query confirmed that 252 accounts were « closed »
- I did not bother to find out which one
- Run the query « UPDATE account_account SET closed = false WHERE closed = true; »
- That solved the problem : I could advance the Sales Order to « Process »
  Suggestion : whilst processing the sales order, to have the error message display one such account encountered in this state up until there are no more in that state.



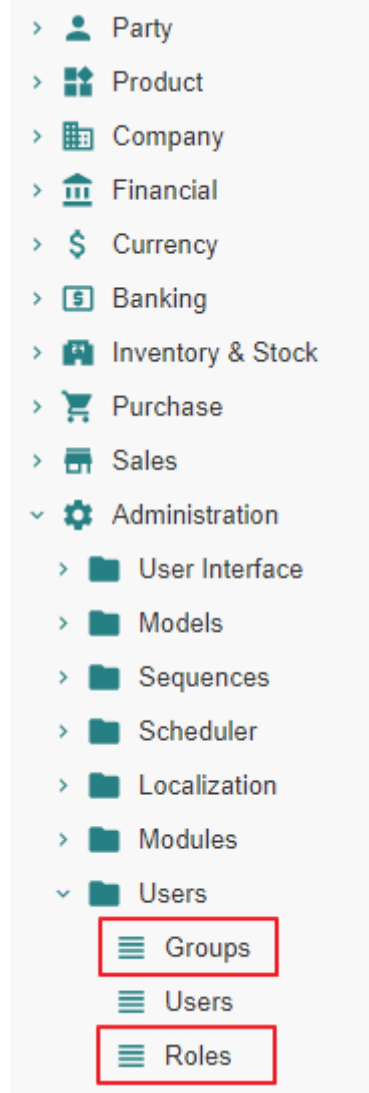




Logins

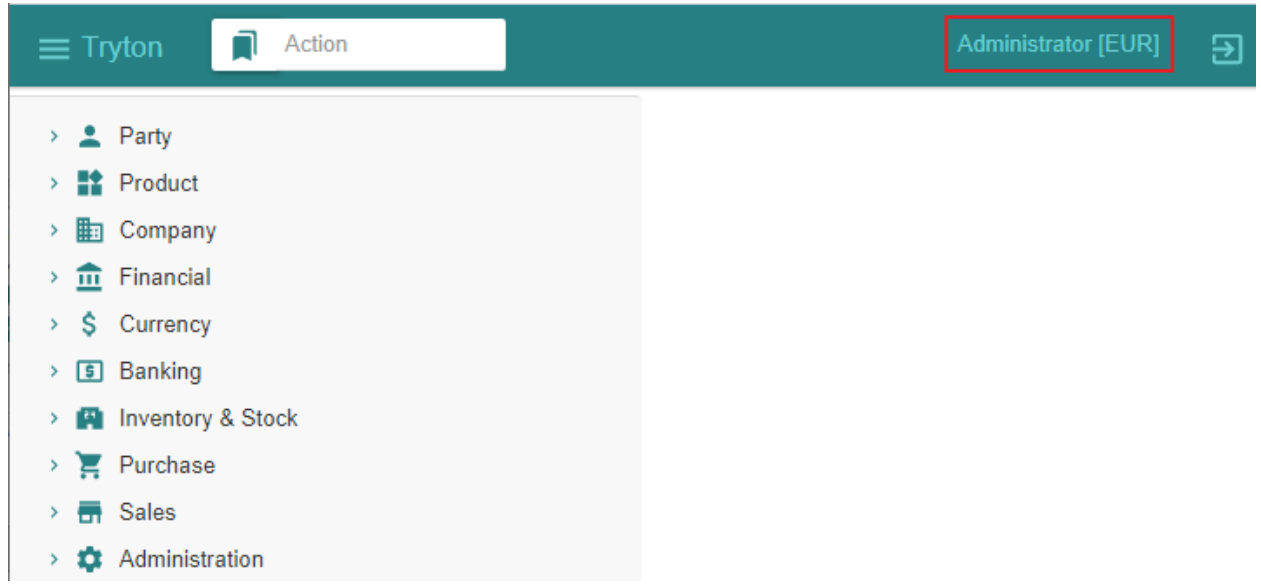
Motivation

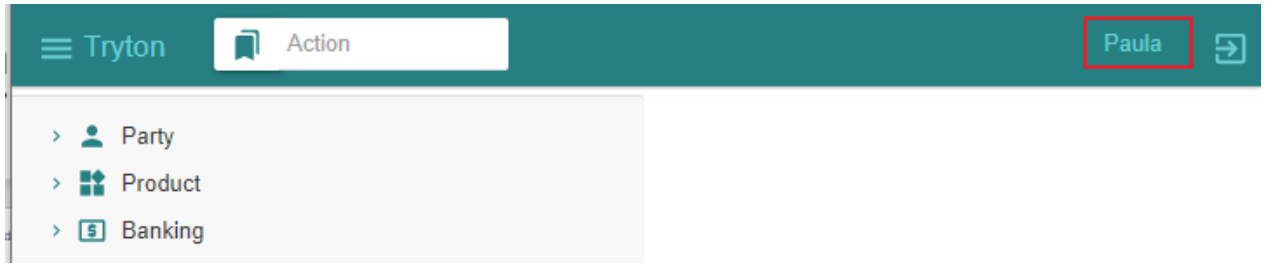
- We experiment in changing user authorizations with respect to accessing subject areas in the application
- The « User Administrator » can tailor this by exercising « User Groups » and « User Roles »

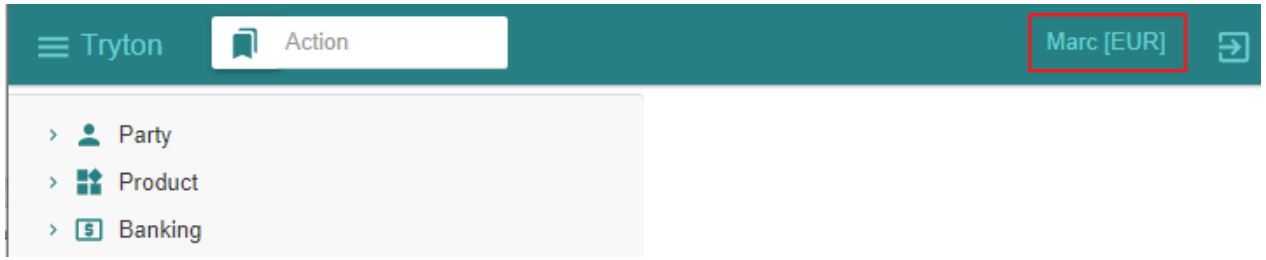


User Capabilities - Ante

State - User Capabilities





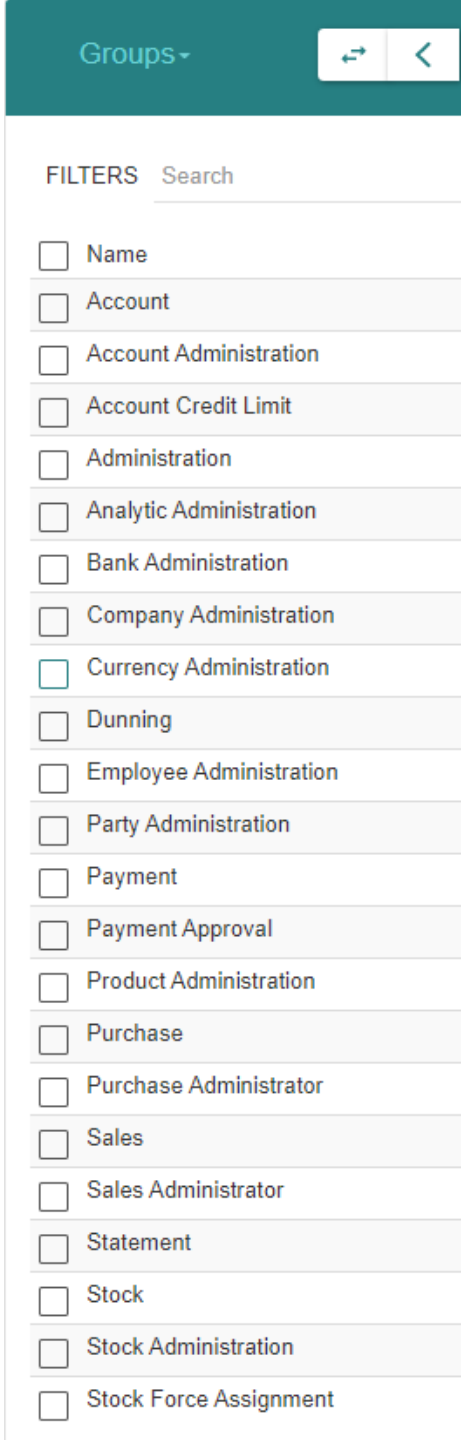


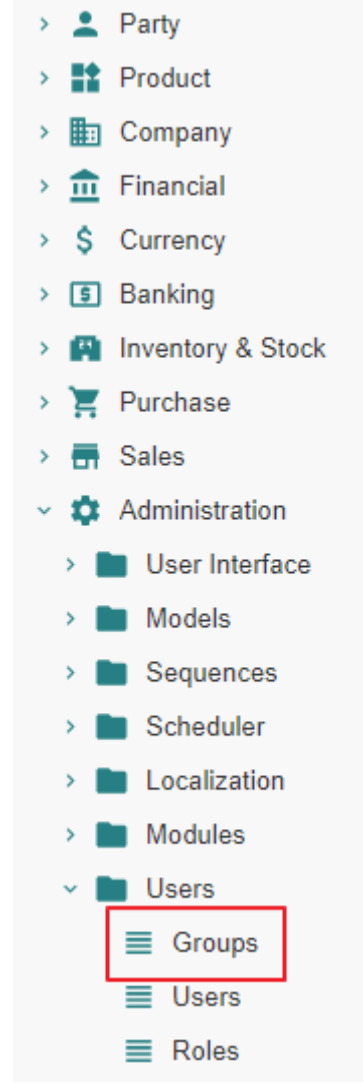
User Groups - Modify

List of « User Groups »

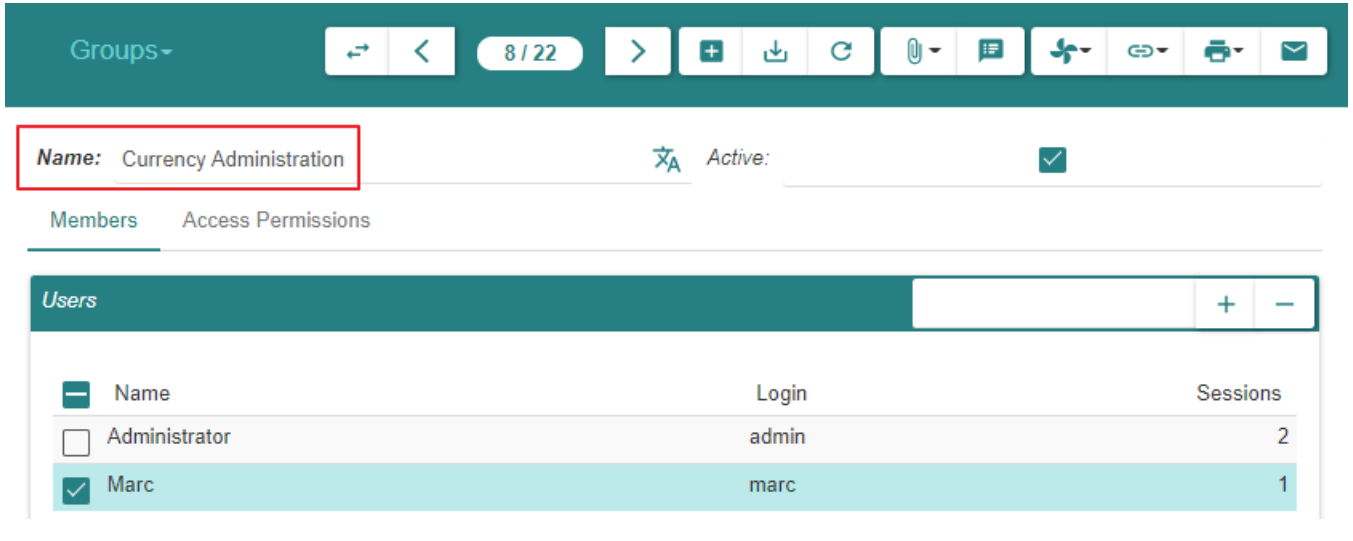
Linking the « User » and the « Group » is possible in two ways :

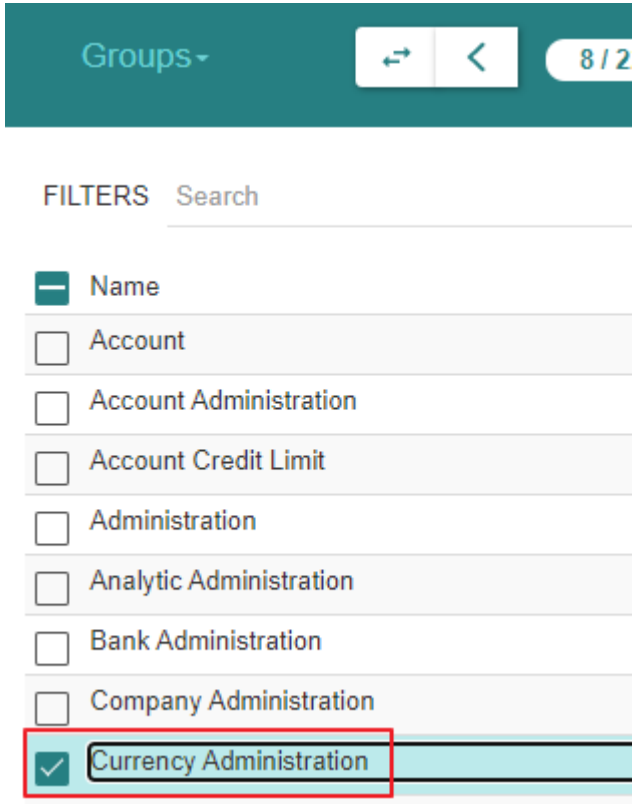
- Method 1 : displaying the choosen group then linking the user to it
- Method 2 : displaying the choosen user then linking the group to it

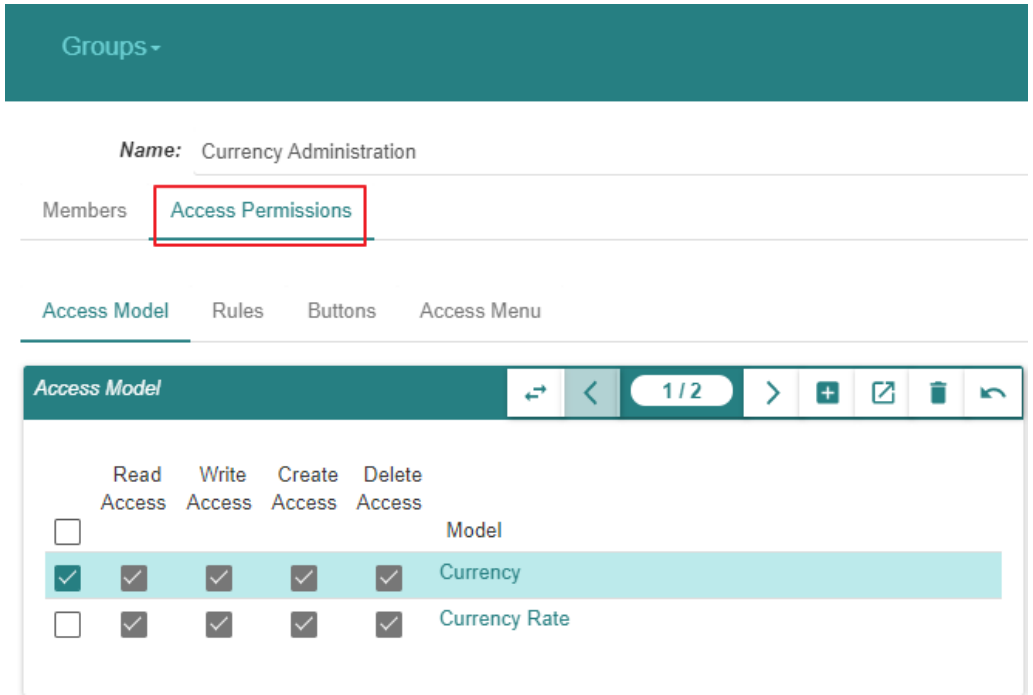




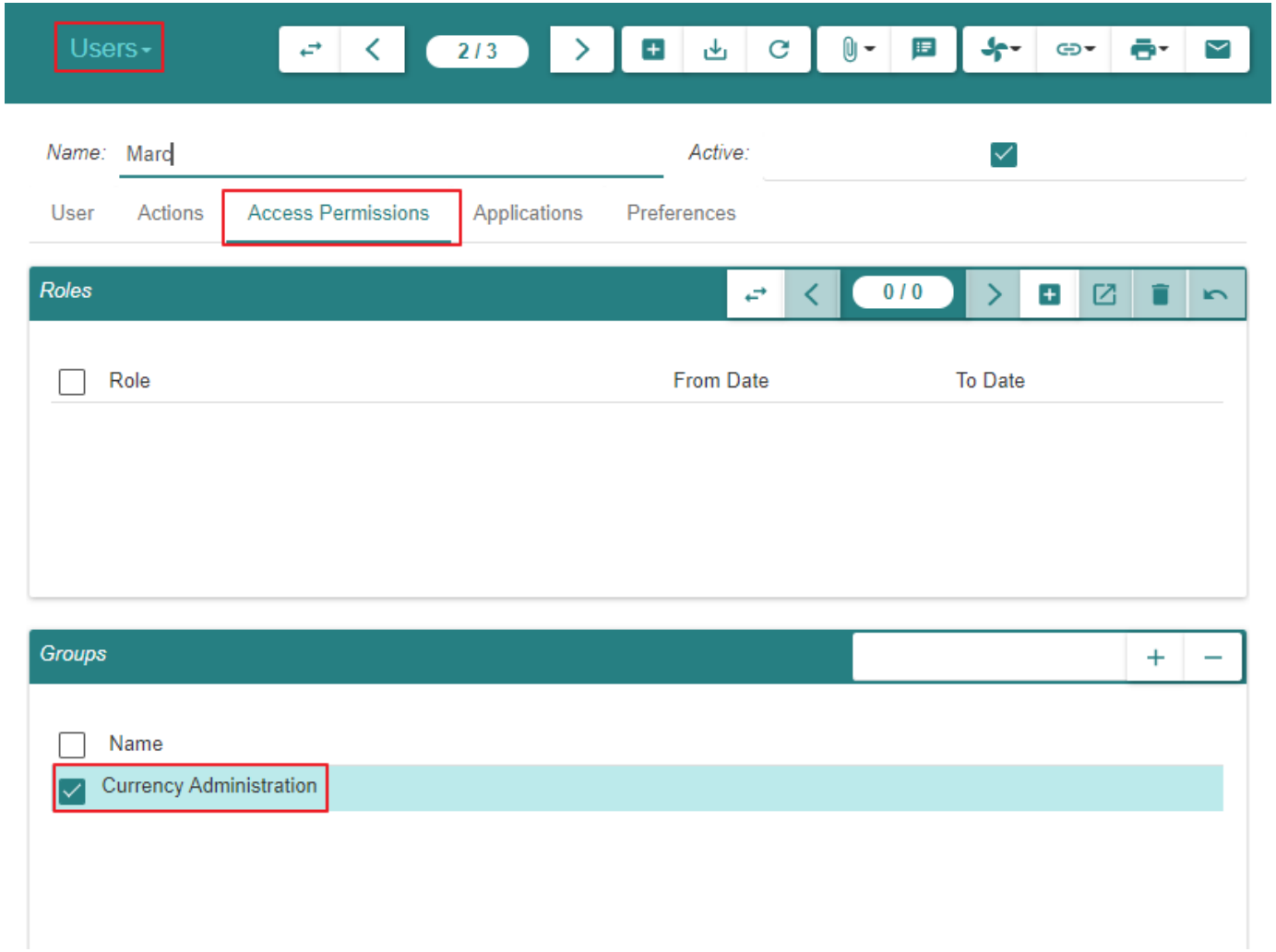
Attach « User Marc » to a « User Group » - Method 1







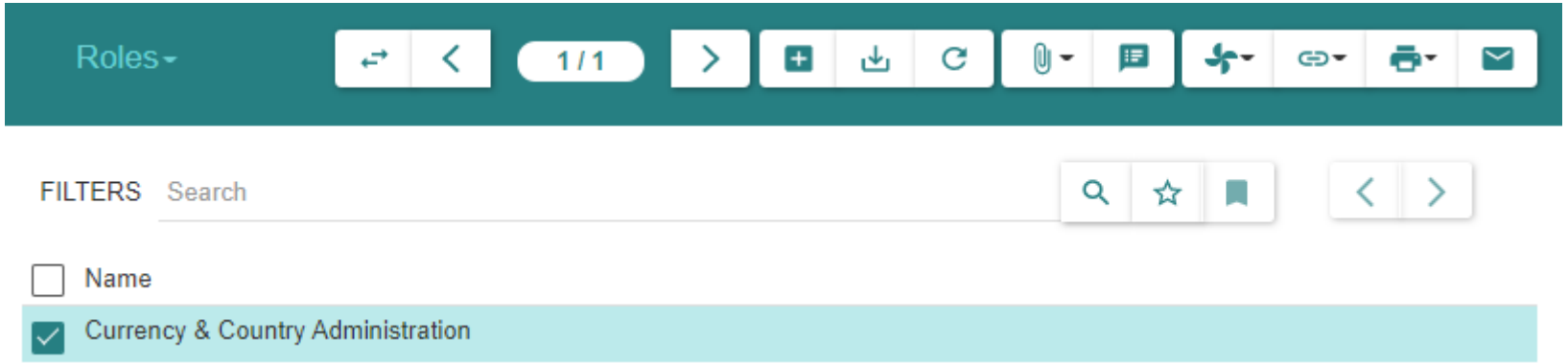
Attach a « User Group » to « User Marc » - Method 2

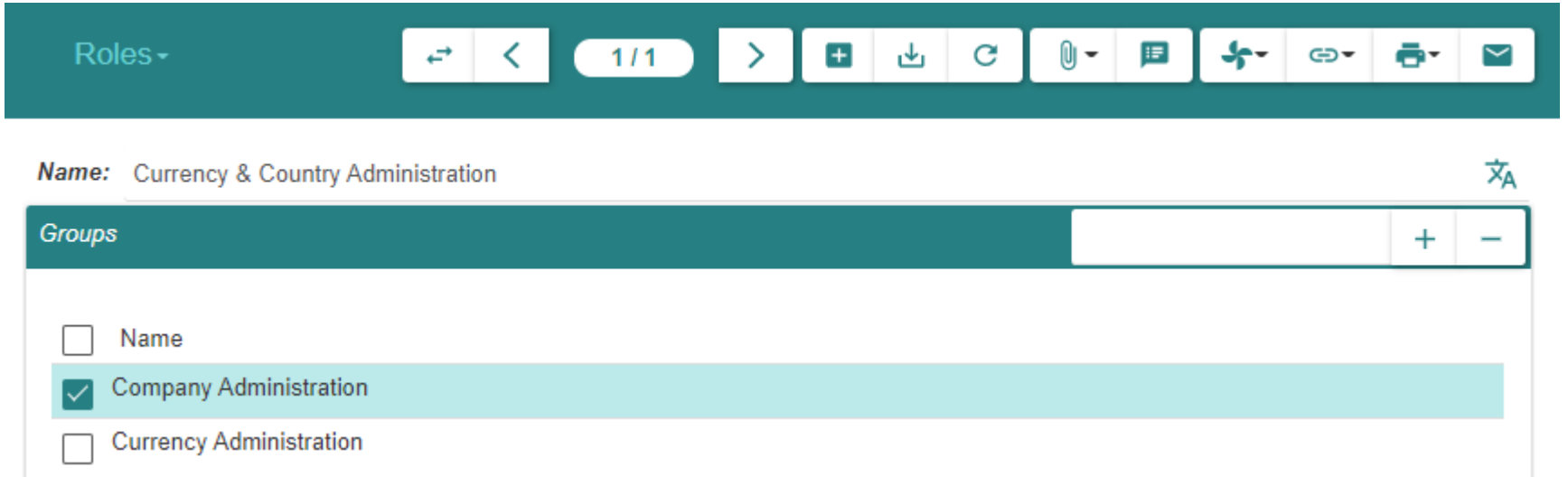


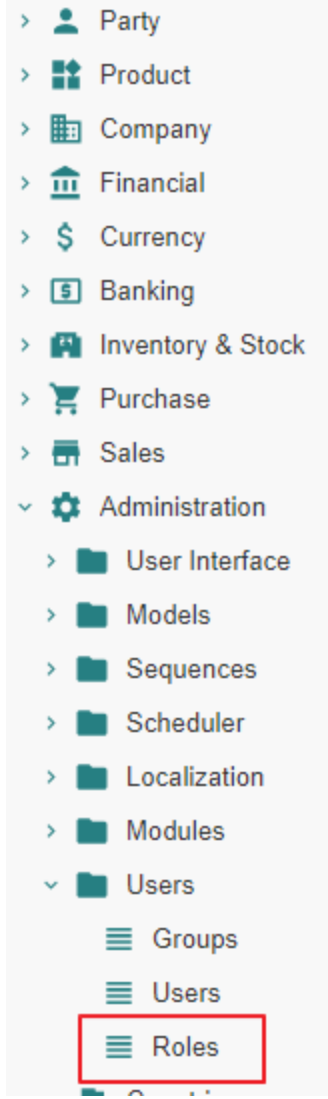
User Roles - Modify

« User Roles »

We define a « Role » that aggregates two « Groups »

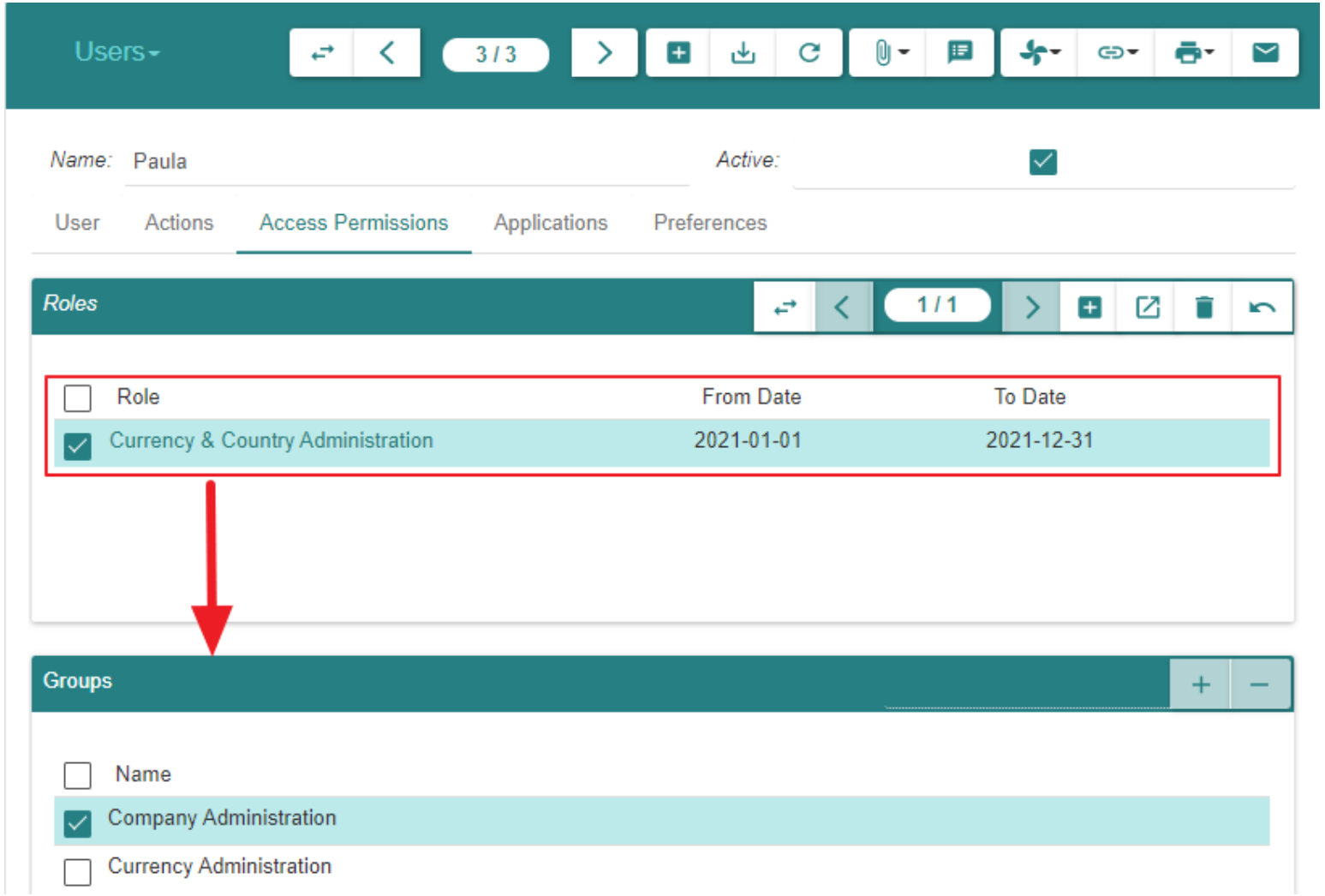






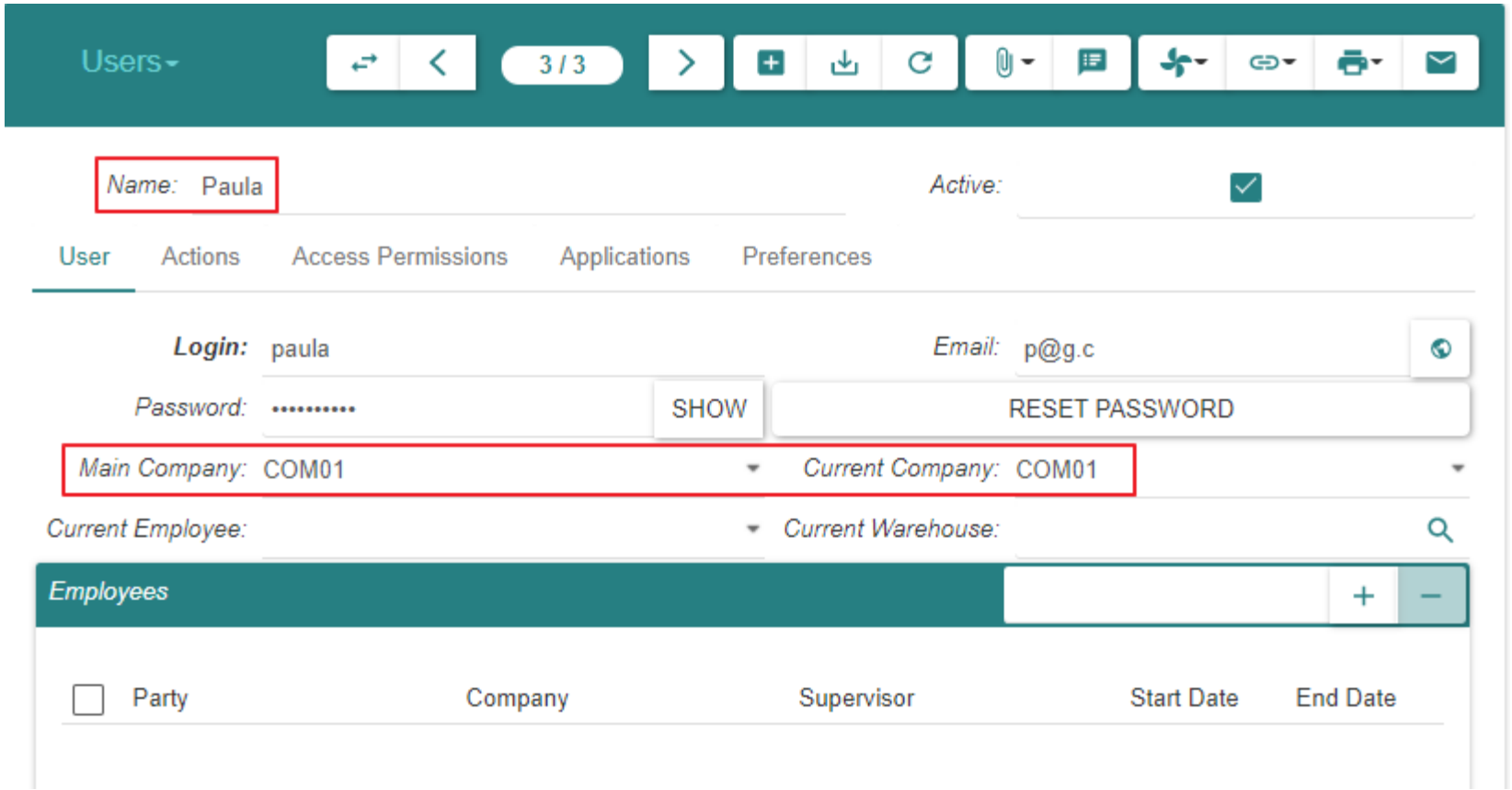
Attach « User Paula » to a « User Role » 1/2

- Once a « Role » is defined, it can be referenced by a « User »
- Attaching a « Role » allows also to restrain the « from » and « to » dates



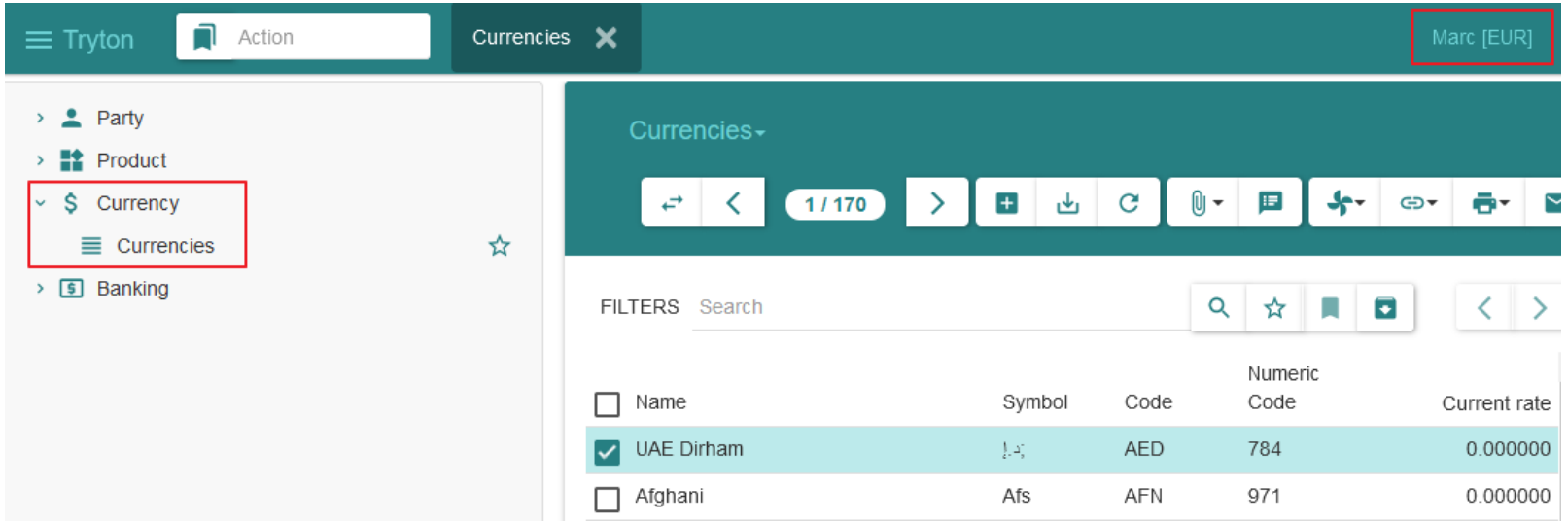
Attach « User Paula » to a « User Role » 2/2

- We must remember that « User Paula » has no reference so far to « Company COM01 »
- In order to obtain the intended result for « User Paula », i.e. displaying the « Country » and « Currency » Menu Tree Items, we must add that reference.

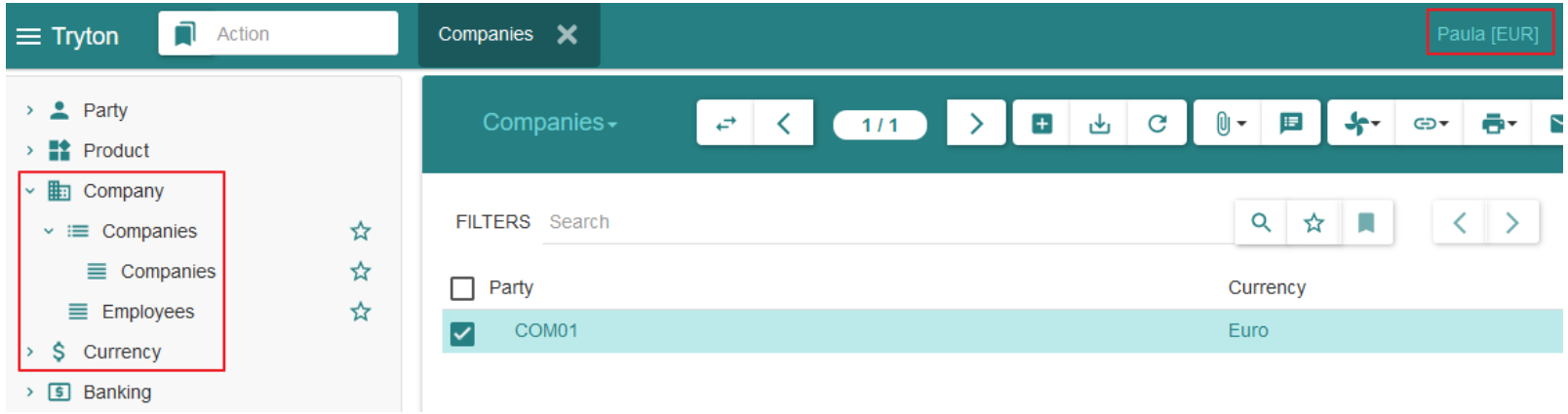


User Capabilities - Post

State - User Capabilities



« User Marc »



« User Paula »