



Data Import/Export (Dimex)

for

Creatio

Dimex V2
June 2022

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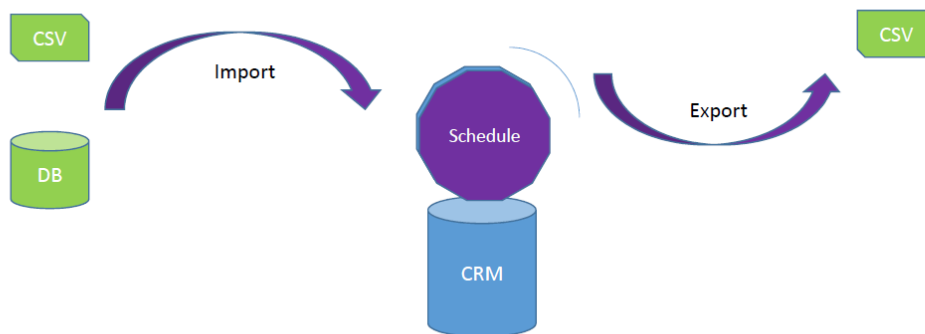
1 What is DIMEX?

DIMEX is a Creatio add-on developed by ProcessFirst, Creatio representative in France.

It enables to interface your Creatio instance with the rest of your IT system.

DIMEX enables to manage and schedule your import and export data.

The data source can be CSV Files or connection to a SQL Server database (MS SQL Server, PostgreSQL, Oracle).



1.1 Product compatibility

Creatio: all modules and editions in SaaS or on-premise mode

Version: 7.10 and above

1.2 Contact & Support

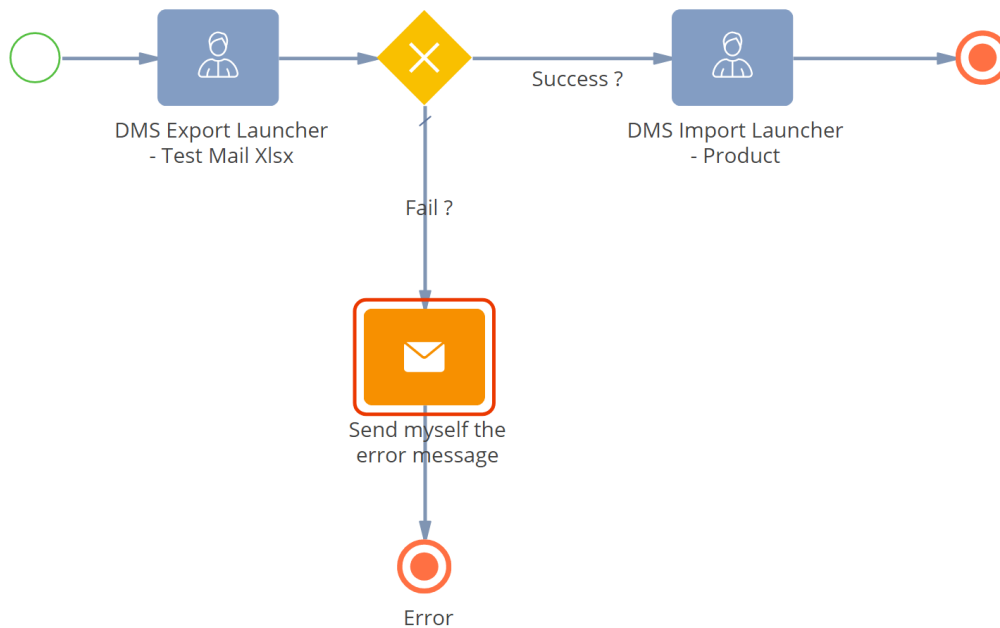
Contact: support@processfirst.fr in case you need more information.

Cases will be handled by ProcessFirst in conjunction with Creatio support.

Corrections and improvements to be provided in the latest package of maintenance.

2 New features DIMEX V2

- General : DIMEX installation is now compatible on Creatio above a PostgreSQL database (MS SQL server still available)
- General: Import and export can now be launched from user tasks in a process.



- Export : Ability to export Excel files (.xlsx)

JBe TEst Xlsx

SAVE CANCEL ACTIONS LAUNCH EXPORT

Name* JBe TEst Xlsx

Export type* Email File

File Format* Excel workbook (*.xlsx)

Last start

Last end

Last status

Query*

```

Select
[Product Code] = PRD.Code,
[Product Name] = PRD.Name
, Notes = COALESCE(PRD_LCZ.Notes, PRD.Notes)
from Product PRD WITH(READUNCOMMITTED)
LEFT Join SysProductLcz PRD_LCZ WITH(READUNCC
ON PRD_LCZ.RecordId = PRD.Id
AND PRD_LCZ.SysCultureId = '{CurrentUser_Sy
where PRD.Id = '87BC6039-3076-4060-839D-E45A5';
  
```

File name* Test.xlsx

Encoding* utf-8

Last error

- Export: export files and send them by email.

- Export : Ability to retrieve Creatio constants in the query.

What can I do for you? >

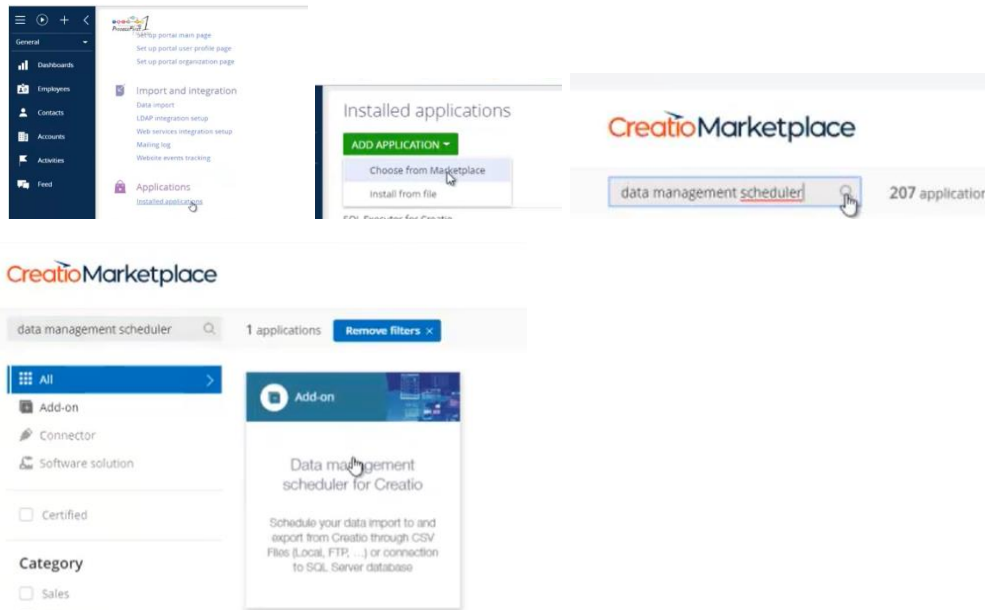
LAUNCH EXPORT

Select
 [Current Culture Id] = '{CurrentUser_SysCultureId}',
 [Current Contact Id] = '{CurrentUser_ContactId}',
 [Current Account Id] = '{CurrentUser_AccountId}'
 Query*

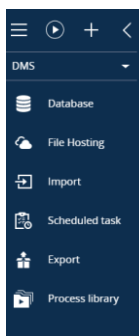
	Police	Alignement	Nombre	Styles
A7				
	A	B	C	
1	Current Culture Id	Current Contact Id	Current Account Id	
2	a5420246-0a8e-e111-84a3-00155d054c03	410006e1-ca4e-4502-a9ec-e54d922d2c00	e308b781-3c5b-4ecb-89ef-5c1ed4da488e	
3				
4				

3 Installation

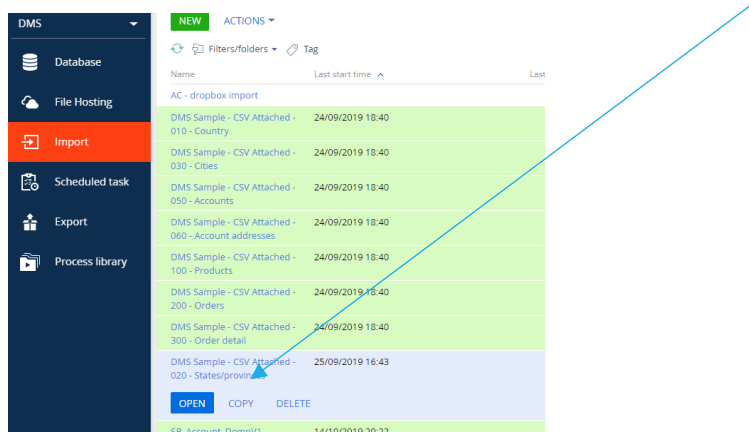
Download the DIMEX package from Creatio Marketplace, logout and log in again



The DIMEX workplace is created



Some import samples are installed by default. They can be copied.



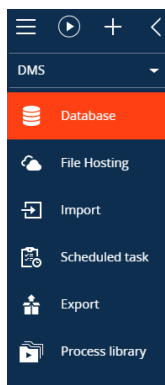
4 Source location setting

The source location is where your csv files or database are located.

4.1 Configure database access.

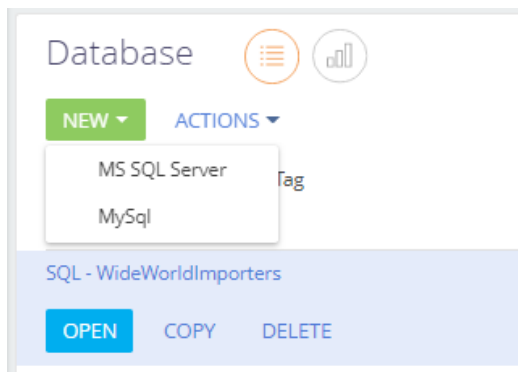
You can configure database access to MS SQL Server, PostgreSQL and MySQL if Creatio is installed on premises. In case you have a SaaS installation, please contact ProcessFirst.

Select Database in the menu

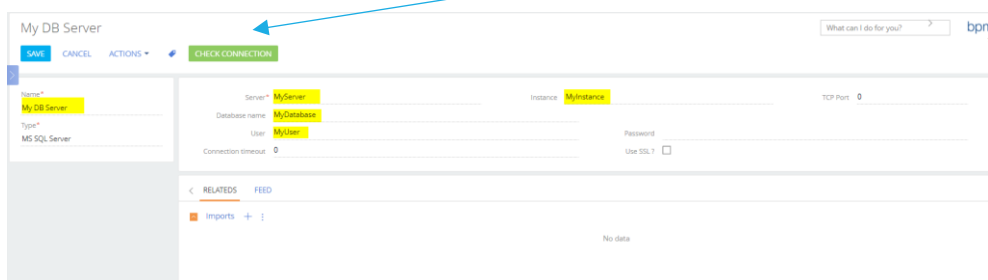


Click on the new button and select the database server type

Fill in the required information for the connection to the database

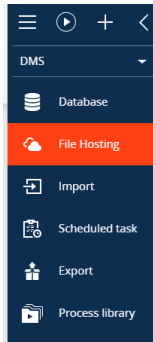


Check if it is valid by clicking on the CHECK CONNECTION button:



4.2 Configure file hosting

Select File Hosting in the menu



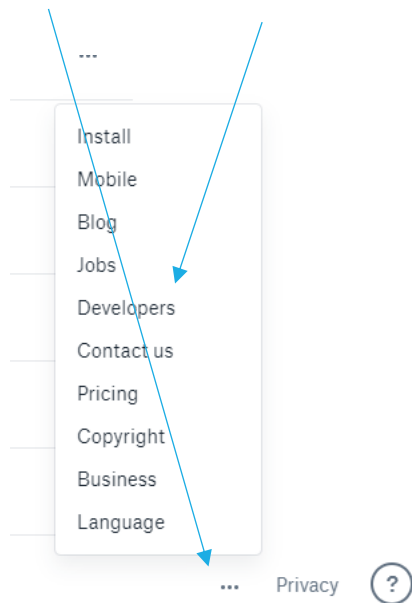
● Dropbox

You need to have a Dropbox account

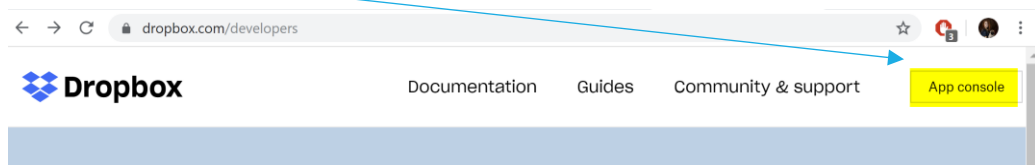
Go to <https://www.dropbox.com/register> and create your account or open your Dropbox account.

Log in to the Dropbox website.

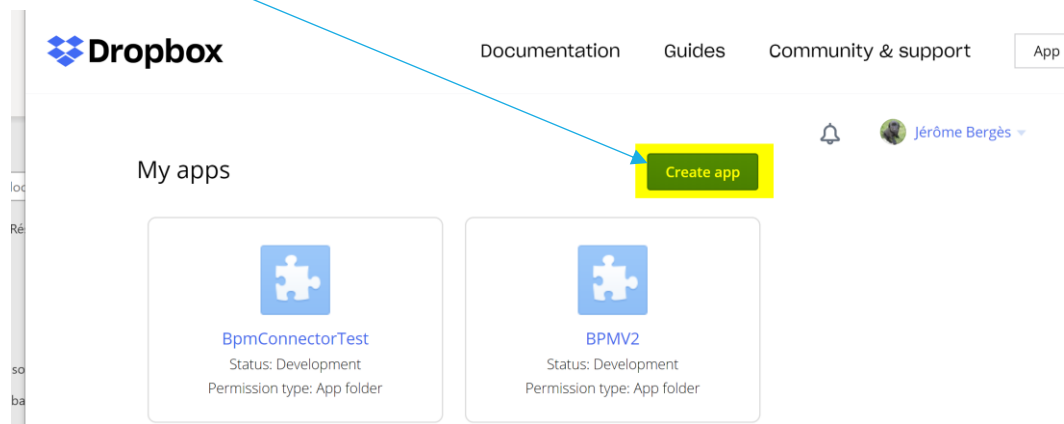
Click on ... and select Developers (on the right, near to Privacy)



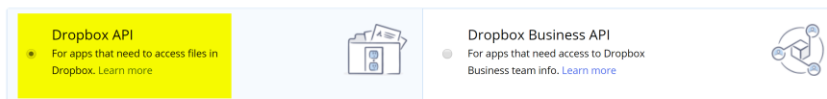
Click on the upper "App console" button.



Click on the “Create app” button.

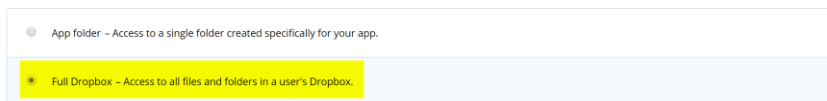


1. Choose an API



2. Choose the type of access you need

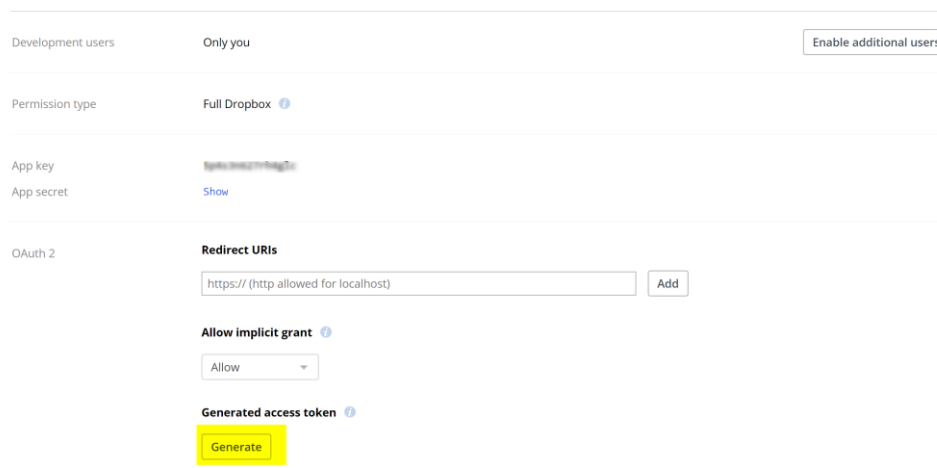
[Learn more about access types](#)



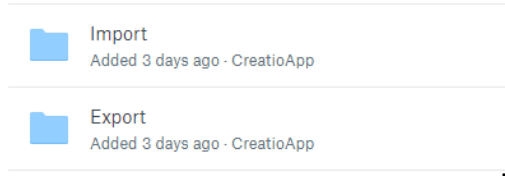
3. Name your app



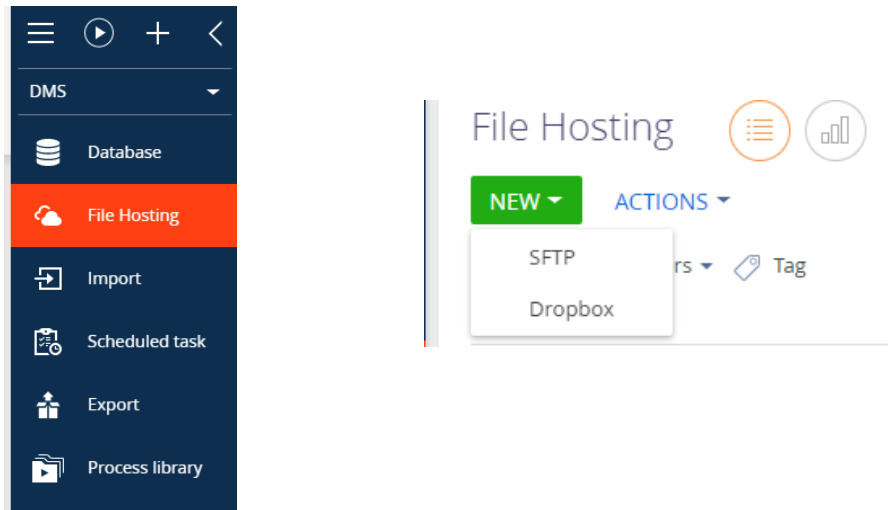
Validate your settings.



- Click on the “Generate” button to get your access token.
- Copy the token.
- **Create two folders** : one for IMPORT and one for EXPORT




In your Creatio instance, go to **File Hosting** menu, click on **New** button and select **Dropbox** value.



Fill in the following fields:

- **Name:** Friendly name of the Dropbox configuration
- **Application name:** Specify here the name of the application previously created in dropbox
- **Access token:** Paste the dropbox token provided previously
- **Timeout:** This is the time limit to reach dropbox API in seconds (15 by default)

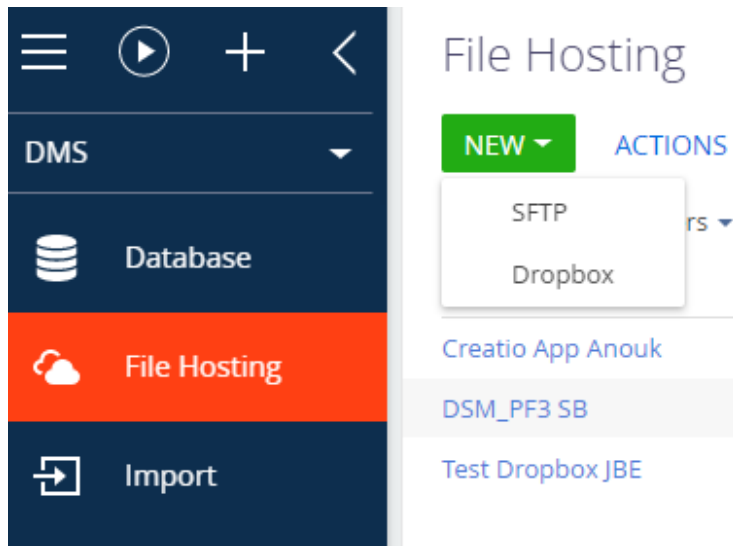
DB Account

SAVE CANCEL ACTIONS 

<p>File hosting type Dropbox</p> <p>Name* DB Account</p>	<p>Application name* SampleApp</p> <p>AccessToken*</p> <p>Timeout* 15</p>
--	---

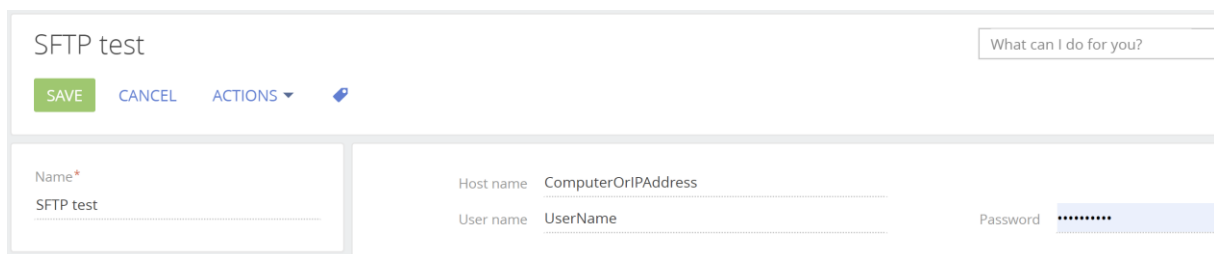
- **SFTP account.**

Go to Creatio application website, go to **File Hosting** menu, Click on **New** button and select **SFTP** value.



Fill in the following fields:

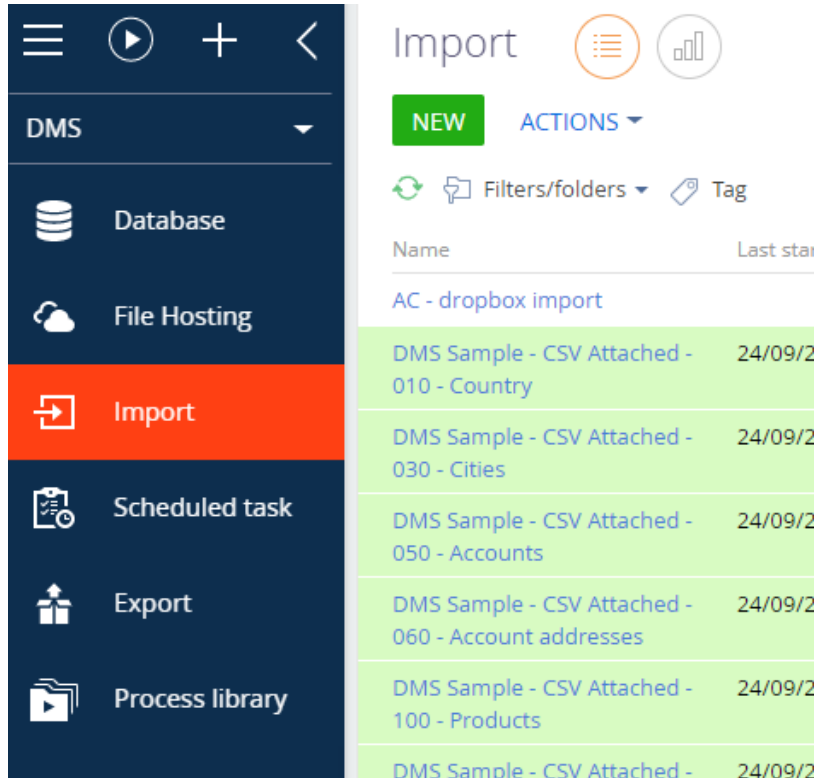
- **Name:** Friendly name of the SFTP configuration
- **Host name:** Insert the name or the IP address of the SFTP server
- **User name:** Insert the login name used to connect to your SFTP server
- **Password:** Insert the password used to connect to your SFTP server



5 Import

5.1 Configure import basics

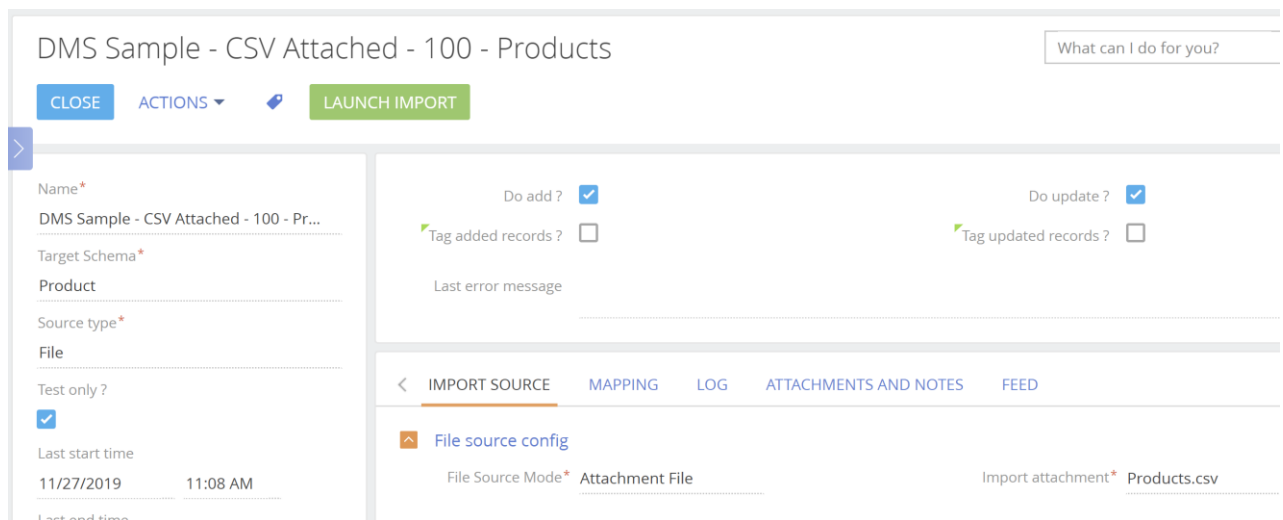
Start with an Excel file in csv format you want to import.
Select **Import** in the menu, then click on **New** button.



The screenshot shows the 'Import' menu on the left, which is highlighted in orange. The menu items are: DMS, Database, File Hosting, Import, Scheduled task, Export, and Process library. To the right, the 'Import' page is displayed, showing a 'NEW' button and a list of imports. The list has columns for 'Name' and 'Last start'.

Name	Last start
AC - dropbox import	
DMS Sample - CSV Attached - 010 - Country	24/09/2
DMS Sample - CSV Attached - 030 - Cities	24/09/2
DMS Sample - CSV Attached - 050 - Accounts	24/09/2
DMS Sample - CSV Attached - 060 - Account addresses	24/09/2
DMS Sample - CSV Attached - 100 - Products	24/09/2
DMS Sample - CSV Attached -	24/09/2

The following page is shown:



The screenshot shows the configuration page for the import 'DMS Sample - CSV Attached - 100 - Products'. The page has a search bar at the top right with the text 'What can I do for you?'. Below the search bar are buttons for 'CLOSE', 'ACTIONS', and 'LAUNCH IMPORT'. The main configuration area is divided into two columns. The left column contains fields for 'Name*', 'Target Schema*', 'Source type*', 'File', 'Test only?' (checked), and 'Last start time' (11/27/2019 11:08 AM). The right column contains checkboxes for 'Do add?' (checked), 'Do update?' (checked), 'Tag added records?' (unchecked), and 'Tag updated records?' (unchecked). Below these are tabs for 'IMPORT SOURCE', 'MAPPING', 'LOG', 'ATTACHMENTS AND NOTES', and 'FEED'. The 'IMPORT SOURCE' tab is active, showing a 'File source config' section with 'File Source Mode*' set to 'Attachment File' and 'Import attachment*' set to 'Products.csv'.

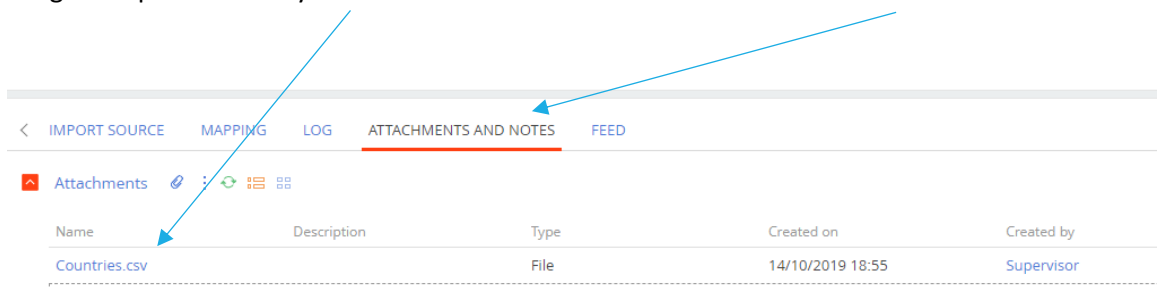
Specify the following fields:

- **Name:** Friendly name of the import.
- **Target schema:** Specify the table in your Creatio instance to where you want to import the data of your csv file.

- **Source type:**
 - File: if you want to import a file from
 - an attachment file (see 4.2)
 - a hosted file (Dropbox or SFTP) (see 4.3)
 - Database: If you are on-site, you can connect to a Database server (see 4.4)
- **Test only:** the import will show the results without any modifications to the data.
- **Do add:** record insertion is done based on the defined mapping (see 4.5). Uncheck, if you only want to update and not add records with this import.
- **Do update:** record update is done based on defined mapping (see 4.5). Uncheck if you only want to insert records with this import.
- **Tag added records:** all records added by the import are tagged with a name "added by import on:".
- **Tag updated record:** all records updated by the import are tagged with a name "updated by import on:".
- **Last error message:** will automatically show the last error message.

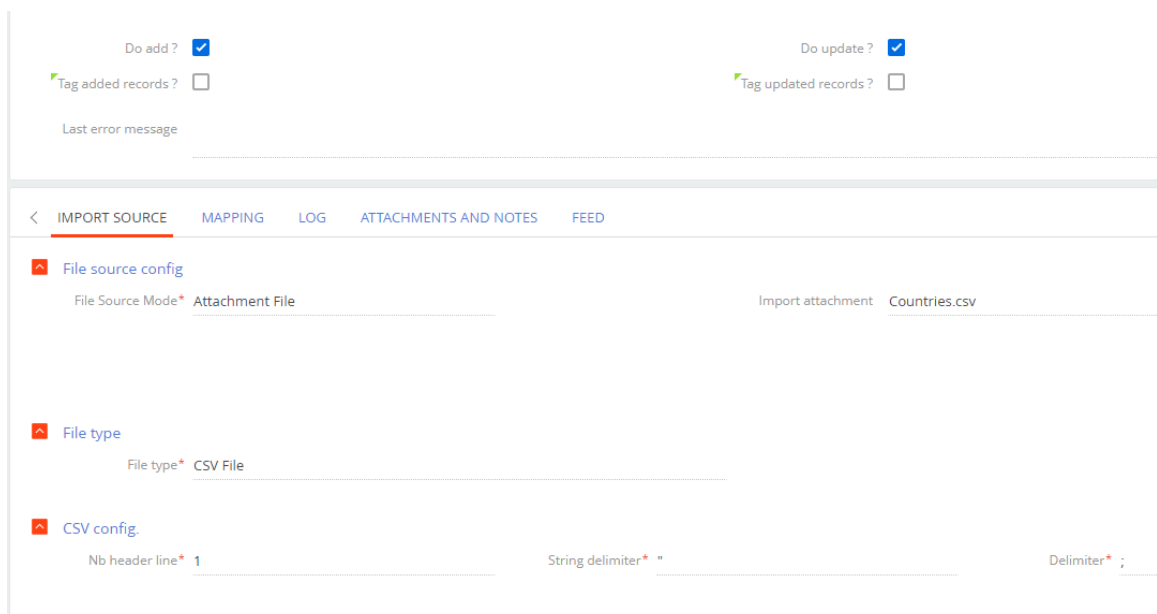
5.2 Import from an attached csv file.

Drag & drop the **csv file** you want to use as source in the **ATTACHMENTS AND NOTES** tab.



Name	Description	Type	Created on	Created by
Countries.csv		File	14/10/2019 18:55	Supervisor

Go back to **IMPORT SOURCE** tab.



Do add? Do update?

Tag added records? Tag updated records?

Last error message

< **IMPORT SOURCE** MAPPING LOG ATTACHMENTS AND NOTES FEED

File source config

File Source Mode* Attachment File Import attachment Countries.csv

File type

File type* CSV File

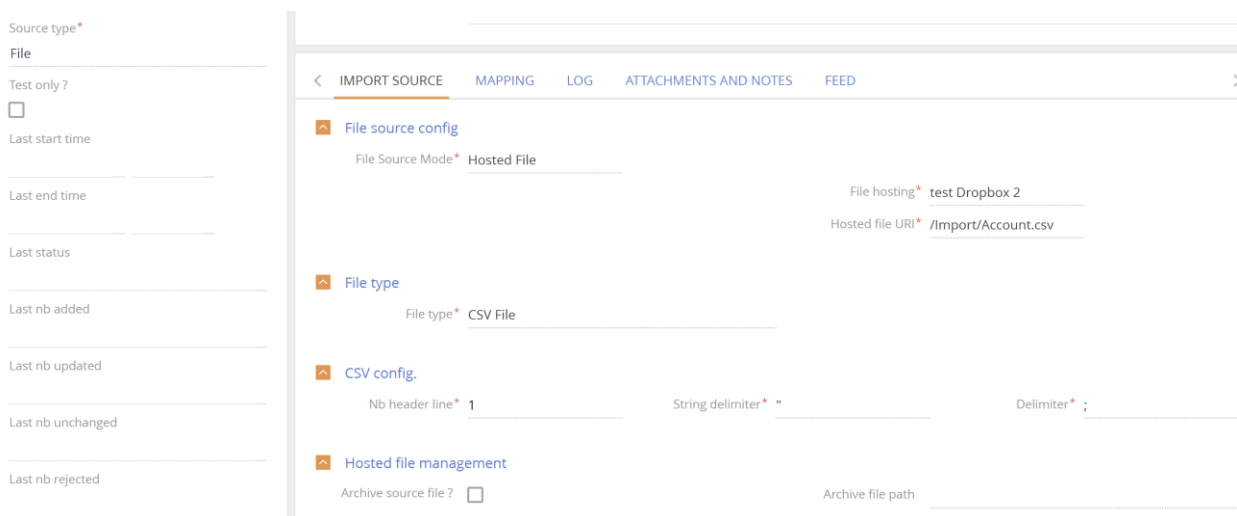
CSV config.

Nb header line* 1 String delimiter* " Delimiter* ;

Specify the following fields:

- **File source Mode:** select Attachment File
- **Import attachment:** choose the previously attached csv file
- **File type:** select CSV File
- **Nb header line:** number of lines in the csv file that will not be taken in account (1 by default).
- **String delimiter:** specify the csv string delimiter (“ by default).
- **Delimiter:** specify the csv column separator (; by default)

5.3 Import from a hosted csv file.



The screenshot shows the DIMEX configuration page for importing a hosted CSV file. The main configuration area is titled 'IMPORT SOURCE' and contains the following sections:

- File source config:** File Source Mode* Hosted File, File hosting* test Dropbox 2, Hosted file URI* /Import/Account.csv
- File type:** File type* CSV File
- CSV config.:** Nb header line* 1, String delimiter* ", Delimiter* ;
- Hosted file management:** Archive source file? , Archive file path

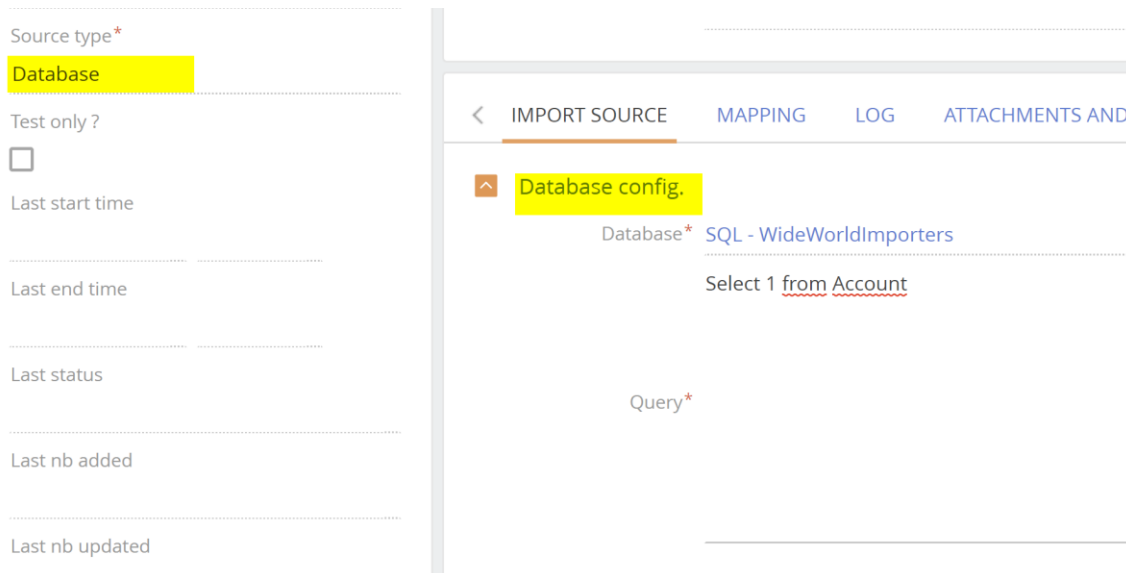
Specify the following fields:

- **File source Mode:** Select Hosted File
- **File hosting:** select the record created in the File Hosting menu of the DIMEX workspace.
- **Hosted file URI:** this is the complete path of the file of the source file used as source of the import
- **File type:** CSV File
- **Nb header line:** number of lines in the csv file that will not be taken in account (1 by default).
- **String delimiter:** specify the csv string delimiter (“ by default).
- **Delimiter:** specify the csv column separator (; by default)
- **Archive source file:** if you need to move the file after import is done.
- **Archive file path:** this is the complete path used for archiving the source file.

5.4 Import from a database.

Specify the following fields:

- **Database:** select the desired record that was created in the menu Database of the DIMEX workspace
- **Query:** insert the SQL query used as import source



The screenshot shows a web interface for configuring an import source. On the left, there is a sidebar with the following fields: 'Source type*' (with 'Database' selected), 'Test only?' (checkbox), 'Last start time', 'Last end time', 'Last status', 'Last nb added', and 'Last nb updated'. The main area has a breadcrumb trail: '< IMPORT SOURCE > MAPPING > LOG > ATTACHMENTS AND'. Below this, there is a 'Database config.' section with a dropdown menu showing 'Database*' and 'SQL - WideWorldImporters'. Below that, there is a text input field containing the SQL query 'Select 1 from Account'. At the bottom, there is a 'Query*' label and an empty text input field.

5.5 Mapping configuration

Before being able to launch the import, you need to map the columns of your csv file with the columns of your Creatio instance.

Under mapping options, by selecting the **Multiple record match mode**, you can define how to treat eventual duplicates you may have in your Creatio instance.

- **Fatal error:** the import updates all records and stops immediately after having found the first duplicate record
- **Reject line:** the first duplicate record will be updated but not the second
- **Update anyway:** both duplicate records will be updated

Do add ? Tag added records ? Last error message

Do update ? Tag updated records ?

< IMPORT SOURCE **MAPPING** LOG ATTACHMENTS AND NOTES FEED

Mapping options

Multiple record match mode* **Reject line** (i)

Columns mapping

Fatal error

Reject line

Update anyway

Start the mapping and click on the + icon on the **Columns mapping** section of the **Mapping** tab

< IMPORT SOURCE **MAPPING** LOG ATTACHMENTS AND NOTES FEED

Mapping options

Multiple record match mode* **Update anyway** (i)

Columns mapping **+** ⋮

Ordinal...	P...	Target schem...	Is key field ?	I...	Is required ?
1	1	Code	Yes	N	No

The following page is shown.

aaa / Import mapping (DMS) What can I do for you? > bpmonline 7.13.3.481 De VIEW

[CLOSE](#)

Import aaa	Process order 1	Use source value ? <input checked="" type="checkbox"/>	Ordinal in source* 1
Target Schema Column Code	Is lookup ? <input type="checkbox"/>	Is key field ? <input checked="" type="checkbox"/>	Is required ? <input type="checkbox"/>
Field update management* Always	Perform trim ? <input checked="" type="checkbox"/>		
Default value			

< **TRANSFORM VALUES** FIELD FORMAT

Specify the following fields:

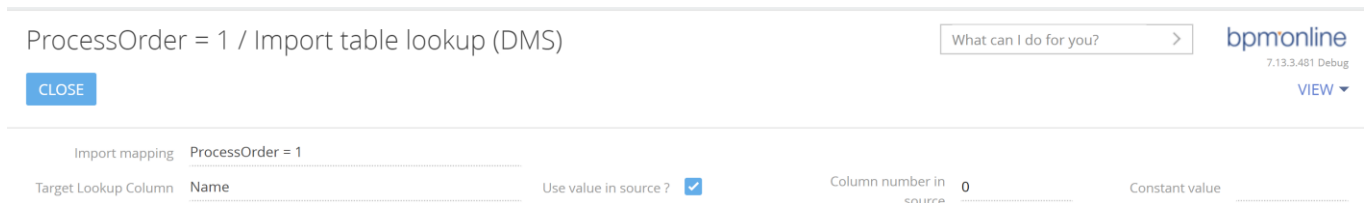
- **Import:** automatically filled in with the name of the Import
- **Target Schema Column:** select the Creatio field that will be updated by the import
- **Is key field ?** to check if this is a key field (the source and the existing record in Creatio instance must match)
- **Process order:** starts automatically with 1 and can be changed to specify in which order the mapping will be processed by the import (this is not the source number)
- **Use source value ?**
 - Checked by default
 - If checked, the column specified in the **Ordinal in source** field will be used as source value
 - If not checked, you can use the value specified in the **Default value** field to hardcode a value for the import
- **Ordinal in source:**
 - Automatically filled in
 - Corresponds to the column number of the database selected query or the csv.
- **Is lookup ?**
 - This field is read-only.
 - When the Target Schema Column field is specified, if it's a foreign key, the checkbox will be checked.
- **Is required ? If checked, and the source is empty, the import will reject this line.**
- **Field update management:**
 - This field allows you to refine the conditions of the current Creatio field update:
 - By default, the **Always** value is specified: the Creatio field will always be updated with the source value.
 - **AddingOnly:** the Creatio field will be updated with the source value only when inserting a record.
 - **If source not null:** the Creatio field will be updated only if the source column is **not** empty.
 - **If target field is null:** the Creatio field will be updated only if it was empty **before**.
 - **Keep:** use this option if you want to inactivate the current mapping.
- **Perform trim?:**
 - If checked, the leading and trailing spaces of the current source value will be removed before updating the current Creatio field.
- **Default value:**
 - This field allows you to specify a default value for the update.
 - If Use source value ? field is checked, and the source column is empty, this default value will be used as a fallback value for the update.
 - If Use source value ? field is not checked, the import will update all records with this default value.

5.6 Lookup

If the field on your mapping is a lookup, the **lookup** field is checked automatically, and you need to specify additional information in the **TABLE LOOKUPS** tab that dynamically appears.



Click on the **+** icon on the **Related lookup mapping** section.
The following page is then shown:

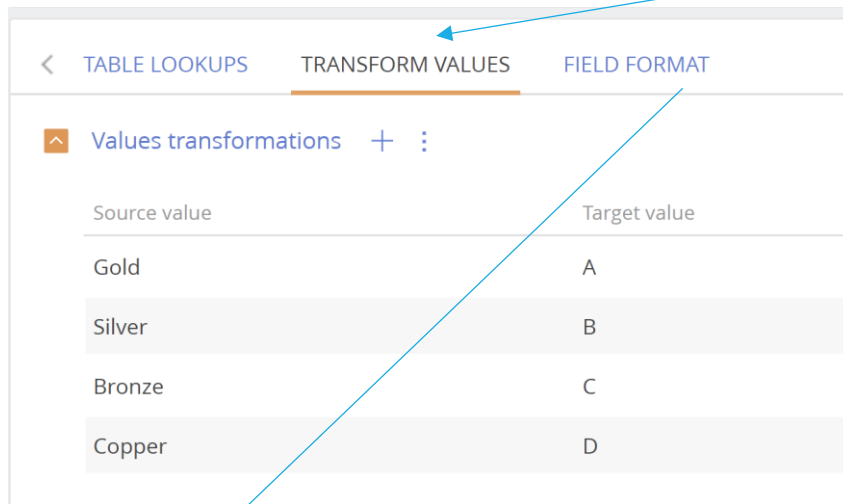


Specify the following fields:

- **Target lookup column:**
 - specify the Creatio field that will match the source:
For example, if your current mapping is the category field of the Account table, you need to specify the field Name of the Account category table.
- **Use value in source ?**
 - If checked, the mapping of the lookup will use the current mapping column.
 - If you want to use another source column, put its number in the field Column number in source, otherwise you can let the 0 value, or repeat the current mapping column number.
- **Column number in source:**
 - If the value is 0, the current mapping column ordinal will be used, else the specified ordinal will be used.
- **Constant value:**
 - Use this field if you want to specify a default value for the mapping rather than the value of the file / database.
 - For instance, if you try to map the “Account type” column to let’s say “Customer” and this value is not in the source, specify “Customer” in this field and all records will be set with the “Customer Account type”.

5.7 Transform values & field format.

If you need to change the source values, you can do it in the **TRANSFORM VALUES** tab:



Source value	Target value
Gold	A
Silver	B
Bronze	C
Copper	D

In the above example, Creatio contains A, B, C & D values for an account category, but in the source, we have Gold, Silver, Bronze and Copper.

Configuring the source and target values as above will put Creatio “A” value when “Gold” is on the csv file.

In **FIELD FORMAT** tab, put the decimal separator if needed.

6 Export

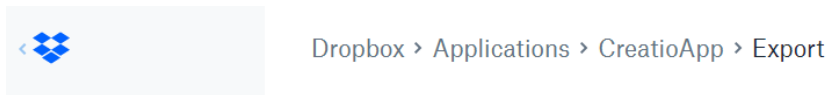
Exports can be:

- some hosted files
 - Dropbox
 - SFTP
- some export page attachments
- send by email.

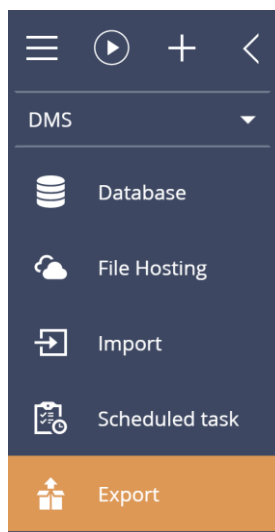
How to configure your export to Dropbox or SFTP:

- Create a file
 - either in your Dropbox
 - or in your SFTP to where you will export your files to.

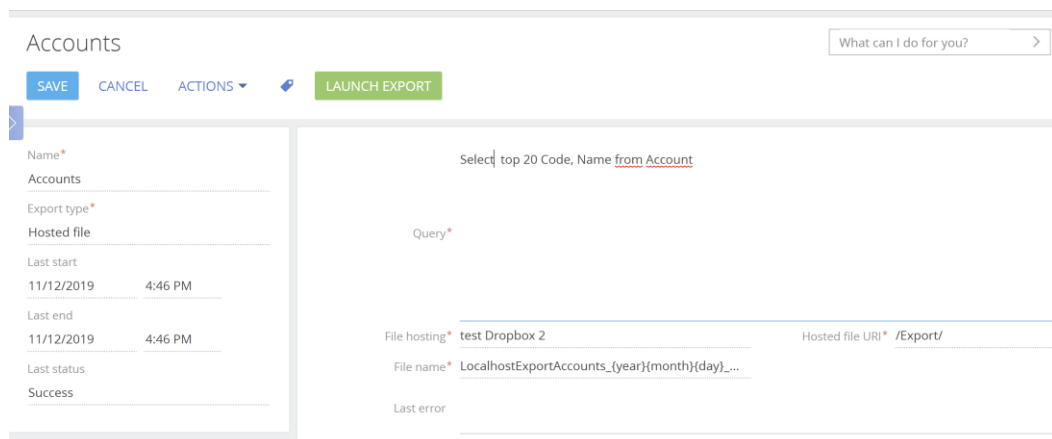
For example, in your Dropbox Application, create /Export/



Select **Export** in the menu, then click on **New** button:



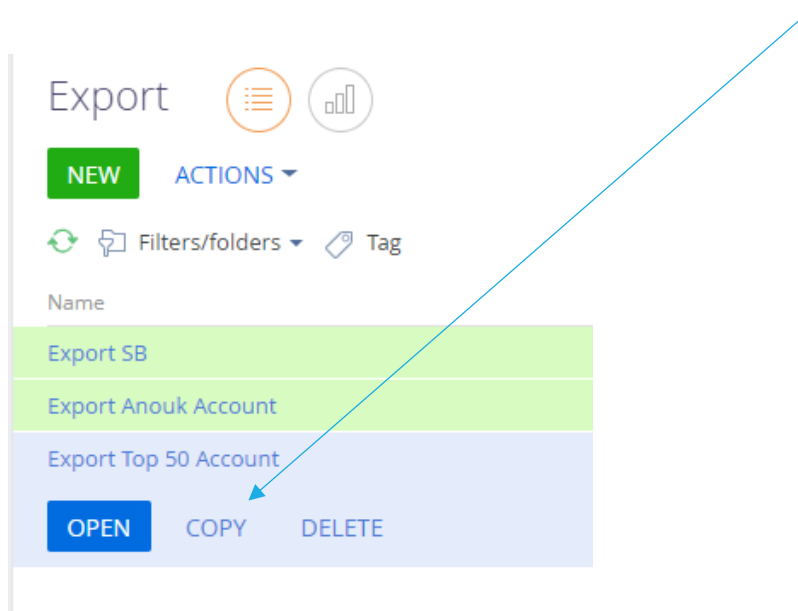
The following page is shown.



Specify the following fields:

- **Name:** Friendly name of the export.
- **Export type:** select “Hosted file”, “Attachment File” or “Email File”.
- **File Format:** choose between “Csv (*.csv)” or “Excel workbook (*.xlsx)”.
- **Query:** specify the SQL query used for extracting to the file
 - For example, select the top 50 accounts: *“Select top 50 Code, Name from Account”*
 - You can use the following wildcards to use some current user connection constants:
 - {CurrentUser_SysCultureId} : get the id of the culture of the current user.
 - {CurrentUser_AccountId} : get the id of the current contact.
 - {CurrentUser_ContactId} : get the id of the account of the current user.
- **File hosting:** select the records you have created in “File Hosting” menu.
- **Hosted file URI:**
 - This is the path to where the file will be extracted, for example */Export/*
 - Specify the full path from the root (Dropbox, SFTP)
- **File name:**
 - Give a name to the csv file that will be generated (Name & variables). You need to use variables in order to have a different file for each export. The following wildcards (variables) can be used in this field:
 - {year}: Current year number (4 digits)
 - {month}: Current month number (2 digits)
 - {day}: Current day number (2 digits)
 - {hour}: Current time hour (2 digits)
 - {minute}: Current time minute (2 digits)
 - {second}: Current time second (2 digits)
 - For example :
“ExportTop50Accounts_{year}{month}{day}_{hour}{minute}{second}.csv”

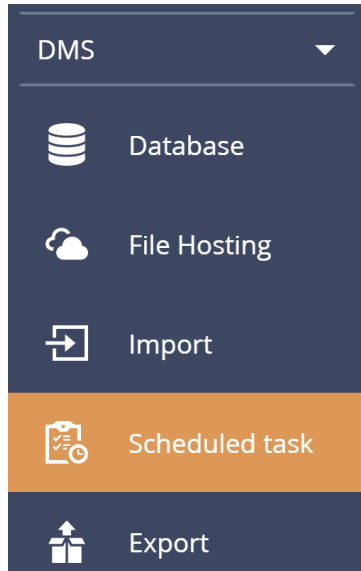
You can copy the existing export Example by clicking on the line and choosing COPY



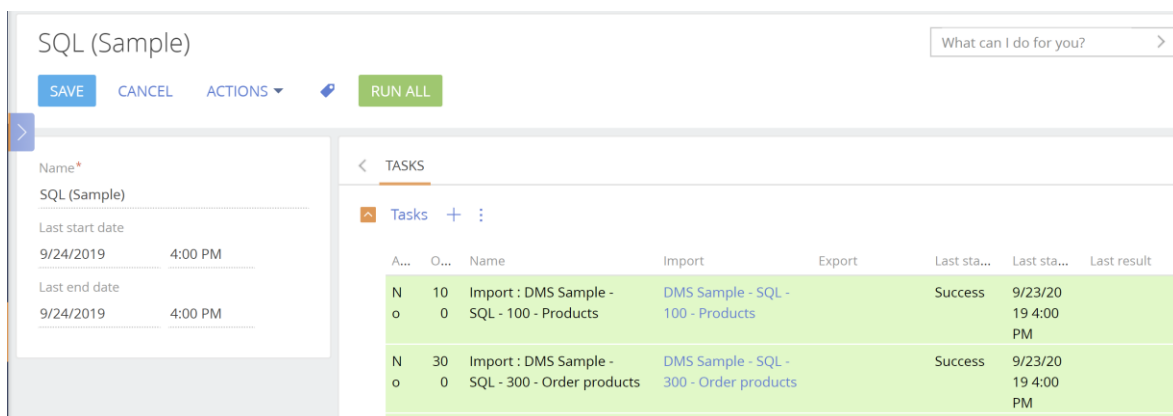
7 Scheduling

Configure the tasks running order.

Select **Schedule task** in the menu, then click on the **New** button:



The following page is then shown:



The screenshot shows the 'SQL (Sample)' task configuration page. It includes a search bar, 'SAVE', 'CANCEL', 'ACTIONS', and 'RUN ALL' buttons. The 'Name' field is filled with 'SQL (Sample)'. The 'Last start date' and 'Last end date' are both set to '9/24/2019 4:00 PM'. The 'TASKS' section shows a table with two tasks:

A...	O...	Name	Import	Export	Last sta...	Last sta...	Last result
N	10	Import : DMS Sample -	DMS Sample - SQL -		Success	9/23/20	
o	0	SQL - 100 - Products	100 - Products			19 4:00 PM	
N	30	Import : DMS Sample -	DMS Sample - SQL -		Success	9/23/20	
o	0	SQL - 300 - Order products	300 - Order products			19 4:00 PM	

You need to fill the Name field which contains the friendly name of your scheduled task, then click on the + icon above the Tasks section.

The following page is then shown:

SQL (Sample) / Scheduled task detail What can I do for you? >

[SAVE](#) [CANCEL](#)

Scheduled task
SQL (Sample) Export* [Export accounts](#)

Ordinal*
301

Type*
Export

Active?

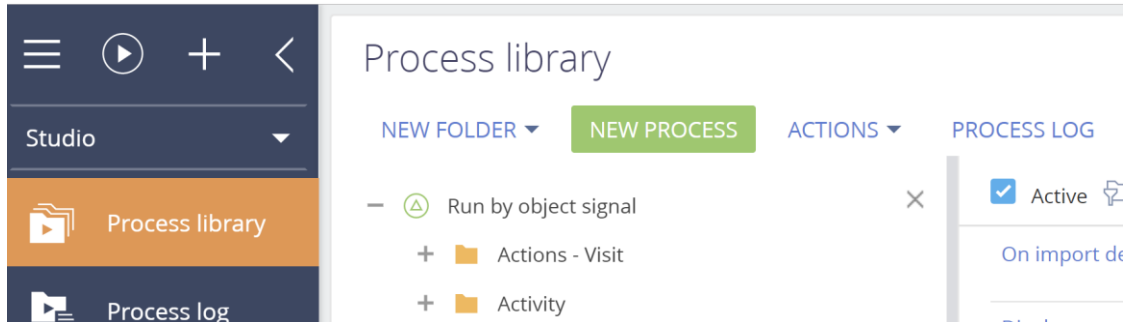
Last result

Here is the description of each fields:

- **Ordinal:**
 - This field represent the running order of the current task.
 - By default, this field is initialized by the max task ordinal incremented by 1.
- **Type:**
 - You can choose between the following values:
 - **Export** : specify the “Export” lookup.
 - **Import** : specify the “Import” lookup.
 - **SQL Command** : specify the “SQL command text” field.
- **Active:**
 - If checked, the task is performed, untick this field if you want to disable this task.
- **Last result:**
 - Contains the errors if any.

8 Run

Go to Process library menu item, then click on the New Process button:

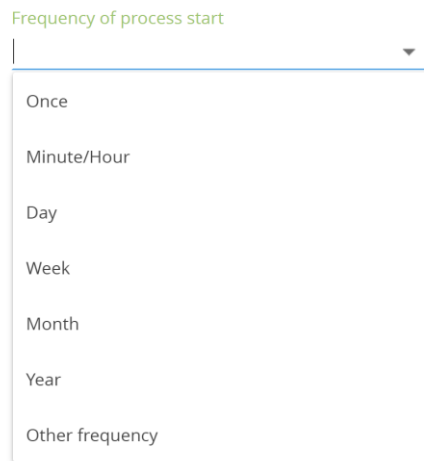
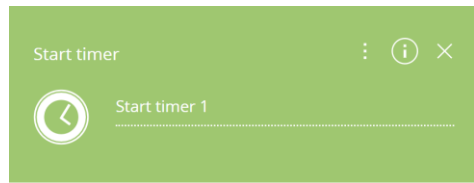


Drag and drop the **Start Timer** component (in **Start events** group)

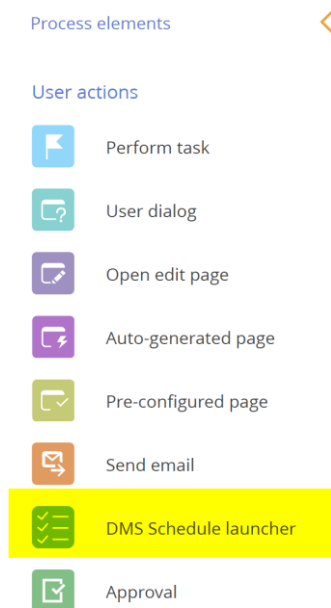
Start events

- Simple
- Message
- Signal
- Start timer

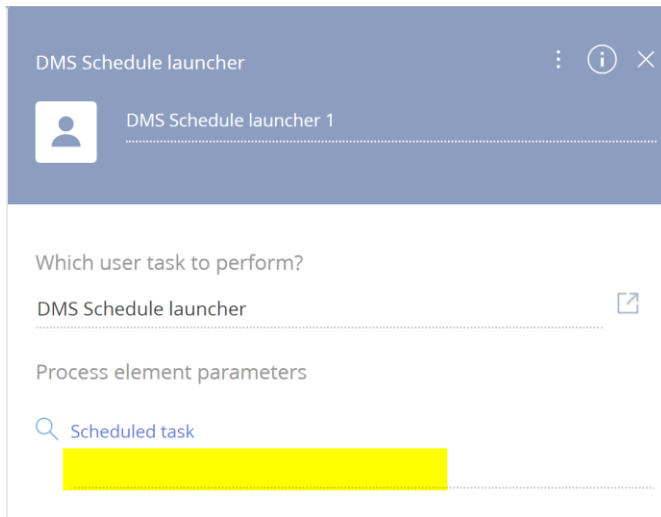
Choose the needed frequency of this scheduled in the component property:



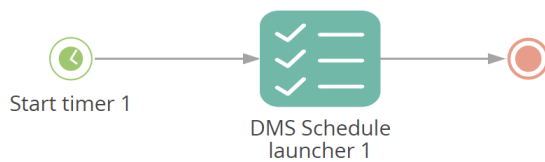
Drag and drop the DIMEX Schedule launcher component (in **User action** group)



Fill the component lookup property with the name of the Schedule task record.



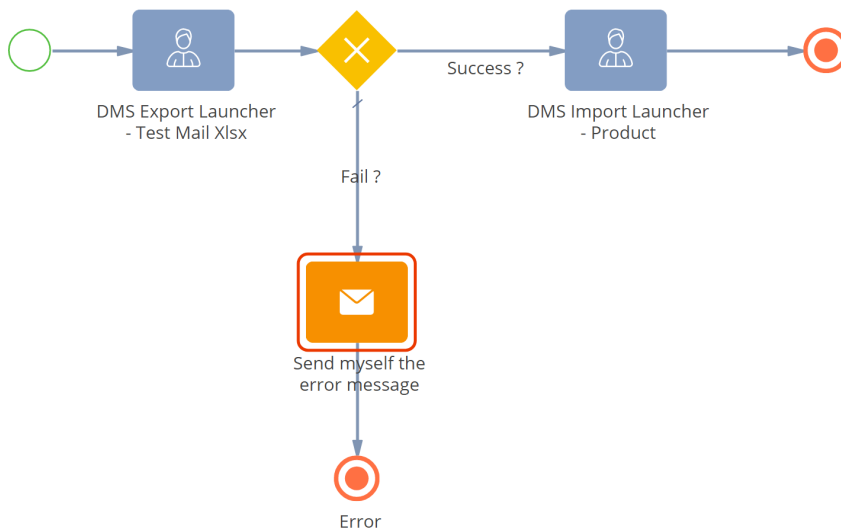
Link the components in order to obtain the following flow:



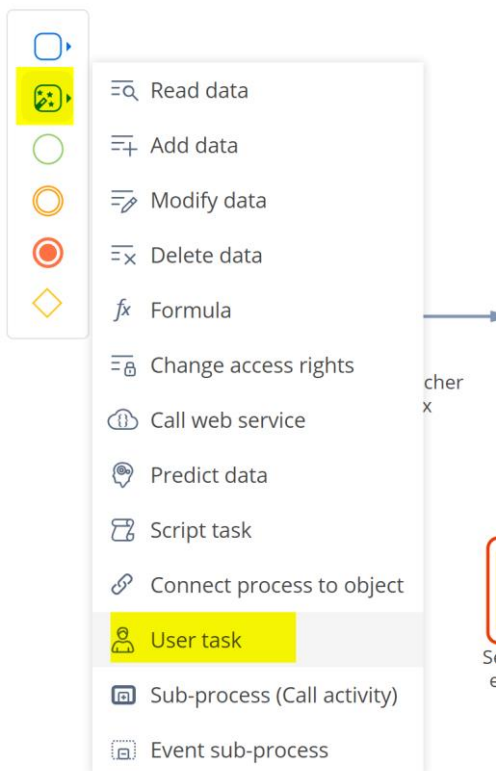
Save the process.

9 Import & export process components.

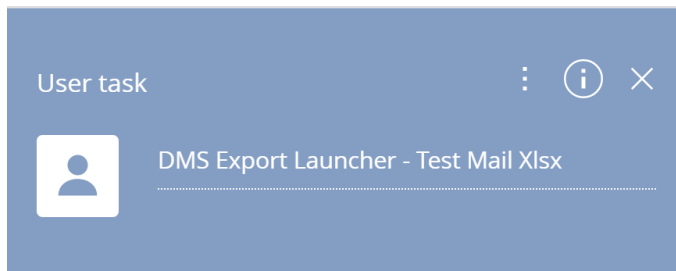
You can now use DIMEX Import and Export components in a process order to chain the calls and eventually check if there is some error.





Create a Creatio process, and add a user task component like below:



Select either “DIMEX Export Launcher” or “DIMEX Import Launcher”



Which user task to perform?

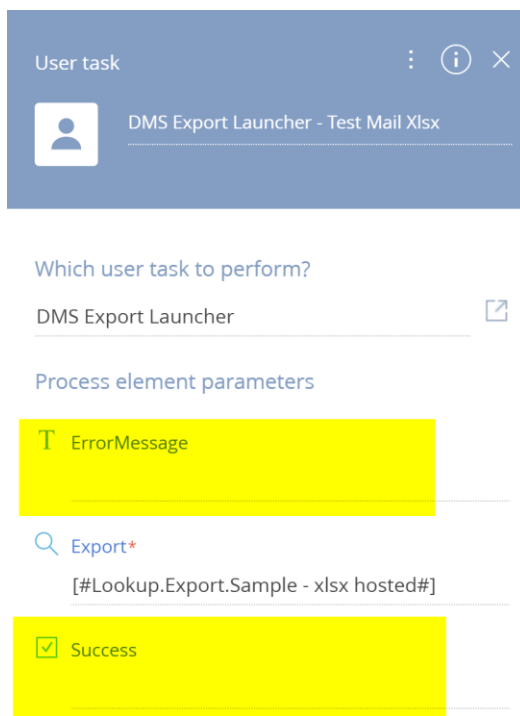
DMS  

- DMS Export Launcher
- DMS Import Launcher

Success

Then choose your record in export / import lookup.

You can retrieve a success Boolean and an error message at the component level:



Thank you for using DIMEX!