

# Data Warehouse

## User Handbook

|         |              |
|---------|--------------|
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# 1 Introduction

## 1.1 Purpose of the document

The Data Warehouse (DWH) User Handbook, hereinafter referred to as UHB, aims to facilitate the use of the Data Warehouse Graphical User Interface. It is addressed to all DWH users, regardless of the parties and describes the full range of functionalities available in user-to-application (U2A) mode. The UHB provides detailed reference information on all GUI functionalities and step-by-step descriptions. Thus the DWH UHB provides helpful information on the use of the DWH GUI.

There is only one handbook for DWH addressing all actors: Central Banks (CB), Payment Banks (PB) and Ancillary Systems (AS). Specific chapters for CB users with advanced user's profile (see chapter [Overview](#) [▶ 30]) are marked with the annex "for advanced user" in the title of the chapter. All other chapters are relevant for each reader.

The UHB is part of the functional documentation and complements the DWH UDFS, which can be found on the ECB's website.

Updated versions of the UHB will be provided on a regular basis.

### 1.1.1 UHB Methodology

To ease orientation and help you to find your desired information quickly several symbols and methodological elements are used throughout the DWH UHB.

#### **Page**

Every page of the UHB has a similar page layout. You can find the following elements:

- | The header, which shows the chapter and the sub-chapter title,
- | The text, which contains the main information, tables and screenshots
- | The footer, which shows page number and the amount of pages of the document

#### **Links**

Links are illustrated throughout the UHB with a little triangle followed by a page number within squared brackets. These links help you to jump to related sections by clicking on them or turning to the relevant page.

Example:

[▶ 209]

## Tables

Tables are used to present information in a clearly arranged format. They consist of a table head and a table body. The body is divided into a left and a right column. The left column contains keywords, for example field names, which are explained in the right column. Subsections within a table are preceded by a heading. The order of the description follows the appearance on the screens from left to right and from top to bottom.

## Action steps

Step-by-step descriptions are divided into single action steps. These steps are numbered sequentially. Intermediate results are described where appropriate.

## Screenshots

Screenshots are used to illustrate the corresponding text. Note that there might be minor deviations between the screenshot and your screen appearance, according to your access rights or a specific selection you have made. In addition, some functions are mutually exclusive and cannot be represented in a single screenshot. In these cases, the screenshot illustrates the more relevant use of the screen.

Values shown on a screenshot might also deviate from the default values indicated in the description. In these cases, the description is valid rather than the screenshot.

### 1.1.2 UHB Structure

The UHB is divided in eight chapters:

#### Chapter 1

The chapter **Introduction** explains the aim, the content and the approach of both the UHB and the DWH GUI. While the first section explains how to use the UHB, the second section focuses on technical requirements.

#### Chapter 2

The chapter **Introduction to the Data Warehouse** provides background information about the Data Warehouse itself and also about the software tool used as GUI.

#### Chapter 3

The chapter **First steps & basics** provides the reader with basic elements and the structure of the DWH GUI.

#### Chapter 4

The chapter **Working with reports** explains the reader how to

l copy and save a report (see chapter [Copy, save and export](#) [▶ 71])

- | run a report (see chapter [Running reports](#) [▶ 83])
- | schedule a report (see chapter [Scheduling reports](#) [▶ 102])

### **Chapter 5**

The chapter **Predefined reports** provides the reader with information about all predefined reports.

### **Chapter 6**

The chapter **Understanding user rights and access rights** is only applicable for advanced users and explains on one hand the functional security and on the other hand the data security in DWH.

### **Chapter 7**

The chapter **Creating reports** is only applicable for advanced users and provides information how to build a user defined report from scratch and how to adapt a predefined report.

### **Chapter 8**

The chapter **DWH data objects** lists all data objects available in the DWH GUI.

## 1.2 Set-up and Login

### 1.2.1 GUI Access

Users are directed to an initial page named ESMIG portal that ensures proper routing to the web applications the user has been granted to enter. Refer to the Connectivity Guide specified in the ESMIG UDFS document, current version available, for details on the communication network and services.

### 1.2.2 Technical Requirements

Before entering the GUI, make sure to implement all necessary preparations described below.

Such preparations may be subject to periodical review/update to comply with changing technical/regulatory scenarios.

The following web-browsers are suggested:

- | Mozilla Firefox 78.0 +
- | Google Chrome 88.0 +

The required minimum screen resolution is 1366 x 768 pixel. Screen resolutions below this requirement are not supported and can lead to a deviating appearance and functionality of the GUI.

Even if the screen resolution fulfils the requirement defined above, it is important to note that scaling options provided by the operating system and the browser (e.g. 125% or 150%) may cause a deviating appearance and functionality of the GUI. If this is the case, the usage of scaling options is not supported.

## 2 Introduction to the Data Warehouse

### 2.1 Overview

The aim of the DWH is to store and compile information coming from T2 (Real-Time Gross Settlement (RTGS) and Central Liquidity Management (CLM)), TARGET2- Securities (T2S) and common components i.e. Common Reference Data Management (CRDM), Billing (BILL), Contingency Services (ECONS II) and Business Day Management (BDM) in a homogenous manner at business level. As in T2 only data from the current business day are available, based on a reliable and secure database, the DWH offers the possibility of accessing the past data accumulated for further data analysis.

The DWH provides access to data in U2A mode and permits access to data within the databases. It gives a business-oriented view of the collected data without any detailed technical database terminology. Therefore, no knowledge about the database structure of T2 or T2S is required. It provides information through reports as predefined reports (for all user profiles) and user defined reports (only applicable for CB users with advanced user profile).

The DWH consolidates the content of the sources into a single database for reporting purposes and offers predefined reports to the users of the following T2 parties:

- | Central Banks (CB),
- | Payment Banks (PB),
- | Ancillary Systems (AS).

The precondition for a user to obtain access to the DWH is a setup in CRDM by the respective party. Access to the DWH depends on the user's profile, which ensures that the user is allowed to perform the requested action(s). There are two user profiles reflected as privileges in CRDM:

- | Normal user profile: will be available for all party types.
- | Advanced user profile: will be available for CB users only.

The data scope in the DWH follows the following rules:

- | Users have access to their parties' data based on the data scope according to the hierarchical model (for details please refer to CRDM UDFS).
- | For CBs: Each CB has access to granular data for all parties belonging to its system entity. Moreover, each CB has access to aggregated data of all system entities.

The DWH uses Cognos as platform. It is an enterprise wide Business Intelligence (BI) solution, mostly used for reporting. Cognos is a web-based solution. Both the development and the end user interface are displayed on the web. It supports Relational Online Analytical Processing (ROLAP) and Multidimensional Online Analytical Processing (MOLAP) data sources.

The DWH provides reports to users in different formats in user-to-application mode (U2A) or to other applications in application-to-application mode (A2A). The user can run a report directly in the DWH GUI

(Cognos) and export the result. The second option is A2A delivery of the report as a file. To achieve this, the report has to be scheduled as described in chapter [Scheduling reports](#) [▶ 102].

**Note:** A CB user with advanced user profile was used in order to show the full scope of all screenshot pictures presented in this document.

## 2.2 Process of the Data Warehouse

DWH receives data from different services and common components and processes the data in order to make them available via reports and files. The data passes through the following three layers:

1. landing zone,
2. core layer,
3. enterprise layer.

The data are transmitted into the landing zone of the DWH as a copy after the end of each business day (EoD). The landing zone buffers the data before they are selected and loaded into the core layer.

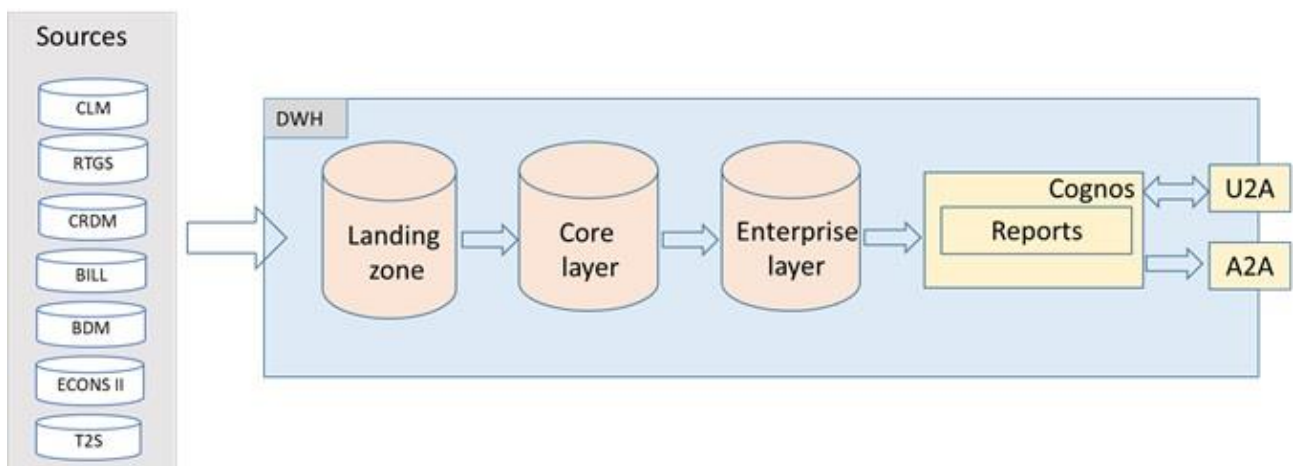
The core layer stores only granular, validated, harmonised and historicised data.

From the core layer the data are loaded into the enterprise layer. In the enterprise layer the data are aggregated, calculated and prepared for reporting and analysis in a dimensional structure.

The stored data cannot be retrieved in the landing zone; instead, detailed structured and aggregated data can be accessed through the reports. The reports are built using the data in the core and the enterprise layer.

After processing (data transformation and pre-calculations) of the transmitted data within the DWH, data from the previous business day are available in the DWH at the start of the new calendar day at the latest.

The following diagram provides a high-level overview of the flow from the source through the different DWH layers:



**Figure 1 - DWH high level overview**

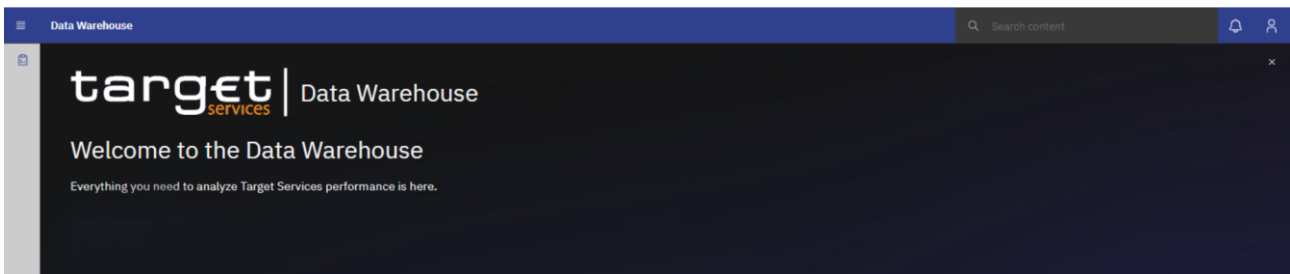
### 3 First steps & basics

#### 3.1 Access to the DWH

Access to the DWH is managed through the Eurosystem Single Market Infrastructure Gateway (ESMIG). ESMIG provides to the DWH specific credentials found in CRDM for a specific user-id. This ensures that you have access to the relevant information depending on the party you belong to, the party type and your privilege.<sup>1</sup>

As soon as your login is successful you will see the welcome page.

The welcome page provides quick access to the product functionalities and content.





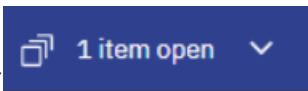
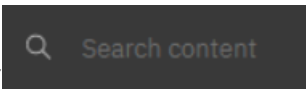

**Figure 2 - Welcome page**

The welcome page consists of the following building blocks:

##### Global application bar

The global application bar (the blue bar at the top of the screen) is a constant element of the user interface.

When the welcome page is open, the following, standard options are available:

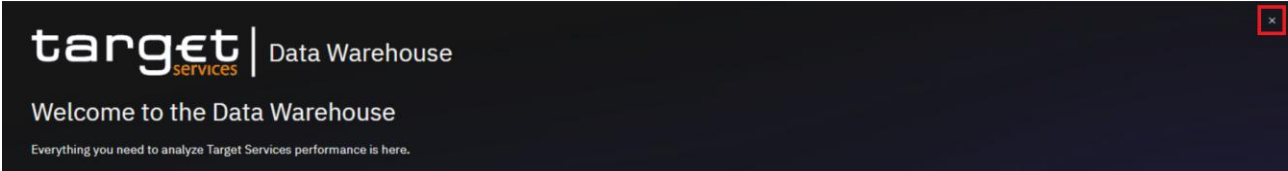
- I “Open menu” icon ()
- I “Data Warehouse” home page link ()
- I “View switcher” - only visible if at least one document is open ()
- I “Search content” ()
- I “Notifications” icon ()


<sup>1</sup> For details on the network communication and services, please refer to the Connectivity Guide specified in the ESMIG UDFS.



| “Personal menu” icon ()

### Welcome banner




You can hide the banner by clicking the “Close” icon () or you can go to the personal menu, and under “Profile and settings > Settings”, toggle the “Welcome banner” switch on or off.

## 3.2 Navigating in the DWH GUI – Global application bar

### 3.2.1 Open menu

The “Open menu” is the main access point to the Cognos Analytics.

Click the “Open menu” icon () in the application bar to access the menu options.

### 3.2.2 Data Warehouse icon

By clicking on the “Data Warehouse” icon () you return to the “Welcome” page.

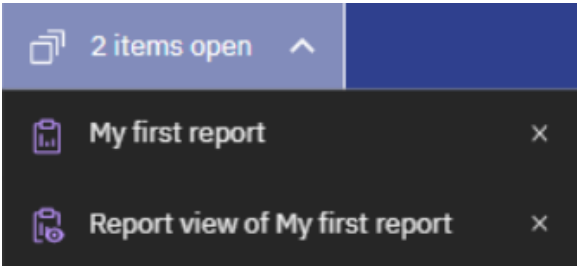
### 3.2.3 View switcher

In the DWH GUI different pages each containing another report can be open at the same time. The “View switcher” in the application bar provides a convenient way to navigate between open views, and closes the views when they are no longer needed. You can navigate between different types of items, such as folders, reports, schedules, and more, from this view.



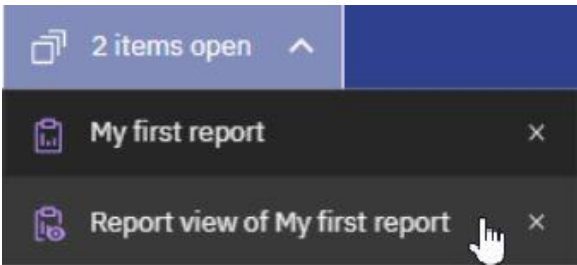
Figure 3 - Welcome page - navigation view

In the following example, you open a report and a report view. The “**View switcher**” provides the ability to view both of the objects:



**Figure 4 - Welcome page - navigation view - items**

By clicking on the report or the report view, you can switch between the report and the report view:



**Figure 5 - Welcome page – navigation view – items – report view selection**

### 3.2.4 Search content

Search content is a quick and easy way to find content in Cognos.

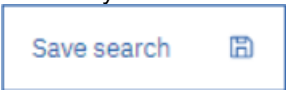
You can search for items such as reports, folders etc. You can also search for table or column labels, XML report specifications, shortcuts, templates, and more.


Search content does not return results for content that is archived, but you can access archived content from any report that is listed in one of your folders.

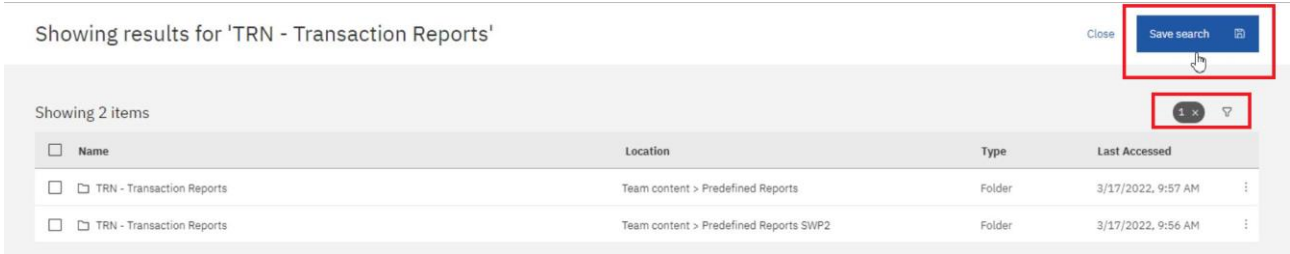
The search content box is located in the application bar, as shown in the following screen capture:



**Figure 6 - Welcome page – Search content**

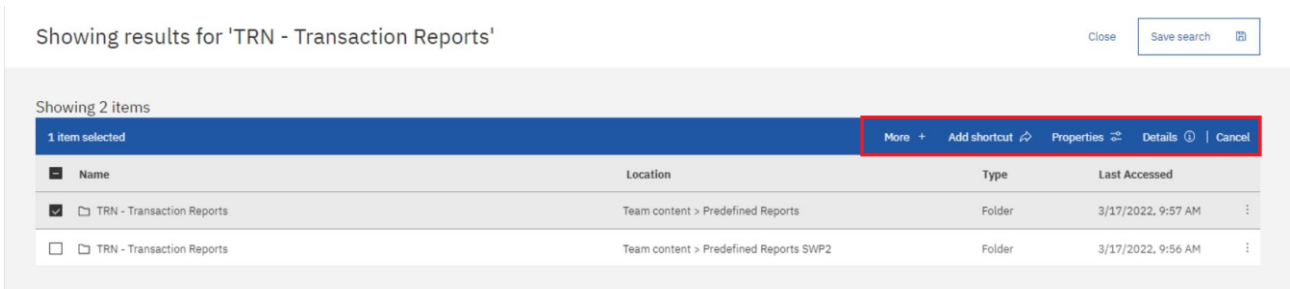
To find items, type the search terms (keywords, phrases, strings), and click the Enter key. After the search results are listed, you can save your search by clicking the “**Save search**” button (  ). If

your search returns too many results, you can click the “filter” icon (  ), and select the options that you want. The filter option is only available after you do an initial search. The filters are saved with the search.




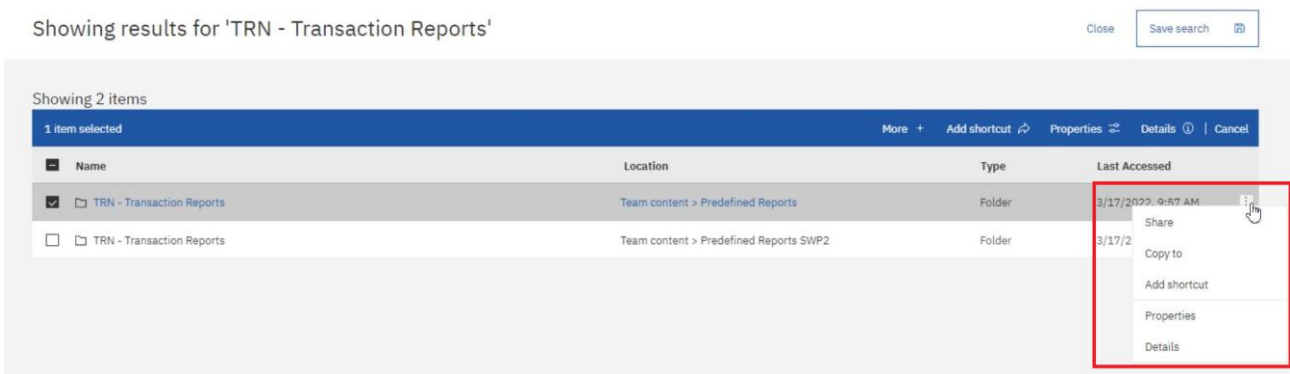
**Figure 7 - Welcome page – Search content - Save search**

From the search results page, you can initiate actions on the returned items. If you select multiple items (by clicking their check boxes), the related actions that are available for all or at least one item are shown in the toolbar, above the search results.



**Figure 8 - Welcome page – Search content - initiate actions**

To view the actions for a specific item, select the checkbox for this item (all other items must be deselected), and click its “Action menu” (  ) icon. The actions that are available for the selected item are shown. For example, the following screen capture shows actions for a report.



**Figure 9 - Welcome page – Search content - Action menu**

**Special characters and search in double quotation marks**

You can use the following special characters in your search terms:

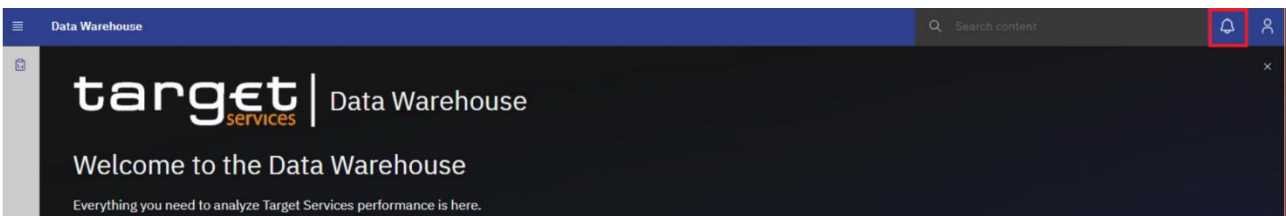
”~`!@#\$\$%^&\*()-+=={[}]|:;<,>./?”

When you enclose your search terms in double quotation marks (" "), the search results include only those instances where the terms appear in the exact order as within the double quotation marks.

### 3.2.5 Notification

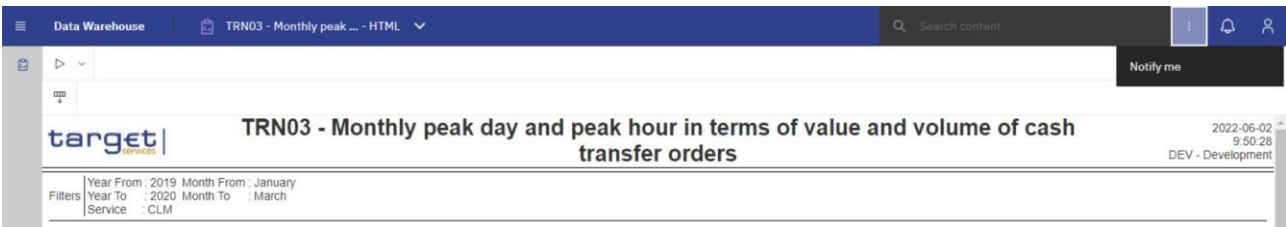
Notifications help you stay on top of important data.

If you view a saved output and you want to know when there is a new version of the report, you can click the **“Notify me”** button. A saved output is either a report view in html format or the html view of the report when the option **“Run in background”** is selected. If you choose to be notified when a new version is available, you are notified every time t a new version of the report is delivered..



**Figure 10 - Welcome page - Notification**

The Notify me option is available in view mode of an html output of a report or a report view when it is saved in “My content” folder when you tap the “More” button in the application bar.



**Figure 11 - More options – Notify me**

If you request notification and then someone runs that report, you get a notification with a link to the updated version.

When you subscribe, if you choose the **“Save the report on the system”** delivery option, you receive a notification with a link to the new report version.

To see all your notifications, tap the **“Notifications”** icon  in the application bar. When you receive a new notification, a number is added to the icon .

### 3.2.5.1 Subscribing to reports


When you subscribe to reports, you pick the time, date, format, and where you want it delivered. When you subscribe to a report, the subscription includes all your prompt and parameter values.

The subscription option is available in the application bar when you run and view a report, but not when you are in editing mode or when you view saved output.



Figure 12 - Welcome page - Notification – subscribe

**Note for users with advanced user profile:**

To ensure that you are in view mode, and not in edit mode, turn off the “**Edit**” toggle (  ).

If you edit a report, you must save it before you can subscribe.

After you subscribe, each time your report is delivered, you are notified by a red circle on the



“**Notifications**” icon (  ) in the application bar.

The number in the red circle indicates the number of notifications that you have not yet viewed. Tap the notifications icon to find a message with a link to view the report output.

After you create your subscriptions, you can view and manage them. For more information, see chapter [Scheduling reports](#) [▶ 102].

### 3.2.6 Personal menu

In the “**Personal menu**” icon you can find settings to customise your DWH experience.

You can view and edit your personal and regional information, monitor the system activities etc. The user can edit the time zone, the product language and view the capabilities granted by the administrator. For further information, please refer to chapter [Profile and settings](#) [▶ 38].

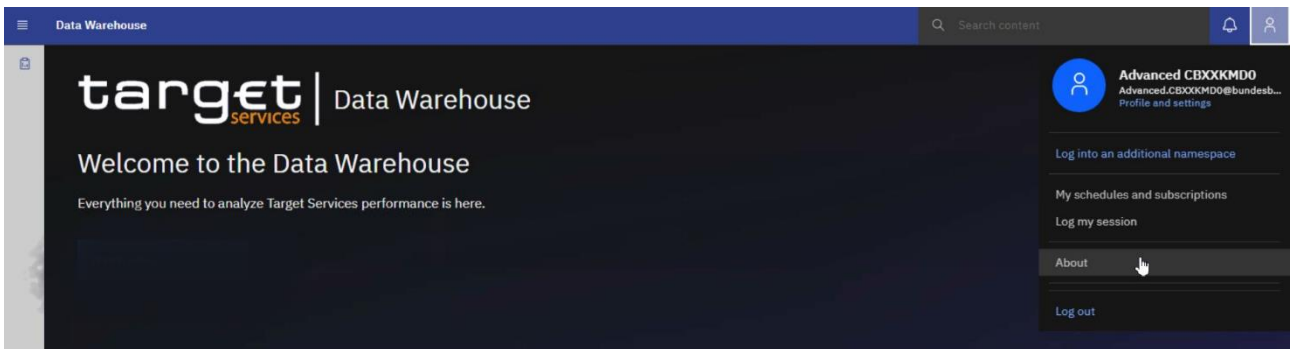


Figure 13 - Welcome screen – Personal menu (1)

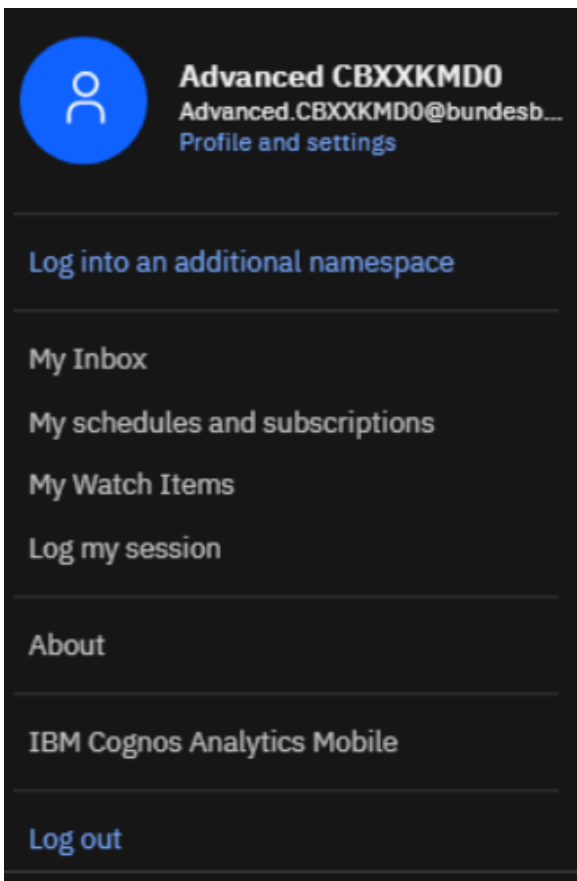


Figure 14 - Welcome screen – Personal menu (2)

### 3.2.6.1 Profile and settings

AugenIn the “**Profile and settings**” menu you can find more information about your user under “**Profile**”. Please note, that some of the settings displayed have to be changed in CRDM e.g. User information, granted privilege.

For example you will see your email address if available in CRDM.

You can also find information about “**Groups and roles**” and “**My capabilities**” described in detail hereafter.

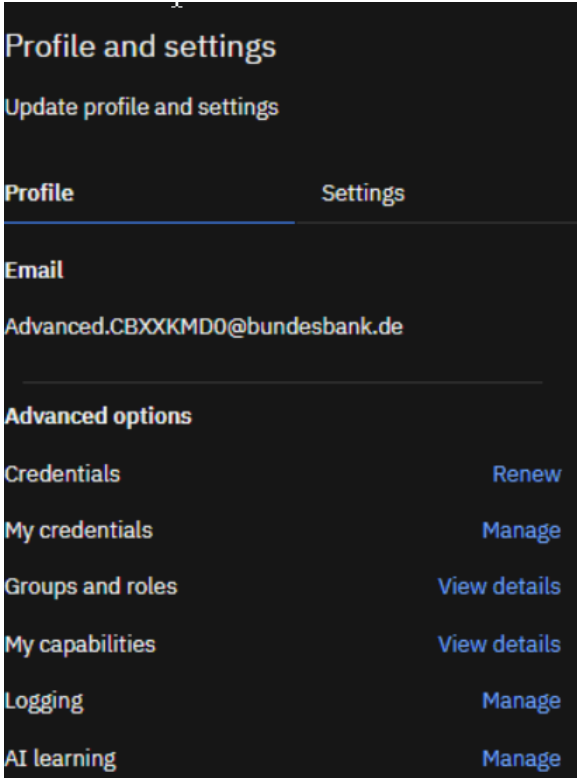


Figure 15 - Welcome screen – Personal menu – Profile and settings – Profile

### Groups and roles

You can find the groups and roles you are associated to by clicking on “**View details**” at the right of “**Groups and roles**”. Please refer to [Understanding user rights and access rights \(advanced users\)](#) [▶ 304] to find more information about groups and roles.

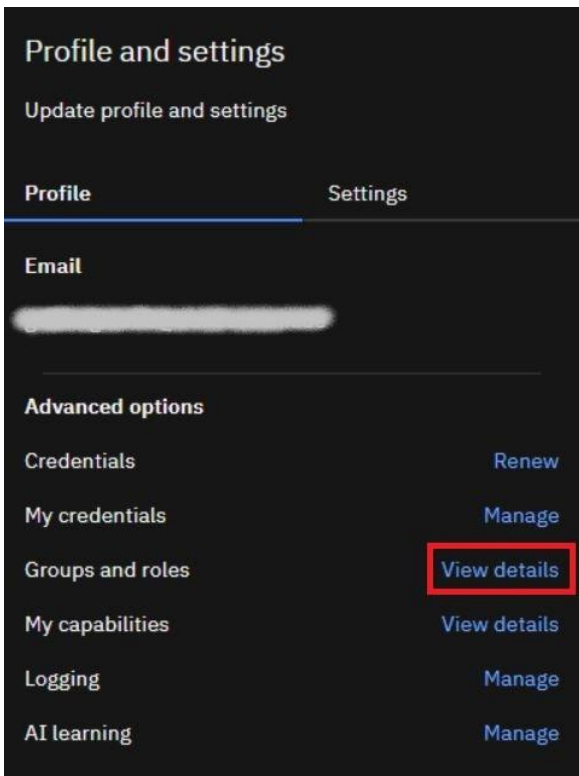


Figure 16 - Welcome screen – Personal menu – Profile and settings – Personal – Groups and roles

In this example, the user belongs to a Central Bank with country code “**KM**”. In CRDM the role containing the “**Data Warehouse Advanced User**”-privilege is granted to the user.

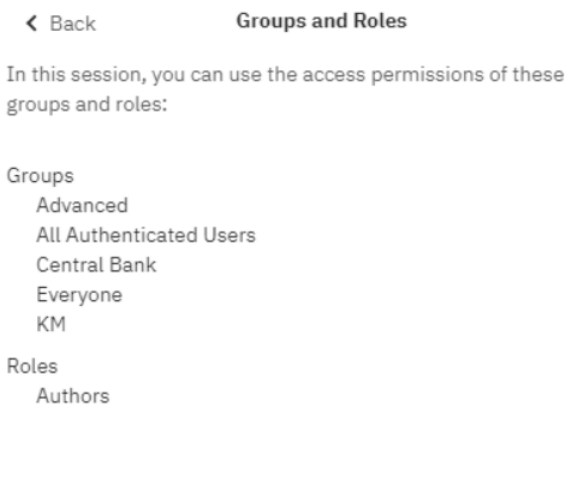


Figure 17 - Welcome screen – Personal menu – Profile and settings – Personal – Groups and roles

### My capabilities

The capabilities control access to different administration tasks and different functional areas of the user interface in DWH. You can find the capabilities assigned to you by clicking on “**View details**” on the right of the section.



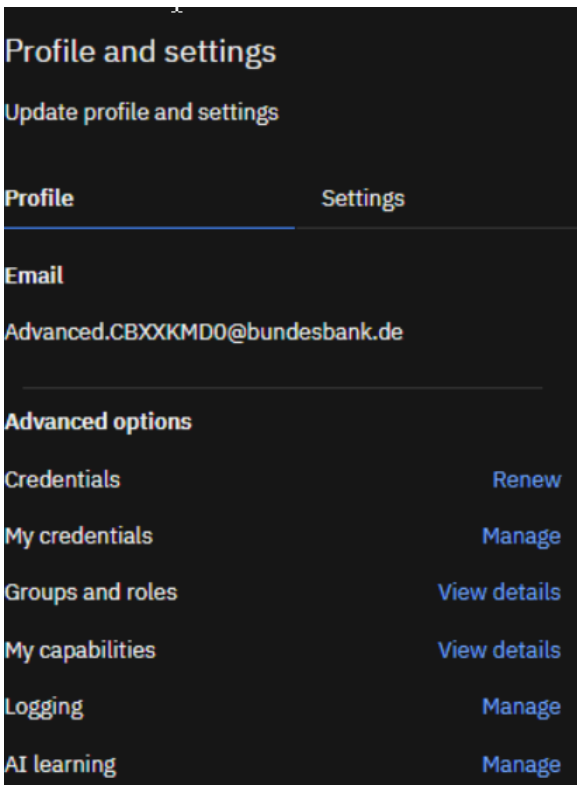
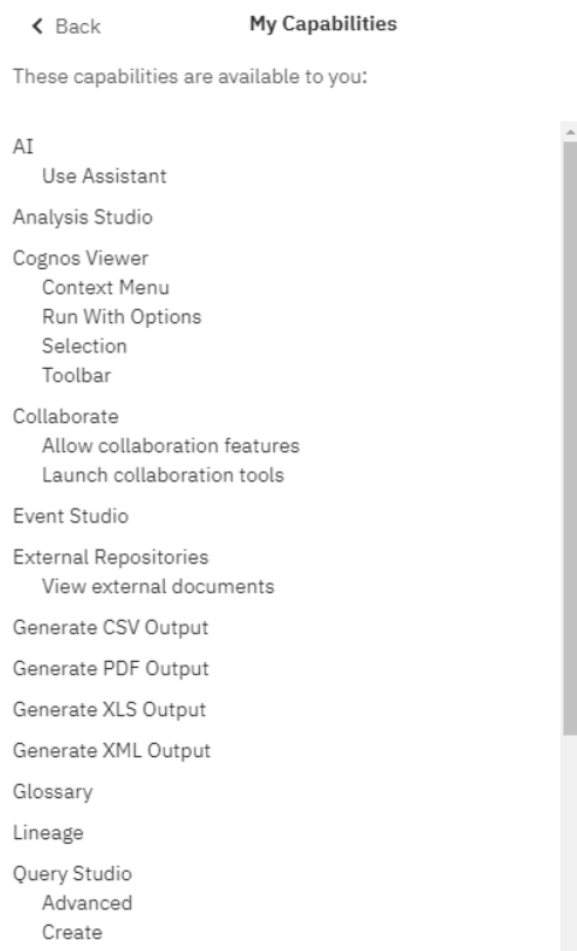


Figure 18 - Welcome screen – Personal menu – Profile and settings – Profile – My capabilities (1)



**Figure 19 - Welcome screen – Personal menu – Profile and settings – Profile – My capabilities (2)**

### 3.2.6.2 Logging

You can use “**Logging**” to enable detailed, diagnostic logging for your current DWH session. This can be useful to support the analysis of the Operational Teams in case you run into reproducible problems or errors while using the Data Warehouse. In such a case, you can turn logging on and then perform the steps that lead to the problem or error you encountered. Session logging can run for one hour maximum, but can be turned off at any time.

A unique identifier is generated to allow the administrator to identify the session logging data. Record the log identifier before you turn off the logging or close your browser. Please remember to add this identifier to your ticket when requesting help.

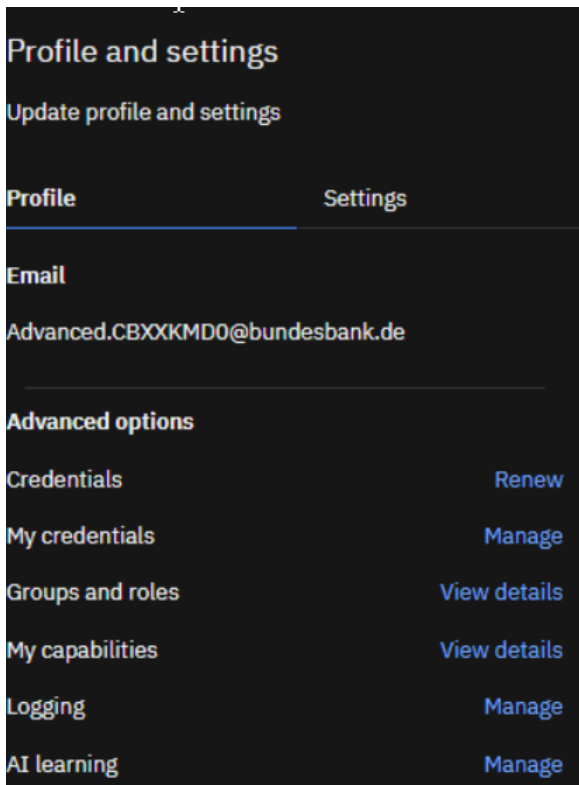


Figure 20 - Welcome screen – Personal menu – Profile and settings - Logging

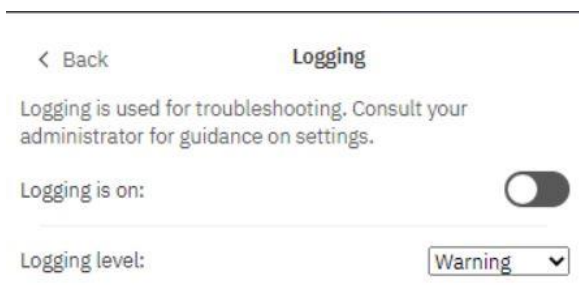


Figure 21 - Welcome screen – Personal menu – Profile and settings – logging

In some circumstances, IBM customer support might direct you to increase the logging level. You can set it to one of the following levels:

**Error**

Basic level of logging that tracks only major error messages that occur during processing on the client workstation.

**Warning**

The next level of logging that includes all the information from the Error level of logging and includes warnings about situations that might not affect your system function.

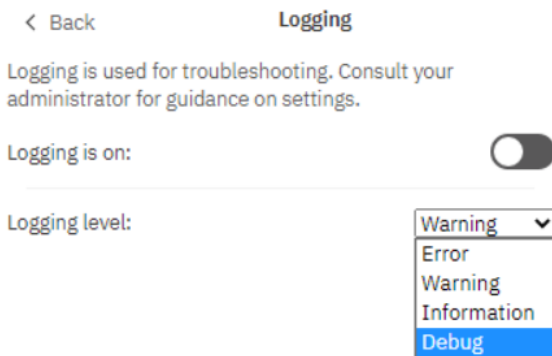
**Information**

This level of logging aggregates all previous levels of logging and includes more detail about the regular operation of the user interface. You might notice that performance at this level is slower.

**Debug**

This level of logging contains the most information. Use it if you are testing your own extensions or when you are advised by a member of the software development team or customer support. You can expect that performance at this level is noticeably slower.

Logging levels are stored in the browser cache. If you clear the browser cache, logging levels return to the default setting.



**Figure 22 - Welcome screen – Personal menu – Profile and settings - logging level**

3.2.6.2.1 Profile and Settings - Settings

You can set up settings for your DWH applications. To set your settings in the personal menu click on “**Profile and settings**” and then “**Settings**”.

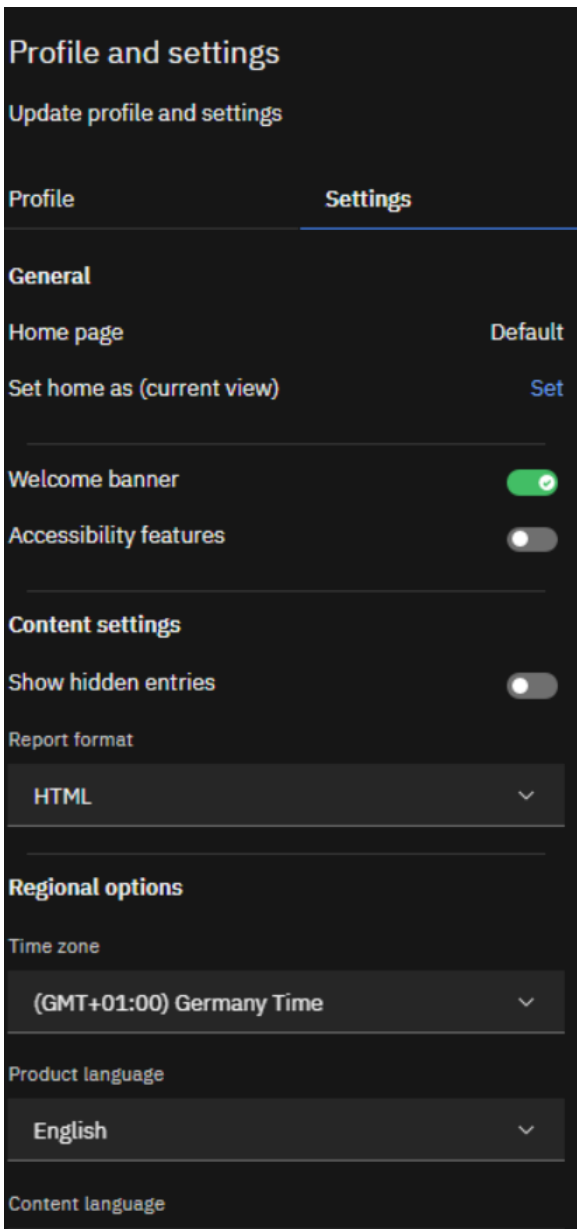


Figure 23 - Welcome screen – Personal menu – Profile and settings – Settings

**Home page**

In case a different page than the default is set, the user can reset to the default

**Report format**

The default value for the report format is html

But you can choose also one of the following formats:

- | Excel (same content as html but as Excel file)
- | Excel Data (only the report data is exported – Not recommended since it does not work properly)

- | Pdf
- | Html
- | Csv
- | Xml

**Turn on accessibility features**

Accessibility features assist users who have a disability, such as restricted mobility or limited vision, to use information technology content successfully

**Show hidden entries**

When you first sign in to the DWH, you can see hints that help you navigate through the user interface. If you turn the hints off, but want to show them again, select the “Show hidden entries” check box.

**Language settings**

The default language is English.

You can select the language that you prefer for the DWH user interface. If your data and reports are available in multiple languages, you can also select the language that you prefer for the content. There is also support for bidirectional languages such as Hebrew, Arabic, Urdu, and Farsi. Report authors can control the display of native digits and the direction of text, crosstabs, and charts.


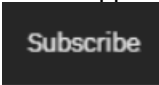
**3.2.6.3 My schedules and subscriptions**

This menu item allows you to browse through the list of all report runs scheduled for the day. You can view all your scheduled activities and subscriptions on the “**My schedules and subscriptions**” panel.

The subscription option is available when you run and view a report, but not when you are in editing mode or when you view saved output.

In order to subscribe to a report:

Run a report.

In the application bar, tap “**More**” icon in the application bar () and then tap the “**Subscribe**” text ().

Select your subscription options, and then tap “**Create**”.

The subscriptions have the following characteristics:

A subscriber requires only Read and Execute permissions for the report.

There can be up to 32 subscriptions for the same report.

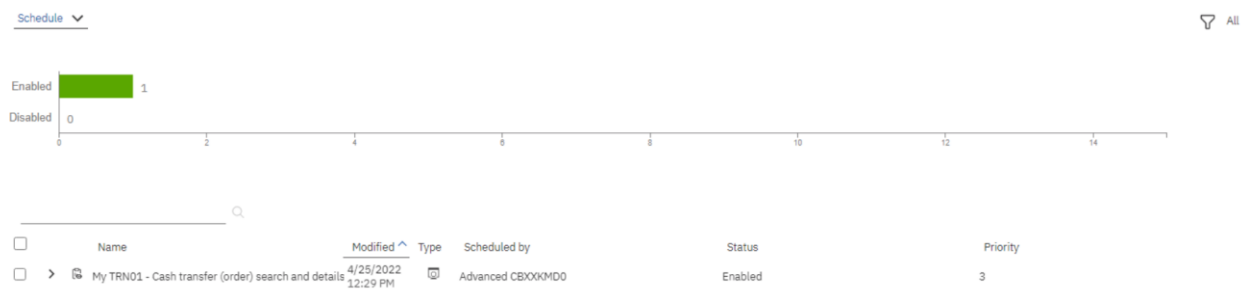
Created by running a report and, in view mode, tapping the “More” icon (  ) in the application bar.

Only the subscriber can view their subscription.

Only the most recent saved report output is available.

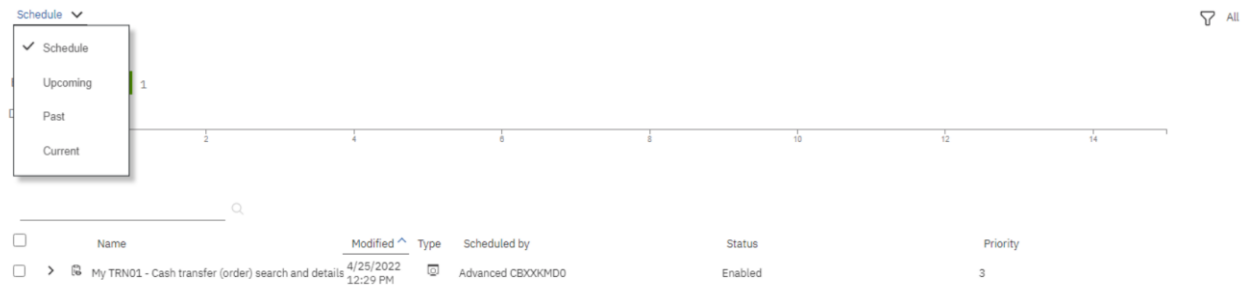
The report can be run daily or weekly.

You can view a list of your scheduled activities that are current, past, or upcoming on a specific day.



**Figure 24 - Welcome screen – Personal menu – My schedules and subscriptions**

You can filter the list to show the entries you want to see by clicking on the down arrow next to the “Schedule”.



**Figure 25 - Welcome screen – Personal menu – My schedules and subscriptions - Filter**

The following screenshots show the upcoming and the past schedules respectively:

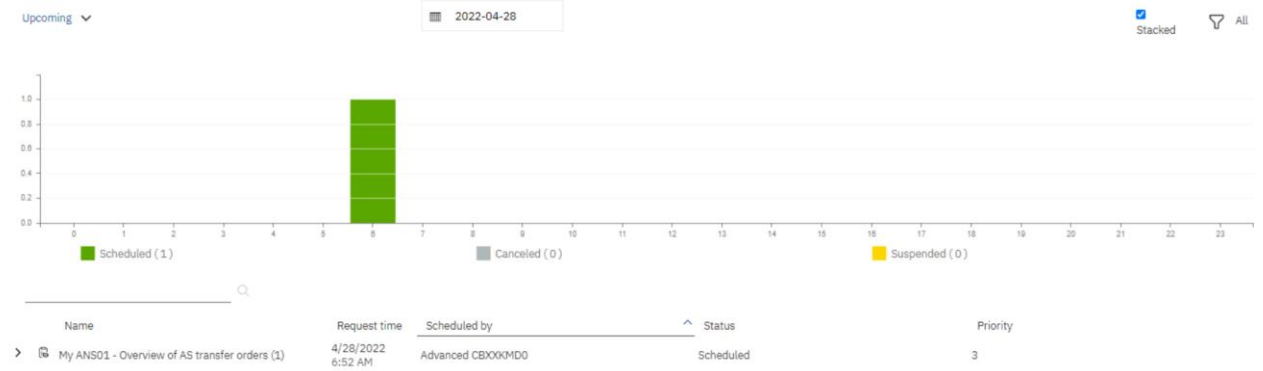


Figure 26 - Welcome screen – Personal menu – My schedules and subscriptions – Upcoming schedules

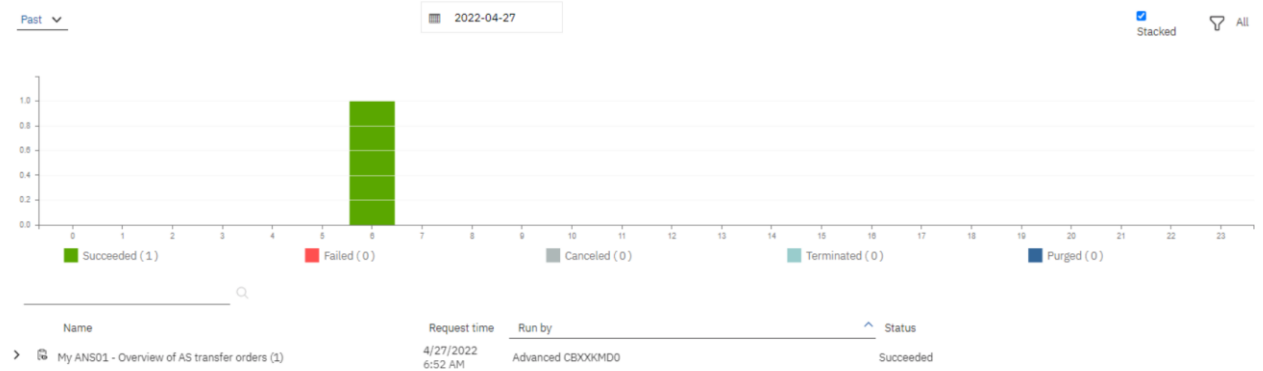

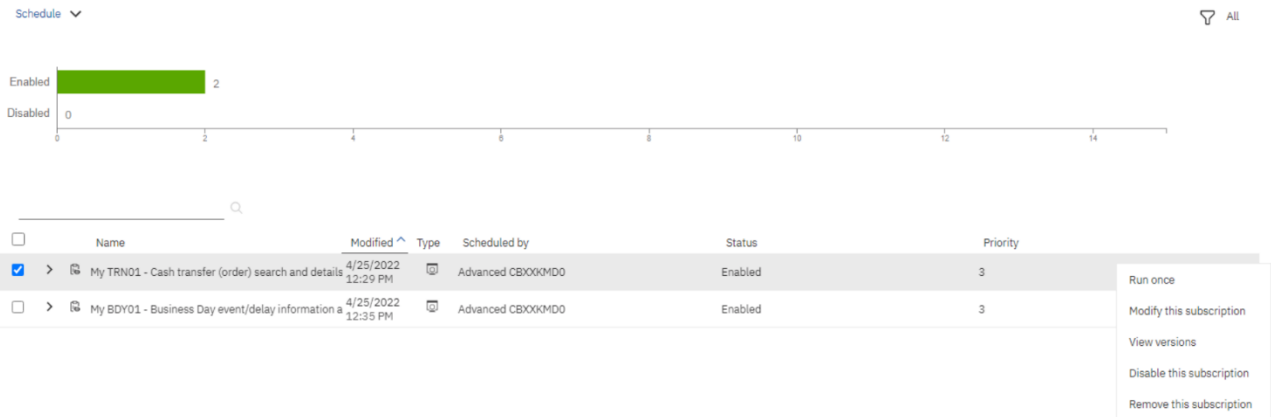


Figure 27 - Welcome screen – Personal menu – My schedules and subscriptions – Past schedules

In general you can enable, disable, modify, or remove subscriptions, and view their saved outputs or the archived version details panel for information such as the run status and run time.

All this information are available by clicking on the “More” icon (  ):

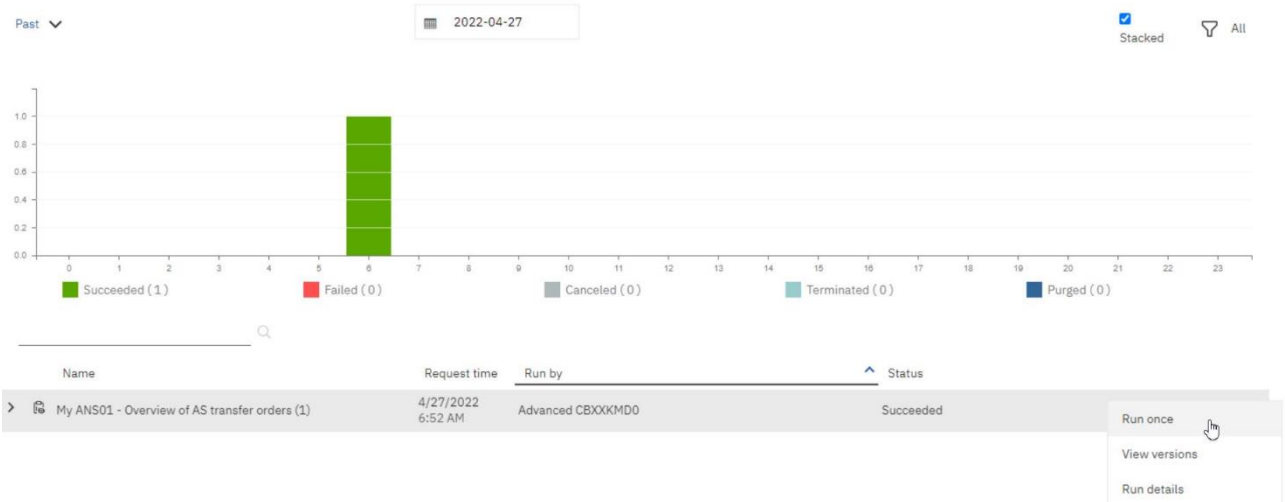




**Figure 28 - Welcome screen – Personal menu – My schedules and subscriptions**

Enabled: The Status “**Enabled**” informs the user that the schedule is active.

Run once: By clicking here, the user can run the report once:



You can find further information on how to run a report in the chapter [Run a report step-by-step](#) [▶ 83].

Modify this subscription: Change the settings for the scheduled report.

### Subscribe

My TRN01 - Cash transfer (order) search and details

When do you want to receive this report?

Repeat on M T W T F S S

Time 12:28 PM

Format HTML

Delivery Save

Prompts 8 schedule prompt values

Update Cancel

Figure 29 - Welcome screen – Personal menu – My schedules and subscriptions – Modify

View versions: The versions of the report, that is the date it was executed after it was successfully scheduled

Versions

Versions Archives

Show all history

Apr 27, 2022, 6:52:00 AM !

Figure 30 - Welcome screen – Personal menu – My schedules and subscriptions – View versions

Disable this subscription: By clicking this option, the user disables the schedule

Schedule ▼

✓ Schedule status was edited. ✕

Enabled 1

Disabled 1

| <input type="checkbox"/> | Name  | Modified           | Type              | Scheduled by      | Status   | Priority |
|--------------------------|---|--------------------|-------------------|-------------------|----------|----------|
| <input type="checkbox"/> | > My BDY01 - Business Day event/delay information a   | 4/25/2022 12:35 PM | Advanced CBXXXMD0 | Advanced CBXXXMD0 | Enabled  | 3        |
| <input type="checkbox"/> | > My TRN01 - Cash transfer (order) search and details | 4/25/2022 12:51 PM | Advanced CBXXXMD0 | Advanced CBXXXMD0 | Disabled | 3        |

Figure 31 - Welcome screen – Personal menu – My schedules and subscriptions – Disable schedule

Remove this subscription: The schedule will be deleted

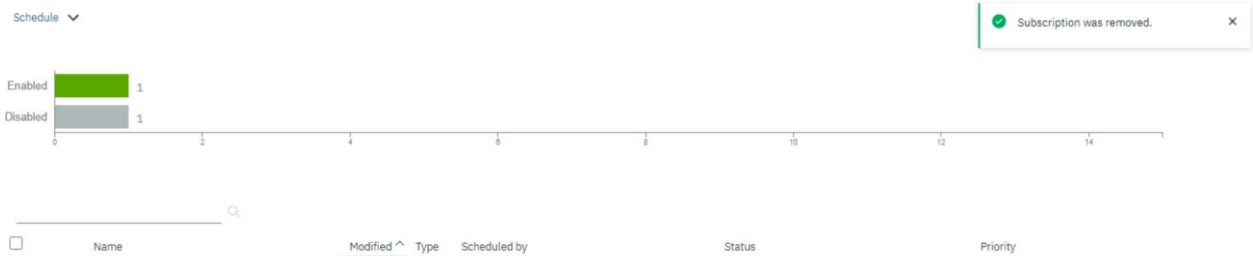


Figure 32 - Welcome screen – Personal menu – My schedules and subscriptions – Remove schedule

In the top right corner, the user will find another filter.

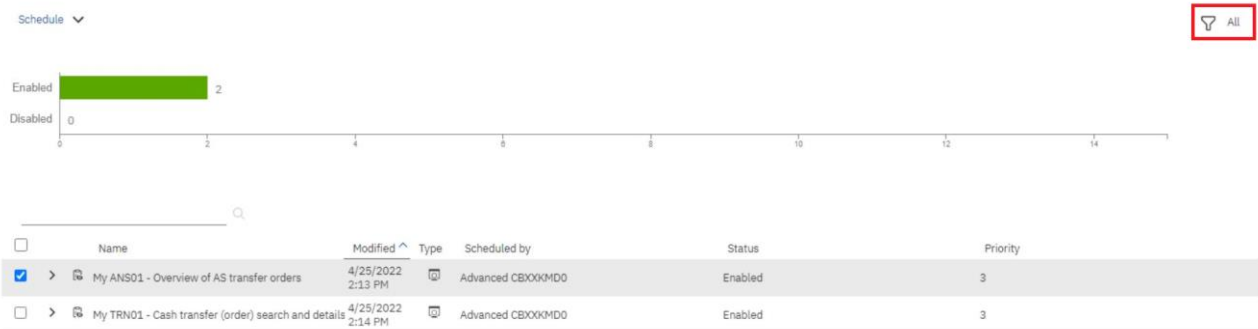



Figure 33 - Welcome screen – Personal menu – My schedules and subscriptions – Filter (2)

By clicking on "All" (  All ) button, the user will be presented with further options.

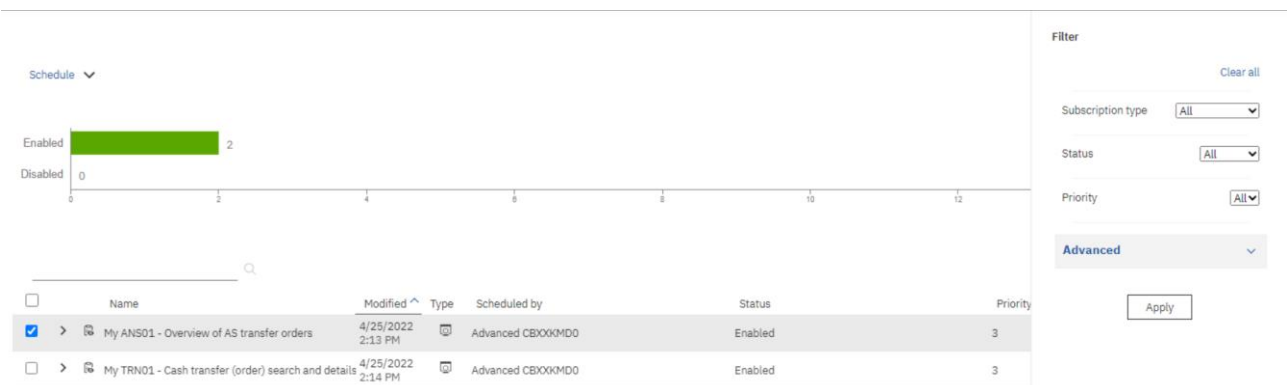
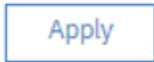
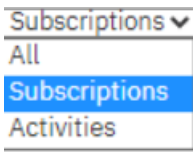


Figure 34 - Welcome screen – Personal menu – My schedules and subscriptions – Filter (2) - Further options

Subscription type: By clicking on the dropdown next to the "Subscription type" the user will be able to filter to see either the subscriptions or the activities.



Verify the choice by clicking on the “**Apply**” button ( ).

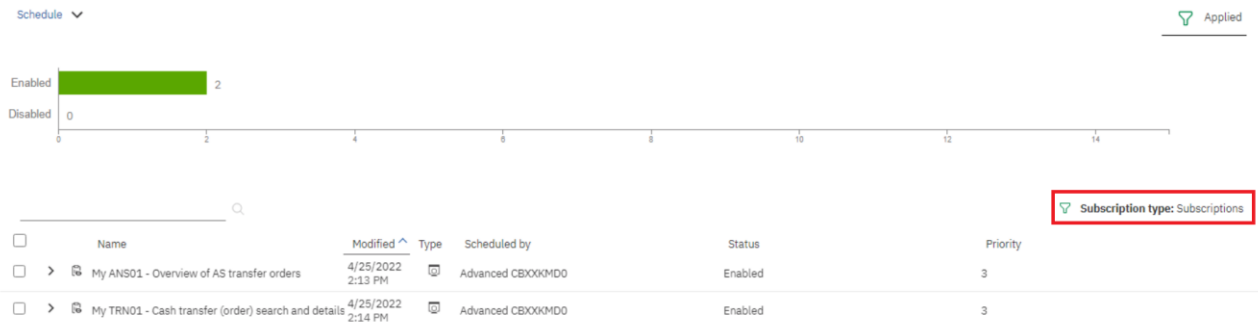
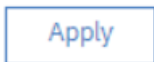
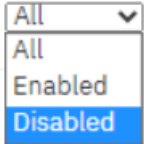


Figure 35 - Welcome screen – Personal menu – My schedules and subscriptions - Subscription type

Status: By clicking on the dropdown next to the “**Status**”, the user can choose to see either the “**Enabled**” or the “**Disabled**” schedules:



Verify the choice by clicking on the “**Apply**” button ( ).

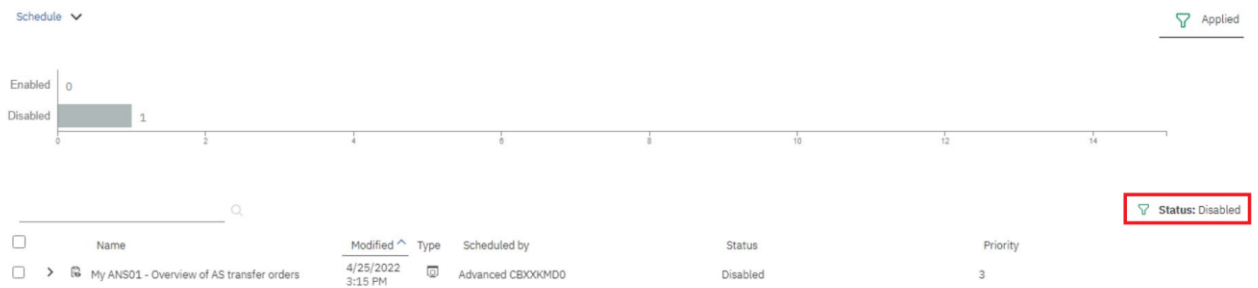
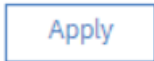
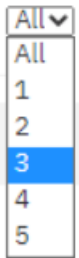
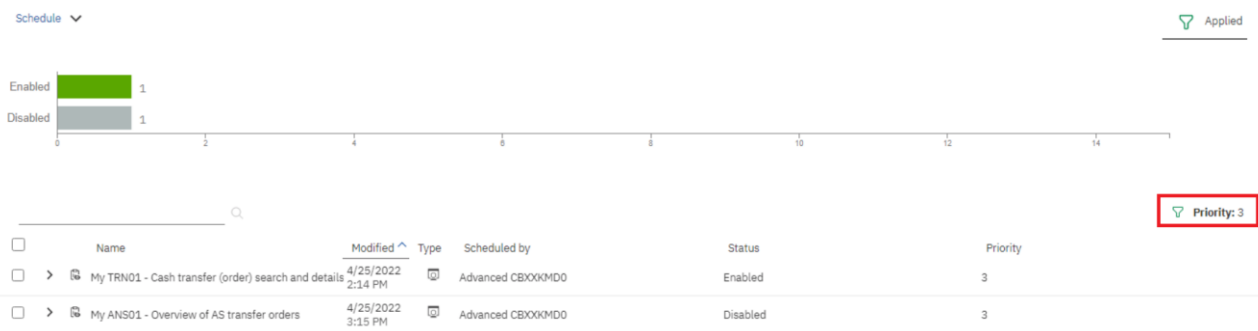


Figure 36 - Welcome screen – Personal menu – My schedules and subscriptions – Status disabled

Priority: By clicking on the dropdown next to the “**Priority**”, the user can choose to select different schedules according to the priority.



Verify the choice by clicking on the “**Apply**” button ( ).



**Figure 37 - Welcome screen – Personal menu – My schedules and subscriptions – Schedules Priority**

By clicking on the down arrow next to “**Advanced**”, the user is presented with further options.

Filter

[Clear all](#)

---

Subscription type

---

Status

---

Priority

---

**Advanced** [^](#)

---

Type [All >](#)

Figure 38 - Welcome screen – Personal menu – My schedules and subscriptions – Advanced

By clicking on the “All” text ( [All >](#) ) next to the “Type”, the user can choose which type of schedule to see, i.e. Report or Report view:

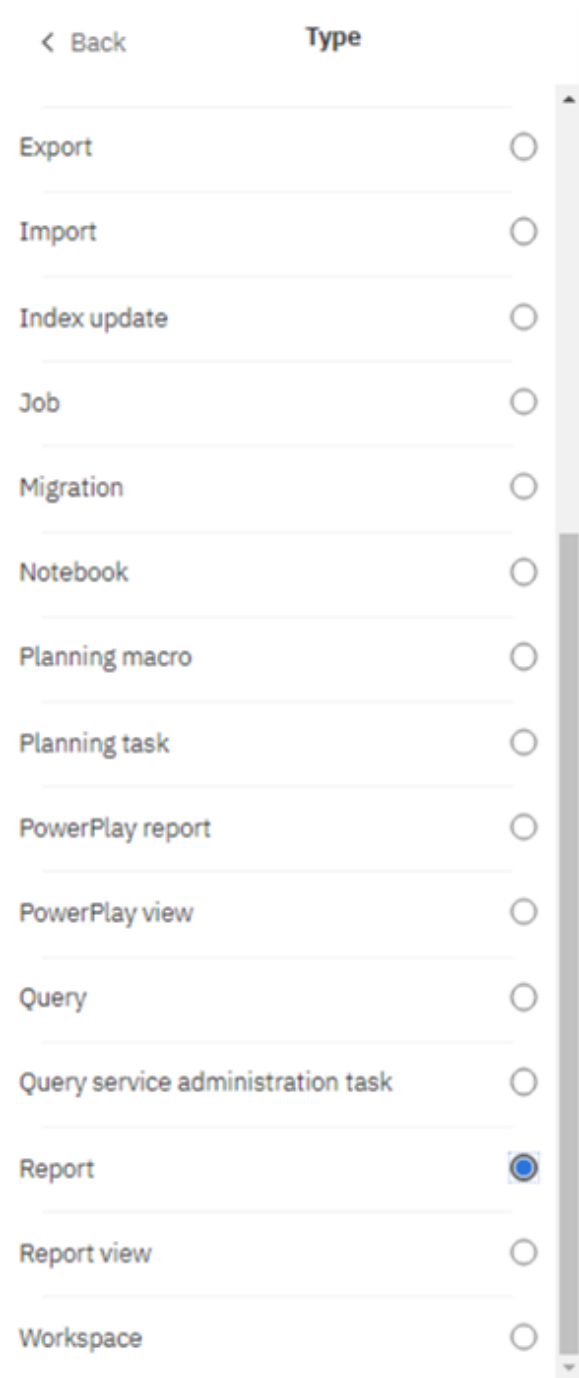


Figure 39 - Welcome screen – Personal menu – My schedules and subscriptions – Advanced - All - Type of schedule

Filter

Clear all

Subscription type

Status

Priority

Advanced ^

Type

Apply

Figure 40 - Welcome screen – Personal menu – My schedules and subscriptions – Advanced - All - Type of schedule – Report

By clicking on “Back” text in the upper left corner (  ) and clicking on the “Apply” button (  ), the user can see the type of schedule that has been chosen.

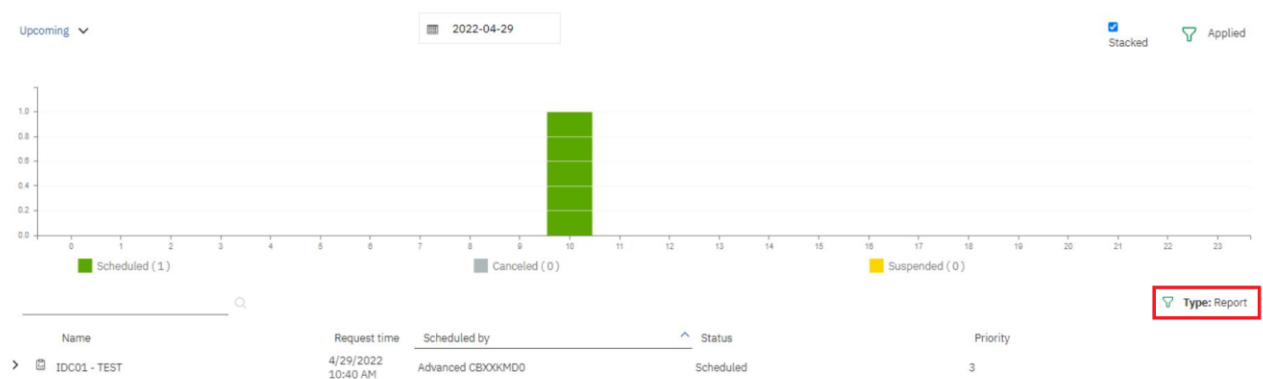


Figure 41 - Welcome screen – Personal menu – My schedules and subscriptions – Advanced - All - Type of schedule - Report



### 3.2.6.4 Log out

In order to log out you can use the “**Log out**” item from the personal menu in the toolbar.

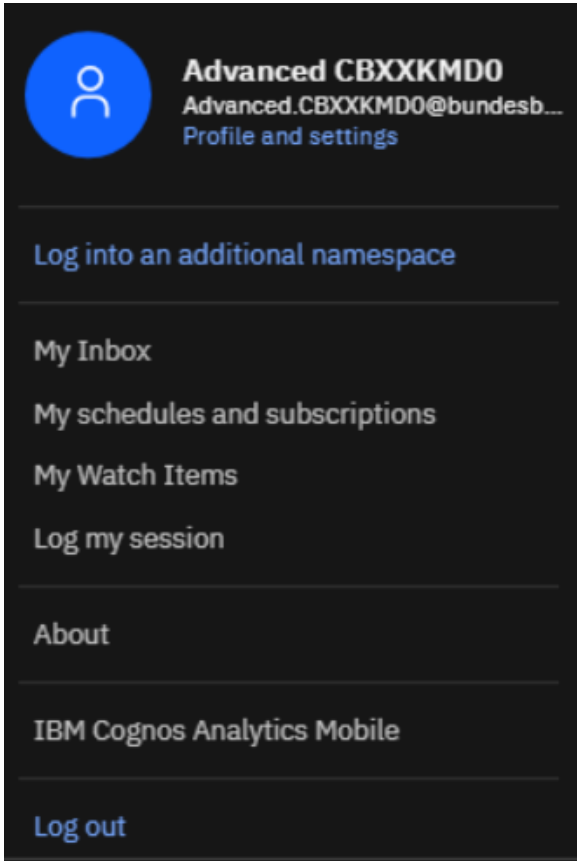


Figure 42 - Personal menu - Log out

## 3.3 Navigating in the DWH GUI – menu

On the left side of the screen you can find the “**Open menu**” icon (  ) with different folders and the “**System information**” (  ).

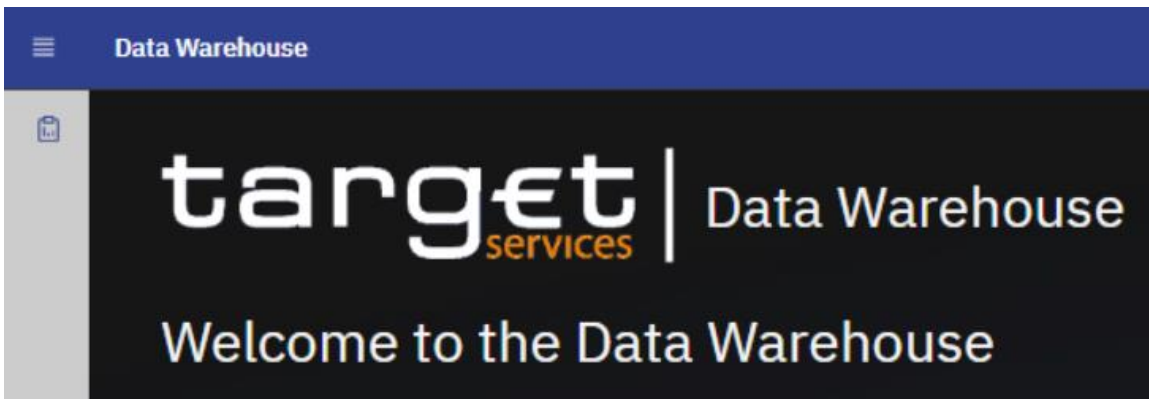


Figure 43 - Welcome page - menu

### 3.3.1 Data Warehouse logo

By clicking on the “**Data Warehouse**” logo, you return to the “**Welcome**” page.

### 3.3.2 Open Home

The first icon under the “**Open Home**” icon is the “**Home**” icon.

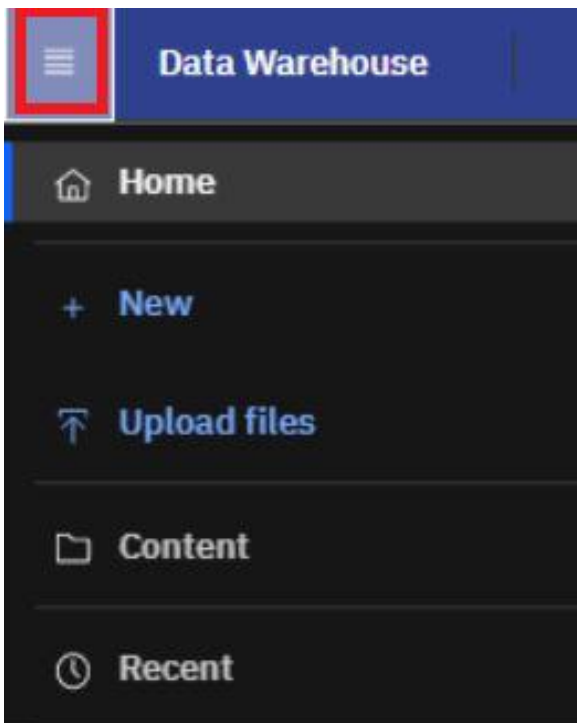


Figure 44 - Welcome page - Home

By clicking on this icon it is always possible to return to the “**Welcome**” page (the standard one or the one you have specified – for further information please refer to chapter [Access to the DWH](#) [ 32]) from everywhere in the DWH GUI.

### 3.3.3 Search function

To find items in your own or in the team content type the search term in the “**Search**” field. In the search field - you can type in one or multiple keywords and press “**Enter**”. You can search for folders or predefined reports.



Figure 45 - Welcome page - Search

#### 3.3.3.1 Narrow your search with filters

After a search was successful, the filter function is available. In case your search returns too many results, you can click on the “**Filter**” icon and select for example specific search results or dates to modify the result list.

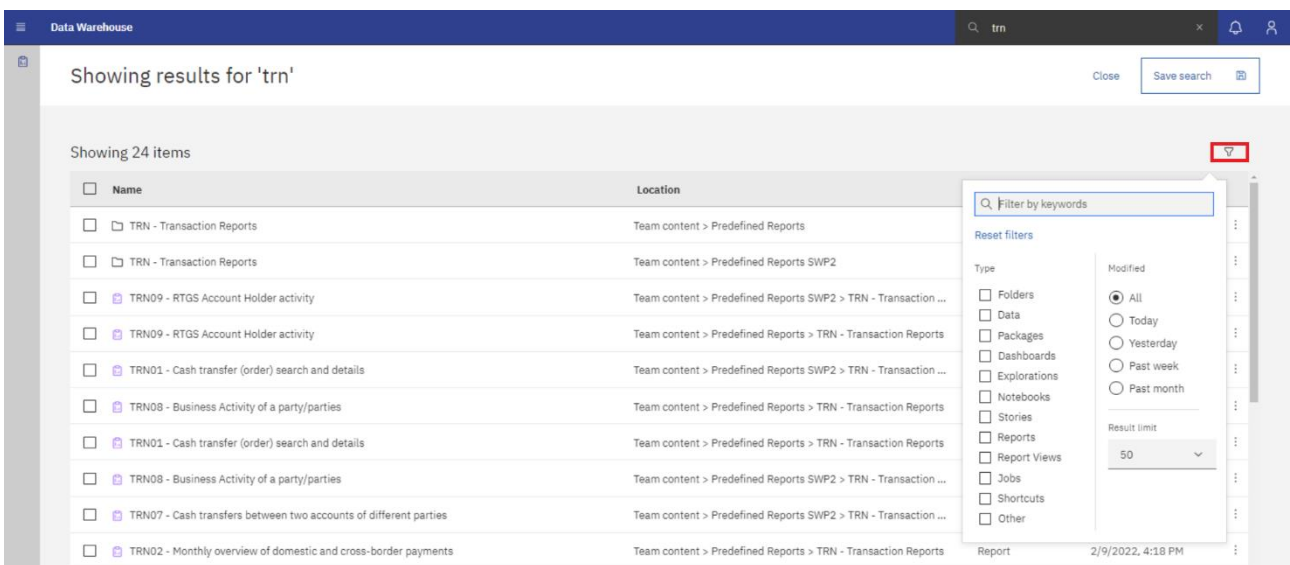


Figure 46 - Welcome page - filter options

#### 3.3.3.2 Save search results

After you have performed a search and the results are shown, you can save the results of your search. The “**Save**” icon is only available after a successful search.



Figure 47 - Welcome page - Search - Save icon

After clicking on the “Save” icon, a message pops up, that informs you that the search was saved.

The result of the search will be available later, even after the search is closed, or the user signs out.

If you do not save the result, the next search will overwrite the previous:

In order to delete a previously saved search, click on the “remove” button of the saved search you intend to delete.

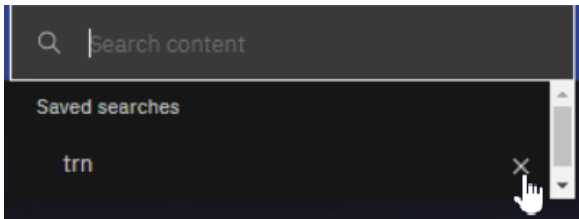


Figure 48 - Welcome page – remove search

### Example

In case you save the search, the search result will be available in the “Saved searches” list, even after you sign out.

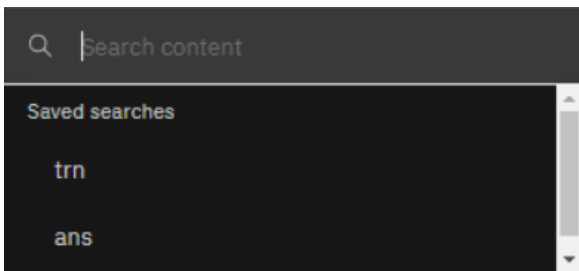


Figure 49 - Welcome page - Search - Saved searches

### 3.3.4 System information

Behind “System information”, you find a menu with a welcome page and user information.

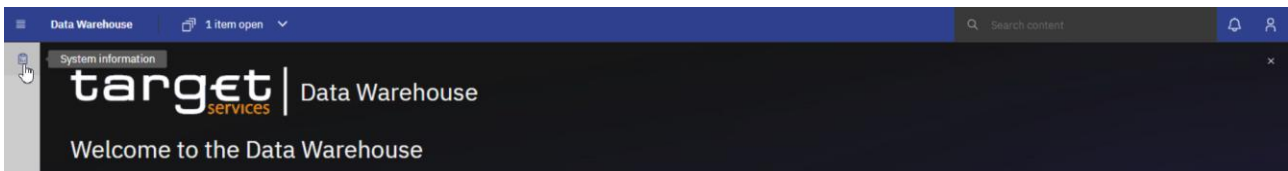


Figure 50 - Welcome page - System information link

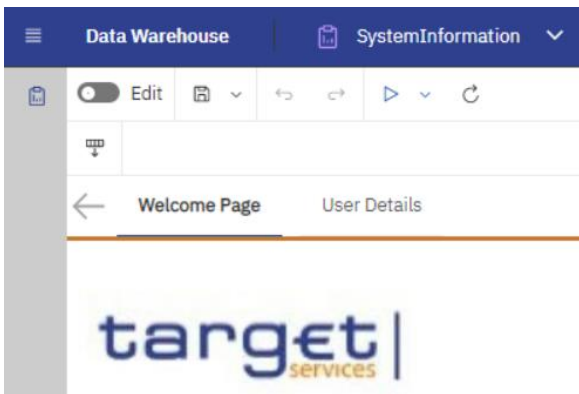


Figure 51 - Welcome page – System information menu

### Welcome page

This page serves as an introduction to this menu and informs you about the content of this menu.

### User details

Here you can see additional user information, such as user details concerning your User ID, which is needed to identify you in case of support. In addition, you will find your name, the name of your institution, and system information such as the environment (production or test environment) you are working on. The last business day is also mentioned to give you the information, which was the last business day loaded into the DWH completely.

### 3.3.5 Recent

If you want to see pages, folders or reports that you recently viewed you can find the list under “**Recent**”.

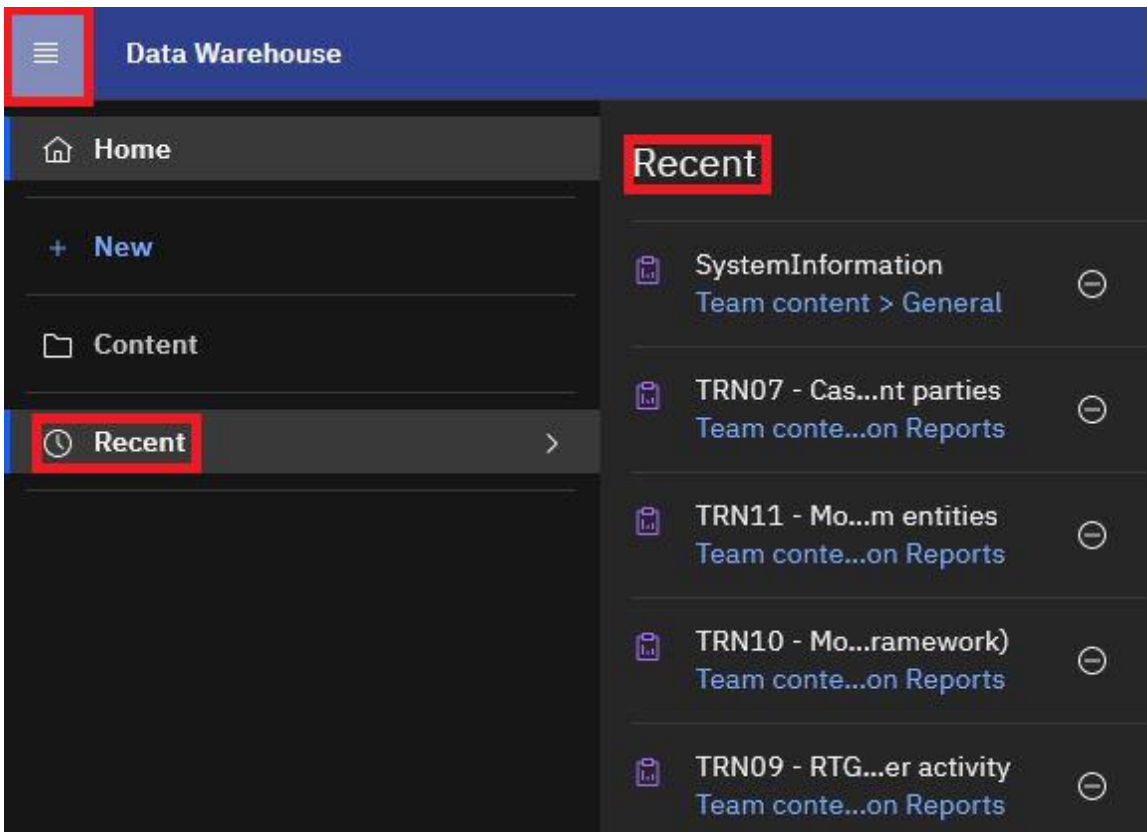


Figure 52 - Welcome page – Recently viewed

### 3.3.6 New

“New” is only visible for CB users granted with the “Data Warehouse advanced user” privilege in CRDM. Only with this privilege it is allowed to create user-defined reports. For more information please refer to chapter [Creating reports \(just advanced users\)](#) [▶ 308].



Figure 53 - Welcome page - New

## 3.4 Personal Folders

### 3.4.1 Team content

After clicking on the “**Open menu**” icon and then clicking on “**Content**”, you will be presented with a screen having two tabs, “**My content**” and “**Team content**”. Under “**Team content**”, you can find all reports you are allowed to run and view, depending on the party type you belong to. For information about each predefined report and who is allowed to use it, please refer to [Predefined reports](#) [▶ 122] . For CB users a specific CB folder can be found, where CB advanced users can store adapted or user-defined reports and share them with normal users within their CB. This enables also other users of this CB with the normal user privilege to execute reports previously designed by an advanced user.

Additionally, the CBs shared folder is included in here. With this folder, CBs can share adapted or user-defined reports with other CBs.

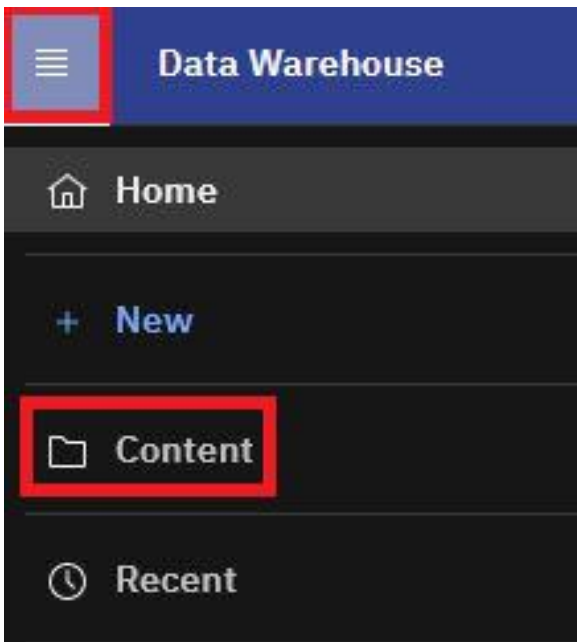


Figure 54 - Welcome page - Team content

You can see the following content within “Team content”.

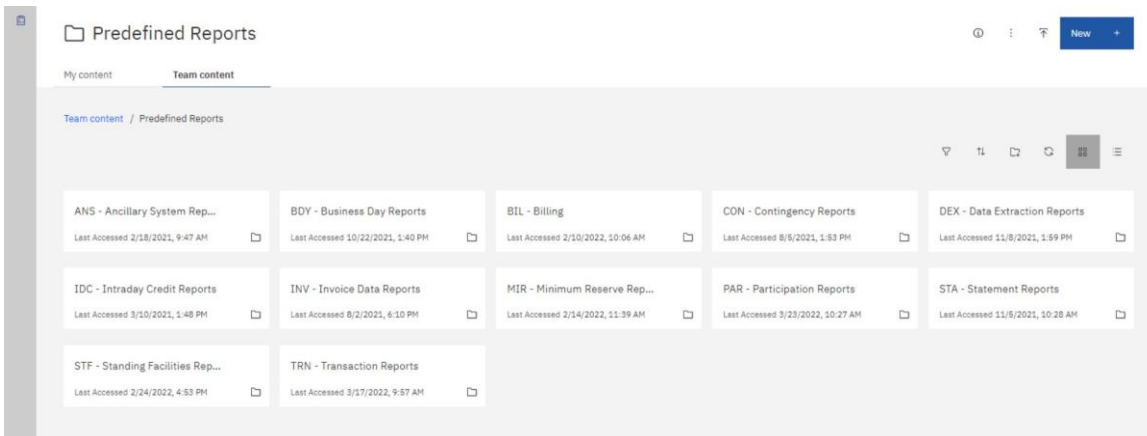


Figure 55 - Welcome page- Team content - folder structure

In case you are a CB user, you will see this structure in “Content”:



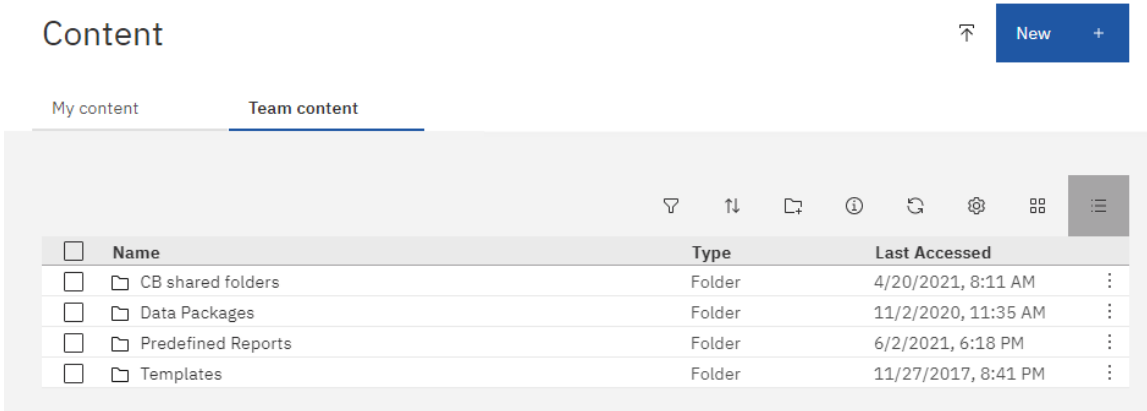


Figure 56 - Welcome page - Team content - folder structure (CB user)

**CB shared folders**

In the “CB” shared folders the CB user can find the folders for sharing reports within its own CB as well as the folder for sharing reports with other CBs. These folders cannot be used to share reports with PBs or AS since the users of these party types do not have visibility of the CB shared folders.

**Data Packages**

In the “Data Packages” folder, you can find the data model that was used to create the reports. This is an information item only (showing the date and time of the last update of the data model).

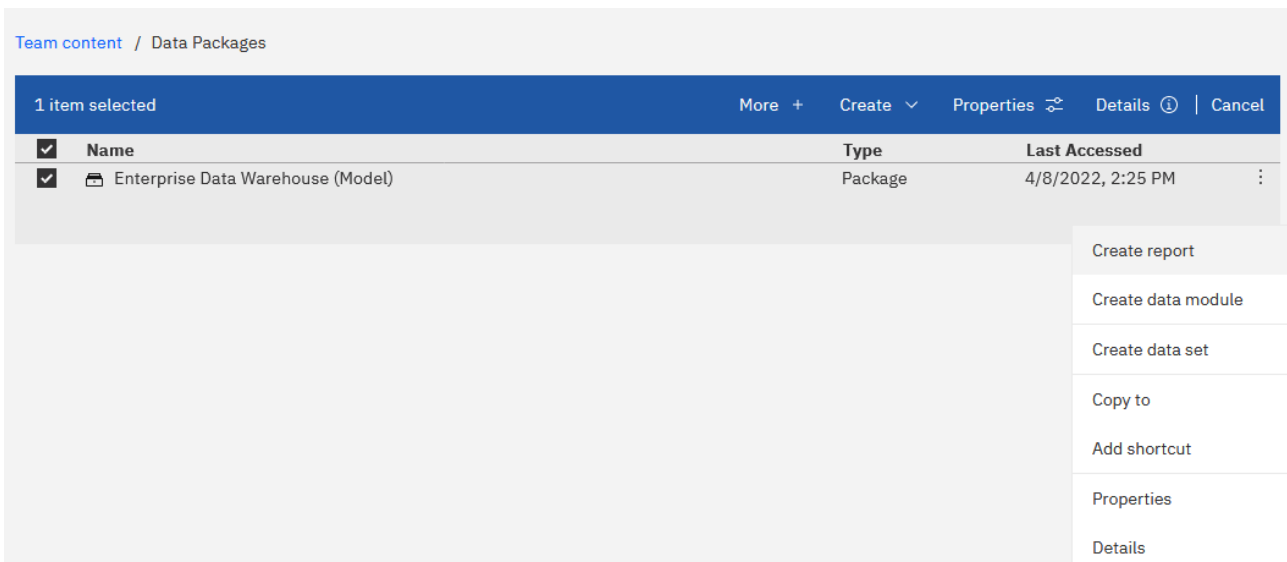


Figure 57 - Welcome page - Team content - Data Packages

**Predefined Reports**

In the “Predefined Reports” folder you can find the subfolders containing the predefined reports.

Team content / Predefined Reports

| <input type="checkbox"/> | Name                              | Type   | Last Accessed       |   |
|--------------------------|-----------------------------------|--------|---------------------|---|
| <input type="checkbox"/> | ANS - Ancillary System Reports    | Folder | 2/18/2021, 9:47 AM  | ⋮ |
| <input type="checkbox"/> | BDY - Business Day Reports        | Folder | 10/22/2021, 1:40 PM | ⋮ |
| <input type="checkbox"/> | BIL - Billing                     | Folder | 2/10/2022, 10:06 AM | ⋮ |
| <input type="checkbox"/> | CON - Contingency Reports         | Folder | 8/5/2021, 1:53 PM   | ⋮ |
| <input type="checkbox"/> | DEX - Data Extraction Reports     | Folder | 11/8/2021, 1:59 PM  | ⋮ |
| <input type="checkbox"/> | IDC - Intraday Credit Reports     | Folder | 3/10/2021, 1:48 PM  | ⋮ |
| <input type="checkbox"/> | INV - Invoice Data Reports        | Folder | 8/2/2021, 6:10 PM   | ⋮ |
| <input type="checkbox"/> | MIR - Minimum Reserve Reports     | Folder | 2/14/2022, 11:39 AM | ⋮ |
| <input type="checkbox"/> | PAR - Participation Reports       | Folder | 3/23/2022, 10:27 AM | ⋮ |
| <input type="checkbox"/> | STA - Statement Reports           | Folder | 11/5/2021, 10:28 AM | ⋮ |
| <input type="checkbox"/> | STF - Standing Facilities Reports | Folder | 2/24/2022, 4:53 PM  | ⋮ |
| <input type="checkbox"/> | TRN - Transaction Reports         | Folder | 3/17/2022, 9:57 AM  | ⋮ |

Figure 58 - Welcome page - Team content - Predefined reports

**Example**

Under “ANS – Ancillary System Reports” you can find the predefined reports “ANS01 – Overview of AS transfer orders” and “ANS02 – Daily average of AS transfers”.

Team content / Predefined Reports / ANS - Ancillary System Reports

| <input type="checkbox"/> | Name                                   | Type   | Last Accessed      |   |
|--------------------------|--|--------|--------------------|---|
| <input type="checkbox"/> | ANS01 - Overview of AS transfer orders | Report | 2/9/2022, 11:44 AM | ⋮ |
| <input type="checkbox"/> | ANS02 - Daily average of AS transfers  | Report | 4/22/2022, 9:23 AM | ⋮ |

Figure 59 - Welcome page - Team content - Predefined Reports - ANS - Ancillary System Reports

The normal user has the same capabilities, except from the “Create report”.

3.4.2 My content

This is your private area where only you can see the content that is stored there. At start, the folder is always empty.

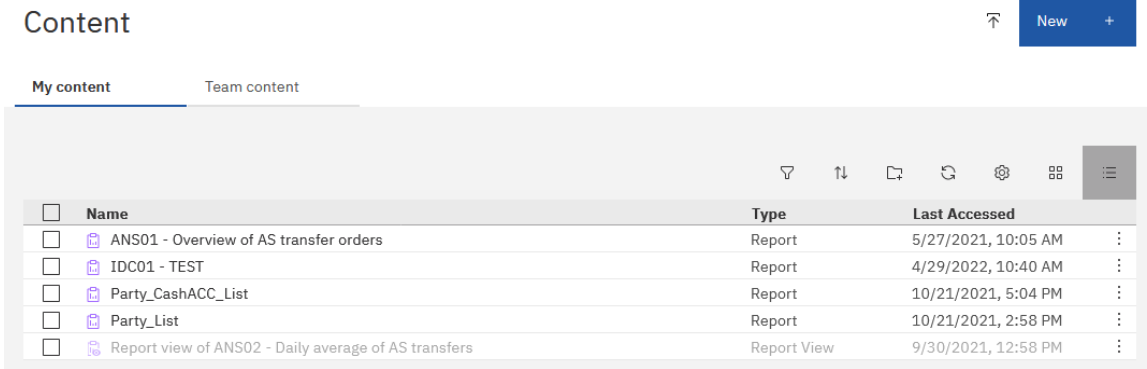




Figure 60 - Welcome page – My content

### 3.4.3 Add a new folder

Click on the **“Open menu”** icon (  ), click on **“Content”** and then click on **“My content”**. In order to create a new folder, click on the **“Add Folder”** icon (  ).

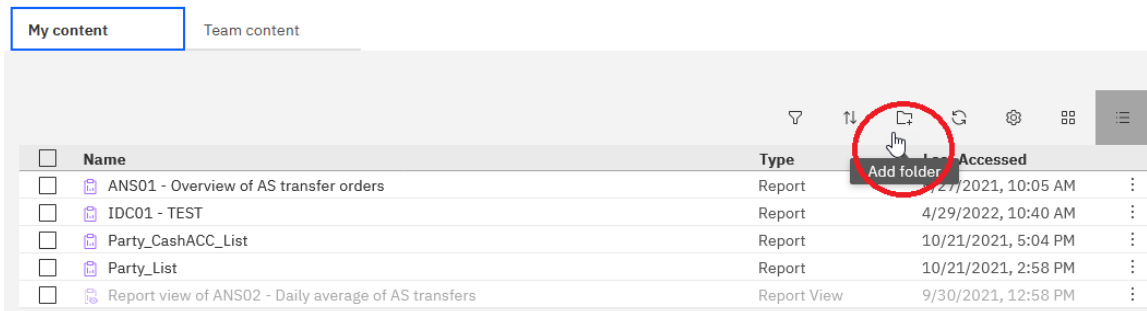


Figure 61 - Welcome page – My content – Add folder

After click on the **“Add Folder”** icon, you must enter a name for the new folder you want to create.

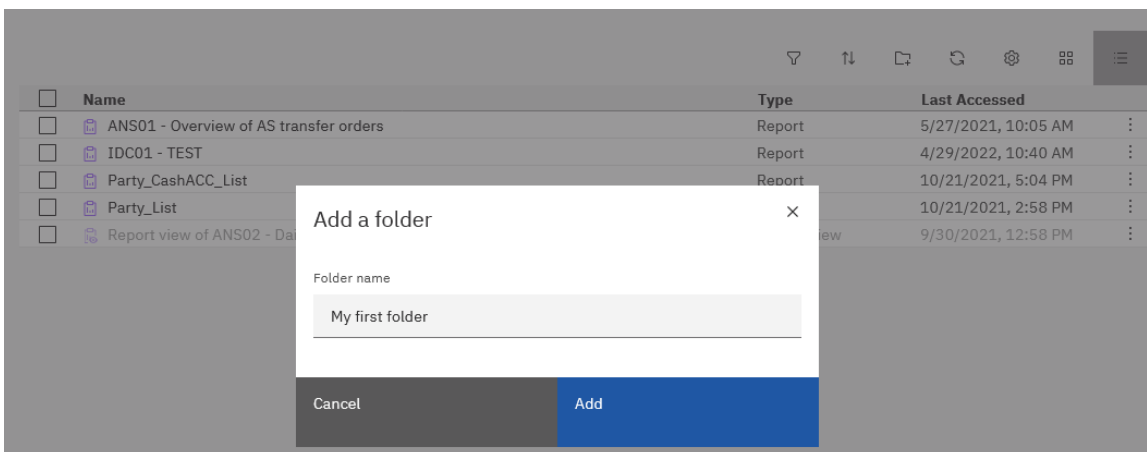


Figure 62 - Welcome page – My content – New Folder (1)

Press “Enter” and the new folder is created.

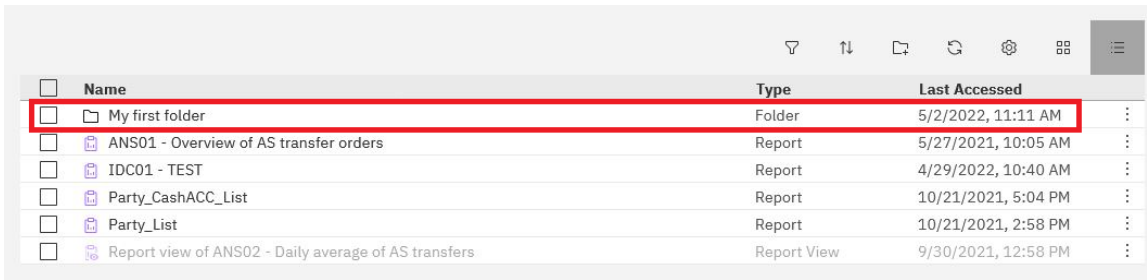


Figure 63 - Welcome page – My content– New Folder (2)

### 3.4.4 Sort the content

Open “My content” or “Team content” by clicking on the “Open menu” icon and then clicking on “Content”, and click on the “Sort” icon in the toolbar. You can sort by name, the latest modification date or type of the content. In addition, you can decide if you want to see the ascending or descending order of your items.

In the following screenshot, the folders are sorted by name in ascending order.

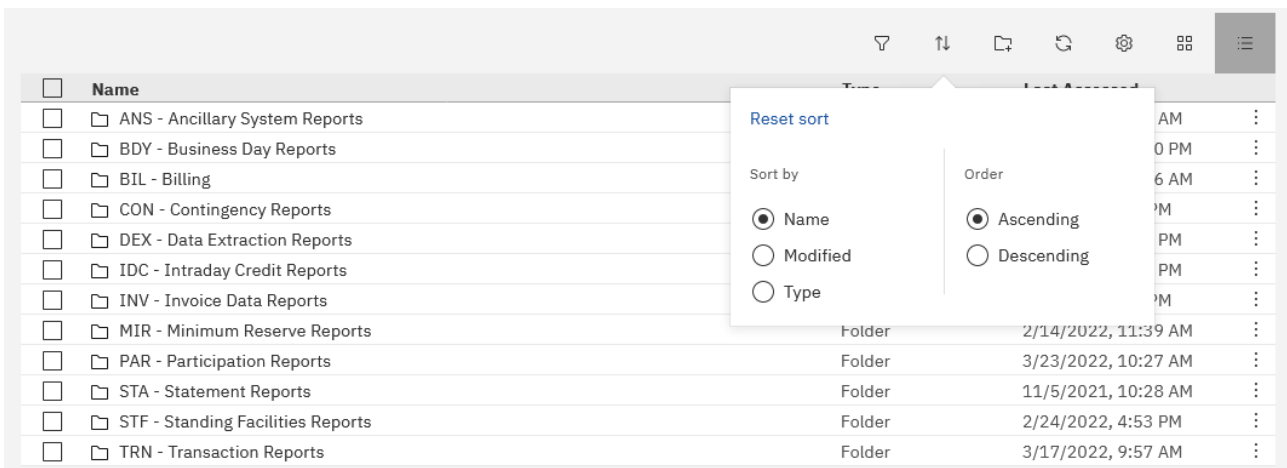


Figure 64 - Welcome page – My content – sort in ascending order

On the contrary, in this screenshot the folders are sorted by name in descending order.

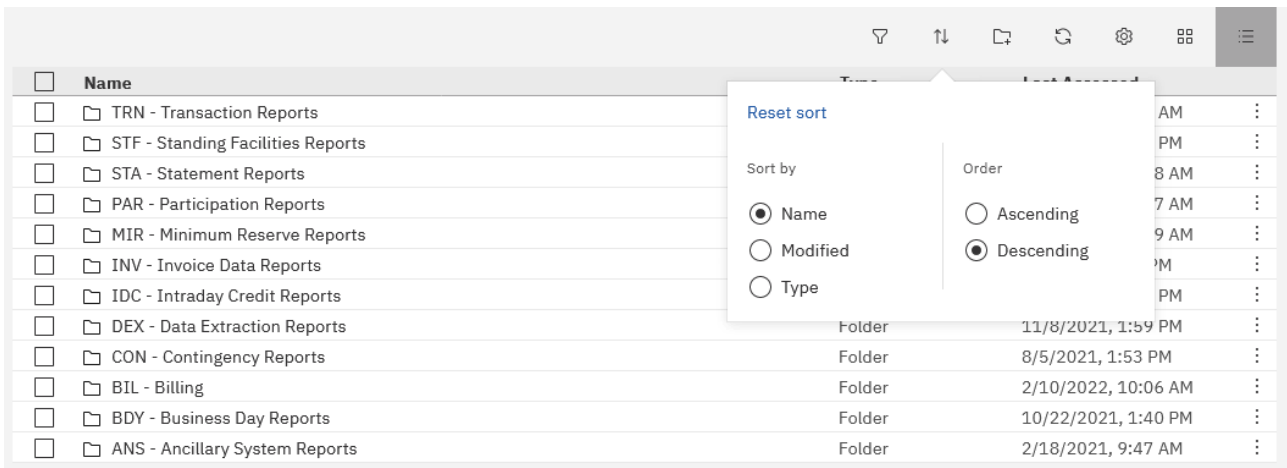


Figure 65 - Welcome page – My content – sort in descending order

### 3.4.5 Filter the content

Open **“My content”** or **“Team content”** by clicking on the **“Open menu”** icon and then clicking on **“Content”**, and click on the **“Filter”** icon in the toolbar. You can choose the type, the modified time or provide one or multiple keywords of the item you are looking for.

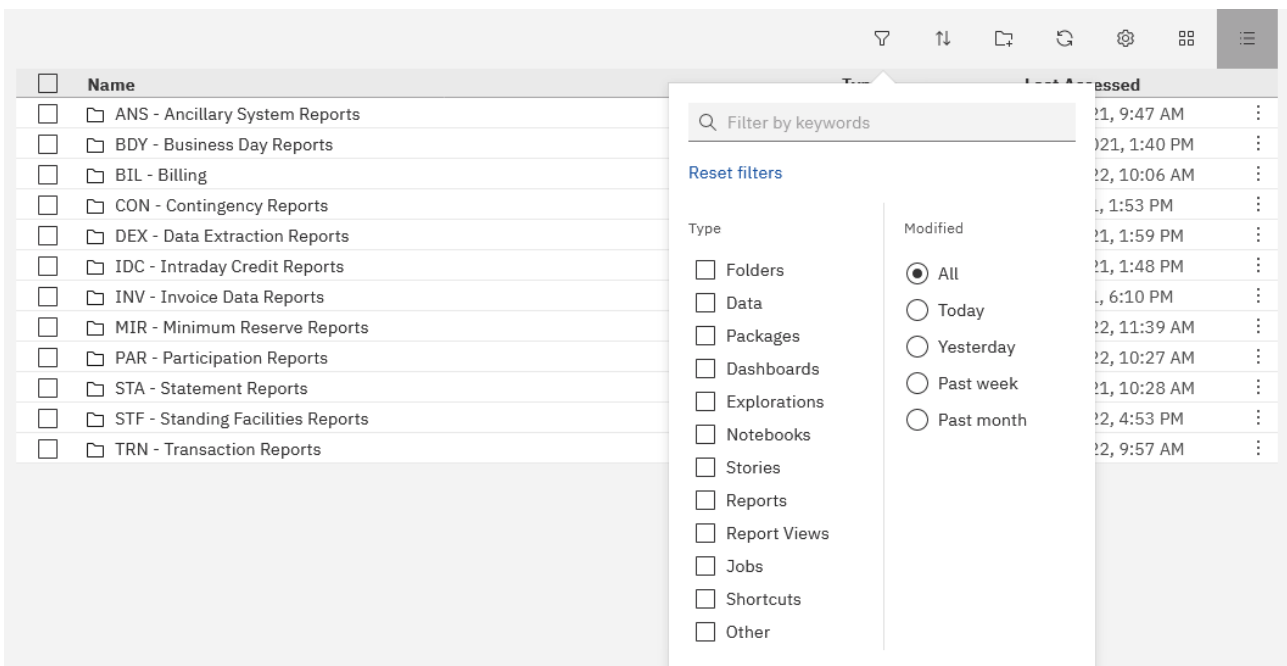


Figure 66 - Welcome page – Team content – Predefined Reports – filter options

### Example

You want to search for a folder in combination with a keyword **“ST”**. The following result is shown:

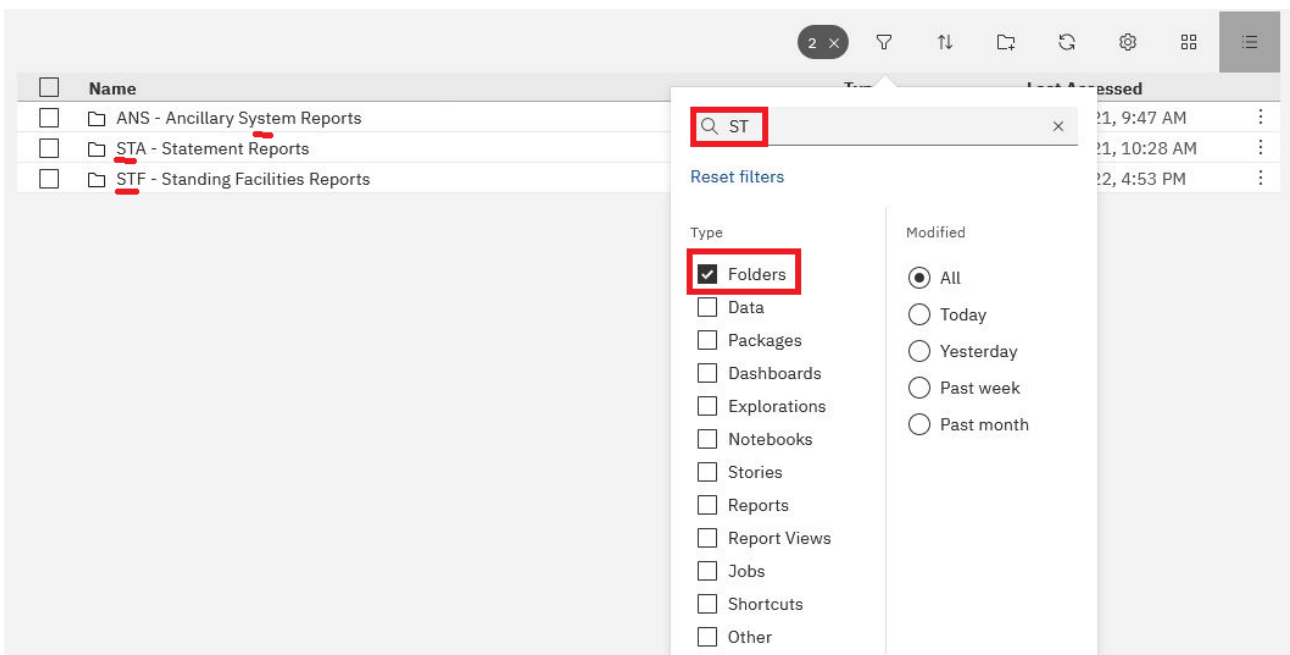


Figure 67 - Welcome page – My content – filter options – filter by folders

## 4 Working with reports

### 4.1 Copy, save and export

This chapter gives you a step-by-step description on how to copy the report to your own folder or to save or export the data.

#### 4.1.1 Copy a report

A copy is an independent version of the original report. Any changes to the implementation due to e.g. CRs in the original report will not affect the report results from the copied version. Deleting the original report will not affect the copy. This is the difference to the report view (please see chapter [Creating a report view](#) [▶ 73]) which remains linked to the original report. You can save a report as a copy in “**My content**” folder, or if the user is a member of a Central Bank, in the CB shared folders as well:

**Step 1:** Navigate to the “**Team content**” folder, open “**Predefined Reports**” and select the folder with the desired report.

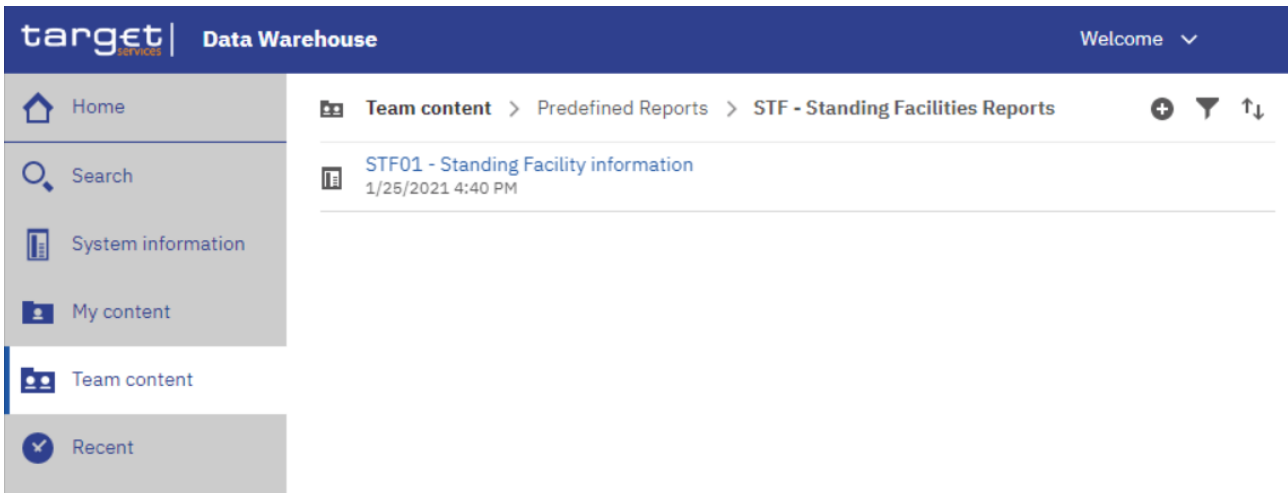
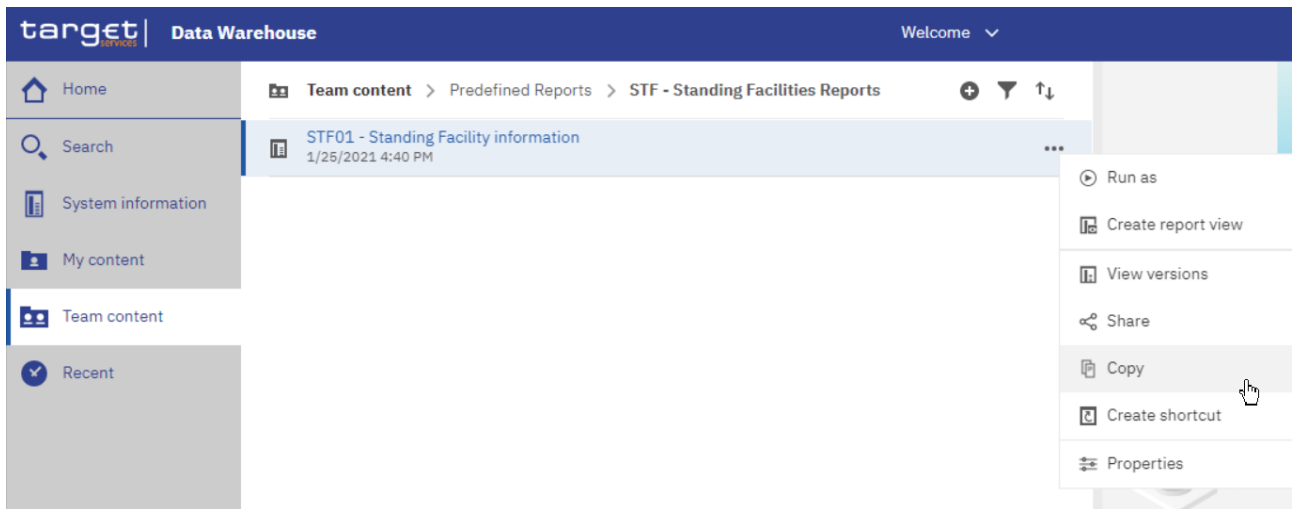


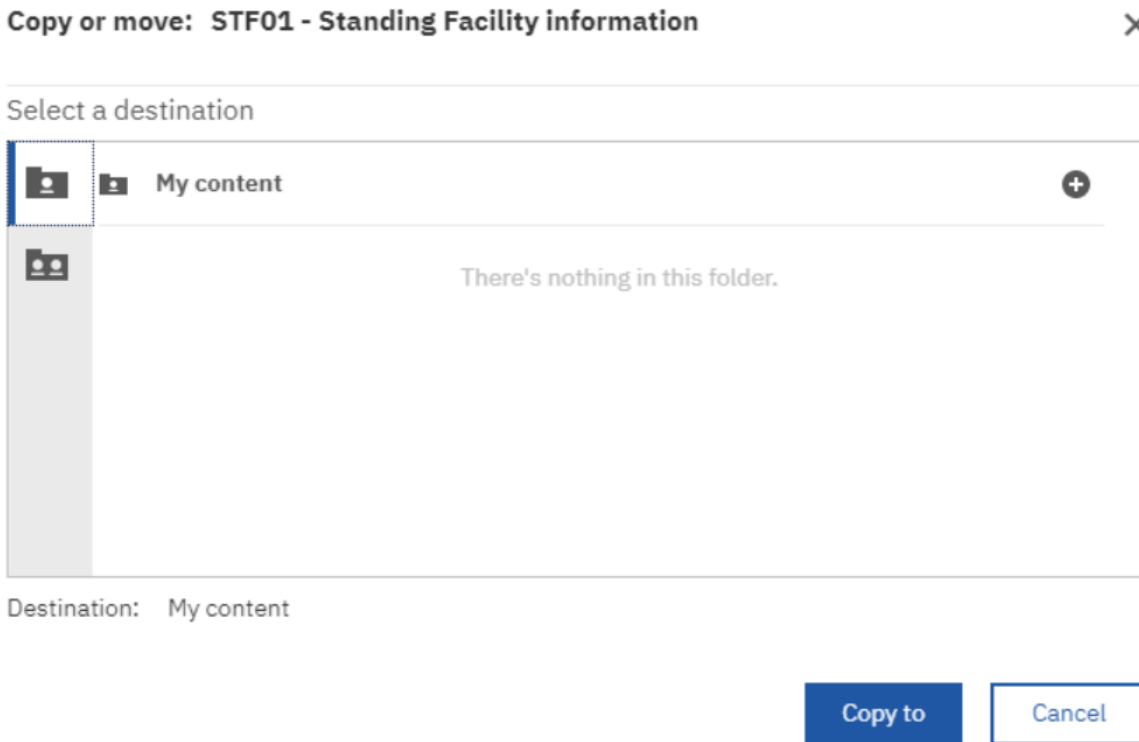
Figure 68 - Team content - Predefined Reports - STF - Standing Facilities Reports

**Step 2:** Choose the report that should be copied and click on the “**More**” icon ( ) at the right of the report and select “**Copy**”.



**Figure 69 - Team content - Predefined Reports - STF - Standing Facilities Reports – STF01 – Standing Facility information- Copy**

**Step 3:** A window pops up to save the report. You can save the reports in the “**My content**”, or in the CB shared folders, by clicking on the “**Copy to**” button you move a copy of the report to your own working space in the DWH.



**Figure 70 - Team content - Predefined Reports - STF - Standing Facilities Reports – STF0 – Standing Facility information - Copy to**

If you are a CB user with advanced user profile, you can also copy the report into the CB shared folder or CB – “**Country code shared**” folder, which can be found in the path: “**Team content**” -> “**CB Shared folders**”. Both folder are only visible for CB user.



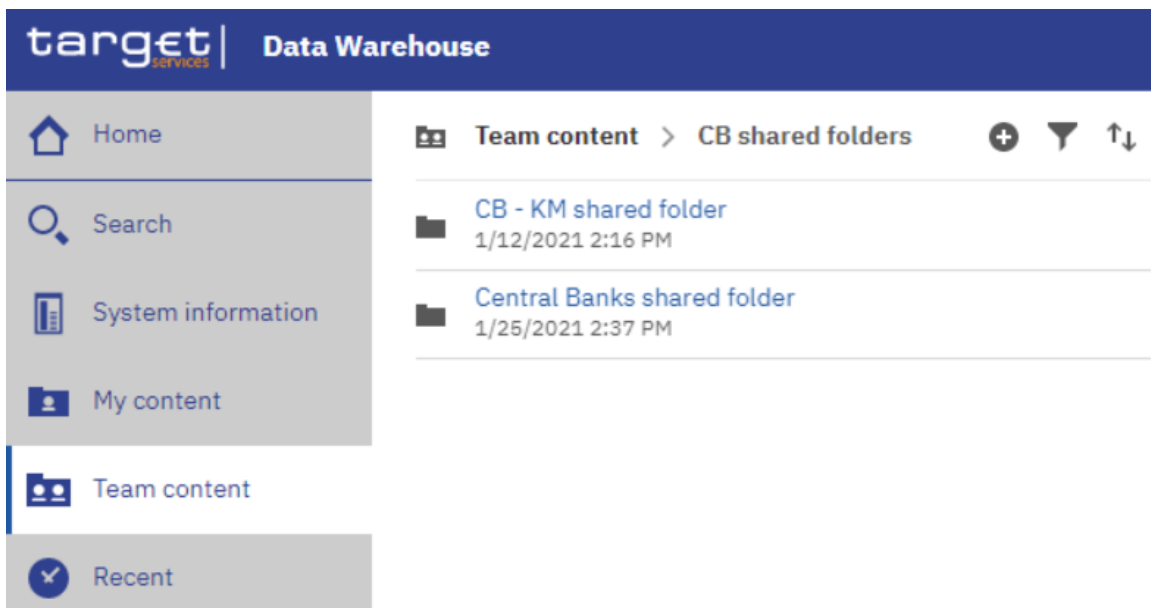


Figure 71 - Team content – CB Shared folders

**Step 4:** Afterwards you can find the report in the respective folder. In this example in “My content”.

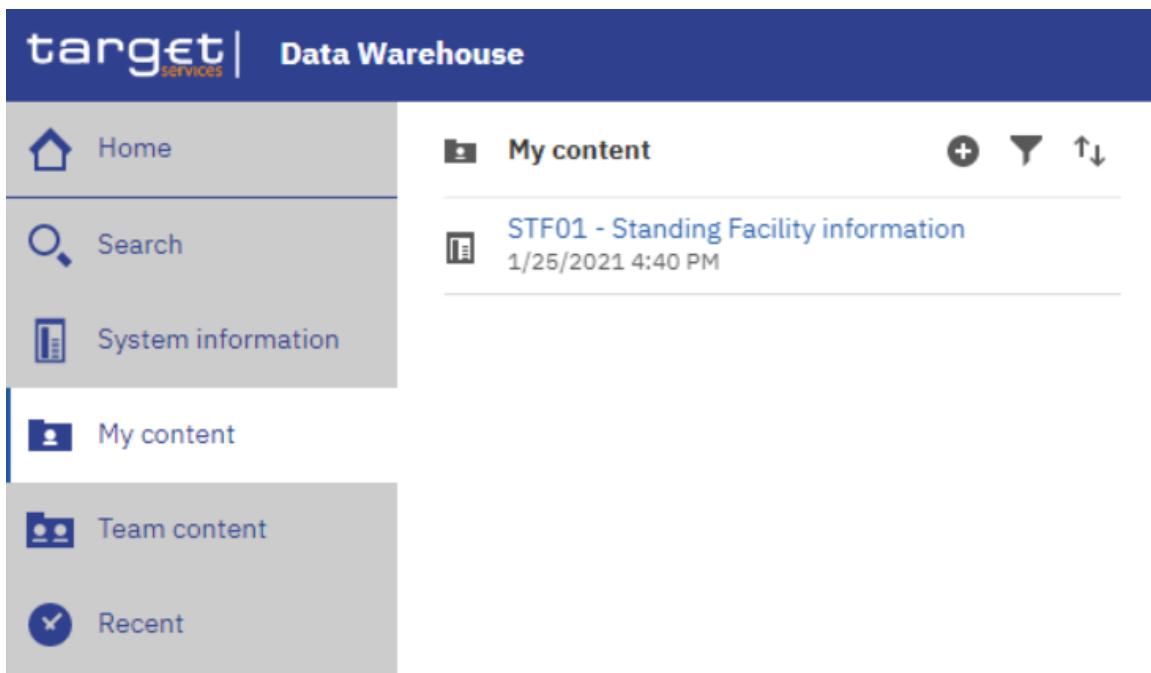



Figure 72 - My content - copied report

#### 4.1.2 Creating a report view

The report view is the same report as the predefined report, but has different properties such as prompt values, schedules, delivery methods, run options, languages, and output formats. A report view is an alias of the original report and remains linked to it. If the source report is moved to another location, the report view link is not broken. If the source report is deleted, the report view link is broken and the properties link to the source

report is removed. In case the report has been changed (e.g. due to a new software release), the user will be prompted with this information. The “**Report view**” icon (  ) changes to indicate that the link is broken and is no longer operable. In order to schedule the run of a report (see chapter [Scheduling reports](#) [▶ 102]), you have to create a report view first. These steps have to be executed in order to create a report view of the chosen report:

**Step 1:** Navigate to the “**Team content**” folder, open “**Predefined Reports**” and select the folder with the desired report.

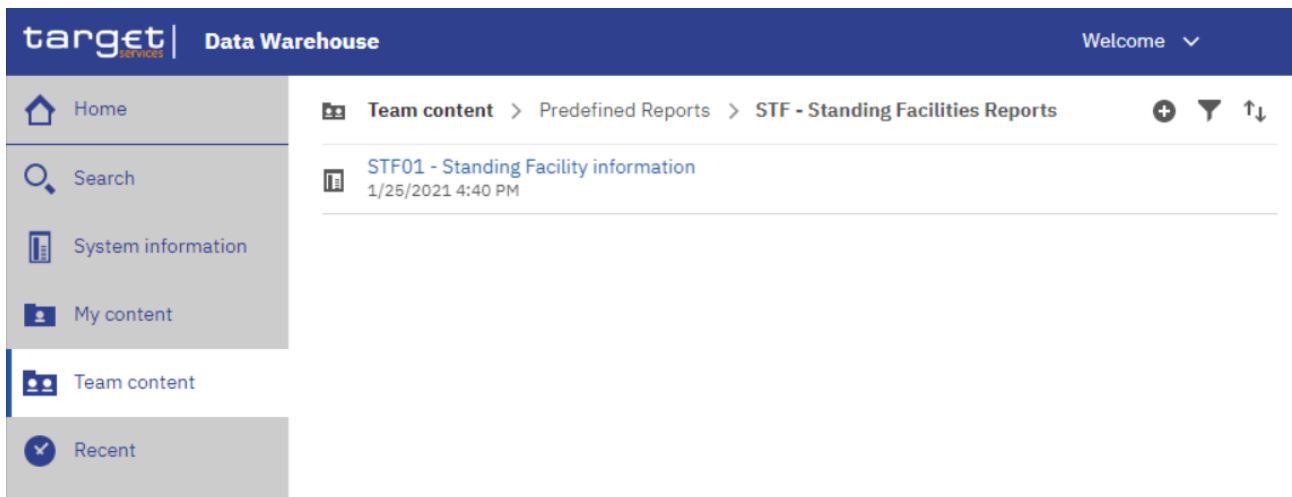



Figure 73 - Team content - Predefined Reports - STF - Standing Facilities Reports

**Step 2:** Choose the report for that a view should be created and click on the “More” icon (  ) at the right of the report and select “Create report view”.

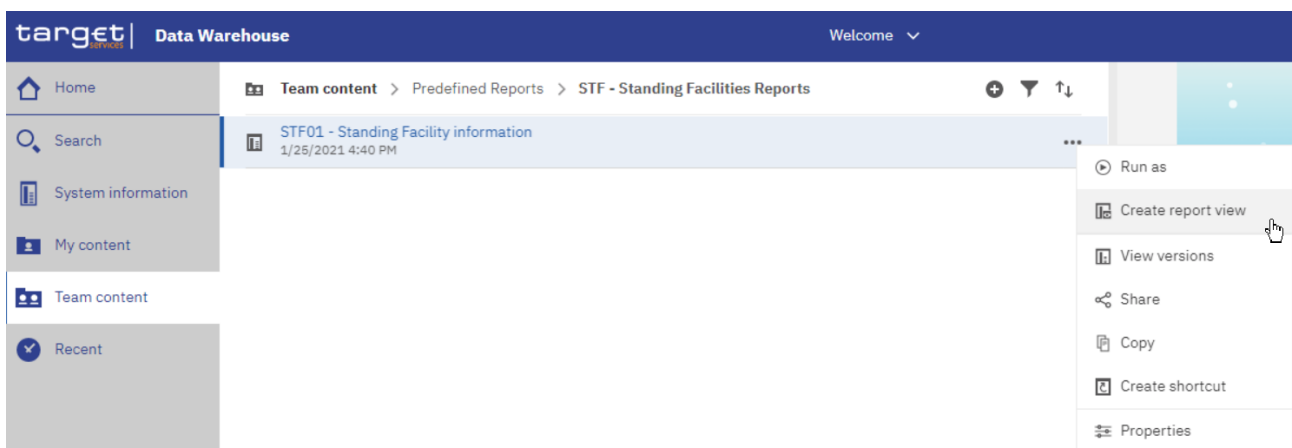
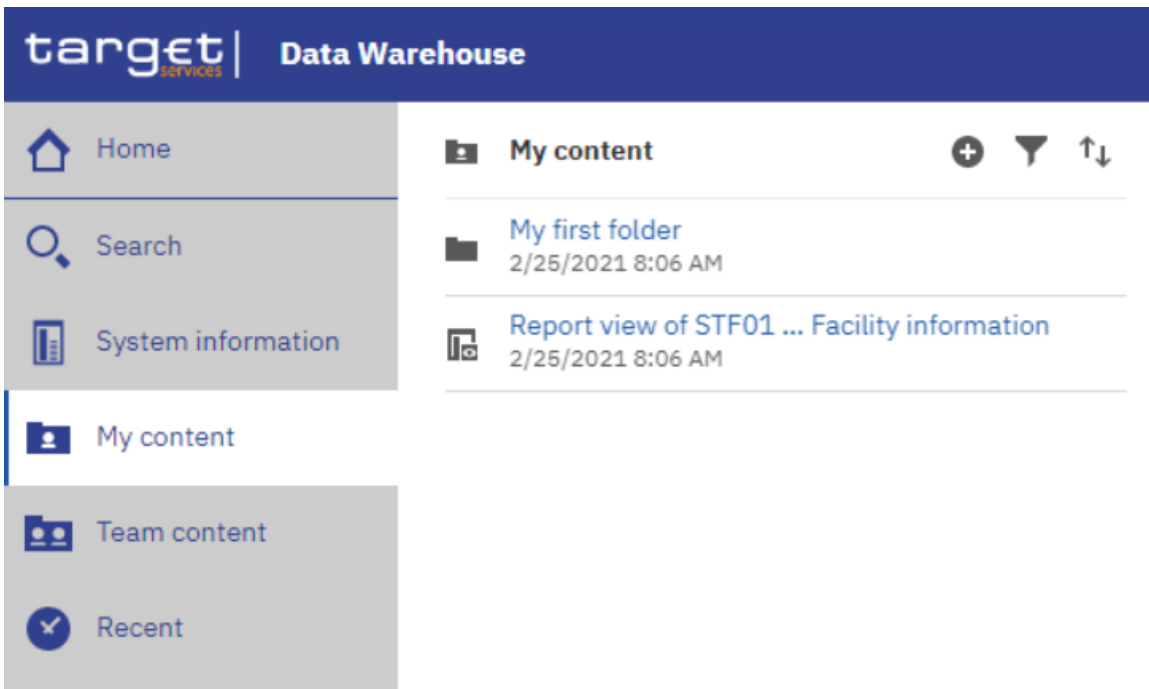


Figure 74 - Team content - Predefined Reports - STF - Standing Facilities Reports – STF01 – Standing Facility information - Create report view

**Step 3:** A pop up window opens and you can save the report view in “**My content**” after entering a name and by clicking on the “**Save**” button.

If you are a CB user, you can also save the report view into the CB shared folder or CB – “**Country code**” shared folder, which can be found in the path: “**Team content**” -> “**CB Shared folders**”.

**Step 4:** You can find the report view in the respective folder. In this example in **“My content”**.



**Figure 75 - My content - report view**

**Step 5:** You can determine the source report for a report view by clicking on the properties.

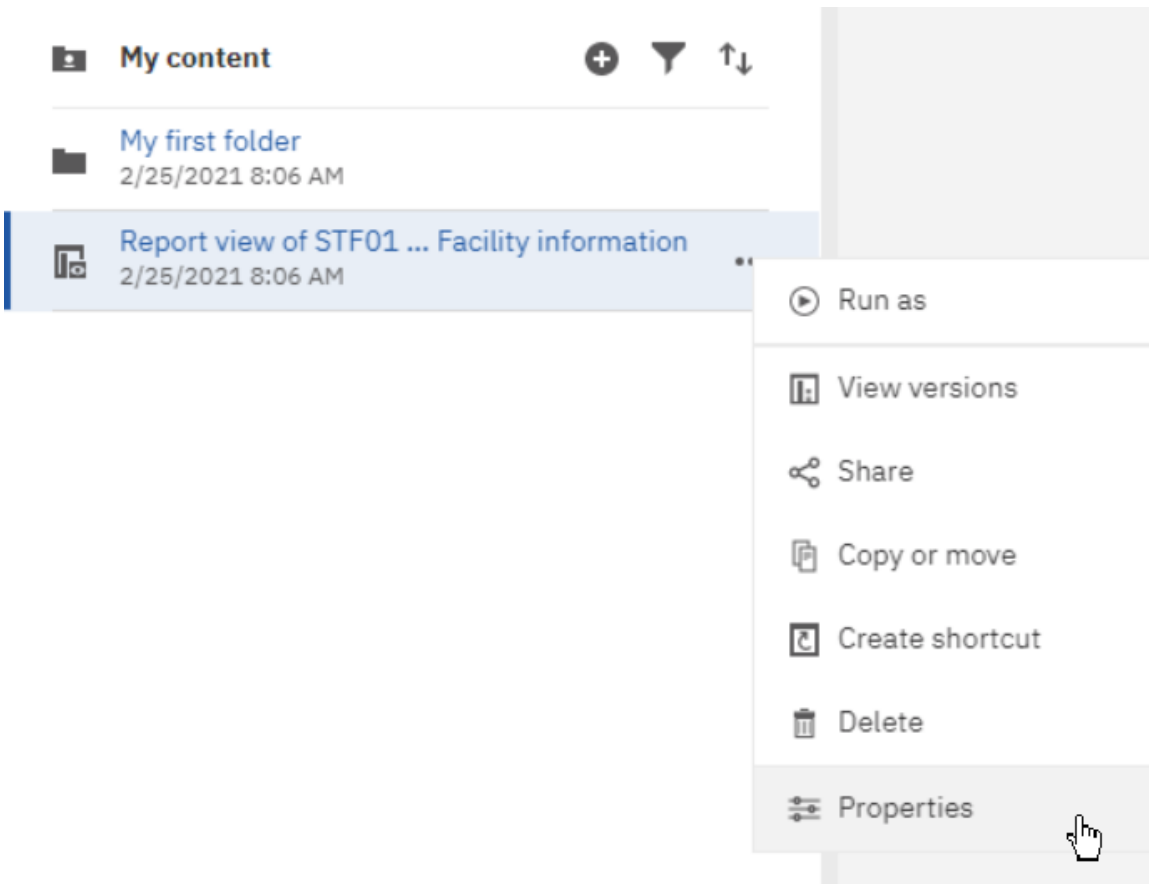


Figure 76 - My content - report view - Properties

**Step 6:** Scroll down to “General”.

The report view properties also provide a link to the properties of the source report.

The screenshot shows the 'My content' sidebar on the left with three items: 'My first folder' (7/13/2020 12:29 PM), 'Report view of STF01 - St ... Facility information' (7/14/2020 1:20 PM), and a partially visible 'Report view of ST ... Fac ... information'. The main panel displays the properties for the selected report view. The title 'Report view of ST ... Fac ... information' is greyed out. The 'Advanced' section is expanded, showing 'Disable this entry' (unchecked), 'Location' (My content), 'Search path' (CAMID("CognosUsers:u:cn=adv...)), 'ID' (iC0D8C9568A674FC5A7CF7DC4C38A3ED5), 'Permission' (Full), 'Languages' (Set...), and 'Source report' (Set...). The breadcrumb at the bottom reads 'Team content > Predefined Reports > ... - Standing Facility information'.

**Figure 77 - My content - report view - Properties - Source report**

When the source report is deleted, the report view title is greyed and the link to the source report is missing in the properties:

**Figure 78 - My content - report view - Properties - Source report deleted**

In case there is a change in the report content and you have created a report view then you will be notified if you have activated the 'notify me' option previously. Please see details on Notifications in the chapter [Personal menu](#) [▶ 37].

### 4.1.3 Saving a report output

You can save the report output (meaning the result of the run of a report, please see chapter [Running reports](#) [▶ 83]) in DWH for future uses by creating a report view first.

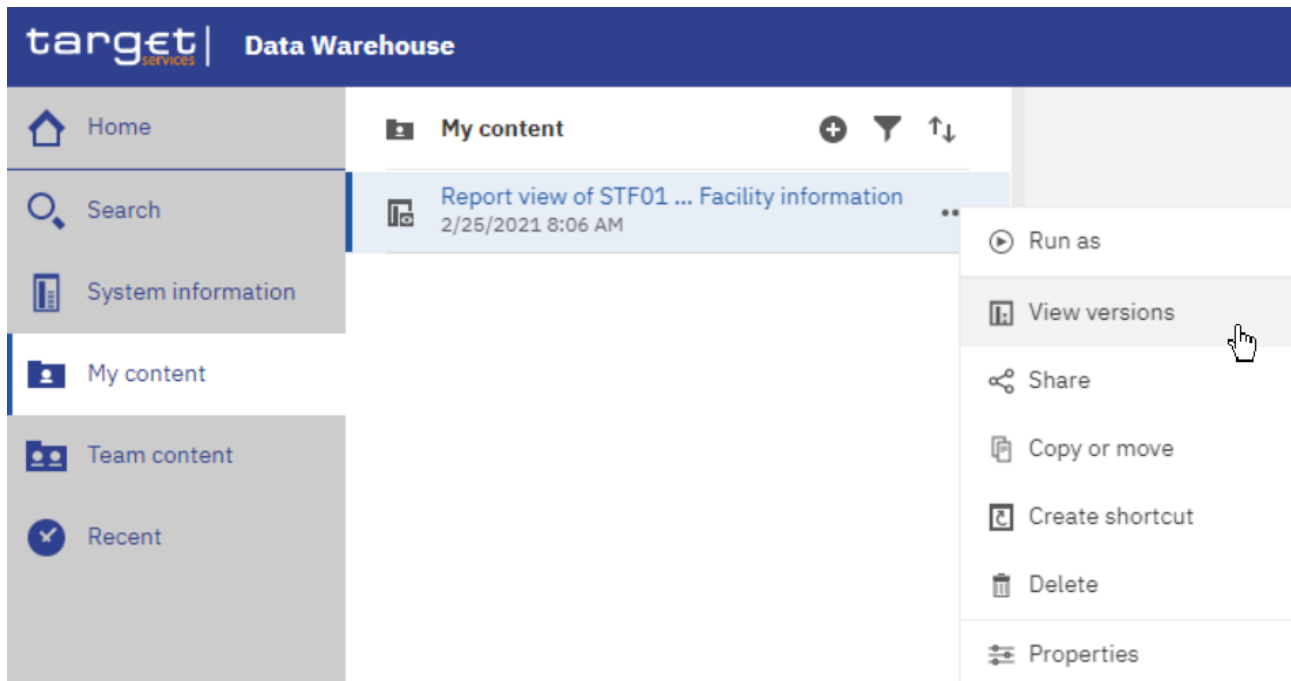
**Step 1:** Create a report view as described in chapter [Creating a report view](#) [▶ 73].

**Step 2:** Navigate to the folder containing the report view you have created.

**Step 3:** Run the report as described in chapter [Run a report step-by-step](#) [▶ 83].

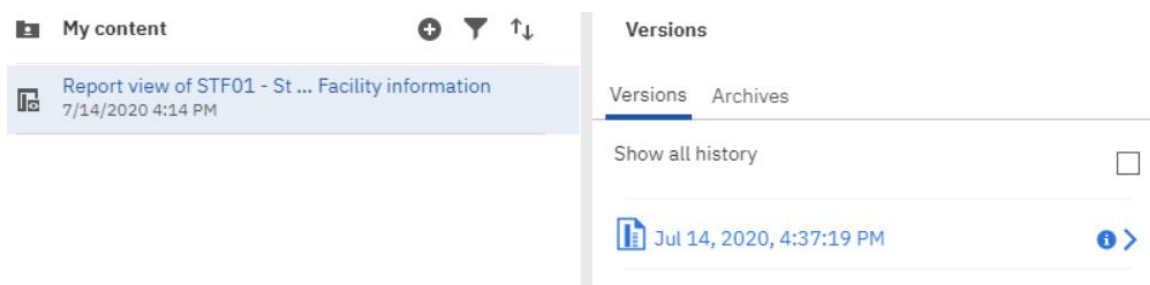
**Step 4:** You can view the output by clicking on the “More” icon (⋮) next to the report in “My content”.

**Step 5:** Select “View versions”.



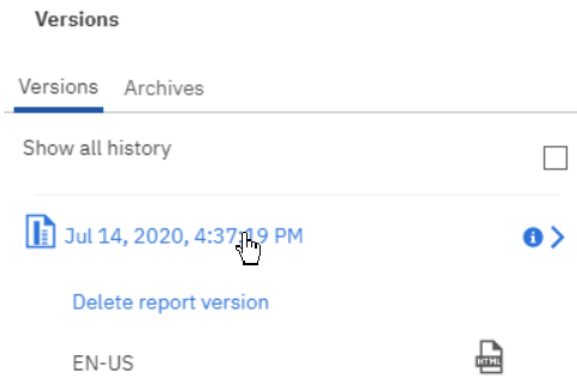
**Figure 79 - My content - report view - View versions**

**Step 6:** Versions opens, where you can find the report output with the date and time of the execution.



**Figure 80 - My content - report view - View versions - Versions**

**Step 7:** Click on the version.




**Figure 81 - My content - report view - View versions - Version - report output**

**Step 8:** You can click on the report name and either delete this version or view the outcome by clicking on the

“Format” icon (  ) of the report.

#### 4.1.4 Exporting a report to a local folder

You can export a report in csv, excel, excel data, pdf and xml format. Therefore, you have to navigate to the folder of the desired report.

**Step 1:** Choose the report you want to export and click on the “More” icon (  ) in the right of the report name.

**Step 2:** Select “Run as” from the list.



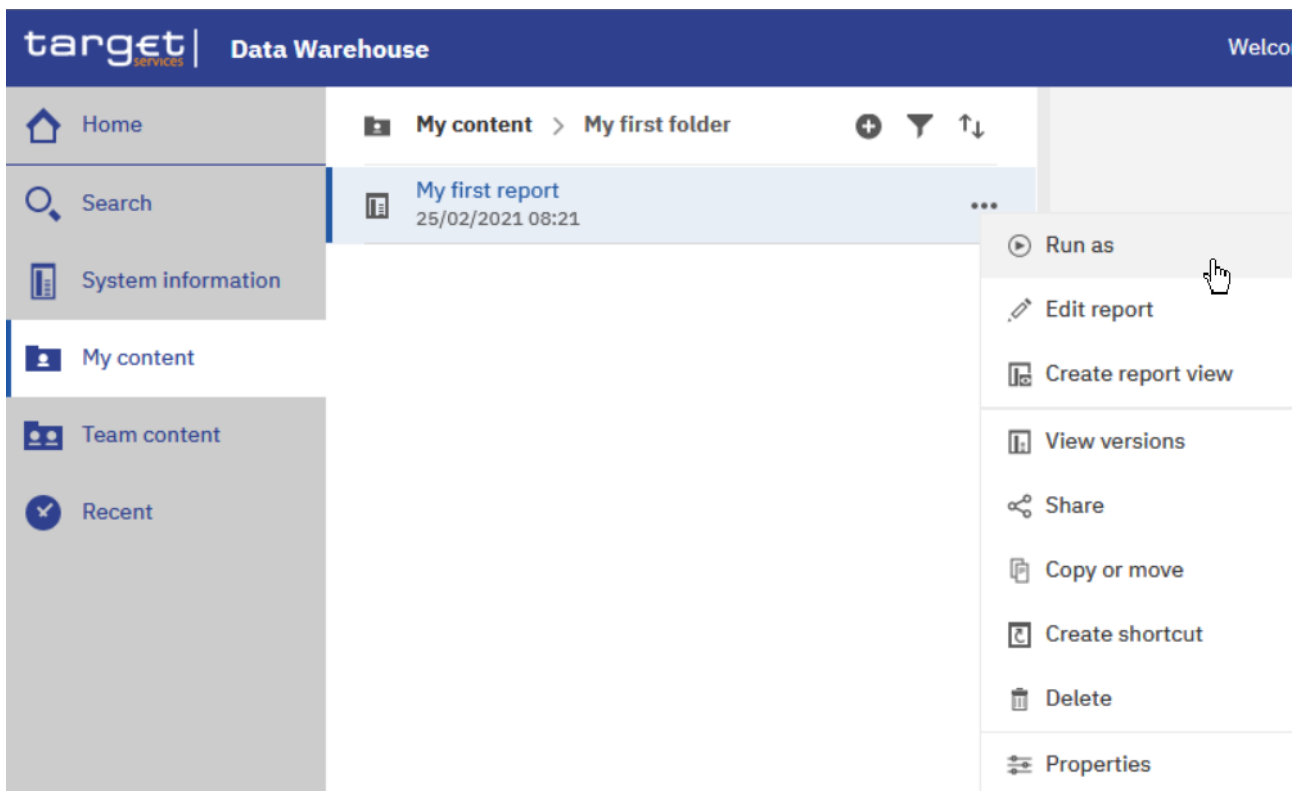



Figure 82 - Welcome page - My content - Properties

**Step 3:** Select the desired format.

**Step 4:** Enter the selection criteria of the report (see chapter [Run a report step-by-step](#) [▶ 83]).

**Step 5:** Click on the “Run” button (  ).

**Step 6:** After clicking on the “Run” button (  ) a pop-up window appears to save the report. You can download a report in csv, excel, excel data, pdf and xml format.

**Step 7:** The download option depends on the chosen format and the functionality of the browser you are using. In most browsers you can define, whether certain file types should be opened in the browser, a save dialog is shown or the file is directly downloaded to the default download directory. Please be aware that these settings have to be done in the browser, not in the DWH GUI.

**For example, if you choose to run the report as ‘XML’, then you cannot view the result, but only download the report in a local folder.**

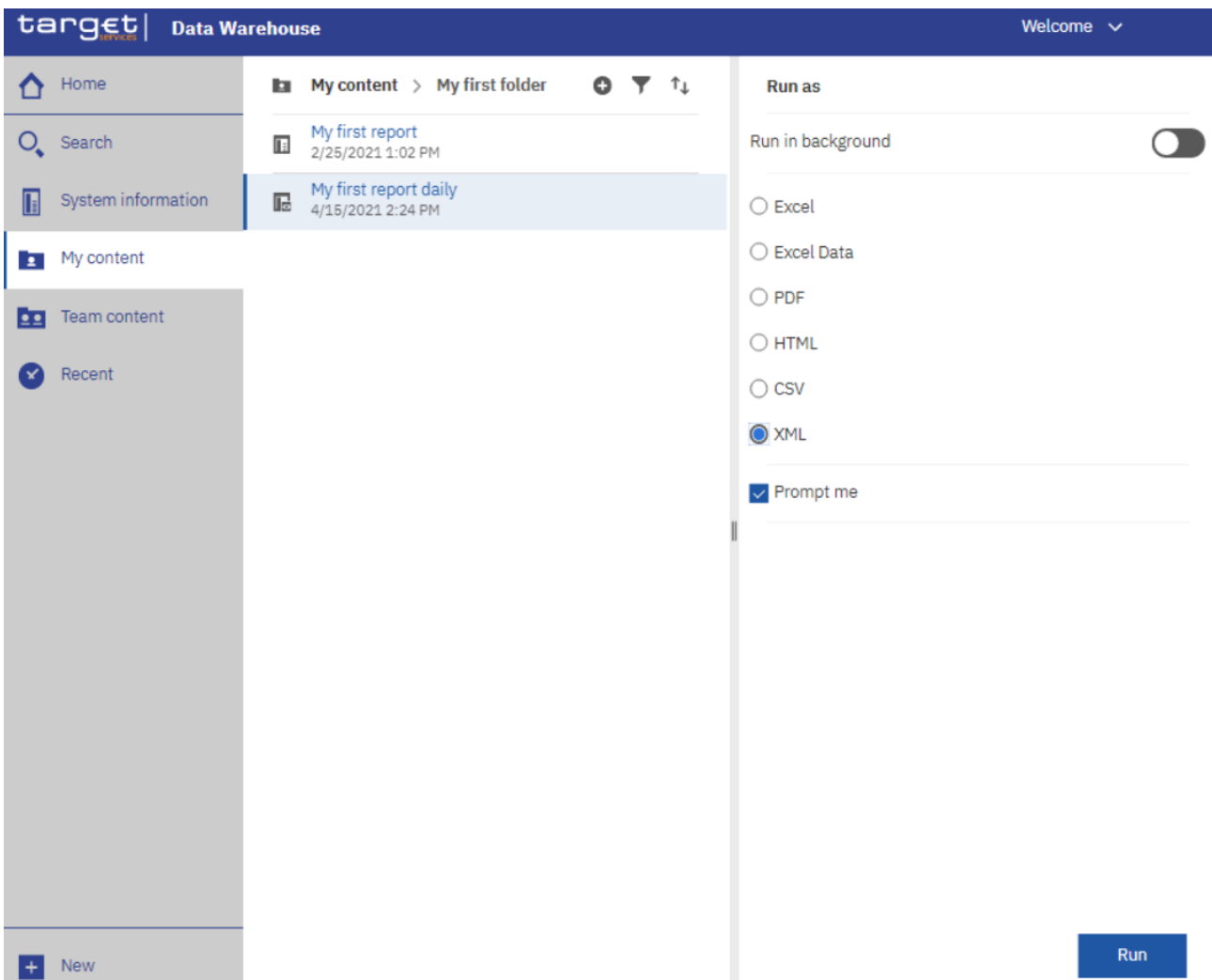


Figure 83 - Welcome page - My content – Run as XML

A pop up window appears to save the report:

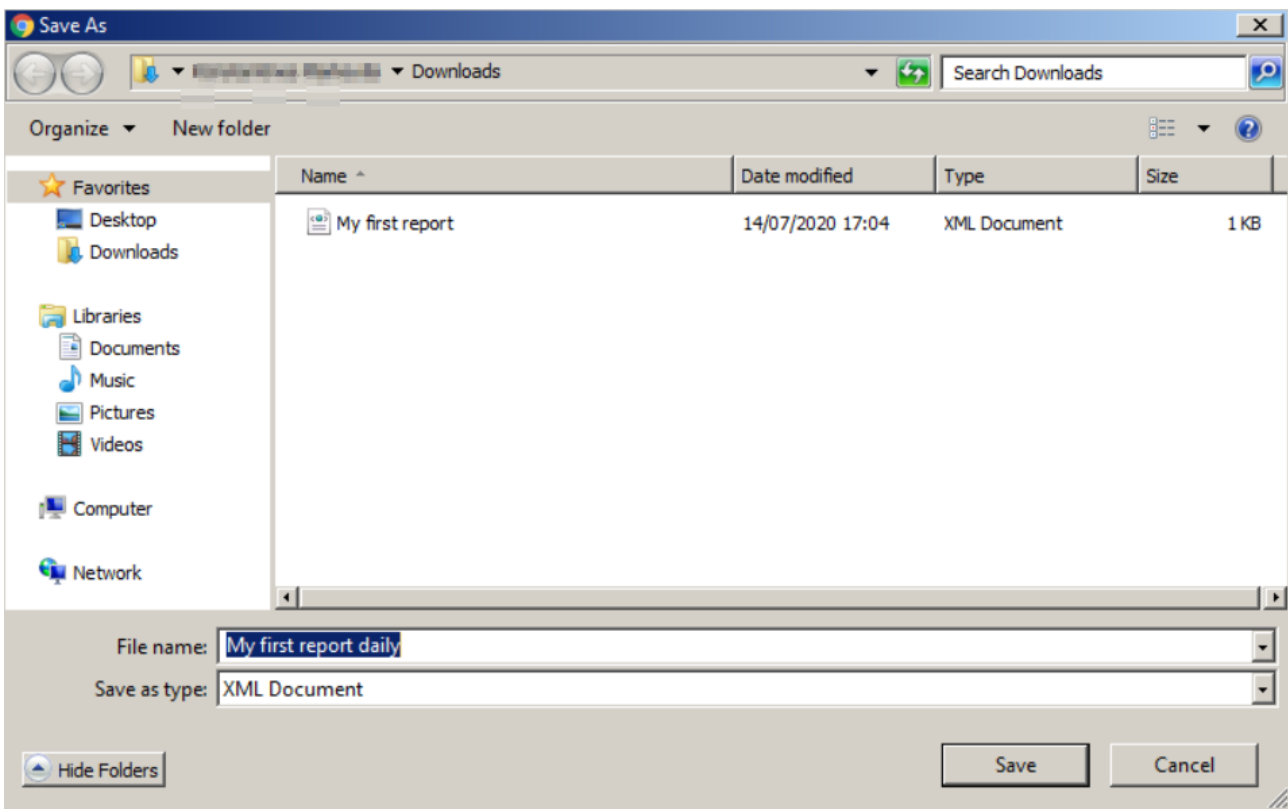


Figure 84 - Save Report

Please refer to the user manual of your browser for details and options.

## 4.2 Running reports

This chapter gives you an overview about how to run a report and organise its delivery.

### 4.2.1 Run a report step-by-step

**Step 1:** Navigate to the “**Team content**” folder, there to folder “**Predefined Report**” and open the folder with the desired report.

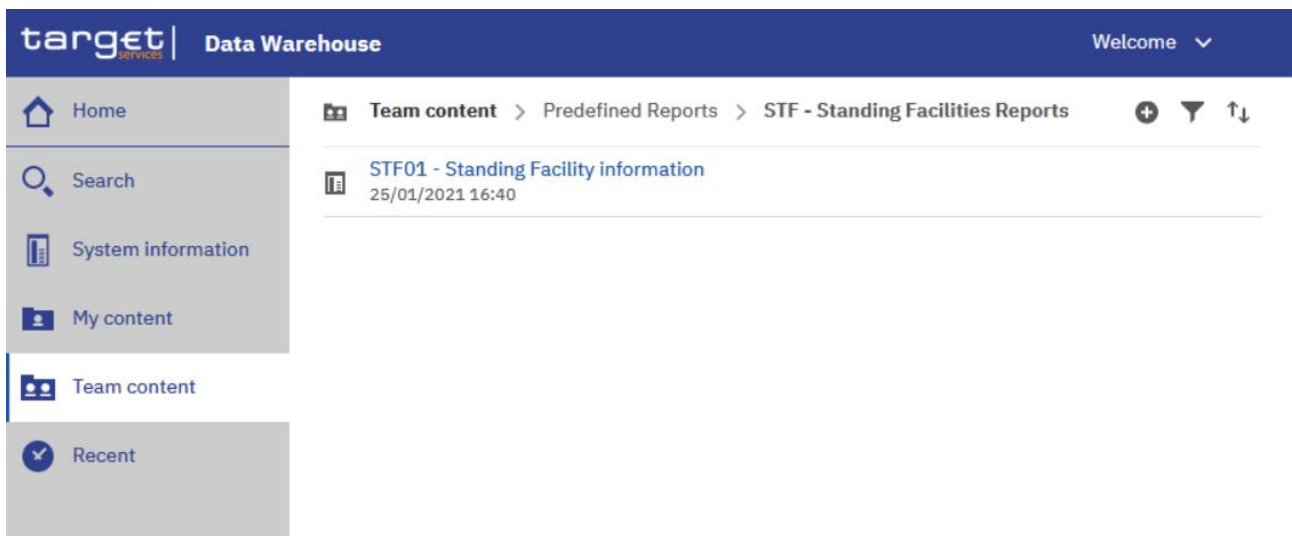


Figure 85 - Team content – Predefined Reports – STF – Standing Facilities Reports

**Step 2:** Select the report you want to run. In order to run the report you can click on the report name. This action will run the report in the default DWH format, which is html.

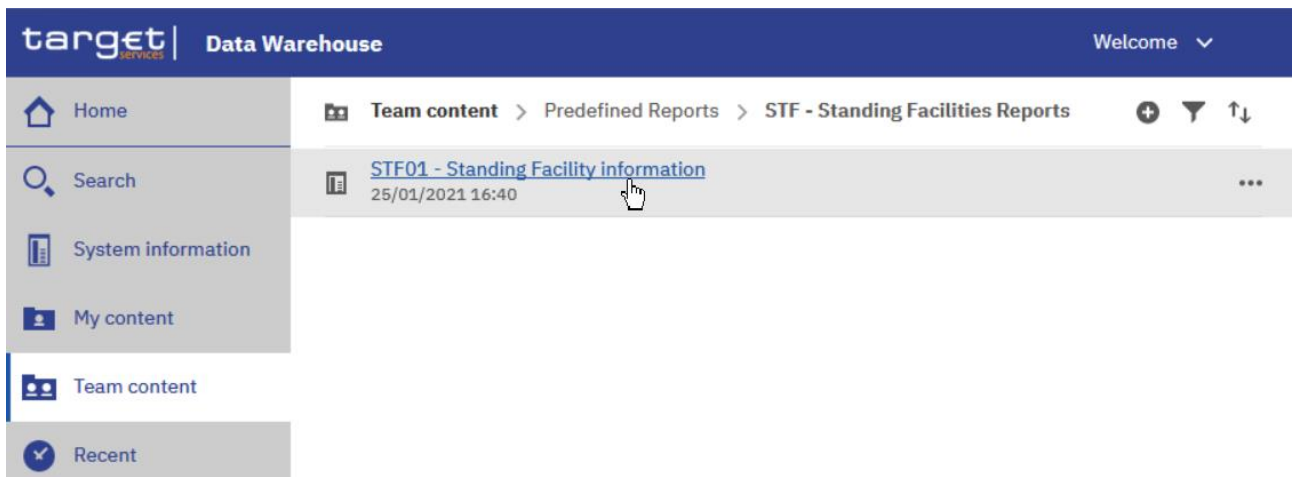


Figure 86 - Team content – Predefined reports – STF – Standing Facilities Reports


**Step 3:** In the following screen you have to enter the search criteria in the prompt page.

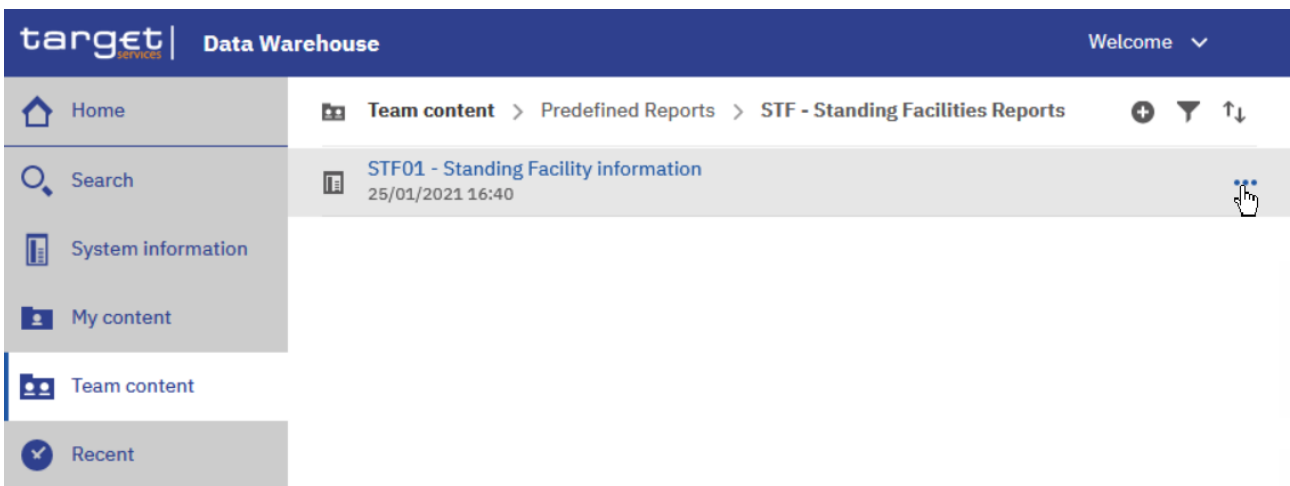
The screenshot shows the 'STF01 - Standing Facility information' prompt page. At the top, there is a search bar containing the keyword 'isthmus'. Below the search bar, there are two date selection fields: 'Date From' set to 'Apr 30, 2019' and 'Date To' set to 'Jun 30, 2019'. A list of search results is displayed, with one entry 'PBAAKMD0XXX - Banco de Ist' selected. To the right of the search results is a 'Choices' panel containing the same entry. Below the search results, there is a 'Party BIC' field, a 'Contains any of these keywords' dropdown menu, and a 'Case Insensitive' checkbox which is checked. At the bottom right, there are 'Cancel' and 'Finish' buttons.

Figure 87 - Standing Facilities Reports – STF01 Standing Facility information – prompt page

**Step 4:** The report result is available in html format.

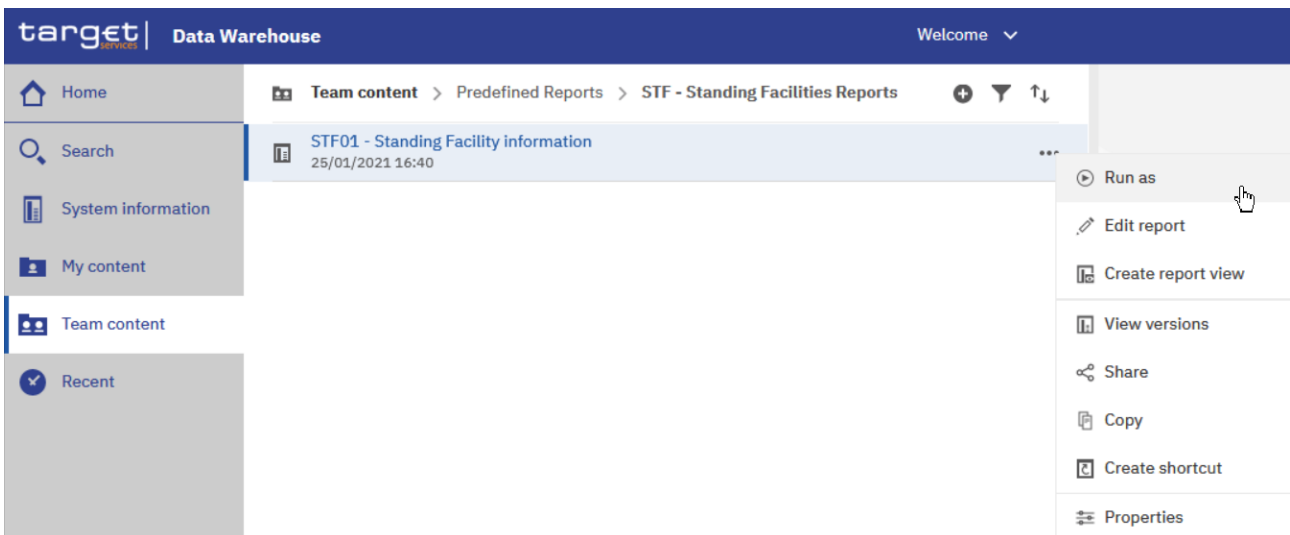
#### 4.2.1.1 Choose different formats

If you want to run the report and DWH shall provide the result in another format than html you have to click on the **“More”** icon (  ) on the right side.



**Figure 88 - Team content – Predefined Reports – STF – Standing Facilities Reports**

Select “Run as” from the list.



**Figure 89 - Team content – Predefined Reports – STF – Standing Facilities Reports – STF01 Standing Facility information – Run as (1)**

You can choose the format you want to receive the report result and click on “Run” button.

The screenshot shows a web interface for configuring a report. The breadcrumb navigation at the top reads: Team content > Predefined Reports > STF - Standing Facilities Reports. Below this, a report card is visible for 'STF01 - Standing Facility information', last updated on 7/10/2020 at 2:12 PM. To the right, a 'Run as' configuration panel is open, featuring a 'Run in background' toggle switch (currently off), a list of output formats (Excel, Excel Data, PDF, HTML, CSV, XML) with radio buttons, and a 'Prompt me' checkbox (checked). A blue 'Run' button is located at the bottom right of the configuration panel.

**Figure 90 - Team content – Predefined Reports – STF – Standing Facilities Reports – STF01 Standing Facility information – Run as (2)**

Also with a different format you have to enter the search criteria in the prompt page.

target services

STF01 - Standing Facility information

Date From : Apr 30, 2019 Date To : Jun 30, 2019

Keywords: isthmus

Choices: PBAAKMD0XXX - Banco de Isthmus

Party BIC :

Contains any of these keywords

Case Insensitive

Cancel Finish

Figure 91 - Standing Facilities Reports – STF01 Standing Facility information - prompt page

The report result is available in the chosen format, in this example in pdf format.



target | STF01 - Standing Facility information

2021-04-27  
14:42:53  
DEV -  
Development and integration

CBXXXXMDDXXX - Central Bank of Fiction

Filters: Date From : 2019-04-30 Date To : 2019-06-30  
Party BIC : PBAAKMDXXX - Banco de Isthmus

**Marginal Lending**  
Responsible CB : Central Bank of Fiction  
Currency : EUR

| Use of marginal lending      |            |                     |                      |                  |
|------------------------------|------------|---------------------|----------------------|------------------|
| BIC                          | Date       | Capital set-up      | Capital refund       | Interests        |
| PBAAKMDXXX                   | 30.04.2019 | 2,341,231.05        | 6,346,801.54         | -1,602.54        |
| Party Name: Banco de Isthmus | 07.05.2019 | 19,230.48           | 0.00                 | 0.00             |
| MFI Code: 10002              | 14.05.2019 | 19,230.48           | 0.00                 | 0.00             |
| Account BIC: PBAAKMCD01X     | 21.05.2019 | 19,230.48           | 0.00                 | 0.00             |
|                              | 28.05.2019 | 19,230.48           | 0.00                 | 0.00             |
|                              | 30.05.2019 | 2,862,000.71        | 7,822,801.91         | -1,602.54        |
|                              | 04.06.2019 | 19,230.50           | 0.00                 | 0.00             |
|                              | 11.06.2019 | 19,230.50           | 0.00                 | 0.00             |
|                              | 18.06.2019 | 19,230.50           | 0.00                 | 0.00             |
|                              | 25.06.2019 | 19,230.50           | 0.00                 | 0.00             |
|                              | 30.06.2019 | 3,402,000.85        | 9,298,802.27         | -1,602.54        |
| <b>Total</b>                 |            | <b>8,759,076.53</b> | <b>23,468,405.72</b> | <b>-4,807.62</b> |
| <b>Total all Parties</b>     |            | <b>8,759,076.53</b> | <b>23,468,405.72</b> | <b>-4,807.62</b> |

Figure 92 - Standing Facilities Reports – STF01 Standing Facility information – report

#### 4.2.1.2 Run in background

There is another option to run a report – “Run in background”. You can find and select this option under “Run as”.

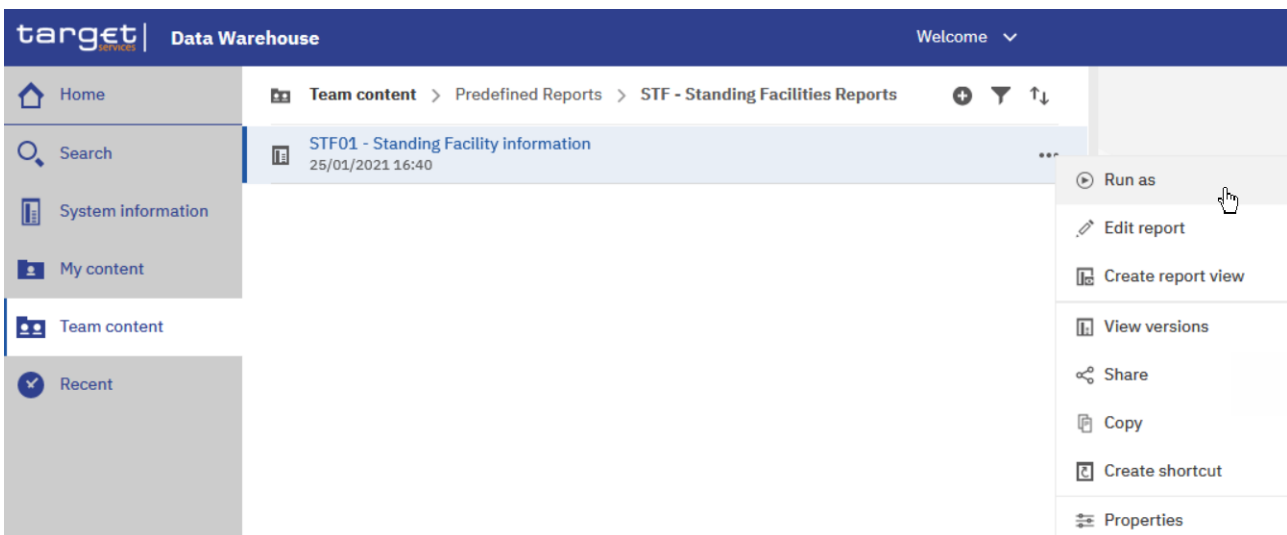
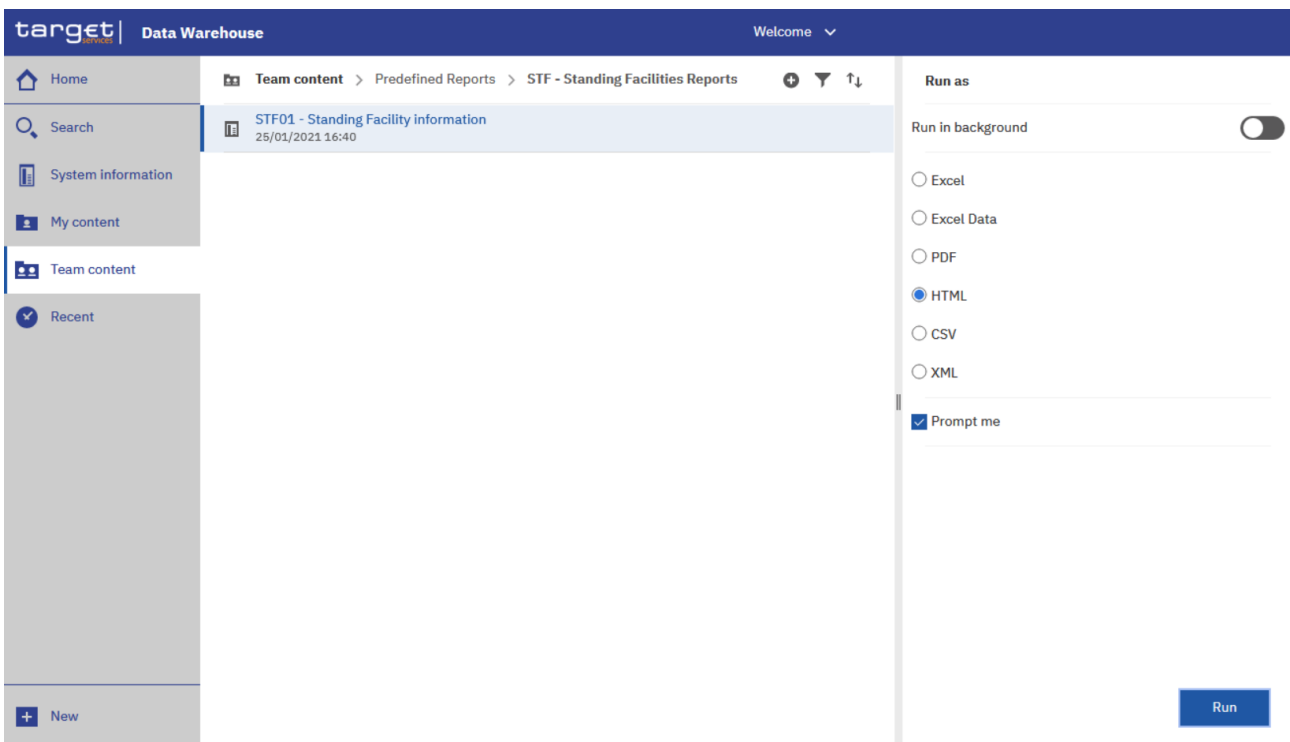


Figure 93 - Team content – Predefined Reports – STF – Standing Facilities Reports – STF01 Standing Facility information – Run as

Here you can see the “Run in background” option on top of the list.



**Figure 94 - Team content – Predefined Reports – STF – Standing Facilities Reports – STF01 Standing Facility information – Run as – Run in background**

This option gives you the opportunity to run the report in the background without waiting for the result. Instead, you can view the report when the report is available.

In order to run the report in background, you have to enable “**Run in background**”. The icon colour turns into blue, meaning this option is enabled, and the following options are available to you:

**Run as**

Run in background

Excel

Excel Data

PDF

HTML

CSV

XML

Prompt me

You will be prompted for input before the report runs in background.

**Advanced**

Now  Later

Languages >

Delivery >

**Run**

**Figure 95 - Run as – Run in background – Advanced**

Prompt me

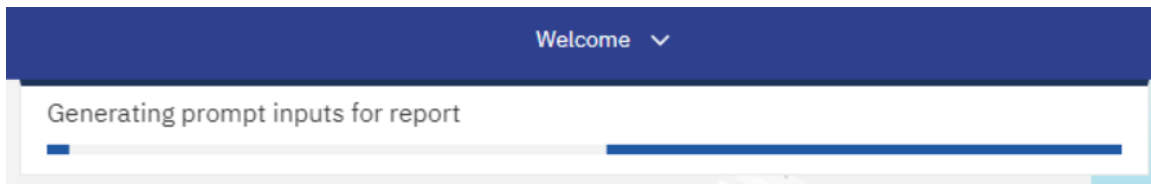
When you select “**Prompt me**”, you have to enter search criteria in the prompt page after you click on “**Run**”. If you do not chose this, the report will run with the last set of search criteria you have used.

Advanced

You can decide if you want to run the report now or later. You can find this option by clicking on the arrow to the right of the “**Advanced**” section.

In case you select “**Now**”, the report runs directly.

A message on top informs you that the prompt page will open.



**Figure 96 - Run as – Run in background - Advanced**

In case you select “**Later**”, you can choose the date and time of the execution.

Now  Later

**Figure 97 - Run as – Run in background – Advanced – Execution time – Later**

## 4.2.2 Delivery

You can deliver reports by either saving them on the Team content folders, or by saving them as an external file. You have two possibilities to deliver a report result if you want to receive the result only once. First you can save the report in DWH directly and view it after successful creation. The second option is the delivery to the application of your party.

In case a report should be delivered to you (independent from the output channel (U2A or A2A) you have to schedule a report. For this option please refer to chapter [Scheduling reports](#) [▶ 102] for further details.

### 4.2.2.1 Delivery - Save report (U2A)

To save the report result you must click on the arrow on the right of the Delivery section. Choose “**Save report**” and click on the “**Done**” button. As soon as it is executed, the report is saved in DWH.

**Step 1:** Navigate to the respective report folder

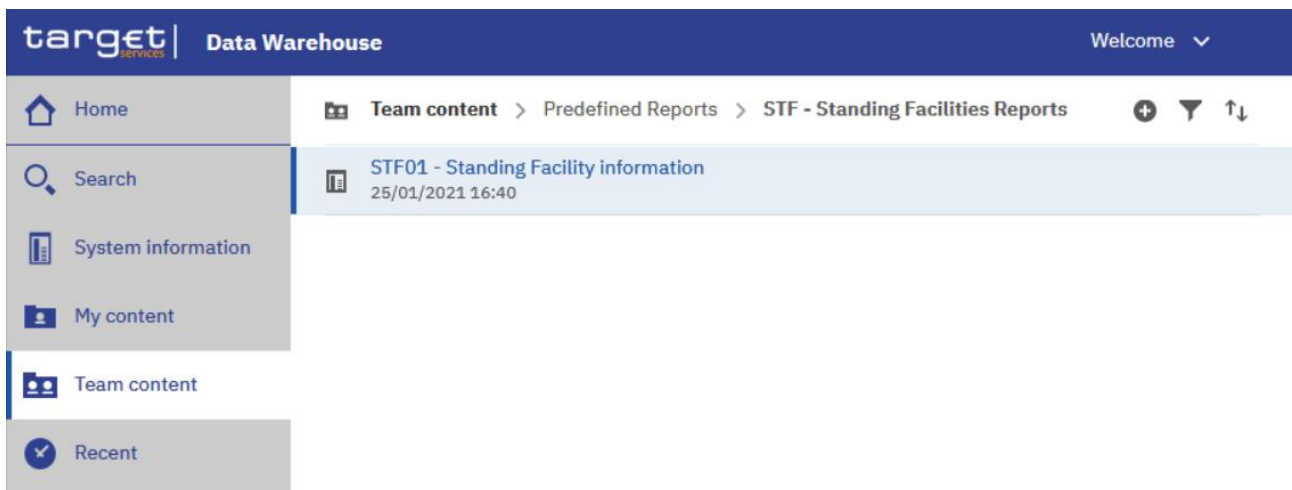




Figure 98 - Team content – Predefined Reports – STF – Standing Facilities Reports

Step 2: Click on the “More” icon (  ) at the right of the report and select “Run as”  .

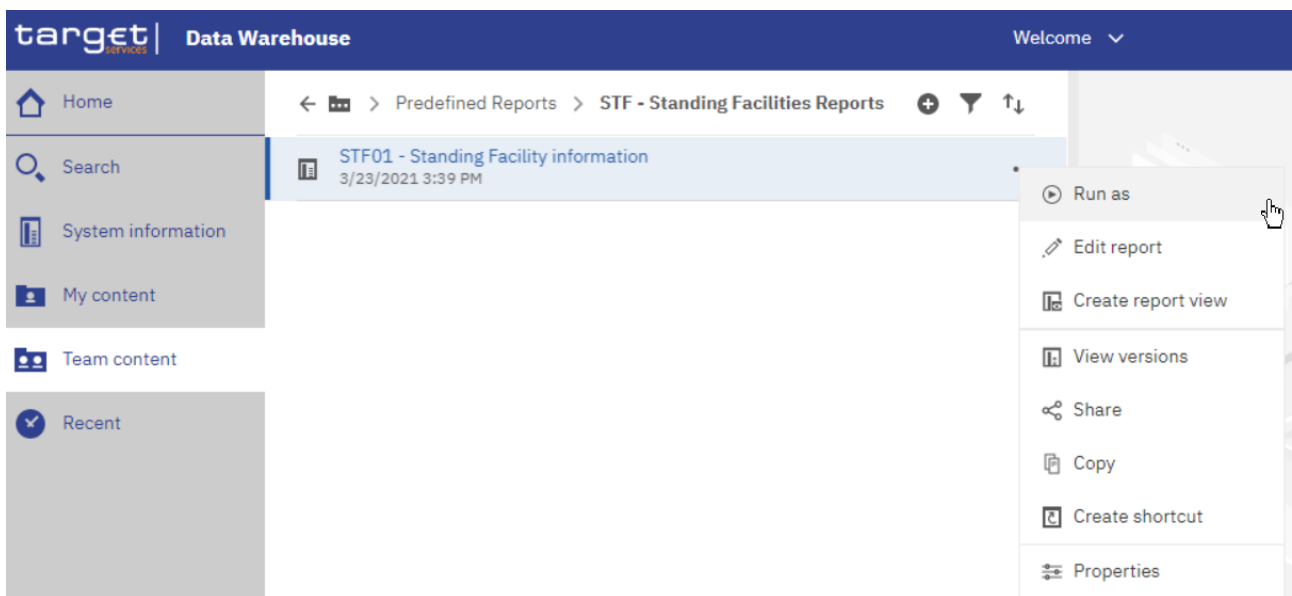


Figure 99 - Team content – Predefined Reports – STF – Standing Facilities Reports – Run as

Step 3: Select “Run in background”

**Run as**

---

Run in background

---

Excel

Excel Data

PDF

HTML

CSV

XML

---

Prompt me

You will be prompted for input before the report runs in background.

**Advanced** ▼

---

**Run**

**Figure 100 - Team content – Predefined Reports – STF – Standing Facilities Reports – Run as – Run in background**

**Step 4:** Click the arrow next to “**Advanced**” to view the delivery section

**Advanced** ▲

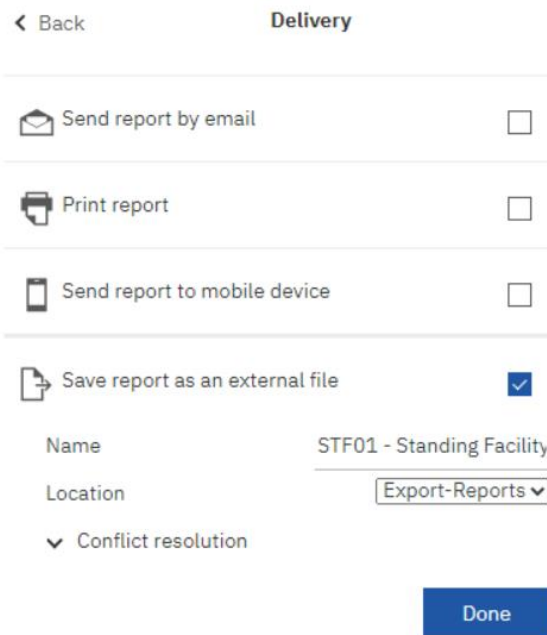
Now  Later

Languages ▶

Delivery ▶

**Figure 101 - Team content – Predefined Reports – STF – Standing Facilities Reports – Run as – Run in background – Advanced**

**Step 5:** Click the arrow next to the “**Delivery**” property, uncheck the “**Print report**” property, and check the “**Save report as an external file**”. Finally, click on ‘Done’

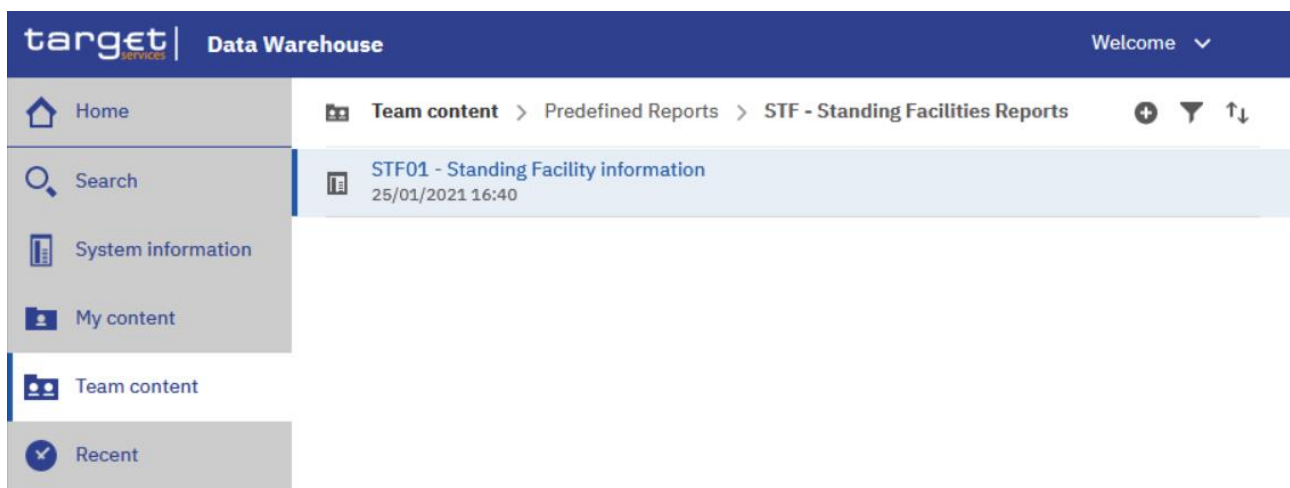


**Figure 102 - Team content – Predefined Reports – STF – Standing Facilities Reports – Run as – Run in background – Advanced – Save report as an external file**


#### 4.2.2.2 Delivery - Save the report for an external file (A2A)

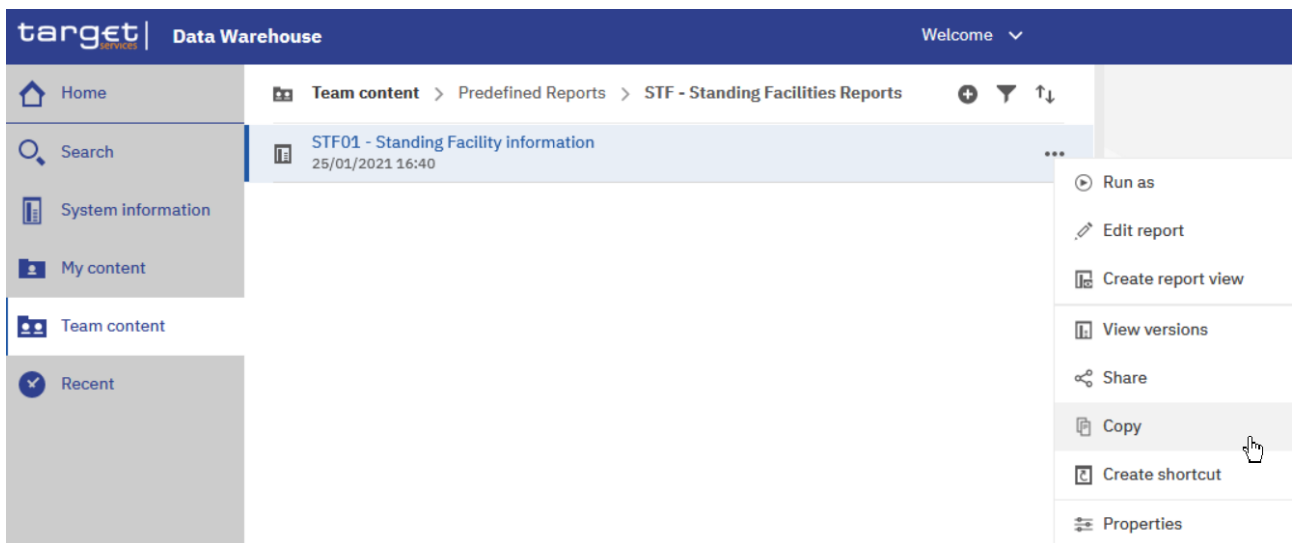
For the A2A delivery please follow the steps described hereafter.

**Step 1:** You navigate to the respective report folder as described in chapter [Copy a report](#) [▶ 71].



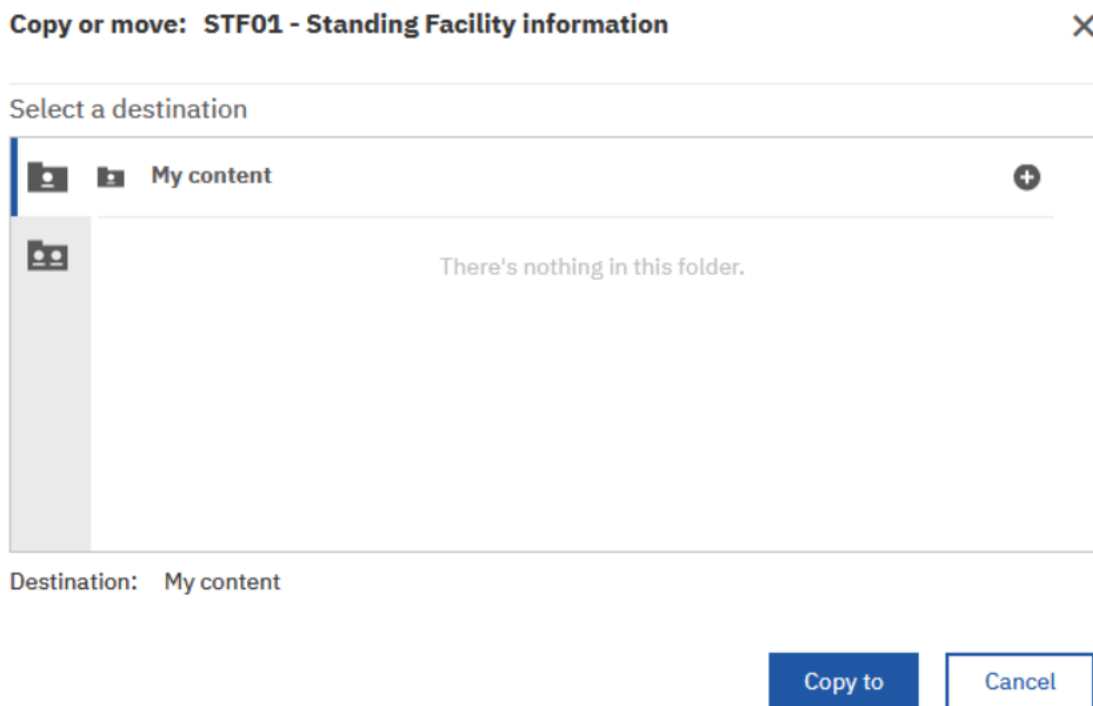
**Figure 103 - Team content - Predefined Reports - Standing Facilities Reports - STF01 Standing Facility information**

**Step 2** Click on the “More” icon (  ) at the right of the report and select “Copy”.



**Figure 104 - STF01 Standing Facility information - More options**

**Step 3:** A window pops up where you have to enter a storage location for your copy. In this example, the report is copied to **“My content”**.



**Figure 105 - STF01 Standing Facility information - Copy**

**Step 4:** Navigate to the folder where you have copied the report. In this example, the folder is **“My content”**.



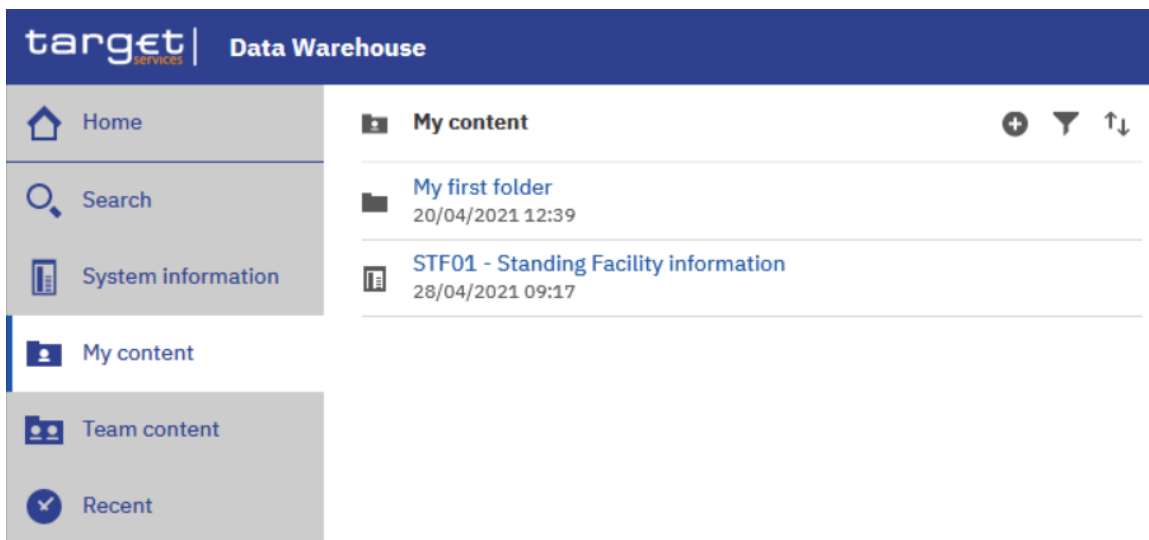


Figure 106 - STF01 Standing Facility information – Copy to My content

**Step 5:** Find the report and click on the “More” icon ( ) at the right of the report and confirm by clicking “Run as”.

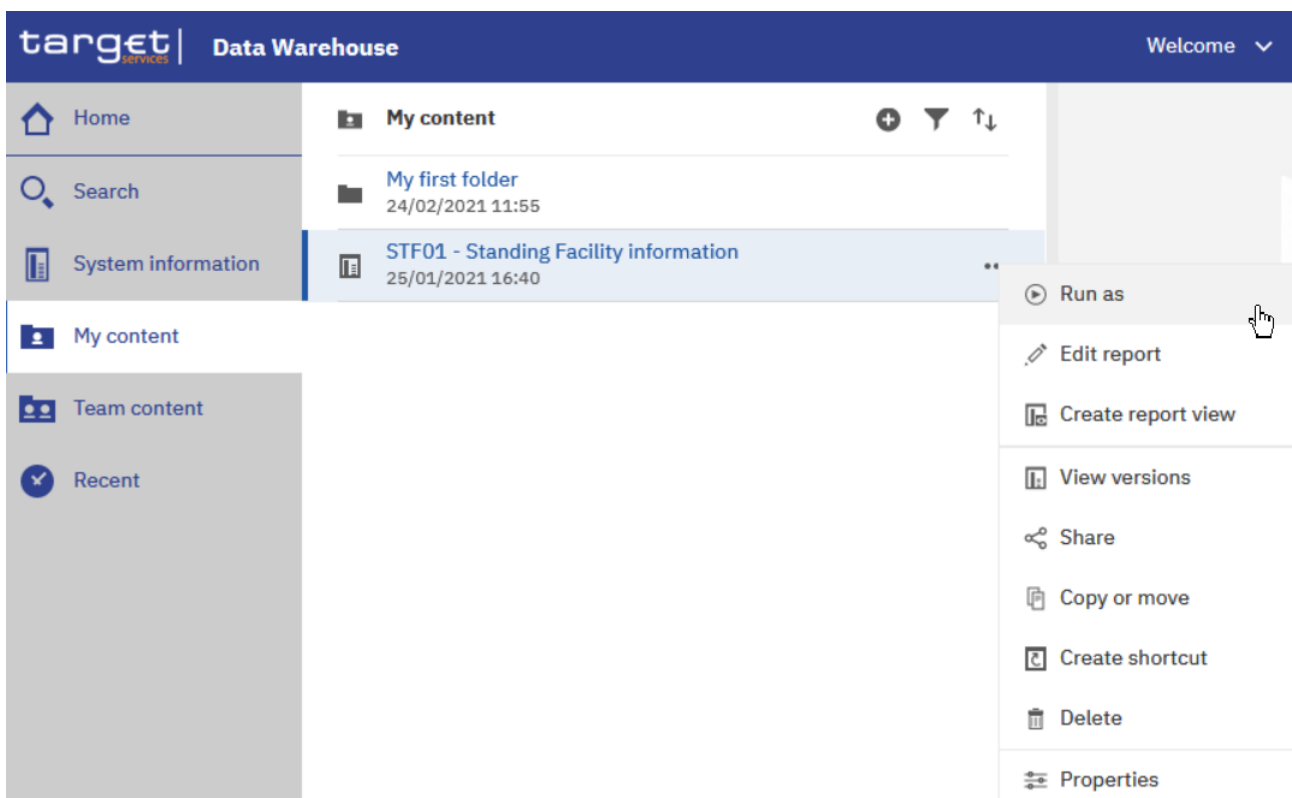


Figure 107 - My content - STF01 Standing Facility information - Run as

**Step 6:** Perform the same action as explained in chapter [Run a report step-by-step](#) [▶ 83] for “Run in background”.

Check the “Run in background” button:

**Run as**

Run in background

Excel

Excel Data

PDF

HTML

CSV

XML

Prompt me

You will be prompted for input before the report runs in background.

**Advanced**

Figure 108 - My content - STF01 Standing Facility information - Run as – Run in background

**Step 7:** For delivery in A2A you can choose the following formats: csv, excel, xml.

**Run as**

Run in background

Excel

Excel Data

PDF

HTML

CSV

XML

Prompt me

You will be prompted for input before the report runs in background.

**Advanced**

Figure 109 - My content - STF01 Standing Facility information - Run as – Choose the format

**Step 8:** You are free to select “Advanced” “Now” or “Later” and add a date and time of the execution.

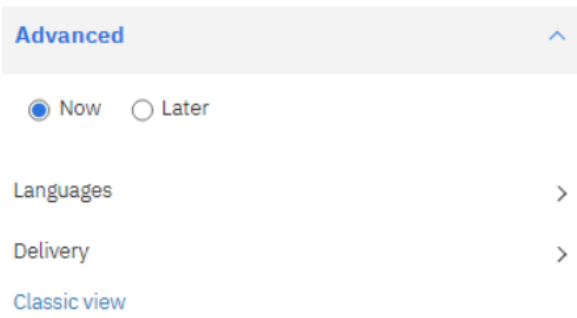


Figure 110 - My content - STF01 Standing Facility information - Run as – Advanced – Now or Later

Step 9: For “Delivery” you have to select the option “Save report as an external file”.

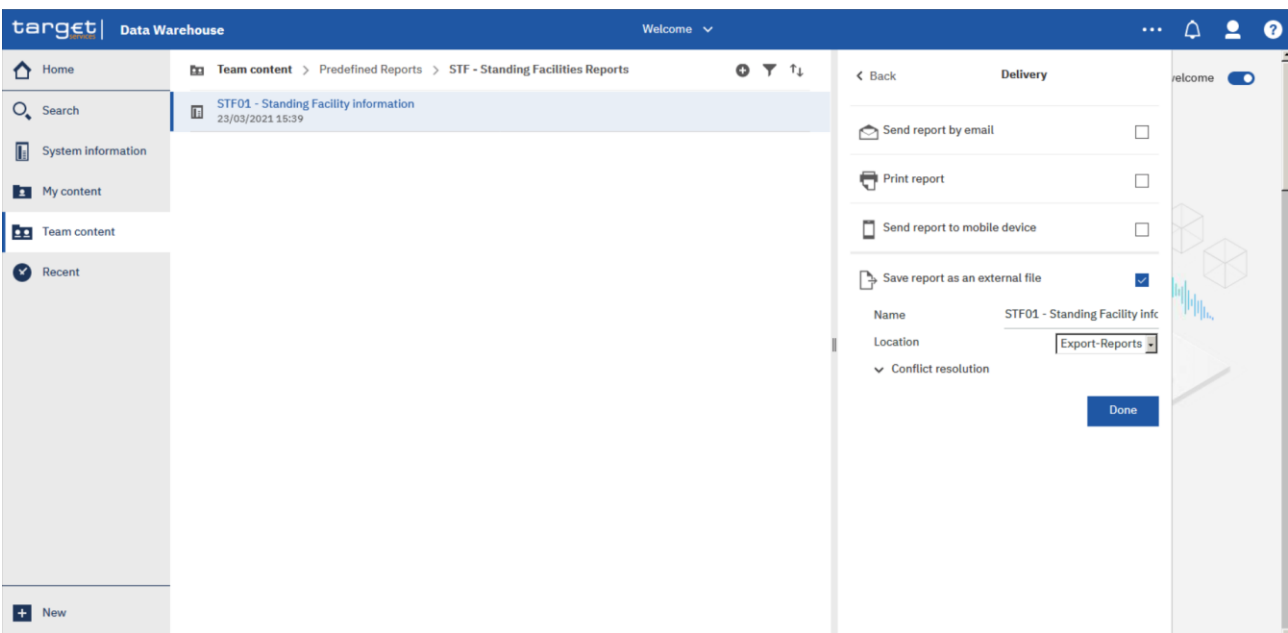



Figure 111 - My content - STF01 Standing Facility information - Run in background - Advanced Delivery


Step 10: After you activated the “Save report as an external file” checkbox, further options are presented.

< Back      **Delivery**


---

 Send report by email     


---

 Print report     

---

 Send report to mobile device     

---

 Save report as an external file     

Name      STF01 - Standing Facility info

Location     

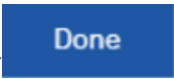
▼ Conflict resolution

**Done**

**Figure 112 - My content - STF01 Standing Facility information - Run in background - Advanced Delivery - Save report as an external file**

The “**Name**” field presents the name of the report. The default value is the name of the report, as it is known in DWH.

Please do not change the default value in the “**Location**” field, as this is the place where the report is stored before it is delivered to your party via A2A. Changing the default value in the ‘Location’ field will result in reports not being send via A2A. The folder is not accessible via the GUI and only for storing the report before it is delivered via A2A.

**Step 11:** Click on the “**Done**” button ().

**Step 12:** Click on the “**Run**” button.

**Run as**

Run in background

Excel

Excel Data

PDF

HTML

CSV

XML

Prompt me

You will be prompted for input before the report runs in background.

**Advanced** ^

Now  Later

Languages >

Delivery >



[Classic view](#)


**Run**

**Figure 113 - My content - STF01 Standing Facility information - Run in background - Advanced Delivery – Run the report**

**Step 13:** Enter the search criteria in the prompt page.


## STF01 - Standing Facility information

Date From : \* Jan 1, 2019  Date To : \* Dec 31, 2019 

Keywords: isthmus 

Party BIC :

Select all  
 PBAAKMD0XXX - Banco de Ist

Contains any of these keywords 

Case Insensitive

Choices: PBAAKMD0XXX - Banco de Isthmus

Select all Deselect all

Cancel Finish

Figure 114 - My content - STF01 Standing Facility information - Run in background - Advanced Delivery – Enter search criteria

**Step 14:** Click on the “Finish” button ().

The report will be executed and the result will be sent via A2A in the chosen format to your party.

Or you run your report in the background with the delivery “**Save the report as an external file**”.

### 4.3 Scheduling reports

The DWH offers a scheduler function which allows the configuration and delivery of (recurring) reports with individual settings.


This chapter describes the steps that you perform to schedule a report and to check the scheduling afterwards.

### 4.3.1 Precondition

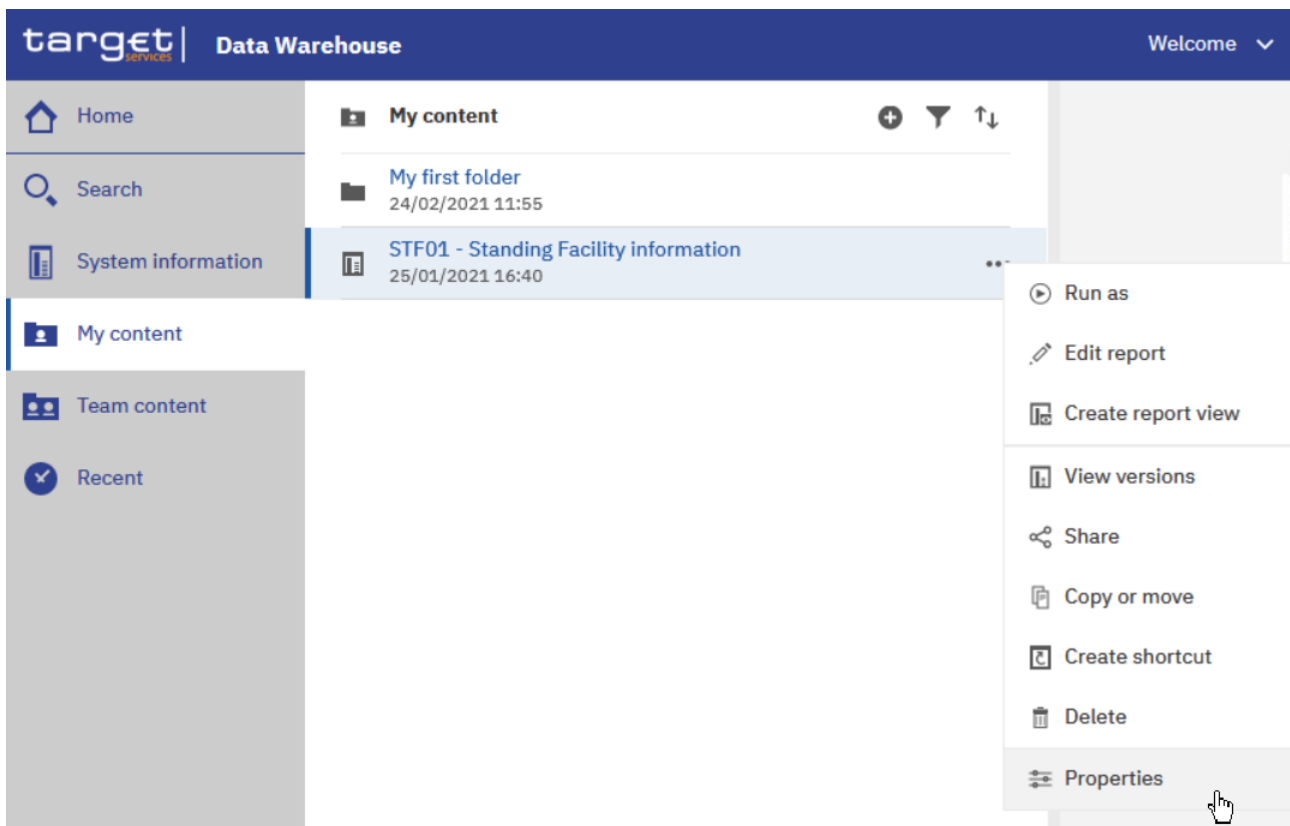
After saving the report in “**My content**” or, for CB users, under the shared folder of your CB, you have to choose the report you want to schedule and create a report view of this report (see chapter [Saving a report output](#) [▶ 78]).

### 4.3.2 Scheduling the report for a specific time

After creating the report view you can start to schedule your report.

**Step 1:** Choose the report you have saved as a report view, and click on the “**More**” icon (  ) at the right of the report.

**Step 2:** Click on “**Properties**”.



**Figure 115 - My content - report view - Properties**

**Step 3:** A description of your report is shown and you can add a description under “**General**”.

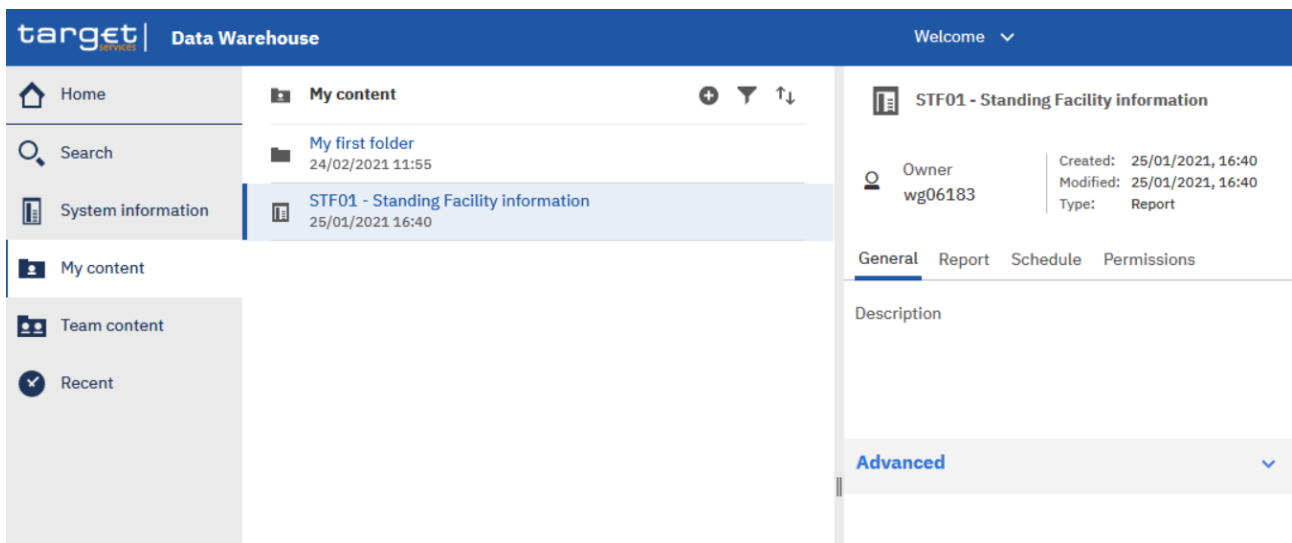
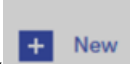


Figure 116 - My content - report view - Properties – General - description of your report

Step 4: In the “Schedule” tab you will find the “New” icon (  ).

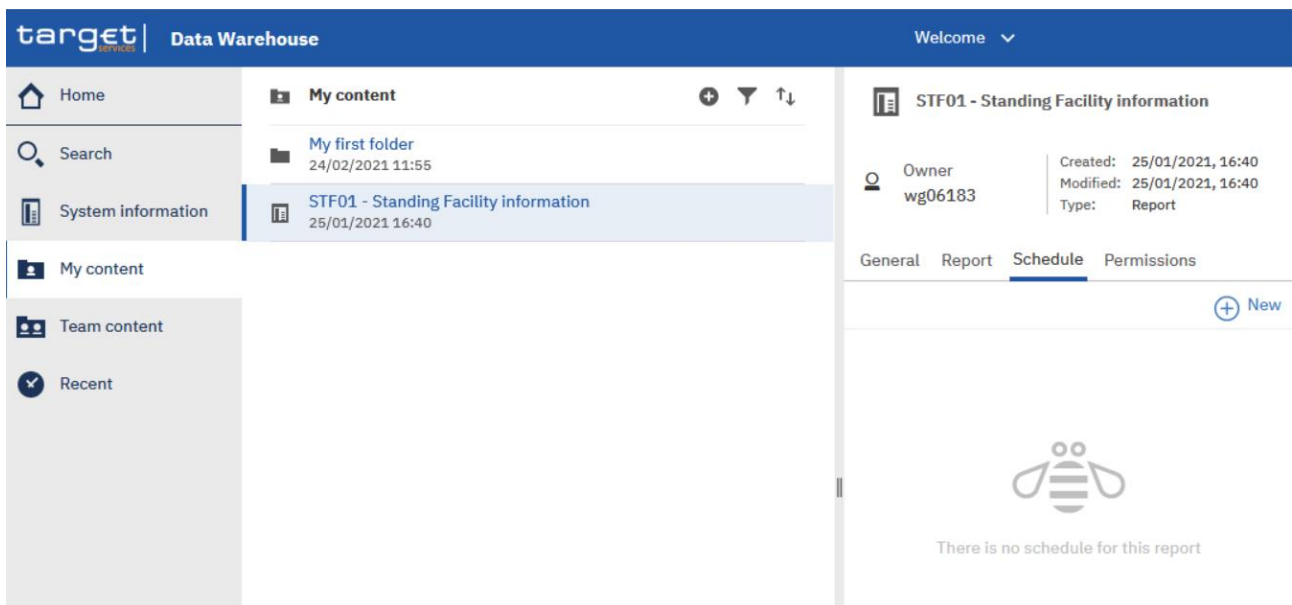



Figure 117 - Welcome page - My content - report view - Properties - Schedule

Step 5: By clicking on the “New” icon (  ), the “Schedule” is opening where you have multiple options to choose for scheduling your report.



The screenshot shows the 'target Data Warehouse' interface. On the left is a navigation sidebar with 'Home', 'Search', 'System information', 'My content', 'Team content', and 'Recent'. The main area displays a folder tree under 'My content' with 'My first folder' and 'STF01 - Standing Facility information'. On the right, the 'Create schedule' configuration panel is open, showing a 'Weekly' schedule, start date of 2021-02-25 at 12:59, end date of 2021-05-25 at 12:59, and a frequency of 1 week on Tuesdays. The 'Options' section includes 'Format' set to HTML, 'Delivery' set to Save, and 'Prompts' set to Set values.

Figure 118 - Welcome page - My content - report view - Properties - create schedule (1)

**Step 6:** You can set a variety of options when scheduling a report: the frequency the report will be run, the “**Period**” of the schedule, the format in which the report will be delivered, and the delivery method.

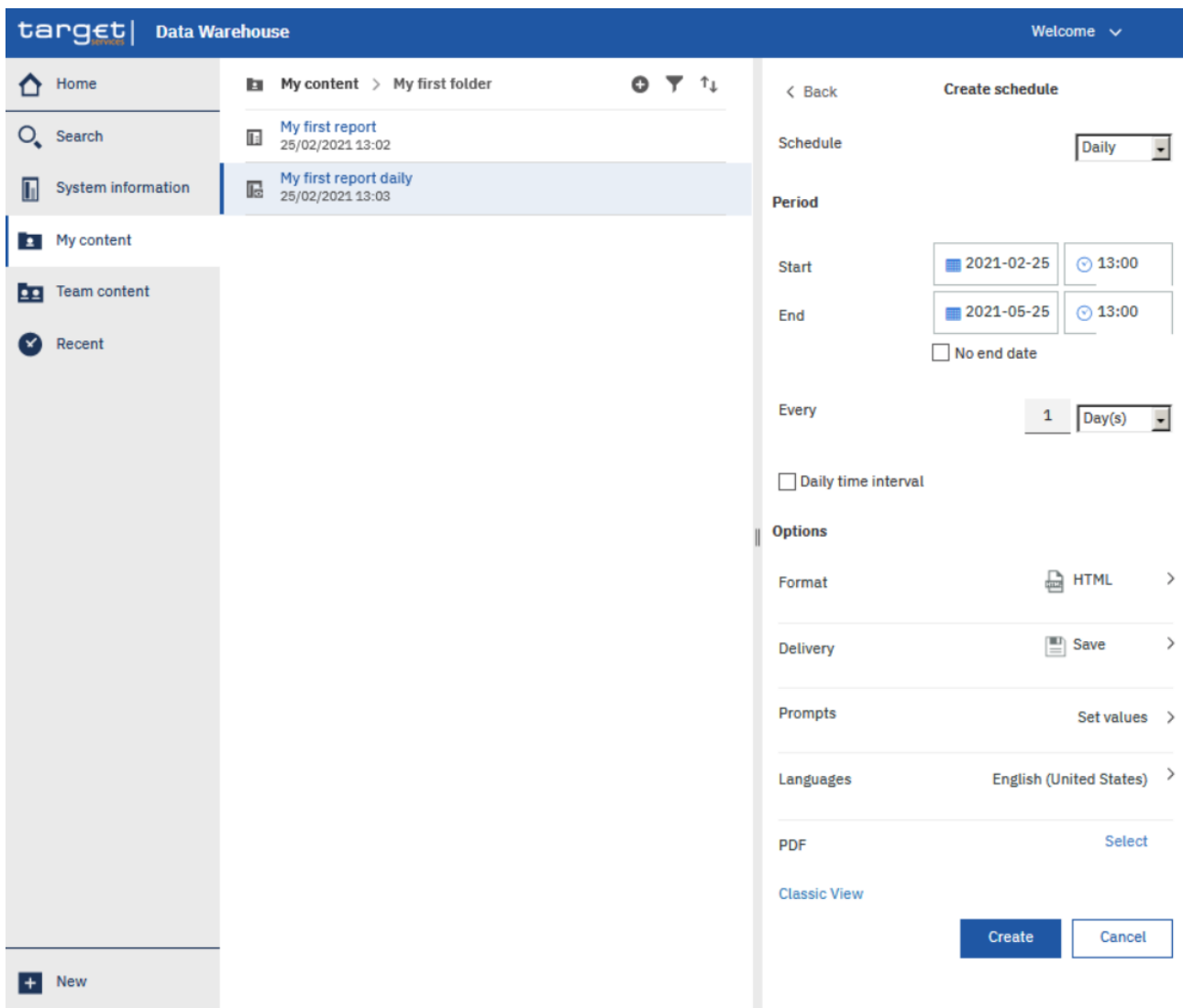


Figure 119 - Welcome page - My content - report view - Properties - create schedule (2)

Schedule: The frequency, which the report will be run, daily, weekly, monthly, yearly.

Period: Choose the start and the end date of the schedule. Alternatively, by clicking on “No end date” the schedule will run indefinitely.

Format: The type of format the report will be executed to, HTML, csv, excel, excel data and xml. For further information, you may check the chapter [Run a report step-by-step](#) [▶ 83].

Delivery: You may choose if you want to save the report in Cognos or as an external file. For further information please go to chapter [Delivery - Save report \(U2A\)](#) [▶ 92].

Prompts: By clicking on “**Set values**”, and then “**Set**” you will be presented with the prompt page of the report, where you can enter the search criteria.

Current values

Set | Clear



You currently have no prompt values set

Figure 120 - Welcome page - My content - Report view - Properties - Create schedule – Current values

### TRN01 - Cash transfer (order) search and details

Please select the group of criteria you wish to perform your search : \* by Transaction Reference

Select by Transaction Reference

Keywords:

Input keywords here

No Results

Reference : \*

Starts with any of these keywords

Case Insensitive

Figure 121 - Welcome page - My content - Report view - Properties - Create schedule – Enter values

Languages: You may define the language of the content of the report, if more than one languages has been defined in the database. As the language in the database is always English, nothing will change in case you define another language.

**Languages**

- English (Ireland)
- English (Malta)
- English (New Zealand)
- English (Philippines)
- English (Singapore)
- English (South Africa)
- English (U.S. Virgin Islands)
- English (United Kingdom)
- English (United States)
- English (Zimbabwe)
- Estonian
- Estonian (Estonia)
- Faroese
- Faroese (Faroe Islands)
- Finnish
- Finnish (Finland)

**Figure 122 - Welcome page - My content - Report view - Properties - Create schedule – Languages**

PDF: By clicking on “**Select**” you may choose the orientation or the paper size.

PDF options

Orientation Default ▾

Paper size Default ▾

Requires a password to open the report

Password:

Confirm Password:

Requires a password to access options

Password:

Confirm Password:

Figure 123 - Welcome page - My content - Report view - Properties - Create schedule - PDF

In this example, you see a daily schedule with no end date, HTML as an output, and save the report in DWH.

The screenshot displays the 'Create schedule' configuration window in the Target Services application. On the left, a navigation pane shows the current location: 'My content > My first folder'. Below this, two report items are listed: 'My first report' (dated 25/02/2021 13:02) and 'My first report daily' (dated 25/02/2021 13:03), with the latter selected. The main configuration area is titled 'Create schedule' and features a '< Back' button. The 'Schedule' dropdown is set to 'Daily'. Under the 'Period' section, the 'Start' date is '2021-02-25' and the time is '13:00'. A checked checkbox indicates 'No end date'. The 'Every' field is set to '1' with a dropdown menu showing 'Day(s)'. An unchecked checkbox for 'Daily time interval' is also present. The 'Options' section includes: 'Format' set to 'HTML', 'Delivery' set to 'Save', 'Prompts' set to 'Set values', and 'Languages' set to 'English (United States)'. Each option has a right-pointing arrow for further configuration.

**Figure 124 - Welcome page - My content - report view - Properties - create schedule (3)**

In case you want to receive the scheduled reports via A2A you have to choose “**Save report as external file**” and follow the information provided in chapter [Delivery - Save report \(U2A\)](#) [▶ 92] .

**Step 7:** It is very important to set the prompt values when scheduling a report to be executed. This can be done by clicking on the arrow next to “**Set values**”.

< Back      **Create schedule**

Schedule

**Period**

Start

No end date

Every

Daily time interval

**Options**

Format  >

Delivery  >

Prompts  >

Figure 125 - Welcome page - My content - Properties - Set values

**Step 8:** The “Current values” opens. To enter the prompt page you must click on the “Set” icon ([Set](#)).

[< Back](#)      **Create schedule**

Schedule

**Period**

Start

No end date

Every

Daily time interval


**Options**

Format  >

Delivery  >

Prompts  >

**Current values**      [Set](#) | [Clear](#)



You currently have no prompt values set

Figure 126 - Welcome page - My content - Properties - Prompts - Set values

**Step 9:** Enter the search criteria on the prompt page and click on **“Finish”**.

**Step 10:** Click on the **“Create”** button and the schedule is created.



< Back **Create schedule**

Schedule

**Period**


Start


No end date

Every

Daily time interval

**Options**

Format  HTML >

Delivery  Save >

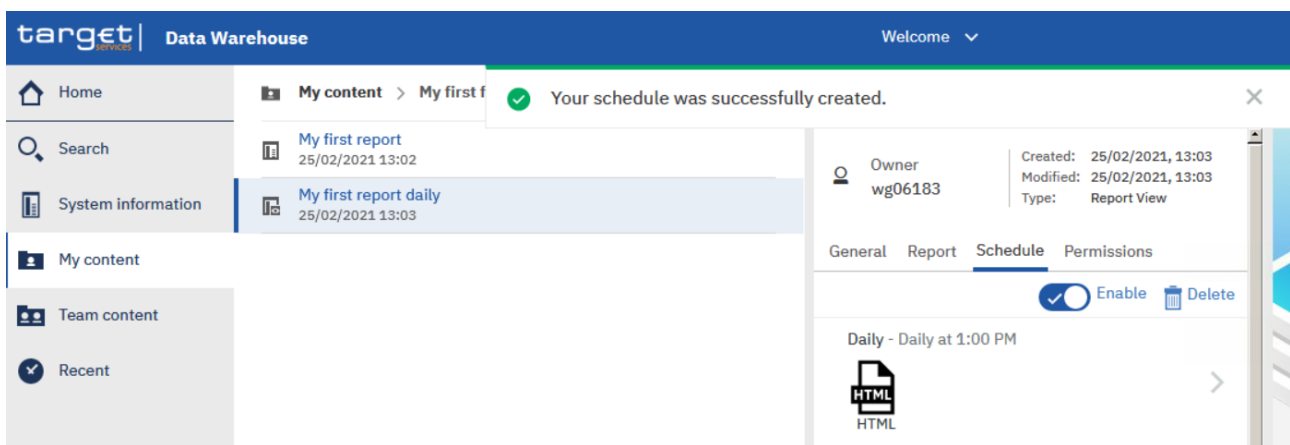
Prompts  >

Languages  >

PDF

[Classic View](#)

Figure 127 - Welcome page - My content - Properties — Schedule




**Figure 128 - Welcome page - My content - Properties – Schedule**

The option “**Enable**” informs the user that the schedule is active. By unchecking it, the user cancels the schedule.

### 4.3.3 Scheduling the report for a specific DWH event

You can also schedule a report to be executed shortly after the new data of the last business day was loaded into the DWH. One dedicated DWH internal event will be triggered that starts the execution of the report and either stores it in the “**My content**” folder or sends it out via A2A.

**Step 1:** Choose the report you have saved as report view, and click on the “**More**” icon (  ) at the right of the report.

**Step 2:** Click on “**Properties**”.

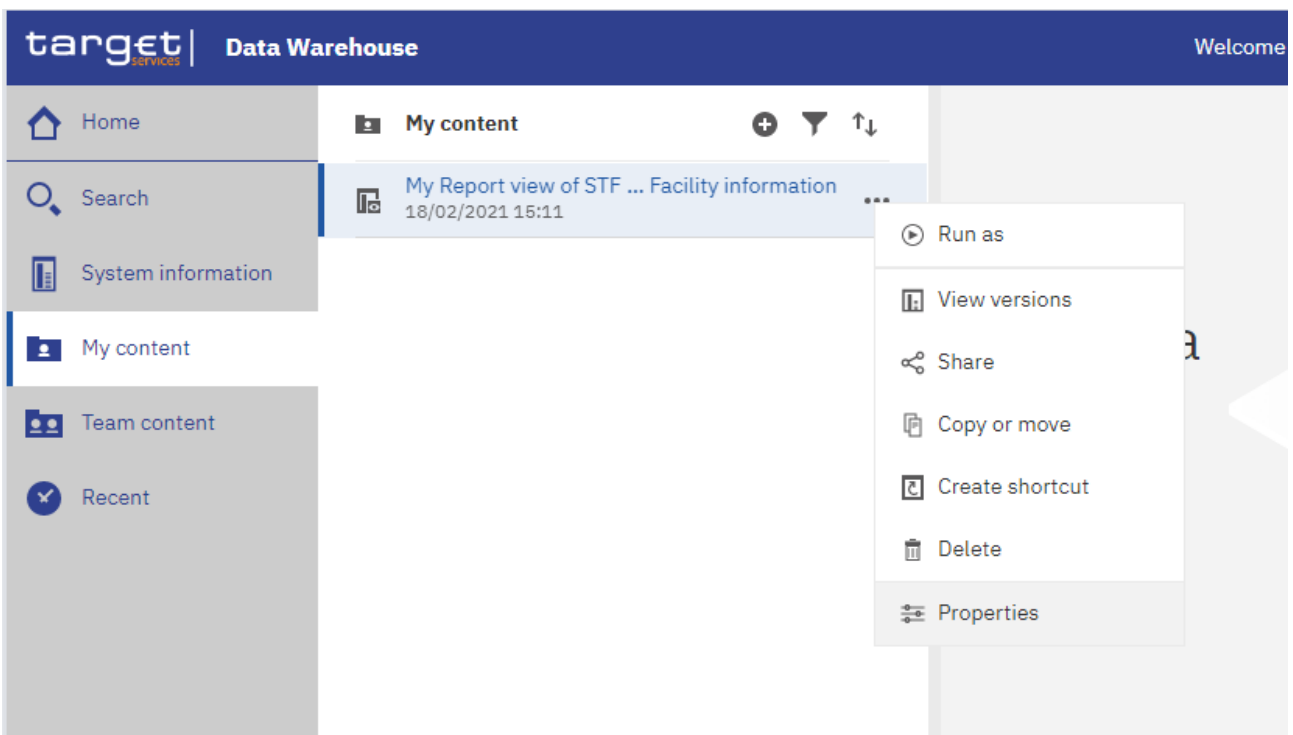


Figure 129 - My content - report view – Properties

**Step 3:** A description of your report is shown and you can add a description under “**General**”.

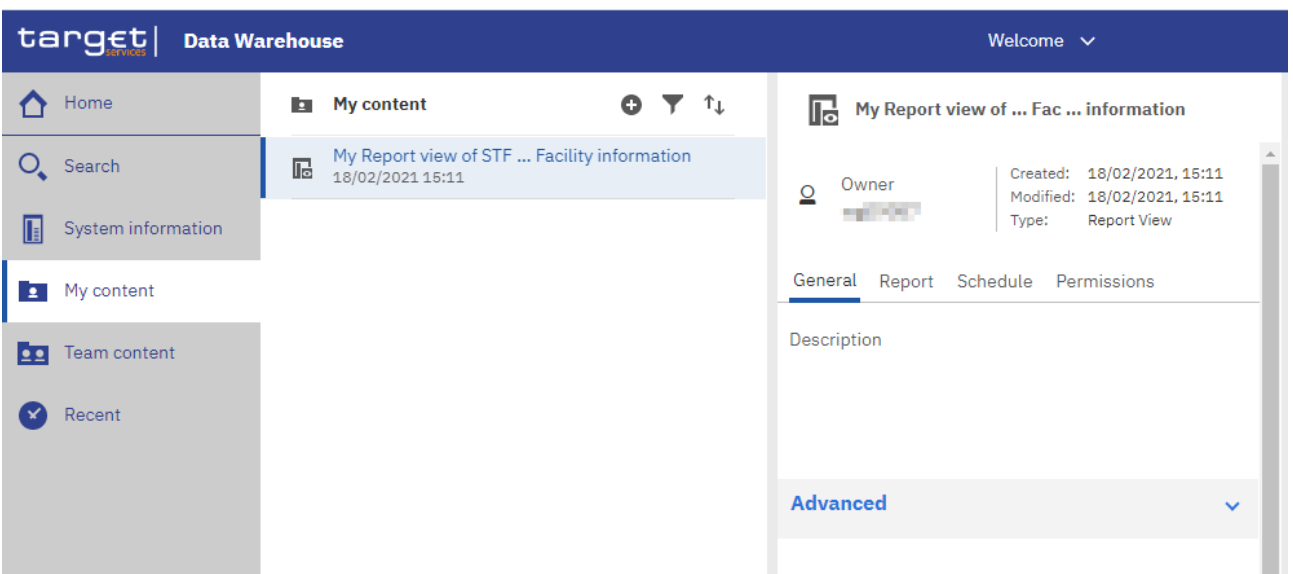
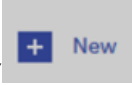


Figure 130 - My content - report view - Properties – General - description of your report

**Step 4:** In the “**Schedule**” tab you will find the “**New**” (  ) icon.

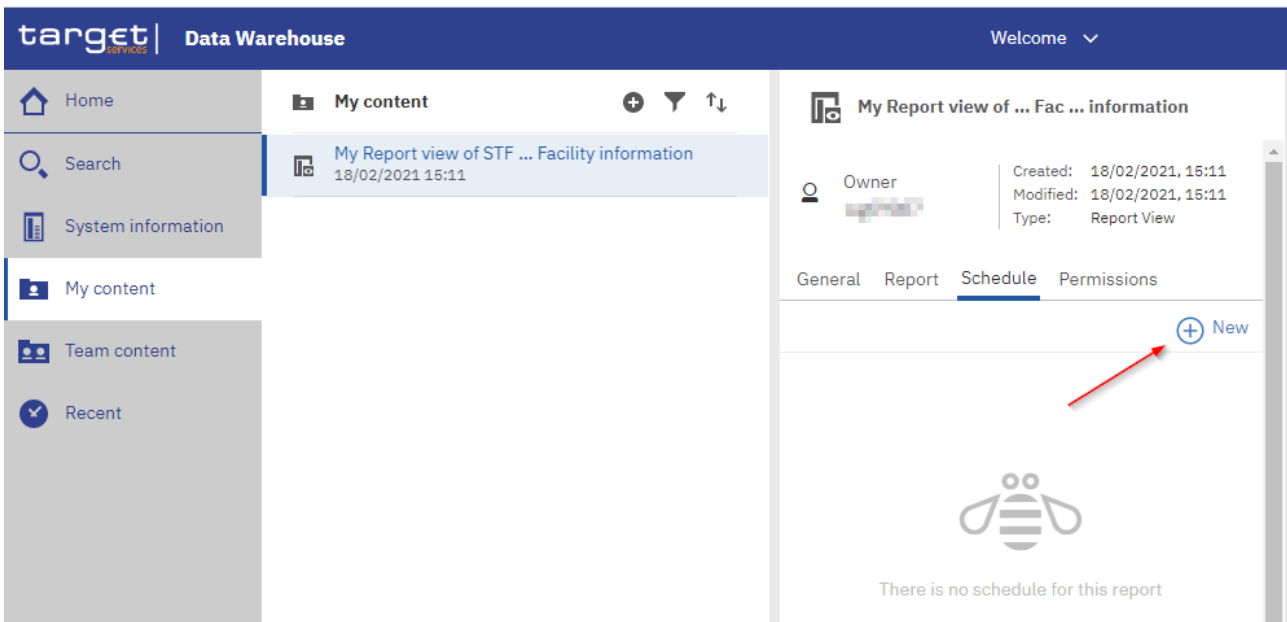
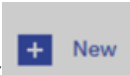


Figure 131 - Welcome page - My content - report view - Properties – Schedule

**Step 5:** By clicking on the “New” icon (  ), the “Schedule” is opening where you have multiple options to choose for scheduling your report.

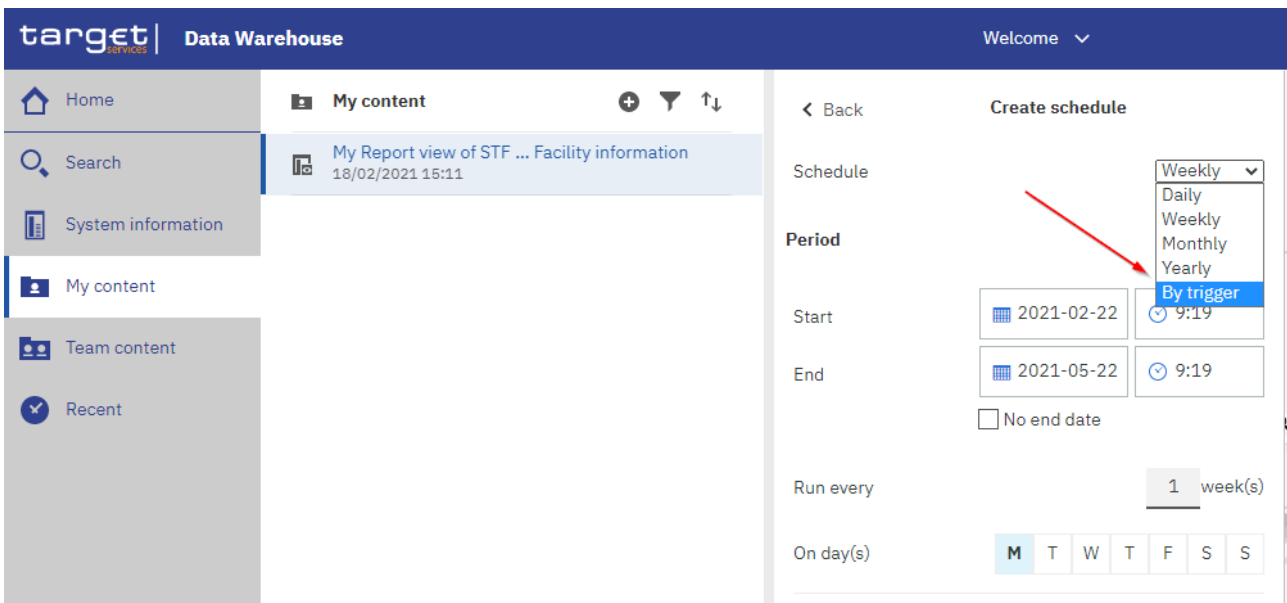


Figure 132 - Welcome page - My content - report view - Properties - create schedule (1)

**Step 6:** Please select “By Trigger” in the pull down list as schedule. In the field “Trigger name” you have to enter the phrase “eodtrigger”. Please make sure to type this phrase exactly this way, otherwise the report trigger does not work and the scheduled report will not be executed.

The screenshot displays the 'target SERVICES Data Warehouse' interface. The top navigation bar includes the logo and 'Data Warehouse' text, with a 'Welcome' dropdown menu. A left sidebar contains navigation options: Home, Search, System information, My content (selected), Team content, and Recent. The main content area shows a breadcrumb trail: 'My content' > 'My Report view of STF ... Facility information' (dated 18/02/2021 15:11). The right-hand panel is titled 'Create schedule' and features a '< Back' button. The 'Schedule' section is set to 'By trigger'. Under the 'Period' section, the 'Start' date is 2021-02-22 at 9:19, and the 'End' date is 2021-05-22 at 9:19. A 'No end date' checkbox is present and unchecked. The 'Trigger name' field is highlighted with a red box and contains the text 'eodtrigger'. Below this, the 'Options' section includes: 'Format' set to 'XML', 'Delivery' set to 'Save', 'Prompts' set to 'Set values', and 'Languages' set to 'English (United Kingdom)'. There is also a 'PDF' option with a 'Select' link. At the bottom of the panel are 'Create' and 'Cancel' buttons.

Figure 133 - Welcome page - My content - report view - Properties - create schedule (2)

In this example, you see a daily schedule with no end date, xml as an output, and save the report in DWH.

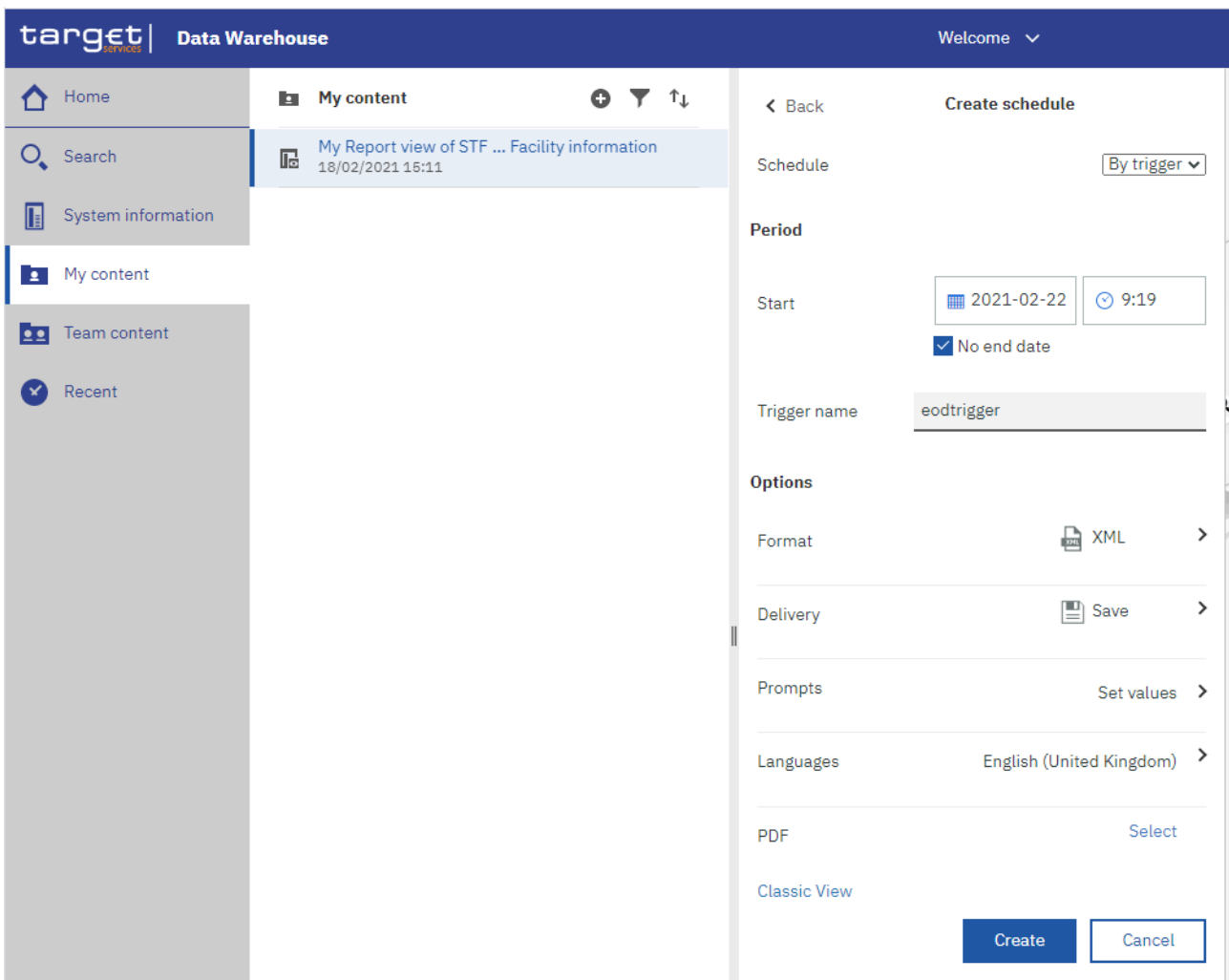


Figure 134 - Welcome page - My content - report view - Properties - create schedule (3)

In case you want to receive the scheduled reports via A2A you have to choose “**Save report as external file**” and follow the information provided in chapter [Delivery - Save report \(U2A\)](#) [▶ 92].

**Step 7:** It is very important to set the prompt values when scheduling a report to be executed. This can be done by clicking on the arrow next to “**Set values**”.

< Back      **Create schedule**

Schedule By trigger ▾

**Period**

Start 2021-02-22 9:19

No end date


Trigger name eodtrigger

**Options**

Format XML >

Delivery Save >

Prompts Set values >



**Figure 135 - Welcome page - My content - Properties - Set values**

**Step 8:** The “Current values” opens. To enter the prompt page you must click on the “Set” icon.

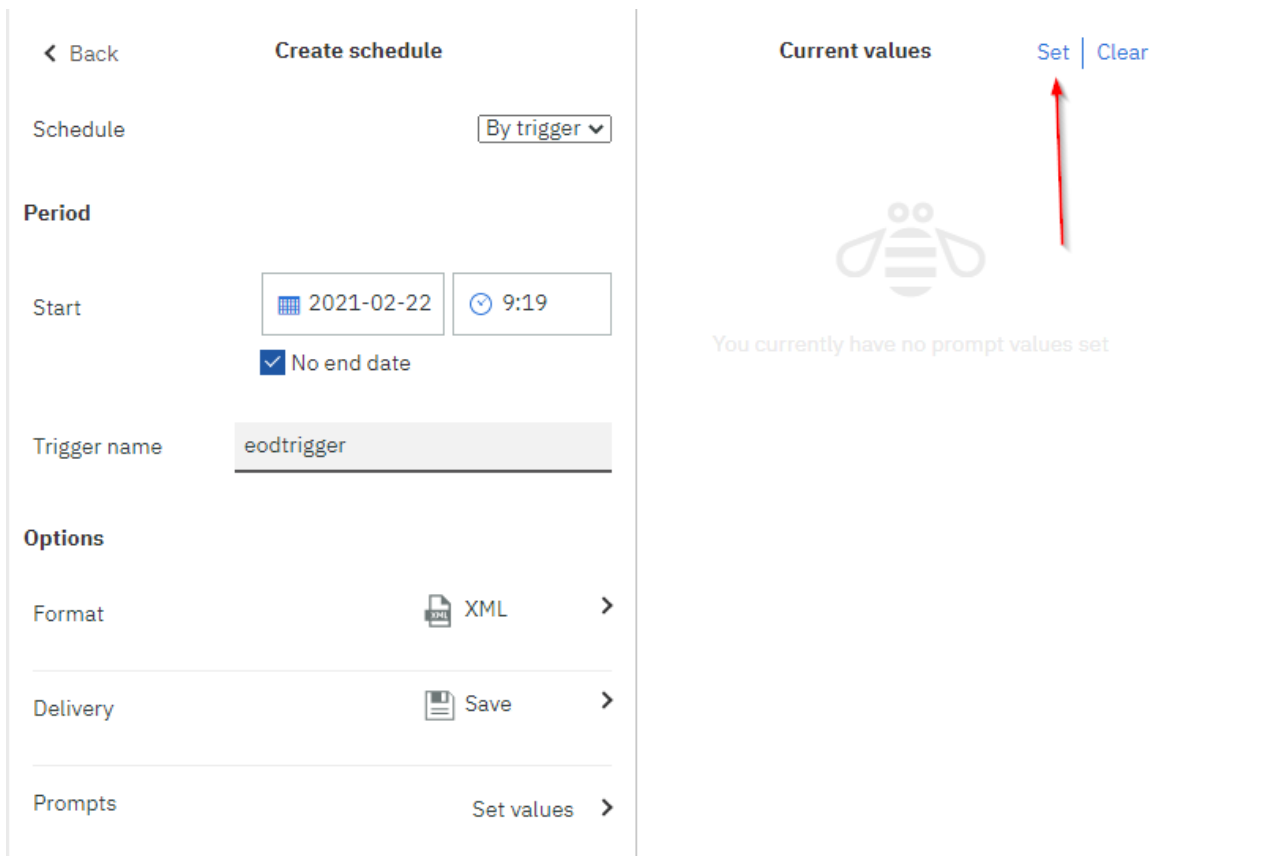


Figure 136 - Welcome page - My content - Properties - Prompts - Set values

**Step 9:** Enter the search criteria on the prompt page and click on “Finish”.

**Step 10:** Click on the “Create” button and the schedule is created.

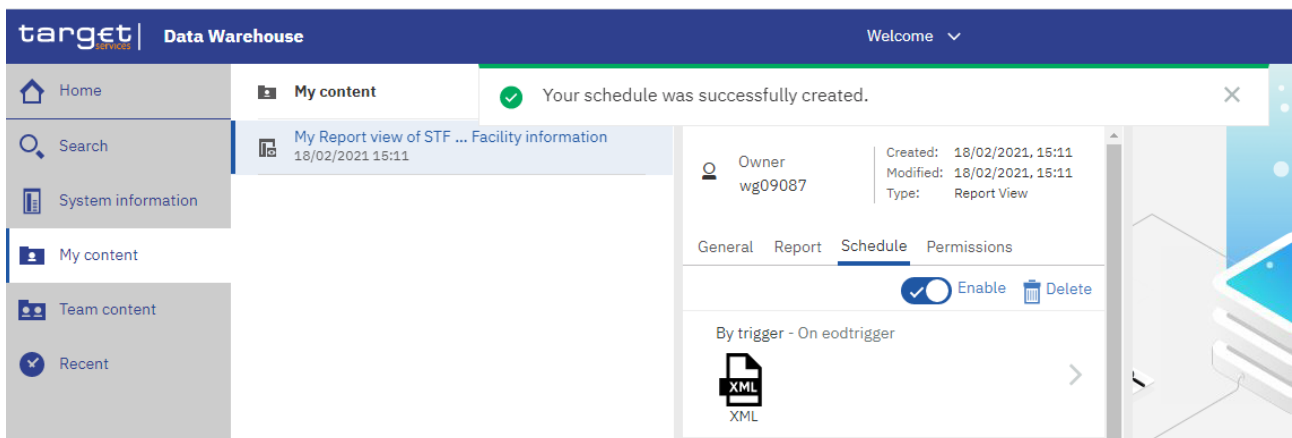


Figure 137 - Welcome page - My content - Properties - Schedule

### 4.3.4 Check the schedule of your report

**Step 1:** To check the schedule of your report you have to navigate to the “Personal menu”.



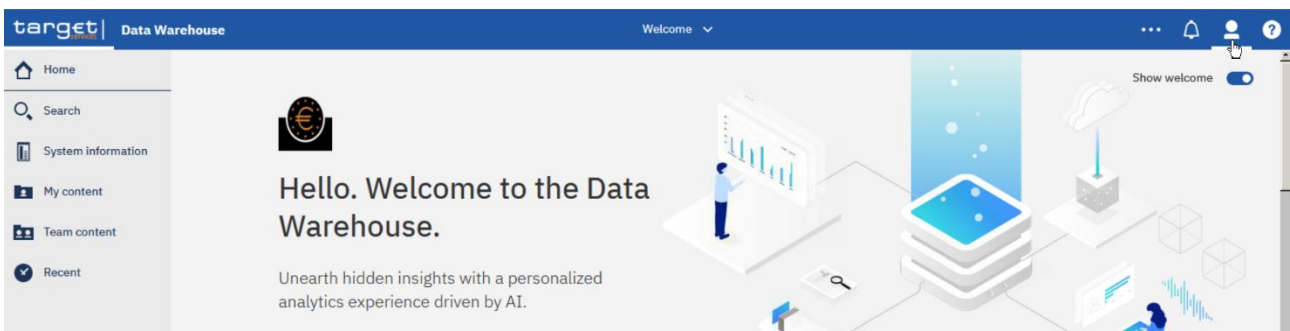


Figure 138 - Welcome page - Personal menu

Step 2: Click on “My schedules and subscriptions”.

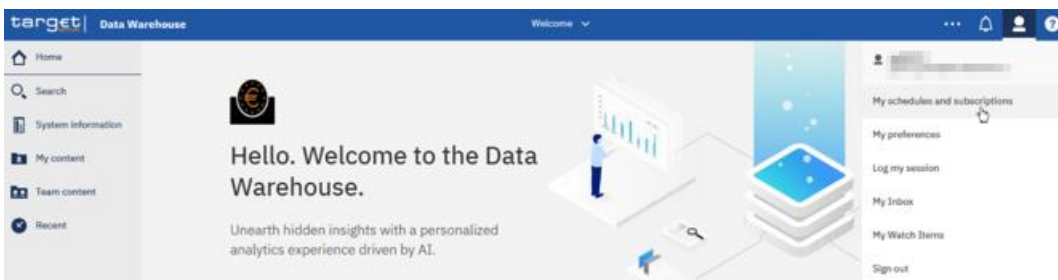


Figure 139 - Welcome page - Personal menu - My schedules and subscriptions

Step 3: You can verify the reports that are scheduled.

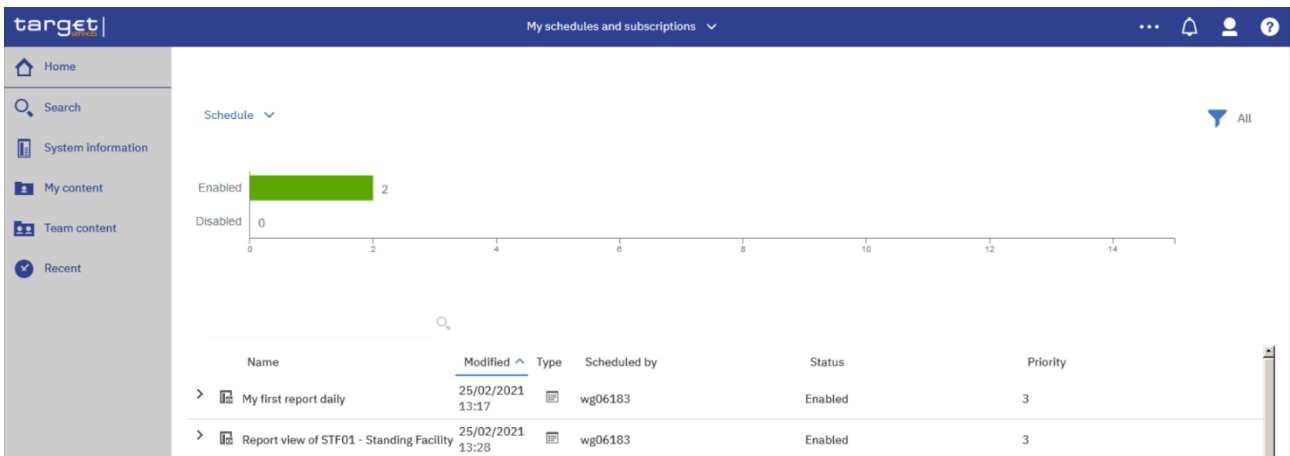


Figure 140 - Welcome page - Personal menu - My schedules and subscriptions - Schedule

Please refer to chapter [Personal menu](#) [▶ 37] for further information.

## 5 Predefined reports

### 5.1 Ancillary systems reports (ANS)

#### 5.1.1 ANS01 – Overview of AS transfer orders

##### **Context of usage**

The report ANS01 provides information on the total volume and value of AS transfer orders differentiated by AS name and BIC that were settled (or not settled) on (or within) a given date (range).

CBs can retrieve information for AS belonging to their system entity.

This report can be used by CB and AS users.

##### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [ANS – Ancillary System Reports] >> [ANS01]

##### **Screenshot – prompt**

The screenshot displays the 'ANS01 - Overview of AS transfer orders' report prompt. The interface includes a search bar with the placeholder text 'Input keywords here' and a search icon. Below the search bar, it indicates 'No Results'. There are date filters for 'Date From' and 'Date To', both set to '22 Apr 2021'. A 'Party BIC' field is present. At the bottom, there is a 'Case Insensitive' checkbox which is checked, and 'Cancel' and 'Finish' buttons.

Figure 141 - ANS01 prompt

**Prompt description**

| ANS01 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Date From                                  | You can select the date by clicking on the calendar.<br>This field is mandatory.  |
| Date To                                    | You can select the end date of the period, for which the report should contain the data by clicking on the calendar.<br>For valid report results, the current day cannot be selected.<br>This field is mandatory. |
| Party BIC                                  | You can use this drop-down field to select the party BIC. This field will show all party BICs within the data scope of the user’s party.<br>This field is optional.   |

Table 1 - ANS01 - Report description - Prompt screen

**Screenshot - output screen**

| AS BIC and short name                    | AS Settlement procedure | Volume of AS transfer orders |                   | Value of AS transfer orders |                         |
|--|-------------------------|------------------------------|-------------------|-----------------------------|-------------------------|
|  |                         | Settled                      | Not settled       | Settled                     | Not settled             |
| ASAAKMD0000X - MetroCapital              | A                       | 339,874,787                  | 9,960,885         | 162,643,537,472.63          | 4,718,524,554.98        |
|  | C                       | 2,333,481                    | 398,400           | 1,104,255,631.89            | 188,531,449.06          |
| ASABKMD0000X - Auslandskassenverein L.L. | D                       | 14,411,000                   | 0                 | 6,124,675,000               | 0                       |
| <b>Total</b>                             |                         | <b>356,619,268</b>           | <b>10,359,285</b> | <b>169,872,468,104.52</b>   | <b>4,907,056,004.04</b> |

Figure 142 - ANS01 output

**Output description**

| ANS01 – Report description – output screen |                              |
|--|------------------------------|
| Field label                                | Description                  |
| AS BIC and short name                      | BIC and short name of the AS |

|  |  |
|--|--|
| AS settlement procedure                    | AS settlement procedure<br>Possible Values:<br>A, B, C, D, E   |
| Volume of AS transfer orders – Settled     | Number of AS transfer orders which were settled or partially settled for the respective AS in the chosen date range is reflected.                      |
| Volume of AS transfer orders – Not settled | Number of AS transfer orders which were not settled (i.e. cancelled (revoked) or rejected) for the respective AS in the chosen date range.             |
| Value of AS transfer orders – Settled      | Sum of amounts of all AS transfer orders which were settled or partially settled for the respective AS in the chosen date range.                       |
| Value of AS transfer orders – Not settled  | Sum of amounts of all AS transfer orders which were not settled (i.e. cancelled (revoked) or rejected) for the respective AS in the chosen date range. |

**Table 2 - ANS01 - Report description - Output screen**

### 5.1.2 ANS02 – Daily average of AS transfers

#### **Context of usage**

The report ANS02 provides information on the daily average volume and value of AS transfers settled within a given month (range) and differentiated by system entity/CB.

CBs can retrieve aggregated volume and value information for each system entity/CB.

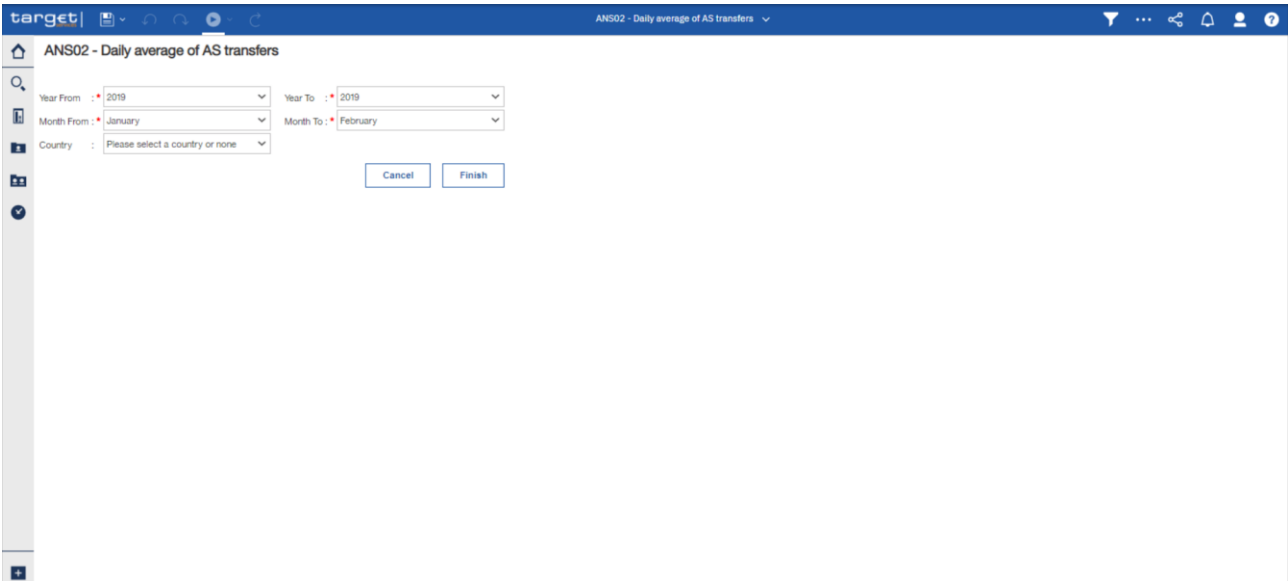
This report can be used by CB users only.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [ANS – Ancillary System Reports] >> [ANS02]

**Screenshot – prompt**



**Figure 143 - ANS02 Prompt**

**Prompt description**

| ANS02 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Year From                                  | <p>You can use this drop-down field to select the year, from which the report should contain the data.</p> <p>This field is mandatory.</p>  |
| Month From                                 | <p>You can use this drop-down field to select the month, from which the report should contain the data.</p> <p>For valid report result, the current month cannot be selected.</p> <p>This field is mandatory.</p> |

|              |   |
|--------------|---|
| Year To      | <p>You can use this drop-down field to select the end year, for which the report should contain the data.</p> <p>This field is mandatory.</p>   |
| Month To     | <p>You can use this drop-down field to select the end month, for which the report should contain the data.</p> <p>For valid report result current month cannot be selected.</p> <p>This field is mandatory.</p> |
| Country Code | <p>You can select the Country Code of the related Party.</p> <p>This field is optional.</p>   |

Table 3 - ANS02 - Report description - Prompt screen

**Screenshot - output screen**

ANS02 - Daily average of AS transfers

2021-04-23 15:17:21  
DEV - Development and integration

CBXXXPD0000 - Banque Centrale de Faillite

Filters: Year From : 2019 Month From : January  
Year To : 2019 Month To : February

Currency : DKK

| Month                      | 2019-01              |                       | 2019-02              |                          |
|----------------------------|----------------------|-----------------------|----------------------|--------------------------|
| Country Code               | Daily average volume | Daily average value   | Daily average volume | Daily average value      |
| KW                         | 4,497,471.00         | 487,726,460.10        | 54,136,890.00        | 12,234,937,625.82        |
| <b>Total daily average</b> | <b>4,497,471.00</b>  | <b>487,726,460.10</b> | <b>54,136,890.00</b> | <b>12,234,937,625.82</b> |

Currency : EUR

| Month                      | 2019-01              |                       | 2019-02              |                       |
|----------------------------|----------------------|-----------------------|----------------------|-----------------------|
| Country Code               | Daily average volume | Daily average value   | Daily average volume | Daily average value   |
| KM                         | 2,207,834.53         | 269,376,080.68        | 4,365,176.81         | 960,743,968.87        |
| KP                         | 429,976.26           | 52,463,751.78         | 842,907.56           | 185,489,554.44        |
| <b>Total daily average</b> | <b>1,318,905.39</b>  | <b>160,919,916.23</b> | <b>2,604,042.19</b>  | <b>573,116,761.66</b> |

NORJ62000019 - CBXXXPD0 (NOR) Normal Page: 1 of 7

Figure 144 - ANS02 output

**Output description**

**ANS02 – Report description – output screen**

The output table will be repeated for each currency and for every selected month in the search prompt. It is sorted by country code.

| Field label                | Description   |
|----------------------------|---|
| Month                      | Month and Year<br><br>AS transfer orders which were settled or partially settled within the scope of the respective CB during this month are reflected. |
| Country Code               | Country Code for all available CBs or for the one selected in the search prompt.  |
| Daily average volume       | Daily average AS transfer volume for this CB in this month.   |
| Daily average value        | Daily average AS transfer value for this CB in this month.  |
| Total daily average volume | The total daily average for a month as sum of daily averages for all CBs divided by the number of CBs.  |
| Total daily average value  | The total daily average for a month as sum of daily averages for all CBs divided by the number of CBs.  |

**Table 4 - ANS02 - Report description - Output screen**

## 5.2 Business day reports (BDY)

### 5.2.1 BDY01 - Business Day event/delay information on settlement opening time

**Context of usage**

This report provides information on the daily timing of business day events and on delays in periods of the business Day for CLM or RTGS.

For each time-based event of a respective business day the report provides information as regards the planned time, the revised time and the effective time. For events that are not time-based the report will only provide an effective time. In case of currency-specific events the event times are provided separate per currency.

Based on the timing of the business Day events, the report calculates the daily opening time for settlement as well as the total number and the duration of delays in CLM or RTGS.

The report is available for a given date (range).

This report can be used by CB, PB and AS users.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [BDY – Business Day Reports] >> [BDY01]

**Screenshot – prompt**

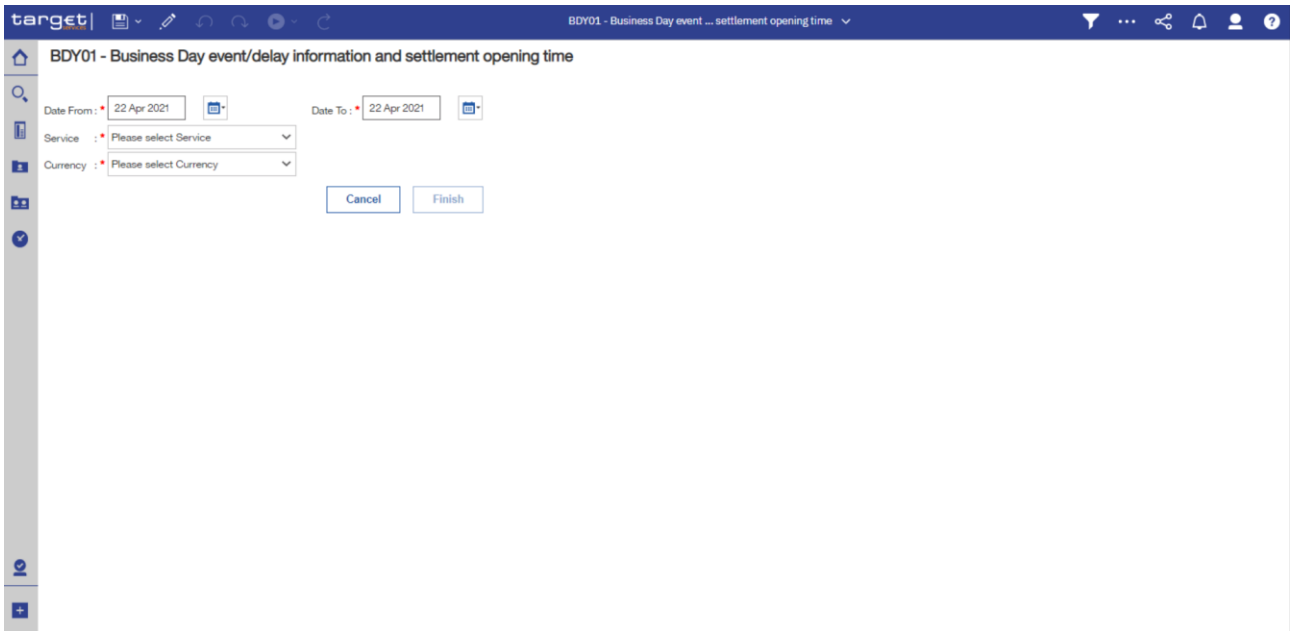


Figure 145 - BDY01 prompt

**Prompt description**

| BDY01 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Service                                    | <p>Service for which the data shall be displayed.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  RTGS</li> <li>  CLM</li> </ul> <p>This field is optional</p> |



|           |   |
|-----------|---|
| Date from | You can select the date by clicking on the calendar.<br><br>This field is mandatory.  |
| Date to   | You can select the end date of the period, for which the report should contain the data by clicking on the calendar.<br><br>For valid report results, the current day cannot be selected.<br><br>This field is mandatory. |
| Currency  | Choose the currency, for which you want to generate the report.   |

Table 5 - BDY01 - Prompt description

**Screenshot - output screen**

The screenshot shows the 'target' application interface. The main title is 'BDY01 - Business Day event/delay information and settlement opening time'. The report is for '17.12.2018' and includes filters for 'Service : CLM', 'Currency : EUR', and 'Date From : 2018-12-17', 'Date To : 2018-12-17'. The data is presented in a table with the following columns: Event, Event code, Planned time, Revised time, Effective time, and End time.

| Event                                    | Event code | Planned time        | Revised time        | Effective time      | End time            |
|--|------------|---------------------|---------------------|---------------------|---------------------|
| Change of business day                   | CSOD       | 2018-12-14 18:45:01 | 2018-12-14 18:45:01 | 2018-12-14 18:46:01 | 2018-12-14 18:47:01 |
| Start of CLM RTS                         | CRTI       | 2018-12-14 19:00:02 | 2018-12-14 19:00:02 | 2018-12-14 19:01:02 | 2018-12-14 19:02:02 |
| Execution of standing orders in CLM      | CESO       | 2018-12-14 19:30:03 | 2018-12-14 19:30:03 | 2018-12-14 19:31:03 | 2018-12-14 19:35:03 |
| Start of non-optional maintenance window | CSMW       | 2018-12-17 02:00:04 | 2018-12-17 02:00:04 | 2018-12-17 02:01:04 | 2018-12-17 02:02:04 |
| End of non-optional maintenance window   | CEMW       | 2018-12-17 02:30:05 | 2018-12-17 02:30:05 | 2018-12-17 02:31:05 | 2018-12-17 02:32:05 |
| Out-off for CLM RTS                      | CCII       | 2018-12-17 17:30:06 | 2018-12-17 17:30:06 | 2018-12-17 17:31:06 | 2018-12-17 17:32:06 |
| Data propagation for T2                  | T2DP       | 2018-12-17 17:35:07 | 2018-12-17 17:35:07 | 2018-12-17 17:36:07 | 2018-12-17 17:39:07 |
| Start of EoD processing                  | CEOD       | 2018-12-17 17:40:08 | 2018-12-17 17:40:08 | 2018-12-17 17:41:08 | 2018-12-17 17:43:08 |
| General cut-off for standing facilities  | CCSF       | 2018-12-17 17:50:09 | 2018-12-17 17:50:09 | 2018-12-17 17:51:09 | 2018-12-17 17:52:09 |
| CB cut-off for standing facilities       | CCML       | 2018-12-17 17:55:10 | 2018-12-17 17:55:10 | 2018-12-17 17:56:10 | 2018-12-17 17:57:10 |
| EoD - close of service                   | CCOS       | 2018-12-17 18:00:11 | 2018-12-17 18:00:11 | 2018-12-17 18:01:11 | 2018-12-17 18:01:11 |

Figure 146 - BDY01 Output (1)

target | Business Day event/delay information and settlement opening time - CLM | Business Day event/delay information and settlement opening time - RTGS

target | **BDY01 - Business Day event/delay information and settlement opening time** | 2021-03-02 09:15:48  
DEV - Development and integration

CBXXKMDXXX - Central Bank of Fiction

Filters | Service : RTGS | Date From : 2018-12-17  
Currency : EUR | Date To : 2018-12-17

17.12.2018

| Event  | Event code | Planned time        | Revised time        | Effective time      | End time            |
|--|------------|---------------------|---------------------|---------------------|---------------------|
| Change of business day   | RSCD       | 2018-12-14 18:45:12 | 2018-12-14 18:45:12 | 2018-12-14 18:46:12 | 2018-12-14 18:47:12 |
| Execution of standing orders in RTGS                               | RESO       | 2018-12-14 22:15:14 | 2018-12-14 22:15:14 | 2018-12-14 22:16:14 | 2018-12-14 22:25:14 |
| Start of RTGS RTS I  | RRTI       | 2018-12-14 22:30:13 | 2018-12-14 22:30:13 | 2018-12-14 22:31:13 | 2018-12-14 22:33:13 |
| Start of non-optional maintenance window                           | RSMW       | 2018-12-17 02:00:15 | 2018-12-17 02:00:15 | 2018-12-17 02:01:15 | 2018-12-17 02:02:15 |
| End of non-optional maintenance window                             | REMW       | 2018-12-17 02:30:16 | 2018-12-17 02:30:16 | 2018-12-17 02:31:16 | 2018-12-17 02:32:16 |
| Start of RTGS RTS II   | RRII       | 2018-12-17 02:35:17 | 2018-12-17 02:35:17 | 2018-12-17 02:36:17 | 2018-12-17 02:37:17 |
| Start of settlement window for interbank and customer payments     | RSIC       | 2018-12-17 03:00:18 | 2018-12-17 03:00:18 | 2018-12-17 03:01:18 | 2018-12-17 03:02:18 |
| Cut-off for customer payments                                      | RCOC       | 2018-12-17 16:30:19 | 2018-12-17 16:30:19 | 2018-12-17 16:31:19 | 2018-12-17 16:32:19 |
| Cut-off for RTGS RTS II  | RCII       | 2018-12-17 16:45:20 | 2018-12-17 16:45:20 | 2018-12-17 16:46:20 | 2018-12-17 16:47:20 |
| Execution of standing orders after last settlement attempt in RTGS | RLSO       | 2018-12-17 16:50:21 | 2018-12-17 16:50:21 | 2018-12-17 16:51:21 | 2018-12-17 16:55:21 |
| Start of EoD processing  | REOD       | 2018-12-17 16:55:22 | 2018-12-17 16:55:22 | 2018-12-17 16:56:22 | 2018-12-17 16:57:22 |
| EoD - close of service   | RCOS       | 2018-12-17 17:00:23 | 2018-12-17 17:00:23 | 2018-12-17 17:01:23 | 2018-12-17 17:02:23 |

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Figure 147 - BDY01 Output (2)

**Output description**

| BDY01 – Report description – output screen |   |
|--|---|
| Field label                                | Description   |
| Event                                      | Description of the business day event.  |
| Event code                                 | The event code as delivered by the CLM or RTGS service. The list of events is not static because the set of events may change.<br><br>For a list of currently valid events, please see CLM and RTGS UDFS. |
| Planned time                               | The planned time corresponds to the standard schedule applied by default.<br><br>Only for time-based events.<br><br>For non-time based events this field is empty.  |

|                |  |
|----------------|--|
| Revised time   | The revised time is the foreseen time for the current business day, which usually coincides with the planned time except when a delay has occurred.<br><br>Only for time-based events.<br><br>For non-time based events this field is empty. |
| Effective time | The effective time is the time of the actual occurrence of the event during the current business day. It is the time, when the BDM (Business Day Management) sent the trigger to CLM or RTGS.  |
| End time       | The end time is the time, when CLM or RTGS informed the BDM, that the processes for this event have been finished.   |

**Table 6 - BDY01 - Output description**

## 5.3 Billing reports (BIL)

### 5.3.1 BIL01 - Consumption data

#### Context of usage

This report provides aggregated information on consumption data for a selected period **per service** and **charged party at the level of service item**. It provides a monthly view on the quantity per service item and the share (in %) compared to the whole system entity's quantity. CBs can retrieve information on the aggregated consumption data of those parties belonging to their system entity.

Additionally, the report provides the sums over all parties per service item and service for the system entity.

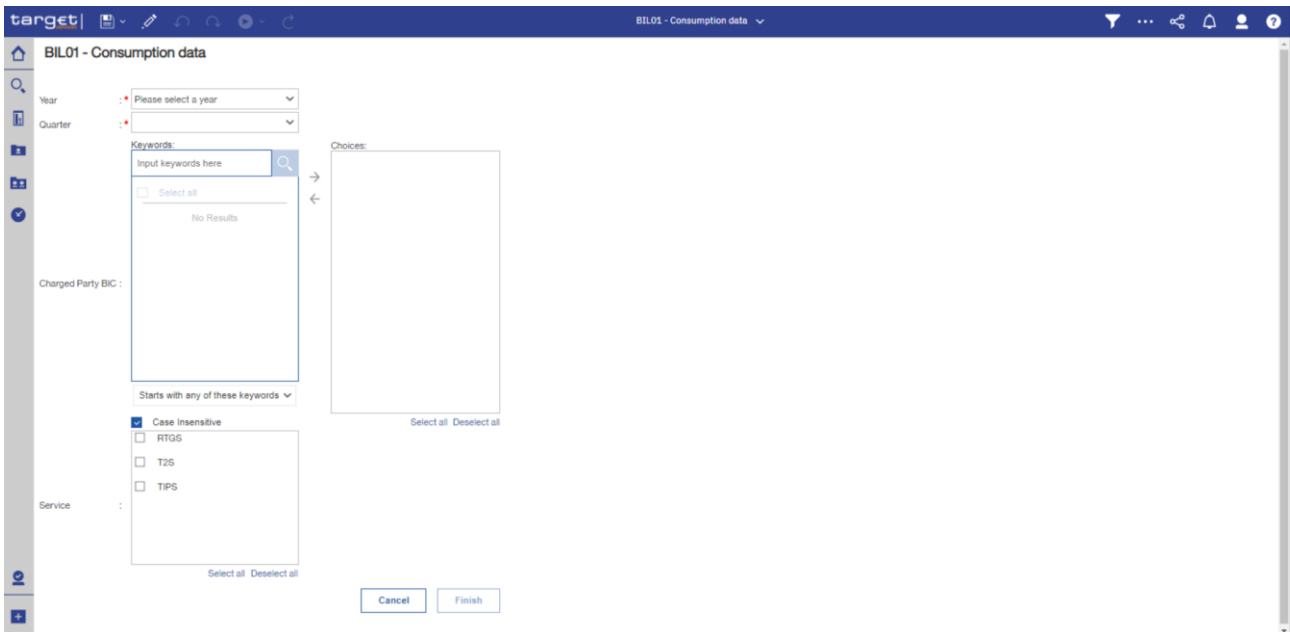
This report can be used by CB users only.

#### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [BIL – Billing Reports] >> [BIL01]

**Screenshot – prompt**



**Figure 148 - BIL01 prompt**

**Prompt description**

**BIL01 – Report description – prompt screen**

| Field label | Description   |
|-------------|---|
| Year        | You can use this drop-down field to select the year, from which the report should contain the data.<br><br>This field is mandatory. |

|                          |  |
|--------------------------|--|
| <p>Quarter</p>           | <p>You can use this drop-down field to select the quarter, for which the report should show the data.</p> <p>This field is mandatory</p>   |
| <p>Charged party BIC</p> | <p>You can use this search and select prompt to be able to search for the party BIC or short name. One or several parties can be selected. In case the user leaves this field free, all party BICs belonging to the user's data scope are selected.</p> <p>This field is optional.</p> |
| <p>Service</p>           | <p>Service for which the data shall be displayed.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  RTGS</li> <li>  TIPS</li> </ul> <p>This field is optional</p>   |

Table 7 - BIL01 - Prompt description

Screenshot - output screen

| Charged party BIC | Responsible party BIC | Category                    | Service Item | Code   | Description | 2018 October                      |           | 2018 November |           | 2018 December |           |      |
|-------------------|-----------------------|-----------------------------|--------------|--|-------------|-----------------------------------|-----------|---------------|-----------|---------------|-----------|------|
|                   |                       |                             |              |  |             | Quantity                          | Share (%) | Quantity      | Share (%) | Quantity      | Share (%) |      |
| PBAAXMD0000       | CBKXMD0000            | Account Management Services | 5002         | Fixed fee - RTGS account                                     | 243         | 8.56                              | 249       | 9.50          | 666       | 10.47         |           |      |
|                   |                       |                             | 5004         | Addressable BIC - Correspondent                              | 171         | 7.30                              | 177       | 8.27          | 522       | 9.67          |           |      |
|                   |                       |                             | 5005         | Fee for unpublished BIC                                      | 117         | 8.42                              | 120       | 9.38          | 324       | 10.38         |           |      |
|                   |                       |                             | 5009         | Ancillary system - Fixed fee II                              | 171         | 7.30                              | 177       | 8.27          | 522       | 9.67          |           |      |
|                   |                       |                             | 5011         | RTGS payment order   | 72          | 6.67                              | 75        | 7.65          | 234       | 9.29          |           |      |
|                   |                       |                             | 5012         | RTGS AS cash transfer order                                  | 162         | 7.10                              | 168       | 8.08          | 504       | 9.55          |           |      |
|                   |                       | Information Services        | 5015         | Inter-banking group intra-component liquidity transfer order | 54          | 5.65                              | 57        | 6.63          | 198       | 8.68          |           |      |
|                   |                       |                             | 5002         | Fixed fee - RTGS account                                     | 144         | 9.14                              | 147       | 10.07         | 378       | 10.86         |           |      |
|                   |                       |                             | 5004         | Addressable BIC - Correspondent                              | 135         | 8.92                              | 138       | 9.86          | 360       | 10.71         |           |      |
|                   |                       |                             | 5005         | Fee for unpublished BIC                                      | 126         | 8.68                              | 129       | 9.63          | 342       | 10.56         |           |      |
|                   |                       |                             | 5006         | Fee for multi-addressee                                      | 117         | 8.42                              | 120       | 9.38          | 324       | 10.38         |           |      |
|                   |                       |                             | 5007         | Ancillary system - core fixed fee                            | 108         | 8.14                              | 111       | 9.10          | 306       | 10.20         |           |      |
|                   |                       |                             | 5008         | Ancillary system - Fixed fee I                               | 99          | 7.83                              | 102       | 8.79          | 288       | 10.00         |           |      |
|                   |                       |                             | 5009         | Ancillary system - Fixed fee II                              | 90          | 7.48                              | 93        | 8.45          | 270       | 9.78          |           |      |
|                   |                       |                             | 5011         | RTGS payment order   | 81          | 7.10                              | 84        | 8.08          | 252       | 9.55          |           |      |
|                   |                       |                             | 5012         | RTGS AS cash transfer order                                  | 72          | 6.67                              | 75        | 7.65          | 234       | 9.29          |           |      |
|                   |                       | Settlement Services         | 5015         | Inter-banking group intra-component liquidity transfer order | 63          | 6.19                              | 66        | 7.17          | 216       | 9.00          |           |      |
|                   |                       |                             | 5016         | Inter-banking group intra-component liquidity transfer order | 54          | 5.65                              | 57        | 6.63          | 198       | 8.68          |           |      |
|                   |                       |                             | 5006         | Fee for multi-addressee                                      | 288         | 7.71                              | 297       | 8.68          | 846       | 9.63          |           |      |
|                   |                       |                             |              |  | 5007        | Ancillary system - core fixed fee | 261       | 7.36          | 270       | 8.33          | 792       | 9.71 |

Figure 149 - BIL01 Output ("Per service")(1)

target | BIL01 - Consumption data

Per service System entity wide sums per service

target | BIL01 - Consumption data

2021-03-02 09:50:17 DEV - Development and Integration

Quarter : 2018 Q4  
Services : RTGS  
Parties : PBAAKMDOXXX - Banco de Isthmus

| Charged party BIC | Responsible party BIC | Category            | Code | Description  | 2018 October |           | 2018 November |           | 2018 December |           |
|-------------------|-----------------------|---------------------|------|--|--------------|-----------|---------------|-----------|---------------|-----------|
|                   |                       |                     |      |  | Quantity     | Share (%) | Quantity      | Share (%) | Quantity      | Share (%) |
| PBAAKMDOXXX       | CBKXKMD0XXX           | Settlement Services | 5008 | Ancillary system - Fixed fee I                               | 234          | 6.96      | 243           | 7.94      | 735           | 9.48      |
|                   |                       |                     | 5016 | Inter-banking group inter-component liquidity transfer order | 108          | 5.65      | 114           | 6.63      | 396           | 8.68      |

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Figure 150 - BIL01 Output ("Per service")(2)

target | BIL01 - Consumption data

Per service System entity wide sums per service

target | BIL01 - Consumption data

2021-03-02 09:50:17 DEV - Development and Integration

Quarter : 2018 Q4  
Services : RTGS  
Parties : PBAAKMDOXXX - Banco de Isthmus

Service: RTGS

| Category                    | Code                 | Description  | 2018 October                    | 2018 November  | 2018 December  |       |
|-----------------------------|----------------------|--|---------------------------------|----------------|----------------|-------|
|                             |                      |  | Quantity (sum)                  | Quantity (sum) | Quantity (sum) |       |
| Account Management Services | 5002                 | Fixed fee - RTGS account                                     | 2,840                           | 2,620          | 6,360          |       |
|                             | 5004                 | Addressable BIC - Correspondent                              | 2,344                           | 2,140          | 6,400          |       |
|                             | 5005                 | Fee for unpublished BIC                                      | 1,389                           | 1,280          | 3,120          |       |
|                             | 5009                 | Ancillary system - Fixed fee II                              | 2,344                           | 2,140          | 6,400          |       |
|                             | 5011                 | RTGS payment order   | 1,079                           | 980            | 2,520          |       |
|                             | 5012                 | RTGS AS cash transfer order                                  | 2,282                           | 2,080          | 5,280          |       |
|                             | 5015                 | Inter-banking group intra-component liquidity transfer order | 955                             | 860            | 2,280          |       |
|                             | Information Services | 5002   | Fixed fee - RTGS account        | 1,576          | 1,460          | 3,480 |
|                             |                      | 5004   | Addressable BIC - Correspondent | 1,513          | 1,400          | 3,360 |
|                             |                      | 5005   | Fee for unpublished BIC         | 1,451          | 1,340          | 3,240 |
| 5006                        |                      | Fee for multi-addressee                                      | 1,389                           | 1,280          | 3,120          |       |
| 5007                        |                      | Ancillary system - core fixed fee                            | 1,327                           | 1,220          | 3,000          |       |
| 5008                        |                      | Ancillary system - Fixed fee I                               | 1,265                           | 1,160          | 2,880          |       |
| 5009                        |                      | Ancillary system - Fixed fee II                              | 1,203                           | 1,100          | 2,760          |       |
| 5011                        |                      | RTGS payment order   | 1,141                           | 1,040          | 2,640          |       |
| 5012                        |                      | RTGS AS cash transfer order                                  | 1,079                           | 980            | 2,520          |       |
| 5015                        |                      | Inter-banking group intra-component liquidity transfer order | 1,017                           | 920            | 2,400          |       |
| Settlement Services         | 5016                 | Inter-banking group inter-component liquidity transfer order | 955                             | 860            | 2,280          |       |
|                             | 5006                 | Fee for multi-addressee                                      | 3,723                           | 3,420          | 8,520          |       |
|                             | 5007                 | Ancillary system - core fixed fee                            | 2,547                           | 2,340          | 6,180          |       |

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Figure 151 - BIL01 Output ("System entity wide sums per service")(1)

target | BIL01 - Consumption data

Per service: system entity wide sums per service

target | BIL01 - Consumption data

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Filters: Quarter: 2018 Q4, Services: RTGS, Parties: PBAAXM000000 - Banco de Isthmus

| Service Item        |      |  | 2018 October   | 2018 November  | 2018 December  |
|---------------------|------|--|----------------|----------------|----------------|
| Category            | Code | Description  | Quantity (sum) | Quantity (sum) | Quantity (sum) |
| Settlement Services | 5008 | Ancillary system - Fixed fee i                               | 3,361          | 3,060          | 7,800          |
|                     | 5016 | Inter-banking group inter-component liquidity transfer order | 1,910          | 1,720          | 4,560          |

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Figure 152 - BIL01 Output (“System entity wide sums per service”)(2)

**Output description**

| BIL01 – Report description – output screen                            |  |
|---|--|
| Field label   | Description  |
| Year, Quarter   | Year and quarter as chosen in input screen   |
| <i>Tab “Per service”: Shows consumption data per selected service</i> |  |
| Charged party BIC   | BIC of the charged party   |
| Responsible party BIC   | BIC of the responsible party.<br>Indicates the CB responsible for the party to be charged  |
| Service item category   | Possible values are: <ul style="list-style-type: none"> <li>  Settlement Services (SETT)</li> <li>  Account Management Services (ACMS)</li> <li>  Information Services (INSV)</li> </ul> |
| Service item code   | Following service item codes are currently available: <ul style="list-style-type: none"> <li>  5002</li> <li>  5004</li> <li>  5005</li> <li>  5006</li> <li>  5007</li> </ul>           |

|                          |  |
|--------------------------|--|
|                          | <ul style="list-style-type: none"> <li>  5008</li> <li>  5009</li> <li>  5011</li> <li>  5012</li> <li>  5015</li> <li>  5016</li> <li>  3001</li> <li>  3002</li> <li>  3003</li> <li>  3004</li> </ul>   |
| Service item description | <p>Following service item descriptions are currently available:</p> <ul style="list-style-type: none"> <li>  Fixed fee – RTGS account (5002)</li> <li>  Addressable BIC – Correspondent (5004)</li> <li>  Fee for unpublished BICs (5005)</li> <li>  Fee for multi-addressee access (5006)</li> <li>  Ancillary system – Core fixed fee (5007)</li> <li>  Ancillary system – Fixed fee I (5008)</li> <li>  Ancillary system – Fixed fee II (5009)</li> <li>  RTGS payment order (5011)</li> <li>  RTGS AS Cash transfer orders (5012)</li> <li>  Inter-banking group intra-component liquidity transfer order (5015)</li> <li>  Inter-banking group inter-component liquidity transfer order (5016)</li> <li>  Settled Instant Payment transaction (3001)</li> <li>  Unsettled Instant Payment transaction (3002)</li> <li>  Settled Positive Recall answer (3003)</li> <li>  Unsettled Positive Recall answer (3004)</li> </ul> |
| Month, Year              | <p>For each month within the chosen quarter, one row will be displayed.</p> <p>If the billing period is not yet closed, then no quantities are shown (empty cells).</p>  |
| Quantity                 | The number of counts for this service item   |
| Share (%)                | The share (in %) for the usage of this service item within the month compared to the total of service items charged.   |

*Tab “System entity wide sums per service” shows the totals for the system entity per selected service*



|                       |  |
|-----------------------|--|
| Service item category | Possible values are: <ul style="list-style-type: none"><li>  Settlement Services</li><li>  Account Management Services</li><li>  Information Services</li></ul>  |
| Service item code     | Following service item codes are currently available: <ul style="list-style-type: none"><li>  5002</li><li>  5004</li><li>  5005</li><li>  5006</li><li>  5007</li><li>  5008</li><li>  5009</li><li>  5011</li><li>  5012</li><li>  5015</li><li>  5016</li><li>  3001</li><li>  3002</li><li>  3003</li><li>  3004</li></ul> |

|                          |   |
|--------------------------|---|
| Service item description | <p>Following service item descriptions are currently available:</p> <ul style="list-style-type: none"> <li>  Fixed fee – RTGS account (5002)</li> <li>  Addressable BIC – Correspondent (5004)</li> <li>  Fee for unpublished BICs (5005)</li> <li>  Fee for multi-addressee (5006)</li> <li>  Ancillary system – Core fixed fee (5007)</li> <li>  Ancillary system – Fixed fee I (5008)</li> <li>  Ancillary system – Fixed fee II (5009)</li> <li>  RTGS payment order (5011)</li> <li>  RTGS AS Cash transfer orders (5012)</li> <li>  Inter-banking group intra-component liquidity transfer order (5015)</li> <li>  Inter-banking group inter-component liquidity transfer order (5016)</li> <li>  Settled Instant Payment transaction (3001)</li> <li>  Unsettled Instant Payment transaction (3002)</li> <li>  Settled Positive Recall answer (3003)</li> <li>  Unsettled Positive Recall answer (3004)</li> </ul> |
| Month, Year              | <p>For each month within the chosen quarter, one row will be displayed.</p> <p>If the billing period is not yet closed, then no quantities are shown (empty cells).</p>   |
| Quantity (sum)           | <p>For each service item the sum over all parties belonging to the data scope of the CB.</p>  |

**Table 8 - BIL01 - Output description**

### 5.3.2 BIL02 - Monitoring the invoice activity

#### **Context of usage**

This report provides aggregated information on invoicing activity per party, service, billing period and fee type. It shows the item count and value in EUR together with the respective share (in %) compared to the grand total of the system entity.

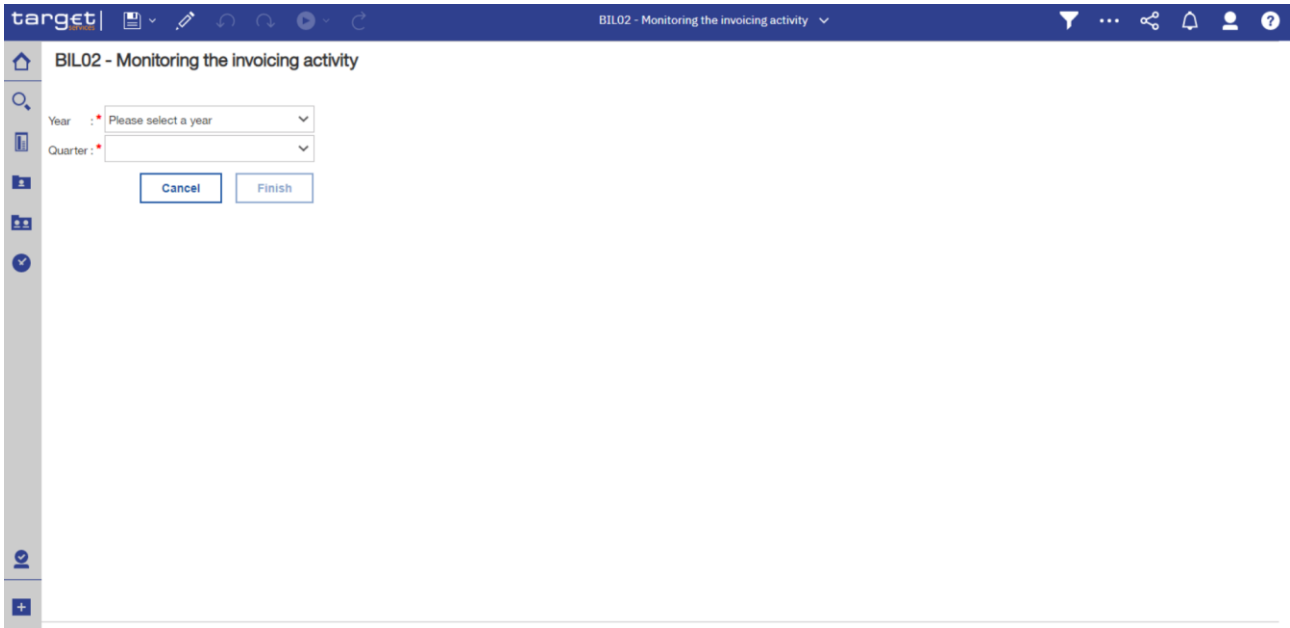
This report can be used by CB users only.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [BIL – Billing Reports] >> [BIL02]

**Screenshot – prompt**



**Figure 153 - BIL02 prompt**

**Prompt description**

**BIL02 – Report description – prompt screen**

| Field label | Description   |
|-------------|---|
| Year        | You can use this drop-down field to select the year, from which the report should contain the data.<br><br>This field is mandatory. |
| Quarter     | You can use this drop-down field to select the quarter, for which the report should show the data.<br><br>This field is mandatory   |

**Table 9 - BIL02 – Prompt description**

Screenshot - output screen

target | BIL02 - Monitoring the invoicing activity

Monitoring the invoicing activity by Party | Monitoring the invoicing activity by Service | Monitoring the invoicing activity by Billing Period | Monitoring the invoicing activity by Fee Type

target | BIL02 - Monitoring the invoicing activity

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CB0X0MD000X - Central Bank of Fiction

Filters | Quarter : 2018 Q4

Currency: EUR

| Party BIC    | Party name               | Party type   | Volume           | Share (%) | Value               | Share (%) |
|--------------|--------------------------|--------------|------------------|-----------|---------------------|-----------|
| PBAAKMD000X  | Banco de Isthmus         | Payment Bank | 554,682          | 18.68     | 1,102,411.36        | 18.65     |
| PBANKMD000X  | Gringotts Bank           | Payment Bank | 531,629          | 17.91     | 1,065,442.01        | 18.03     |
| PBBEKMD000X  | Banco di San Giorgio     | Payment Bank | 419,420          | 14.13     | 831,214.30          | 14.06     |
| PBBHKMD000X  | Monte Pio                | Payment Bank | 285,344          | 9.61      | 568,189.81          | 9.61      |
| PBBKMD000X   | Banca de Bondi           | Payment Bank | 135,093          | 4.55      | 272,578.24          | 4.61      |
| PBBCKMD000X  | Fidelity Savings & Trust | Payment Bank | 135,972          | 4.58      | 272,114.40          | 4.60      |
| PBBAMMD000X  | Tolson's Mutual          | Payment Bank | 133,934          | 4.51      | 265,835.34          | 4.50      |
| PBAGKMD000X  | Woodgrove Bank           | Payment Bank | 131,442          | 4.43      | 263,915.26          | 4.47      |
| PBAHKMD000X  | Goleth National Bank Ltd | Payment Bank | 132,690          | 4.47      | 262,002.13          | 4.43      |
| PBADKMD000X  | Banque Mammon            | Payment Bank | 127,972          | 4.31      | 254,609.47          | 4.31      |
| PBAFKMD000X  | Dagobert Duck Thrift     | Payment Bank | 130,010          | 4.38      | 252,660.25          | 4.27      |
| PBACKMD000X  | Iron Banks of Braavos    | Payment Bank | 126,624          | 4.27      | 251,576.05          | 4.26      |
| PBMFMMD000X  | Par o Six Ouvert Bank    | Payment Bank | 124,008          | 4.18      | 247,939.36          | 4.19      |
| <b>Total</b> |                          |              | <b>2,968,820</b> |           | <b>5,910,487.98</b> |           |

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Figure 154 - BIL02 Output (“Monitor the invoicing activity by party”)

target | BIL02 - Monitoring the invoicing activity

Monitoring the invoicing activity by Party | Monitoring the invoicing activity by Service | Monitoring the invoicing activity by Billing Period | Monitoring the invoicing activity by Fee Type

target | BIL02 - Monitoring the invoicing activity

2021-03-02 10:10:31 DEV - Development and integration

CB0X0MD000X - Central Bank of Fiction

Filters | Quarter : 2018 Q4

Currency: EUR

| Service      | Volume           | Share (%) | Value               | Share (%) |
|--------------|------------------|-----------|---------------------|-----------|
| T2S          | 1,877,440        | 63.24     | 3,734,003.09        | 63.18     |
| RTGS         | 1,091,380        | 36.76     | 2,176,484.89        | 36.82     |
| <b>Total</b> | <b>2,968,820</b> |           | <b>5,910,487.98</b> |           |

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Figure 155 - BIL02 Output (“Monitor the invoicing activity by service”)

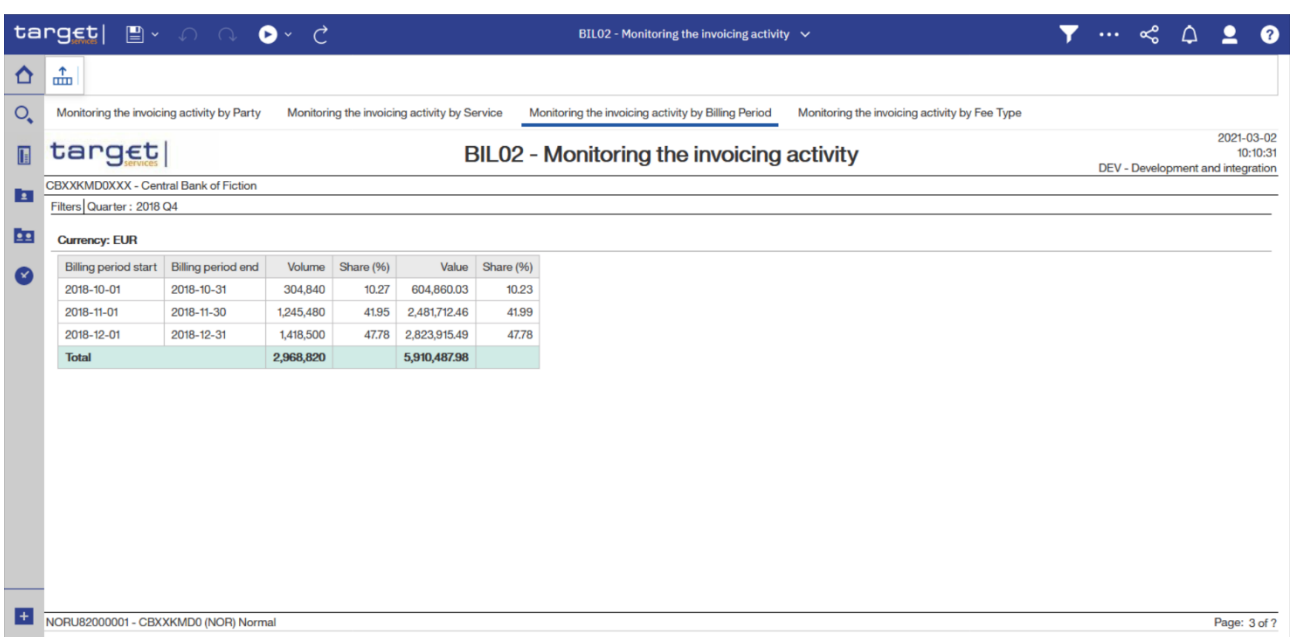


Figure 156 - BIL02 Output (“Monitor the invoicing activity by billing period”)

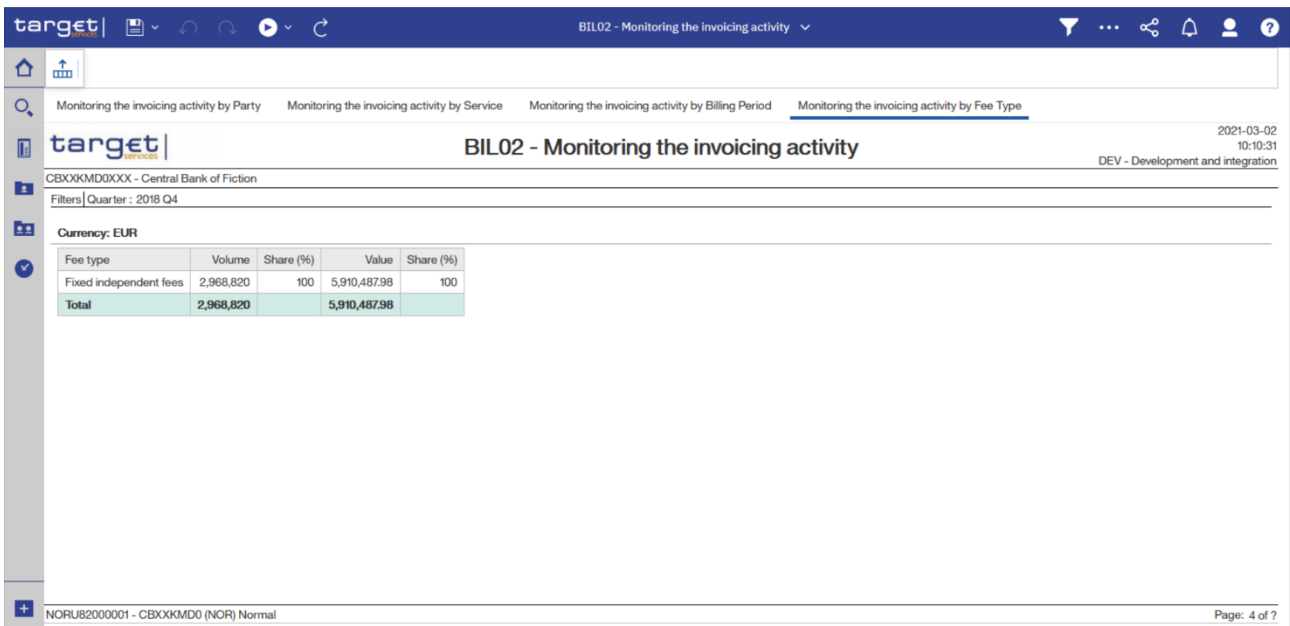


Figure 157 - BIL02 Output (“Monitor the invoicing activity by fee type”)

**Output description**

| <b>BIL02 – Report description – output screen</b>      |  |
|--|--|
| <b>Field label</b>                                     | <b>Description</b>   |
| Year, Quarter  | Year and quarter as chosen in input screen   |
| <i>Tab “Monitor the invoicing activity by party”</i>   |  |
| Party BIC  | BIC of the charged party   |
| Party name   | Name of the charged party  |
| Party type   | Type of the charged party  |
| Volume   | Number of all charged service items for the party during the selected quarter  |
| Share (%)  | Share (in %) of the volume compared to the total of the system entity during the selected quarter  |
| Value (in EUR)   | Value of all charged service items for the party during the selected quarter   |
| Share (%)  | Share (in %) of the value compared to the total of the system entity during the selected quarter   |
| Total volume   | Sum of all volumes of charged service items for the system entity during the selected quarter  |
| Total value (in EUR)                                   | Sum of all values of charged service items for the system entity during the selected quarter   |
| <i>Tab “Monitor the invoicing activity by service”</i> |  |
| Service  | Service for which the data is displayed.<br><br>Possible values:<br><ul style="list-style-type: none"> <li>  RTGS</li> <li>  TIPS</li> </ul> |
| Volume   | Number of all charged service items for the service during the selected quarter  |
| Share (%)  | Share (in %) of the volume compared to the total of the system entity during the selected quarter  |
| Value (in EUR)   | Value of all charged service items for the service during the selected quarter   |
| Share (%)  | Share (in %) of the value compared to the total of the system entity during the selected quarter   |
| Total volume   | Sum of all volumes of charged service items for the system entity during the selected quarter  |

|   |   |
|---|---|
| Total value (in EUR)  | Sum of all values of charged service items for the system entity during the selected quarter      |
| <i>Tab "Monitor the invoicing activity by billing period"</i> |   |
| Billing period start  | Start date (Calendar date) of the billing period for which data is shown                          |
| Billing period end  | End date (Calendar date) of the billing period for which data is shown                            |
| Volume  | Number of all charged service items for the billing period  |
| Share (%)   | Share (in %) of the volume compared to the total of the system entity during the selected quarter |
| Value (in EUR)  | Value of all charged service items for the billing period   |
| Share (%)   | Share (in %) of the value compared to the total of the system entity during the selected quarter  |
| Total volume  | Sum of all volumes of charged service items for the system entity during the selected quarter     |
| Total value (in EUR)  | Sum of all values of charged service items for the system entity during the selected quarter      |
| <i>Tab "Monitor the invoicing activity by fee type"</i>       |   |
| Fee type  | Fee type  |
| Volume  | Number of all charged service items for the fee type during the selected quarter                  |
| Share (%)   | Share (in %) of the volume compared to the total of the system entity during the selected quarter |
| Value (in EUR)  | Value of all charged service items for the fee type during the selected quarter                   |
| Share (%)   | Share (in %) of the value compared to the total of the system entity during the selected quarter  |
| Total volume  | Sum of all volumes of charged service items for the system entity during the selected quarter     |
| Total value (in EUR)  | Sum of all values of charged service items for the system entity during the selected quarter      |

**Table 10 - BIL02 - Output description**

### 5.3.3 BIL03 - Audit of critical billing data

#### Context of usage

This report provides audit information on changes to data critical for billing (“Critical data”). Sorted by party BIC, the report lists the most recent changes to critical data that were executed during a selected period stating their old and new values and the timestamp of the change.

This report can be used by CB users only.

#### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [BIL – Billing Reports] >> [BIL03]

#### Screenshot – prompt

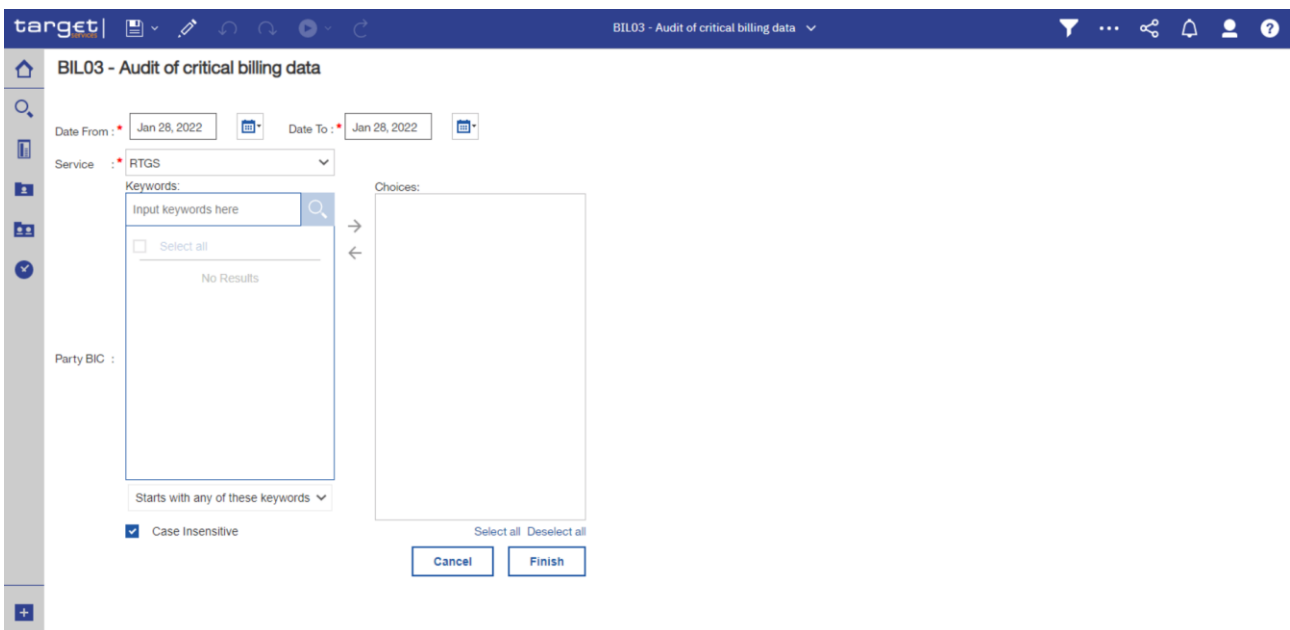


Figure 158 - BIL03 prompt

#### Prompt description

| BIL03 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Service                                    | Service for which the data shall be displayed.<br>Possible values:<br>  RTGS |



|           |  |
|-----------|--|
|           | <p>TIPS</p> <p>This field is mandatory.</p>  |
| Date from | <p>You can select the date by clicking on the calendar.</p> <p>This field is mandatory.</p>  |
| Date to   | <p>You can select the end date of the period, for which the report should contain the data by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory.</p>   |
| Party BIC | <p>You can use this search and select prompt to be able to search for the party BIC or short name. One or several parties can be selected. In case the user leaves this field free, all party BICs belonging to the user's data scope are selected.</p> <p>This field is optional.</p> |

Table 11 - BIL03 - Prompt description

**Screenshot - output screen**

The screenshot displays the 'BIL03 - Audit of critical billing data' report in the target services application. The interface includes a top navigation bar with the target logo and a search bar. The report title is 'BIL03 - Audit of critical billing data' with a timestamp of 2022-01-28 9:21:55 and environment 'DEV - Development'. The report content is as follows:

Central Bank of Fiction

Filters: Date From : 2021-01-28, Date To : 2022-01-28, Service : RTGS

Service: RTGS

Party BIC: NCBKSAMM002

Invoice configuration (Last update timestamp: 2021-05-29 12:00:00 AM)

| Attributes                                 | Old field value | New field value          |
|--|-----------------|--------------------------|
| Invoice configuration technical identifier |                 | 940001004                |
| Tariff technical identifier                |                 | 1                        |
| VAT ID                                     |                 | 0                        |
| System entity                              |                 | SNSA                     |
| Deletion status                            |                 | ACTV                     |
| Service                                    |                 | RTGS                     |
| Party BIC                                  |                 | NCBKSAMM002              |
| Direct invoicing                           |                 | T                        |
| Tax exempt                                 |                 | F                        |
| Annual amount threshold                    |                 | 0                        |
| Direct charging                            |                 | F                        |
| Credit account                             |                 | MACASHPBAAAYAA0XXEUR1000 |
| Debit account                              |                 | CLMTRXTBBEEGA0XXTAQ0400  |
| Creation timestamp                         |                 | 2021-05-29 09:43:21 AM   |

Figure 159 - BIL03 output (1) ("Invoice configuration")

The screenshot shows the Target Services interface for a report titled "BIL03 - Audit of critical billing data". The report is for the "Central Bank of Fiction" and is filtered by "Date From : 2021-01-28" and "Date To : 2022-01-28". The service is "RTGS". The report is on page 2 of 7. The main content is a table with the following data:

| Attributes                        | Old field value | New field value |
|-----------------------------------|-----------------|-----------------|
| Fee schedule technical identifier |                 |                 |
| Tariff technical identifier       |                 |                 |
| Tariff name                       |                 |                 |
| System entity                     |                 |                 |
| Service item code                 |                 |                 |
| Fee type                          |                 |                 |
| Fee price                         |                 |                 |
| Computation method                |                 |                 |
| Valid from                        |                 |                 |
| Valid to                          |                 |                 |
| Creation timestamp                |                 |                 |

Figure 160 - BIL03 output (2) ("Fee schedule")

The screenshot shows the Target Services interface for a report titled "BIL03 - Audit of critical billing data". The report is for the "Central Bank of Fiction" and is filtered by "Date From : 2021-01-28" and "Date To : 2022-01-28". The service is "RTGS". The report is on page 3 of 7. The main content is a table with the following data:

| Attributes                        | Old field value | New field value |
|-----------------------------------|-----------------|-----------------|
| Fee band technical identifier     |                 |                 |
| Fee schedule technical identifier |                 |                 |
| System entity                     |                 |                 |
| Service item code                 |                 |                 |
| Band price                        |                 |                 |
| Lower bound                       |                 |                 |
| Upper bound                       |                 |                 |
| Creation timestamp                |                 |                 |

Figure 161 - BIL03 output (3) ("Fee band")

target SERVICES | BIL03 - Audit of critical billing data

2022-01-28 9:21:55 DEV - Development

Central Bank of Fiction

Filters | Date From : 2021-01-28 | Date To : 2022-01-28 | Service : RTGS

**VAT**

| Attributes               | Old field value | New field value |
|--------------------------|-----------------|-----------------|
| VAT technical identifier |                 |                 |
| System entity            |                 |                 |
| Service                  |                 |                 |
| Party BIC (of the CB)    |                 |                 |
| Default flag             |                 |                 |
| VAT mnemonic             |                 |                 |
| VAT percentage           |                 |                 |
| Creation timestamp       |                 |                 |

Page: 4 of ?

Top | Page up | Page down | Bottom

Figure 162 - BIL03 output (4) ("VAT")

target SERVICES | BIL03 - Audit of critical billing data

2022-01-28 9:21:55 DEV - Development

Central Bank of Fiction

Filters | Date From : 2021-01-28 | Date To : 2022-01-28 | Service : RTGS

**Service**

| Attributes                        | Old field value | New field value |
|-----------------------------------|-----------------|-----------------|
| Service item technical identifier |                 |                 |
| Service                           |                 |                 |
| Category                          |                 |                 |
| Service item code                 |                 |                 |
| Classification                    |                 |                 |
| Creation timestamp                |                 |                 |

Page: 5 of ?

Top | Page up | Page down | Bottom

Figure 163 - BIL03 output (5) ("Service")

**Output description**

| <b>BIL03 – Report description – output screen</b>  |  |
|--|--|
| <b>Field label</b>   | <b>Description</b>   |
| Party BIC  | BIC of the party, for which the audit for critical billing data is shown in the following table  |
| <i>The following information is shown per critical data item (entity – see following list for possible values):</i>                  |  |
| Entity name  | Name of the critical data entity.<br><br>Possible values:<br><ul style="list-style-type: none"> <li>  Invoice configuration</li> <li>  Fee schedule</li> <li>  Fee band</li> <li>  VAT</li> <li>  Billing group</li> <li>  Service item</li> </ul> |
| Last update timestamp  | Timestamp of the last update to attributes of this critical data item  |
| <i>The following information is shown per attribute of the critical data item (entity – see following list for possible values):</i> |  |
| Attribute name   | Name of the attribute  |
| Old field value  | Value of the attribute before the change.  |
| New field value  | Value of the attribute after the change. Is empty for those attributes that were not changed.  |

**Table 12 - BIL03 - Output description**

**Critical data fields**

| <b>BIL03 – List of billing critical data entities and attributes</b> |                         |
|--|-------------------------|
| <b>Entity</b>  | <b>Attribute</b>        |
| Invoice configuration  | Service                 |
| Invoice configuration  | Party BIC               |
| Invoice configuration  | Direct invoicing        |
| Invoice configuration  | Tax exempt              |
| Invoice configuration  | Annual amount threshold |
| Invoice configuration  | Direct charging         |

|                       |                       |
|-----------------------|-----------------------|
| Invoice configuration | Credit account        |
| Invoice configuration | Debit account         |
| Fee schedule          | Tariff name           |
| Fee schedule          | Service item code     |
| Fee schedule          | Fee type              |
| Fee schedule          | Fee price             |
| Fee schedule          | Computation method    |
| Fee schedule          | Valid from            |
| Fee schedule          | Valid to              |
| Fee band              | Service item code     |
| Fee band              | Band price            |
| Fee band              | Lower bound           |
| Fee band              | Upper bound           |
| VAT                   | Service               |
| VAT                   | Party BIC (of the CB) |
| VAT                   | Default flag          |
| VAT                   | VAT mnemonic          |
| VAT                   | VAT percentage        |
| Billing group         | Billing group leader  |
| Tariff                | Service               |
| Tariff                | Tariff name           |

**Table 13 - BIL03 - Critical data fields**

### 5.3.4 BIL04 - Detailed consumption

#### **Context of usage**

This report provides detailed information on consumption data for a selected period and provides information on the originator and the charged party, the service item category and code and the quantity of each service item per day within the selected period. CBs can retrieve information on the detailed consumption data of those parties belonging to their system entity.

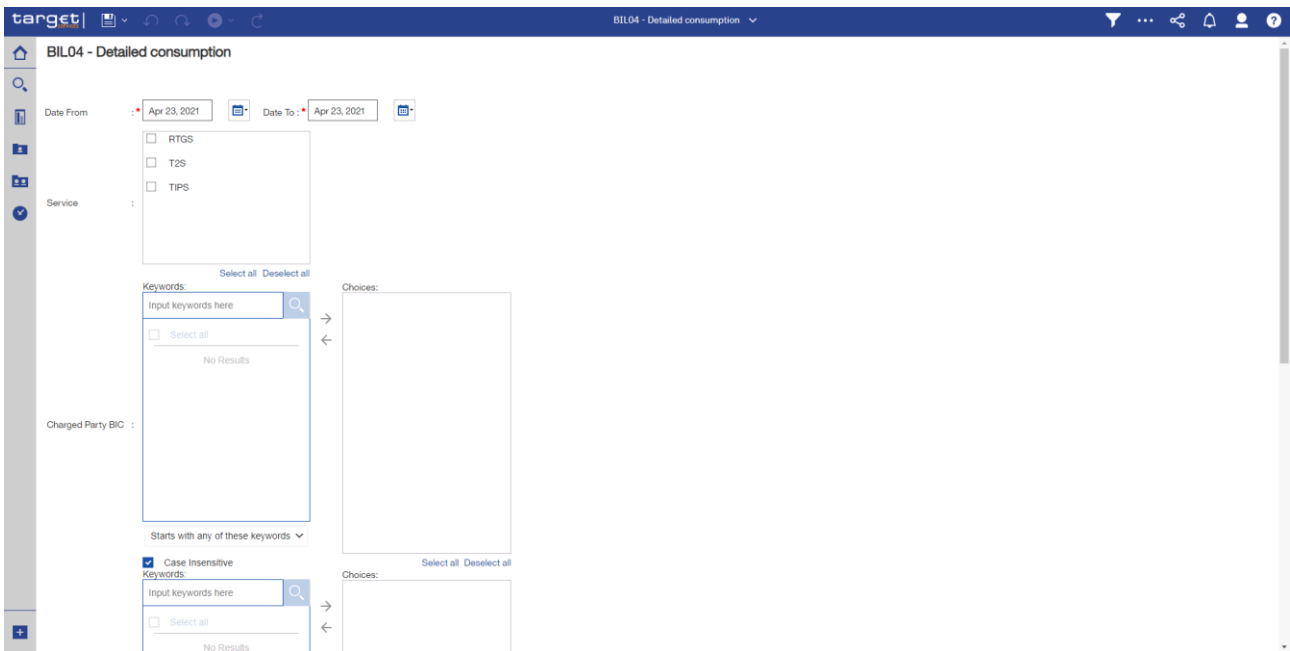
This report can be used by CB users only.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [BIL – Billing Reports] >> [BIL04]

**Screenshot – prompt**



**Figure 164 - BIL04 prompt (1)**

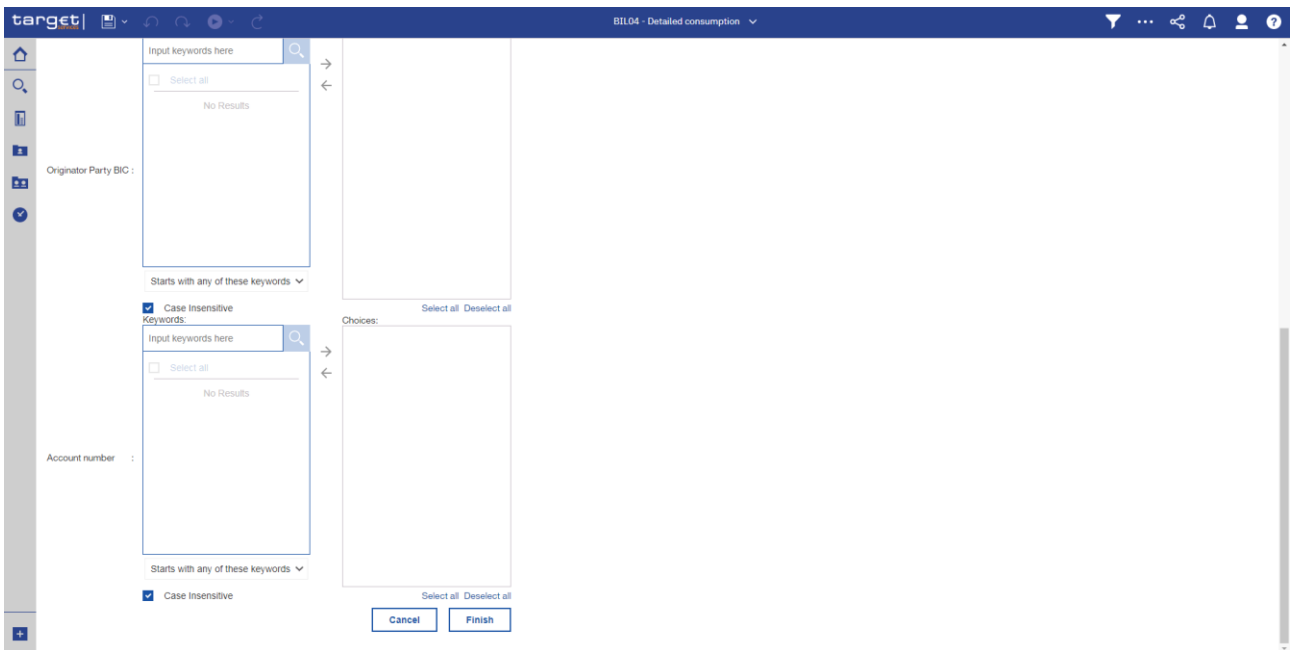


Figure 165 - BIL04 prompt (2)

**Prompt description**

| BIL04 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Date from                                  | <p>You can select the date by clicking on the calendar.</p> <p>This field is mandatory.</p>  |
| Date to                                    | <p>You can select the end date of the period, for which the report should contain the data by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory.</p> |
| Service                                    | <p>Service for which the data shall be displayed.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  RTGS</li> <li>  TIPS</li> </ul> <p>This field is mandatory.</p>   |

|                               |  |
|-------------------------------|--|
| Charged party BIC and name    | <p>BIC and name of the party to be charged</p> <p>You can use this search and select prompt to be able to search for the charged party BIC or short name. One or several parties can be selected. In case the user leaves this field free, all party BICs belonging to the user's data scope are selected.</p> <p>This field is optional.</p>          |
| Originator party BIC and name | <p>BIC and name of the party originating the charge</p> <p>You can use this search and select prompt to be able to search for the charged party BIC or short name. One or several parties can be selected. In case the user leaves this field free, all party BICs belonging to the user's data scope are selected.</p> <p>This field is optional.</p> |
| Account number                | <p>Account number to which the service item is linked</p> <p>This field is optional.</p>   |

Table 14 - BIL04 - Prompt description

**Screenshot - output screen**

| Service | Charged party BIC | Charged party name | Charged party type | Account number           | Responsible party BIC | Responsible party name  | Originator party BIC | Originator party name | Service item category       | Service item code | Service item description       | Quantity |
|---------|-------------------|--------------------|--------------------|--------------------------|-----------------------|-------------------------|----------------------|-----------------------|-----------------------------|-------------------|--------------------------------|----------|
| RTGS    | PBAAKMD00XX       | Banco de Isthmus   | Payment Bank       | MACASHPBAAKMD00XXEUR0A01 | CBXXKMD00XX           | Central Bank of Fiction | PBAAKMD00XX          | Banco de Isthmus      | Information Services        | 5002              | Fixed fee - RTGS account       | 15       |
| RTGS    | PBAAKMD00XX       | Banco de Isthmus   | Payment Bank       | MACASHPBAAKMD00XXEUR0A01 | CBXXKMD00XX           | Central Bank of Fiction | PBAAKMD00XX          | Banco de Isthmus      | Account Management Services | 5002              | Fixed fee - RTGS account       | 11       |
| RTGS    | PBAAKMD00XX       | Banco de Isthmus   | Payment Bank       | MACASHPBAAKMD00XXEUR0A01 | CBXXKMD00XX           | Central Bank of Fiction | PBAAKMD00XX          | Banco de Isthmus      | Account Management Services | 5002              | Fixed fee - RTGS account       | 14       |
| RTGS    | PBAAKMD00XX       | Banco de Isthmus   | Payment Bank       | MACASHPBAAKMD00XXEUR0A01 | CBXXKMD00XX           | Central Bank of Fiction | PBAAKMD00XX          | Banco de Isthmus      | Information Services        | 5004              | Adressable BIC - Correspondent | 14       |
| RTGS    | PBAAKMD00XX       | Banco de Isthmus   | Payment Bank       | MACASHPBAAKMD00XXEUR0A01 | CBXXKMD00XX           | Central Bank of Fiction | PBAAKMD00XX          | Banco de Isthmus      | Account Management Services | 5004              | RTGS AS cash transfer order    | 10       |
| RTGS    | PBAAKMD00XX       | Banco de Isthmus   | Payment Bank       | MACASHPBAAKMD00XXEUR0A01 | CBXXKMD00XX           | Central Bank of Fiction | PBAAKMD00XX          | Banco de Isthmus      | Account Management Services | 5004              | RTGS AS cash transfer order    | 6        |
| RTGS    | PBAAKMD00XX       | Banco de Isthmus   | Payment Bank       | MACASHPBAAKMD00XXEUR0A01 | CBXXKMD00XX           | Central Bank of Fiction | PBAAKMD00XX          | Banco de Isthmus      | Information Services        | 5005              | Fee for unpublished BIC        | 13       |
| RTGS    | PBAAKMD00XX       | Banco de Isthmus   | Payment Bank       | MACASHPBAAKMD00XXEUR0A01 | CBXXKMD00XX           | Central Bank of Fiction | PBAAKMD00XX          | Banco de Isthmus      | Account Management Services | 5005              | Adressable BIC - Correspondent | 4        |

Figure 166 - BIL04 Output



**Output description**

| <b>BIL04 – Report description – output screen</b>                                |   |
|--|---|
| <b>Field label</b>   | <b>Description</b>  |
| Date   | Date, for which detailed consumption data are shown   |
| <i>The following information is shown per date within the chosen date range.</i> |   |
| Service  | Service where the detailed consumption data are shown.<br><br>Possible values:<br><ul style="list-style-type: none"> <li>  RTGS</li> <li>  TIPS</li> </ul>                                  |
| Charged party BIC  | Party that is charged for the service items   |
| Charged party name   | Name of the charged party   |
| Charged party type   | Party type of the charged party.  |
| Account number   | Account number, to which the service item is linked (only filled in case of service item category “Settlement services” or “Account management services”. Otherwise empty)                  |
| Responsible party BIC  | Party BIC of CB responsible for the charged party   |
| Responsible party name   | Name of the CB responsible for the charged party  |
| Originator party BIC   | BIC of the party that originated the service item   |
| Originator party name  | Name of the party that originated the service item  |
| Service Item Category  | Possible values are:<br><ul style="list-style-type: none"> <li>  Settlement Services (SETT)</li> <li>  Account Management Services (ACMS)</li> <li>  Information Services (INSV)</li> </ul> |

|                                 |   |
|---------------------------------|---|
| <p>Service item code</p>        | <p>Following service item codes are currently available:</p> <ul style="list-style-type: none"> <li>  5002</li> <li>  5004</li> <li>  5005</li> <li>  5006</li> <li>  5007</li> <li>  5008</li> <li>  5009</li> <li>  5011</li> <li>  5012</li> <li>  5015</li> <li>  5016</li> <li>  3001</li> <li>  3002</li> <li>  3003</li> <li>  3004</li> </ul>   |
| <p>Service item description</p> | <p>Following service item descriptions are currently available:</p> <ul style="list-style-type: none"> <li>  Fixed fee – RTGS account (5002)</li> <li>  Addressable BIC – Correspondent (5004)</li> <li>  Fee for unpublished BICs (5005)</li> <li>  Fee for multi-addressee (5006)</li> <li>  Ancillary system – Core fixed fee (5007)</li> <li>  Ancillary system – Fixed fee I (5008)</li> <li>  Ancillary system – Fixed fee II (5009)</li> <li>  RTGS payment order (5011)</li> <li>  RTGS AS Cash transfer orders (5012)</li> <li>  Inter-banking group intra-component liquidity transfer order (5015)</li> <li>  Inter-banking group inter-component liquidity transfer order (5016)</li> <li>  Settled Instant Payment transaction (3001)</li> <li>  Unsettled Instant Payment transaction (3002)</li> <li>  Settled Positive Recall answer (3003)</li> <li>  Unsettled Positive Recall answer (3004)</li> </ul> |

| Quantity | Number of the service items counted |
|----------|-------------------------------------|
|----------|-------------------------------------|

**Table 15 - BIL04 - Output description**

### 5.3.5 BIL05 - Detailed participation

#### Context of usage

This report provides detailed information about charged parties per consumption of service item categories of each service for a given date range. CBs can retrieve information on the detailed participation data of those parties belonging to their system entity.

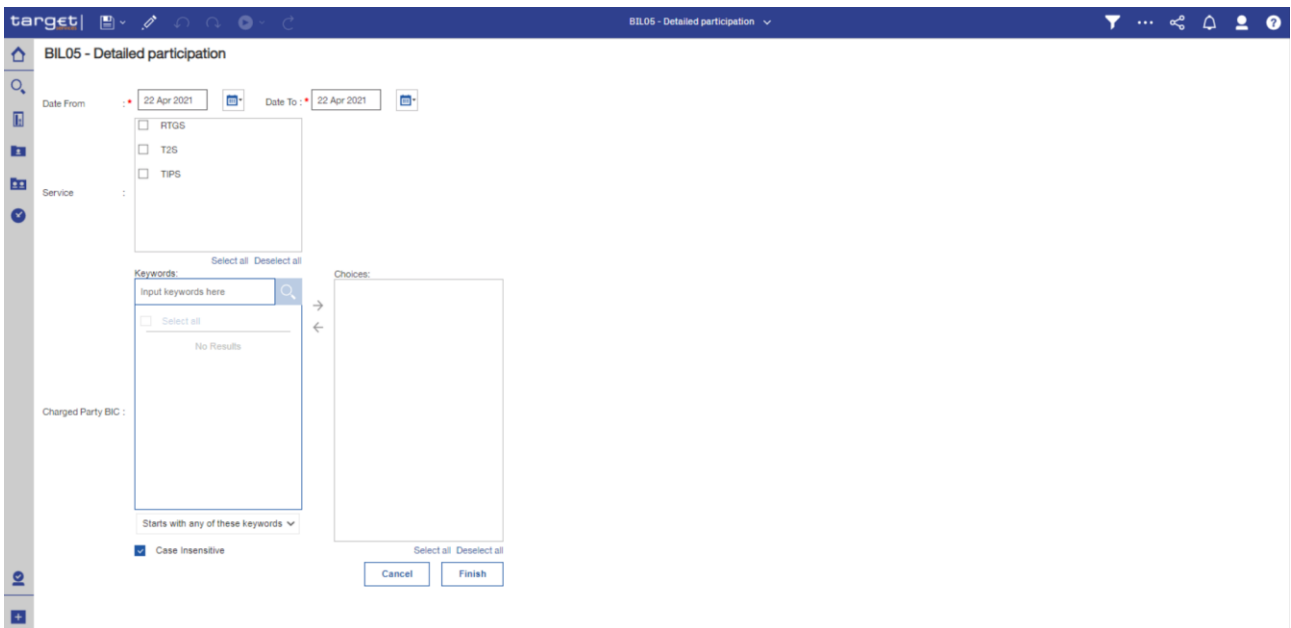
This report can be used by CB users only.

#### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [BIL – Billing Reports] >> [BIL05]

#### Screenshot – prompt



**Figure 167 - BIL05 prompt**

**Prompt description**

| <b>BIL05 – Report description – prompt screen</b> |   |
|---|---|
| <b>Field label</b>                                | <b>Description</b>  |
| Date from   | <p>You can select the date by clicking on the calendar.</p> <p>This field is mandatory.</p>   |
| Date to   | <p>You can select the end date of the period, for which the report should contain the data by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory.</p>  |
| Service   | <p>Service for which the data shall be displayed.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  RTGS</li> <li>  TIPS</li> </ul> <p>This field is mandatory.</p>  |
| Charged party BIC and name                        | <p>BIC and name of the party to be charged</p> <p>You can use this search and select prompt to be able to search for the charged party BIC or short name. One or several parties can be selected. In case the user leaves this field free, all party BICs belonging to the user’s data scope are selected.</p> <p>This field is optional.</p> |

**Table 16 - BIL05 - Prompt description**

**Screenshot - output screen**

| Service | Charged party BIC | Charged party name        | Charged party type | Responsible party BIC | Responsible party name  | Sum of Consumptions for Settlement Services | Sum of Consumptions for Account Management Services | Sum of Consumptions for Information Services |
|---------|-------------------|---------------------------|--------------------|-----------------------|-------------------------|---|---|--|
| RTGS    | PBAAKMD000X       | Banco de Isthmus          | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 904   | 990   | 1,056  |
| RTGS    | PBAAKMD000X       | Gringotts Bank            | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 792   | 858   | 924  |
| RTGS    | PBACKMD000X       | Iron Banks of Braavos     | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 296   | 308   | 330  |
| RTGS    | PBADM0000X        | Banque Mamon              | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 330   | 352   | 374  |
| RTGS    | PBAFKMD000X       | Dagobert Duck Thrift      | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 418   | 440   | 462  |
| RTGS    | PBAGKMD000X       | Woodgrove Bank            | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 462   | 484   | 506  |
| RTGS    | PBAHKMD000X       | Goliath National Bank Ltd | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 506   | 528   | 550  |
| RTGS    | PBBAKMD000X       | Telson's Mutual           | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 550   | 572   | 594  |
| RTGS    | PBBEKMD000X       | Banca de Bondi            | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 594   | 616   | 638  |
| RTGS    | PBBCKMD000X       | Fidelity Savings & Trust  | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 638   | 660   | 682  |
| RTGS    | PBBEKMD000X       | Banco di San Giorgio      | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 2,244                                       | 2,310   | 2,376  |
| RTGS    | PBBHKMD000X       | Monte Pio                 | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 1,738                                       | 1,782   | 1,826  |
| RTGS    | PBMFKMD000X       | Par ò Six Overt Bank      | Payment Bank       | CB00KMD000X           | Central Bank of Fiction | 198   | 220   | 242  |

**Figure 168 - BIL05 Output**

**Output description**

| BIL05 – Report description – output screen  |  |
|---|--|
| Field label                                 | Description  |
| Service                                     | Service where the detailed consumption data are shown.<br>Possible values:<br>  RTGS<br>  TIPS |
| Charged party BIC                           | Party that is charged for the service items  |
| Charged party name                          | Name of the charged party  |
| Charged party type                          | Party type of the charged party.   |
| Responsible party BIC                       | Party BIC of CB responsible for the charged party  |
| Responsible party name                      | Name of the CB responsible for the charged party   |
| Sum of consumptions for Settlement services | Number of consumptions of Settlement Services by the charged party during the given date range |

|   |  |
|---|--|
| Sum of consumptions for Account management services | Number of consumptions of Account management services by the charged party during the given date range |
| Sum of consumptions for Information services        | Number of consumptions of Information services by the charged party during the given date range        |
| Quantity  | Number of the service items counted  |

**Table 17 - BIL05 - Output description**

## 5.4 Contingency reports (CON)

### 5.4.1 CON01 – Cash transfers settled during contingency processing and final contingency account balances

#### **Context of usage**

This report provides information on the cash transfers settled on accounts in the Contingency Services during a contingency procedure. For each party/contingency account (with at least one cash transfer within a contingency processing) all cash transfers within the contingency processing as well as the final account balance on the contingency account at the time of the closure of the contingency processing are provided.

For each cash transfer the report provides the account number in the Contingency Services, the account number of the cash transfer counterparty in the Contingency Services, the settlement timestamp and the credit or debit amount. Cash transfers on the same account are sorted in chronological order of their settlement timestamp.

In case that several contingency processing sessions occurred within the same business day, the sessions are reported separate.

CBs can retrieve information for parties belonging to their system entity.

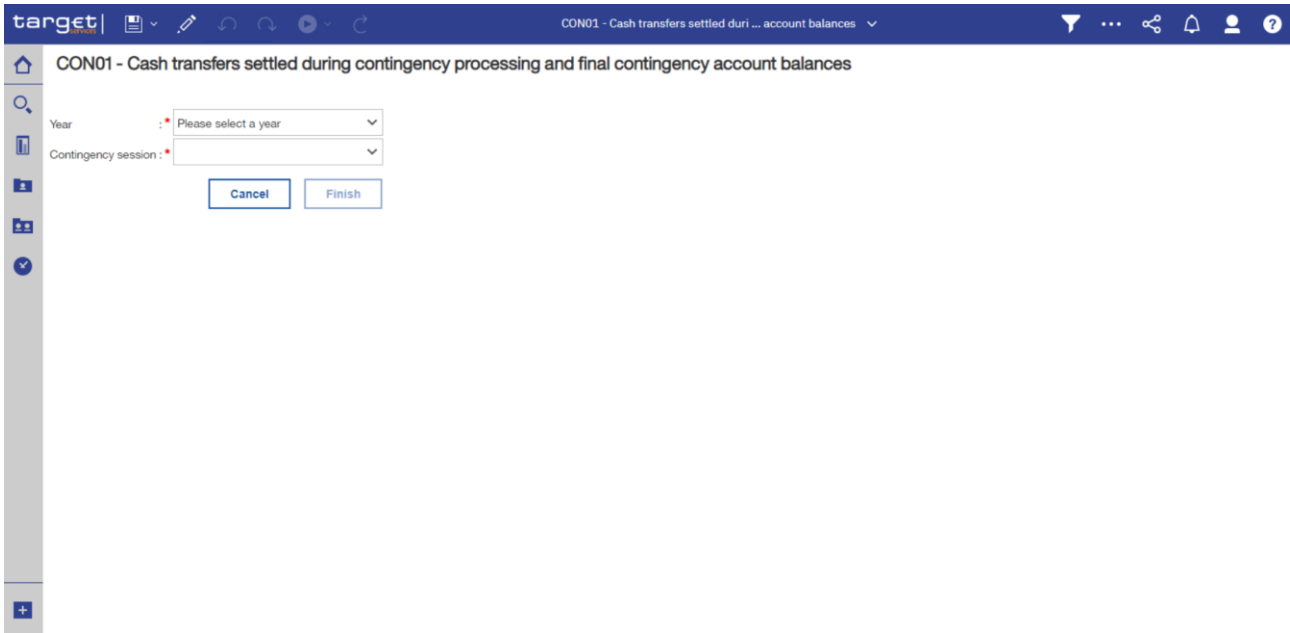
This report can be used by CB users only.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [CON – Contingency Reports] >> [CON01]

**Screenshot – prompt**



**Figure 169 - CON1 prompt**

**Prompt description**

| CON01 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Year                                       | <p>You can use this drop-down field to select the year, from which the report should contain the data.</p> <p>This field is mandatory.</p>                 |
| Contingency session                        | <p>You can select the contingency session, for which the report should contain the data, depending on the chosen year.</p> <p>This field is mandatory.</p> |

**Table 18 - CON01 - Prompt description**

Screenshot - output screen

CON01 - Cash transfers settled during contingency processing and final contingency account balances

2022-01-28 9:44:35 DEV - Development

Year: 2021  
Contingency session: from 01-06 09:55:01 to 01-06 16:05:16

Responsible CB : SE - ST 500000006  
Currency : EUR  
Synthesis of contingency accounts settlements during the contingency procedure and final balances  
Contingency Session from 2021-01-06 09:55:01 to 2021-01-06 16:05:16

| Party BIC  | Parent party BIC | Contingency account number | Injection of drain or liquidity |              |              | Total credit | Total debit | Session balance |
|------------|------------------|----------------------------|---------------------------------|--------------|--------------|--------------|-------------|-----------------|
|            |                  |                            | CB                              | T2S          | TIPS         |              |             |                 |
| B50000010X | B50000006X       | ECCA0untContingency        | 0.00                            | 0.00         | 8,000,160.00 | 0.00         | 0.00        | 8,000,160.00    |
| B50000010X | B50000006X       | TACCBACC                   | 0.00                            | 0.00         | 0.00         | 0.00         | 0.00        | 0.00            |
| B50000014X | B50000006X       | ECCA2untContingency        | 0.00                            | 8,000,224.00 | 0.00         | 0.00         | 0.00        | 8,000,224.00    |
| B50000014X | B50000006X       | RTGSSBPBAKEF0001EUR0001    | 0.00                            | 0.00         | 0.00         | 0.00         | 0.00        | 0.00            |
| B50000015X | B50000006X       | ECCA2untConTestUpdate      | 0.00                            | 8,000,240.00 | 0.00         | 0.00         | 0.00        | 8,000,240.00    |
| B50000015X | B50000006X       | RTGSSBPBAKEF0002EUR0001    | 0.00                            | 0.00         | 0.00         | 0.00         | 0.00        | 0.00            |
| B50000016X | B50000006X       | ECCA2untContingency2       | 0.00                            | 8,000,256.00 | 0.00         | 0.00         | 0.00        | 8,000,256.00    |
| B50000016X | B50000006X       | RTGSSBPBAKEF0003EUR0001    | 0.00                            | 0.00         | 0.00         | 0.00         | 0.00        | 0.00            |
| B50000020X | B50000006X       | ECCA0untConTestUpdate      | 0.00                            | 0.00         | 8,000,320.00 | 0.00         | 0.00        | 8,000,320.00    |
| B50000020X | B50000006X       | TACCCACC                   | 0.00                            | 0.00         | 0.00         | 0.00         | 0.00        | 0.00            |
| B50000030X | B50000006X       | ECCA0untContingency2       | 0.00                            | 0.00         | 8,000,480.00 | 0.00         | 0.00        | 8,000,480.00    |
| B50000030X | B50000006X       | TACCDACC                   | 0.00                            | 0.00         | 0.00         | 0.00         | 0.00        | 0.00            |
| B50000034X | B50000006X       | 1914101496                 | 0.00                            | 0.00         | 0.00         | 0.00         | 0.00        | 0.00            |
| B50000034X | B50000006X       | ECCA3untContingency        | 0.00                            | 8,000,544.00 | 0.00         | 0.00         | 0.00        | 8,000,544.00    |
| B50000035X | B50000006X       | ASTECHASACGHF0001EUR0002   | 0.00                            | 0.00         | 0.00         | 0.00         | 0.00        | 0.00            |

Figure 170 - CON01 output (1) (“Synthesis of contingency accounts settlements during the contingency procedure and final balances”)

CON01 - Cash transfers settled during contingency processing and final contingency account balances

2022-01-28 9:44:35 DEV - Development

Year: 2021  
Contingency session: from 01-06 09:55:01 to 01-06 16:05:16

Responsible CB : SE - ST 500000006  
Currency : EUR  
Details on contingency cash transfers settled  
Contingency Session from 2021-01-06 09:55:01 to 2021-01-06 16:05:16

| Party BIC  | Parent party BIC | Contingency account number | Settlement timestamp | Counterpart contingency account number | Counterpart CB | Credit | Debit |
|------------|------------------|----------------------------|----------------------|--|----------------|--------|-------|
| B50000010X | B50000006X       | ECCA0untContingency        | 2021-01-06 10:00:01  | TACCBACC                               | SE             | 0      | 0     |
| B50000010X | B50000006X       | TACCBACC                   | 2021-01-06 10:00:01  | ECCA0untContingency                    | BED1           | 0      | 0     |
| B50000010X | B50000006X       | TACCBACC                   | 2021-01-06 10:00:06  | ECCA1untContingency2                   | BED1           | 0      | 0     |
| B50000014X | B50000006X       | ECCA2untContingency        | 2021-01-06 16:00:11  | RTGSSBPBAKEF0001EUR0001                | SE             | 0      | 0     |
| B50000014X | B50000006X       | RTGSSBPBAKEF0001EUR0001    | 2021-01-06 16:00:11  | ECCA2untContingency                    | BED1           | 0      | 0     |
| B50000015X | B50000006X       | ECCA2untConTestUpdate      | 2021-01-06 16:00:12  | RTGSSBPBAKEF0002EUR0001                | SE             | 0      | 0     |
| B50000015X | B50000006X       | RTGSSBPBAKEF0002EUR0001    | 2021-01-06 16:00:12  | ECCA2untConTestUpdate                  | BED1           | 0      | 0     |
| B50000016X | B50000006X       | ECCA2untContingency2       | 2021-01-06 16:00:13  | RTGSSBPBAKEF0003EUR0001                | SE             | 0      | 0     |
| B50000016X | B50000006X       | RTGSSBPBAKEF0003EUR0001    | 2021-01-06 16:00:13  | ECCA2untContingency2                   | BED1           | 0      | 0     |
| B50000020X | B50000006X       | ECCA0untConTestUpdate      | 2021-01-06 10:00:02  | TACCCACC                               | SE             | 0      | 0     |
| B50000020X | B50000006X       | TACCCACC                   | 2021-01-06 10:00:02  | ECCA0untConTestUpdate                  | BED1           | 0      | 0     |
| B50000030X | B50000006X       | ECCA0untContingency2       | 2021-01-06 10:00:03  | TACCDACC                               | SE             | 0      | 0     |
| B50000030X | B50000006X       | TACCDACC                   | 2021-01-06 10:00:03  | ECCA0untContingency2                   | BED1           | 0      | 0     |
| B50000034X | B50000006X       | 1914101496                 | 2021-01-06 16:00:14  | ECCA3untContingency                    | BED1           | 0      | 0     |
| B50000034X | B50000006X       | ECCA3untContingency        | 2021-01-06 16:00:14  | 1914101496                             | SE             | 0      | 0     |
| B50000035X | B50000006X       | ASTECHASACGHF0001EUR0002   | 2021-01-06 16:00:15  | ECCA3untConTestUpdate                  | BED1           | 0      | 0     |

Figure 171 - CON01 output (2) (“Details on contingency cash transfers settled”)



**Output description**

| <b>CON01 – Report description – output screen</b>                                   |  |
|---|--|
| <b>Sheet 1</b>  |  |
| <b>Field label</b>  | <b>Description</b>   |
| Party BIC   | BIC of the party whose details are listed in the following fields  |
| Parent party BIC  | The party BIC of the responsible CB in case the Party BIC belongs to a PB or AS. In case the party BIC belongs to a CB, this field is empty.   |
| Contingency account number  | The account number of the contingency account of a PB and/or an AS   |
| Injection or drain of liquidity - CB  | Sum of credited (injected) - Sum of debited (drained) amount of liquidity transfers on the current partys contingency account when the counterparty of the liquidity transfer is the CB contingency account.         |
| Injection or drain of liquidity – T2S   | Sum of credited (injected) - Sum of debited (drained) amount of liquidity transfers on the current partys account when the counterparty of the liquidity transfer is the T2S contingency transit account.            |
| Injection or drain of liquidity - TIPS  | Sum of credited (injected) - Sum of debited (drained) amount of liquidity transfers on the current partys account when the counterparty of the liquidity transfer is the TIPS contingency transit account            |
| Total credit  | Sum of credited cash transfers i.e. payment orders and liquidity transfers between the current partys account and any other contingency account (excluding the CB/T2S/TIPS injections or drains) during the session. |
| Total debit   | Sum of debited cash transfers i.e. payment orders and liquidity transfers between the current partys account and any other contingency account (excluding the CB/T2S/TIPS injections or drains) during the session.  |
| Session balance   | The available cash balance for the current partys contingency account by the end of the contingency session.   |
| One row for the « CB » with the following data for the selected congingency session |  |
| Party BIC   | BIC of the CB  |

|   |  |
|---|--|
| Contingency account number              | The contingency account number of the CB   |
| Injection or drain of liquidity - CB    | Sum of credited (drained) - Sum of debited (injected) amount of liquidity transfers on the CBs contingency account when the counterparty of the liquidity transfer is the contingency account of a party within the data scope of the CB   |
| Total credit                            | Sum of credited payment orders and liquidity transfers between the CBs contingency account and any other contingency account (excluding the liquidity transfers on the counterparty accounts within the data scope of the CB, i.e. without CB liquidity drains) during the session.    |
| Total debit                             | Sum of debited payment orders and liquidity transfers between the CBs contingency account and any other contingency account (excluding the liquidity transfers on the counterparty accounts within the data scope of the CB, i.e. without CB liquidity injections) during the session. |
| Session balance                         | The available cash balance for the CB contingency account by the end of the contingency session  |
| <b>Sheet 2</b>                          |  |
| <b>Field label</b>                      | <b>Description</b>   |
| Party BIC                               | BIC of the party whose details are listed in the following fields  |
| Parent party BIC                        | The party BIC of the responsible CB in case the Party BIC belongs to a PB or AS  |
| Contingency account number              | The contingency account number of the party  |
| Settlement timestamp                    | The timestamp at which the cash transfer was settled   |
| Counterparty contingency account number | The contingency account number of the counterparty of the cash transfer.   |
| Counterparty CB                         | The country code of the CB of the counterparty of the cash transfer.   |
| Credit                                  | Credited value of the cash transfer  |
| Debit                                   | Debited value of the cash transfer   |

**Table 19 - CON01 - Output description**

## 5.4.2 CON02 – Contingency processing – end of procedure account balances per CB

### Context of usage

This report provides the balance for each CB contingency account at the end of a contingency procedure. In addition, the sum of debits and credits during a contingency procedure for each CB contingency account are reported.

This report can be used by CB users only.

### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [CON – Contingency Reports] >> [CON02]

### Screenshot – prompt

The screenshot shows a web application interface for generating a report. At the top, there is a blue header bar with the 'target SERVICES' logo on the left and navigation icons on the right. Below the header, the main content area has a title 'CON02 - Contingency processing - end of procedure account balances per CB'. On the left side, there is a vertical sidebar with various icons. The main form area contains two dropdown menus: 'Year' with the text 'Please select a year' and 'Contingency session'. Below these dropdowns are two buttons labeled 'Cancel' and 'Finish'.

Figure 172 - CON02 prompt

**Prompt description**

| CON02 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Year                                       | <p>You can use this drop-down field to select the year, from which the report should contain the data.</p> <p>This field is mandatory.</p>                 |
| Contingency session                        | <p>You can select the contingency session, for which the report should contain the data, depending on the chosen year.</p> <p>This field is mandatory.</p> |

Table 20 - CON02 - Prompt description

**Screenshot - output screen**

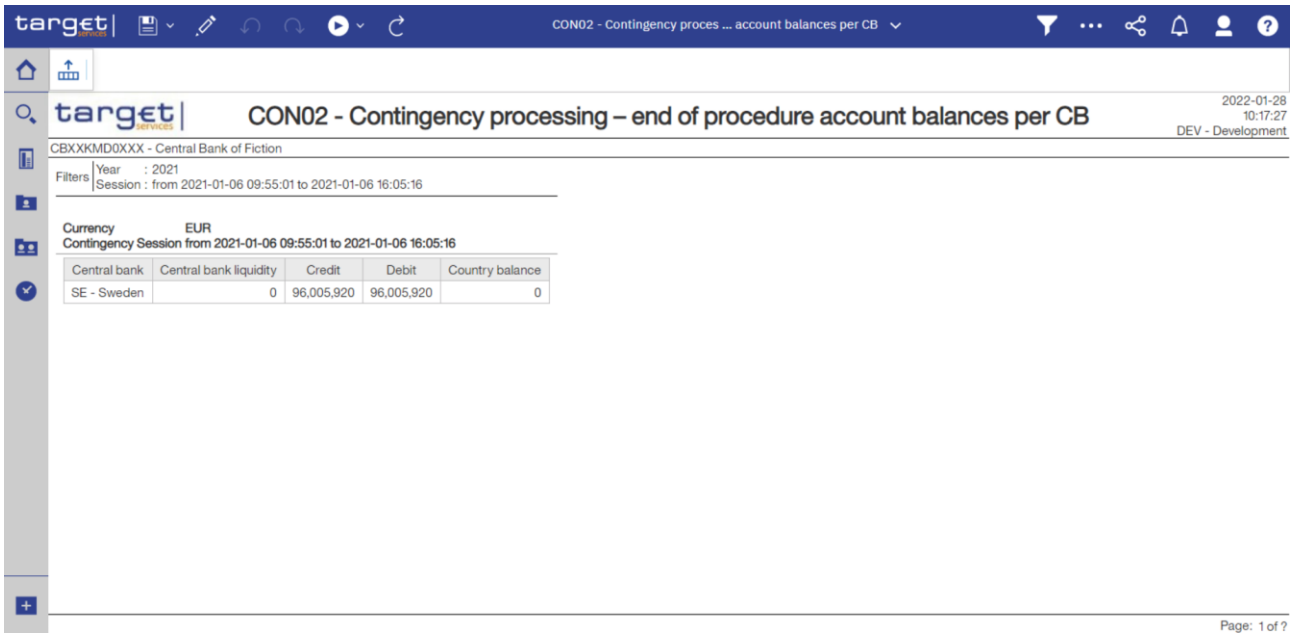


Figure 173 - CON02 output (2)

**Output description**

| <b>CON02 – Report description – output screen</b> |  |
|---|--|
| <b>Field label</b>                                | <b>Description</b>   |
| Central Bank                                      | Filled with the country code of the CB and the name of the country   |
| Central bank liquidity                            | Central bank liquidity = Sum of CB liquidity drains – Sum of CB liquidity injections against the parties contingency accounts within the CBs data scope. |
| Credit  | Sum over credited amounts of the cash transfers of the PB/As contingency accounts without CB liquidity injections  |
| Debit   | Sum over debited amounts of the cash transfers of the PB/AS contingency accounts without CB liquidity drains   |
| Country balance                                   | Country balance = CB liquidity + Credit – Debit  |

**Table 21 - CON02 - Output description**

## 5.5 Data extraction reports (DEX)

### 5.5.1 DEX01 - Monitoring data extraction request(s)

**Context of usage**

This report provides information on data extraction requests (DEX02) by CB users for a given date (range). For each data extraction request, the user, the request date and the status is provided.

CBs can retrieve information on extraction requests of users belonging to their system entity.

This report can be used by CB users only.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [DEX – Data Extraction Reports] >> [DEX01]

**Screenshot – prompt**

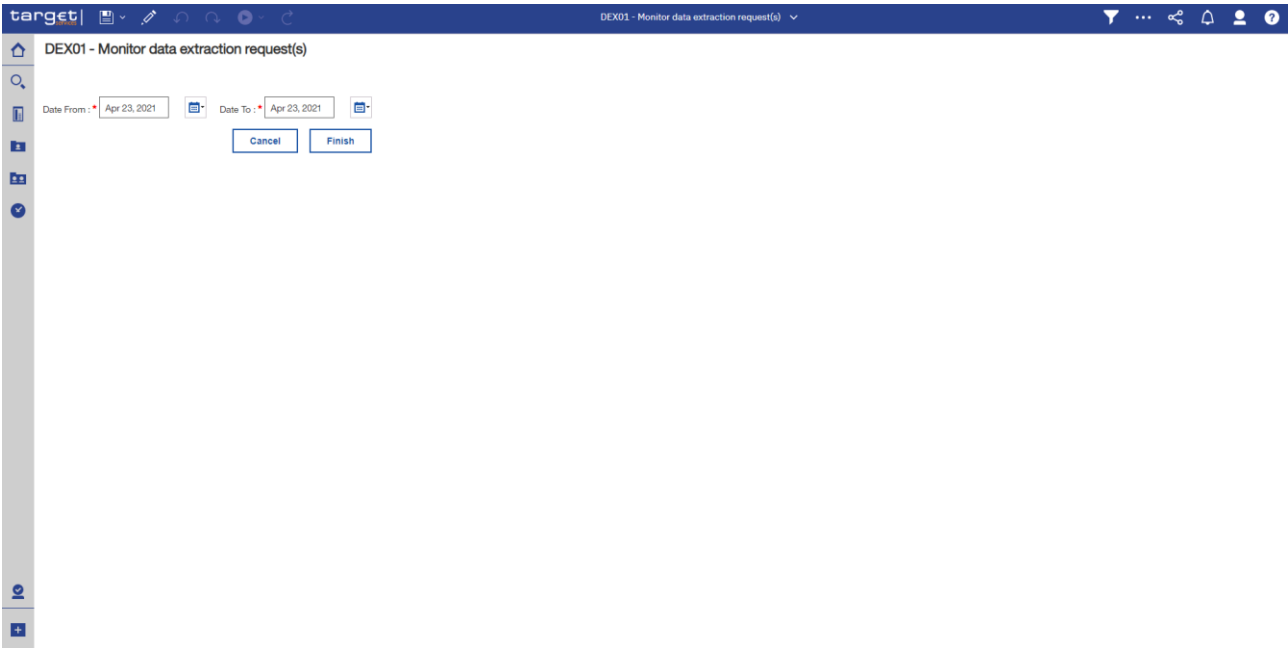


Figure 174 - DEX01 prompt

**Prompt description**

| DEX01 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Date from                                  | <p>You can select the date by clicking on the calendar.</p> <p>This field is mandatory.</p>  |
| Date to                                    | <p>You can select the end date of the period, for which the report should contain the data by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory.</p> |

Table 22 - DEX01 - Prompt description

**Screenshot - output screen**

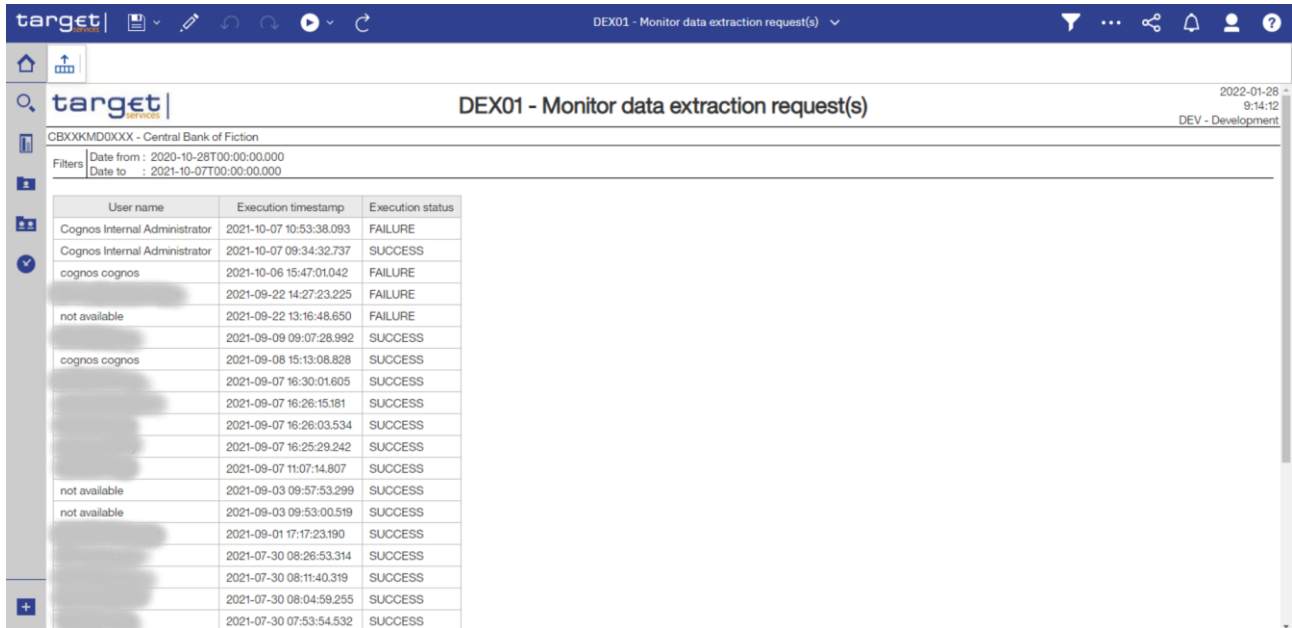


Figure 175 - DEX01 output

**Output description**

| DEX01 – Report description – output screen |   |
|--|---|
| Field label                                | Description   |
| User name                                  | Name of the user  |
| Execution timestamp                        | The timestamp of the execution of the DEX02 report  |
| Execution status                           | Indication whether the report execution and generation was successful or not.<br>Possible values are:<br><ul style="list-style-type: none"> <li>  Failure</li> <li>  Success</li> </ul> |

Table 23 - DEX01 - Output description

5.5.2 DEX02 - Data extraction request

**Context of usage**

This report is used to submit requests for the extraction of CLM and RTGS data for a given date (range). CBs can retrieve (transaction level and party) data within their own data scope. The data extraction period is limited to a maximum of five business days. The data is only provided as one single file in CSV format via A2A, it does not provide a GUI screen for the report result.

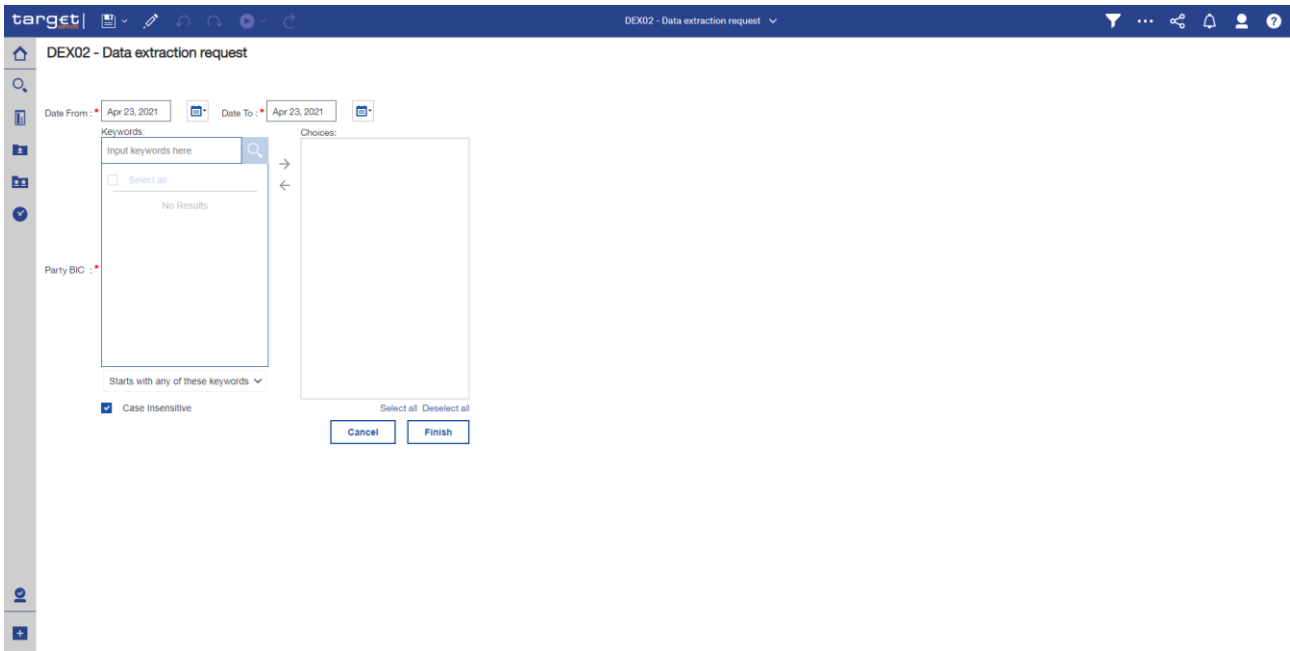
This report can be used by CB users only.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [DEX – Data Extraction Reports] >> [DEX02]

**Screenshot – prompt**



**Figure 176 - DEX02 prompt**



**Prompt description**

| DEX02 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Date from                                  | You can select the date by clicking on the calendar.<br><br>This field is mandatory.   |
| Date to                                    | You can select the end date of the period, for which the report should contain the data by clicking on the calendar.<br><br>For valid report results, the current day cannot be selected.<br><br>This field is mandatory.  |
| Party BIC                                  | You can use this search and select prompt to be able to search for the party BIC or short name you wish to extract data for. One or several parties can be selected. In case the user leaves this field free, all party BICs belonging to the user’s data scope are selected.<br><br>This field is optional. |

**Table 24 - DEX02 - Prompt description**

**Screenshot - output screen**

No output screen available – report result is only provided via CSV file.

**Output description**

In following the functional structure of the output file is provided. The CSV-output-file contains one row per instance of the functional data object returned. The beginning of each row in the file begins with an indicator of the functional data object. All functional data objects are contained in the listed order:

| DEX02 – Report description – CSV file structure |  |
|---|--|
| Filename attributes:                            |  |
| Attribute                                       | Description  |
| “Data extraction request”                       | Fixed text   |
| Country code                                    | 2 character ISO country code of the requesting CB    |
| Currency code                                   | 3 character ISO currency code of the CB              |
| Date from                                       | Date from as requested in prompt screen (YYYY-MM-DD) |

|  |   |
|--|---|
| Date to  | Date to as requested in prompt screen (YYYY-MM-DD)  |
| <b>Business Day Event:</b>   |   |
| Repeatable block for each business day within the selected date range according to the requested data range:   |   |
| <b>Field content</b>   | <b>Description</b>  |
| "BDE"  | Indicator of each Business day event – row in the output  |
| Business date  | Business date of the selected data  |
| Event code   | The event code as delivered by the CLM/RTGS service. The list of events is not static because the set of events may change.   |
| Planned time   | The planned time corresponds to the standard schedule applied by default.<br>Only for time-based events.<br>Non-time based events show a default value:<br>"9999-01-01 00:00:00"  |
| Revised time   | The revised time is the foreseen time for the current business day, which usually coincides with the planned time except when a delay has occurred.<br>Only for time-based events. Non-time based events show a default value:<br>"9999-01-01 00:00:00" |
| <b>Party:</b>  |   |
| Repeatable block for each selected party within the data scope of the current user. The most recent valid party data within the date range (at the last day of the selected date range) are delivered: |   |
| <b>Field content</b>   | <b>Description</b>  |
| "PAR"  | Indicator of each "Party"-row in the output   |
| Party BIC  | BIC of the party whose details are listed in the following fields   |
| Party type   | Party type of the party   |
| Banking Group name   | The name of the banking group this party belongs to (empty if none)   |
| Leading CLM Account Holder BIC   | The BIC of the leading party<br>Display only if the leading party is within the data scope of the current user  |
| LEI  | Legal entity identifier   |
| Party short name   | Short name of the party   |
| Party long name  | Long name of the party  |
| Party opening date   | Opening date of the party   |

|                  |                              |
|------------------|------------------------------|
| Party close date | Closing date of the party    |
| Deletion status  | Deletion status of the party |

**Cash accounts of the party in previous party block:**

Each cash account data followed by the cash transfers, credit lines, reservations and limits on that account are reported on per business day

Repeatable block for each cash account (in CLM and RTGS) of the party:

| Field content                      | Description  |
|------------------------------------|--|
| "ACC"                              | Indicator of each cash account – row in the output   |
| Business date                      | Business day of the selected data  |
| Account BIC                        | Account BIC  |
| Account number                     | Account number   |
| Account type                       | Account type   |
| Currency Code                      | ISO currency code of the account   |
| Liquidity Transfer Group name      | The liquidity transfer group of this cash account (empty if none)  |
| Account Monitoring Group name      | The account monitoring group of this cash account (empty if none)  |
| Settlement Bank Account Group name | The settlement bank account group of this cash account (empty if none)   |
| Credit based only flag             | Indicates whether the account is credit based only   |
| Standing Facilities Interest Flag  | Indicates if the CB uses this CLM CB account for Standing facilities interest  |
| Minimum Reserve Interest Flag      | Indicates if the CB uses this CLM CB account for Minimum Reserve interest  |
| Service party type                 | Identifies the settlement service a party belongs to   |
| Balance of account – SoD           | Balance of this DCA at the start of the above mentioned business day   |
| Credit line amount at SoD          | Credit line of this DCA at the start of the above mentioned business day. Only for accounts in CLM, empty for accounts in RTGS or if none. |

**Cash transfers of the cash account:**

Repeatable block per cash transfer during each business day for the current cash account:

| Field content   | Description                           |
|-----------------|---------------------------------------|
| "TRA"           | Indicator of the cash transfer row    |
| Business date   | The business day of the cash transfer |
| Entry timestamp | Timestamp of entry in CLM/RTGS        |

|                               |   |
|-------------------------------|---|
| UETR                          | Universal-End-to-End-Transaction Reference  |
| End-to-End Reference          | End-to-End-Transaction Reference  |
| Instruction Identification    | Instruction Identification (InstrId)  |
| Transaction Identification    | Transaction Identification (TxId )  |
| Settlement Reference          | Settlement Reference  |
| Transaction Reference Number  | Technical Identifier of the transfer  |
| Message type                  | Exhaustive list of possible values: <ul style="list-style-type: none"> <li>  camt.050</li> <li>  pacs.004</li> <li>  pacs.008</li> <li>  pacs.009</li> <li>  pacs.010</li> <li>  pain.998 (ASTI)</li> </ul> |
| Settlement status description | Output contains cash transfers in final status: <ul style="list-style-type: none"> <li>  Settled</li> <li>  Partially Settled</li> <li>  Rejected</li> <li>  Cancelled (Revoked)</li> </ul>                 |
| Cash transfer type            | Cash transfer type  |
| Priority                      | Priority of the cash transfer   |
| Transaction classifier        | Classification of the cash transfer according to statistical classification framework   |
| Global Filter                 | More than one global filter can be provided   |
| Local Filter for CLM          | More than one local filter for CLM can be provided  |
| Local Filter for RTGS         | More than one local filter for RTGS can be provided   |
| From Service                  | The service from which the cash transfer is initiated   |
| To Service                    | Counterparty service  |
| On behalf                     | On behalf flag  |
| Business Case Code            | Code indicating the context of a business case  |
| Settlement timestamp          | Timestamp of effective settlement   |

|                                  |  |
|----------------------------------|--|
| Country code of the counterparty | ISO country code of the counterparty   |
| Debited account BIC              | Debited account BIC  |
| Debited account number           | Debited account number<br>The account number is not displayed if it does not belong to data scope of the user. |
| Type of debited Account          | Type of the debited account  |
| Credited account BIC             | Credited account BIC   |
| Credited account number          | Credited account<br>The account number is not displayed if it does not belong to data scope of the user.       |
| Type of credited account         | Type of credited account   |
| Originator BIC                   | BIC of the originator of the cash transfer   |
| Beneficiary BIC                  | BIC of the beneficiary of the cash transfer  |
| Currency                         | ISO currency code  |
| Settlement value                 | Debit or credit amount   |
| Reversed Payment Indicator       |  |
| Error code (if provided)         | Error code (if provided)   |

**Credit line changes of the cash account:**

Repeatable block for each business day within the selected date range for the current cash account:

| Field content      | Description                                |
|--------------------|--|
| "CLC"              | Indicator of a credit line row             |
| Business date      | Business date of the limit change          |
| Account number     | Account number of the current cash account |
| Credit line amount | Amount of the changed credit line          |
| Timestamp          | Timestamp of the credit line change        |

**Reservation:**

Repeatable block for each business day within the selected date range and for the current cash account:

| Field content | Description  |
|---------------|--|
| "RES"         | Indicator of a reservation line for the cash account |
| Business date | Business date of the reservation                     |

|   |  |
|---|--|
| Account number  | Account number of the current cash account |
| Type  | Type of the reservation                    |
| Reservation amount  | Amount of the reservation                  |
| Timestamp   | Timestamp of the reservation               |
| <b>Limit (Bilateral/Multilateral):</b>  |  |
| Repeatable block for each business day within the selected date range for the current cash account: |  |
| <b>Field content</b>  | <b>Description</b>                         |
| "LIM"   | Indicator of a limit row                   |
| Business date   | Business date of the limit                 |
| Account BIC   | BIC of the current cash account            |
| To Cash Account BIC   | BIC of the target account                  |
| Bilateral limit amount  | Defined bilateral limit amount             |
| Bilateral limit timestamp   | Defined bilateral limit timestamp          |
| Multilateral limit amount   | Defined multilateral limit amount          |
| Multilateral limit timestamp  | Defined multilateral limit timestamp       |

**Table 25 - DEX02 - Output description**

## 5.6 Intraday credit reports (IDC)

### 5.6.1 IDC01 - Daily Intraday credit (IDC) community indicators

#### **Context of usage**

This report provides a set of community indicators related to the use of credit lines and IDC. The indicators focus on those default main cash accounts (MCAs) belonging to the system entity of each CB and having at least once within the respective business day a credit line > 0.

For the respective business day the number of default MCAs with a credit line > 0 and the number of those with a negative intraday balance (IDC used) is reported. In addition, the report provides calculations (lowest community value, highest community value and time weighted average value) for the aggregated credit line amounts, IDC use and queued cash transfer orders.

This report can be used by CB users only.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [IDC – Intraday Credit Reports] >> [IDC01]

**Screenshot – prompt**

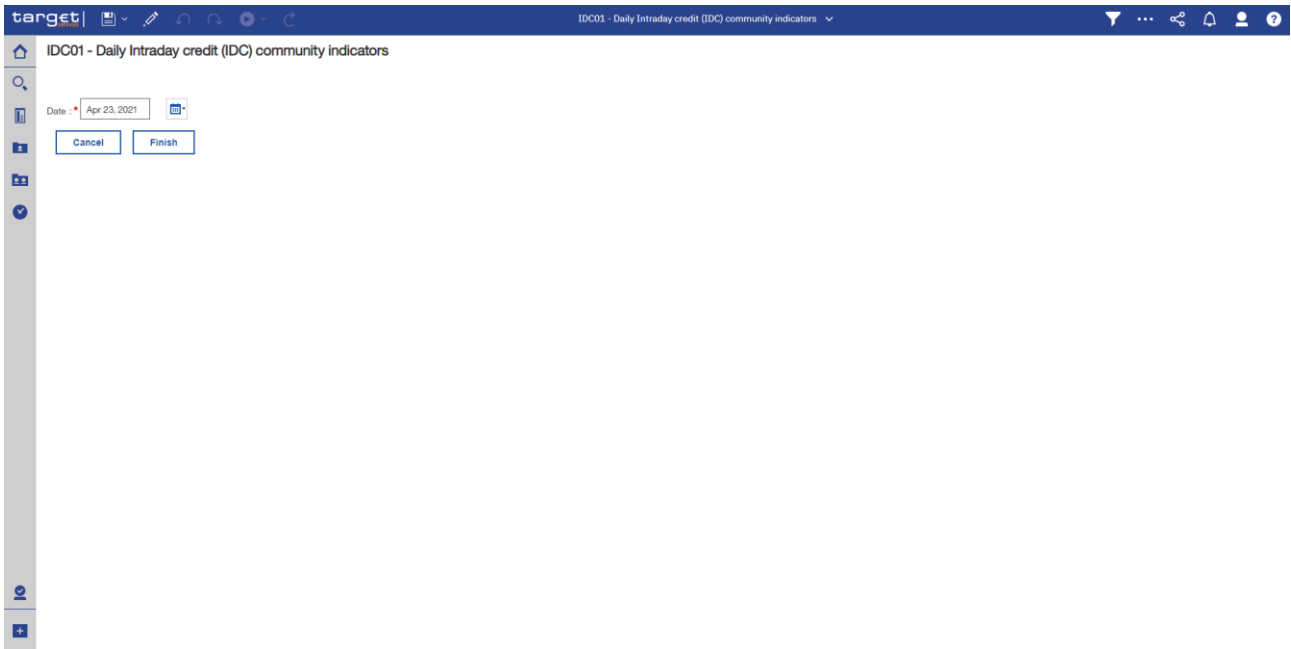


Figure 177 - IDC01 prompt

**Prompt description**

| IDC01 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Date                                       | <p>You can select the date by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory.</p> |

Table 26 - IDC01 - Prompt description

Screenshot - output screen

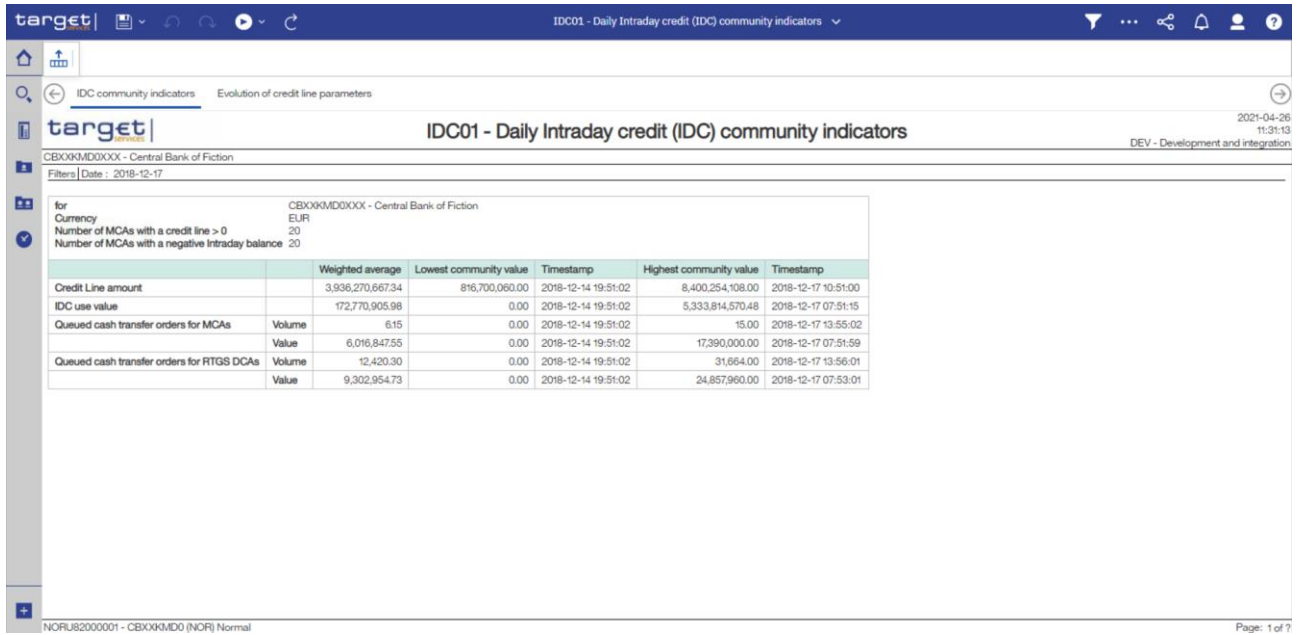


Figure 178 - IDC01 Output (1)

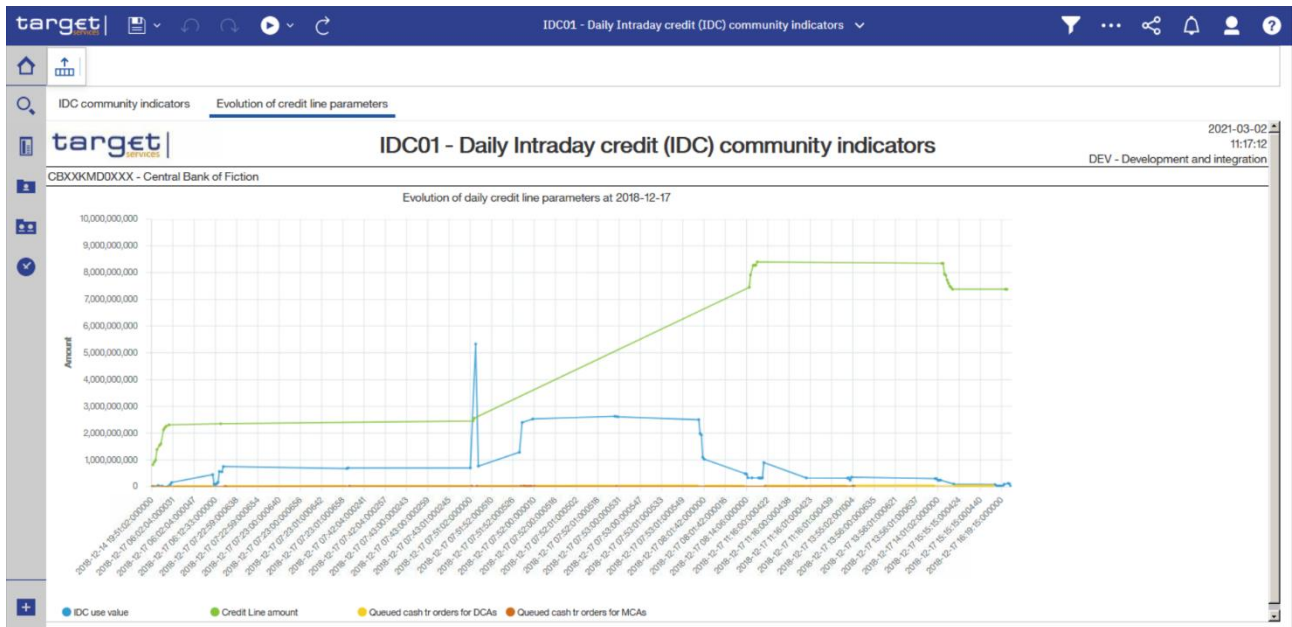


Figure 179 - IDC01 Output (2)



**Output description**

| <b>IDC01 – Report description – output screen</b> |   |
|---|---|
| <b>Field label</b>                                | <b>Description</b>  |
| Number of MCAs with a credit line > 0             | Number of all MCAs, which had a credit line > 0 at least once during the selected date.   |
| Number of MCAs with a negative intraday balance   | Number of those MCAs that had a negative account balance at least once during the selected date.  |
| Credit line amount                                | Amount of credit line   |
| Weighted average                                  | Weighted average of the credit line amount (Time based on a minute-level excluding the maintenance times during the business day)                       |
| Lowest community value                            | Lowest community value of the credit line amount  |
| Timestamp   | For lowest community level, this is the timestamps, when the community-wide values for the Credit line amount, the IDC use etc. reached their minimum.  |
| Highest community level                           | Highest community value of the credit line amount   |
| Timestamp   | For highest community level, this is the timestamps, when the community-wide values for the Credit line amount, the IDC use etc. reached their maximum. |
| IDC use value                                     | Total amount of intraday credit use   |
| Weighted average                                  | Weighted average of the IDC use value (Time based on a minute-level excluding the maintenance times during the business day).                           |
| Lowest community value                            | Lowest community value of the IDC use   |
| Timestamp   | For lowest community level  |
| Highest community level                           | Highest community level of the IDC used   |
| Timestamp   | For highest community level   |
| Queued cash transfer orders for MCAs              | Queued cash transfer orders for the default MCAs  |
| Volume / Value                                    |   |
| Weighted average volume / value                   | Weighted average volume/value of queued cash transfer orders for the default MCAs in CLM  |
| Lowest community volume / value                   | Lowest community volume/value of queued cash transfer orders for the default MCAs in CLM  |
| Timestamp   | For lowest community level  |
| Highest community volume / value                  | Highest community volume/value of queued cash transfer orders for the default MCAs in CLM   |

|   |  |
|---|--|
| Timestamp                                 | For highest community level  |
| Queued cash transfer orders for RTGS DCAs | Queued cash transfer orders for the RTGS DCAs that are linked to a default MCA which had a credit line > 0 at least once a day   |
| Volume / Value                            |  |
| Weighted average volume / value           | Weighted average volume/value of queued cash transfer orders for the RTGS DCAs that are linked to a default MCA which had a credit line > 0 at least once a day.       |
| Lowest community volume / value           | Lowest community volume/value of queued cash transfer orders for the RTGS DCAs that are linked to a default MCA which had a credit line > 0 at least once a day.       |
| Timestamp                                 | For lowest community level   |
| Highest community volume / value          | Highest community volume/value of queued cash transfer orders for the RTGS DCAs that are linked to a default MCA which had a credit line > 0 at least once a day.      |
| Timestamp                                 | For highest community level  |
| Graph 1                                   | Evolution of daily credit line indicators<br><br>Cartesian coordinate system, y-axis representing the amount, x-axis representing the time (hours of the business day) |

**Table 27 - IDC01 - Output description**

## 5.6.2 IDC02 – Credit line/IDC daily reporting

### **Context of usage**

The report IDC02 provides information related to the amount of credit line, the use of IDC and queued cash transfer orders on a given business day for a selected holder of a default MCA.

CBs can retrieve information on default MCAs of those parties belonging to their system entity.

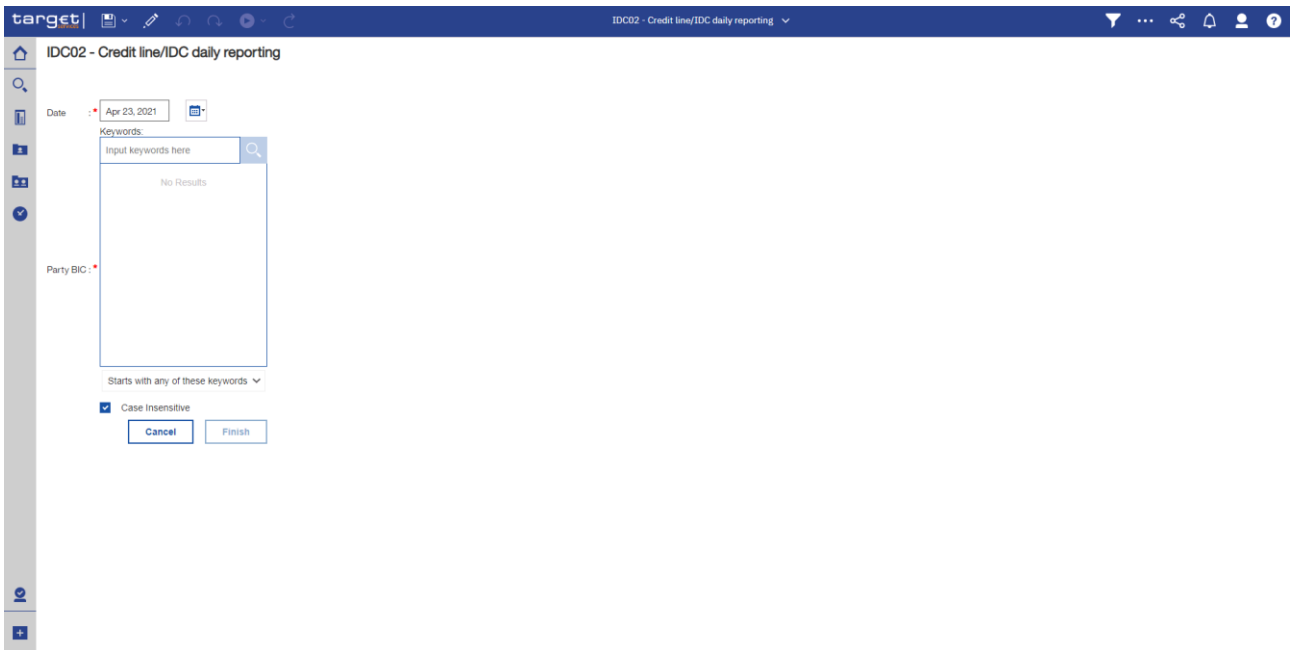
This report can be used by CB users only.

### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [IDC – Intraday Credit Reports] >> [IDC02]

**Screenshot – prompt**



**Figure 180 - IDC02 prompt**

**Prompt description**

| IDC02 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Date                                       | <p>You can select the date by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory.</p>    |
| Party BIC                                  | <p>You can use this drop-down field to select the Party BIC. This field will show all related BIC's, which belong to the party.</p> <p>This field is mandatory.</p> |

**Table 28 - IDC02 - Prompt description**

Screenshot - output screen

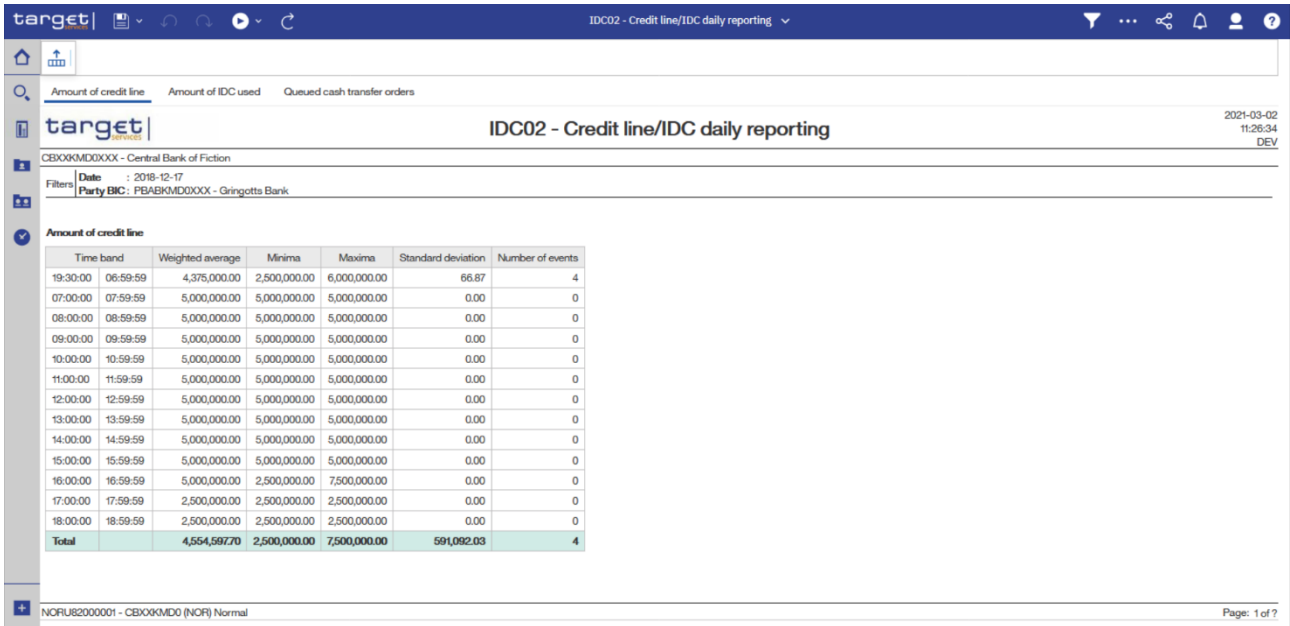


Figure 181 - IDC02 output (1)

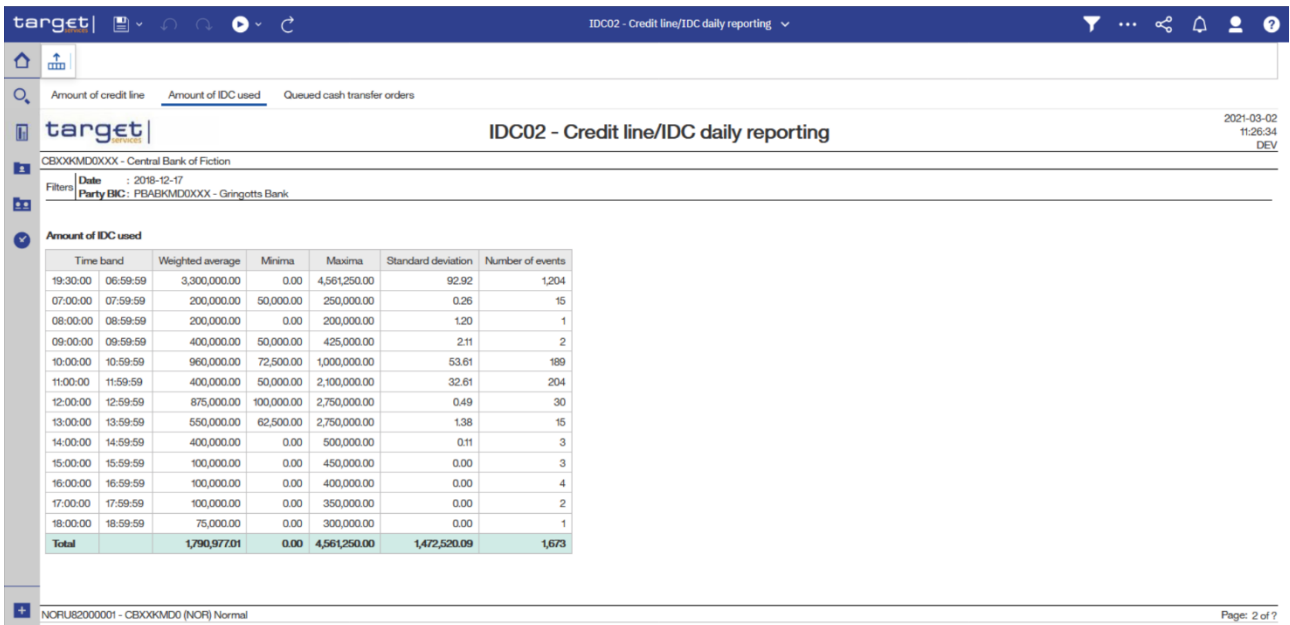


Figure 182 - IDC02 output (2)

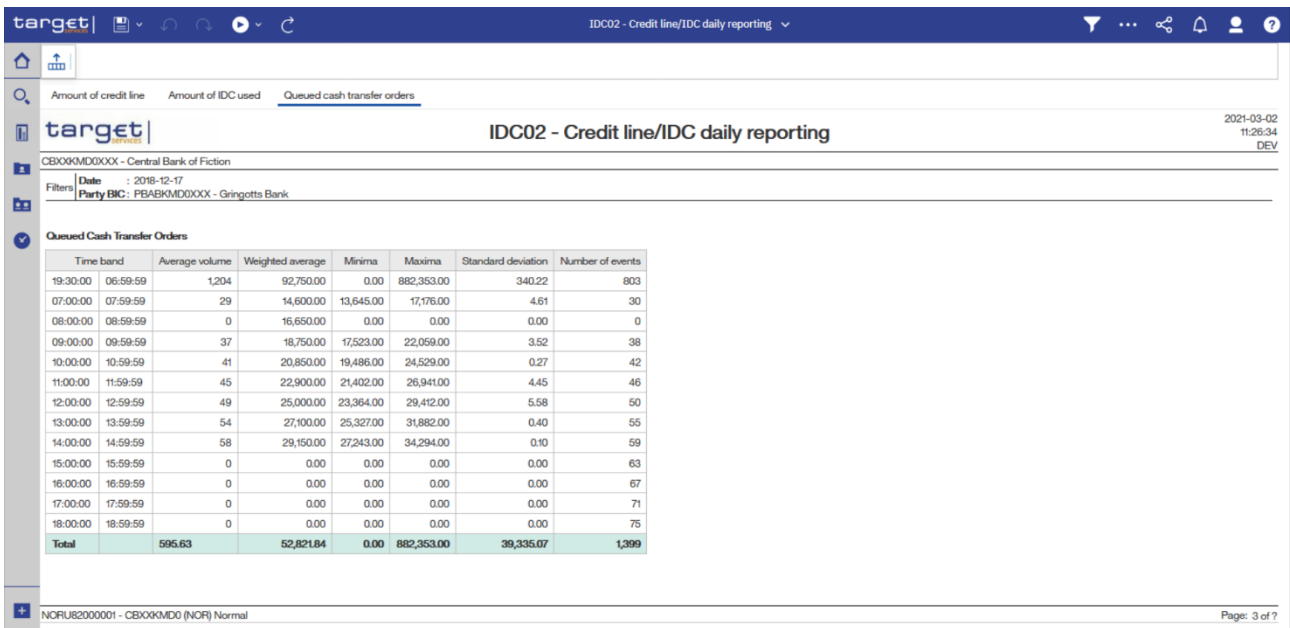


Figure 183 - IDC02 output (3)

**Output description**

| IDC02 – Report description – output screen  |   |
|---|---|
| Field label   | Description   |
| Following details are available in separate tables for:<br>Amount of credit line/ Amount of IDC used/ Queued Cash Transfer Orders |   |
| Time band   | Time band in one hour interval.   |
| Average volume  | For “Queued cash transfer orders” table only: Average number of queued cash transfer orders in the timeframe 19:00:00 – 18:00:00  |
| Weighted average  | Weighted average of <ul style="list-style-type: none"> <li>  the credit line amount</li> <li>  the amount of IDC used</li> <li>  the sum of values of queued cash transfer orders</li> <li>  for the time band</li> </ul> |
| Minima  | Minimum of <ul style="list-style-type: none"> <li>  the credit line amount</li> <li>  the amount of IDC used</li> <li>  the sum of values of queued cash transfer orders</li> <li>  for the time band</li> </ul>          |

|                    |   |
|--------------------|---|
| Maxima             | <p>Maximum of</p> <ul style="list-style-type: none"> <li>  the credit line amount</li> <li>  the amount of IDC used</li> <li>  the sum of values of queued cash transfer orders</li> <li>  for the time band</li> </ul>                       |
| Standard deviation | <p>Standard deviation of</p> <ul style="list-style-type: none"> <li>  the credit line amount values</li> <li>  the amounts of IDC used</li> <li>  the sum of values of queued cash transfer orders</li> <li>  during the time band</li> </ul> |
| Number of events   | <p>The number of</p> <ul style="list-style-type: none"> <li>  changes to the credit line</li> <li>  changes to the account balance influencing the IDC use</li> <li>  Queued cash transfers</li> <li>  during the time band</li> </ul>        |

**Table 29 - IDC02 - Output description**

### 5.6.3 IDC03 – Credit line/IDC averages and maxima (account level)

#### **Context of usage**

This report provides information related to the credit line and IDC development during a given date range for a selected holder of a default MCA. For each business day within the given date range the weighted average and maximum amount of credit line amount and IDC use are reported.

CBs can retrieve information on default MCAs of those parties belonging to their system entity.

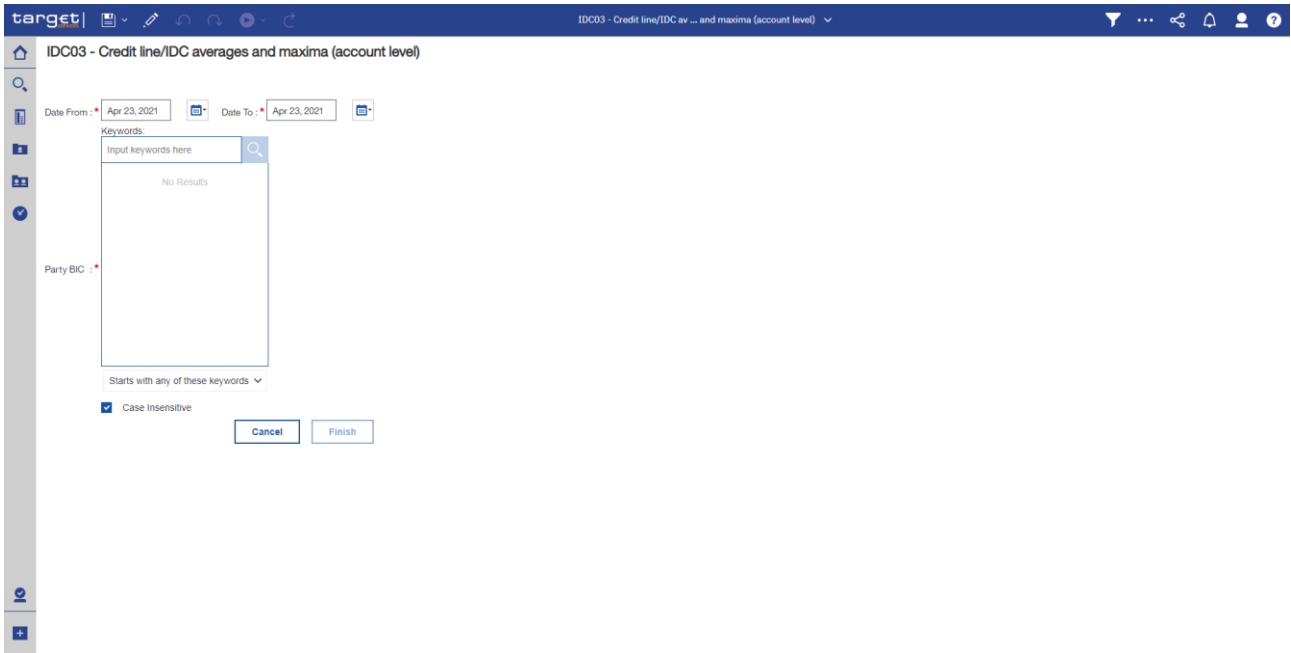
This report can be used by CB, PB and AS users.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [IDC – Intraday Credit Reports] >> [IDC03]

**Screenshot – prompt**



**Figure 184 - IDC03 prompt**

**Prompt description**

| IDC03 – Report description –prompt screen |   |
|---|---|
| Field label                               | Description   |
| Date From                                 | You can select the date by clicking on the calendar.<br><br>This field is mandatory.  |
| Date To                                   | You can select the end date of the period, for which the report should contain the data by clicking on the calendar.<br><br>For valid report results, the current day cannot be selected.<br><br>This field is mandatory. |
| Party BIC                                 | You can use this drop-down field to select the party BIC. This field will show all related BIC´s, which belong to the party.<br><br>This field is mandatory.  |

**Table 30 - IDC03 - Prompt description**

Screenshot - output screen

target | IDC03 - Credit line/IDC av ... and maxima (account level)

target | IDC03 - Credit line/IDC averages and maxima (account level) | 2021-04-27 16:07:25  
DEV - Development and integration

CBXXKMD0XXX - Central Bank of Fiction

Filters  
Date From : 2018-12-17  
Date To : 2018-12-19  
For : PBABKMD0XXX - Gringotts Bank

Currency : EUR  
Default MCA: MACASHPBABKMD0XXEUR0A01 - EUR

| Date                | Credit line amount |              | Intraday credit use |              |
|---------------------|--------------------|--------------|---------------------|--------------|
|                     | Weighted average   | Maxima       | Weighted average    | Maxima       |
| 2018-12-17          | 4,554,597.70       | 7,500,000.00 | 1,790,977.01        | 6,250,000.00 |
| 2018-12-18          | 910,919.54         | 1,500,000.00 | 358,195.40          | 1,250,000.00 |
| 2018-12-19          | 455,459.77         | 750,000.00   | 179,097.70          | 625,000.00   |
| Maximum over period | 4,554,597.70       | 7,500,000.00 | 1,790,977.01        | 6,250,000.00 |

NORU82000001 - CBXXKMD0 (NOR) Normal | Page: 1 of ?

Figure 185 - IDC03 output (1)



**Output Description**

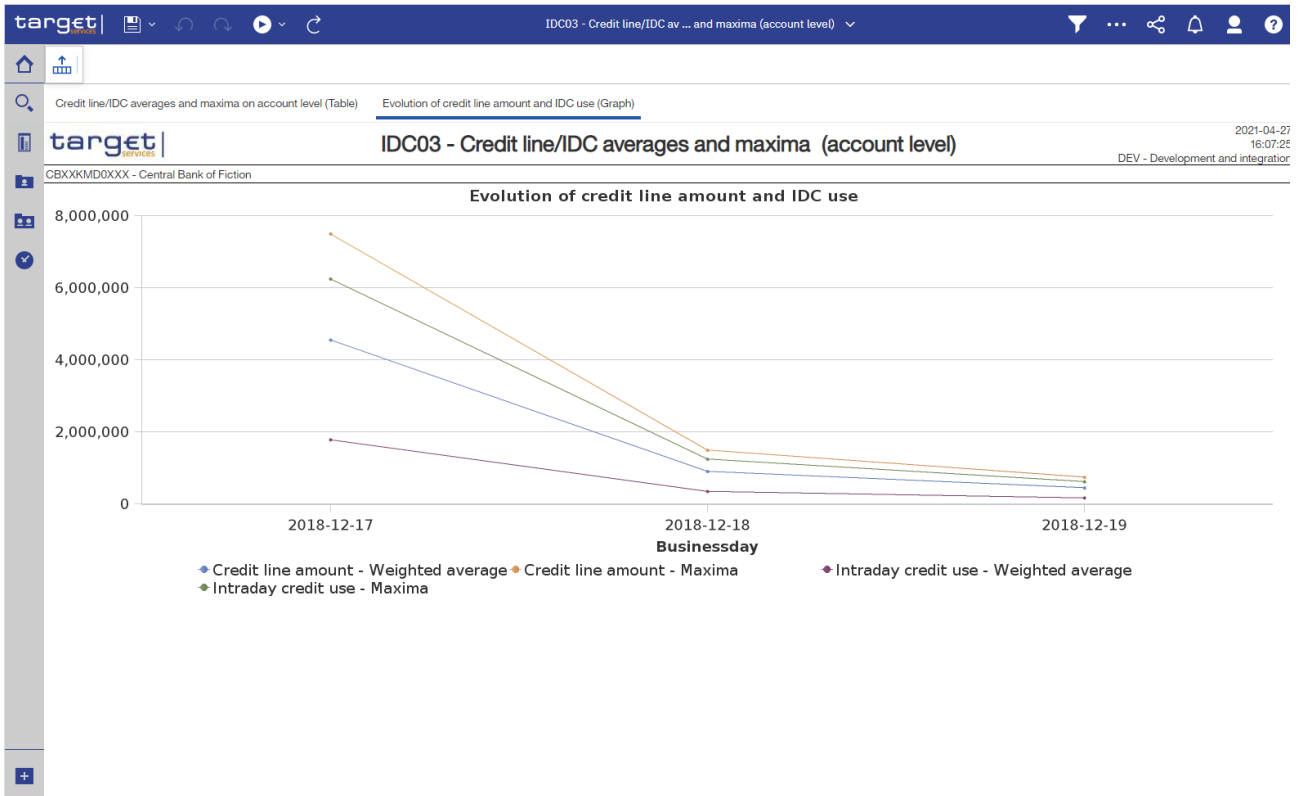


Figure 186 - IDC03 output (2)

**Output description**

| IDC03 – Report description – output screen |  |
|--|--|
| Field label                                | Description  |
| Date                                       | One line per business date within the chosen date range, sorted by date. |
| Credit line amount:<br>Weighted average    | Weighted average of the credit line amount of that day.                  |
| Credit line amount:<br>Maxima              | Maximum of the credit line amount at that day.                           |
| Intraday credit use:<br>Weighted average   | Weighted average of the intraday credit line use of that day.            |

|                                |   |
|--------------------------------|---|
| Intraday credit use:<br>Maxima | Maximum of the intraday credit line use at that day.  |
| Maximum over period            | Highest amount of the respective column.  |
| Graph 1                        | <p>Evolution of credit line amount and IDC use</p> <p>Cartesian coordinate system, y-axis representing the amount, x-axis representing the date.</p> <p>Show four lines in different colours representing the values in the table on previous page.</p> |

**Table 31 - IDC03 - Output description**

### 5.6.4 IDC04 – Credit line/IDC averages and maxima (community level)

#### **Context of usage**

This report provides aggregated information related to the credit line and IDC development during a given date range at community level. For each business day within the given date range the weighted average and maximum amount of credit line amount and IDC use (aggregated Figures at community level) are reported.

CBs can retrieve aggregated information on parties belonging to their system entity.

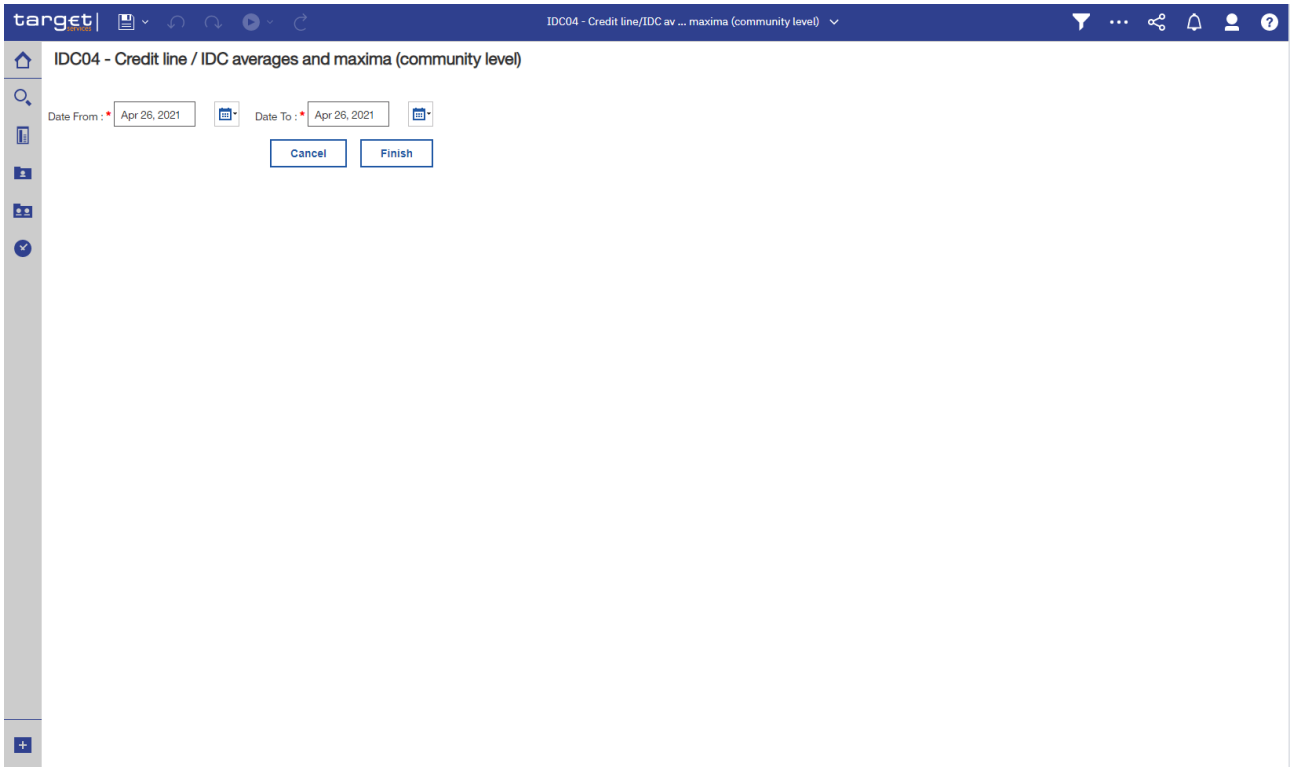
This report can be used by CB users only.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [IDC – Intraday Credit Reports] >> [IDC04]

**Screenshot – prompt**



**Figure 187 - IDC04 prompt**

**Prompt description**

| IDC04 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Date From                                  | You can select the date by clicking on the calendar.<br>This field is mandatory.  |
| Date To                                    | You can select the end date of the period, for which the report should contain the data by clicking on the calendar.<br>For valid report results, the current day cannot be selected.<br>This field is mandatory. |

**Table 32 - IDC04 - Prompt description**

Screenshot - output screen

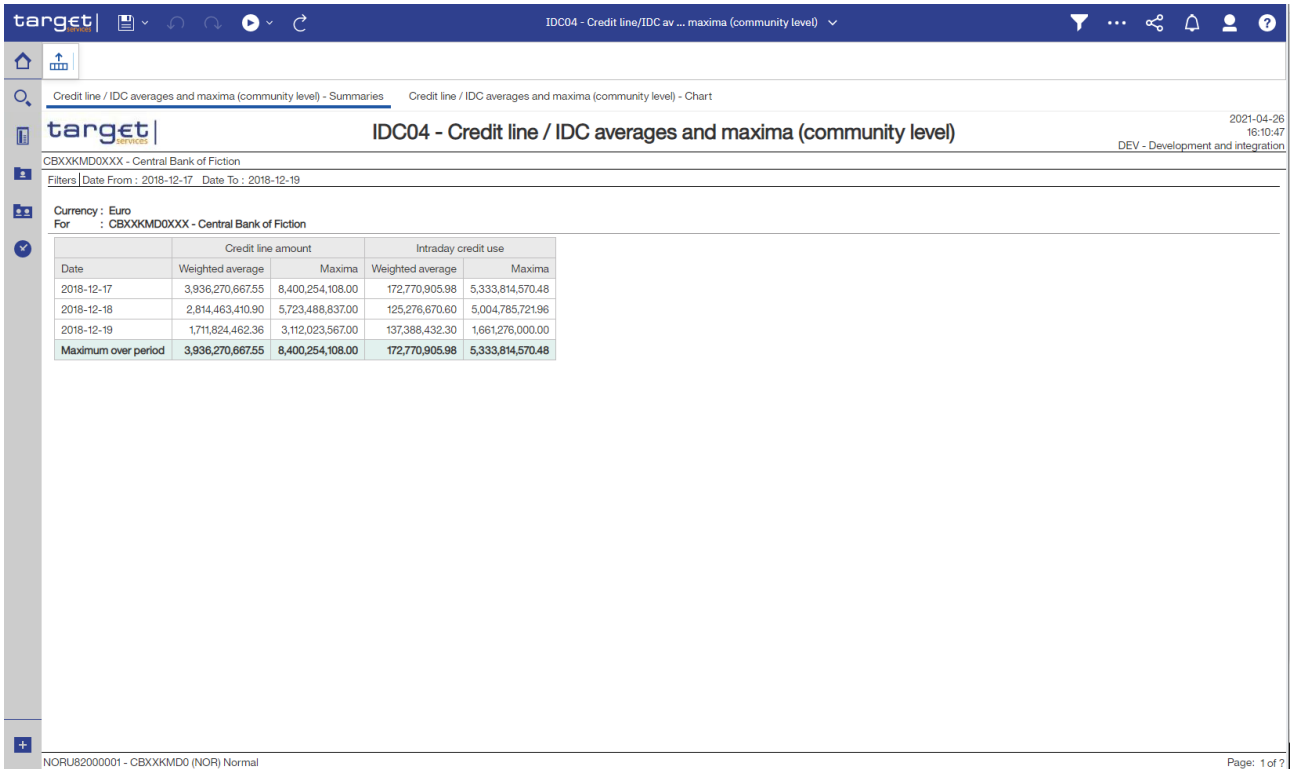


Figure 188 - IDC04 output (1)

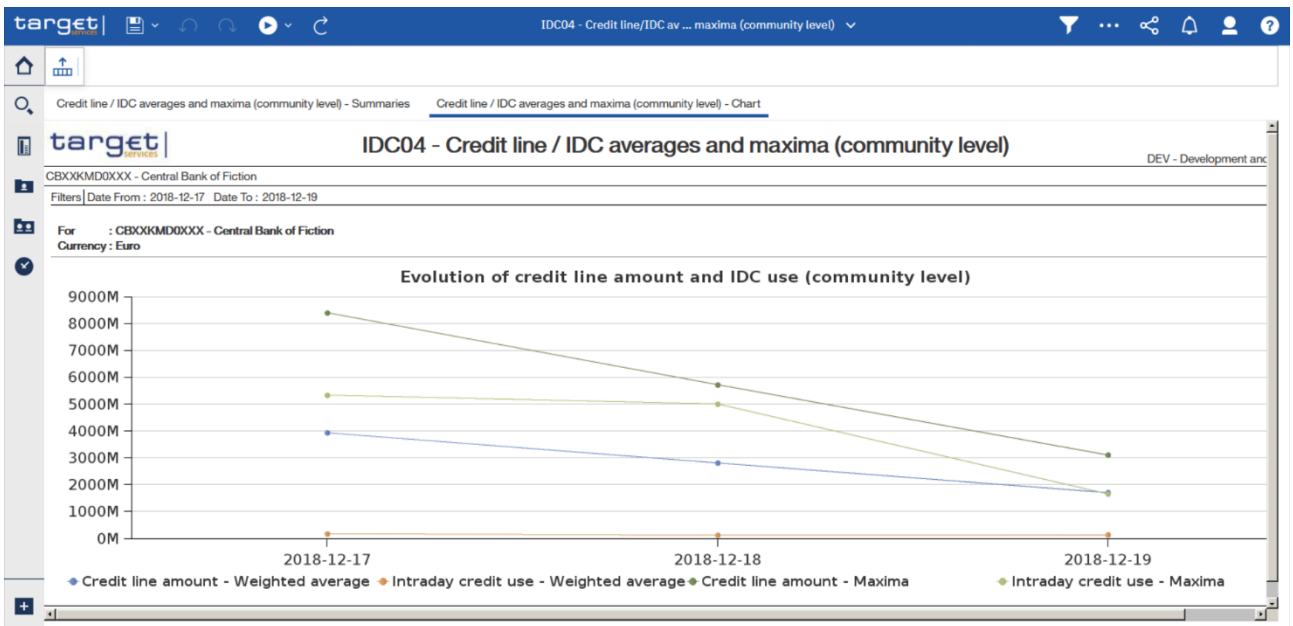


Figure 189 - IDC04 output (2)

**Output description**

| IDC04 – Report description – output screen |   |
|--|---|
| Field label                                | Description   |
| Date                                       | One line per business date within the chosen date range, sorted by date.  |
| Credit line amount:<br>Weighted average    | Weighted average of the credit line amount of that day<br>and<br>Weighted average of the intraday credit line use of that day.  |
| Credit line amount:<br>Maxima              | Maximum of the credit line amount at that day<br>and<br>Maximum of the intraday credit line use at that day.  |
| Intraday credit use:<br>Weighted average   | Weighted average of the intraday credit line use of that day.   |
| Intraday credit use:<br>Maxima             | Maximum of the intraday credit line use at that day.  |
| Maximum over period                        | Highest amount of the respective column.  |
| Graph 1                                    | <p>“Evolution of credit line amount and IDC use (community level)”</p> <p>Cartesian coordinate system, y-axis representing the amount, x-axis representing the date.</p> <p>Show four lines in different colours representing the values in the table on previous page.</p> |

**Table 33 - IDC04 - Output description**

**5.6.5 IDC05 – Maximum of credit line used**

**Context of usage**

This report provides credit line and balance information for the SoD and EoD of a selected parties’ default MCA on a given business day. Moreover, the peak IDC use for the selected default MCA on that business day is reported together with the corresponding amount of credit line at that point in time.

CBs can retrieve information on default MCAs of those parties belonging to their system entity.

This report can be used by CB, PB and users.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [IDC – Intraday Credit Reports] >> [IDC05]

Screenshot – prompt

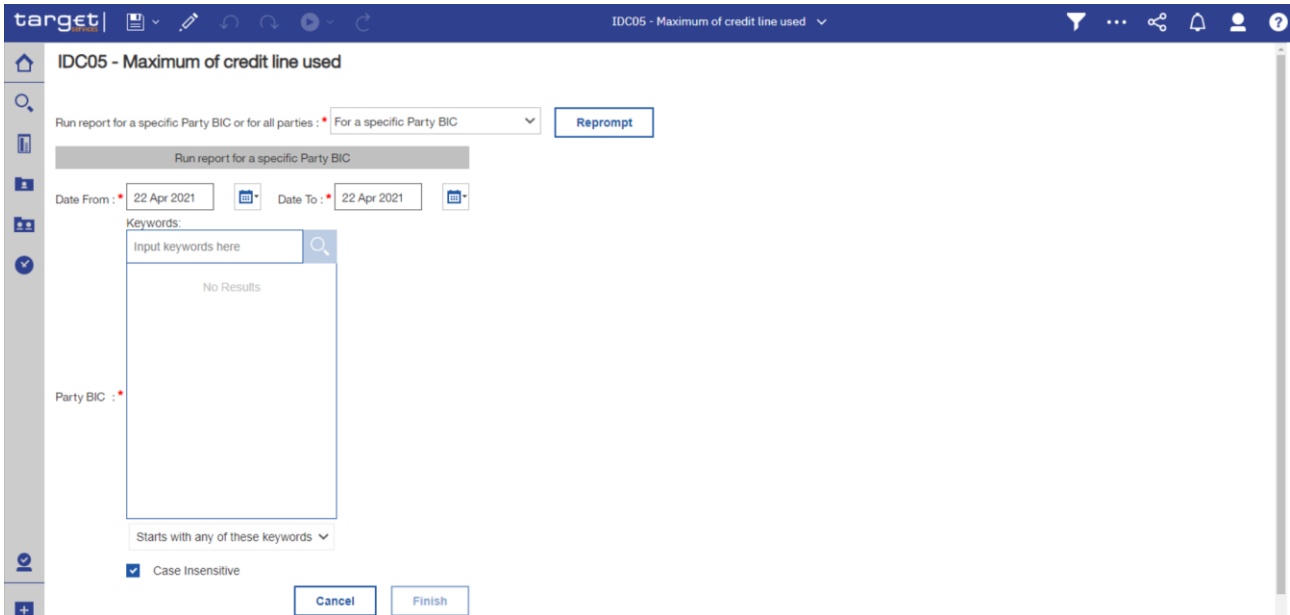


Figure 190 - IDC05 prompt (1) – For a specific party BIC

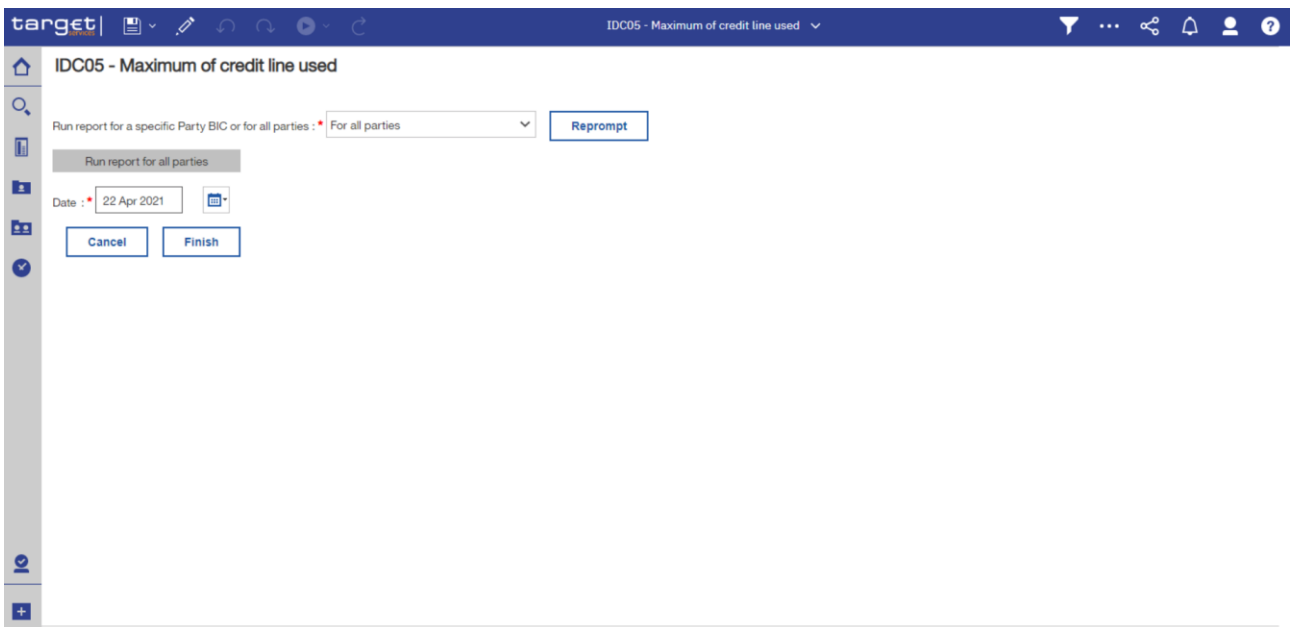


Figure 191 - IDC05 prompt (2) – For all parties

**Prompt description**

| IDC05 – Report description –prompt screen |  |
|---|--|
| Field label                               | Description  |
| Date From                                 | You can select the date by clicking on the calendar.<br><br>This field is mandatory.   |
| Date To                                   | You can select the end date of the period, for which the report should contain the data by clicking on the calendar.<br><br>For valid report results, the current day cannot be selected.<br><br>This field is mandatory.  |
| Party BIC                                 | You can use this drop-down field to select the party BIC. This field will show all related BICs, which belong to the party.<br><br>In case the party BIC is not selected, the report only shows results for one date (the date selected under “Date from”).<br><br>This field is optional. |

Table 34 - IDC05 - Prompt description

**Screenshot - output screen**

target | IDC05 - Maximum of credit line used

target | IDC05 - Maximum of credit line used

2021-03-02 13:18:47  
DEV - Development and integration

CB000MD000 - Central Bank of Fiction

Filters: Date From : 2017-12-17 Date To :2019-12-19  
Party BIC : PBABKMDXXX - Gringotts Bank

Default MCA : MACASHPBABKMDXXXEUR0A01

Currency : EUR

| Date       | Credit line amount |              | Account balance |            | Time     | Peak IDC use |                    |
|------------|--------------------|--------------|-----------------|------------|----------|--------------|--------------------|
|            | at SoD             | at EoD       | at SoD          | at EoD     |          | Amount       | Credit line amount |
| 2018-12-17 | 5,000,000.00       | 6,000,000.00 | 250,000.00      | 100,000.00 | 02:37:47 | 4,561,250.00 | 6,000,000.00       |
| 2018-12-18 | 3,000,000.00       | 4,000,000.00 | 50,000.00       | 20,000.00  | 02:38:47 | 912,250.00   | 1,200,000.00       |
| 2018-12-19 | 1,000,000.00       | 2,000,000.00 | 25,000.00       | 10,000.00  | 02:39:47 | 456,125.00   | 600,000.00         |

NORUB2000001 - CB000MD0 (NOR) Normal Page: 1 of ?

Figure 192 - IDC05 output (1) - A party was selected

target | IDC05 - Maximum of credit line used

2021-03-02 13:21:05 DEV - Development and Integration

target | IDC05 - Maximum of credit line used

CBXXXXMDDXXX - Central Bank of Fiction  
Filters | Date From : 2018-12-17

Currency : EUR

| Party BIC  | Party name                       | Default MCA             | Credit line amount |                | Account balance |               | Time     | Peak IDC use   |                    |
|------------|----------------------------------|-------------------------|--------------------|----------------|-----------------|---------------|----------|----------------|--------------------|
|            |                                  |                         | at SoD             | at EoD         | at SoD          | at EoD        |          | Amount         | Credit line amount |
| ASAAKMDXXX | MetroCapital                     | MACASHASAAKMDXXXEUR0A01 | 50,000,004.00      | 60,000,005.00  | 2,500,000.00    | 1,000,000.00  | 02:37:47 | 45,612,504.00  | 60,000,005.00      |
| ASABKMDXXX | Austlandskassenverein LL         | MACADCASABKMDXXXEUR0A01 | 6,000,004.00       | 7,000,005.00   | 300,000.00      | 120,000.00    | 02:37:47 | 5,473,504.00   | 7,200,005.00       |
| ASACKMDXXX | Discount Card                    | MACADCASACKMDXXXEUR0A01 | 5,000,004.00       | 6,000,005.00   | 250,000.00      | 100,000.00    | 02:37:47 | 4,561,254.00   | 6,000,005.00       |
| PBAKMDXXX  | Banco de Isthmus                 | MACASHPBAKMDXXXEUR0A01  | 500,000,004.00     | 600,000,005.00 | 0.00            | 10,000,000.00 | 02:37:47 | 456,125,004.00 | 600,000,005.00     |
| PBABKMDXXX | Gringotts Bank                   | MACASHPBABKMDXXXEUR0A01 | 5,000,000.00       | 6,000,000.00   | 250,000.00      | 100,000.00    | 02:37:47 | 4,561,250.00   | 6,000,000.00       |
| PBCKMDXXX  | Iron Banks of Braavos            | MACASHPBCKMDXXXEUR0A01  | 0.00               | 0.00           | 0.00            | 0.00          | 11:58:40 | 336,000.00     | 0.00               |
| PBADMXXX   | Banque Mamon                     | MACASHPBADMXXXEUR0A01   | 0.00               | 0.00           | 0.00            | 0.00          | 11:58:40 | 336,000.00     | 0.00               |
| PBAKMDXXX  | Bankhaus Goldscheider            | MACASHPBAKMDXXXEUR0A01  | 8,500,004.00       | 9,500,005.00   | 425,000.00      | 170,000.00    | 02:37:47 | 7,754,129.00   | 10,200,005.00      |
| PBAKMDXXX  | Dagobert Duck Thrift             | MACASHPBAKMDXXXEUR0A01  | 18,000,004.00      | 19,000,005.00  | 900,000.00      | 360,000.00    | 02:37:47 | 16,420,504.00  | 21,600,005.00      |
| PBAGKMDXXX | Woodgrove Bank                   | MACASHPBAGKMDXXXEUR0A01 | 2,300,004.00       | 2,300,005.00   | 110,000.00      | 44,000.00     | 02:37:47 | 2,006,954.00   | 2,640,005.00       |
| PBAKMDXXX  | Goliath National Bank Ltd        | MACASHPBAKMDXXXEUR0A01  | 12,000,000.00      | 13,000,000.00  | 600,000.00      | 240,000.00    | 02:37:47 | 10,947,000.00  | 14,400,000.00      |
| PBBAKMDXXX | Telson's Mutual                  | MACASHPBBAKMDXXXEUR0A01 | 15,000,004.00      | 16,000,005.00  | 750,000.00      | 300,000.00    | 02:37:47 | 13,683,754.00  | 18,000,005.00      |
| PBBKMDXXX  | Banca de Bondi                   | MACASHPBBKMDXXXEUR0A01  | 46,000,004.00      | 45,000,005.00  | 2,300,000.00    | 920,000.00    | 02:37:47 | 41,963,504.00  | 55,200,005.00      |
| PBCKMDXXX  | Fidelity Savings & Trust         | MACASHPBCKMDXXXEUR0A01  | 54,000,004.00      | 64,000,005.00  | 2,700,000.00    | 1,080,000.00  | 02:37:47 | 49,261,504.00  | 64,800,005.00      |
| PBCKMDXXX  | DGI Deutsche Global Invest       | MACASHPBCKMDXXXEUR0A01  | 15,000,000.00      | 12,500,000.00  | 750,000.00      | 300,000.00    | 02:37:47 | 13,683,750.00  | 18,000,000.00      |
| PBBKMDXXX  | Banco di San Giorgio             | MACASHPBBKMDXXXEUR0A01  | 5,000,004.00       | 6,000,005.00   | 250,000.00      | 100,000.00    | 02:37:47 | 4,561,254.00   | 6,000,005.00       |
| PBBKMDXXX  | Welsler Venezuela Funding        | MACASHPBBKMDXXXEUR0A01  | 6,000,004.00       | 7,000,005.00   | 300,000.00      | 120,000.00    | 02:37:47 | 5,473,504.00   | 7,200,005.00       |
| PBBKMDXXX  | Compagnie des Indes Occidentales | MACASHPBBKMDXXXEUR0A01  | 7,000,004.00       | 8,000,005.00   | 350,000.00      | 140,000.00    | 02:37:47 | 6,385,754.00   | 8,400,005.00       |
| PBBKMDXXX  | Monte Pio                        | MACASHPBBKMDXXXEUR0A01  | 8,000,004.00       | 9,000,005.00   | 400,000.00      | 160,000.00    | 02:37:47 | 7,298,004.00   | 9,600,005.00       |
| PBPFKMDXXX | Par ó Six Overt Bank             | MACADCPBPFKMDXXXEUR0A01 | 54,000,004.00      | 64,000,005.00  | 2,700,000.00    | 1,080,000.00  | 02:37:47 | 49,261,504.00  | 64,800,005.00      |

NORUR2000001 - CBXXXXMDD (NOR) Normal Page: 1 of 7

Figure 193 - IDC05 output (2) - A party was not selected covering one day only

**Output description**

**IDC05 – Report description – output screen (a party was selected)**

| Field label | Description |
|-------------|-------------|
|-------------|-------------|

Following details are available for:

Credit line amount / Account balance

|        |   |
|--------|---|
| Date   | One line per business date within the chosen date range, sorted by date |
| At SoD | Credit line amount at SoD<br>and<br>Account balance of the MCA at SoD   |
| At EoD | Credit line amount at EoD<br>and<br>Account balance of the MCA at EoD   |

Following details are available for:

Peak IDC use

|        |   |
|--------|---|
| Date   | One line per business date within the chosen date range   |
| Time   | Time of the peak IDC use (HH:MM:SS); Marked with “—” in case the account balance remained positive throughout the day |
| Amount | IDC amount used at that time;   |



|  |  |
|--|--|
|  | Marked with “—” in case the account balance remained positive throughout the day                                       |
| Credit line amount   | Credit line amount at that time;<br>Marked with “—” in case the account balance remained positive throughout the day   |
| <b>IDC05 – Report description – output screen (a party was not selected covering one day only)</b> |  |
| <b>Field label</b>   | <b>Description</b>   |
| Party BIC  | BIC of the party for which the default MCA is regarded.  |
| Party name   | Party short name according to party BIC  |
| Default MCA number   | Account number of the default MCA of the party   |
| Following details are available for:   |  |
| Credit line amount /Account balance  |  |
| At SoD   | Credit line amount at SoD<br>and<br>Account balance of the MCA at SoD  |
| At EoD   | Credit line amount at EoD<br>and<br>Account balance of the MCA at EoD  |
| Following details are available for:   |  |
| Peak IDC use   |  |
| Time   | Time of the peak IDC use (HH:MM:SS); Marked with “—” in case the account balance remained positive throughout the day. |
| Amount   | IDC amount used at that time;<br>Marked with “—” in case the account balance remained positive throughout the day.     |
| Credit line amount   | Credit line amount at that time;<br>Marked with “—” in case the account balance remained positive throughout the day.  |

**Table 35 - IDC05 - Output description**

## 5.6.6 IDC06 – Credit line and IDC use at system level

### Context of usage

This report provides system-wide aggregated information on the overall amount of credit line and IDC use for a given date (range). For both objects the weighted average for each business day within the given date range is reported.

CBs can retrieve aggregated information including credit line and IDC data from all system entities in a respective currency.

This report can be used by CB users only.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [IDC – Intraday Credit Reports] >> [IDC06]

**Screenshot – prompt**

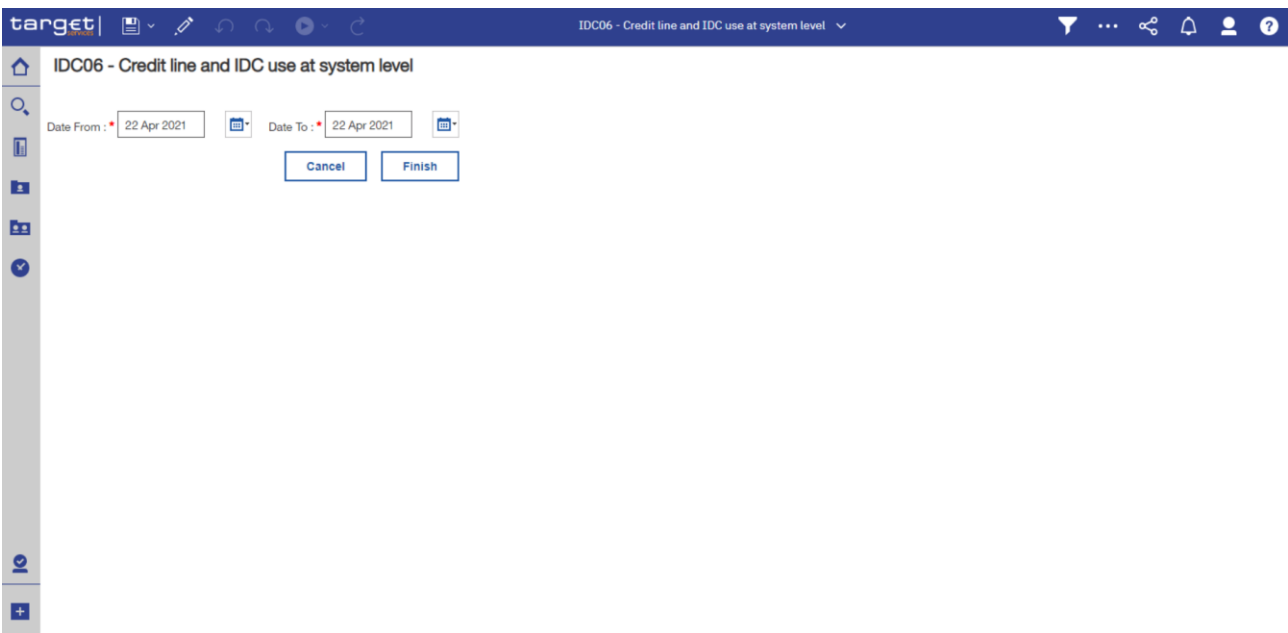


Figure 194 - IDC06 prompt

**Prompt description**

| IDC06 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Date From                                  | You can select the date by clicking on the calendar.<br>This field is mandatory.   |
| Date To                                    | You can select the end date of the period, for which the report should contain the data by clicking on the calendar.<br>For valid report results, the current day cannot be selected.<br>This field is mandatory |

Table 36 - IDC06 - Prompt description

Screenshot - output screen

The screenshot displays the Target Services web interface. The main header shows the report title "IDC06 - Credit line and IDC use at system level" and the date "2020-07-13 13:35:52". The user is identified as "DEV - Development and integration". The report is for "CBXXKMD0XXX - Central Bank of Fiction" with filters for "Date From : 2018-12-17" and "Date To: 2018-12-19".

| Date                 | Weighted average of credit line amount | Weighted average of intraday credit line use |
|----------------------|--|--|
| <b>Currency: DKK</b> |  |  |
| 2018-12-17           | 91,091.95                              | 35,819.54                                    |
| 2018-12-18           | 91,091.95                              | 35,819.54                                    |
| 2018-12-19           | 227,729.89                             | 89,548.85                                    |
| <b>Currency: EUR</b> |  |  |
| 2018-12-17           | 29,177,179.92                          | 11,473,096.26                                |
| 2018-12-18           | 6,138,539.40                           | 2,413,797.30                                 |
| 2018-12-19           | 4,102,422.48                           | 1,613,135.67                                 |

At the bottom left, there is a "New" button and a reference to "NORU82000001 - CBXXKMD0 (NOR) Normal". At the bottom right, it says "Page: 1 of ?".

Figure 195 - IDC06 output (1)

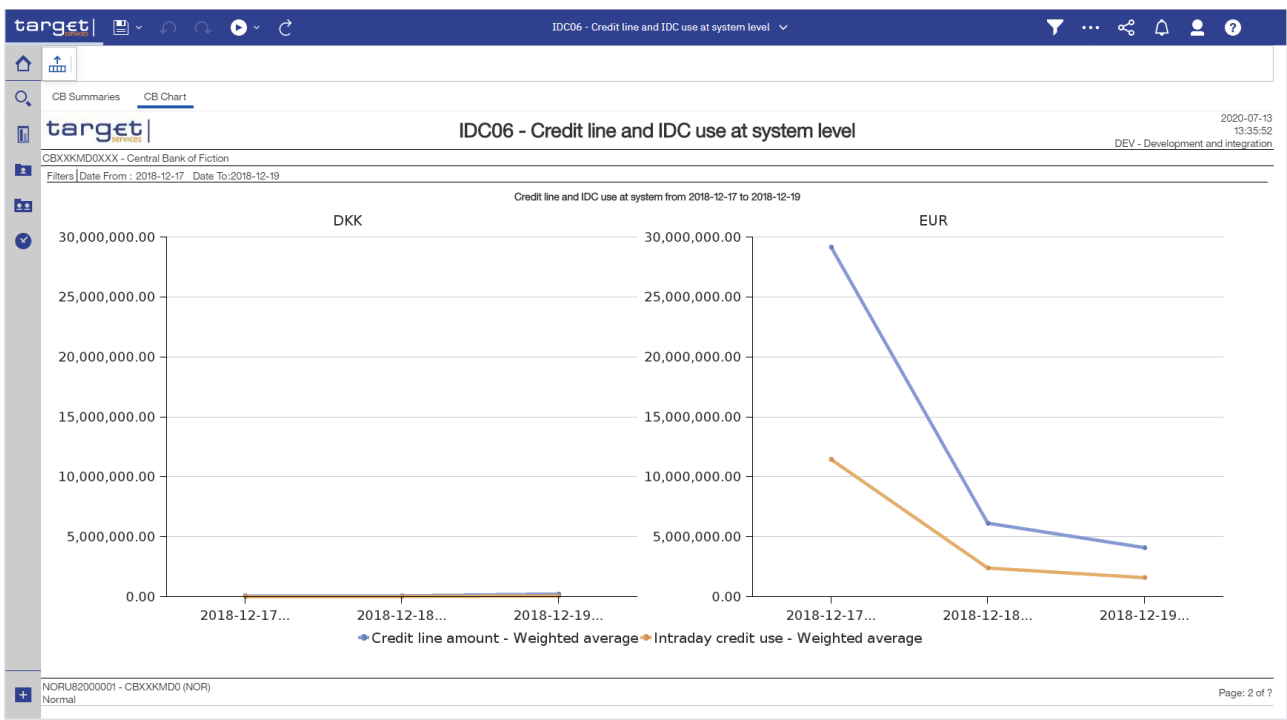


Figure 196 - IDC06 output (2)

**Output description**

| IDC06 – Report description – output screen   |  |
|--|--|
| Field label                                  | Description  |
| Currency                                     | ISO currency code  |
| Date   | Business day as chosen in prompt screen.<br>One line per business day within the date range.   |
| Weighted average of credit line amount       | The weighted average of credit line amounts for all parties within the system entity at the business day.  |
| Weighted average of intraday credit line use | The weighted average of the intraday credit line use for parties within the system entity at the business day.   |
| Graph 1                                      | Credit line and IDC use at system level<br><br>Cartesian coordinate system, y-axis representing the amount (value), x-axis representing the date (each business day within the selected date range)<br><br>Shows two lines in different colours representing the evolution of the values in the table on previous page per business day within the selected date range (between from and to date). |

Table 37 - IDC06 - Output description

## 5.7 Invoice Data (INV)

### 5.7.1 INV01 - Reporting revenues

#### Context of usage

This report provides information on the volumes and values of fees/revenues for each month within a given quarter. Within the selected service, absolute volumes and values are reported for each service item. In addition, the fee category (e.g. “Account Management”) and the fee type (e.g. “Fixed Independent”) are provided for each service item. For each month the total amount of fees/revenues is reported.

CBs can retrieve aggregated information on the fees/revenues of parties belonging to their system entity.

This report can be used by CB users only.

#### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [INV – Invoice Data Reports] >> [INV01]

#### Screenshot – prompt

The screenshot displays the 'INV01 - Reporting revenues' prompt in the 'target' system. The interface includes a sidebar with navigation icons and a main content area. The main area contains several sections:

- Filters:**
  - Year:** A dropdown menu with the text 'Please select year'.
  - Quarter:** A dropdown menu.
  - Service:** A list of checkboxes for 'RTGS', 'T2S', and 'TIPS'.
- Keywords:**
  - A search box labeled 'Input keywords here' with a magnifying glass icon.
  - A 'Select all' checkbox.
  - The text 'No Results' is displayed below the search box.
  - A dropdown menu labeled 'Starts with any of these keywords'.
  - A checked checkbox labeled 'Case insensitive'.
- Search and Select the Party BIC:**
  - A large empty rectangular area for displaying search results.
  - 'Select all' and 'Deselect all' buttons at the bottom.
  - 'Cancel' and 'Finish' buttons at the bottom.

Figure 197 - INV01 prompt

**Prompt description**

| <b>INV01 – Report description – prompt screen</b> |  |
|---|--|
| <b>Field label</b>                                | <b>Description</b>   |
| Year  | <p>You can use this drop-down field to select the year, from which the report should contain the data.</p> <p>This field is mandatory.</p>   |
| Quarter   | <p>You can use this drop-down field to select the quarter, for which the report should show the data.</p> <p>This field is mandatory</p>   |
| Service   | <p>Service for which the data shall be displayed.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  RTGS</li> <li>  TIPS</li> </ul> <p>This field is optional</p>   |
| Charged party BIC                                 | <p>You can use this search and select prompt to be able to search for the party BIC or short name. One or several parties can be selected. In case the user leaves this field free, all party BICs belonging to the user’s data scope are selected.</p> <p>This field is optional.</p> |

**Table 38 - INV01 - Prompt description**

**Screenshot - output screen**

target | INV01 - Reporting revenues | 2021-02-19 07:52:33 DEV - Development and integration

target | INV01 - Reporting revenues

CBXXKMD0XXX - Central Bank of Fiction

Filters: Year : 2018 Service : RTGS  
Quarter : 2018 Q4

Service: RTGS

| Category             | Code   | Description  | Fee type               | 2018 October  |                  | 2018 November |                  | 2018 December |                  |
|----------------------|--|--|------------------------|---------------|------------------|---------------|------------------|---------------|------------------|
|                      |  |  |                        | Volume        | Value (EUR)      | Volume        | Value (EUR)      | Volume        | Value (EUR)      |
| Information Services | 5012   | RTGS AS cash transfer order                                  | Fixed independent fees | 271           | 813.9            | 1,687         | 5,662.35         | 678           | 2,034.27         |
|                      | 5015   | inter-banking group intra-component liquidity transfer order | Fixed independent fees | 241           | 723.9            | 1,757         | 5,272.4          | 1,110         | 3,330.5          |
|                      | 5016   | Inter-banking group inter-component liquidity transfer order | Fixed independent fees | 346           | 1,039.32         | 753           | 2,259.66         | 222           | 666.11           |
| Settlement Services  | 5002   | Fixed fee - RTGS account                                     | Fixed independent fees | 552           | 552.15           | 2,312         | 2,312.17         | 1,642         | 1,642.07         |
|                      | 5004   | Addressable BIC - Correspondent                              | Fixed independent fees | 449           | 449.22           | 1,214         | 1,214.18         | 234           | 234.02           |
|                      | 5005   | Fee for unpublished BIC                                      | Fixed independent fees | 455           | 455.39           | 2,298         | 2,298.51         | 463           | 463.06           |
|                      | 5006   | Fee for multi-addressee                                      | Fixed independent fees | 306           | 306.36           | 1,489         | 1,489.44         | 937           | 937.16           |
|                      | 5007   | Ancillary system - core fixed fee                            | Fixed independent fees | 353           | 353.5            | 1,075         | 1,075.4          | 2,073         | 2,073.45         |
|                      | 5008   | Ancillary system - Fixed fee I                               | Fixed independent fees | 693           | 694.26           | 1,446         | 1,446.66         | 457           | 457.12           |
|                      | 5009   | Ancillary system - Fixed fee II                              | Fixed independent fees | 252           | 252.56           | 1,457         | 1,457.77         | 678           | 678.21           |
|                      | 5011   | RTGS payment order   | Fixed independent fees | 345           | 345.88           | 2,328         | 2,329.44         | 914           | 914.32           |
|                      | 5012   | RTGS AS cash transfer order                                  | Fixed independent fees | 392           | 393.17           | 1,444         | 1,444.99         | 917           | 917.36           |
|                      | 5015   | inter-banking group intra-component liquidity transfer order | Fixed independent fees | 291           | 292              | 1,030         | 1,030.8          | 451           | 451.2            |
| 5016                 | Inter-banking group inter-component liquidity transfer order | Fixed independent fees                                       | 414                    | 415.54        | 1,677            | 1,678.43      | 669              | 669.33        |                  |
| <b>Total</b>         |  |  |                        | <b>12,747</b> | <b>24,766.81</b> | <b>53,435</b> | <b>106,420.3</b> | <b>26,532</b> | <b>51,375.85</b> |

|                      | 2018 October  |                  | 2018 November |                  | 2018 December |                  |
|----------------------|---------------|------------------|---------------|------------------|---------------|------------------|
|                      | Volume        | Value (EUR)      | Volume        | Value (EUR)      | Volume        | Value (EUR)      |
| <b>Overall Total</b> | <b>12,747</b> | <b>24,766.81</b> | <b>53,435</b> | <b>106,420.3</b> | <b>26,532</b> | <b>51,375.85</b> |

Page: 2 of 2

**Figure 198 - INV01 Output**

**Output description**

| INV01 – Report description – output screen   |  |
|--|--|
| Field label  | Description  |
| Year, Quarter  | Year and quarter as chosen in input screen   |
| <i>The following block is repeated for every service chosen in the prompt screen</i> |  |
| Service  | The service, for which invoice data are displayed<br>Possible values:<br>  RTGS<br>  TIPS  |
| Month/Year   | Calendar month and year of the billing period, for which the invoice data are shown. All three months of the selected quarter are displayed. In case the billing period of one month is still running, no data will be shown for that month. |
| Service item category  | Service item category  |
| Service item code  | Following service item codes are currently available:  |

|                          |   |
|--------------------------|---|
|                          | <ul style="list-style-type: none"> <li>  5002</li> <li>  5004</li> <li>  5005</li> <li>  5006</li> <li>  5007</li> <li>  5008</li> <li>  5009</li> <li>  5011</li> <li>  5012</li> <li>  5015</li> <li>  5016</li> <li>  3001</li> <li>  3002</li> <li>  3003</li> <li>  3004</li> </ul>  |
| Service item description | <p>Following service item descriptions are currently available:</p> <ul style="list-style-type: none"> <li>  Fixed fee – RTGS account (5002)</li> <li>  Addressable BIC – Correspondent (5004)</li> <li>  Fee for unpublished BICs (5005)</li> <li>  Fee for multi-addressee (5006)</li> <li>  Ancillary system – Core fixed fee (5007)</li> <li>  Ancillary system – Fixed fee I (5008)</li> <li>  Ancillary system – Fixed fee II (5009)</li> <li>  RTGS payment order (5011)</li> <li>  RTGS AS Cash transfer orders (5012)</li> <li>  Inter-banking group intra-component liquidity transfer order (5015)</li> <li>  Inter-banking group inter-component liquidity transfer order (5016)</li> <li>  Settled Instant Payment transaction (3001)</li> <li>  Unsettled Instant Payment transaction (3002)</li> <li>  Settled Positive Recall answer (3003)</li> <li>  Unsettled Positive Recall answer (3004)</li> </ul> |
| Fee type                 | Fee type  |



|                              |  |
|------------------------------|--|
| Volume                       | The quantity of the billable items for the service item having this fee type<br><br>If there is no fee for this fee type, then 0 is displayed.   |
| Value                        | The sum of amounts of the billable items for the service item having this fee type (VAT not included)<br><br>The invoices are always in EUR.<br><br>If there is no fee for this fee type, then 0 is displayed. |
| Total (Volume/Value)         | Sum of the volumes/values within the month over all fee types  |
| Overall total (Volume/Value) | Overall sum of the volumes/values within the month over all fee types and services   |

**Table 39 - INV01 - Output description**

## 5.8 Minimum reserve reports (MIR)

### 5.8.1 MIR01 – Minimum reserve information

#### **Context of usage**

This report provides periodic information on the minimum reserve requirements, the fulfilment of the aforementioned and the associated (accrued/pro rata) interests. In addition to the party BIC/name, entities are reported with their respective MFI code. The report provides information on payment banks being subject to minimum reserves on the level of the respective leading CLM Account Holder. The report is available for each reserve maintenance period.

CBs can retrieve minimum reserve information on those parties belonging to their system entity.

**Note:** As the report is required to display accrued interests (interests will be shown pro rata within an ongoing reserve maintenance period), the interest amounts shown are derived from calculations (and not from interest payments). The final (calculated) interest amounts are displayed as soon as all data for a respective reserve maintenance period is available in the DWH.

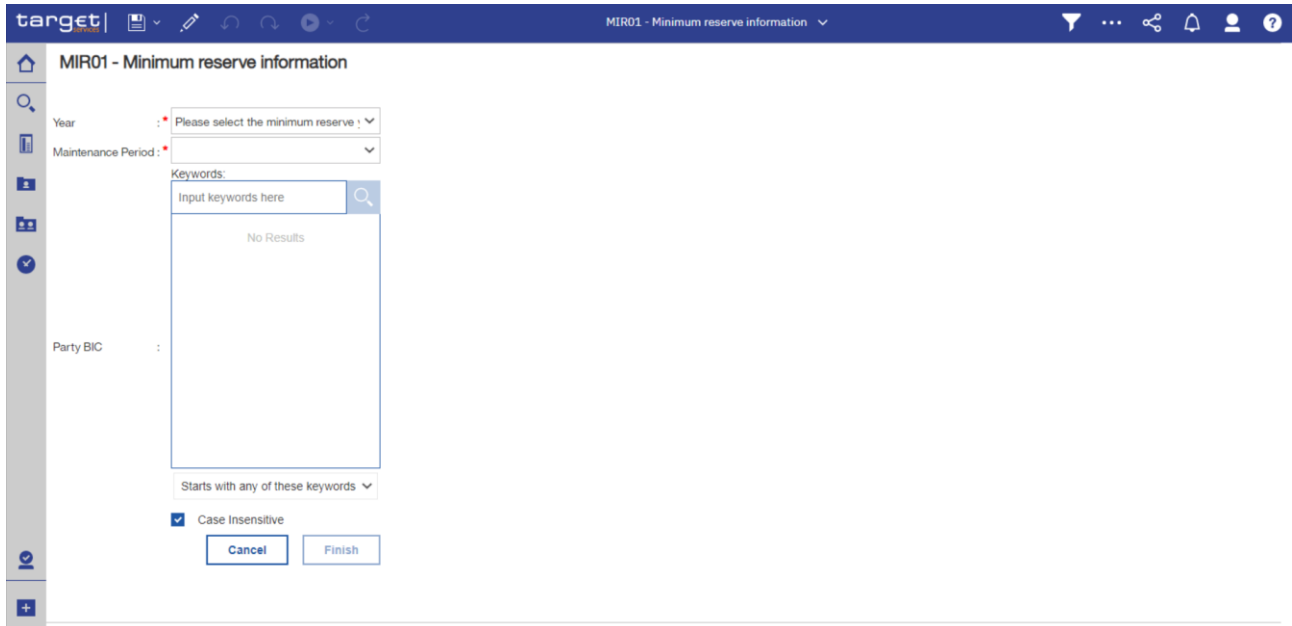
This report can be used by CB and PB users.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [MIR – Minimum Reserve Reports] >> [MIR01]

**Screenshot – prompt**



**Figure 199 - MIR01 prompt**

**Prompt description**

| MIR01 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Year                                       | <p>You can use this drop-down field to select the year, from which the report should contain the data.</p> <p>This field is mandatory.</p>  |
| Maintenance period                         | <p>You can select the required maintenance period in this drop-down field.</p> <p>This field contains “validity start date” to “validity end date” of maintenance periods and consists of all maintenance periods that start in the chosen year</p> <p>This field is mandatory.</p> |
| Party BIC                                  | <p>You can use this drop-down field to select the party BIC. This field will show all related BICs, which belong to the party.</p> <p>This field is optional.</p>   |

**Table 40 - MIR01 - Prompt description**

Screenshot - output screen

| MFI code | Party BIC   | Party name                       | MR Obligation | Party BIC of the Leading CLM account holder | MR Requirement   | Effective MR Requirement | Running average  | Adjustment balance | Excess / deficiency of reserves | Interest amount | Excess reserve interest amount (non-exemption tier) | Excess reserve interest amount (exemption tier) | MR calculated penalty amount 1 (single infringement) | MR calculated penalty amount 2 (repeated infringement) |
|----------|-------------|----------------------------------|---------------|---|------------------|--------------------------|------------------|--------------------|---------------------------------|-----------------|---|---|--|--|
| 1008     | ASAAKMD000X | MetroCapital                     | pool          | FBHHKMD000X                                 | 1,790,000.00     | 1,790,000.00             | 1,790,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 11004    | ASABKMD000X | Auslandskassenverein i.L.        | indirect      | FBABKMD000X                                 | 100,400,000.00   | 0.00                     | 0.00             | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 11005    | ASACHMD000X | Discount Card                    | indirect      | FBABKMD000X                                 | 100,900,000.00   | 0.00                     | 0.00             | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10002    | PBAAKMD000X | Banco de Isthmus                 | direct        | PBAAKMD000X                                 | 2,020,000.00     | 3,920,000.00             | 3,920,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10003    | PBAKMD000X  | Gringotts Bank                   | direct        | PBAKMD000X                                  | 3,020,000.00     | 203,920,000.00           | 203,920,000.00   | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10004    | PBACHMD000X | Iron Banks of Braavos            | direct        | PBACHMD000X                                 | 4,020,000.00     | 4,020,000.00             | 4,020,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10005    | PBACHMD000X | Banque Mamon                     | direct        | PBACHMD000X                                 | 5,020,000.00     | 5,020,000.00             | 5,020,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10006    | PBAKMD000X  | Bankhaus Goldscheider            | indirect      | PBAKMD000X                                  | 600,000.00       | 0.00                     | 0.00             | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10007    | PBAKMD000X  | Dagobert Duck Thrift             | direct        | PBAKMD000X                                  | 7,020,000.00     | 7,020,000.00             | 7,020,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10008    | PBAKMD000X  | Woodgrove Bank                   | direct        | PBAKMD000X                                  | 8,020,000.00     | 8,020,000.00             | 8,020,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10009    | PBAKMD000X  | Gollath National Bank Ltd        | direct        | PBAKMD000X                                  | 9,020,000.00     | 9,020,000.00             | 9,020,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10010    | PBAKMD000X  | Tellson's Mutual                 | direct        | PBAKMD000X                                  | 10,020,000.00    | 10,020,000.00            | 10,020,000.00    | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10011    | PBBKMD000X  | Banca de Bondi                   | direct        | PBBKMD000X                                  | 11,020,000.00    | 11,020,000.00            | 11,020,000.00    | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10012    | PBCKMD000X  | Fidelity Savings & Trust         | direct        | PBCKMD000X                                  | 12,020,000.00    | 12,020,000.00            | 12,020,000.00    | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10013    | PBCKMD000X  | DGI Deutsche Global Invest       | indirect      | PBAKMD000X                                  | 1,300,000.00     | 0.00                     | 0.00             | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10014    | PBBKMD000X  | Banco di San Giorgio             | pool          | PBBKMD000X                                  | 2,310,000.00     | 2,310,000.00             | 2,310,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10015    | PBPKMD000X  | Welter Venezuela Funding         | pool          | PBBKMD000X                                  | 2,310,000.00     | 2,310,000.00             | 2,310,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10016    | PBBKMD000X  | Compagnie des Indes Occidentales | pool          | PBBKMD000X                                  | 2,310,000.00     | 2,310,000.00             | 2,310,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 10017    | PBBKMD000X  | Monte Pio                        | pool          | PBBKMD000X                                  | 1,790,000.00     | 1,790,000.00             | 1,790,000.00     | N/A                | 0.00                            | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |
| 11002    | PBPKMD000X  | Par à Six Ouvert Bank            | direct        | PBPKMD000X                                  | 1,002,020,000.00 | 1,002,020,000.00         | 1,002,010,000.00 | N/A                | -10,000.00                      | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |

Figure 200 - MIR01 output (1)

| MFI code | Party BIC  | Party name           | MR Obligation | Party BIC of the Leading CLM account holder | MR Requirement   | Effective MR Requirement | Running average  | Adjustment balance | Excess / deficiency of reserves | Interest amount | Excess reserve interest amount (non-exemption tier) | Excess reserve interest amount (exemption tier) | MR calculated penalty amount 1 (single infringement) | MR calculated penalty amount 2 (repeated infringement) |
|----------|------------|----------------------|---------------|---|------------------|--------------------------|------------------|--------------------|---------------------------------|-----------------|---|---|--|--|
| 11003    | PBPKMD000X | Par à Six Fermé Bank | direct        | PBPKMD000X                                  | 1,003,020,000.00 | 1,003,020,000.00         | 1,003,010,000.00 | N/A                | -10,000.00                      | 0.00            | 0.00  | 0.00  | 0.00   | 0.00   |

Figure 201 - MIR01 output (2)

The screenshot shows the 'MIR01 - Minimum reserve information' report. The main table contains the following data:

| Field  | Value      |
|--|------------|
| Calculation includes data until                  | 2019-04-18 |
| Number of calendar days in the MP                | 17         |
| Minimum reserve interest rate                    | -0.5000%   |
| Excess reserve interest rate 1 (exempt tier)     | -0.1000%   |
| Excess reserve interest rate 2 (non-exempt tier) | -1.0000%   |
| Excess reserve exemption factor                  | 6.00       |
| Penalty rate 1 (single infringement)             | -1.5000%   |
| Penalty rate 2 (repeated infringement)           | -2.0000%   |

Figure 202 - MIR01 – Output (List of interest and penalty rates)

**Output description**

| MIR01 – Report description – output screen – table minimum reserve information |   |
|--|---|
| Field label  | Description   |
| Sorted by party BIC:   |   |
| MFI code   | MFI code of the party   |
| Party BIC  | BIC of the party  |
| Party name   | Name of the party   |
| MR Obligation  | Minimum reserve obligation.<br>Possible Values:<br><ul style="list-style-type: none"> <li>  Direct</li> <li>  Indirect</li> <li>  Pool</li> </ul> |
| Party BIC of the Leading CLM Account Holder                                    | BIC of the party that holds the leading CLM account   |
| MR Requirement   | Amount of minimum reserve to be held at the end of each day of the maintenance period.  |
| Effective MR requirement   | Amount of minimum reserve to be held effectively at the end of each day of the maintenance period.  |

|   |   |
|---|---|
|   | <p>For Leading CLM Account Holders offering to maintain the MR requirements for other parties (i.e. for those with MR obligation = "Indirect") this is the sum of the requirement for the Leading CLM Account Holder itself as well as of the MR requirements from the other parties.</p> <p>For parties with MR obligation "Indirect", the value is always 0 (zero)</p> <p>For all other parties the value is identical to the MR requirement.</p>   |
| Running average                                     | <p>This is the arithmetic mean of the accumulated balances from the first calendar day of the current maintenance period until the last day of the maintenance period, i.e sum of daily balances from beginning of the maintenance period till the end of the maintenance period / total number of days in the maintenance period (for ongoing maintenance periods: sum of daily balances from beginning of the maintenance period till the day for which MR data is available in the DWH / total number of days in the maintenance period that have already been passed).</p> <p>As soon as a Maintenance Period is over, this amount corresponds to the Minimum Reserve fulfilment.</p> |
| Adjustment balance                                  | <p>The adjustment balance is the amount that would be needed at the end of each business day from the current day until the end of the maintenance period, in order to precisely fulfil the minimum reserve requirement. In case that the minimum reserve requirement for an ongoing maintenance period is already fulfilled the adjustment balance is 0 (zero).</p> <p>This field is only filled in case the chosen maintenance period is the currently running. For past maintenance periods, this field is empty.</p>  |
| Excess / deficiency of reserve                      | <p>This is the difference between the running average and the minimum reserve requirements.</p>   |
| Interest amount                                     | <p>The amount of MR interest for the displayed maintenance period.</p> <p>In case the chosen maintenance period is the currently running, the accrued interest is displayed, calculated from the start of the MP until the end of the day preceding the day of report generation.</p> <p>Please note, that accrued MR interest calculations are based on MR fulfilment data delivered by CLM.</p>   |
| Excess reserve interest amount (non-exemption tier) | <p>Amount of interest to be paid for excess reserves within the non-exemption tier.</p> <p>In case the chosen maintenance period is the currently running, the accrued interest is calculated from the start of the MP until the end of the day preceding the day of report generation.</p>   |

|  |   |
|--|---|
|  | Please note, that accrued excess reserve interest calculations are based on MR fulfilment data delivered by CLM.  |
| Excess reserve interest amount (exemption tier)        | <p>Amount of interest to be paid for excess reserves within the exemption tier.</p> <p>In case the chosen maintenance period is the currently running, the accrued interest is calculated from the start of the MP until the end of the day preceding the day of report generation.</p> <p>Please note, that accrued excess reserve interest calculations are based on MR fulfilment data delivered by CLM.</p> |
| MR calculated penalty amount 1 (single infringement)   | <p>Penalty to be debited for balances not meeting the MR requirements. The value is calculated by CLM at the end of the MP. It is up to the responsible CB to decide, whether penalties are debited and which of the two.</p> <p>This field is only filled for a past maintenance period. For the current maintenance period, this field is empty.</p>  |
| MR calculated penalty amount 2 (repeated infringement) | <p>Penalty to be debited for balances not meeting the MR requirements. The value is calculated by CLM at the end of the MP. It is up to the responsible CB to decide, whether penalties are debited and which of the two.</p> <p>This field is only filled for a past maintenance. For the current maintenance period, this field is empty.</p>   |

**Table 41 - MIR01 - Output description - table minimum reserve information**

| <b>MIR01 – Report description – output screen – table list of interest and penalty rates</b> |   |
|--|---|
| <b>Field label</b>   | <b>Field label</b>  |
| Calculation includes data until <Date>   | The calculation includes data until the given date. For past maintenance periods it is always the last day of the MP, for running MP it is the date of the last data load in the DWH. |
| Number of calendar days in the MP  | Number of days within the maintenance period; For current MP, the days are counted from the start of the MP until the date in the previous line.                                      |
| Minimum reserve interest rate  | Rate (in %) which is used to calculate the interest amount on MR  |
| Excess reserve interest rate (exempt tier)   | Rate (in %) which is used to calculate the interest amount for excess reserves (exempt tier).   |
| Excess reserve interest rate (non-exempt tier)   | Rate (in %) which is used to calculate the interest amount for excess reserves (non-exempt tier).   |

|  |   |
|--|---|
| Excess reserve exemption factor        | Factor for the calculation of the excess reserve exemption amount   |
| Penalty rate 1 (single infringement)   | Rate (in %) which is used to calculate the interest amount on MR balances which did not meet the MR requirement (for a single infringement).  |
| Penalty rate 2 (repeated infringement) | Rate (in %) which is used to calculate the interest amount on MR balances which did not meet the MR requirement (for a repeated infringement) |

**Table 42 - MIR01 - Output description - table list of interest and penalty rates**

## 5.8.2 MIR02 – Minimum reserve requirements per country

### Context of usage

This report provides information on the aggregated amount of minimum reserve requirements for a given reserve maintenance period and the five preceding reserve maintenance periods. For each reserve maintenance period the aggregated amount of minimum reserve requirements at country level is reported.

CBs can retrieve aggregated minimum reserve information of parties belonging to their system entity.

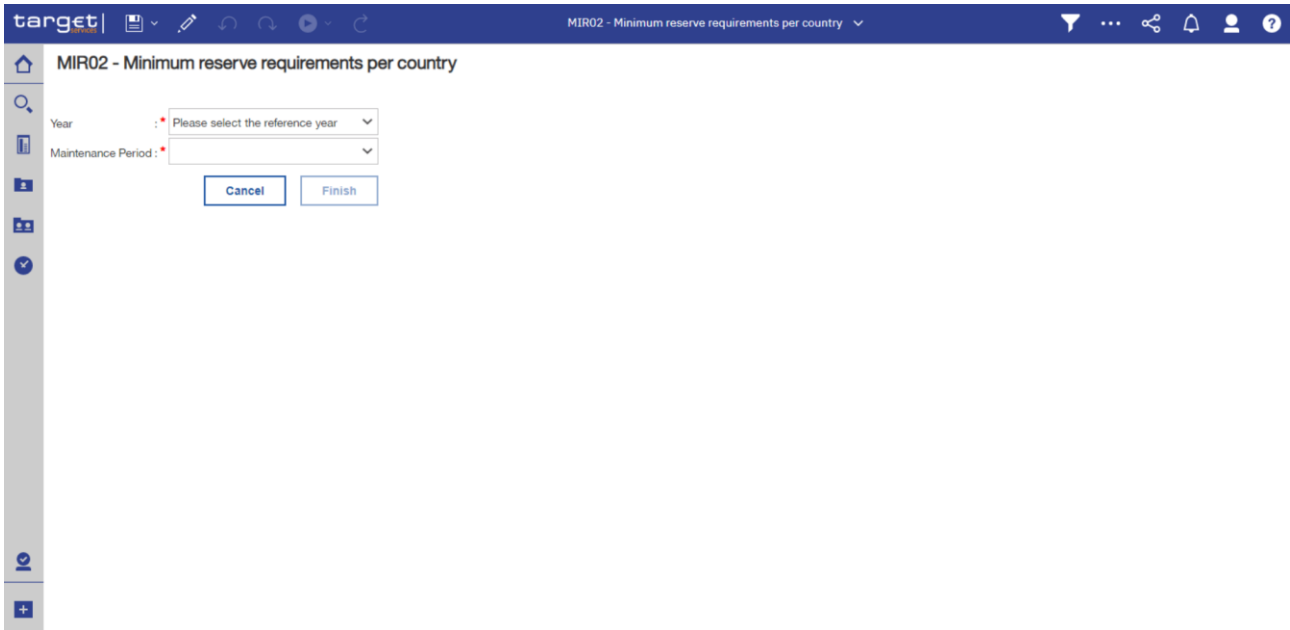
This report can be used by CB users only.

### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [MIR – Minimum Reserve Reports] >> [MIR02]

**Screenshot – prompt**



**Figure 203 - MIR02 prompt**

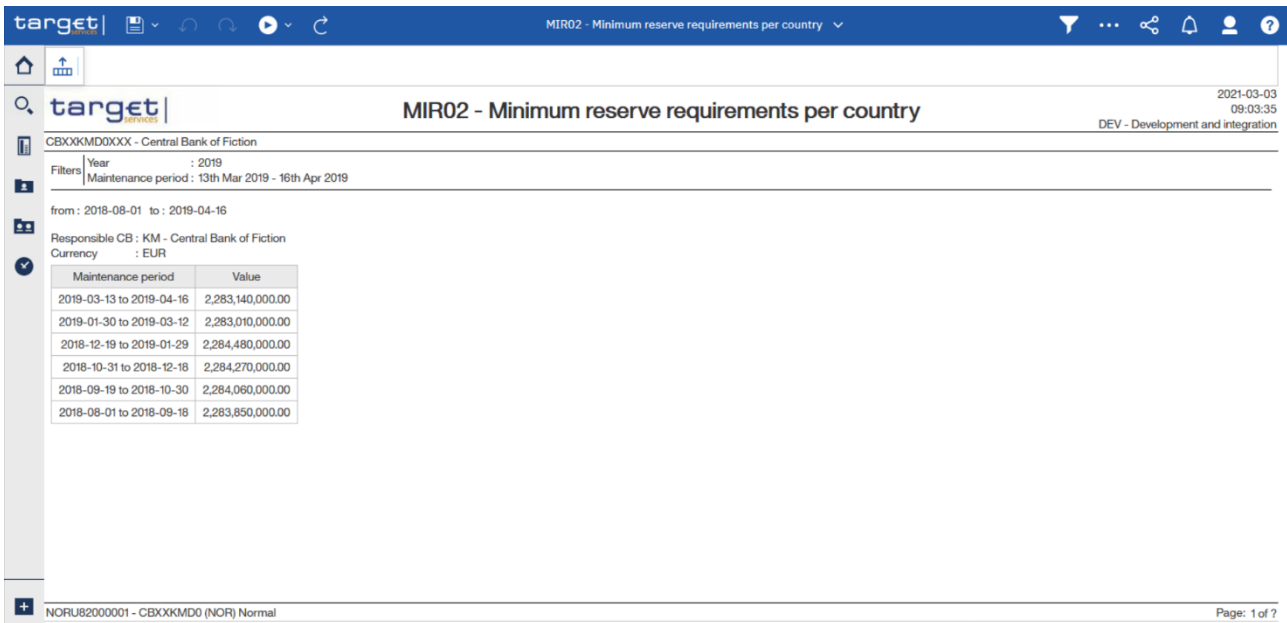
**Prompt description**

| MIR02 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Year                                       | <p>You can use this drop-down field to select the year, from which the report should contain the data.</p> <p>This field is mandatory.</p>  |
| Maintenance period                         | <p>You can select the required maintenance period in this drop-down field.</p> <p>This field contains “validity start date” to “validity end date” of maintenance periods and consists of all maintenance periods that start in the chosen year</p> <p>This field is mandatory.</p> |

**Table 43 - MIR02 - Prompt description**



**Screenshot - output screen**



**Figure 204 - MIR02 output**

**Output description**

| MIR02 – Report description – output screen                        |  |
|---|--|
| Field label   | Description  |
| For the chosen maintenance period and the five preceding periods: |  |
| Maintenance period  | Shows the validity start date until validity end date of the maintenance period  |
| Value   | Aggregated amount of the minimum reserve requirements during the respective period at the country level:<br><br>Within the data scope of the CB the minimum reserve requirements of all parties subject to minimum reserve requirements (minimum reserve obligation = direct, indirect or pool) for the respective maintenance period are summed up. |

**Table 44 - MIR02 - Output description**

## 5.9 Participation reports (PAR)

### 5.9.1 PAR01 – Critical participants

**Context of usage**

This report aims to identify critical participants in RTGS. For the chosen quarter, the report provides information on the daily average volume and value of payments and AS transfers on RTGS dedicated cash accounts

(DCAs). Payments and AS transfers are counted once on the debit side of each RTGS DCA and reported by account number, party BIC and party name. Volumes and values for payments and AS transfers are reported as aggregated daily averages for the chosen quarter. By standard, the report result is sorted decreasing by the aggregated daily average value of payments and AS transfers.

In a second report table the report provides the daily average volume and value of payments and AS transfers on all RTGS DCAs within the given quarter. In addition, the value corresponding to one percent of the reported value is displayed.

CBs can retrieve information for those parties belonging to their system entity.

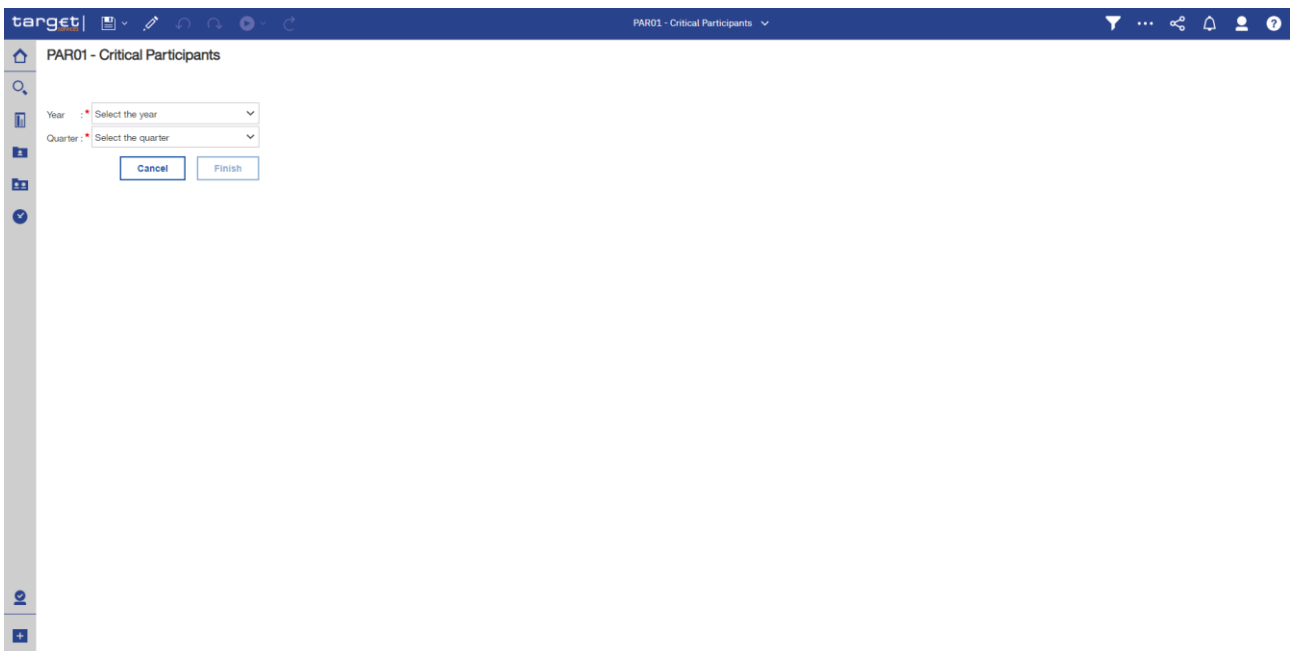
This report can be used by CB users only.

### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [PAR – Participation Reports] >> [PAR01]

### **Screenshot – prompt**



**Figure 205 - PAR01 prompt**

**Prompt description**

| PAR01 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Year                                       | You can use this drop-down field to select the year, from which the report should contain the data.<br><br>This field is mandatory    |
| Quarter                                    | You can use this drop-down field to select the quarter, from which the report should contain the data.<br><br>This field is mandatory |

Table 45 - PAR01 - Prompt description

**Screenshot - output screen**

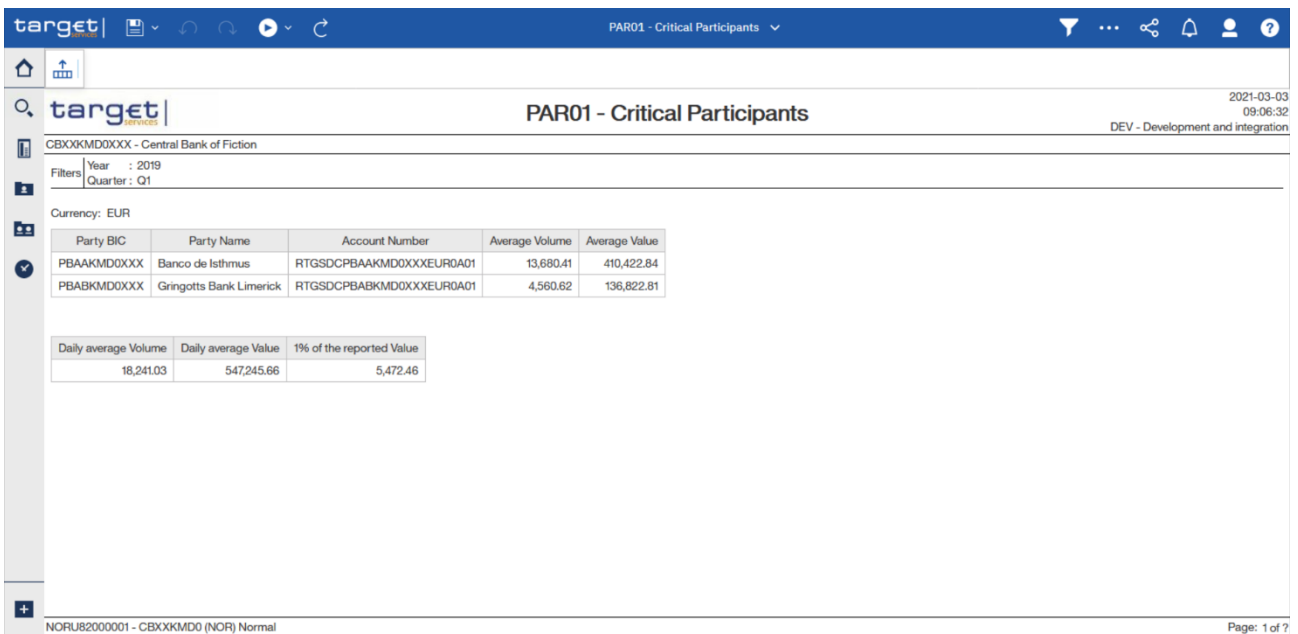


Figure 206 - PAR01 output (1)

**Output description**

| PAR01 – Report description – output screen |   |
|--|---|
| Field label                                | Description   |
|  | List by RTGS DCA and party. It is sorted by average value decreasing, then average volume decreasing, then party BIC decreasing |
| Party                                      | BIC and short name of the party   |
| Cash Account Number                        | RTGS dedicated cash account number  |

|                           |  |
|---------------------------|--|
| Daily Average Volume      | Average volume of the debit side of payments and AS transfers on the specified RTGS DCA. |
| Daily Average Value       | Average value of the debit side of payments and AS transfers on the specified RTGS DCA.  |
| <b>Overall</b>            |  |
| Daily average Volume      | Daily average volume for all RTGS DCAs in the first list.                                |
| Daily average Value       | Daily average value for all RTGS DCAs in the first list.                                 |
| 1 % of the reported Value | 1 % of the daily average value for all RTGS DCAs in the first list.                      |

**Table 46 - PAR01 - Output description**

## 5.9.2 PAR02 – List of active Direct and Indirect Participants according to RTGS Directory

### Context of usage

This report provides information on those entities being a Direct or an Indirect Participant (Participation Type = 01 – Direct or 02 – Indirect) according to the RTGS Directory on a given date.

For each Direct and Indirect Participant the following information from the RTGS Directory are provided: BIC, Institution Name, Valid from, National Sorting Code, Participation Type. In addition, the overall number of Direct and Indirect Participants is reported.

In case of Indirect Participation, the report provides the country code (ISO 3166 Alpha-2) from the BIC of the corresponding Direct Participant.

The report is provided in several sorting options, including an option where the Indirect Participants are reported under their corresponding Direct Participant/addressee.

**Note:** Independent from the Participation Type, unpublished BICs are not considered for the purpose of this report:

This report can be used by CB, PB and AS users.

### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [PAR – Participation Reports] >> [PAR02]

**Screenshot – prompt**



**Figure 207 - PAR02 prompt**

**Prompt description**

| PAR02 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Date                                       | <p>You can select the date by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory.</p> |

**Table 47 - PAR02 - Prompt description**

Screenshot - output screen

Output description

target | PAR02 - List of active Direct and Indirect Participants according to RTGS Directory

2021-03-03 09:11:06  
DEV - Development and integration

CBXXKMD0XXX - Central Bank of Fiction  
Filters | Date : 2018-01-01

| Participant BIC | Participant Name    | Account BIC | Indirect participant BIC | Institution Name      |
|-----------------|---------------------|-------------|--------------------------|-----------------------|
| PBAAKMD0XXX     | Banco de Isthmus    | PBAAKMR001X | LBSWKMFXXX               | Banco de Isthmus      |
| PBMFKMD0XXX     | Par ô Six Test Bank | PBMFKMR001X | PBMFKMI17X               | Par ô Six Ouvert Bank |

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Figure 208 - PAR02 output (1)

target | PAR02 - List of active Direct and Indirect Participants according to RTGS Directory

2021-03-03 09:11:06  
DEV - Development and integration

CBXXKMD0XXX - Central Bank of Fiction  
Filters | Date : 2018-01-01

| Account BIC | Participant BIC | Participant Name              | Valid from | National Sorting Code | RTGS participation type | Direct Participant BIC | Direct Participant Name | Country Code |
|-------------|-----------------|-------------------------------|------------|-----------------------|-------------------------|------------------------|-------------------------|--------------|
| ASAAKMR001X | ASAAKMD001X     | MetroCapital                  | 2018-01-01 | NSORT0028             | Direct                  |                        |                         |              |
| ASAAKPR001X | ASAAKPD001X     | Porex                         | 2018-01-01 | NSORT0066             | Direct                  |                        |                         |              |
| ASAAKWR001X | ASAAKW001X      | Christiansa Central Clearing  | 2018-01-01 | NSORT0103             | Direct                  |                        |                         |              |
| PBAAKMR001X | PBAAKMD001X     | Banco de Isthmus              | 2018-01-01 | NSORT0104             | Direct                  |                        |                         |              |
| PBAAKMR001X | LBSWKMFXXX      | Banco de Isthmus              | 2018-01-01 | NSORT0007             | Indirect                | PBAAKMD0XXX            | Banco de Isthmus        | KM           |
| PBAAKMR001X | PBAAKMD001X     | Banco de Isthmus              | 2018-01-01 | NSORT0009             | Direct                  |                        |                         |              |
| PBAAKPR001X | PBAAKPD001X     | Lehman Brothers Bankhaus AG   | 2018-01-01 | NSORT0011             | Direct                  |                        |                         |              |
| PBAAKWR001X | PBAAKW001X      | Roma Bank                     | 2018-01-01 | NSORT0087             | Direct                  |                        |                         |              |
| PBAAKPR001X | PBAAKPD001X     | Gringotts Bank                | 2018-01-01 | NSORT0098             | Direct                  |                        |                         |              |
| PBAAKPR001X | PBAAKPD001X     | Washington Mutual             | 2018-01-01 | NSORT0050             | Direct                  |                        |                         |              |
| PBAAKPR001X | PBAAKPD001X     | Farename Bank                 | 2018-01-01 | NSORT0088             | Direct                  |                        |                         |              |
| PBAAKMR001X | PBAAKMD001X     | Iron Banks of Braavos         | 2018-01-01 | NSORT0014             | Direct                  |                        |                         |              |
| PBAAKPR001X | PBAAKPD001X     | Herrstatt Bank AG             | 2018-01-01 | NSORT0051             | Direct                  |                        |                         |              |
| PBAAKWR001X | PBAAKW001X      | Äre Land Pardebrev            | 2018-01-01 | NSORT0089             | Direct                  |                        |                         |              |
| PBAAKMR001X | PBAAKMD001X     | Banque Mamon                  | 2018-01-01 | NSORT0016             | Direct                  |                        |                         |              |
| PBAAKPR001X | PBAAKPD001X     | Thornburg Finance S.A.        | 2018-01-01 | NSORT0052             | Direct                  |                        |                         |              |
| PBAAKWR001X | PBAAKW001X      | Bilge Credit                  | 2018-01-01 | NSORT0090             | Direct                  |                        |                         |              |
| PBAAKMR001X | PBAAKMD001X     | Bankhaus Goldscheider         | 2018-01-01 | NSORT0016             | Direct                  |                        |                         |              |
| PBAAKPR001X | PBAAKPD001X     | America First Savings & Loans | 2018-01-01 | NSORT0093             | Direct                  |                        |                         |              |
| PBAAKWR001X | PBAAKW001X      | Vendhyttel-by Andelselskab    | 2018-01-01 | NSORT0091             | Direct                  |                        |                         |              |

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Figure 209 - PAR02 output (2)

target | PAR02-List of active Direct and Ind ... to RTGS Directory

Direct participant view | Indirect participant view

target | PAR02 - List of active Direct and Indirect Participants according to RTGS Directory

2021-03-03 09:11:06  
DEV - Development and Integration

CBXXXXM0000X - Central Bank of Fiction  
Filters | Date : 2018-01-01

| Account BIC | Participant BIC | Participant Name                  | Valid from | National Sorting Code | RTGS participation type | Direct Participant BIC | Direct Participant Name | Country Code |
|-------------|-----------------|-----------------------------------|------------|-----------------------|-------------------------|------------------------|-------------------------|--------------|
| PBBDKWR00X  | PBBDKWD00X      | Tasinge og Frerup Udbetalingsbank | 2018-01-01 | NSORT0098             | Direct                  |                        |                         |              |
| PBBEKMRO0X  | PBBEKMDO0X      | Banco di San Giorgio              | 2018-01-01 | NSORT0024             | Direct                  |                        |                         |              |
| PBBEKP000X  | PBBEKP000X      | Hypo Alpe Adria                   | 2018-01-01 | NSORT0061             | Direct                  |                        |                         |              |
| PBBEKMRO0X  | PBBEKMDO0X      | Læse Landbobank                   | 2018-01-01 | NSORT0099             | Direct                  |                        |                         |              |
| PBBFKMRO0X  | PBBFKMDO0X      | Welsar Venezuela Funding          | 2018-01-01 | NSORT0025             | Direct                  |                        |                         |              |
| PBBFKPR00X  | PBBFKPD00X      | Banco Português de Negócios       | 2018-01-01 | NSORT0062             | Direct                  |                        |                         |              |
| PBBFKWRO0X  | PBBFKWD00X      | Æro Pensionsbank                  | 2018-01-01 | NSORT0100             | Direct                  |                        |                         |              |
| PBBGKMRO0X  | PBBGKMD00X      | Compagnie des Indes Occidentales  | 2018-01-01 | NSORT0026             | Direct                  |                        |                         |              |
| PBBGKPR00X  | PBBGKPD00X      | Schaaffhausen'scher Bankverein    | 2018-01-01 | NSORT0063             | Direct                  |                        |                         |              |
| PBBGKWR00X  | PBBGKWD00X      | Smlandsstarvandet Sparekassen     | 2018-01-01 | NSORT0101             | Direct                  |                        |                         |              |
| PBBHKMRO0X  | PBBHKMD00X      | Monte Pio                         | 2018-01-01 | NSORT0027             | Direct                  |                        |                         |              |
| PBBHKPR00X  | PBBHKPD00X      | Banka                             | 2018-01-01 | NSORT0064             | Direct                  |                        |                         |              |
| PBBHKWR00X  | PBBHKWD00X      | Masnedo Bank Aktieselskab         | 2018-01-01 | NSORT0102             | Direct                  |                        |                         |              |
| PBMFKMRO0X  | PBMFKMFI0X      | Par ò Six Ouvert Bank             | 2018-01-01 | NSORT0125             | Direct                  |                        |                         |              |
| PBMFKMRO0X  | PBMFKMI00X      | Par ò Six Ouvert Bank             | 2018-01-01 | NSORT0127             | Indirect                | PBMFKMD00X             | Par ò Six Test Bank     | KM           |

Total number of direct participants: 53  
Total Number of indirect participants: 2

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Figure 210 - PAR02 output (3)

**PAR02 – Report description – output screen – table Direct Participant view**

| Field label              | Description   |
|--------------------------|---|
|                          | Per active party in RTGS, sorted by participant BIC, then by account BIC.                             |
| Participant BIC          | The participant BIC   |
| Participant name         | Short name of the participant   |
| Account BIC              | RTGS DCA account BIC of the Direct Participant, where at least one Indirect Participant is linked to. |
| Indirect Participant BIC | BIC of the Indirect Participant linked to the account BIC   |
| Institution name         | Institution name of the Indirect Participant  |

**PAR02 – Report description – output screen – table Indirect Participant view**

| Field label           | Description   |
|-----------------------|---|
|                       | Per active party in RTGS, sorted by account BIC.                  |
| Account BIC           | RTGS DCA Account BIC of the Direct Participant.                   |
| Participant BIC       | BIC of the Direct or Indirect Participant.                        |
| Participant Name      | Short name of the Direct or Indirect Participant.                 |
| Valid from            | Date, from which the Direct or Indirect Participant became valid. |
| National Sorting Code | National sorting code of the Direct or Indirect Participant       |

|                                      |  |
|--------------------------------------|--|
| RTGS participation type              | RTGS participation type.<br>Possible values:<br>  Direct<br>  Indirect |
| Direct Participant BIC               | The Participant BIC of the related participant.                        |
| Direct Participant Name              | The Direct Participant Name of the related participant.                |
| Country code                         | The Country code of the related participant.                           |
| Total number of Direct Participants  | Only displayed for participation type = direct                         |
| Total number of Indirect Participant | Only displayed for participation type = indirect                       |

**Table 48 - PAR02 - Output description**

### 5.9.3 PAR03 – Parties subject and not subject to minimum reserve

#### **Context of usage**

This report provides information on whether or not parties are subject to minimum reserves according to the CLM configuration reference data attribute Minimum Reserve Obligation on a given date.

Separate lists are provided for parties holding their minimum reserves direct, indirect, in a pool of accounts (pool) and those not being subject to minimum reserves.

Each party is reported with its respective MFI code in addition to its party BIC and name.

For parties holding their minimum reserves indirect, BIC and name of the party maintaining reserves for this party are reported.

CBs can retrieve data of those parties belonging to their system entity.

This report can be used by CB users.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [PAR – Participation Reports] >> [PAR03]



Screenshot – prompt

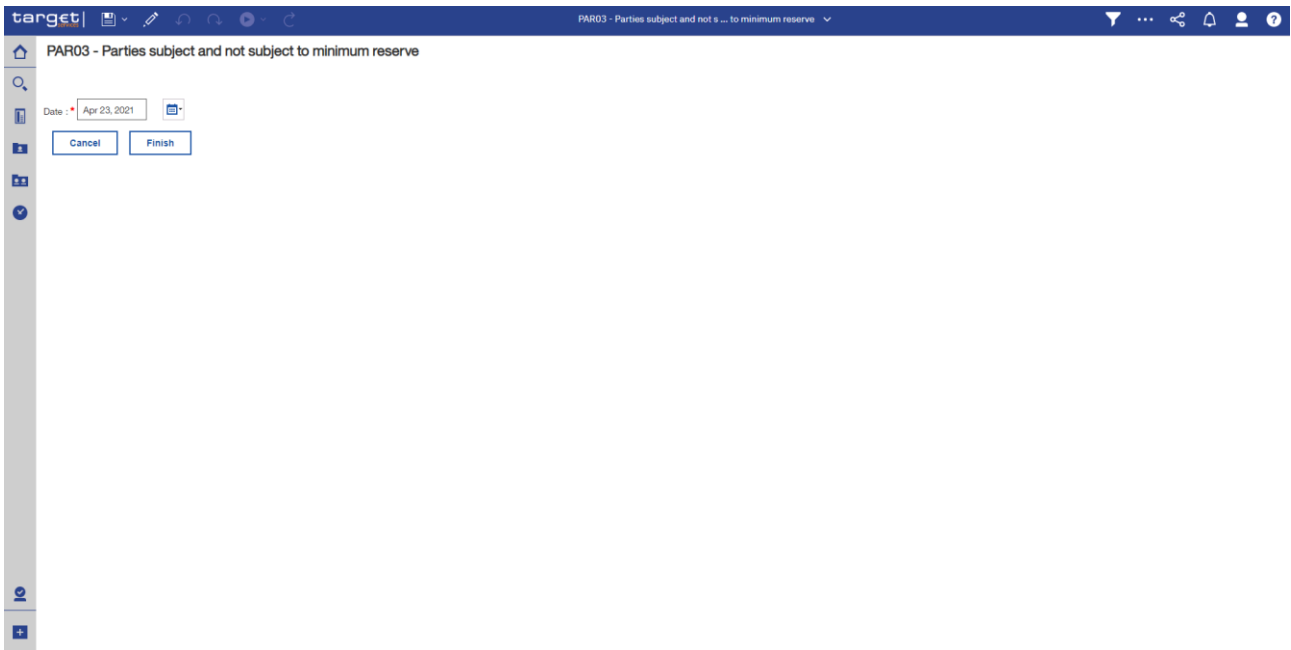


Figure 211 - PAR03 prompt

**Prompt description**

| PAR03 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Date                                       | You can select the date by clicking on the calendar.<br>This field is mandatory. |

Table 49 - PAR03 - Prompt description

Screenshot - output screen

The screenshot shows the 'target' application interface. The main title is 'PAR03 - Parties subject and not subject to minimum reserve'. The report is filtered for 'Parties subject to minimum reserve'. The data is organized into three sections: 'about', 'subject', and 'part'.

| Party BIC  | Party Name                           | MF Code |
|------------|--------------------------------------|---------|
| PSAAMDDXXX | Banco de Intermus                    | 1002    |
| PSBAMDDXXX | Crédit Agricole Leclercq             | 1003    |
| PSQAMDDXXX | Van Bank of Belgium                  | 1004    |
| PSHAMDDXXX | Banque Marcheur Middelburg           | 1005    |
| PSFAMDDXXX | Dagobert Duck Trift Dienstleistungen | 1007    |
| PSGAMDDXXX | Woodhouse Bank S.A.                  | 1008    |
| PSHAMDDXXX | Salath National Bank Ltd Dublin      | 1009    |
| PSHAMDDXXX | Talman National Ltd Dublin           | 1010    |
| PSHAMDDXXX | Banco de Breda Plezier               | 1011    |
| PSHAMDDXXX | Fidelity Savings & Trust             | 1012    |
| PSHAMDDXXX | Par 3 St. Test Bank                  | 1013    |
| PSHAMDDXXX | Par 3 St. Normal Bank                | 1013    |

| Party BIC  | Party Name                                      | MF Code | Leading CLM Account Holder BIC | Leading CLM Account Holder Name |
|------------|---|---------|--------------------------------|---------------------------------|
| ASAMDDXXX  | Auton Nationalbank AG, Frankfurt                | 1004    | PSAMDDXXX                      | Crédit Agricole                 |
| ASAMDDXXX  | Discount Card Address                           | 1005    | PSAMDDXXX                      | Crédit Agricole                 |
| PSHAMDDXXX | Banque National de Luxembourg                   | 1006    | PSAMDDXXX                      | Banco de Intermus               |
| PSHAMDDXXX | DB Deutsche Global Investment Bank AG Frankfurt | 1013    | PSAMDDXXX                      | Banco de Intermus               |

| Party BIC  | Party Name                                  | MF Code | Leading CLM Account Holder BIC | Leading CLM Account Holder Name |
|------------|---|---------|--------------------------------|---------------------------------|
| ASAMDDXXX  | MetroCapital Cooperation Clark              | 1016    | PSHAMDDXXX                     | Monte Plé                       |
| PSHAMDDXXX | Banco di San Giorgio Genova                 | 1016    | PSHAMDDXXX                     | Banco di San Giorgio            |
| PSHAMDDXXX | Wahler Venezia Parking Genova               | 1016    | PSHAMDDXXX                     | Banco di San Giorgio            |
| PSHAMDDXXX | Compagnie des Indes Occidentales S.A. Paris | 1016    | PSHAMDDXXX                     | Banco di San Giorgio            |
| PSHAMDDXXX | Infibus Bancario di Monte Plé               | 1017    | PSHAMDDXXX                     | Monte Plé                       |

Figure 212 - PAR03 output (1)

The screenshot shows the 'target' application interface. The main title is 'PAR03 - Parties subject and not ... to minimum reserve'. The report is filtered for 'Parties not subject to minimum reserve'. The data is organized into a single table section.

| Party BIC  | Party Name                        | MF Code |
|------------|-----------------------------------|---------|
| FACTHMDXXX | Nakamura Factoring N.V. Rotterdam | 10055   |

Figure 213 - PAR03 output (2)

**Output description**

| <b>PAR03 – Report description – output screen – table parties subject to minimum reserve</b> |  |
|--|--|
| <b>Field label</b>   | <b>Description</b>                           |
| Direct – List is sorted by party BIC   |  |
| Party BIC  | Party BIC                                    |
| Party Name   | Party short name                             |
| MFI Code   | MFI code of the party                        |
| Indirect – List sorted by party BIC  |  |
| Party BIC  | Party BIC                                    |
| Party Name   | Party short name                             |
| MFI Code   | MFI code of the party                        |
| Leading CLM Account Holder BIC   | BIC of the Leading CLM Account Holder        |
| Leading CLM Account Holder Name  | Short name of the Leading CLM Account Holder |
| Pool   |  |
| Party BIC  | Party BIC                                    |
| Party Name   | Party short name                             |
| MFI Code   | MFI code of the party                        |
| Leading CLM Account Holder BIC   | BIC of the Leading CLM Account Holder        |
| Leading CLM Account Holder Name  | Short name of the Leading CLM Account Holder |

**Table 50 - PAR03 - Output description - table parties subject to minimum reserve**

| <b>PAR03 – Report description – output screen - table parties not subject to minimum reserve</b> |                                      |
|--|--------------------------------------|
| <b>Label</b>   | <b>Description</b>                   |
| Party BIC  | Party BIC                            |
| Party Name   | Party short name                     |
| MFI Code   | MFI-Code of the party (can be empty) |

**Table 51 - PAR03 - Output description - table parties not subject to minimum reserve**

## 5.9.4 PAR04 – List of ancillary systems

### Context of usage

This report provides information on those parties classified as ancillary system according to the party reference data attribute Party Type on a given date.

For each ancillary system, the party name and BIC and the corresponding accounts of the ancillary system, or linked through a settlement bank account group, in RTGS are reported.

For each account the account number and the ancillary system procedure (where applicable) is provided.

CBs can retrieve data of those ancillary systems belonging to their system entity.

This report can be used by CB users only .

### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [PAR – Participation Reports] >> [PAR04]

### Screenshot – prompt

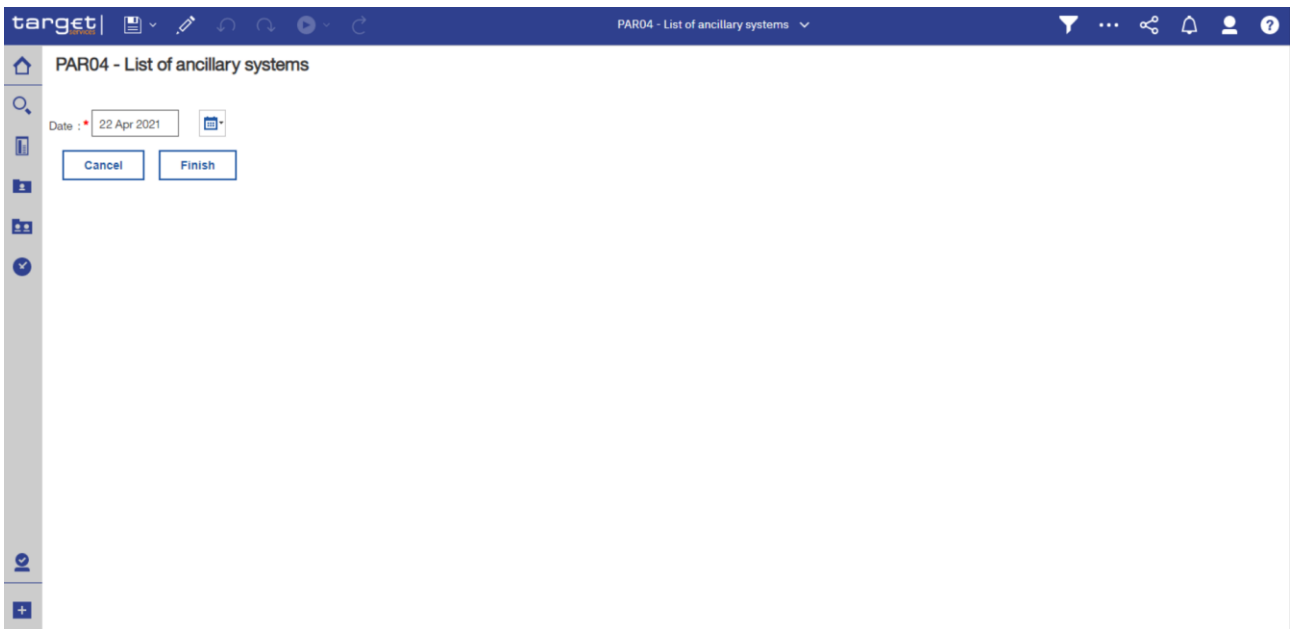


Figure 214 - PAR04 prompt

**Prompt description**

**PAR04 – Report description – prompt screen**

| Field label | Description  |
|-------------|--|
| Date        | <p>You can select the date by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory.</p> |

**Table 52 - PAR04 - Prompt description**

**Screenshot - output screen**

target | PAR04 - List of ancillary systems

2022-02-08 7:55:55 DEV - Development

CBXXKMD000 - Central Bank of Fiction  
Filters | Date : 2022-02-01

| Party BIC  | Party Name   | Ancillary System Type      | Service Party Type | Account Type         | Account Number            | Account Owner BIC | Account Owner Name            | AS Settlement Procedure |
|------------|--------------|----------------------------|--------------------|----------------------|---------------------------|-------------------|-------------------------------|-------------------------|
| ASAAKMD000 | MetroCapital | Security Settlement System | Ancillary System   | AS technical account | ASGUAFASAAKMD000XEUR0A02  | ASAAKMD000        | MetroCapital                  | A                       |
|            |              |                            | Ancillary System   | AS technical account | ASGUAFASAAKMD000XEUR0A02  | ASAAKMD000        | MetroCapital                  | B                       |
|            |              |                            | Ancillary System   | AS technical account | ASTECHASAAKMD000XEUR0A01  | ASAAKMD000        | MetroCapital                  | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCASAAMKMD000XEUR0A00 | ASAAKMD000        | MetroCapital                  | A                       |
|            |              |                            | Ancillary System   | AS technical account | RTGSDCASAAMKMD000XEUR0A01 | ASAAKMD000        | MetroCapital                  | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBAEKPD000XEUR0A01  | PBAEKPD000        | America First Savings & Loans | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBAEKPD000XEUR0D01  | PBAEKPD000        | America First Savings & Loans | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBBBKMD000XEUR0A01  | PBBBKMD000        | Banca de Bondi                | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBBBKMD000XEUR0D01  | PBBBKMD000        | Banca de Bondi                | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBBBKMD000XEUR0D11  | PBBBKMD000        | Banca de Bondi                | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBBFKPD000XEUR0A01  | PBBFKPD000        | Banco Português de Negócios   | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBBFKPD000XEUR0D01  | PBBFKPD000        | Banco Português de Negócios   | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBAAMKMD000XEUR0A01 | PBAAMKMD000       | Banco de Isthmus              | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBAAMKMD000XEUR0B01 | PBAAMKMD000       | Banco de Isthmus              | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBAAMKMD000XEUR0D01 | PBAAMKMD000       | Banco de Isthmus              | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBAAMKMD000XEUR0D02 | PBAAMKMD000       | Banco de Isthmus              | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBBEKMD000XEUR0A01  | PBBEKMD000        | Banco di San Giorgio          | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBBEKMD000XEUR0D01  | PBBEKMD000        | Banco di San Giorgio          | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBBEKMD000XEUR0D11  | PBBEKMD000        | Banco di San Giorgio          | A                       |
|            |              |                            | Ancillary System   | RTGS DCA             | RTGSDCPBBAKPD000XEUR0A01  | PBBAKPD000        | Bank of New England           | A                       |

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**Figure 215 - PAR04 output (1)**

| Party BIC   | Party Name    | Ancillary System Type      | Service Party Type | Account Type               | Account Number             | Account Owner BIC | Account Owner Name        | AS Settlement Procedure  |
|-------------|---------------|----------------------------|--------------------|----------------------------|----------------------------|-------------------|---------------------------|--------------------------|
| ASAAKMD000X | MetroCapital  | Security Settlement System | Ancillary System   | RTGS DCA                   | RTGSDCPBBAKMD000XEUR0A01   | PBBAKMD000X       | Telso's Mutual            | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBBAKMD000XEUR0D01   | PBBAKMD000X       | Telso's Mutual            | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBBAKMD000XEUR0D11   | PBBAKMD000X       | Telso's Mutual            | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBADKPD000XEUR0A01   | PBADKPD000X       | Thornburg Finance S.A.    | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBADKPD000XEUR0D01   | PBADKPD000X       | Thornburg Finance S.A.    | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBADKPD000XEUR0A01   | PBADKPD000X       | Washington Mutual         | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBADKPD000XEUR0D01   | PBADKPD000X       | Washington Mutual         | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBBFKMD000XEUR0A01   | PBBFKMD000X       | Welsler Venezuela Funding | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBBFKMD000XEUR0D01   | PBBFKMD000X       | Welsler Venezuela Funding | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBBFKMD000XEUR0D11   | PBBFKMD000X       | Welsler Venezuela Funding | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBAGKMD000XEUR0A01   | PBAGKMD000X       | Woodgrove Bank            | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBAGKMD000XEUR0D01   | PBAGKMD000X       | Woodgrove Bank            | A                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCPBAGKMD000XEUR0D11   | PBAGKMD000X       | Woodgrove Bank            | A                        |
|             |               |                            | ASABKMD000X        | Auslandskassenverein i.L.  | Security Settlement System | Ancillary System  | RTGS DCA                  | RTGSDCASABKMD000XEUR0A01 |
| ASACKMD000X | Discount Card | Retail Payment System      | Ancillary System   | AS guarantee funds account | RTGSDCASABKMD000XEUR0G01   | ASABKMD000X       | Auslandskassenverein i.L. | B                        |
|             |               |                            | Ancillary System   | RTGS DCA                   | RTGSDCASABKMD000XEUR0D02   | ASACKMD000X       | Discount Card             | E                        |

Figure 216 - PAR04 output (2)

**Output description**

| PAR04 – Report description – output screen |   |
|--|---|
| Field label                                | Description   |
| Party BIC                                  | Party BIC of the ancillary system   |
| Party Name                                 | Party short name of the ancillary system  |
| Ancillary system type                      | <p>Ancillary system type.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  High-Value-Payment- Systems (HVPS)</li> <li>  Retail-Payment-Systems (RPS)</li> <li>  Instant-Payment-Systems (IPS)</li> <li>  Security-Settlement-Systems (SSS)</li> <li>  Foreign-Exchange-Settlement-Systems</li> <li>  Money-Market-Settlement-Systems (MMS)</li> <li>  Central Counterparties (CCP)</li> <li>  Other</li> </ul> |
| Service party type                         | <p>Service party type linked to the party.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  Ancillary system</li> </ul>   |

|                         |  |
|-------------------------|--|
|                         | <ul style="list-style-type: none"> <li>  RTGS Account holder</li> </ul>  |
| Account type            | <p>Account type.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  RTGS CB account</li> <li>  RTGS DCA</li> <li>  RTGS sub-account</li> <li>  AS guarantee funds account</li> <li>  AS technical account</li> </ul> |
| Account number          | Account number, where the party (AS) is owner as well as those, that are linked to this party (AS) via its Settlement Bank Account Group.  |
| Account owner BIC       | BIC of the party owning the account. This can either be the AS itself or (in case the account is linked to the AS via the Settlement Bank Account Group) the AS settlement bank  |
| Account owner name      | Name of the party owning the account   |
| AS settlement procedure | <p>Optional criteria;</p> <p>Possible Values:</p> <p>A, B, C, D, E</p> <p>If not applicable, field is filled with “—”</p>  |

**Table 53 - PAR04 - Output description**

### 5.9.5 PAR05 – List of DCA cross-border links

#### **Context of usage**

This report provides information on those DCAs and their linked MCA when they are held in books of different CBs within a given month.

For each cross border link, the account number and the party BIC and name of the DCA and the linked account are reported. In addition, the country code of the CB being responsible for the respective account (DCA and the linked account) is displayed.

The report is provided in two different views (DCA and linked account view).

CBs can retrieve information on those cross border links where either the party owning the DCA and/or the party owning the linked account of a cross border link belongs to their system entity.

This report can be used by CB users only.

## Report access<sup>2</sup>

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [PAR – Participation Reports] >> [PAR05]

## Screenshot – prompt

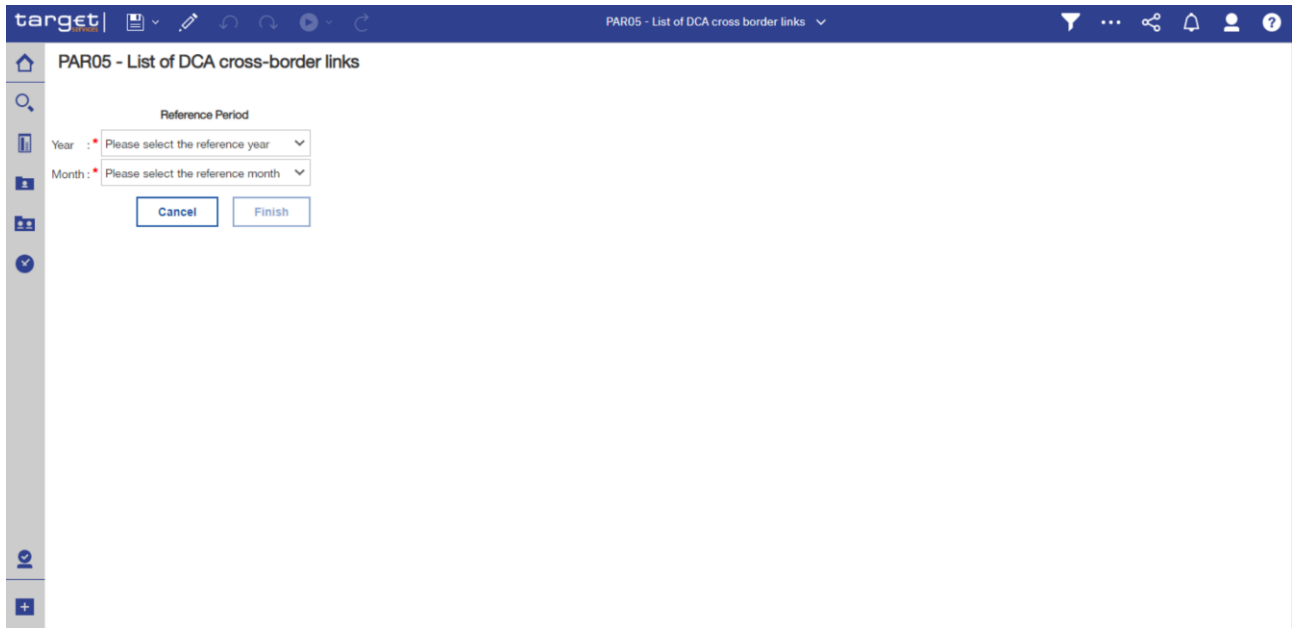


Figure 217 - PAR05 prompt

2 This report currently shows empty results since DCA cross border links no longer exist in T2 (contrary to Target2). Will be transformed by a future CR to show cross-service billing groups.



**Prompt description**

| PAR05 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Year                                       | <p>You can use this drop-down field to select the year, from which the report should contain the data.</p> <p>This field is mandatory</p>   |
| Month                                      | <p>You can use this drop-down field to select the month, from which the report should contain the data.</p> <p>For a valid report result, it is necessary to select at least the previous Month.</p> <p>This field is mandatory</p> |

Table 54 - PAR05 - Prompt description

**Screenshot - output screen**

target | PAR05 - List of DCA cross border links

2021-03-03 10:02:21  
DEV - Development and integration

CBXXKMD0XXX - Central Bank of Fiction  
Filters | Reference Period : April - 2019

| DCA                      |             |                      | Linked MCA               |             |                 |                 |
|--------------------------|-------------|----------------------|--------------------------|-------------|-----------------|-----------------|
| Account Number           | Party BIC   | Party Name           | Account Number           | Party BIC   | Party Name      | Country Code CB |
| RTGSDCPBBBKMD0XXXEUR0A01 | PBBBKMD0XXX | Banca de Bondi       | MACASHPBBDKPD0XXXEUR0A01 | PBBDKPD0XXX | Bankhaus Medici | KP              |
| RTGSDCPBBBKMD0XXXEUR0A01 | PBBBKMD0XXX | Banco di San Giorgio | MACASHPBBDKPD0XXXEUR0A01 | PBBDKPD0XXX | Bankhaus Medici | KP              |
| RTGSDCPBBBKMD0XXXEUR0A01 | PBBBKMD0XXX | Monte Pio            | MACASHPBBDKPD0XXXEUR0A01 | PBBDKPD0XXX | Bankhaus Medici | KP              |

NORU82000001 - CBXXKMD0 (NOR) Normal | Page: 1 of 7

Figure 218 - PAR05 output (1) – DCA view

target services | PAR05 - List of DCA cross border links

2021-03-03 10:02:21  
DEV - Development and integration

CBXXKMD0XXX - Central Bank of Fiction  
Filters | Reference Period : April - 2019

| MCA                      |             |                      | Linked DCA     |             |                               |                 |
|--------------------------|-------------|----------------------|----------------|-------------|-------------------------------|-----------------|
| Account Number           | Party BIC   | Party Name           | Account Number | Party BIC   | Party Name                    | Country Code CB |
| MACASHPBAFKMD0XXXEUR0A01 | PBAFKMD0XXX | Dagobert Duck Thrift | RDCA           | PBAAKPD0XXX | Lehman Brothers Bankhaus AG   | KP              |
| MACASHPBAFKMD0XXXEUR0A01 | PBAFKMD0XXX | Dagobert Duck Thrift | RDCA           | PBAEKPD0XXX | America First Savings & Loans | KP              |
| MACASHPBAFKMD0XXXEUR0A01 | PBAFKMD0XXX | Dagobert Duck Thrift | RDCA           | PBBAKPD0XXX | Bank of New England           | KP              |

NORU82000001 - CBXXKMD0 (NOR) Normal | Page: 2 of 7

Figure 219 - PAR05 output (2) – Linked account view

**Output description**

**PAR05 –Report description – output screen – table DCA view**

| Field label                        | Description  |
|------------------------------------|--|
| DCA, list sorted by account number |  |
| Account Number                     | Dedicated cash account number with a cross-border link during the selected month |
| Party BIC                          | BIC of the party owning the DCA  |
| Party Name                         | Short name of the party owning the DCA.  |
| Linked MCA                         |  |
| Account Number                     | MCA number corresponding to the DCA  |
| Party BIC                          | BIC of the party owning the MCA  |
| Party Name                         | Short name of the party owning the MCA.  |
| Country Code CB                    | Country code of the CB responsible for the MCA                                   |

Table 55 - PAR05 - Output description - Table DCA View

**PAR05 –Report description – output screen – table linked account view**

| Field label                        | Description |
|------------------------------------|-------------|
| MCA, list sorted by account number |             |

|                 |   |
|-----------------|---|
| Account Number  | MCA number  |
| Party BIC       | BIC of the party owning the MCA   |
| Party Name      | Short name of the party owning the MCA                                  |
| Linked DCA      |   |
| Account Number  | Dedicated cash account number corresponding to the MCA                  |
| Party BIC       | BIC of the party owning the DCA   |
| Party Name      | Short name of the party owning the DCA.                                 |
| Country Code CB | Country code of the CB responsible for the MCA corresponding to the DCA |

**Table 56 - PAR05 - Output description - Table linked account view**

### 5.9.6 PAR06 – Number of participants per CB

#### **Context of usage**

This report provides information on the number of participants per participation type according to RTGS Directory on a given date.

For each participation type in RTGS Directory, the number (total and per CB) of participants on the given date is reported. In addition, the number of unpublished RTGS DCAs belonging to payment banks and the number of Direct Participants (payment banks) having a different BIC8 is provided in the same manner.

CBs can retrieve aggregated numbers (overall and per CB) for all CBs/system entities.

This report can be used by CB users only.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [PAR – Participation Reports] >> [PAR06]

**Screenshot – prompt**



**Figure 220 - PAR06 prompt**

**Prompt description**

**PAR06 – Report description – prompt screen**

| Field label | Description   |
|-------------|---|
| Date        | <p>You can select the date by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory</p> |

**Table 57 - PAR06 - Prompt description**

**Screenshot - output screen**

| Country code           |           |             |            | Direct Participants                      |   | Indirect Participants | Multi-Addressee | Addressable BICs | Ancillary Systems |
|------------------------|-----------|-------------|------------|--|---|-----------------------|-----------------|------------------|-------------------|
|                        | Published | Unpublished | Overall    | Payment banks with at least one RTGS DCA | Number of RTGS DCAs having a different BIC8 |                       |                 |                  |                   |
| FO                     | 1         | 1           | 2          | 1  | 1   | 0                     | 0               | 0                | 0                 |
| KM                     | 19        | 21          | 40         | 17                                       | 19  | 2                     | 5               | 4                | 1                 |
| KP                     | 20        | 18          | 38         | 16                                       | 18  | 0                     | 1               | 0                | 1                 |
| KW                     | 18        | 18          | 36         | 15                                       | 17  | 0                     | 0               | 0                | 1                 |
| <b>Overall - Total</b> | <b>58</b> | <b>58</b>   | <b>116</b> | <b>49</b>                                | <b>55</b>                                   | <b>2</b>              | <b>6</b>        | <b>4</b>         | <b>3</b>          |

**Figure 221 - PAR06 output**

**Output description**

| PAR06 – Report description – output screen |   |
|--|---|
| Field label                                | Description   |
| Country                                    | ISO country code  |
| Direct Participants                        |   |
| Published                                  | Number of published RTGS DCA Account BICs   |
| Unpublished                                | Number of unpublished RTGS DCA Account BICs   |
| Overall                                    | Number of published + unpublished RTGS DCA Account BICs   |
| Payment banks with at least one RTGS DCA   | Distinct number of payment banks having at least one RTGS DCA   |
| Direct Participants accord. BIC8-Criterion | Distinct number of RTGS DCA Account BICs for each CB on BIC8-Level (without the last 3 positions of BIC11)<br><br>Every BIC needs to have 11 characters, but in this column all accounts are summed up, that have the same first 8 characters in their account BIC (the trailing three are disregarded) |
| Indirect Participants                      | Number of Indirect Participants   |
| Multi-Addressee                            | Number of all types of Multi-addressees   |

|                   |  |
|-------------------|--|
| Addressable BICs  | Number of all types of Addressable BICs              |
| Ancillary Systems | Number of parties with party type = ancillary system |
| Overall - Total   | Sums for each of the columns                         |

**Table 58 - PAR06 - Output description**

## 5.10 Standing facilities reports (STF)

### 5.10.1 STF01 – Standing facility information

#### **Context of usage**

This report provides daily information on the use of standing facilities within a given data range. In addition to the party BIC/name, entities are reported with their respective MFI code. The report provides information on payment banks with access to monetary policy operations and is split in two parts: Marginal lending and overnight deposit.

For each facility and day the set-up amount, the refund amount and the interest amount is reported. For the marginal lending facility, the reported amounts include both, the use of marginal lending on request and the use of automated marginal lending.

CBs can retrieve information on the use of standing facilities of those parties belonging to their system entity.

Note: After the launch of Eurosystem Collateral Management System (ECMS) this report will only provide information on the use of the overnight deposit facility as major parts of the marginal lending facility will be no more handled by CLM, but by ECMS. Further information can be found in CLM UDFS chapters “Marginal lending on request” and “Automated marginal lending”.

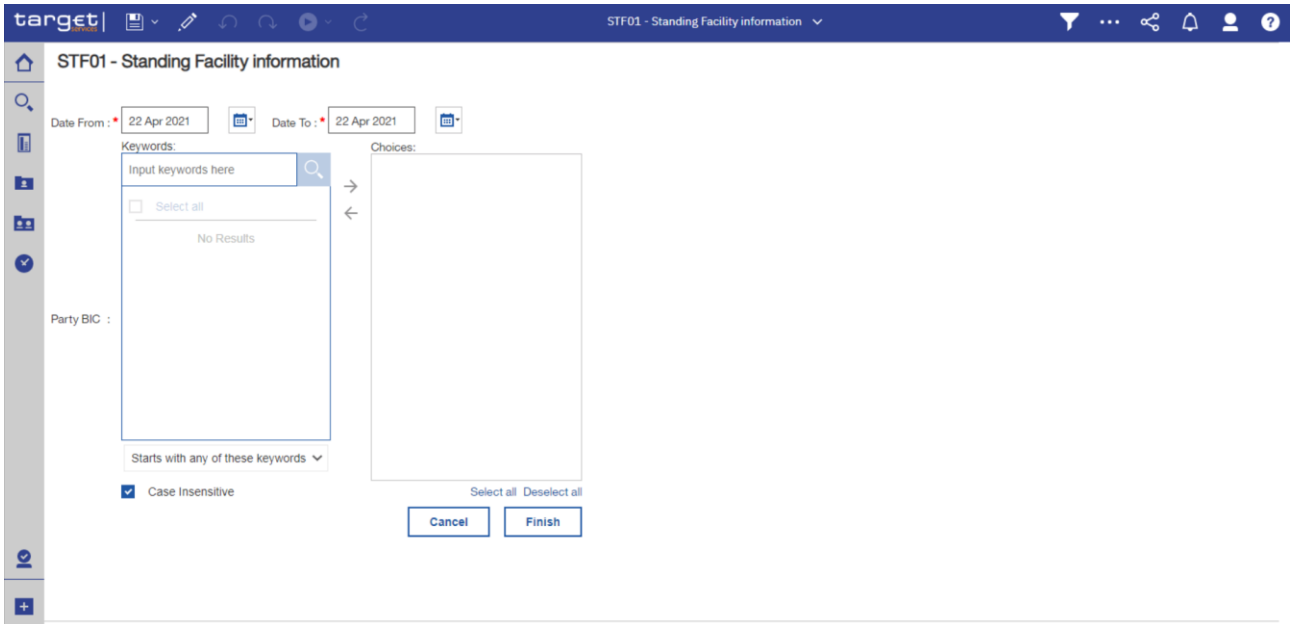
This report can be used by CB and PB users.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [STF – Standing Facilities Reports] >> [STF01]

**Screenshot – prompt**



**Figure 222 - STF01 prompt**

**Prompt description**

**STF01 – Report description –prompt screen**

| Field label | Description  |
|-------------|--|
| Date From   | You can select the date by clicking on the calendar.<br>This field is mandatory.   |
| Date To     | You can select the end date of the period, for which the report should contain the data by clicking on the calendar.<br>For valid report result, the current day cannot be selected.<br>This field is mandatory. |
| Party BIC   | You can use this search and select prompt to search for the party BIC or short name. One, several or all parties can be selected.<br>This field is mandatory.  |

**Table 59 - STF01 - Prompt description**

Screenshot - output screen

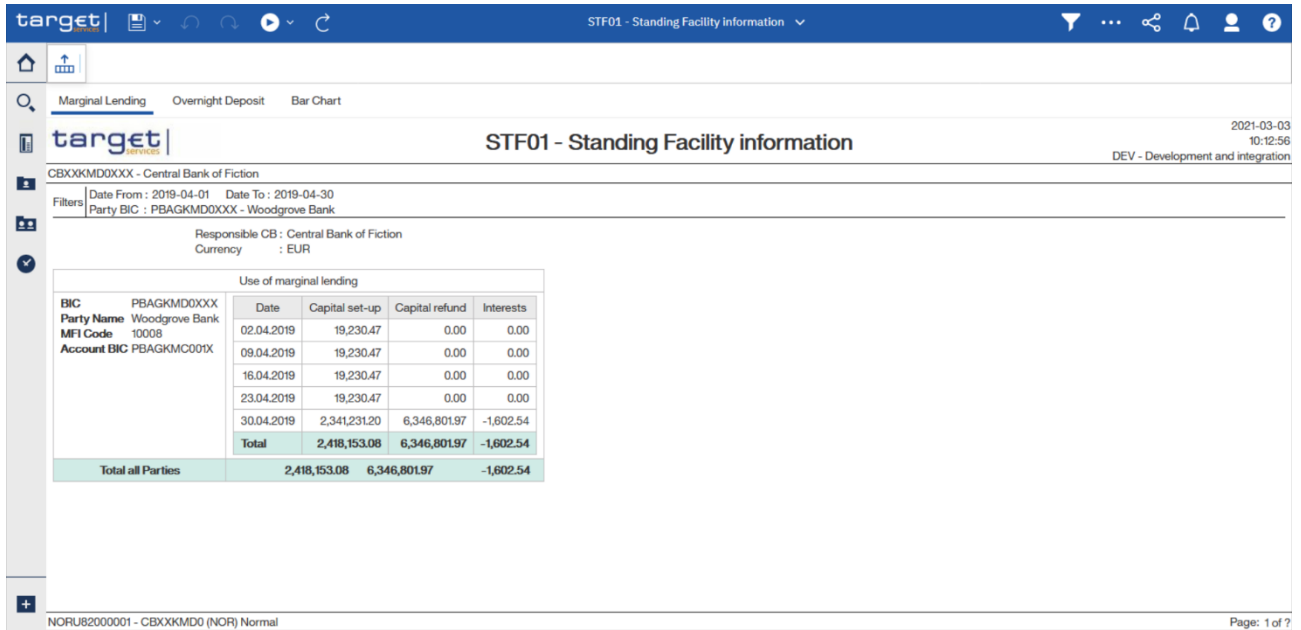


Figure 223 - STF01 output (1)

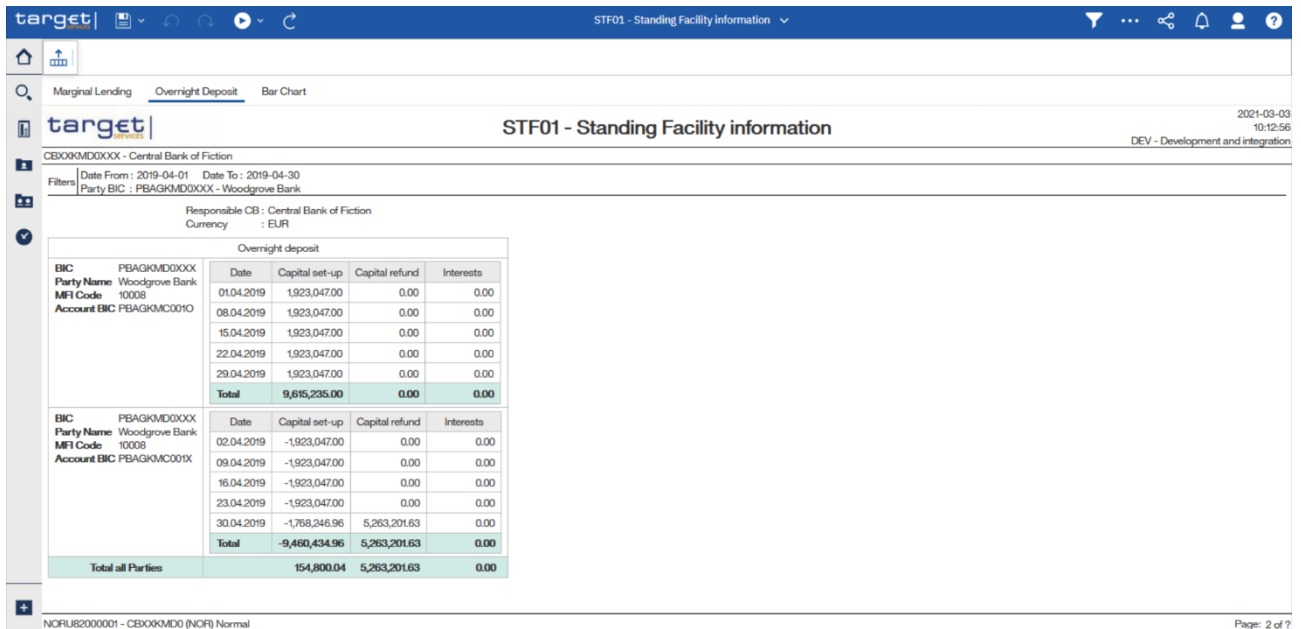


Figure 224 - STF01 output (2)



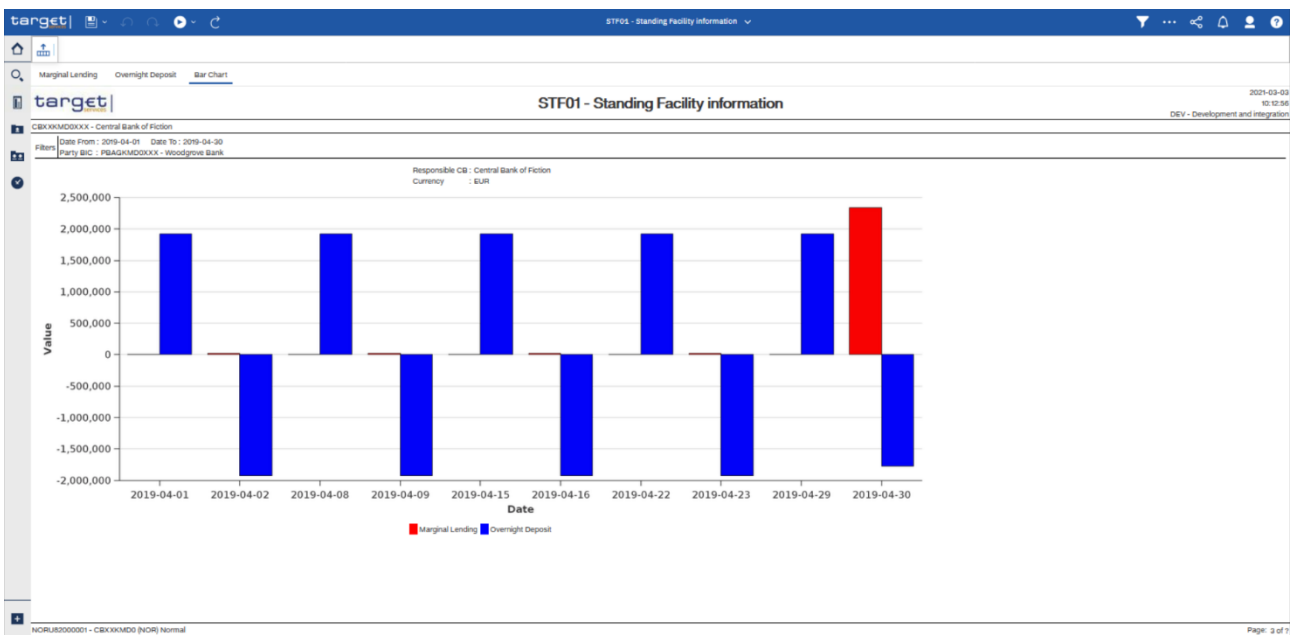


Figure 225 - STF01 output (3)

**Output description**

**STF01 – Report description – output screen – table use of marginal lending**

| Field label   | Description  |
|---|--|
| The table contains the following details for each selected party (sorted by party BIC): |  |
| BIC   | BIC of the party holding the default MCA   |
| Party name  | Short name of the party holding the default MCA  |
| Account BIC   | Account BIC of the default MCA   |
| MFI Code  | MFI code of the party holding the default MCA  |
| Date  | Date of the chosen Date range in the search prompt. The following details will be repeated for each business day (sorted by date).   |
| Capital set-up  | Total value of liquidity granted to the party minus the on-demand reverse operation between default MCA of the party and its dedicated ML account.<br><br>This value considers automatic and on-demand marginal lending. |
| Capital refund  | Total value of liquidity reimbursed by the party on a daily basis.   |

|   |  |
|---|--|
| Interest  | Total value of interests paid by the party.<br><br>In case of multiple marginal lending operations, automatic and on request, for the same CLM account holder, the interest is calculated on the basis of the aggregated marginal lending amount by CLM. |
| “Total” per party for capital set-up capital refund interests   | For all business days for each party   |
| “Total all Parties” for capital set-up capital refund interests | For all business days and all parties  |

**Table 60 - STF01 - Output description - Table use of marginal lending**

| STF01 – Report description – output screen – table overnight deposit                   |  |
|--|--|
| Field label  | Description  |
| The table contains the following details for each selected party (sorted by party BIC) |  |
| BIC  | BIC of the party holding the default MCA   |
| Party name   | Short name of the party holding the default MCA  |
| Account BIC  | Account BIC of the default MCA   |
| MFI Code   | MFI code of the party holding the default MCA  |
| Date   | Date of the chosen date range in the search prompt. The following details will be repeated for each business day (sorted by date).   |
| Capital set-up   | The overnight deposit capital set-up amount.<br><br>This amount equals the (positive) end of day balance on the dedicated overnight deposit account (owned by the responsible CB) per default MCA holder.<br><br>The balance is the result of liquidity transfers of a party to its dedicated overnight deposit account minus possible overnight deposit reverse transactions on a given business day. |
| Capital refund   | Total value of liquidity reimbursed to the party on a daily basis.   |

|   |  |
|---|--|
| Interest  | Amount of overnight deposit interests received by the party on a daily basis.<br><br>Note:<br><br>Depending on the interest rate for overnight deposit in CRDM, interest amounts are displayed positive (positive interest rate) or negative (negative interest rate). |
| Total per party for capital set-up capital refund interests   | For all business days for each party   |
| Total all Parties for capital set-up capital refund interests | For all business days and all parties  |

**Table 61 - STF01 - Output description - Table overnight deposit**

| <b>STF01 – Report description – output screen - bar chart for marginal lending and overnight deposit</b> |  |
|--|--|
| <b>Field label</b>   | <b>Description</b>   |
| x-axis: Date   | Bar chart:   |
| y-axis:  | Each business day within the given date range has an entry on the x-axis-  |
| - The amount of marginal lending capital set-up  | The amounts of each facility for each business day is calculated as:<br>sum over all capital set-ups (per facility) of all parties (for each business day) |
| - The amount of overnight deposit capital set-up   | Marginal lending and overnight deposit are separately shown for each business day and are differentiated by separate colours.                              |
| Total all Parties for capital set-up capital refund interests  | For all business days and all parties  |

**Table 62 - STF01 - Output description - Bar chart for marginal lending and overnight deposit**

## 5.11 Statement reports (STA)

### 5.11.1 STA01 – Statement of account (single account)

#### **Context of usage**

This report provides information on all cash transfers debited or credited on an account in CLM or RTGS for a given date (range).

For each business day the account balance at the beginning and the end of the day is reported. In between, the report lists all cash transfers in the order of their CLM/RTGS settlement timestamp. For each cash transfer an ID, the currency of the instructed amount, the party BIC of the counterparty, the service/component where

the account of the counterparty is located and the debit/credit settlement value are provided. Each cash transfer is reported with the respective account balance after its settlement.

For each business day the volume and value (separate for debits and credits) of cash transfers are calculated.

CBs can retrieve account statement information for those parties belonging to their system entity.

Note: No information is provided for RTGS sub-accounts and accounts in the Contingency Services.

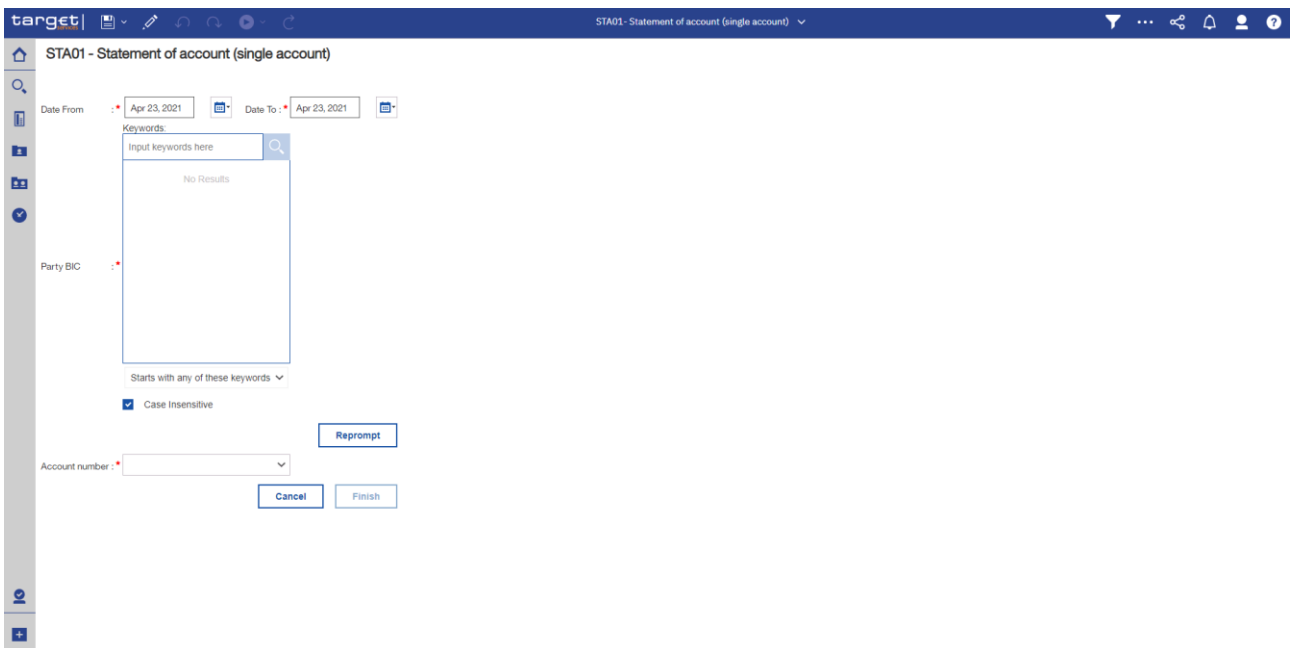
This report can be used by CB, PB and AS users.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [STA – Statement Reports] >> [STA01]

**Screenshot – prompt**



**Figure 226 - STA01 prompt (1)**

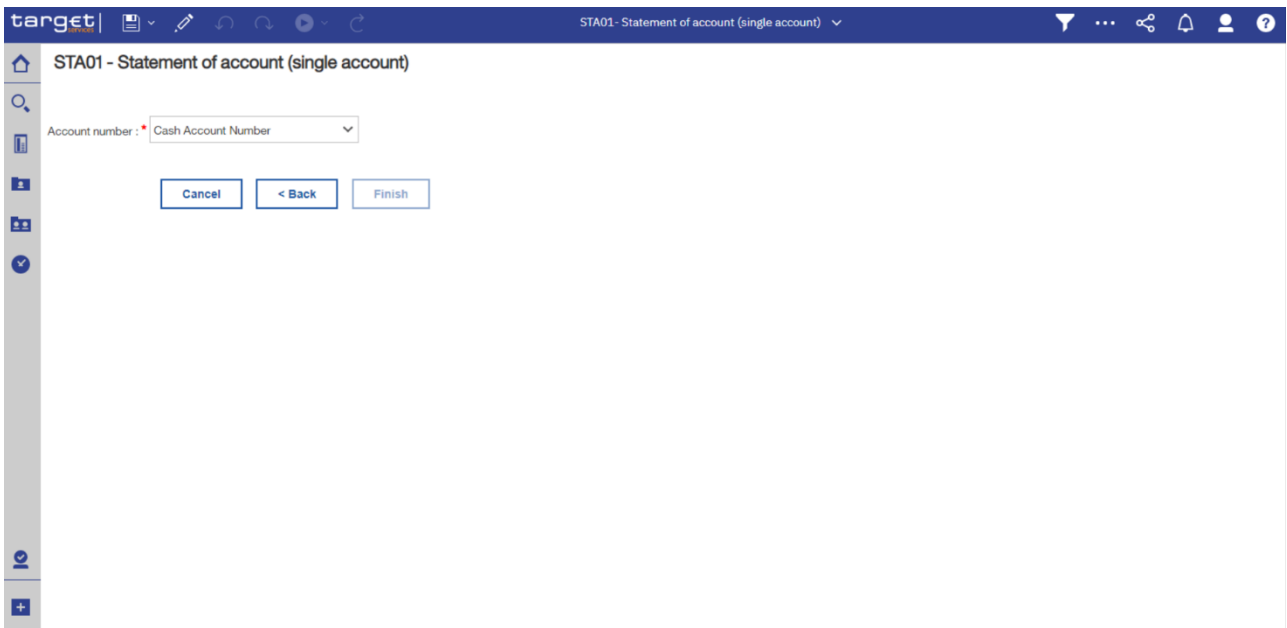


Figure 227 - STA01 prompt (2)

**Prompt description**

| STA01 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Date from                                  | You can select the date by clicking on the calendar.<br><br>This field is mandatory.  |
| Date to                                    | You can select the end date of the period, for which the report should contain the data by clicking on the calendar.<br><br>For valid report results, the current day cannot be selected.<br><br>This field is mandatory.   |
| Party BIC                                  | You can use this search and select prompt to be able to search for the party BIC or short name.<br><br>This field is mandatory.   |
| Account number                             | You can choose here the cash account number for which the account statement should be generated.<br><br>Only account numbers under the selected party BIC can be selected (either CLM or RTGS accounts).<br><br>RTGS sub-accounts and accounts in the contingency services are excluded in this report.<br><br>This field is mandatory. |

Table 63 - STA01 - Prompt description

Screenshot - output screen

The screenshot displays the Target Services web interface for a Statement of Account (STA01) for the account PBAAKMD0XXX - Banco de Isthmus. The interface includes a header with the Target logo and navigation icons, and a main content area with filters, account details, and a table of cash transfers.

**Filters:**  
 Date From : 2019-04-01  
 Date To : 2019-04-30  
 Party BIC : PBAAKMD0XXX - Banco de Isthmus  
 Account number : MACASHPBAAKMD0XXXEUR0A01

**Account Statement (single account)**  
 National Sorting Code: NSORT00000000058    Currency: EUR  
 Account Type: CMCA    Party Address: Penny Lane 771 8000013 Frankfurt  
 Place and Date: Montelongo, 2021-04-23    Created by: PBAAKMD0XXX - Banco de Isthmus

**Account number : MACASHPBAAKMD0XXXEUR0A01**

**Date: 2019-04-01** SoD 2,644,188,822.00

| Reference Id 1                        | Reference Id 2    | Settlement timestamp    | Counterpart country code | Counterpart party BIC | Counterpart account BIC | Counterpart service | Debit        | Credit                             | Balance             |                             |
|---------------------------------------|-------------------|-------------------------|--------------------------|-----------------------|-------------------------|---------------------|--------------|------------------------------------|---------------------|-----------------------------|
| UETR_2018141151270                    | E2E_2018141151270 | 2019-04-01 17:48:23.001 | KM                       | CBXXKMD0XXX           | PBAAKMC001O             | CLM                 | 1,923,046.00 |                                    | 2,642,265,776.00    |                             |
| UETR_2018141200192                    | E2E_2018141200192 | 2019-04-01 17:48:23.164 | KM                       | CBXXKMD0XXX           | PBAAKMC001M             | CLM                 | 19,230.46    |                                    | 2,642,246,545.54    |                             |
| <b>Total number of cash transfers</b> |                   |                         |                          |                       |                         |                     | <b>2</b>     | <b>Total sum of cash transfers</b> | <b>1,942,276.46</b> | <b>EoS 2,642,246,545.54</b> |

**Date: 2019-04-02** SoD 2,642,246,545.54

| Reference Id 1     | Reference Id 2    | Settlement timestamp    | Counterpart country code | Counterpart party BIC | Counterpart account BIC | Counterpart service | Debit | Credit       | Balance          |
|--------------------|-------------------|-------------------------|--------------------------|-----------------------|-------------------------|---------------------|-------|--------------|------------------|
| UETR_2018141198848 | E2E_2018141198848 | 2019-04-01 17:48:23.055 | KM                       | CBXXKMD0XXX           | PBAAKMC001O             | CLM                 |       | 1,923,046.00 | 2,644,169,591.54 |
| UETR_2018141200340 | E2E_2018141200340 |                         |                          |                       |                         |                     |       | 19,230.46    | 2,644,188,822.00 |

Navigation: Top, Page up, Page down, Bottom

Figure 228 - STA01 output (1)

| target                                  |                         | STA01- Statement of account (single account) |                      |                      |                             |
|---|-------------------------|--|----------------------|----------------------|-----------------------------|
| Settlement timestamp                    | 2019-04-30 17:04:32.914 |  |                      |                      |                             |
| Counterpart country code                | KR                      |  |                      |                      |                             |
| Counterpart party BIC                   | CBXXXKRD0XXX            |  |                      |                      |                             |
| Counterpart account BIC                 |                         |  |                      |                      |                             |
| Counterpart service                     | CLM                     |  |                      |                      |                             |
| Reference id 1                          | not provided            | 0.00   |                      |                      | 2,644,410,186.01            |
| Reference id 2                          | E2E_2018141190973       |  |                      |                      |                             |
| Settlement timestamp                    | 2019-04-30 17:04:32.957 |  |                      |                      |                             |
| Counterpart country code                | KI                      |  |                      |                      |                             |
| Counterpart party BIC                   | CBXXXKID0XXX            |  |                      |                      |                             |
| Counterpart account BIC                 |                         |  |                      |                      |                             |
| Counterpart service                     | CLM                     |  |                      |                      |                             |
| Reference id 1                          | not provided            | 0.00   |                      |                      | 2,644,410,186.01            |
| Reference id 2                          | E2E_2018141191099       |  |                      |                      |                             |
| Settlement timestamp                    | 2019-04-30 17:04:32.999 |  |                      |                      |                             |
| Counterpart country code                | PL                      |  |                      |                      |                             |
| Counterpart party BIC                   | CBXXPLD0XXX             |  |                      |                      |                             |
| Counterpart account BIC                 |                         |  |                      |                      |                             |
| Counterpart service                     | CLM                     |  |                      |                      |                             |
| Reference id 1                          | not provided            | 0.00   |                      |                      | 2,644,410,186.01            |
| Reference id 2                          | E2E_2018141191225       |  |                      |                      |                             |
| Settlement timestamp                    | 2019-04-30 17:04:33.041 |  |                      |                      |                             |
| Counterpart country code                | CZ                      |  |                      |                      |                             |
| Counterpart party BIC                   | CBXXCZD0XXX             |  |                      |                      |                             |
| Counterpart account BIC                 |                         |  |                      |                      |                             |
| Counterpart service                     | CLM                     |  |                      |                      |                             |
| Reference id 1                          | not provided            | 0.00   |                      |                      | 2,644,410,186.01            |
| Reference id 2                          | E2E_2018141191351       |  |                      |                      |                             |
| Settlement timestamp                    | 2019-04-30 17:04:33.083 |  |                      |                      |                             |
| Counterpart country code                | GL                      |  |                      |                      |                             |
| Counterpart party BIC                   | CBXXGLD0XXX             |  |                      |                      |                             |
| Counterpart account BIC                 |                         |  |                      |                      |                             |
| Counterpart service                     | CLM                     |  |                      |                      |                             |
| Reference id 1                          | not provided            | 0.00   |                      |                      | 2,644,410,186.01            |
| Reference id 2                          | E2E_2018141191477       |  |                      |                      |                             |
| Settlement timestamp                    | 2019-04-30 17:04:33.125 |  |                      |                      |                             |
| Counterpart country code                | FO                      |  |                      |                      |                             |
| Counterpart party BIC                   | CBXXFOD0XXX             |  |                      |                      |                             |
| Counterpart account BIC                 |                         |  |                      |                      |                             |
| Counterpart service                     | CLM                     |  |                      |                      |                             |
| Reference id 1                          | UETR_2018141201071      | 1,602.54                                     |                      |                      | 2,644,408,583.47            |
| Reference id 2                          | E2E_2018141201071       |  |                      |                      |                             |
| Settlement timestamp                    | 2019-04-30 17:48:23.056 |  |                      |                      |                             |
| Counterpart country code                | KM                      |  |                      |                      |                             |
| Counterpart party BIC                   | CBXXXKMD0XXX            |  |                      |                      |                             |
| Counterpart account BIC                 |                         |  |                      |                      |                             |
| Counterpart service                     | CLM                     |  |                      |                      |                             |
| <b>Total number of cash transfers</b>   | <b>75</b>               | <b>Total sum of cash transfers</b>           | <b>86,225,223.58</b> | <b>88,387,262.52</b> | <b>EoD 2,644,408,583.47</b> |
| <b>Overall number of cash transfers</b> | <b>93</b>               | <b>Overall sum of cash transfers</b>         | <b>95,936,609.92</b> | <b>96,156,371.39</b> |                             |

Figure 229 - STA01 output (2)

**Output description**

**STA01 – Report description – output screen**

| Field label                                 | Description  |
|---|--|
| Party Address                               | Street, house number, postal code and city of the selected Party                             |
| National Sorting Code                       | NSC of the selected Party  |
| Currency                                    | Currency of the selected Party   |
| “Place and date” + City + date              | City of the user’s party + current date. Used as place and date of creation of the report    |
| “Created by” + Party BIC + Party short name | The user’s party. Used for information about the executor of the report in line “created by” |
| Account Type                                | Account type of selected account number  |
| Date  | Business day   |

|   |  |
|---|--|
| Balance of account (SoD)                | Balance of account (SoD) is always shown, even if there is no cash transfer during the business day.   |
| Reference 1                             | <p>Depending on the message that caused the cash transfer, the following reference type is listed:</p> <ul style="list-style-type: none"> <li>  camt.050: Message ID (from BAH)</li> <li>  pacs.004: original UETR</li> <li>  pacs.008: UETR</li> <li>  pacs.009: UETR</li> <li>  pacs.010: UETR</li> </ul> <p>If no reference can be found, this field is left empty.</p> |
| Reference 2                             | <p>End To End ID</p> <p>If no reference can be found, this field is left empty.</p>  |
| Settlement timestamp                    | Settlement timestamp of the cash transfer  |
| Counterparty country code               | ISO country code of the counterparty   |
| Counterparty party BIC                  | Party BIC of the counterparty  |
| Counterparty account BIC                | Account BIC of the counterparty; If no account BIC exists (e.g. for marginal lending accounts), the value “-“ is filled in   |
| Counterparty service                    | Service of the counterparty  |
| Debit                                   | Debited value of the cash transfer- If the settlement was debited  |
| Credit                                  | Credited value of the cash transfer - If the settlement was credited   |
| Balance                                 | Calculated balance of the account after the settlement of the cash transfer  |
| Volume (number of cash transfers)       | Volume of cash transfers during the business day   |
| Value (sum of cash transfers debited)   | Value of debited cash transfers during the business day  |
| Value (sum of cash transfers credited)  | Value of credited cash transfers during the business day   |
| Balance of Account (EoD)                | <p>Balance of the account at the end of the business days</p> <p>Balance of account (EoD) is always shown, even if there is no cash transfer during the business day.</p>  |
| Total Volume (number of cash transfers) | Total volume over all business days within the selected date range   |



|  |  |
|--|--|
| Total Value (of all cash transfers) debited  | Total value of debited cash transfers over all business days within the selected date range  |
| Total Value (of all cash transfers) credited | Total value of credited cash transfers over all business days within the selected date range |
| Balance                                      | EoD balance at the end of the date range   |

**Table 64 - STA01 - Output description**

### 5.11.2 STA02 – Statement of account (co-managed accounts)

#### **Context of usage**

This report provides information on all cash transfers debited or credited on one or several co-managed MCAs in CLM for a given date (range).

Apart from that, the content of the report is congruent to STA01.

Co-managers can retrieve account statement information on single or all of their co-managed accounts.

CBs can retrieve account statement for those parties belonging to their system entity.

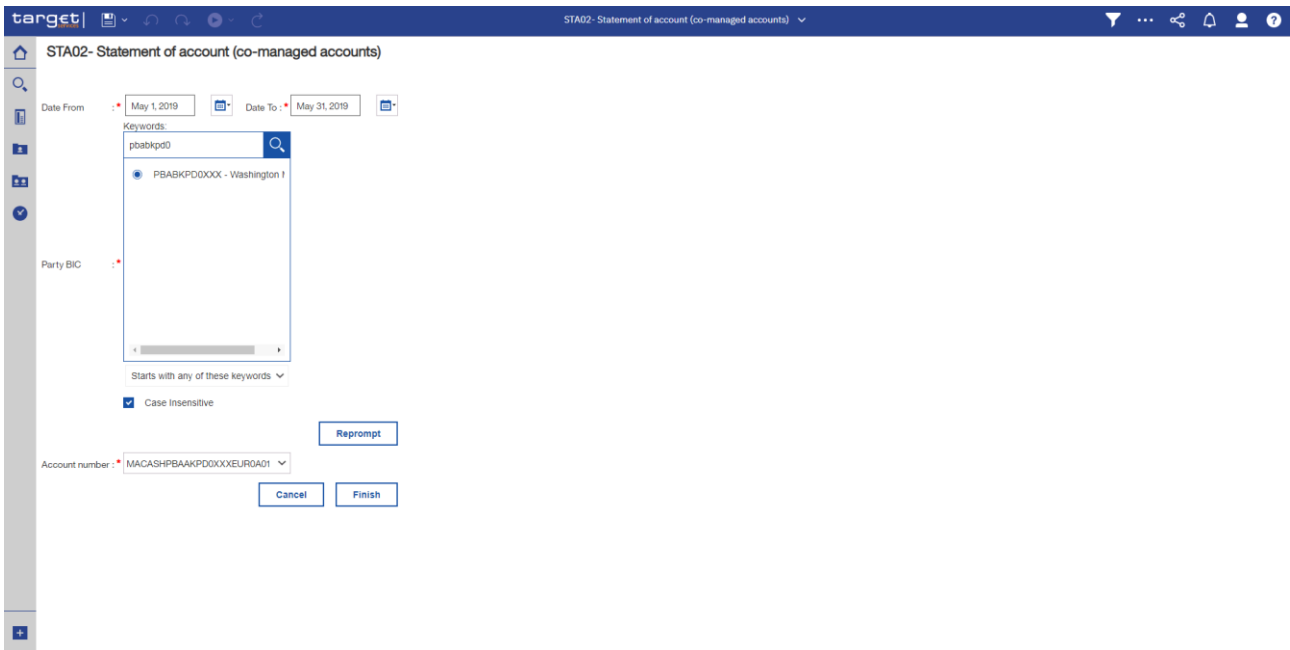
This report can be used by CB and PB users.

#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [STA – Statement Reports] >> [STA02]

**Screenshot – prompt**



**Figure 230 - STA02 prompt**

**Prompt description**

| STA02 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Date From                                  | You can select the date by clicking on the calendar.<br><br>This field is mandatory. |

|                |   |
|----------------|---|
| Date To        | <p>You can select the end date of the period, for which the report should contain the data by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory</p> |
| Party BIC      | <p>You can use this search and select prompt to search for the party BIC or short name</p> <p>This field is mandatory</p>   |
| Account number | <p>You can select here the cash account number for which the account statement should be generated.</p> <p>Only MCA numbers under the selected party BIC can be selected</p> <p>This field is optional.</p>                     |

Table 65 - STA02 - Prompt description

Screenshot - output screen

The screenshot displays the 'STA02 - Statement of account (Co-managed account)' interface. It features a top navigation bar with the 'target' logo and various icons. Below the navigation bar, there is a search bar and a title 'STA02 - Statement of account (Co-managed account)'. The main content area shows filters for 'Date From', 'Date To', 'Party BIC', and 'Account number'. Below the filters, there is a section for 'Account Statement (single account)' with details such as 'National Sorting Code', 'Currency', 'Account Type', 'Party Address', and 'Place and Date'. The bottom part of the screenshot shows a table with columns for 'Reference Id', 'Debit', 'Credit', and 'Balance', containing data for two dates: 2019-05-01 and 2019-05-02.

| Reference Id                          | Debit    | Credit          | Balance                 |
|---------------------------------------|----------|-----------------|-------------------------|
| Reference Id 1                        |          | 1,602.54        | 7,211,431,662.54        |
| Reference Id 2                        |          |                 |                         |
| Settlement timestamp                  |          |                 |                         |
| Counterpart country code              |          |                 |                         |
| Counterpart party BIC                 |          |                 |                         |
| Counterpart account BIC               |          |                 |                         |
| Counterpart service                   |          |                 |                         |
| <b>Total number of cash transfers</b> | <b>1</b> | <b>1,602.54</b> | <b>7,211,431,662.54</b> |

Figure 231 - STA02 output (1)

| Reference Id 1                        | Reference Id 2    | Settlement timestamp    | Counterparty country code | Counterparty party BIC | Counterparty account BIC | Counterparty service | Value 1   | Value 2                            | Value 3               |                       |                               |
|---------------------------------------|-------------------|-------------------------|---------------------------|------------------------|--------------------------|----------------------|-----------|------------------------------------|-----------------------|-----------------------|-------------------------------|
| not provided                          | E2E_2018141191275 | 2019-05-30 17:04:23.000 | CZ                        | CBXXCZ00XXX            |                          | CLM                  | 0.00      |                                    | 7211704,644.16        |                       |                               |
| not provided                          | E2E_2018141191527 | 2019-05-30 17:04:23.000 | GL                        | CBXXGLD0XXX            |                          | CLM                  | 0.00      |                                    | 7211704,644.16        |                       |                               |
| not provided                          | E2E_2018141201121 | 2019-05-30 17:48:23.000 | FO                        | CBXXFOD0XXX            |                          | CLM                  | 0.00      |                                    | 7211703,041.62        |                       |                               |
| UETR_201814201121                     | E2E_201814201121  | 2019-05-30 17:48:23.000 | KP                        | CBXXKP00XXX            |                          | CLM                  | 1,602.54  |                                    | 7211703,041.62        |                       |                               |
| <b>Total number of cash transfers</b> |                   |                         |                           |                        |                          |                      | <b>73</b> | <b>Total sum of cash transfers</b> | <b>106,277,273.36</b> | <b>106,548,514.98</b> | <b>SoD 526,451,111,774.91</b> |
| Date: 2019-05-31                      |                   |                         |                           |                        |                          |                      |           |                                    |                       |                       |                               |
|                                       |                   |                         |                           |                        |                          |                      |           | Debit                              | Credit                | Balance               |                               |
|                                       |                   |                         |                           |                        |                          |                      |           |                                    |                       | 7,211,431,860.00      |                               |
| <b>Total number of cash transfers</b> |                   |                         |                           |                        |                          |                      | <b>90</b> | <b>Total sum of cash transfers</b> | <b>114,046,391.32</b> | <b>114,319,235.48</b> | <b>SoD 7,211,431,860.00</b>   |

Figure 232 - STA02 output (2)

**Output description**

| STA02 – Report description – output screen  |  |
|---|--|
| Field label                                 | Description  |
| Party Address                               | Street, house number, postal code and city of the selected co-manager  |
| National Sorting Code                       | National sorting code of the selected Party  |
| Currency                                    | ISO currency code of the selected party  |
| “Place and date” + City + date              | City of the user’s party + current date. Used as place and date of creation of the report  |
| “Created by” + Party BIC + Party short name | The user’s party. Used for information about the executor of the report in line “created by”   |
| Account number                              | The following details are repeated per co-managed MCA (sorted by account number).  |
| Date  | Date of the Business day<br><br>The following details are repeated per business day in the date range (sorted by date).  |
| Balance of account (SoD)                    | Balance of account (SoD) is always shown, even if there is no cash transfer during the business day.   |
| Reference Id 1                              | Depending on the message that caused the cash transfer, the following reference type is listed:<br><br><ul style="list-style-type: none"> <li>  camt.050: Message ID (from BAH)</li> <li>  pacs.009: UETR</li> </ul> |

|                                  |   |
|----------------------------------|---|
|                                  | <p>I pacs.010: UETR</p> <p>If no reference can be found, this field is left empty.</p>  |
| Reference Id 2                   | <p>End To End ID</p> <p>If no reference can be found, this field is left empty.</p>   |
| Settlement timestamp             | Settlement timestamp of the cash transfer   |
| Counterparty country code        | ISO country code of the counterparty  |
| Counterparty party BIC           | Party BIC of the counterparty   |
| Counterparty account BIC         | Account BIC of the counterparty; If no account BIC exists (e.g. for marginal lending accounts), the value “-“ is filled in  |
| Counterparty service             | Service of the counterparty   |
| Debit                            | Debited value of the cash transfer- If the settlement was debited   |
| Credit                           | Credited value of the cash transfer - If the settlement was credited  |
| Balance                          | Calculated balance of the account after the settlement of the cash transfer   |
| Balance EoD                      | <p>Balance of the account at the end of the business days</p> <p>Balance of account (EoD) is always shown, even if there is no cash transfer during the business day.</p> |
| Total number of cash transfers   | Total volume of cash transfers per business day   |
| Total sum of cash transfers      | Total value of cash transfers per business day  |
| Overall number of cash transfers | Total volume over all business days within the selected date range  |
| Overall sum of cash transfers    | Total value over all business days within the selected date range   |
| Balance EoD                      | EoD balance at the end of the date range  |

**Table 66 - STA02 - Output description**

## 5.12 Transaction reports (TRN)

### 5.12.1 TRN01 - Cash transfer (order) search and details

#### **Context of usage**

The report TRN01 offers the possibility to search for cash transfer orders/cash transfers using a set of (optional) filter criteria (including e.g. the UETR). For the resulting cash transfers/cash transfer orders it is possible to display the respective message and settlement details.

For CBs access to those cash transfers/cash transfer orders is granted where one of its parties is involved on the credit and/or the debit side.

From a prompt of the selection criteria screen the user either opts for the selection by reference or selection by business related criteria.

This report can be used by CB, PB and AS users.

### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN01]

### Screenshot – prompt

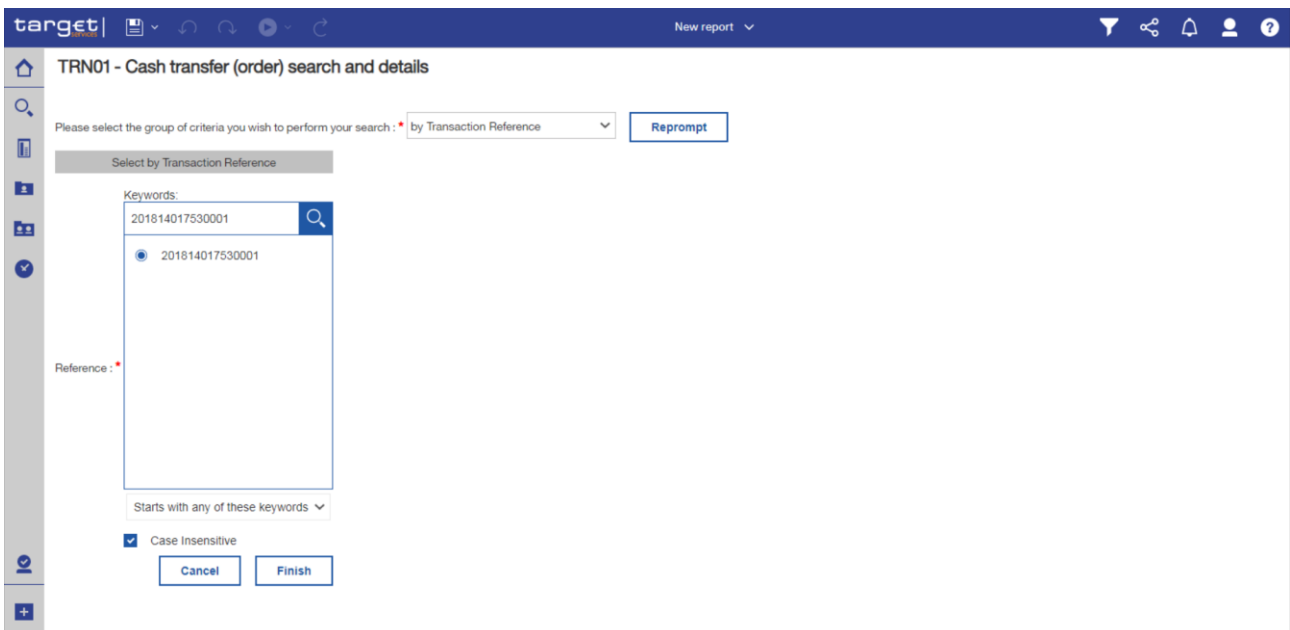


Figure 233 - TRN01 prompt (1) – by transaction reference

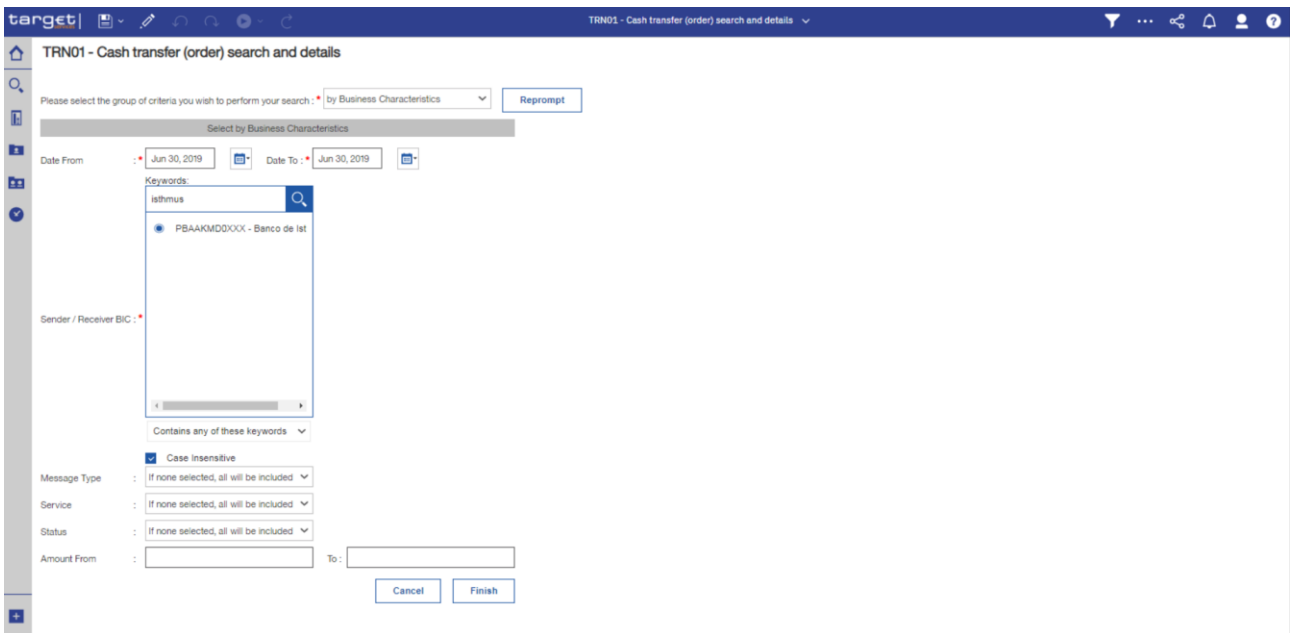


Figure 234 - TRN01 prompt (2) - by business characteristics

**Prompt description**

The TRN01 offers the possibility to execute the report in two ways. The first way is “**Select by Transaction Reference**” the other way is “**Search by Business Characteristics**”.

Having chosen a selection by transaction reference, you may enter any reference such as message ID, a UETR, an End-To-End ID, an instruction ID etc.

Having chosen a selection by business related criteria, you can enter business related search criteria.

When the DWH finds at least one transaction, a view on all transactions, which match the entered business criteria is opened. Here you can choose a certain transaction by double click for a view on its detailed data.

| TRN01 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Search by transaction reference            |   |
| Reference                                  | You can use this field to search with any reference that can be contained in a cash transfer.<br><br>This field is mandatory. |
| Search by Business Characteristics         |   |
| Date From                                  | You can select the date by clicking on the calendar.<br><br>This field is mandatory.  |

|                     |   |
|---------------------|---|
| Date To             | <p>You can select the end date of the period, for which the report should contain the data by clicking on the calendar.</p> <p>For valid report results, current day cannot be selected.</p> <p>This field is mandatory.</p>  |
| Sender/receiver BIC | <p>You can use this drop-down field to select the BIC of the sending resp. receiving party</p> <p>The possible values are built from parties within the user's data scope.</p> <p>This field is mandatory.</p>  |
| Message Type        | <p>You can use this drop-down field to restrict the result list to one message type.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> <li>  camt.050</li> <li>  pacs.004</li> <li>  pacs.008</li> <li>  pacs.009</li> <li>  pacs.010</li> <li>  pain.998 (ASTI)</li> </ul> <p>This field is optional.</p> |



|                |   |
|----------------|---|
| Service Type   | <p>This drop-down field offers the possibility to select between the services</p> <p>CLM or RTGS.</p> <p>This field is optional.</p>  |
| Status         | <p>You can use this drop-down field to restrict the result list to one status.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> <li>  Partially settled</li> <li>  Revoked</li> <li>  Rejected</li> <li>  Settled</li> <li>  Warehoused</li> </ul> <p>This field is optional.</p> |
| Amount from/to | <p>You can use these fields to search for a certain amount or amount range.</p> <p>This field is optional.</p>  |

**Table 67 - TRN01 - Prompt description**

Screenshot - output screen

target TRN01 - Cash transfer (order) search and details

target TRN01 - Cash transfer (order) search 2021-04-23 12:28:42 DEV - Development and integration

CBXXKMD0XXX - Central Bank of Fiction  
Filters | Transaction Reference : 201814017530001

Transaction search  
at : 2019-11-12  
Currency : EUR

CBXXKMD0XXX as Sender

| Transaction Reference Number | Sender Message Reference | Message Type | Service | Status  | Debited Account Number   | Debited Account BIC | Credited Account Number  | Credited Account BIC | Amount    |
|------------------------------|--------------------------|--------------|---------|---------|--------------------------|---------------------|--------------------------|----------------------|-----------|
| 201814017530001              | not provided             | pac08        | RTGS    | Settled | RTGSCBCBXXKMD0XXXEUR0A01 | CBXXKMR001X         | RTGSDCPBBHKMD0XXXEUR0A01 | PBBHKMR001X          | 14,000.00 |

ADVU82000001 - CBXXKMD0 (ADV) Advanced Page: 1 of ?

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Figure 235 - TRN01 output (1) – by transaction reference

target TRN01 - Cash transfer (order) search and details - target

target TRN01 - Cash transfer (order) details 2021-04-23 09:15:20 DEV - Development and integration

CBXXKMD0XXX - Central Bank of Fiction

Transaction Detail

Business Date 2019-11-15

Entry Timestamp 2019-11-15 13:35:16

UETR UETR\_20181401000001

End-to-End Reference E2E\_20181401000001

Instruction Identification not provided

Transaction Identification 20181401000001

Clearing System Reference not provided

Settlement Reference not provided

Business Message Identifier not provided

Message ID not provided

Transaction Reference Number 20181401000001

Message Type pac08

Sender BIC PBAAKMD0XXX

Sender Name Banco de Istimus

Receiver BIC PBABKMR001X

Receiver Name Gringotts Bank

Debited Account BIC PBAAKMR001X

Debited Account Number RTGSDCPBAAKMD0XXXEUR0A01

Type of Debited Account RTGS DCA

Credited Account BIC PBABKMR001X

Credited Account Number RTGSDCPBABKMD0XXXEUR0A01

Type of Credited Account RTGS DCA

Amount of Payment 10,345.00

Currency of Payment EUR

Settlement Status Description Final

Reversed Payment Indicator Not Reversed

Timestamp of Effective Settlement 2019-11-15 13:35:16

Error Code 0

Error Description no error

Message in XML-Format <?xml version="1.0" encoding="UTF-8"?><Sample XML file pac08XXX COV in EndToEndIdentification--><Document xmlns="urn:iso:std:iso:2002:tech:std:pac08:001:08"><FCIDTrf><GrpHdr><MsgId>NONREF</MsgId><CreDtm>2018-08-24T09:30:44Z</CreDtm><NboOfTx>1</NboOfTx><CbRef></CbRef></GrpHdr></Document>

Figure 236 - TRN01 output (2) – details

target | TRN01 - Cash transfer (order) search and details

target | TRN01 - Cash transfer (order) search

2021-04-23 12:30:39  
DEV - Development and integration

CBXXKMD0XXX - Central Bank of Fiction

Date From : 2019-06-30 Date To : 2019-06-30  
Filter: Sender / Receiver BIC : PBAAKMD0XXX - Banco de Istthmus

Transaction search at: 2019-06-30  
Currency: EUR

CBXXCZD0XXX as Receiver

| Transaction Reference Number | Sender Message Reference | Message Type | Service | Status  | Debited Account Number   | Debited Account BIC | Credited Account Number | Credited Account BIC | Amount |
|------------------------------|--------------------------|--------------|---------|---------|--------------------------|---------------------|-------------------------|----------------------|--------|
| 201814119123                 | not provided             | camt.050     | CLM     | Settled | MACASHPBAAKMD0XXXEUR0A01 | PBAAKM001X          |                         |                      | 0.00   |
| 2018141191749                | not provided             | camt.050     | CLM     | Settled | MACASHPBAAKMD0XXXEUR0A01 | PBAAKM001X          |                         |                      | 0.00   |

CBXXFOD0XXX as Receiver

| Transaction Reference Number | Sender Message Reference | Message Type | Service | Status  | Debited Account Number   | Debited Account BIC | Credited Account Number | Credited Account BIC | Amount |
|------------------------------|--------------------------|--------------|---------|---------|--------------------------|---------------------|-------------------------|----------------------|--------|
| 2018141191475                | not provided             | camt.050     | CLM     | Settled | MACASHPBAAKMD0XXXEUR0A01 | PBAAKM001X          |                         |                      | 0.00   |

CBXXGLD0XXX as Receiver

| Transaction Reference Number | Sender Message Reference | Message Type | Service | Status  | Debited Account Number   | Debited Account BIC | Credited Account Number | Credited Account BIC | Amount |
|------------------------------|--------------------------|--------------|---------|---------|--------------------------|---------------------|-------------------------|----------------------|--------|
| 2018141191349                | not provided             | camt.050     | CLM     | Settled | MACASHPBAAKMD0XXXEUR0A01 | PBAAKM001X          |                         |                      | 0.00   |

CBXXKDD0XXX as Receiver

| Transaction Reference Number | Sender Message Reference | Message Type | Service | Status  | Debited Account Number   | Debited Account BIC | Credited Account Number | Credited Account BIC | Amount |
|------------------------------|--------------------------|--------------|---------|---------|--------------------------|---------------------|-------------------------|----------------------|--------|
| 2018141191457                | not provided             | camt.050     | CLM     | Settled | MACASHPBAAKMD0XXXEUR0A01 | PBAAKM001X          |                         |                      | 0.00   |
| 2018141191021                | not provided             | camt.050     | CLM     | Settled | MACASHPBAAKMD0XXXEUR0A01 | PBAAKM001X          |                         |                      | 0.00   |

CBXXKMD0XXX as Receiver

| Transaction Reference Number | Sender Message Reference | Message Type | Service | Status  | Debited Account Number   | Debited Account BIC | Credited Account Number  | Credited Account BIC | Amount     |
|------------------------------|--------------------------|--------------|---------|---------|--------------------------|---------------------|--------------------------|----------------------|------------|
| 2018141191352                | not provided             |              | RTGS    | Settled | RTGSDCPBAAKMD0XXXEUR0C01 |                     | RTGSDCPBAAKMD0XXXEUR0A01 | PBAAKM001X           | 100,800.00 |

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Figure 237 - TRN01 output (3) - by business characteristics

target | TRN01 - Cash transfer (order) search and details - target

target | TRN01 - Cash transfer (order) details

2021-04-23 12:29:49  
DEV - Development and integration

CBXXKMD0XXX - Central Bank of Fiction

Transaction Detail

Business Date: 2019-11-12  
Entry Timestamp: 2019-11-12 11:35:16 AM  
UETR: UETR\_201814017530001  
End-to-End Reference: E2E\_201814017530001  
Instruction Identification: not provided  
Transaction Identification: 201814017530001  
Clearing System Reference: not provided  
Settlement Reference: not provided  
Sender Message Reference: not provided  
Message ID: not provided  
Transaction Reference Number: 201814017530001  
Message Type: pacs.008  
Sender BIC: CBXXKMD0XXX  
Sender Name: Central Bank of Fiction  
Receiver BIC: PBBHKMD0XXX  
Receiver Name: Monte Pio  
Debited Account BIC: CBXXKMR001X  
Debited Account Number: RTGSCBCBXXKMD0XXXEUR0A01  
Type of Debited Account: RTGS CB account  
Credited Account BIC: PBBHKMR001X

Figure 238 - TRN01 output (4) – details

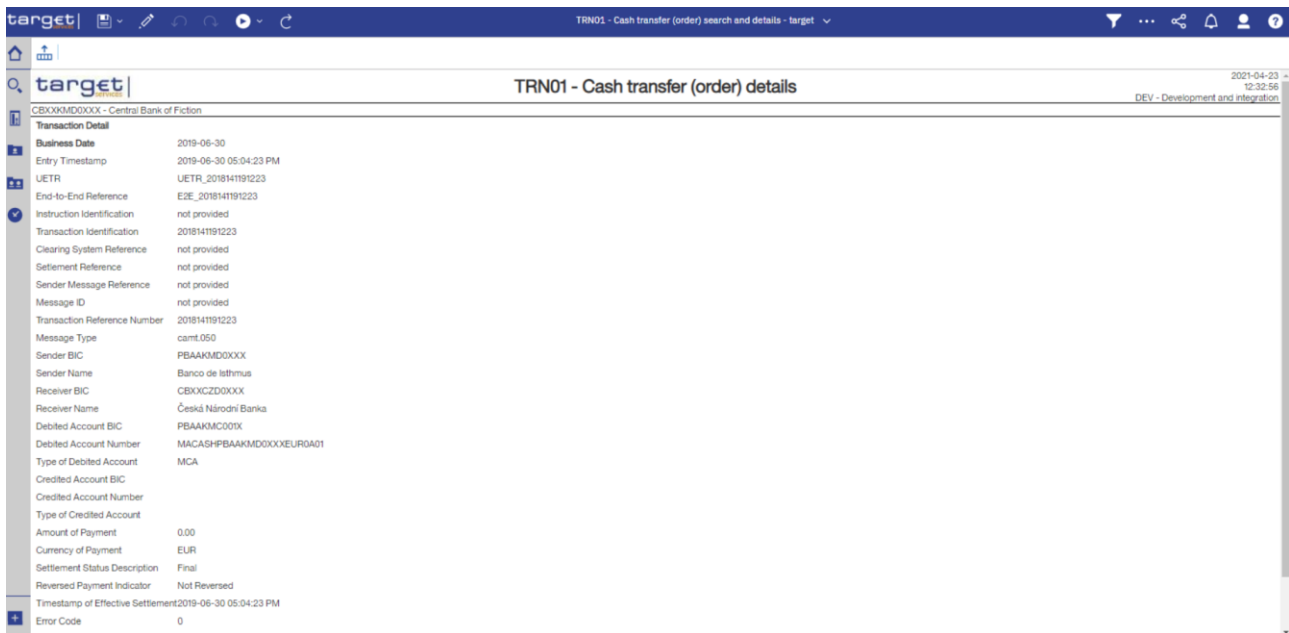


Figure 239 - TRN01 output (5) - details

**Output description**

**TRN01 – Report description – output screen – list of cash transfers**

| Field label  | Description   |
|--|---|
| Date   | Above the table you can see the date of the transaction search “at”   |
| Currency   | Above the table you can see the currency of the transaction   |
| One table for “ <b>Sender BIC</b> ” and one table for “ <b>Receiver BIC</b> ”. In each table every cash transfer order is listed with following data (sorted by transaction reference number): |   |
| Transaction Reference Number   | Transaction reference; technical identifier of the transfer.  |
| Sender Message Reference   | Identification of the message, which is delivered by the sender.  |
| Message Type   | Message type<br>Possible values:<br><ul style="list-style-type: none"> <li>  camt.050</li> <li>  pacs.004</li> <li>  pacs.008</li> <li>  pacs.009</li> <li>  pacs.010</li> <li>  pain.998 (ASTI)</li> </ul> |

|                         |  |
|-------------------------|--|
| Service                 | Service for which the data is displayed.<br><br>Possible values:<br><ul style="list-style-type: none"> <li>  CLM</li> <li>  RTGS</li> </ul>                        |
| Status                  | Status of the cash transfer order.<br><br>Possible values:<br><ul style="list-style-type: none"> <li>  Warehoused</li> <li>  Settled</li> <li>  Revoked</li> </ul> |
| Debited Account Number  | Debited account number<br><br>The account number is not displayed if it does not belong to data scope of the user.   |
| Debited Account BIC     | Debited account BIC  |
| Credited Account Number | Credited account number<br><br>The account number is not displayed if it does not belong to data scope of the user.  |
| Credited Account BIC    | The BIC of the credited account  |
| Amount                  | Amount of payment  |

**Table 68 - TRN01 - Output description**

| <b>TRN01 – Report description – details</b> |  |
|---|--|
| <b>Field label</b>                          | <b>Description</b>                         |
| Entry Timestamp                             | Timestamp of entry in CLM/RTGS             |
| UETR  | Universal-End-to-End-Transaction Reference |
| End-to-End Reference                        | End-to-End-Transaction Reference           |
| Instruction Identification                  | Instruction Identification                 |
| Transaction Identification                  | Transaction Identification                 |
| Clearing System Reference                   | Clearing System Reference                  |
| Settlement Reference                        | Settlement Reference                       |
| Sender Message Reference                    | Sender Message Reference                   |

|                              |  |
|------------------------------|--|
| Message ID                   | Message ID   |
| Transaction Reference Number | Technical Identifier of the transfer   |
| Message Type                 | <p>Message Type</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  camt.050</li> <li>  pacs.004</li> <li>  pacs.008</li> <li>  pacs.009</li> <li>  pacs.010</li> <li>  pain.998 (ASTI)</li> </ul>  |
| Sender BIC                   | Party BIC of the sender  |
| Sender Name                  | Sender Name  |
| Receiver BIC                 | Party BIC of the receiver  |
| Receiver Name                | Receiver name  |
| Debited Account BIC          | Debited account BIC  |
| Debited Account Number       | <p>Debited account number</p> <p>The account number is not displayed if it does not belong to data scope of the user.</p>  |
| Type of Debited Account      | <p>Type of debited account</p> <p>Possible Values:</p> <ul style="list-style-type: none"> <li>  RTGS DCA</li> <li>  RTGS CB account</li> <li>  AS guarantee funds account</li> <li>  RTGS sub-account</li> <li>  AS technical account for procedure A</li> <li>  AS technical account for procedure B</li> <li>  AS technical account for procedure D</li> <li>  AS technical account for procedure C</li> <li>  AS technical account for procedure E</li> <li>  CLM dedicated transit account in RTGS</li> <li>  MCA</li> <li>  CLM CB account</li> </ul> |

|                          |  |
|--------------------------|--|
|                          | <ul style="list-style-type: none"> <li>  Overnight deposit account</li> <li>  Marginal lending account</li> <li>  ECB mirror account</li> <li>  CB ECB account</li> <li>  Technical account for CONT settlement</li> <li>  T2S dedicated transit account in CLM</li> <li>  TIPS dedicated transit account in CLM</li> <li>  RTGS dedicated transit account in CLM</li> </ul>   |
| Credited Account BIC     | Credited account BIC   |
| Credited Account Number  | <p>Credited account number</p> <p>The account number is not displayed if it does not belong to data scope of the user.</p>   |
| Type of Credited Account | <p>Type of credited account</p> <p>Possible Values:</p> <ul style="list-style-type: none"> <li>  RTGS DCA</li> <li>  RTGS CB account</li> <li>  AS guarantee funds account</li> <li>  RTGS sub-account</li> <li>  AS technical account for procedure A</li> <li>  AS technical account for procedure B</li> <li>  AS technical account for procedure D</li> <li>  AS technical account for procedure C</li> <li>  AS technical account for procedure E</li> <li>  CLM dedicated transit account in RTGS</li> <li>  MCA</li> <li>  CLM CB account</li> <li>  Overnight deposit account</li> <li>  Marginal lending account</li> <li>  ECB mirror account</li> <li>  CB ECB account</li> <li>  Technical account for CONT settlement</li> <li>  T2S dedicated transit account in CLM</li> <li>  TIPS dedicated transit account in CLM</li> </ul> |

|                                   |  |
|-----------------------------------|--|
|                                   | <ul style="list-style-type: none"> <li>RTGS dedicated transit account in CLM</li> </ul>  |
| Amount of Payment                 | Amount of payment  |
| Currency of Payment               | Currency of payment  |
| Settlement Status Description     | Status description.<br><ul style="list-style-type: none"> <li></li> </ul>  |
| Reversed Payment Indicator        | Reversed payment indicator.<br>Possible values: <ul style="list-style-type: none"> <li>“not reversed”</li> <li>“is a reversed”</li> <li>“has been reversed”</li> </ul> |
| Timestamp of Effective Settlement | Date and time of effective settlement  |
| Error Code                        | Error code (if provided)   |
| Error Description                 | Error description (if provided)  |
| Message in XML-Format             | Original message in XML format. Only the payload of the message will be displayed, not the BAH.  |

**Table 69 - TRN01 - Report description - Details**

### 5.12.2 TRN02 - Monthly overview of domestic and cross-border payments

#### **Context of usage**

The report TRN02 provides information on the monthly volume and value of payments in RTGS differentiated by domestic and cross-border traffic. Separate tables for interbank and customer payments are displayed. For CBs information on all of its payment banks the figures are shown sorted by name and BIC.

This report can be used by CB and PB users

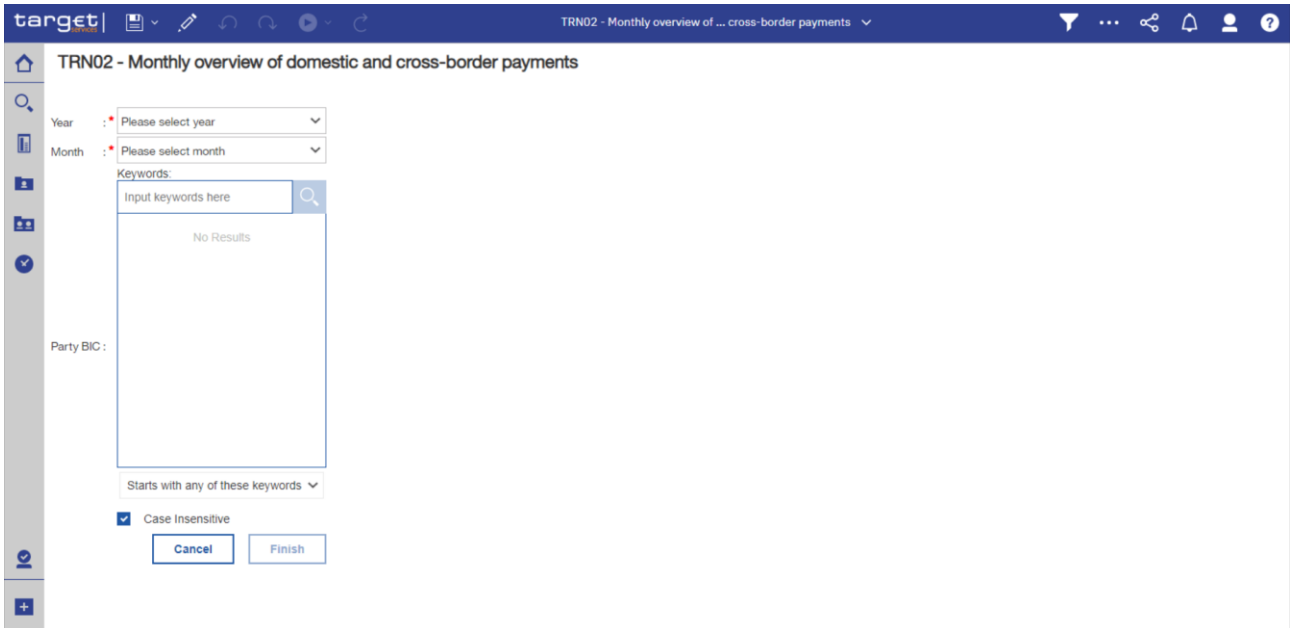
#### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN02]



**Screenshot – prompt**



**Figure 240 - TRN02 prompt**

**Prompt description**

| TRN02 – Report description – prompt screen |   |
|--|---|
| Filed label                                | Description   |
| Year                                       | You can use this drop-down to select the year, from which the report should contain the data.<br><br>This field is mandatory.   |
| Month                                      | You can use this drop-down field to select the month, from which the report should contain the data.<br><br>For valid report results, the current month cannot be selected.<br><br>This field is mandatory. |
| Party BIC                                  | You can use this drop-down field to select the party BIC. This field will show all related BIC’s, which belong to the party.<br><br>This field is optional.   |

**Table 70 - TRN02 - Prompt description**

Screenshot - output screen

target | TRN02 - Monthly overview of ... cross-border payments

2021-03-04 09:24:49  
DEV - Development and Integration

CBXXKMD0XXX  
Filters Year : 2019  
Month : January

Currency EUR

Customer Payments

| National Sorting Code | Party BIC   | Party Name       | Message Type | Domestic/Cross Border | Debit/Credit | Volume       | Value                |
|-----------------------|-------------|------------------|--------------|-----------------------|--------------|--------------|----------------------|
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.008     | Cross Border          | Credit       | 645,010      | 15,350,701.46        |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.008     | Cross Border          | Debit        | 225,088      | 6,753,236.72         |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.008     | Domestic              | Credit       | 230,106      | 6,903,799.96         |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.008     | Domestic              | Debit        | 65,920       | 1,978,345.58         |
| NSORT000000000058     | PBAAKMD0XXX | Gringotts Bank   | pacs.008     | Cross Border          | Credit       | 2,812        | 87,432.06            |
| NSORT000000000058     | PBAAKMD0XXX | Gringotts Bank   | pacs.008     | Cross Border          | Debit        | 23,534       | 706,182.20           |
|                       |             |                  |              |                       |              | <b>Total</b> | <b>35,779,697.98</b> |

Interbank Payments

| National Sorting Code | Party BIC   | Party Name       | Message Type | Domestic/Cross Border | Debit/Credit | Volume    | Value         |
|-----------------------|-------------|------------------|--------------|-----------------------|--------------|-----------|---------------|
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | camt.050     | Cross Border          | Credit       | 209,014   | 6,270,862.78  |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | camt.050     | Cross Border          | Debit        | 133,896   | 3,717,430.60  |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | camt.050     | Domestic              | Credit       | 61,226    | 1,837,035.20  |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | camt.050     | Domestic              | Debit        | 562,660   | 16,880,586.40 |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.009     | Cross Border          | Credit       | 261,228   | 7,837,415.03  |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.009     | Cross Border          | Debit        | 694,616   | 20,839,216.92 |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.009     | Domestic              | Credit       | 418,042   | 12,541,723.66 |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.009     | Domestic              | Debit        | 347,816   | 7,434,861.52  |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.010     | Cross Border          | Credit       | 30,608    | 918,517.84    |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.010     | Cross Border          | Debit        | 281,320   | 8,440,293.04  |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.010     | Domestic              | Credit       | 1,280,028 | 38,701,402.96 |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pacs.010     | Domestic              | Debit        | 450,196   | 13,506,473.80 |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pain.998     | Cross Border          | Credit       | 115,052   | 3,451,899.90  |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pain.998     | Cross Border          | Debit        | 32,856    | 989,172.62    |

NORU82000001 - CBXXKMD0 (NOR) Normal  
Page: 1 of 7

Figure 241 - TRN02 output (1)

target | TRN02 - Monthly overview of ... cross-border payments

2021-03-04 09:24:49  
DEV - Development and Integration

CBXXKMD0XXX  
Filters Year : 2019  
Month : January

Currency EUR

Interbank Payments

| National Sorting Code | Party BIC   | Party Name       | Message Type | Domestic/Cross Border | Debit/Credit | Volume       | Value                 |
|-----------------------|-------------|------------------|--------------|-----------------------|--------------|--------------|-----------------------|
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pain.998     | Domestic              | Credit       | 522,476      | 15,674,830.26         |
| NSORT000000000058     | PBAAKMD0XXX | Banco de Isthmus | pain.998     | Domestic              | Debit        | 1,389,260    | 41,678,434.06         |
| NSORT000000000059     | PBANKMD0XXX | Gringotts Bank   | camt.050     | Cross Border          | Credit       | 21,854       | 655,740.62            |
| NSORT000000000059     | PBANKMD0XXX | Gringotts Bank   | camt.050     | Cross Border          | Debit        | 210,594      | 6,317,977.20          |
| NSORT000000000059     | PBANKMD0XXX | Gringotts Bank   | pacs.009     | Cross Border          | Credit       | 37,300       | 1,119,130.64          |
| NSORT000000000059     | PBANKMD0XXX | Gringotts Bank   | pacs.009     | Cross Border          | Debit        | 3,134        | 94,157.60             |
| NSORT000000000059     | PBANKMD0XXX | Gringotts Bank   | pacs.010     | Cross Border          | Credit       | 57,116       | 1,713,668.88          |
| NSORT000000000059     | PBANKMD0XXX | Gringotts Bank   | pacs.010     | Cross Border          | Debit        | 40,168       | 1,205,217.66          |
| NSORT000000000059     | PBANKMD0XXX | Gringotts Bank   | pain.998     | Cross Border          | Credit       | 195,550      | 5,866,693.14          |
| NSORT000000000059     | PBANKMD0XXX | Gringotts Bank   | pain.998     | Cross Border          | Debit        | 61,508       | 1,845,489.58          |
|                       |             |                  |              |                       |              | <b>Total</b> | <b>219,538,233.60</b> |

NORU82000001 - CBXXKMD0 (NOR) Normal  
Page: 2 of 7

Figure 242 - TRN02 output (2)

**Output description**

| <b>TRN02 – Report description – output screen</b>   |   |
|---|---|
| The currency will be displayed above the table  |   |
| <b>Field label</b>  | <b>Description</b>  |
| One table for “Interbank payments” and one table for “Customer payments” with following data, sorted by message type and then by party BIC: |   |
| National Sorting Code   | National Sorting Code of the participant  |
| Party BIC   | BIC of Party  |
| Party Name  | Short name of the party;  |
| Message Type  | <p>Message type.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> <li>  camt.050</li> <li>  pacs.004</li> <li>  pacs.008</li> <li>  pacs.009</li> <li>  pacs.010</li> <li>  pain.998 (ASTI)</li> </ul>      |
| Domestic/Cross Border   | <p>Mark, which identifies whether the displayed aggregation refers to domestic or cross border payments.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  Domestic</li> <li>  Cross Border</li> </ul> |
| Debit/Credit  | “Debit” or “Credit” are displayed.  |
| Volume  | Number of payments per party, message type, domestic/cross border payment and debit/credit  |
| Value   | Sum of payments per party, message type, domestic/cross border payment and debit/credit   |
| Total   | <p>Total of volumes and values listed in the preceding rows.</p> <p>Recalculated automatically on the base of a data subset when the user uses filters.</p>   |

**Table 71 - TRN02 - Output description**

### 5.12.3 TRN03 - Monthly peak day and peak hour in terms of volume and value of cash transfer orders

#### Context of usage

The report TRN03 provides information on the peak hour and peak day within a given month (range) in terms of volume and value of cash transfer orders in CLM or in RTGS. The report delivers peaks for each system entity and differentiates per settlement status.

This report can be used by CB and PB users.

#### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN03]

#### Screenshot – prompt

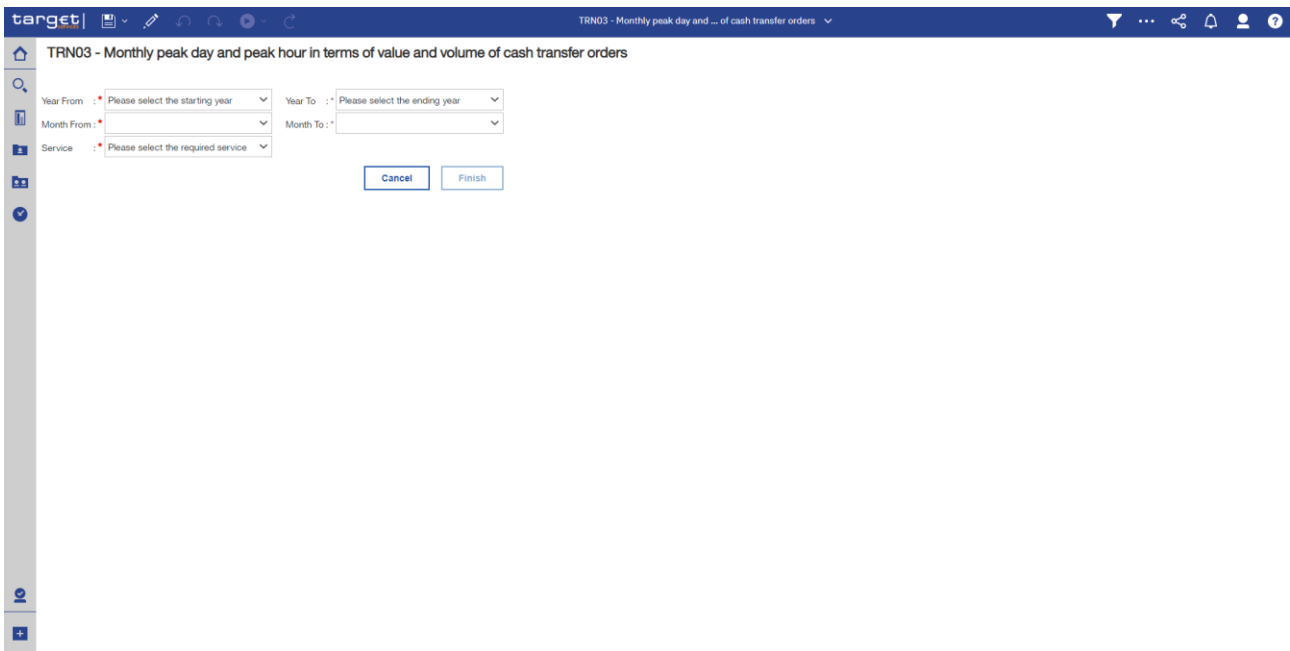


Figure 243 - TRN03 prompt

#### Prompt description

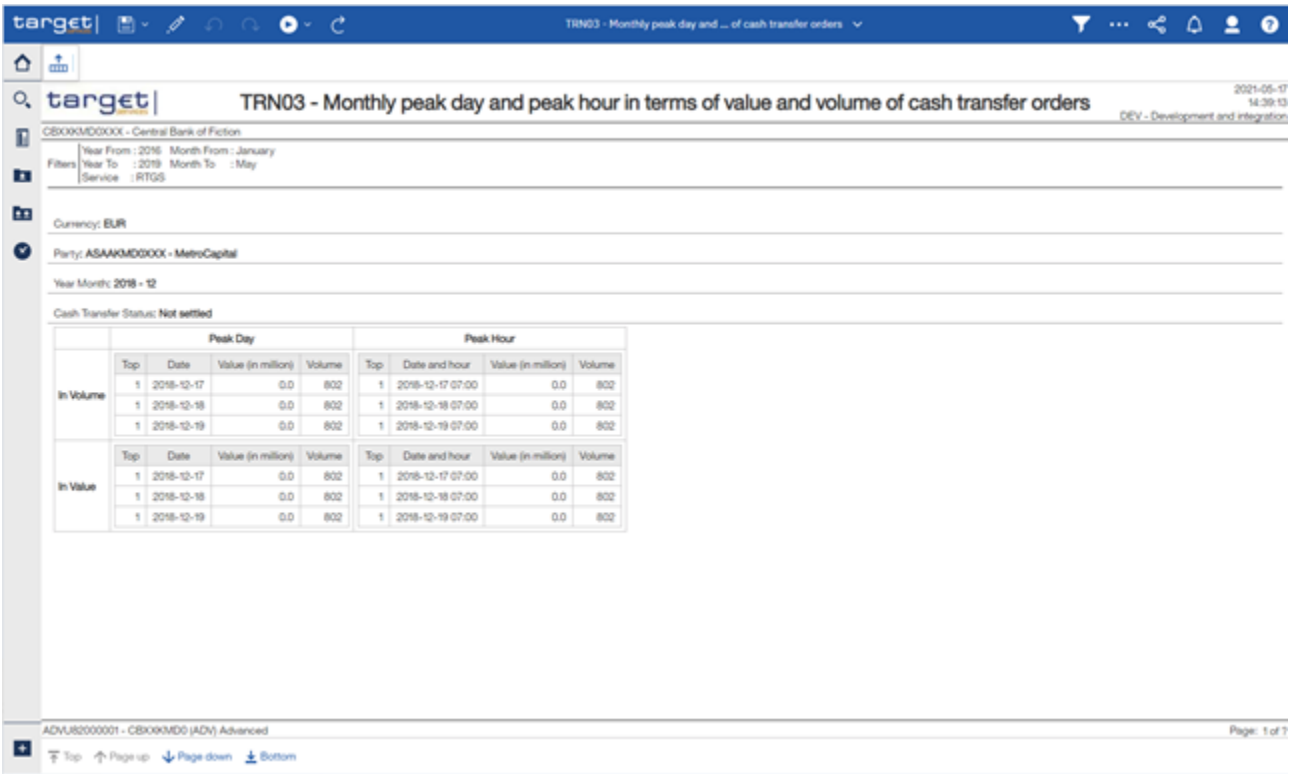
##### TRN03 – Report description – prompt screen

| Field label | Description  |
|-------------|--|
| Service     | You can use this drop-down field to select between the services.<br><br>Possible values: |

|            |  |
|------------|--|
|            | <ul style="list-style-type: none"> <li>  CLM,</li> <li>  RTGS.</li> </ul> <p>This field is mandatory.</p>  |
| Year From  | <p>You can use this drop-down field to select the year, from which the report should contain the data.</p> <p>This field is mandatory.</p>   |
| Month From | <p>You can use this drop-down field to select the month, from which the report should contain the data.</p> <p>For a valid report result, it is necessary to select at least the previous month.</p> <p>This field is mandatory.</p>                 |
| Year To    | <p>You can use this drop-down field to select the end date of the period, for which the report should contain the data.</p> <p>This field is mandatory</p>   |
| Month To   | <p>You can use this drop-down field to select the end date of the period, for which the report should contain the data.</p> <p>For a valid report result, it is necessary to select at least the previous month.</p> <p>This field is mandatory.</p> |

**Table 72 - TRN03 - Prompt description**

**Screenshot - output screen**



**Figure 244 - TRN03 output**

The report result is separated into two blocks, one for transfer orders in volume and the other one for transfer orders in value. Within this blocks there is a further segmentation in “Peak Day” and “Peak Hour” for the selected time period. For every segmentation the report will display the Top 5 results. If one or several results are identical, the report result will be extended by another result.

The report result shows the date, date and hour, volume and value of all cash transfer orders/final cash transfer orders/not settled cash transfer orders and cancelled cash transfer orders

**Output description**

| TRN03 – Report description – output screen |   |
|--|---|
| Field label                                | Description   |
| Party                                      | The party BIC and party short name of the user are shown. Both values are separated by a hyphen “-“ |
| Peak day – in volume                       |   |
| Top  | Numbers 1 through 5, each in a single row   |
| Date                                       | Date of the peak day this row refers to   |

|                       |  |
|-----------------------|--|
| Value (in million)    | Sum of the value of all cash transfer orders/all final cash transfer orders/all not settled cash transfer orders this row refers to million of the given currency commercially rounded.  |
| Volume                | Number of all cash transfer orders/all final cash transfer orders/all not settled cash transfer orders this row refers to.   |
| Peak day – in value   |  |
| Top                   | Numbers 1 through 5, each in a single row  |
| Date                  | Date of the peak day this row refers to  |
| Value (in million)    | Sum of the value of all cash transfer orders/all final cash transfer orders/all not settled cash transfer orders this row refers to million of the given currency, commercially rounded. |
| Volume                | Number of all cash transfer orders/all final cash transfer orders/all not settled cash transfer orders this row refers to.   |
| Peak hour – in volume |  |
| Top                   | Numbers 1 through 5, each in a single row  |
| Hour                  | Date and hour (as range) this row refers to:<br>yyyy-mm-dd<br>hh.mm – hh.mm<br>(from 00:00 – 00:59 till 23:00 – 23:59)   |
| Value (in million)    | Sum of the value of all cash transfer orders/all final cash transfer orders/all not settled cash transfer orders this row refers to million in the given currency, commercially rounded. |
| Volume                | Number of all cash transfer orders/all final cash transfer orders/all not settled cash transfer orders this row refers to  |
| Peak hour – in value  |  |
| Top                   | Numbers 1 through 5, each in a single row  |

|                    |   |
|--------------------|---|
| Date and Hour      | Date and hour (as range) this row refers to:<br>yyyy-mm-dd<br>hh:mm – hh:mm<br>(from 00:00 – 00:59 till 23:00 – 23:59)  |
| Value (in million) | Sum of the value of all cash transfer orders/all final cash transfer orders/all not settled cash transfer orders this row refers to in million in the given currency, commercially rounded. |
| Volume             | Number of all cash transfer orders/all final cash transfer orders/all not settled cash transfer orders this row refers to.  |

**Table 73 - TRN03 - Output description**

#### 5.12.4 TRN04 - Cash transfers per time band and per CB

##### **Context of usage**

The report TRN04 provides information on the total volume and value of cash transfers per time band of 15 minutes on a chosen business day. Cash transfers in CLM and RTGS are reported in separate report Tables.

Volume and value Figures are reported separate for domestic (only debits) and cross-border (differentiated by debits and credits) cash transfers. In addition, cumulated volume and value Figures are displayed.

CBs can retrieve information on cash transfers of parties belonging to their system entity.

This report can be used by CB users only.

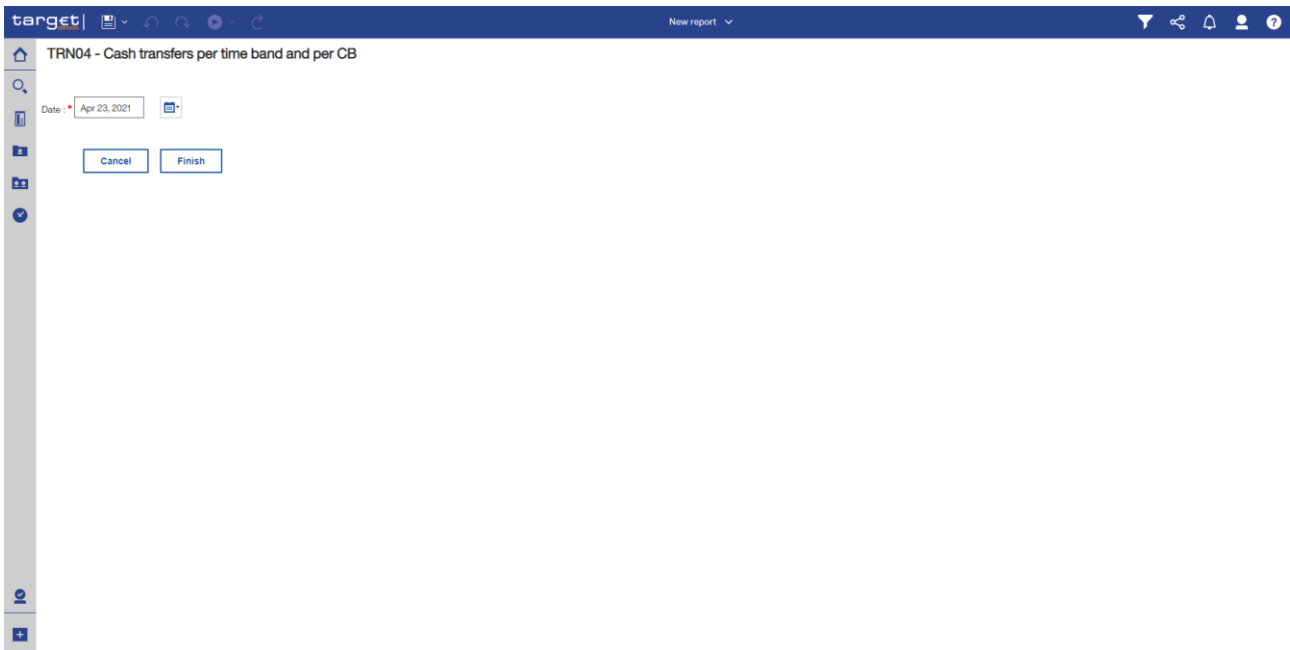
##### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN04]



**Screenshot – prompt**



**Figure 245 - TRN04 prompt**

**Prompt description**

| TRN04 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Date                                       | <p>You can specify the business day by clicking on the calendar.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is mandatory.</p> |

**Table 74 - TRN04 - Prompt description**

Screenshot - output screen

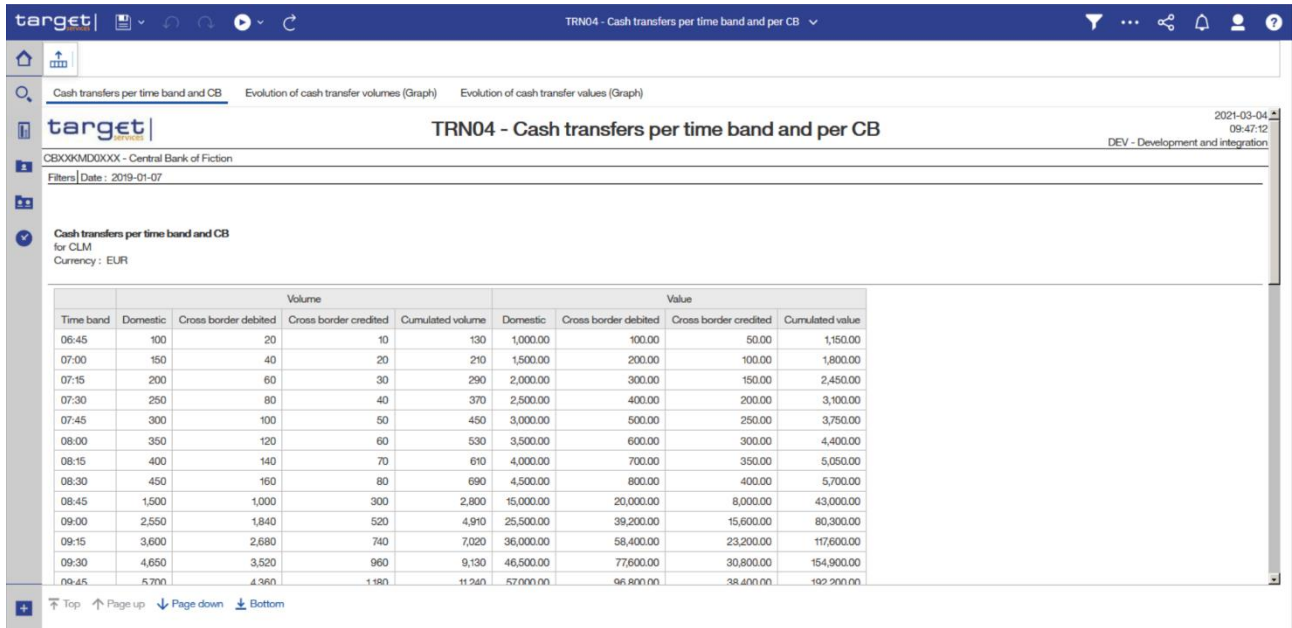


Figure 246 - TRN04 output (1)

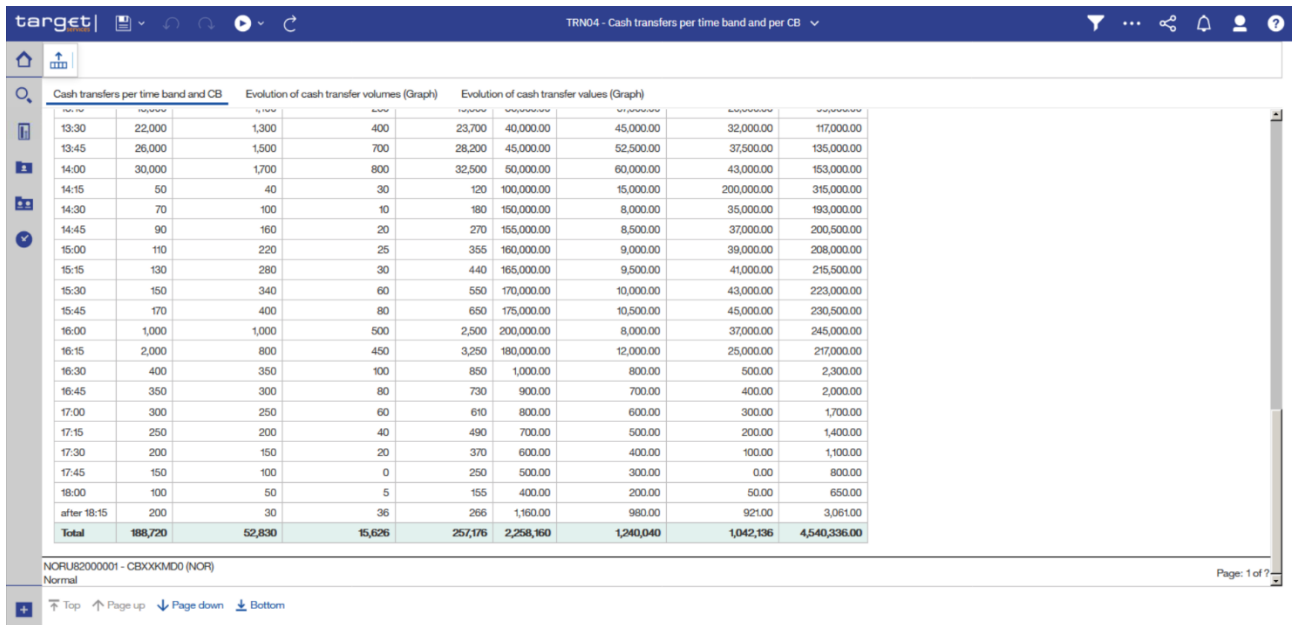


Figure 247 - TRN04 output (2)

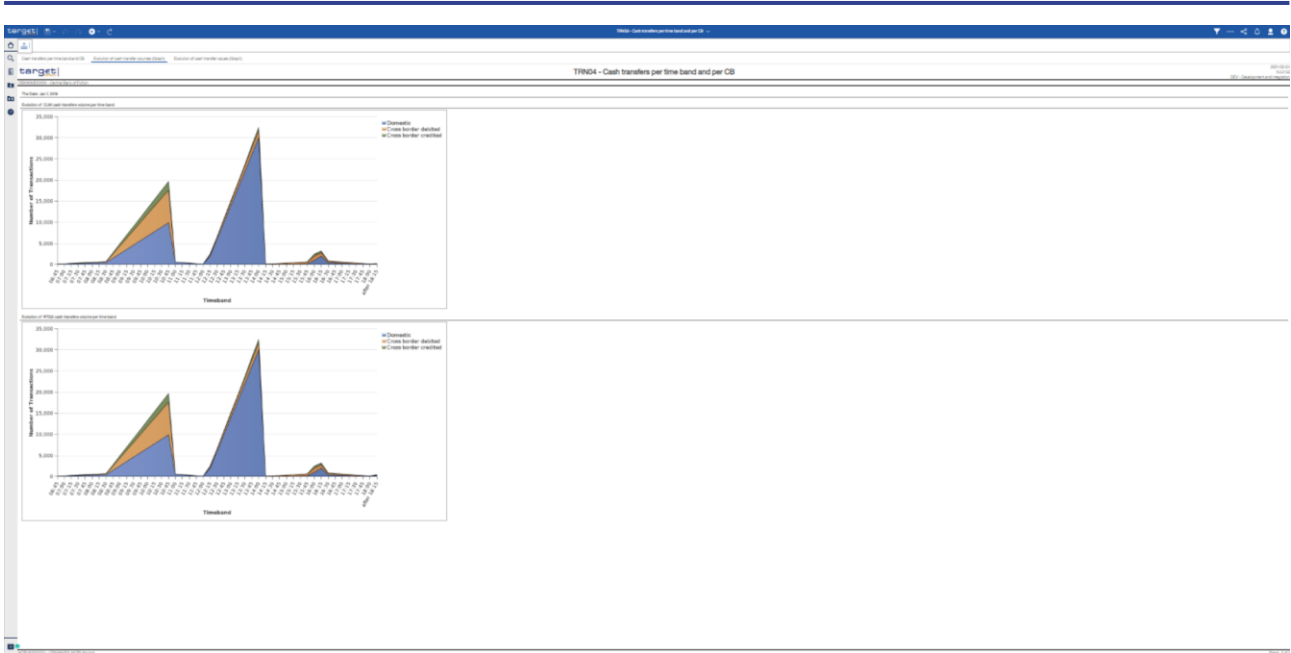


Figure 248 - TRN04 output (3)

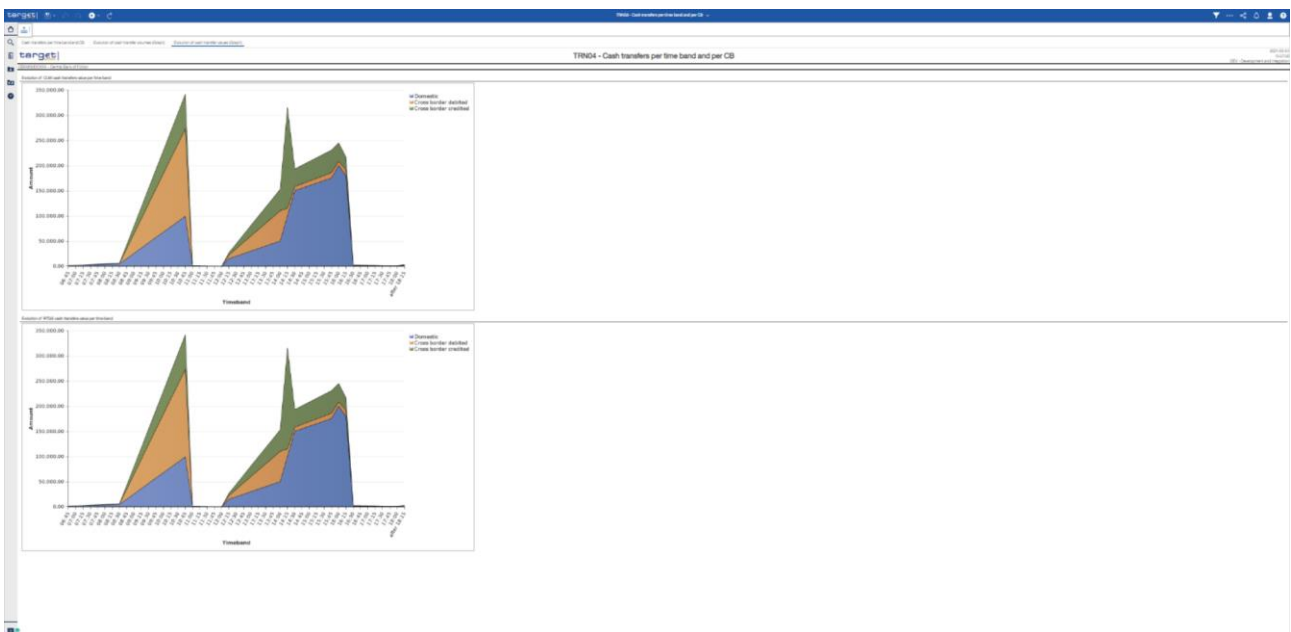


Figure 249 - TRN04 output (4)

### Output description

| <b>TRN04 – Report description – output screen</b> |   |
|---|---|
| <b>Field label</b>                                | <b>Description</b>  |
| Time band   | Time band in 15 minutes intervals:<br><br>Time band in 15 minutes intervals: Before 19:00 (beginning with start of the business day), 19:00, 19:15, 19:30, (etc. in 15 minutes steps), 18:00, after 18:00 (ending with EoD) |
| Volume Domestic                                   | Volume of domestic cash transfers (only debits) per time band   |
| Volume Cross border debited                       | Volume of debited cross border cash transfers per time band   |
| Volume Cross border credited                      | Volume of credited cross border cash transfers per time band  |
| Volume Cumulated volume                           | Sum of all three volumes per time band  |
| Value Domestic                                    | Value of domestic cash transfers (only debits) per time band  |
| Value Cross border debited                        | Value of debited cross border cash transfers per time band  |
| Value Cross border credited                       | Value of credited cross border cash transfers per time band   |
| Value Cumulated value                             | Sum of all three values per time band   |
| Total   | Overall Sum of the volumes/values types over all time bands   |
| Graph 1   | Evolution of CLM/RTGS cash transfer volumes per time band”.<br><br>Four different lines stacked areas in different colours representing the values in the table on previous page.   |
| Graph 2   | Evolution of CLM/RTGS cash transfer values per time band”.<br><br>Four different lines stacked areas in different colours representing the values in the table on previous page.  |

**Table 75 - TRN04 - Output description**

### 5.12.5 TRN05 – Monthly overview of cash transfer orders per party

#### Context of usage

The report TRN05 provides information on the monthly volume and value of cash transfer orders of a selected party on its account(s). Cash transfer orders in CLM and RTGS are reported in separate report Tables. In case that several accounts belong to the same party in CLM or RTGS, separate Figures for each account are displayed. The volume/value Figures include totals, monthly averages and are differentiated by settlement priority and settlement status and service.

CBs can retrieve information for parties belonging to their system entity.

This report can be used by CB and PB users.

### **Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN05]

### **Screenshot – prompt**



**Figure 250 - TRN05 prompt**

**Prompt description**

| TRN05 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Year                                       | You can use this drop-down field to select the Year, from which the report should contain the data.<br><br>This field is mandatory.   |
| Month                                      | You can use this drop-down field to select the Month, from which the report should contain the data.<br><br>For valid report results, the current month cannot be selected.<br><br>This field is mandatory. |
| Party BIC                                  | You can use this drop-down field to select the party BIC. This field will show all related BIC's, which belong to the party.<br><br>This field is mandatory.  |

Table 76 - TRN05 - Prompt description

**Screenshot - output screen**

target | TRN05 - Monthly overview of cash transfer orders per party

Apr 23, 2021 14:30:31 GMT+02:00  
DEV - Development and Integration

CBXXXMD000X - Central Bank of Fiction

Filters: Year : 2019  
Month : January  
Party : PBAAKMD000X

Cross border transactions debited  
Currency: EUR  
CLM account number: MACASHPBAAKMD000XEUR0A01

| Final transactions |                |                      |                              |                      |                     |                                    |
|--------------------|----------------|----------------------|------------------------------|----------------------|---------------------|------------------------------------|
|                    | Total volume   | Daily average volume | Previous month daily average | Total value          | Daily average value | Previous month daily average value |
| Urgent             | 87,744         | 3,988.36             |                              | 2,632,541.94         | 119,661.00          |                                    |
| High               | 175,500        | 7,977.27             |                              | 5,265,084.06         | 239,322.00          |                                    |
| Normal             | 614,250        | 27,920.45            |                              | 18,427,794.30        | 837,627.01          |                                    |
| <b>Total</b>       | <b>877,494</b> | <b>39,886.09</b>     |                              | <b>26,325,420.30</b> | <b>1,196,610.01</b> |                                    |

| Rejected transactions |               |                      |                              |                     |                     |                                    |
|-----------------------|---------------|----------------------|------------------------------|---------------------|---------------------|------------------------------------|
|                       | Total volume  | Daily average volume | Previous month daily average | Total value         | Daily average value | Previous month daily average value |
| Urgent                | 4,710         | 214.09               |                              | 141,534.42          | 6,433.38            |                                    |
| High                  | 9,426         | 428.45               |                              | 283,068.90          | 12,866.77           |                                    |
| Normal                | 33,018        | 1,500.82             |                              | 990,741.54          | 45,033.71           |                                    |
| <b>Total</b>          | <b>47,154</b> | <b>2,143.36</b>      |                              | <b>1,415,344.86</b> | <b>64,333.86</b>    |                                    |

| Cancelled transactions |               |                      |                              |                     |                     |                                    |
|------------------------|---------------|----------------------|------------------------------|---------------------|---------------------|------------------------------------|
|                        | Total volume  | Daily average volume | Previous month daily average | Total value         | Daily average value | Previous month daily average value |
| Urgent                 | 9,426         | 428.45               |                              | 283,068.90          | 12,866.77           |                                    |
| High                   | 18,864        | 857.45               |                              | 566,138.04          | 25,733.55           |                                    |
| Normal                 | 66,042        | 3,001.91             |                              | 1,981,483.14        | 90,067.42           |                                    |
| <b>Total</b>           | <b>94,332</b> | <b>4,287.82</b>      |                              | <b>2,830,690.08</b> | <b>128,667.73</b>   |                                    |

| Overall Total        |                  |                      |                              |                      |                     |                                    |
|----------------------|------------------|----------------------|------------------------------|----------------------|---------------------|------------------------------------|
|                      | Total volume     | Daily average volume | Previous month daily average | Total value          | Daily average value | Previous month daily average value |
| <b>Overall Total</b> | <b>1,019,980</b> | <b>46,317.27</b>     |                              | <b>30,571,455.24</b> | <b>1,389,611.60</b> |                                    |

Figure 251 - TRN05 output (1)

target | TRN05 - Monthly overview of cash transfer orders per party

|                      | Cross border transactions debited | Cross border transactions credited | Domestic transactions debited | Domestic transactions credited |                      |                     |
|----------------------|-----------------------------------|------------------------------------|-------------------------------|--------------------------------|----------------------|---------------------|
| High                 |                                   |                                    | 18,884                        | 85745                          | 566,138.04           | 25,733.55           |
| Normal               |                                   |                                    | 66,042                        | 3,00181                        | 1,981,483.14         | 90,067.42           |
| <b>Total</b>         |                                   |                                    | <b>94,332</b>                 | <b>4,28782</b>                 | <b>2,830,690.08</b>  | <b>128,667.73</b>   |
| <b>Overall Total</b> |                                   |                                    | <b>1,018,980</b>              | <b>46,31727</b>                | <b>30,571,455.24</b> | <b>1,389,611.80</b> |

Cross border transactions debited  
Currency: EUR  
RTGS account number: RTGSDCPBAAKMD00000EUR001

Final transactions

|              | Total volume   | Daily average volume | Previous month daily average | Total value         | Daily average value | Previous month daily average value |
|--------------|----------------|----------------------|------------------------------|---------------------|---------------------|------------------------------------|
| Urgent       | 29,182         | 1,326.45             |                              | 875,568.68          | 39,798.58           |                                    |
| High         | 58,368         | 2,653.09             |                              | 1,751,137.46        | 79,587.16           |                                    |
| Normal       | 204,294        | 9,286.09             |                              | 6,128,981.16        | 278,590.05          |                                    |
| <b>Total</b> | <b>291,844</b> | <b>13,265.64</b>     |                              | <b>8,755,687.30</b> | <b>397,985.79</b>   |                                    |

Rejected transactions

|              | Total volume  | Daily average volume | Previous month daily average | Total value       | Daily average value | Previous month daily average value |
|--------------|---------------|----------------------|------------------------------|-------------------|---------------------|------------------------------------|
| Urgent       | 1,566         | 71.18                |                              | 47,073.54         | 2,139.71            |                                    |
| High         | 3,134         | 142.45               |                              | 94,147.12         | 4,279.41            |                                    |
| Normal       | 10,980        | 499.09               |                              | 329,515.08        | 14,977.96           |                                    |
| <b>Total</b> | <b>15,680</b> | <b>712.73</b>        |                              | <b>470,735.74</b> | <b>21,397.08</b>    |                                    |

Cancelled transactions

|                      | Total volume   | Daily average volume | Previous month daily average | Total value          | Daily average value | Previous month daily average value |
|----------------------|----------------|----------------------|------------------------------|----------------------|---------------------|------------------------------------|
| Urgent               | 3,134          | 142.45               |                              | 94,147.12            | 4,279.41            |                                    |
| High                 | 6,274          | 285.18               |                              | 188,294.32           | 8,558.83            |                                    |
| Normal               | 21,964         | 998.36               |                              | 659,030.18           | 29,955.92           |                                    |
| <b>Total</b>         | <b>31,372</b>  | <b>1,426.00</b>      |                              | <b>941,471.62</b>    | <b>42,794.16</b>    |                                    |
| <b>Overall Total</b> | <b>338,896</b> | <b>15,404.36</b>     |                              | <b>10,167,894.66</b> | <b>462,777.03</b>   |                                    |

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Figure 252 - TRN05 output (2)

target | TRN05 - Monthly overview of cash transfer orders per party

target | TRN05 - Monthly overview of cash transfer orders per party

Apr 23, 2021 - 14:30:31 GMT+02:00  
DEV - Development and Integration

CBXXXKMD0000 - Central Bank of Fiction  
Year: 2019  
Month: January  
Party: PBAAKMD0000

Cross border transactions credited  
Currency: EUR  
CLM account number: MACASHPBAAKMD00000EUR001

Final transactions

|              | Total volume   | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|--------------|----------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent       | 81,480         | 3,703.64             |                                     | 2,444,503.26         | 111,113.78          |                                    |
| High         | 162,960        | 7,407.27             |                                     | 4,889,006.58         | 222,227.57          |                                    |
| Normal       | 570,378        | 25,926.27            |                                     | 17,111,523.30        | 777,796.51          |                                    |
| <b>Total</b> | <b>814,818</b> | <b>37,037.18</b>     |                                     | <b>24,445,033.14</b> | <b>1,111,137.87</b> |                                    |

Rejected transactions

|              | Total volume  | Daily average volume | Previous month daily average volume | Total value         | Daily average value | Previous month daily average value |
|--------------|---------------|----------------------|-------------------------------------|---------------------|---------------------|------------------------------------|
| Urgent       | 4,380         | 199.09               |                                     | 131,424.84          | 5,973.86            |                                    |
| High         | 8,760         | 398.18               |                                     | 262,849.60          | 11,947.72           |                                    |
| Normal       | 30,660        | 1,393.64             |                                     | 919,974.30          | 41,817.01           |                                    |
| <b>Total</b> | <b>43,800</b> | <b>1,990.91</b>      |                                     | <b>1,314,248.94</b> | <b>59,738.59</b>    |                                    |

Cancelled transactions

|                      | Total volume   | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|----------------------|----------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent               | 8,760          | 398.18               |                                     | 262,849.60           | 11,947.72           |                                    |
| High                 | 17,520         | 796.36               |                                     | 525,699.60           | 23,895.44           |                                    |
| Normal               | 61,320         | 2,787.27             |                                     | 1,839,948.66         | 83,634.03           |                                    |
| <b>Total</b>         | <b>87,600</b>  | <b>3,981.82</b>      |                                     | <b>2,628,498.06</b>  | <b>119,477.18</b>   |                                    |
| <b>Overall Total</b> | <b>946,218</b> | <b>43,009.91</b>     |                                     | <b>28,387,780.14</b> | <b>1,290,353.64</b> |                                    |

Figure 253 - TRN05 output (3)

target | TRN05 - Monthly overview of cash transfer orders per party

|                      | Cross border transactions debited | Cross border transactions credited | Domestic transactions debited | Domestic transactions credited |  |                      |
|----------------------|-----------------------------------|------------------------------------|-------------------------------|--------------------------------|--|----------------------|
| High                 |                                   |                                    | 17,520                        | 796.36                         |  | 525,699.60           |
| Normal               |                                   |                                    | 61,320                        | 2,787.27                       |  | 1,639,948.66         |
| <b>Total</b>         |                                   |                                    | <b>87,600</b>                 | <b>3,981.82</b>                |  | <b>2,628,498.06</b>  |
| <b>Overall Total</b> |                                   |                                    | <b>946,218</b>                | <b>43,009.91</b>               |  | <b>28,387,780.14</b> |

Currency: EUR  
RTGS account number: RTGSDCPBAAKMD0000EUR0A01

Final transactions

|              | Total volume   | Daily average volume | Previous month daily average volume | Total value         | Daily average value | Previous month daily average value |
|--------------|----------------|----------------------|-------------------------------------|---------------------|---------------------|------------------------------------|
| Urgent       | 27,100         | 1,231.82             |                                     | 813,028.10          | 36,955.82           |                                    |
| High         | 54,200         | 2,463.64             |                                     | 1,626,056.22        | 73,911.65           |                                    |
| Normal       | 189,702        | 8,622.82             |                                     | 5,691,196.80        | 258,690.76          |                                    |
| <b>Total</b> | <b>271,002</b> | <b>12,318.27</b>     |                                     | <b>8,130,281.12</b> | <b>369,558.23</b>   |                                    |

Rejected transactions

|              | Total volume  | Daily average volume | Previous month daily average volume | Total value       | Daily average value | Previous month daily average value |
|--------------|---------------|----------------------|-------------------------------------|-------------------|---------------------|------------------------------------|
| Urgent       | 1,454         | 66.09                |                                     | 43,711.12         | 1,986.87            |                                    |
| High         | 2,912         | 132.36               |                                     | 87,422.34         | 3,973.74            |                                    |
| Normal       | 10,194        | 463.36               |                                     | 305,978.30        | 13,908.10           |                                    |
| <b>Total</b> | <b>14,560</b> | <b>661.82</b>        |                                     | <b>437,111.76</b> | <b>19,868.72</b>    |                                    |

Cancelled transactions

|                      | Total volume   | Daily average volume | Previous month daily average volume | Total value         | Daily average value | Previous month daily average value |
|----------------------|----------------|----------------------|-------------------------------------|---------------------|---------------------|------------------------------------|
| Urgent               | 2,912          | 132.36               |                                     | 87,422.34           | 3,973.74            |                                    |
| High                 | 5,826          | 264.82               |                                     | 174,844.72          | 7,947.49            |                                    |
| Normal               | 20,394         | 927.00               |                                     | 611,956.62          | 27,816.21           |                                    |
| <b>Total</b>         | <b>29,132</b>  | <b>1,324.18</b>      |                                     | <b>874,223.68</b>   | <b>39,737.44</b>    |                                    |
| <b>Overall Total</b> | <b>314,694</b> | <b>14,304.27</b>     |                                     | <b>9,441,616.56</b> | <b>429,164.39</b>   |                                    |

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Figure 254 - TRN05 output (4)

target | TRN05 - Monthly overview of cash transfer orders per party

Apr 23, 2021 14:30:31 GMT+02:00  
DEV - Development and integration

CBXXXMD0000 - Central Bank of Fiction  
Year: 2019  
Month: January  
Party: PBAAKMD0000

Domestic transactions debited  
Currency: EUR  
CLM account number: MACASHPBAAKMD0000EUR0A01

Final transactions

|              | Total volume     | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|--------------|------------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent       | 175,500          | 7,977.27             |                                     | 5,265,084.06         | 239,322.00          |                                    |
| High         | 391,000          | 15,954.55            |                                     | 10,530,168.12        | 476,844.01          |                                    |
| Normal       | 1,228,506        | 55,841.18            |                                     | 36,855,588.72        | 1,675,254.03        |                                    |
| <b>Total</b> | <b>1,755,006</b> | <b>79,773.00</b>     |                                     | <b>52,650,840.90</b> | <b>2,393,220.04</b> |                                    |

Rejected transactions

|              | Total volume  | Daily average volume | Previous month daily average volume | Total value         | Daily average value | Previous month daily average value |
|--------------|---------------|----------------------|-------------------------------------|---------------------|---------------------|------------------------------------|
| Urgent       | 9,426         | 428.45               |                                     | 283,068.90          | 12,866.77           |                                    |
| High         | 18,864        | 857.45               |                                     | 566,138.04          | 25,733.55           |                                    |
| Normal       | 66,042        | 3,001.91             |                                     | 1,961,483.14        | 90,067.42           |                                    |
| <b>Total</b> | <b>94,332</b> | <b>4,287.82</b>      |                                     | <b>2,830,690.08</b> | <b>128,667.73</b>   |                                    |

Cancelled transactions

|                      | Total volume     | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|----------------------|------------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent               | 18,864           | 857.45               |                                     | 566,138.04           | 25,733.55           |                                    |
| High                 | 37,740           | 1,715.45             |                                     | 1,132,276.08         | 51,467.09           |                                    |
| Normal               | 132,090          | 6,004.09             |                                     | 3,962,966.46         | 180,134.84          |                                    |
| <b>Total</b>         | <b>188,694</b>   | <b>8,577.00</b>      |                                     | <b>5,661,380.58</b>  | <b>257,335.48</b>   |                                    |
| <b>Overall Total</b> | <b>2,038,032</b> | <b>92,637.82</b>     |                                     | <b>61,142,911.56</b> | <b>2,779,223.25</b> |                                    |

Figure 255 - TRN05 output (5)



target | TRN05 - Monthly overview of cash transfer orders per party

|                      | Cross border transactions debited | Cross border transactions credited | Domestic transactions debited | Domestic transactions credited |                      |                     |
|----------------------|-----------------------------------|------------------------------------|-------------------------------|--------------------------------|----------------------|---------------------|
| High                 |                                   |                                    | 37,740                        | 1,715,45                       | 1,132,276.06         | 51,467.09           |
| Normal               |                                   |                                    | 132,090                       | 6,004,09                       | 3,962,966.46         | 180,134.84          |
| <b>Total</b>         |                                   |                                    | <b>188,894</b>                | <b>8,577,00</b>                | <b>5,061,380.58</b>  | <b>257,335.48</b>   |
| <b>Overall Total</b> | <b>2,038,032</b>                  |                                    | <b>92,837.82</b>              |                                | <b>61,142,911.56</b> | <b>2,779,223.25</b> |

Domestic transactions debited  
Currency: EUR  
RTGS account number: RTGSDCPBAAKMDXXXEUR0A01

|              | Total volume   | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|--------------|----------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent       | 58,368         | 2,653.09             |                                     | 1,751,137.46         | 79,597.16           |                                    |
| High         | 116,740        | 5,306.36             |                                     | 3,502,274.94         | 159,194.32          |                                    |
| Normal       | 408,594        | 18,572.45            |                                     | 12,257,962.36        | 557,160.11          |                                    |
| <b>Total</b> | <b>583,702</b> | <b>26,531.91</b>     |                                     | <b>17,511,374.76</b> | <b>795,971.58</b>   |                                    |

|              | Total volume  | Daily average volume | Previous month daily average volume | Total value       | Daily average value | Previous month daily average value |
|--------------|---------------|----------------------|-------------------------------------|-------------------|---------------------|------------------------------------|
| Urgent       | 3,134         | 142.45               |                                     | 94,147.12         | 4,279.41            |                                    |
| High         | 6,274         | 285.18               |                                     | 188,294.32        | 8,558.83            |                                    |
| Normal       | 21,964        | 998.36               |                                     | 659,030.18        | 29,955.92           |                                    |
| <b>Total</b> | <b>31,372</b> | <b>1,426.00</b>      |                                     | <b>941,471.62</b> | <b>42,794.16</b>    |                                    |

|                      | Total volume   | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|----------------------|----------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent               | 6,274          | 285.18               |                                     | 188,294.32           | 8,558.83            |                                    |
| High                 | 12,550         | 570.45               |                                     | 376,588.68           | 17,117.67           |                                    |
| Normal               | 43,932         | 1,996.91             |                                     | 1,318,060.42         | 59,911.84           |                                    |
| <b>Total</b>         | <b>62,756</b>  | <b>2,852.55</b>      |                                     | <b>1,882,943.42</b>  | <b>85,588.34</b>    |                                    |
| <b>Overall Total</b> | <b>677,830</b> | <b>30,810.45</b>     |                                     | <b>20,335,789.80</b> | <b>924,354.08</b>   |                                    |

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Figure 256 - TRN05 output (6)

target | TRN05 - Monthly overview of cash transfer orders per party

target | TRN05 - Monthly overview of cash transfer orders per party

Apr 23, 2021 14:30:31 GMT+02:00  
DEV - Development and integration

CBXXXMDDXXX - Central Bank of Fiction  
Year: 2019  
Month: January  
Party: PBAAKMDXXX

Domestic transactions credited  
Currency: EUR  
CLM account number: MACASHPBAAKMDXXXEUR0A01

|              | Total volume     | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|--------------|------------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent       | 182,960          | 7,407.27             |                                     | 4,889,006.58         | 222,227.57          |                                    |
| High         | 325,926          | 14,814.82            |                                     | 9,778,013.22         | 444,455.15          |                                    |
| Normal       | 1,140,762        | 51,852.82            |                                     | 34,223,046.66        | 1,555,593.03        |                                    |
| <b>Total</b> | <b>1,629,648</b> | <b>74,074.91</b>     |                                     | <b>48,890,066.46</b> | <b>2,222,275.75</b> |                                    |

|              | Total volume  | Daily average volume | Previous month daily average volume | Total value         | Daily average value | Previous month daily average value |
|--------------|---------------|----------------------|-------------------------------------|---------------------|---------------------|------------------------------------|
| Urgent       | 8,760         | 398.18               |                                     | 262,849.80          | 11,947.72           |                                    |
| High         | 17,520        | 796.36               |                                     | 525,699.60          | 23,895.44           |                                    |
| Normal       | 61,320        | 2,787.27             |                                     | 1,839,948.66        | 83,634.03           |                                    |
| <b>Total</b> | <b>87,600</b> | <b>3,981.82</b>      |                                     | <b>2,628,498.06</b> | <b>119,477.18</b>   |                                    |

|                      | Total volume     | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|----------------------|------------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent               | 17,520           | 796.36               |                                     | 525,699.60           | 23,895.44           |                                    |
| High                 | 35,040           | 1,592.73             |                                     | 1,051,399.14         | 47,790.87           |                                    |
| Normal               | 122,652          | 5,575.09             |                                     | 3,679,897.38         | 167,268.06          |                                    |
| <b>Total</b>         | <b>175,212</b>   | <b>7,964.18</b>      |                                     | <b>5,256,996.12</b>  | <b>238,954.37</b>   |                                    |
| <b>Overall Total</b> | <b>1,892,460</b> | <b>86,020.91</b>     |                                     | <b>56,775,560.64</b> | <b>2,580,707.30</b> |                                    |

Figure 257 - TRN05 output (7)

The screenshot displays the TRN05 report output for 'Domestic transactions credited'. The report is organized into several sections: a summary table, a table for 'Final transactions', a table for 'Rejected transactions', and a table for 'Cancelled transactions'. Each table includes columns for 'Total volume', 'Daily average volume', 'Previous month daily average volume', 'Total value', 'Daily average value', and 'Previous month daily average value'. The data is categorized by 'High', 'Normal', and 'Total' for each section. The overall total for Domestic transactions credited is 1,892,460 transactions with a total value of 56,775,560.64 EUR.

|                      | Cross border transactions debited | Cross border transactions credited | Domestic transactions debited | Domestic transactions credited |
|----------------------|-----------------------------------|------------------------------------|-------------------------------|--------------------------------|
| High                 |                                   |                                    | 35,040                        | 1,592.73                       |
| Normal               |                                   |                                    | 122,652                       | 5,575.09                       |
| <b>Total</b>         |                                   |                                    | <b>175,212</b>                | <b>7,964.18</b>                |
| <b>Overall Total</b> | <b>1,892,460</b>                  |                                    | <b>86,020.81</b>              | <b>56,775,560.64</b>           |

|              | Total volume   | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|--------------|----------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent       | 54,200         | 2,463.64             |                                     | 1,626,056.22         | 73,911.65           |                                    |
| High         | 108,400        | 4,927.27             |                                     | 3,252,112.44         | 147,823.29          |                                    |
| Normal       | 379,410        | 17,245.91            |                                     | 11,382,393.62        | 517,381.53          |                                    |
| <b>Total</b> | <b>542,010</b> | <b>24,636.82</b>     |                                     | <b>16,260,562.28</b> | <b>739,116.47</b>   |                                    |

|              | Total volume  | Daily average volume | Previous month daily average volume | Total value       | Daily average value | Previous month daily average value |
|--------------|---------------|----------------------|-------------------------------------|-------------------|---------------------|------------------------------------|
| Urgent       | 2,912         | 132.36               |                                     | 87,422.34         | 3,973.74            |                                    |
| High         | 5,826         | 264.82               |                                     | 174,844.72        | 7,947.49            |                                    |
| Normal       | 20,394        | 927.00               |                                     | 611,956.62        | 27,816.21           |                                    |
| <b>Total</b> | <b>29,132</b> | <b>1,324.18</b>      |                                     | <b>874,223.68</b> | <b>39,737.44</b>    |                                    |

|                      | Total volume   | Daily average volume | Previous month daily average volume | Total value          | Daily average value | Previous month daily average value |
|----------------------|----------------|----------------------|-------------------------------------|----------------------|---------------------|------------------------------------|
| Urgent               | 5,826          | 264.82               |                                     | 174,844.72           | 7,947.49            |                                    |
| High                 | 11,654         | 529.73               |                                     | 349,689.46           | 15,894.98           |                                    |
| Normal               | 40,794         | 1,854.27             |                                     | 1,223,913.26         | 55,632.42           |                                    |
| <b>Total</b>         | <b>58,274</b>  | <b>2,648.82</b>      |                                     | <b>1,748,447.44</b>  | <b>79,474.88</b>    |                                    |
| <b>Overall Total</b> | <b>629,416</b> | <b>28,609.82</b>     |                                     | <b>18,883,233.40</b> | <b>858,328.79</b>   |                                    |

Figure 258 - TRN05 output (8)

**Output description**

**TRN05 – Report description – output screen**

| Field label | Description |
|-------------|-------------|
|-------------|-------------|

The report consists of four sheets:

Sheet 1: Cross border transactions debited

Sheet 2: Cross border transactions credited

Sheet 3: Domestic transactions debited

Sheet 4: Domestic transactions credited

Each sheet with following data:

For every service (CLM and RTGS, in case the chosen party owns accounts in both) and every cash account owned by the chosen party in the respective service:

Service, account number

Service in which the account is held:

- | CLM,
- | RTGS,

followed by the account number of cash account owned by the chosen party in the respective service.

Only accounts of the following types are regarded:

For CLM:

- | MCA

|  |   |
|--|---|
|  | <ul style="list-style-type: none"> <li>  CLM CB account</li> </ul> <p>For RTGS:</p> <ul style="list-style-type: none"> <li>  RTGS DCA</li> <li>  RTGS sub-account</li> <li>  RTGS CB account</li> <li>  Ancillary System Guarantee funds account</li> <li>  AS Technical account</li> </ul> |
|--|---|

Three tables for “Final transactions”, “Cancelled transactions” and “Rejected transactions”. Each table with following data :

|                                    |  |
|------------------------------------|--|
| Priority                           | <p>Possible values:</p> <ul style="list-style-type: none"> <li>  Urgent</li> <li>  High</li> <li>  Normal</li> </ul> |
| Total volume                       | Total of volume of chosen month  |
| Daily average volume               | Daily average of volume  |
| Previous month daily average       | Daily average of volume of the previous month  |
| Total value                        | Total value  |
| Daily average value                | Monthly average of value   |
| Previous month daily average value | Daily average of value of the previous month   |
| Total                              | Sum of each column for one status  |
| Overall Total                      | Sum of each column over all status (final, cancelled, rejected)  |

**Table 77 - TRN05 - Output description**

### 5.12.6 TRN06 – Monthly share of Indirect Participant, addressable BIC and multi-addressee payments as part of total Direct Participant’s activity

**Context of usage**

This report provides information on the monthly volume and value of payments of all Indirect Participants, addressable BICs and multi-addressees belonging to a selected Direct Participant in RTGS. The volume and value Figures are presented for each Indirect Participant/addressable BIC/multi-addressee as totals (differentiated by domestic and cross-border traffic) and in addition, as share of the Direct Participant’s activity.

All Figures are reported for the given month and the preceding month.

CBs can retrieve information for those entities where the respective Direct Participant belongs to their system entity.

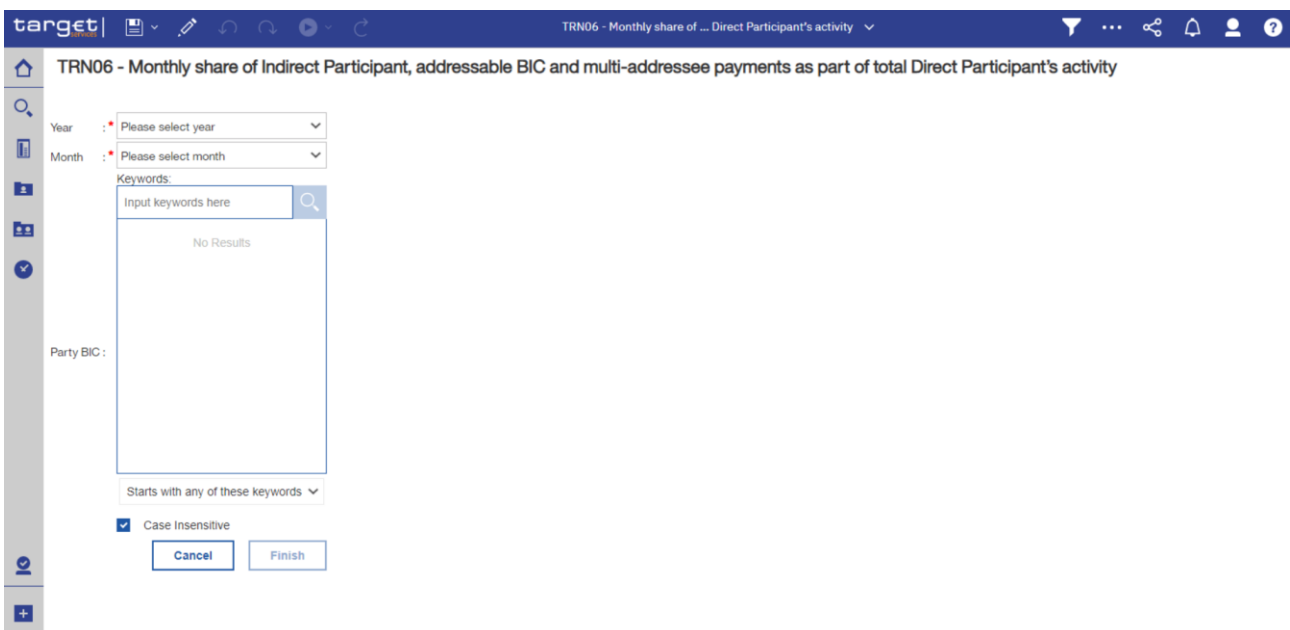
This report can be used by CB and PB users.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN06]

**Screenshot - prompt screen**



**Figure 259 - TRN06 prompt**

**Prompt description,**

| TRN06 – Report description – prompt description |   |
|---|---|
| Field label                                     | Description   |
| Year  | You can use this drop-down field to select the year, from which the report should contain the data.<br><br>This field is mandatory.   |
| Month   | You can use this drop-down field to select the month, from which the report should contain the data.<br><br>For valid report results, the current month cannot be selected.<br><br>This field is mandatory. |
| Party BIC                                       | You can use this drop-down field to select the Party BIC. This field will show all related BIC’s, which belong to the Party.  |

Table 78 - TRN06 - Prompt description

**Screenshot - output screen**

| Participation type | Party BIC           | Domestic/Cross border | Reported Month   |                   |                    |         |
|--------------------|---------------------|-----------------------|------------------|-------------------|--------------------|---------|
|                    |                     |                       | Volume           | %                 | Value              | %       |
| Overall            | PBAAKMD000X         | Overall               | 1,703,789,308.00 | 100.00%           | 681,516,004,193.50 | 100.00% |
|                    |                     | Domestic              | 1,107,463,178.00 | 65.00%            | 442,985,402,727.16 | 65.00%  |
|                    |                     | Cross Border          | 596,326,130.00   | 35.00%            | 238,530,601,466.34 | 35.00%  |
| Direct             | PBAAKMD000X         | Overall               | 973,594,200.00   | 57.14%            | 389,437,716,686.34 | 57.14%  |
|                    |                     | Domestic              | 632,836,244.00   | 37.14%            | 253,134,515,846.24 | 37.14%  |
|                    |                     | Cross Border          | 340,757,956.00   | 20.00%            | 136,303,200,840.10 | 20.00%  |
| Indirect           | All Indirect        | Overall               | 389,437,524.00   | 22.86%            | 155,775,086,672.24 | 22.86%  |
|                    |                     | Domestic              | 253,134,432.00   | 14.86%            | 101,253,806,337.52 | 14.86%  |
|                    |                     | Cross Border          | 136,303,092.00   | 8.00%             | 54,521,280,334.72  | 8.00%   |
|                    | LBSWKMFF00X         | Overall               | 389,437,524.00   | 22.86%            | 155,775,086,672.24 | 22.86%  |
|                    |                     | Domestic              | 253,134,432.00   | 14.86%            | 101,253,806,337.52 | 14.86%  |
|                    |                     | Cross Border          | 136,303,092.00   | 8.00%             | 54,521,280,334.72  | 8.00%   |
| Multi Addressee    | All Multi Addressee | Overall               | 165,510,872.00   | 9.71%             | 66,204,411,634.58  | 9.71%   |
|                    |                     | Domestic              | 107,582,092.00   | 6.31%             | 43,032,867,692.70  | 6.31%   |
|                    |                     | Cross Border          | 57,928,780.00    | 3.40%             | 23,171,544,141.88  | 3.40%   |
|                    | HELAKMDA00X         | Overall               | 87,623,402.00    | 5.14%             | 35,045,394,500.70  | 5.14%   |
|                    |                     | Domestic              | 56,955,226.00    | 3.34%             | 22,782,106,425.60  | 3.34%   |
|                    |                     | Cross Border          | 30,668,176.00    | 1.80%             | 12,267,288,075.10  | 1.80%   |
| HELAKMW00X         | Overall             | 77,887,470.00         | 4.57%            | 31,155,017,333.88 | 4.57%              |         |

Figure 260 - TRN06 output (1)

| Participation type | Party BIC           | Domestic/Cross border | Reported Month        |               |                          |               |
|--------------------|---------------------|-----------------------|-----------------------|---------------|--------------------------|---------------|
|                    |                     |                       | Volume                | %             | Value                    | %             |
| Multi Addressee    | HELLAKM000X         | Domestic              | 50,626,866.00         | 2.97%         | 20,250,761,267.10        | 2.97%         |
|                    |                     | Cross Border          | 27,260,604.00         | 1.60%         | 10,904,256,066.78        | 1.60%         |
| Addressable BIC    | All Addressable BIC | <b>Overall</b>        | <b>175,246,712.00</b> | <b>10.29%</b> | <b>70,998,789,000.34</b> | <b>10.29%</b> |
|                    |                     | Domestic              | 113,910,410.00        | 6.69%         | 45,564,212,850.70        | 6.69%         |
|                    |                     | Cross Border          | 61,336,302.00         | 3.60%         | 24,534,576,149.64        | 3.60%         |
|                    | NASSKM500X          | <b>Overall</b>        | <b>68,151,520.00</b>  | <b>4.00%</b>  | <b>27,260,640,166.96</b> | <b>4.00%</b>  |
|                    |                     | Domestic              | 44,298,502.00         | 2.60%         | 17,718,416,108.72        | 2.60%         |
|                    |                     | Cross Border          | 23,853,018.00         | 1.40%         | 9,541,224,058.24         | 1.40%         |
|                    | NASSKM520X          | <b>Overall</b>        | <b>58,415,572.00</b>  | <b>3.43%</b>  | <b>23,366,263,000.14</b> | <b>3.43%</b>  |
|                    |                     | Domestic              | 37,970,140.00         | 2.23%         | 15,188,070,950.24        | 2.23%         |
|                    |                     | Cross Border          | 20,445,432.00         | 1.20%         | 8,178,192,049.90         | 1.20%         |
|                    | NASSKM530X          | <b>Overall</b>        | <b>48,679,620.00</b>  | <b>2.86%</b>  | <b>19,471,885,833.24</b> | <b>2.86%</b>  |
|                    |                     | Domestic              | 31,641,768.00         | 1.86%         | 12,656,725,791.74        | 1.86%         |
|                    |                     | Cross Border          | 17,037,852.00         | 1.00%         | 6,815,160,041.50         | 1.00%         |

Figure 261 - TRN06 output (2)

**Output description**

| TRN06 – Report description – output screen |   |
|--|---|
| Field label                                | Description   |
| Currency                                   | Currency  |
| Party                                      | The party BIC and party short name of the user are shown. Both values separated by a hyphen “-“   |
| Participation Type                         | <p>Participation type.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  “Overall”</li> <li>  “Direct”</li> <li>  “Addressable BIC”</li> <li>  “Indirect”</li> <li>  “Multi Addressee”</li> </ul> <p>In order to increase readability the participation type is displayed only after a group change.</p> <p>Initial sorting by this column , then by party BIC</p> |
| Party BIC                                  | In total rows the column either displays “Addressable BIC” resp. “All Indirect” resp. “All Multi Addressee” or the BICs of the Direct Participant, of related addressable BICs, the party's Indirect Participants or of its multi addressee.  |

|                               |  |
|-------------------------------|--|
|                               | <p>In order to increase readability the party BIC/Total is displayed only after a group change.</p> <p>Initial sorting by participation type , then by this column</p>   |
| Overall/Domestic/Cross Border | <p>Mark which identifies whether the displayed aggregation refers to a total per BIC or domestic or cross border cash transfer orders.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  Overall</li> <li>  Domestic</li> <li>  Cross Border</li> </ul> |
| Previous Month                |  |
| Volume                        | Number of cash transfer orders   |
| %                             | <p>Percentage value of the displayed volume for the combination of participation type, party BIC total and debit/credit;</p> <p>Up to 2 decimals are displayed</p>   |
| Value                         | Sum of amount. The base for the calculation are debited amounts only.  |
| %                             | <p>Percentage of the displayed volume for the combination of participation type, party BIC total and debit/credit</p> <p>Up to 2 decimals are displayed.</p>   |
| Reported Month                |  |
| %                             | <p>Percentage value of the displayed volume for the combination of participation type, party BIC total and debit/credit;</p> <p>Up to 2 decimals are displayed.</p>  |
| Value                         | Sum of amount. The base for the calculation are debited amounts only.  |
| %                             | <p>Percentage of the displayed volume for the combination of participation type, party BIC total and debit/credit</p> <p>Up to 2 decimals are displayed.</p>   |

**Table 79 - TRN06 - Output description**

### 5.12.7 TRN07 – Cash transfers between two accounts of different parties

#### **Context of usage**

TRN07 lists all cash transfers between two accounts in CLM or RTGS for a given date (range). For each cash transfer the settlement time stamp, the message type, the CLM/RTGS booking reference, the transaction

category and the settlement amount are displayed. CBs can retrieve information on those cash transfers where at least one of the two involved accounts (credited or debited account) is opened under a party belonging to its system entity.

This report can be used by CB users only.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN07]

**Screenshot – prompt**

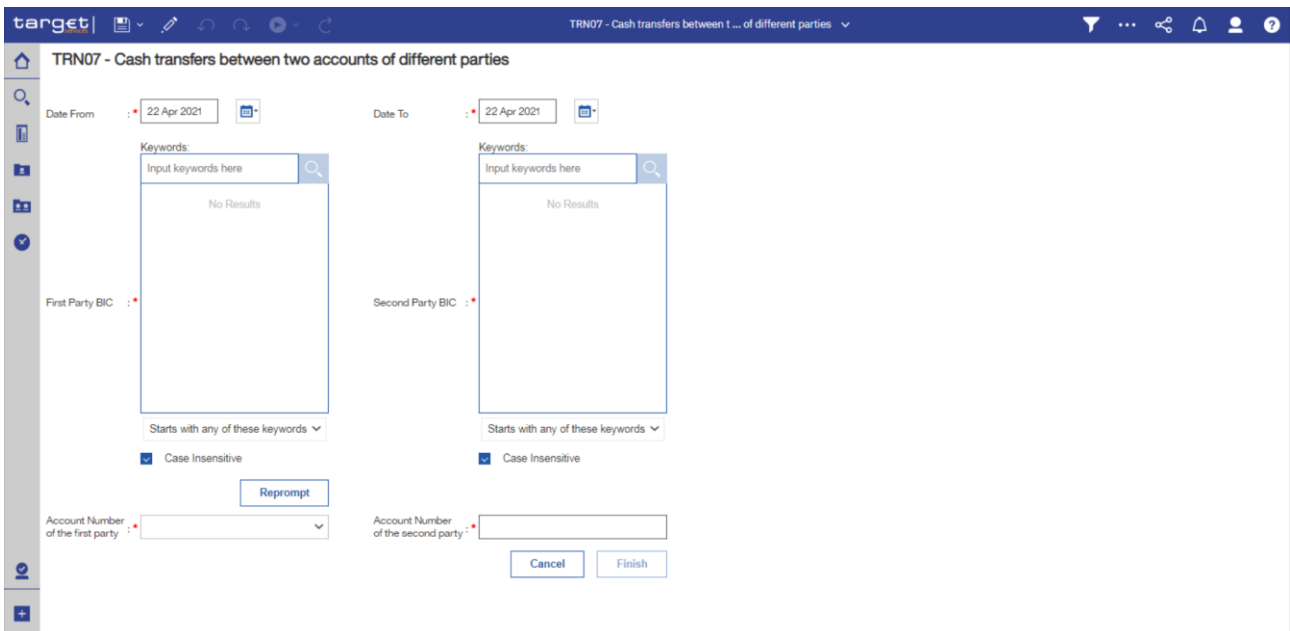


Figure 262 - TRN07 prompt

**Prompt description**

| TRN07 – Report description – prompt description |  |
|---|--|
| Field label                                     | Description  |
| Date From                                       | You can enter the date by clicking on the calendar .<br><br>This field is mandatory.   |
| Date To   | You can enter the end date of the period, for which the report should contain the data by clicking on the calendar.<br><br>For valid report results, the current day cannot be selected. |



|                                    |   |
|------------------------------------|---|
|                                    | This field is mandatory   |
| First Party BIC                    | You can use this search and select prompt to select the first party BIC or short name.<br><br>This field is mandatory   |
| Second Party BIC                   | You can use this search and select prompt to select the second party BIC and short name.<br><br>This field is mandatory   |
| Account Number of the first party  | .You can use this drop-down list to select the account number of the first party.<br>It is built from account numbers within the user's data scope.<br><br>This field is mandatory. |
| Account Number of the second party | You can use this free text field to enter the account number of the second party.<br><br>This field is mandatory  |

Table 80 - TRN07 - Prompt description

**Screenshot - output screen**

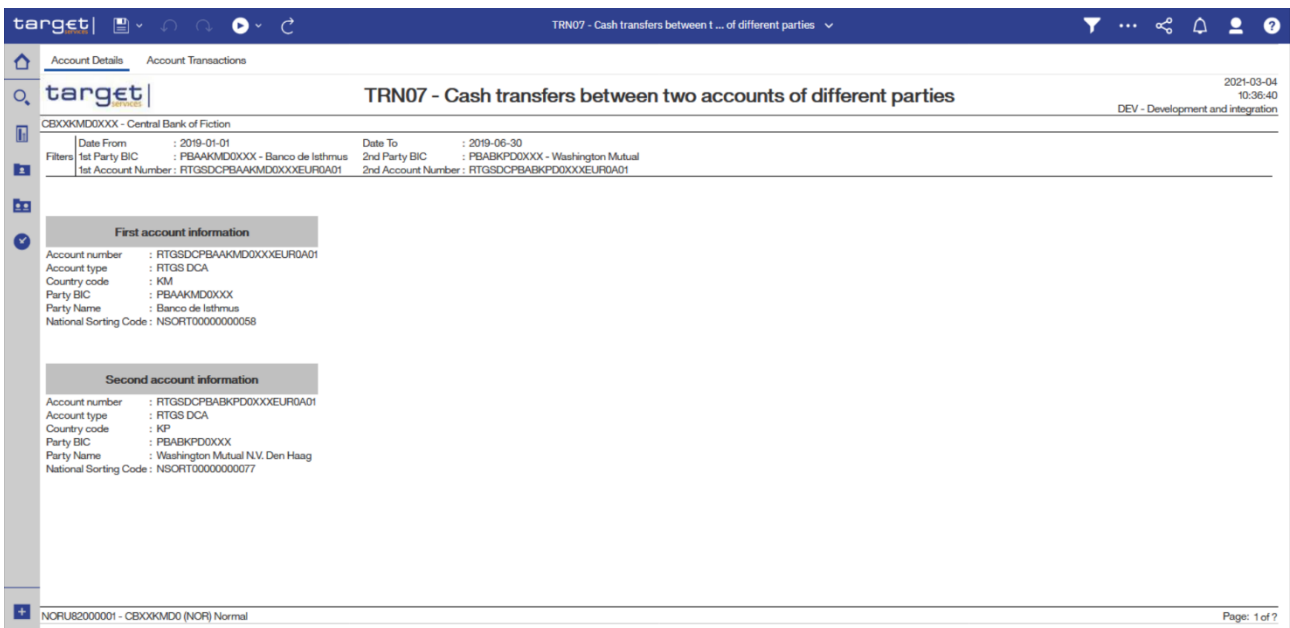


Figure 263 - TRN07 output (1)

target | TRN07 - Cash transfers between two accounts of different parties

Account Details Account Transactions

target | TRN07 - Cash transfers between two accounts of different parties

CBXXXMD0000 - Central Bank of Fiction

Filters Date From : 2019-01-01 Date To : 2019-06-30  
1st Party BIC : PBAAKMD0000 - Banco de Isthmus 2nd Party BIC : PBABKPD0000 - Washington Mutual  
1st Account Number : RTGSDCPBAAKMD0000EUR0A01 2nd Account Number : RTGSDCPBANKPD0000EUR0A01

Currency: EUR

| Transaction Reference Number | Settlement Timestamp | Message Type                 | Transaction Category | Debited Account          | Credited Account         | Value of Settlement |
|------------------------------|----------------------|------------------------------|----------------------|--------------------------|--------------------------|---------------------|
| 2018141432373                | 2019-05-02 17:04:23  | pacs.009 - Interbank Payment | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 451,800.11          |
| 2018141432374                | 2019-05-02 17:04:23  | pacs.010 - Direct Debit      | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBAAKMD0000EUR0A01 | 180,720.04          |
| 2018141432375                | 2019-05-02 17:04:23  | pain.998 - AS Payment        | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 542,160.13          |
| 2018141432376                | 2019-05-02 17:04:23  | pacs.008 - Customer Payment  | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 7,228.80            |
| 2018141432429                | 2019-04-02 17:04:23  | pacs.009 - Interbank Payment | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 361,800.09          |
| 2018141432430                | 2019-04-02 17:04:23  | pacs.010 - Direct Debit      | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 14,720.03           |
| 2018141432431                | 2019-04-02 17:04:23  | pain.998 - AS Payment        | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 434,160.10          |
| 2018141432432                | 2019-04-02 17:04:23  | pacs.008 - Customer Payment  | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 5,788.80            |
| 2018141433029                | 2019-06-02 17:04:23  | pacs.009 - Interbank Payment | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 541,800.13          |
| 2018141433030                | 2019-06-02 17:04:23  | pacs.010 - Direct Debit      | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 216,720.05          |
| 2018141433031                | 2019-06-02 17:04:23  | pain.998 - AS Payment        | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 650,160.16          |
| 2018141433032                | 2019-06-02 17:04:23  | pacs.008 - Customer Payment  | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 8,668.79            |
| 2018141433097                | 2019-05-02 17:04:23  | pacs.009 - Interbank Payment | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 451,800.11          |
| 2018141433098                | 2019-05-02 17:04:23  | pacs.010 - Direct Debit      | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBAAKMD0000EUR0A01 | 180,720.04          |
| 2018141433099                | 2019-05-02 17:04:23  | pain.998 - AS Payment        | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 542,160.13          |
| 2018141433900                | 2019-05-02 17:04:23  | pacs.008 - Customer Payment  | Interbank Payment    | RTGSDCPBANKPD0000EUR0A01 | RTGSDCPBAAKMD0000EUR0A01 | 7,228.80            |
| 2018141433945                | 2019-04-02 17:04:23  | pacs.009 - Interbank Payment | Interbank Payment    | RTGSDCPBANKPD0000EUR0A01 | RTGSDCPBAAKMD0000EUR0A01 | 361,800.09          |
| 2018141433946                | 2019-04-02 17:04:23  | pacs.010 - Direct Debit      | Interbank Payment    | RTGSDCPBANKPD0000EUR0A01 | RTGSDCPBAAKMD0000EUR0A01 | 14,720.03           |
| 2018141433947                | 2019-04-02 17:04:23  | pain.998 - AS Payment        | Interbank Payment    | RTGSDCPBANKPD0000EUR0A01 | RTGSDCPBAAKMD0000EUR0A01 | 434,160.10          |
| 2018141433948                | 2019-04-02 17:04:23  | pacs.008 - Customer Payment  | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 5,788.80            |

NORUR2000001 - CBXXXMD0 (NOR) Normal Page: 2 of 7

Figure 264 - TRN07 output (2)

target | TRN07 - Cash transfers between two accounts of different parties

Account Details Account Transactions

target | TRN07 - Cash transfers between two accounts of different parties

CBXXXMD0000 - Central Bank of Fiction

Filters Date From : 2019-01-01 Date To : 2019-06-30  
1st Party BIC : PBAAKMD0000 - Banco de Isthmus 2nd Party BIC : PBABKPD0000 - Washington Mutual  
1st Account Number : RTGSDCPBAAKMD0000EUR0A01 2nd Account Number : RTGSDCPBANKPD0000EUR0A01

| Transaction Reference Number                               | Settlement Timestamp | Message Type                 | Transaction Category | Debited Account          | Credited Account         | Value of Settlement |
|--|----------------------|------------------------------|----------------------|--------------------------|--------------------------|---------------------|
| 2018141439689  | 2019-06-02 17:04:23  | pacs.009 - Interbank Payment | Interbank Payment    | RTGSDCPBANKPD0000EUR0A01 | RTGSDCPBAAKMD0000EUR0A01 | 541,800.13          |
| 2018141439690  | 2019-06-02 17:04:23  | pacs.010 - Direct Debit      | Interbank Payment    | RTGSDCPBAAKMD0000EUR0A01 | RTGSDCPBANKPD0000EUR0A01 | 216,720.05          |
| 2018141439691  | 2019-06-02 17:04:23  | pain.998 - AS Payment        | Interbank Payment    | RTGSDCPBANKPD0000EUR0A01 | RTGSDCPBAAKMD0000EUR0A01 | 650,160.16          |
| 2018141439692  | 2019-06-02 17:04:23  | pacs.008 - Customer Payment  | Interbank Payment    | RTGSDCPBANKPD0000EUR0A01 | RTGSDCPBAAKMD0000EUR0A01 | 8,668.79            |
| <b>Total value of settlement (first account debited)</b>   |                      |                              |                      |                          |                          | <b>3,545,727.23</b> |
| <b>Total volume of settlement (first account debited)</b>  |                      |                              |                      |                          |                          | <b>12</b>           |
| <b>Total value of settlement (first account credited)</b>  |                      |                              |                      |                          |                          | <b>3,545,727.23</b> |
| <b>Total volume of settlement (first account credited)</b> |                      |                              |                      |                          |                          | <b>12</b>           |

NORUR2000001 - CBXXXMD0 (NOR) Normal Page: 3 of 7

Figure 265 - TRN07 output (3)

**Output description**

**TRN07 – Report description – output screen – table**

**Account details**

| Field label           | Description   |
|-----------------------|---|
| Account number        | Account number as chosen in the search criteria   |
| Account type          | Account type as chosen in the search criteria<br>Possible values:<br>For CLM<br><ul style="list-style-type: none"> <li>  MCA</li> <li>  Overnight Deposit account</li> <li>  CLM CB account</li> <li>  Marginal Lending account</li> </ul> For RTGS :<br><ul style="list-style-type: none"> <li>  RTGS DCA</li> <li>  RTGS sub-account</li> <li>  RTGS CB account</li> <li>  Ancillary System Guarantee funds account</li> <li>  AS technical accounts</li> </ul> |
| Country code          | Country code related to the party chosen in the search criteria   |
| Party BIC             | Party BIC as chosen in the search criteria  |
| Party Name            | Party name related to the party BIC chosen in the search criteria   |
| National Sorting Code | National Sorting Code related to the party BIC chosen in the search criteria  |

**TRN07 – Report description – output screen – table list of cash transfers**

| Field label                  | Description  |
|------------------------------|--|
| Currency                     | ISO currency code  |
| Transaction Reference Number | Transaction reference number (CLM/RTGS internal cash transfer identifier)  |
| Settlement Timestamp         | Timestamp of the cash transfer settlement  |
| Message Type                 | Message type.<br>Possible values:<br><ul style="list-style-type: none"> <li>  camt.050</li> <li>  pain.998 (ASTI)</li> </ul> |

|                      |  |
|----------------------|--|
|                      | <ul style="list-style-type: none"> <li>  pacs.004</li> <li>  pacs.008</li> <li>  pacs.009</li> <li>  pacs.010</li> </ul>   |
| Transaction Category | <p>Statistical Classification Transaction category.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  CLM Intra Liquidity Transfer (C.10.00)</li> <li>  CLM RTGS Liquidity Transfer (C.10.20)</li> <li>  CLM T2S Liquidity Transfer (C.10.30)</li> <li>  CLM TIPS Liquidity Transfer (C.10.40)</li> <li>  Open Market Operations (C.11.01)</li> <li>  Standing Facilities (C.11.02)</li> <li>  Reserve and Account Management (C.11.03)</li> <li>  Inter Central Bank Transactions (C.11.04)</li> <li>  Connected payments for credit line changes (C.11.05)</li> <li>  Non-euro area CB operations (C.11.06)</li> <li>  Other (including cash transactions) (C.11.09)</li> <li>  Billing (C.12)</li> <li>  Target balances (C.13)</li> <li>  Levelling out of closed accounts (C.14.01)</li> <li>  ECONS II back transfers (C.14.02)</li> <li>  Seizure of funds (C.14.03)</li> <li>  CLM Other (C.19)</li> <li>  RTGS Intra Liquidity Transfer (R.20.00)</li> <li>  RTGS CLM Liquidity Transfer (R.20.10)</li> <li>  RTGS T2S Liquidity Transfer (R.20.30)</li> <li>  RTGS TIPS Liquidity Transfer (R.20.40)</li> <li>  Interbank Payments (R.21.01)</li> <li>  Customer Payments (R.21.02)</li> <li>  Other (R.21.09)</li> <li>  AS Transactions HVPS (R.22.01)</li> <li>  AS Transactions RPS (R.22.02)</li> <li>  AS Transactions IPS (R.22.03)</li> </ul> |

|   |  |
|---|--|
|   | <ul style="list-style-type: none"> <li>  AS Transactions SSS (R.22.04)</li> <li>  AS Transactions FES (R.22.05)</li> <li>  AS Transactions MMS (R.22.06)</li> <li>  AS Transactions CCP (R.22.07)</li> <li>  AS Transactions Other (R.22.09)</li> <li>  Levelling out of closed accounts (R.23.01)</li> <li>  RTGS Other (R.29)</li> </ul> |
| Debited Account                                     | Debited account number   |
| Credited Account                                    | Identification of the credited account number  |
| Value of Settlement                                 | Settlement amount  |
| Total value of settlement (first account debited)   | Total value of settlement (first account debited)  |
| Total volume of settlement (first account debited)  | Total volume of settlement (first account debited)   |
| Total value of settlement (first account credited)  | Total value of settlement (first account credited)   |
| Total volume of settlement (first account credited) | Total volume of settlement (first account credited)  |
| Details of chosen cash transfer                     | This Details-screen is shown when the user has clicked on the reference of one of the objects in the screen. <a href="#">TRN01 - Cash transfer (order) search and details</a><br>[ 245]  |

**Table 81 - TRN07 - Output description**

### 5.12.8 TRN08 – Business activity of a party/parties

#### **Context of usage**

The report TRN08 provides information on the total volume and value as well as the average settlement amount of cash transfer orders in CLM or RTGS per party for a given date (range). In case that several accounts belong to the same party in CLM or RTGS, aggregated Figures are displayed. The volume, value and average settlement amount Figures are presented separately for the debit/credit side and the sending/receiving side.

CBs can retrieve information for parties belonging to their system entity.

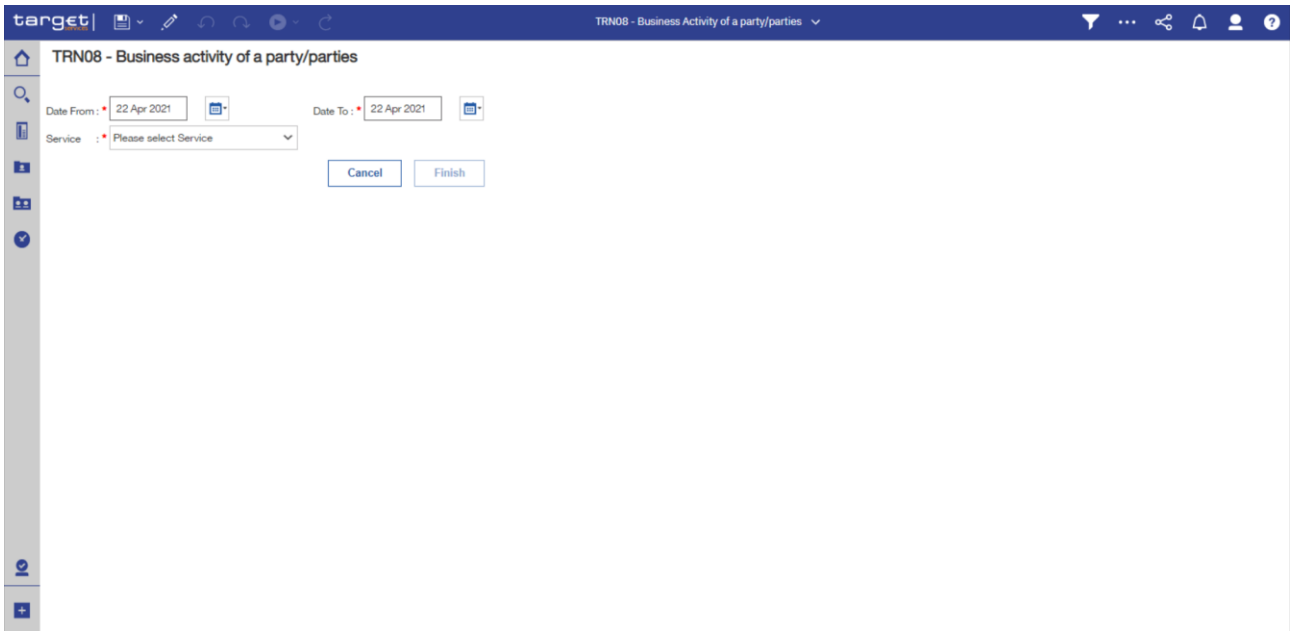
This report can be used by CB and PB users.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN08]

**Screenshot - prompt screen**



**Figure 266 - TRN08 prompt**

**Prompt description**

| TRN08 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Service Type                               | <p>You can use this drop-down field to select between the services</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  CLM,</li> <li>  RTGS.</li> </ul> <p>This field is mandatory.</p> |
| Date From                                  | <p>You can select the date by clicking on the calendar.</p> <p>This field is mandatory.</p>  |
| Date To                                    | <p>You can select the end date of the period, for which the report should contain the data.</p> <p>For valid report results, the current day cannot be selected.</p> <p>This field is optional.</p>      |

**Table 82 - TRN08 - Prompt description**

**Screenshot - output screen**

The screenshot displays the Target Services web application interface. At the top, there's a navigation bar with the Target logo and the report title 'TRN08 - Business Activity of a party/parties'. Below this, a filter section shows 'Service : RTGS', 'Date From : 2018-01-01', and 'Date To : 2021-02-05'. The main content area is titled 'Cash transfer orders debited' and shows a table with the following data:

| Party BIC and name             | Volume of cash transfer orders debited | Value of cash transfer orders debited | Average amount |
|--------------------------------|--|---------------------------------------|----------------|
| PBAAKMD0XXX - Banco de Isthmus | 2,165,767                              | 189,049,394.18                        | 87.29          |
| PBANKMD0XXX - Gringotts Bank   | 1,123,611                              | 189,942,898.53                        | 169.05         |

The interface also includes a sidebar with navigation icons and a footer with the text 'NORU82000001 - CBXXKMD0 (NOR) Normal' and 'Page: 1 of ?'.

**Figure 267 - TRN08 output (1)**

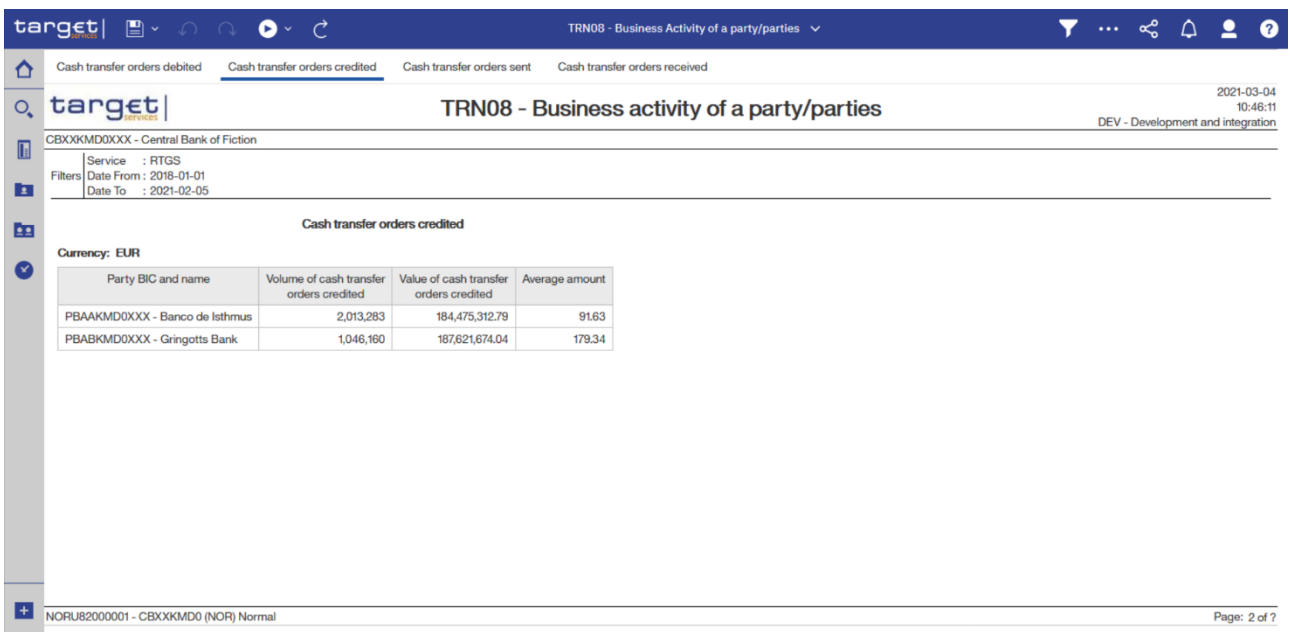


Figure 268 - TRN08 output (2)

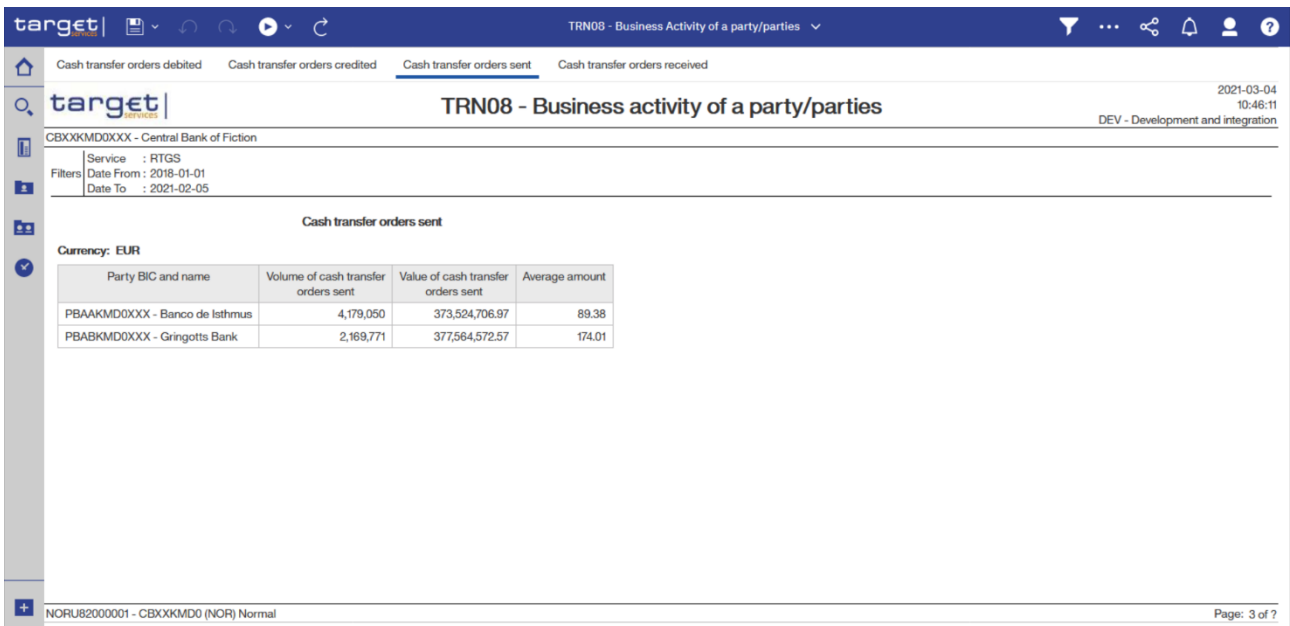


Figure 269 - TRN08 output (3)



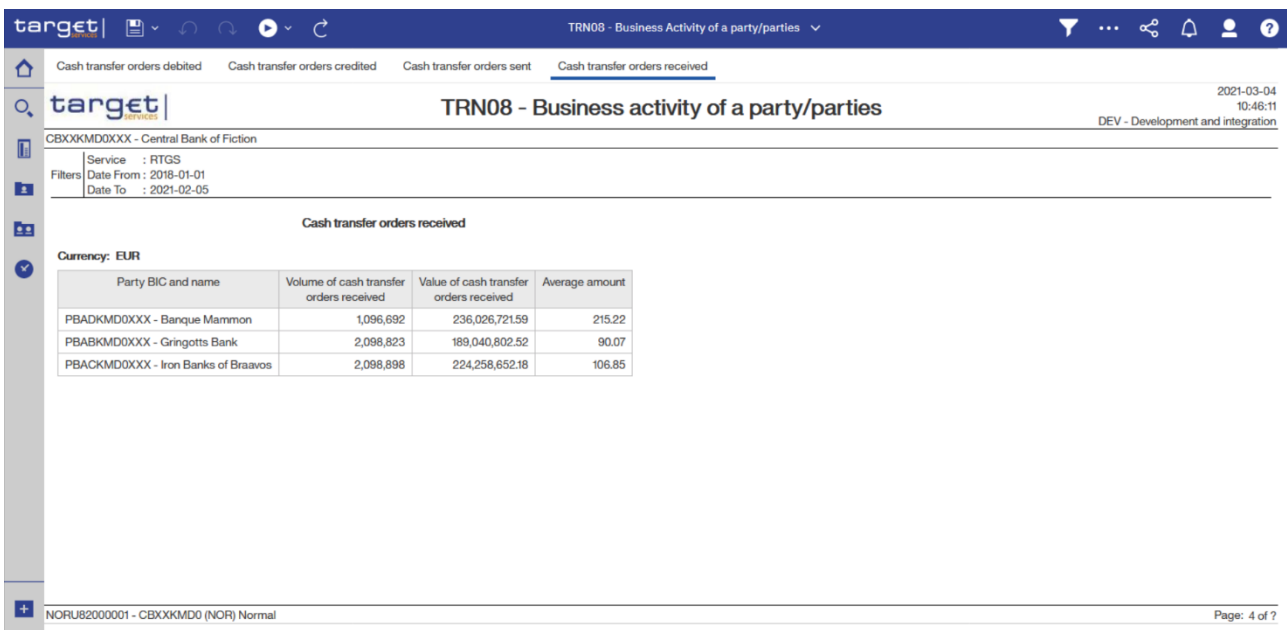


Figure 270 - TRN08 output (4)

**Output description**

| TRN08 – Report description – output screen   |  |
|--|--|
| Field Label  | Description  |
| Following information is available for:<br>“Cash transfer orders debited”, “Cash transfer orders credited”, “Cash transfer orders sent”, “Cash transfer orders received” |  |
| Party  | The party BIC and party short name of the user are shown.<br>Sorting is done by party BIC.                   |
| Volume of cash transfer orders debited/credited/sent/received  | Number of cash transfer orders for this party of any status within the regarded date / date range.           |
| Value of cash transfer orders debited/credited/sent/received   | Total amount of all cash transfer orders for this party of any status within the regarded date / date range. |
| Average amount   | Average calculated from previous fields of the row (value divided by volume).                                |

Table 83 - TRN08 - Output description

### 5.12.9 TRN09 – RTGS Account Holder activity

#### Context of usage

The report TRN09 provides information on the biannually activity of RTGS Account Holders. It displays for the selected account holder(s) the total volume and value of cash transfer orders per transaction category, per message type and differentiated per settlement status within the first or second half of a year. In case that several accounts belong to the same party, each account is displayed separately. In case that a CB executes the report for ALL RTGS Account Holders belonging to its system entity, the market share per RTGS Account Holder in terms of volume of cash transfers in relation to the volume of all cash transfers of RTGS Account Holders belonging to the CBs system entity is added to the report.

CBs can retrieve information for Account Holders belonging to their system entity.

This report can be used by CB users only.

#### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN09]

#### Screenshot - prompt screen

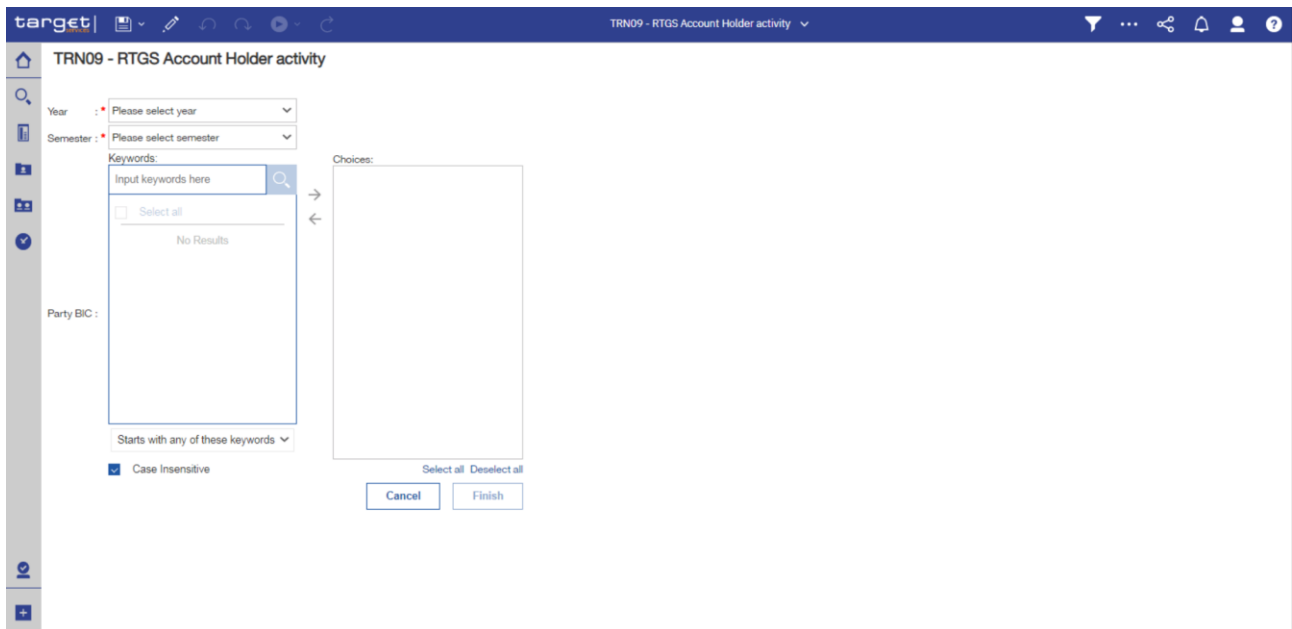


Figure 271 - TRN09 prompt

**Prompt description**

| TRN09 – Report description – prompt screen |  |
|--|--|
| Field label                                | Description  |
| Semester                                   | <p>You can use this drop-down field to select a semester.</p> <p>Possible Values:</p> <ul style="list-style-type: none"> <li>1st semester (representing 01.01. – 30.06.)</li> <li>2nd semester (representing 01.07. – 31.12.)</li> </ul> <p>This field is mandatory.</p> |
| Year                                       | <p>You can use this drop-down field to select the year, for which the report should contain the data.</p> <p>This field is mandatory.</p>  |
| Party BIC                                  | <p>You can use this field to select one, several or all party BICs. This field will show all related BICs, which belong to the party.</p> <p>This field is mandatory.</p>  |

Table 84 - TRN09 - Prompt description

**Screenshot - output screen**

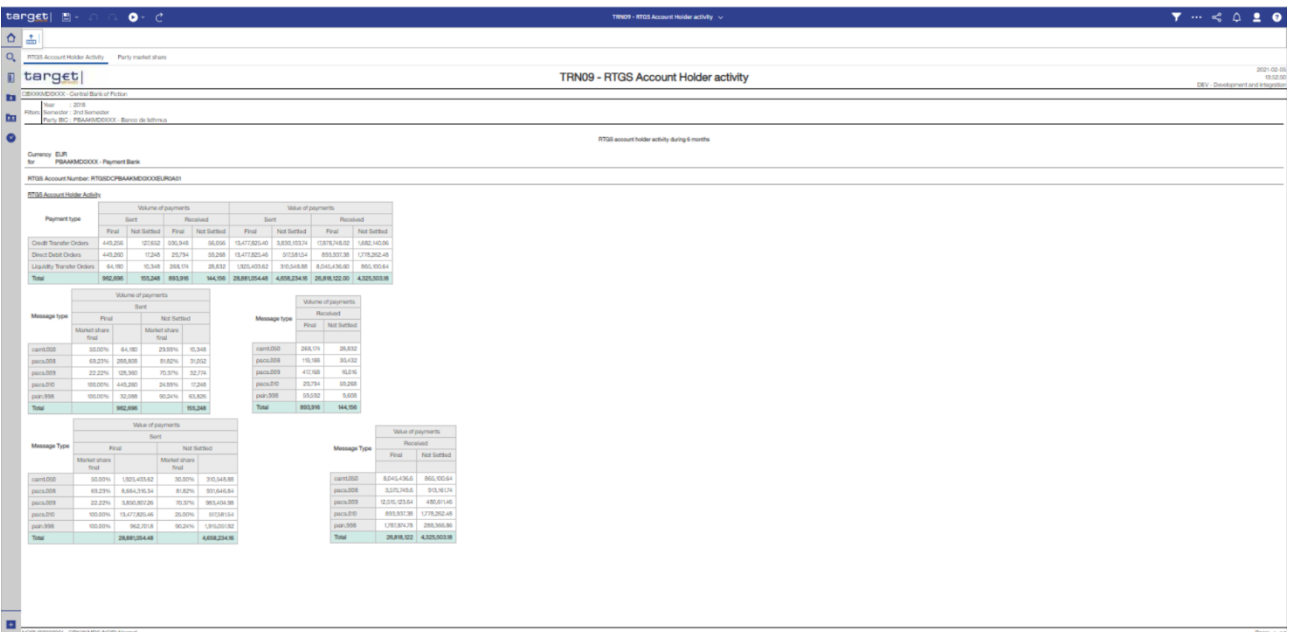


Figure 272 - TRN09 output (1) – RTGS Account Holder activity View

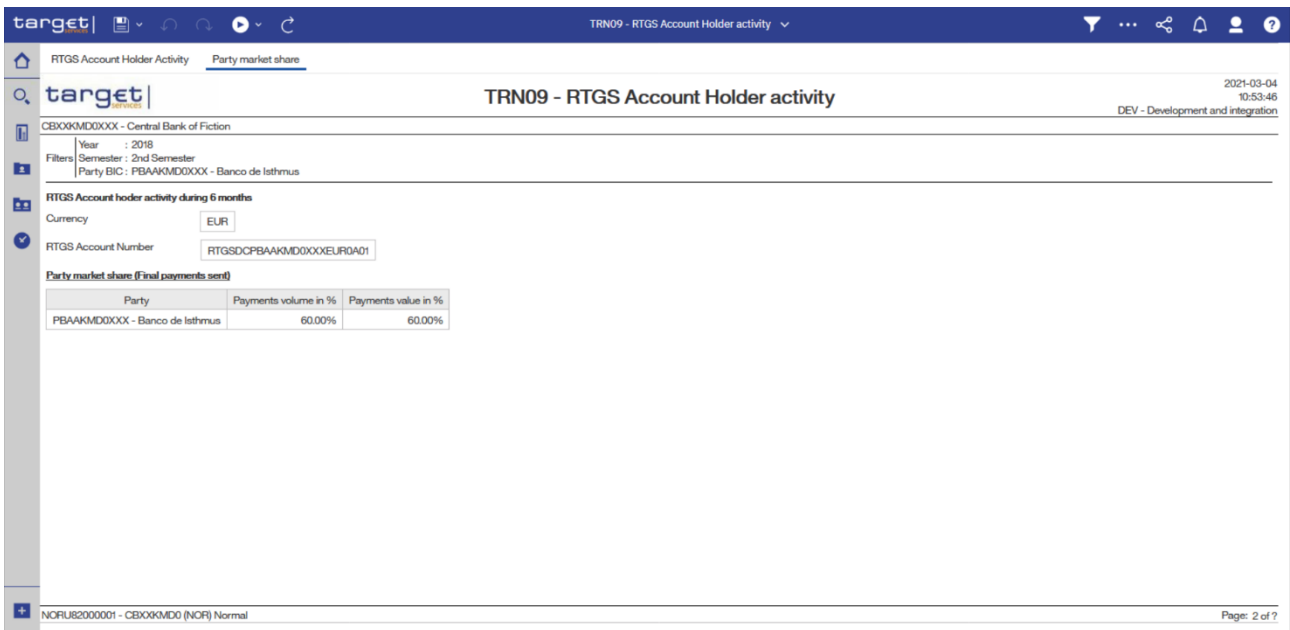


Figure 273 - TRN09 output (2) – Party Market Share View

**Output description**

**TRN09 – Report description – output screen – table**

**RTGS Account Holder activity**

| Field label                 | Description  |
|-----------------------------|--|
| Payment type                | Payment type.<br>Possible values:<br><ul style="list-style-type: none"> <li>  Credit transfer orders</li> <li>  Liquidity transfer orders</li> <li>  Direct debit orders</li> </ul>                |
| Volume of payments sent     | Volume of all payments sent<br><ul style="list-style-type: none"> <li>  Final (Settled)</li> <li>  Not settled (Cancelled, rejected)</li> </ul> per payment type and total for the chosen semester |
| Volume of payments received | Volume of all payments received<br>Final (Settled)<br>Not settled (Cancelled, rejected)<br>per payment type and total for the chosen semester  |
| Value of payments sent      | Value of all payments sent   |

|                             |  |
|-----------------------------|--|
|                             | <ul style="list-style-type: none"> <li>  Final (Settled)</li> <li>  Not settled (Cancelled, rejected)</li> </ul> <p>per payment type and total for the chosen semester</p>   |
| Value of payments received  | <p>Value of all payments received</p> <ul style="list-style-type: none"> <li>  Final (Settled)</li> <li>  Not settled (Cancelled, rejected)</li> </ul> <p>per payment type and total for the chosen semester</p>                               |
| Message type                | <p>Message type.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  camt.050</li> <li>  pacs.004</li> <li>  pacs.008</li> <li>  pacs.009</li> <li>  pacs.010</li> </ul>  |
| Volume of payments sent     | <p>Volume of all payments sent</p> <p>Market share final (in %)</p> <ul style="list-style-type: none"> <li>  Final (Settled)</li> <li>  Not settled (Cancelled, rejected)</li> </ul> <p>per message type and total for the chosen semester</p> |
| Volume of payments received | <p>Volume of all payments received</p> <ul style="list-style-type: none"> <li>  Final (Settled)</li> <li>  Not settled (Cancelled, rejected)</li> </ul> <p>per message type and total for the chosen semester</p>                              |
| Message type                | <p>Message type.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  camt.050</li> <li>  pacs.004</li> <li>  pacs.008</li> <li>  pacs.009</li> <li>  pacs.010</li> </ul>  |

|                            |  |
|----------------------------|--|
| Value of payments sent     | Value of all payments sent<br>Market share final (in %)<br><ul style="list-style-type: none"> <li>  Final (Settled)</li> <li>  Not settled (Cancelled, rejected)</li> </ul> per message type and total for the chosen semester |
| Value of payments received | Value of all payments received<br><ul style="list-style-type: none"> <li>  Final (Settled)</li> <li>  Not settled (Cancelled, rejected)</li> </ul> per message type and total for the chosen semester                          |
| Total                      | Totals of volumes and values   |

**Table 85 - TRN09 - Output description - Table**

| <b>TRN09 – Report description – output Screen –<br/>only in case ALL Party BICs were chosen</b> |  |
|---|--|
| <b>Field label</b>  | <b>Description</b>   |
| Party   | BIC and short name of the party  |
| Payments volume in %  | Percentage of the party's volume of whole CB's volume (only final payments sent) for the chosen semester |
| Payments value in %   | Percentage of the party's value of whole CB's value (only final payments sent) for the chosen semester   |

**Table 86 - TRN09 - Output description**

### 5.12.10 TRN10 – Monthly value and volume of cash transfers in CLM/RTGS (according to T2 statistical framework)

#### **Context of usage**

This report provides information on the monthly volume and value of cash transfers in CLM or RTGS according to the T2 statistical framework, which aims to reflect cash transfers from a business perspective. In this respect, some cash transfers (e.g. any liquidity transfers between two accounts of the same party) are not considered for the volume and value Figures in this report.

Volume and value figures are displayed as monthly totals and daily averages (for each month) and are given for each CB/system entity and in addition as the total sum of all system entities for a given currency.

CBs can retrieve aggregated volume and value information for each CB/system entity as well as the sum of all system entities in CLM/RTGS.

This report can be used by CB users only.

**Report access**

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN10]

**Screenshot - prompt**

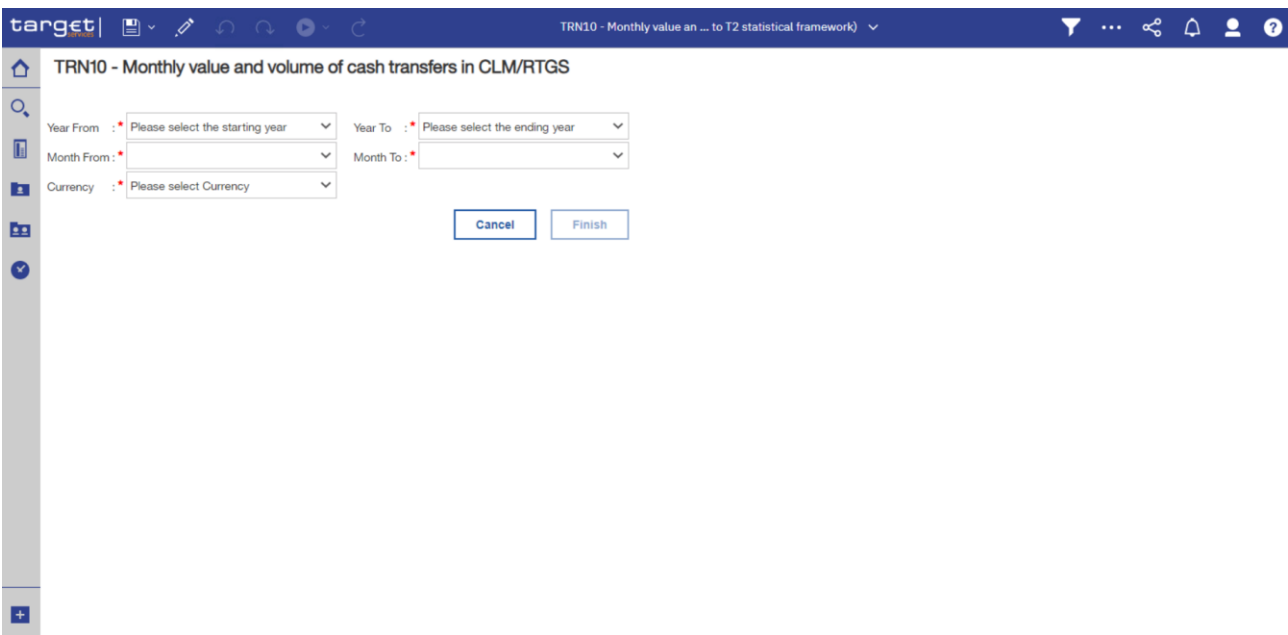


Figure 274 - TRN10 prompt

**Prompt description**

| TRN10 – Report description – prompt screen |   |
|--|---|
| Field label                                | Description   |
| Year From                                  | You can use this drop-down field to select the year, from which the report should contain the data.<br><br>This field is mandatory.   |
| Month From                                 | You can use this drop-down field to select the month, from which the report should contain the data.<br><br>For valid report results, the current month cannot be selected. |

|          |  |
|----------|--|
|          | This field is mandatory.   |
| Year To  | You can use this drop-down field offers the possibility to select the end year of the period, for which the report should contain the data.<br><br>This field is mandatory.  |
| Month To | You can use this drop-down field to select the end month of the period, for which the report should contain the data.<br><br>For valid report results, the current month cannot be selected.<br><br>This field is mandatory. |
| Currency | You can use this drop-down field to select from all valid currencies in CLM/RTGS.<br><br>This field is mandatory.  |

Table 87 - TRN10 - Prompt description

**Screenshot - output screen**

target | TRN10 - Monthly value and ... T2 statistical framework

CLM RTGS

target | TRN10 - Monthly value and volume of cash transfers in CLM

2021-04-21 07:15:40  
DEV - Development and integration

CBXXKMD0000 - Central Bank of Fiction

Filters Year From : 2019 Month From : April  
Year To : 2019 Month To : April  
Currency : EUR

Distribution per CB in CLM

April 2019

| Country Code CB | Volume     | Daily average volume | Value                 | Daily average value  |
|-----------------|------------|----------------------|-----------------------|----------------------|
| KM              | 160        | 32.00                | 153,972,251.44        | 30,794,450.29        |
| KP              | 51         | 10.20                | 65,410,846.18         | 13,082,169.24        |
| <b>Total</b>    | <b>211</b> | <b>42.20</b>         | <b>219,383,097.62</b> | <b>43,876,619.52</b> |

ADVU82000001 - CBXXKMD0 (ADV) Advanced Page: 1 of ?

Figure 275 - TRN10 output (1)



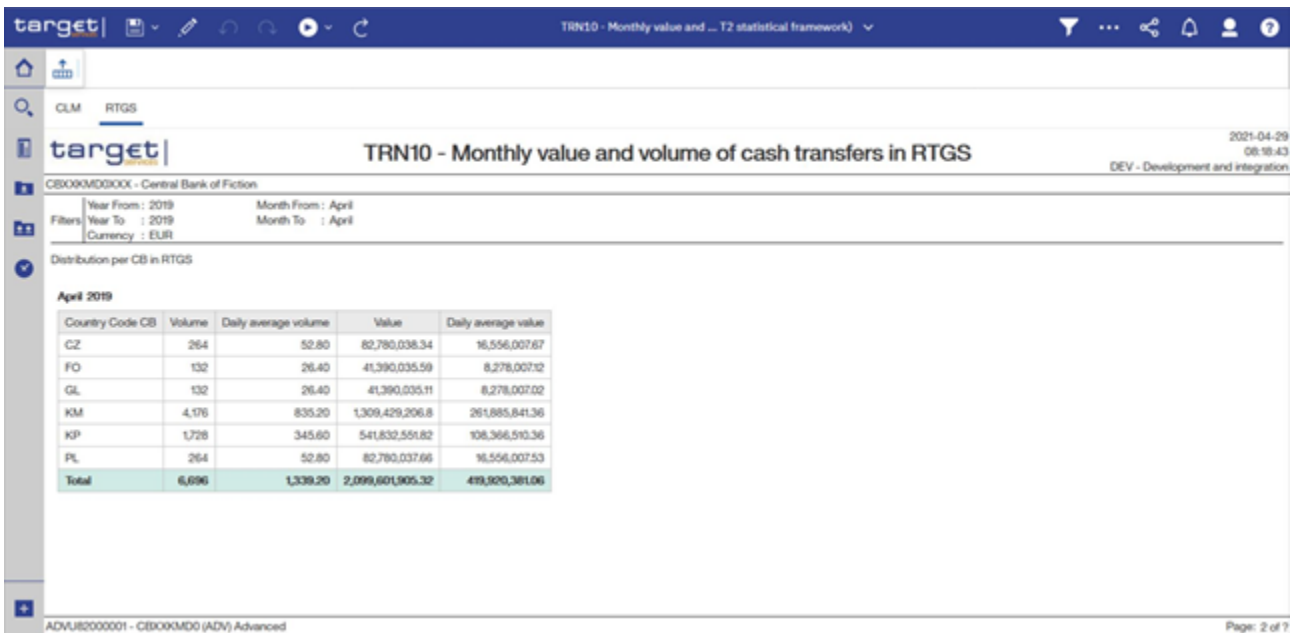


Figure 276 - TRN10 output (2)

**Output description**

**TRN10 – Report description – output screen**

| Field label          | Description  |
|----------------------|--|
| Country Code CB      | ISO Country Code of the CB   |
| Volume               | Number of all cash transfers (according to T2 statistical framework) of the CB in the chosen month.                    |
| Daily average volume | Calculated from the sum of volumes divided by the number of business days for the chosen currency in the chosen month. |
| Value                | Sum of the value of all cash transfers (according to T2 statistical framework) of the CB in the chosen month.          |
| Daily average value  | Calculated from the sum of values divided by the number of business days for the chosen currency in the chosen month.  |
| Total                | Total of volumes and values listed in the preceding rows over all CBs.   |

Table 88 - TRN10 - Output description

## 5.12.11 TRN11 – Monthly value and volume of cash transfers between system entities

### Context of usage

The report TRN11 provides information on the monthly volume and value of cash transfers in CLM and RTGS between all accounts belonging to the system entities/CBs active in a selected currency. The Figures for the bilateral payment flows between all accounts of system entities/CBs which are differentiated by Euro area and by EU CBs are displayed as totals.

CBs can retrieve aggregated volume and value information for each bi-lateral CB/system entity relationship.

This report can be used by CB users only.

### Report access

This report can be reached in the following way:

[Team Content] >> [Predefined Reports] >> [TRN – Transaction Report] >> [TRN11]

### Screenshot – prompt

Figure 277 - TRN11 prompt

### Prompt description

#### TRN11 – Report description – prompt screen

| Field label | Description   |
|-------------|---|
| Year From   | You can use this drop-down field to select the year, from which the report should contain the data. |

|            |   |
|------------|---|
|            | <p>This field is mandatory.</p>   |
| Month From | <p>You can use this drop-down field to select the month, from which the report should contain the data.</p> <p>For valid report results, the current month cannot be selected.</p> <p>This field is mandatory.</p>                  |
| Year To    | <p>You can use this drop-down field to select the end year of the period, for which the report should contain the data.</p> <p>This field is mandatory</p>  |
| Month To   | <p>You can use this drop-down field to select the end month of the period, for which the report should contain the data.</p> <p>For valid report results, the current month cannot be selected.</p> <p>This field is mandatory.</p> |
| Service    | <p>You can use this drop-down field to select a Service.</p> <p>Possible values:</p> <ul style="list-style-type: none"> <li>  CLM</li> <li>  RTGS</li> <li>  CLM + RTGS</li> </ul> <p>This field is mandatory.</p>                  |
| Currency   | <p>You can use this drop-down field to select from all valid currencies in CLM/RTGS.</p> <p>This field is mandatory.</p>  |

**Table 89 - TRN11 - Prompt description**

Screenshot - output screen

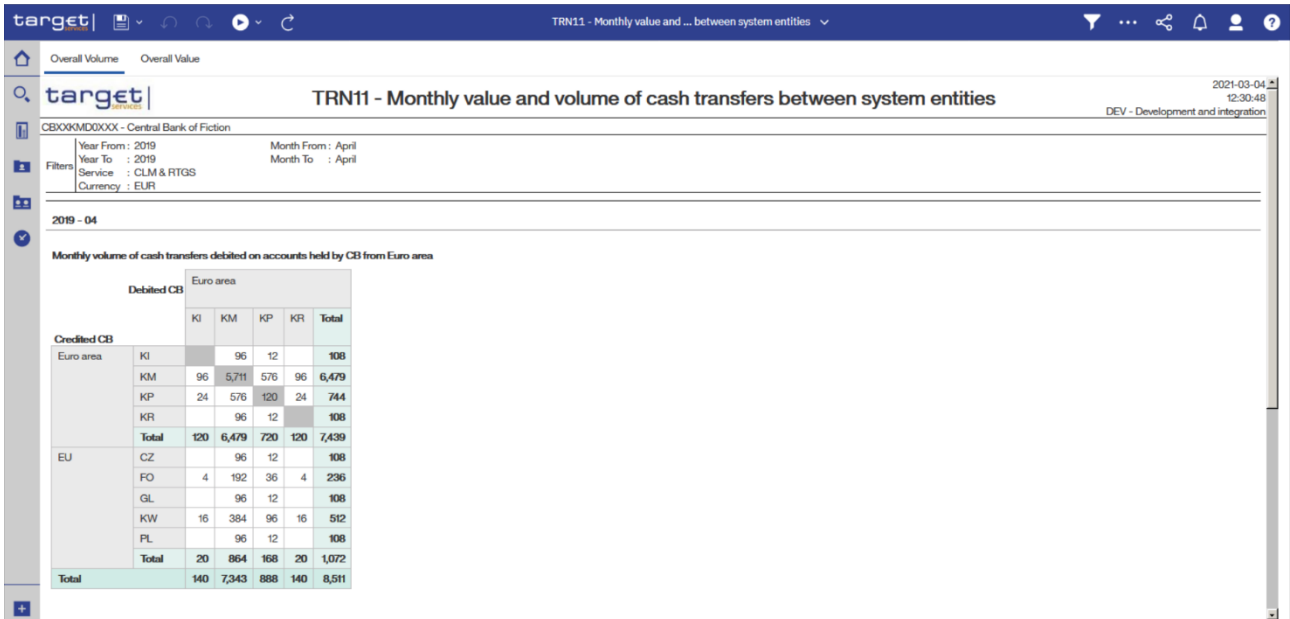


Figure 278 - TRN11 output (1)

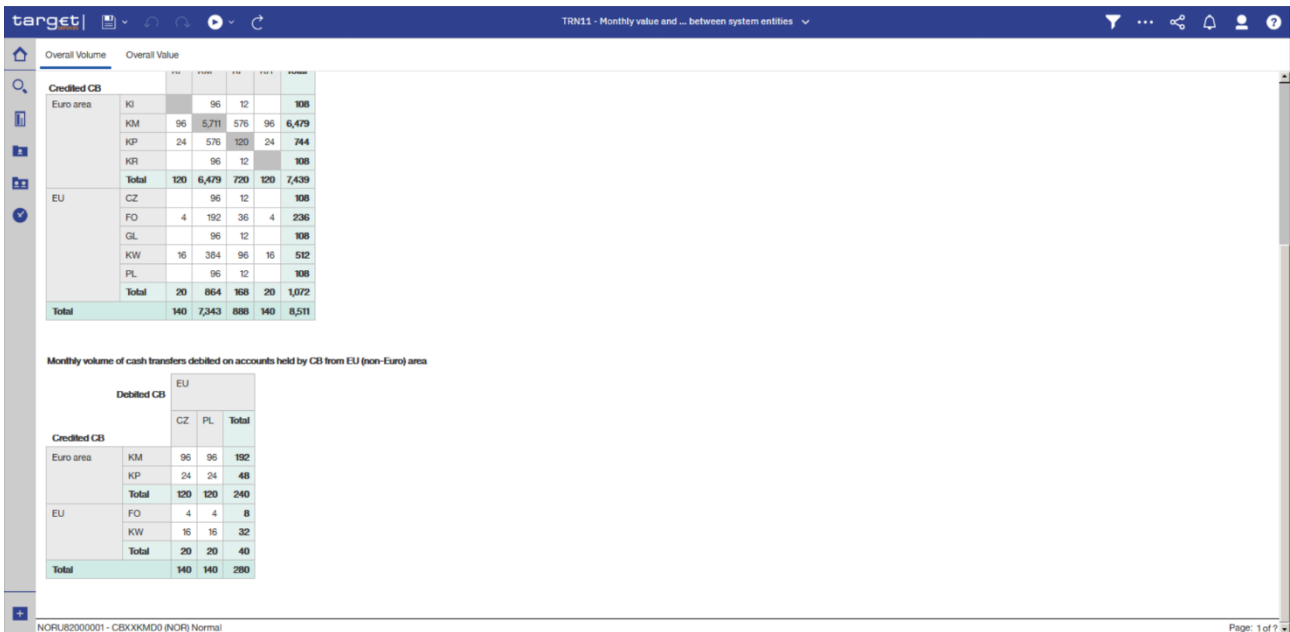


Figure 279 - TRN11 output (2)

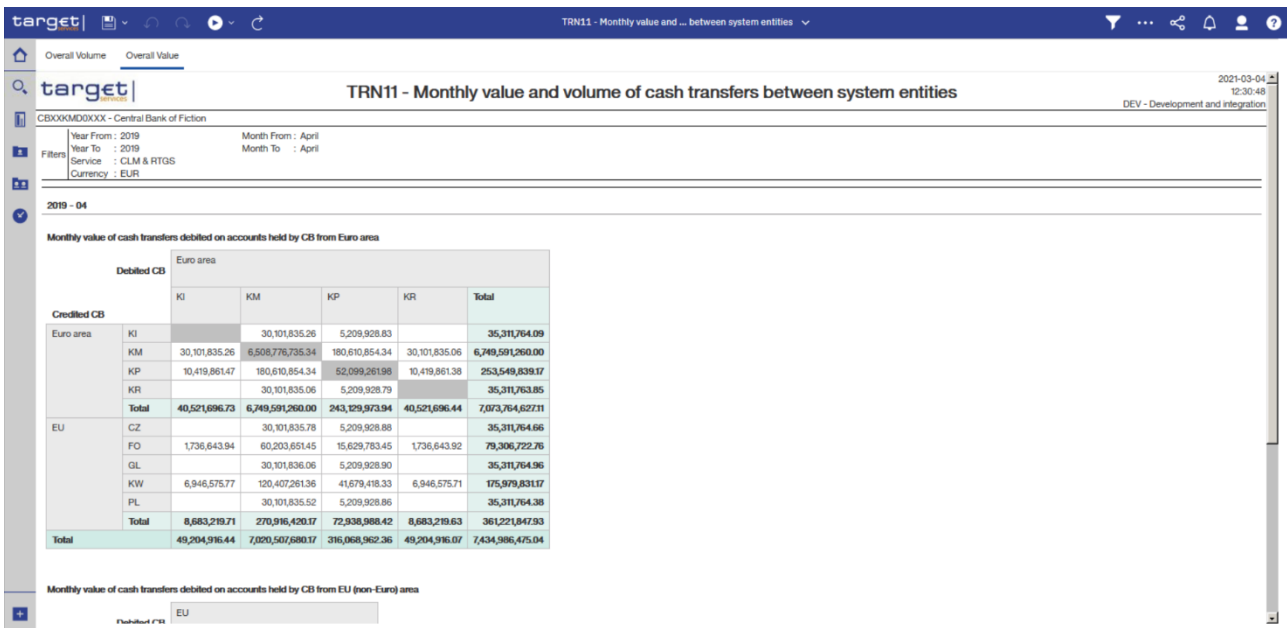


Figure 280 - TRN11 output (3)

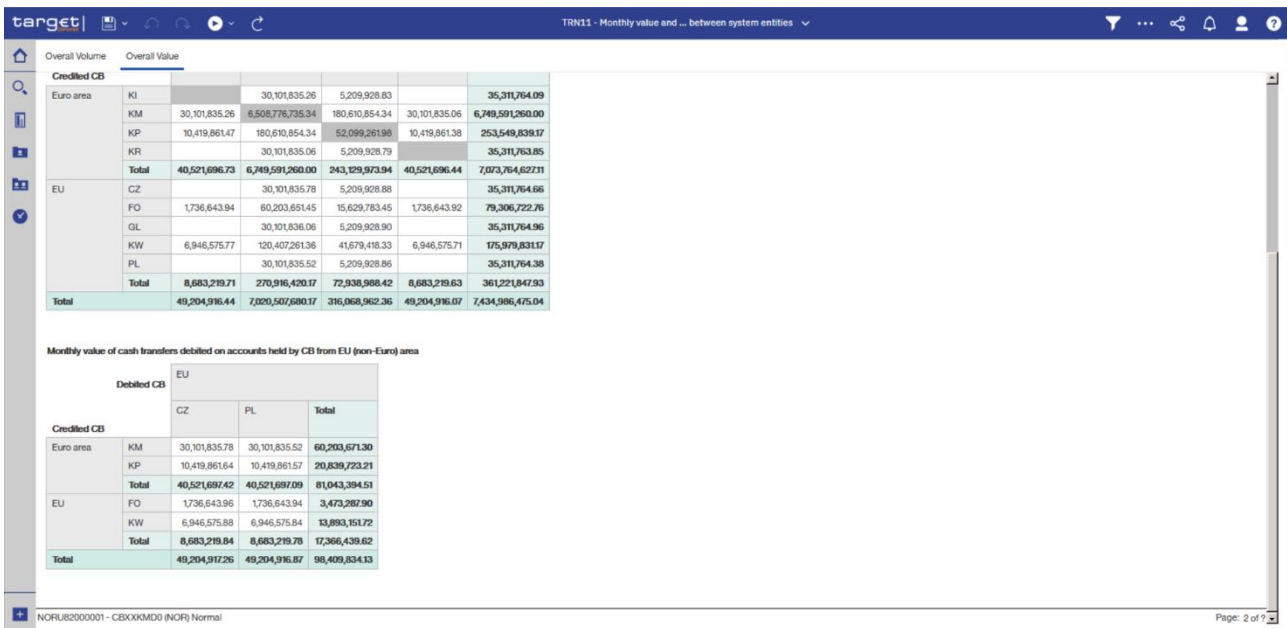


Figure 281 - TRN11 output (4)

TRN11 – Report description – output screen – table overall volume

| Field label | Description |
|-------------|-------------|
|-------------|-------------|

Only cash transfers are selected for this report according to T2 statistical framework.

One block for each month with two tables.

|  |  |
|--|--|
| Table "Cash transfers debited on accounts held by CB from Euro area". The tables are sorted by month and within each table by "Euro area". |  |
| Columns "Euro area"  | Each column contains one ISO country code. All EUR-countries are listed.<br>The tables are sorted by month and within each table by this column.   |
| Rows "Euro area"   | Each row contains one ISO country code. All EUR-countries are listed.  |
| None   | Every cell in the matrix is filled with the daily average volume of cash transfers, where the accounts held by the CB represented by the country code in each column were debited and where the accounts held by the CB represented by the country code in each row were credited.<br><br>Cells, where both the country code in the column header and the country code in the row header are the same are shaded light grey. |
| Total  | In the cells of this column, all values from the respective row are added up.  |
| Total Euro-area  | In the cells of this row, all values from the respective columns are added up.   |
| Rows "EU/non-Euro area"  | Each row contains one ISO country code. All EU-countries (non Euro-area) are listed.   |
| None   | Every cell in the matrix is filled with the daily average volume of cash transfers, where the accounts held by the CB represented by the country code in each column were debited and where the accounts held by the CB represented by the country code in each row were credited.   |
| Column "Total"   | In the cells of this column, all values from the respective row are added up.  |
| Row "Total EU/non-Euro area"   | In the cells of this row, all values from the respective columns are added up.   |
| Row over all columns "Total"   | In the cells of this row, all values from "Total Euro area" and "Total EU area" of the respective columns are added up.  |
| Table "Cash transfers debited on accounts held by CB from EU (non-Euro) area"  |  |
| Columns "EU/non-Euro area"   | Each row contains one ISO country code. All EU-countries (non Euro area) are listed  |
| Rows "Euro area"   | Each row contains one ISO country code. All Euro-countries are listed.   |
| None   | Every cell in the matrix is filled with the daily average volume of cash transfers, where the accounts held by the CB represented by the country code in each column were debited and where the accounts held by the CB represented by the country code in each row were credited.   |
| Column header "Total"  | In the cells of this column, all values from the respective row are added up.  |
| Row header "Total Euro-area"   | In the cells of this row, all values from the respective columns are added up.   |

|                              |  |
|------------------------------|--|
| Rows "EU/non-Euro area"      | Each row contains one ISO country code. All EU-countries (non Euro-area) are listed.   |
| None                         | Every cell in the matrix is filled with the daily average volume of cash transfers, where the accounts held by the CB represented by the country code in each column were debited and where the accounts held by the CB represented by the country code in each row were credited.<br><br>Cells, where both the country code in the column header and the country code in the row header are the same are shaded light grey. |
| Column "Total"               | In the cells of this column, all values from the respective row are added up.  |
| Row "Total EU area"          | In the cells of this row, all values from the respective columns are added up.   |
| Row over all columns "Total" | In the cells of this row, all values from "Total Euro area" and "Total EU area" of the respective columns are added up.  |

**Table 90 - TRN11 - Output description - Table overall volume**

|  |
|--|
| <b>TRN11 – Report description – output screen – table overall value</b>  |
| This table has the same structure as the previous table (Overall Volume) with the difference that here the daily average values are displayed. |

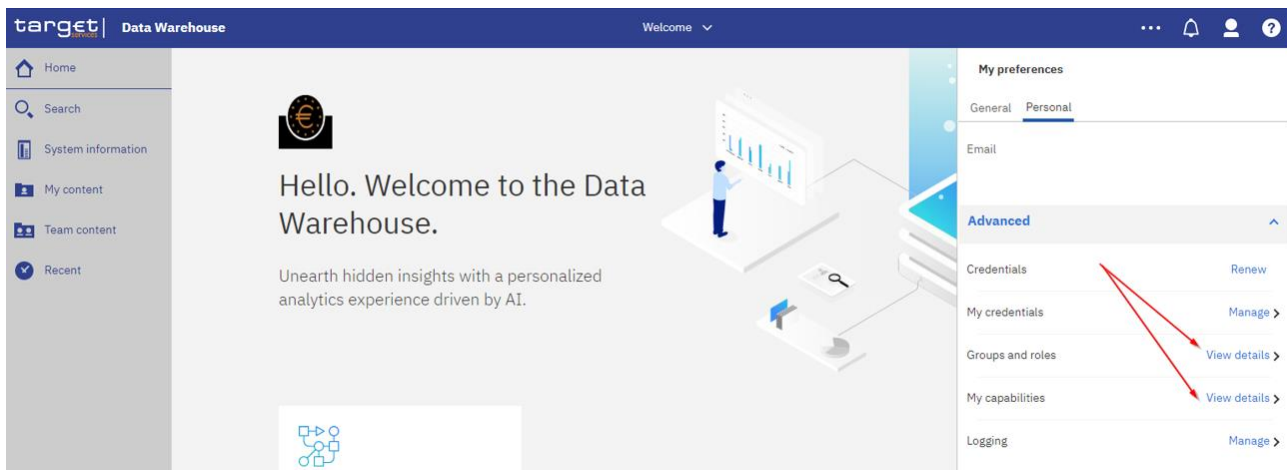
**Table 91 - TRN11 - Output description - Table overall value**

## 6 Understanding user rights and access rights (advanced users)

Every user is linked to one party in CRDM and member of one role and group in DWH.

In order to identify to which group, role you belong and the capabilities assigned to you follow the steps:

- | Personal menu > My preferences > Personal > Advanced > Groups and roles > View details
- | Personal menu > My preferences > Personal > Advanced > My capabilities > View details



**Figure 282 - Groups and roles and capabilities**

Based on the above attributes a two level security is defined in the DWH:

- | Functional security
- | Data security

### 6.1 Functional security

The functional security is defined as what a user is able to access and do in the DWH, which means access to content and product features.

#### User Groups and Roles

In CRDM two privileges for the usage of DWH are available: Data Warehouse Normal User and Data Warehouse Advanced User. Each of these privileges is linked to one role/group in DWH. Their roles/groups define the DWH capabilities, assigned to user.



| User groups | Can be assigned to party type                    | DWH Role  | Description   |
|-------------|--|-----------|---|
| Normal      | Central Bank<br>Payment Bank<br>Ancillary System | Consumers | Members can read and execute public content, such predefined as reports.  |
| Advanced    | Central Bank                                     | Authors   | Members have the same access permissions as Consumers. They can also schedule a report and create user defined reports or adapt predefined reports. |

**Table 92 - Functional security - User Groups and Roles**

**Note:** Roles “Everyone” and “All Authenticated Users” are system roles, which are assigned to all users who are allowed to access the DWH.

The party types CB, Pb and AS define the access to the DWH content.

All users of these three party types have access to the “Team content” folder. It contains the following sub-folders, visible to the users according to the group they belong to:

**I** CB shared folder (only visible to CB users), containing following sub-folders:

- CB – XX shared folder (XX is the country code of the CB)  
Contains reports shared among all users of the same CB
- Central Banks shared folder  
Contains reports shared among all CBs

**I** Data packages (visible to all users)

Packages are model subsets or the whole model that ensure users are provided with data appropriate for the reporting they need to do, and that the data is structured in ways that make sense from a business perspective. A model serves as an insulating layer between DWH users and the database.

Contains data used for running or developing reports – it is read-only.

**I** Predefined Reports (visible to all users)

Contains all predefined reports grouped in sub-folders in the hierarchy of chapter [Predefined reports](#) [▶ 122]. Only those predefined reports are visible to the user, which are accessible to his user group (according to his party type). See chapter [Predefined reports](#) [▶ 122] for details.

Users are not allowed to create or delete entries in the “Team content”, “CB shared”, “Data packages” and “Predefined Reports” folder.

The users according to their party type (CB, PB, AS) have access to different reports in the Predefined Reports folder. For example in the folder ‘TRN - Transaction Reports’ under Team content – Predefined Reports,

A Central Bank user can see the following reports:

The screenshot shows the 'Data Warehouse' interface. The breadcrumb trail is 'Team content > Predefined Reports > TRN - Transaction Reports'. The list of reports is as follows:

| Report ID | Report Title   | Last Modified      |
|-----------|--|--------------------|
| TRN01     | Cash transfer (order) search and details   | 3/23/2021 3:42 PM  |
| TRN01     | Cash transfer (order) search and details - target  | 4/12/2021 1:51 PM  |
| TRN02     | Monthly overview of domestic and cross-border payments   | 3/29/2021 10:57 AM |
| TRN03     | Monthly peak day and peak hour in terms of value and volume of cash transfer orders                  | 4/7/2021 1:10 PM   |
| TRN04     | Cash transfers per time band and per CB  | 4/14/2021 1:06 PM  |
| TRN05     | Monthly overview of cash transfer orders per party   | 3/23/2021 4:20 PM  |
| TRN06     | Monthly share of Indirect Participant, addressabl ... as part of total Direct Participant's activity | 4/14/2021 5:17 PM  |
| TRN07     | Cash transfers between two accounts of different parties   | 4/14/2021 5:17 PM  |
| TRN08     | Business Activity of a party/parties   | 4/14/2021 1:24 PM  |
| TRN09     | RTGS Account Holder activity   | 4/14/2021 1:26 PM  |
| TRN10     | Monthly value and volume of cash transf ... CLM/RTGS (according to T2 statistical framework)         | 4/7/2021 4:34 PM   |
| TRN11     | Monthly value and volume of cash transfers between system entities                                   | 4/6/2021 9:58 AM   |

Figure 283 - Functional security - Central Bank user

A Payment Bank user can see the following reports:

The screenshot shows the 'Data Warehouse' interface. The breadcrumb trail is 'Team content > Predefined Reports > TRN - Transaction Reports'. The list of reports is as follows:

| Report ID | Report Title  | Last Modified      |
|-----------|---|--------------------|
| TRN01     | Cash transfer (order) search and details  | 4/19/2021 12:59 PM |
| TRN01     | Cash transfer (order) search and details - target                                     | 4/12/2021 1:51 PM  |
| TRN02     | Monthly overview of domestic and cross-border payments                                | 4/19/2021 10:56 AM |
| TRN03     | Monthly peak day and peak hour i ... value and volume of cash transfer orders         | 4/16/2021 2:24 PM  |
| TRN05     | Monthly overview of cash transfer orders per party                                    | 3/23/2021 4:20 PM  |
| TRN06     | Monthly share of Indirect Particip ... as part of total Direct Participant's activity | 4/19/2021 11:11 AM |
| TRN08     | Business Activity of a party/parties  | 4/19/2021 11:25 AM |

Figure 284 - Functional security - Payment bank user

An Ancillary System user can see the following reports:

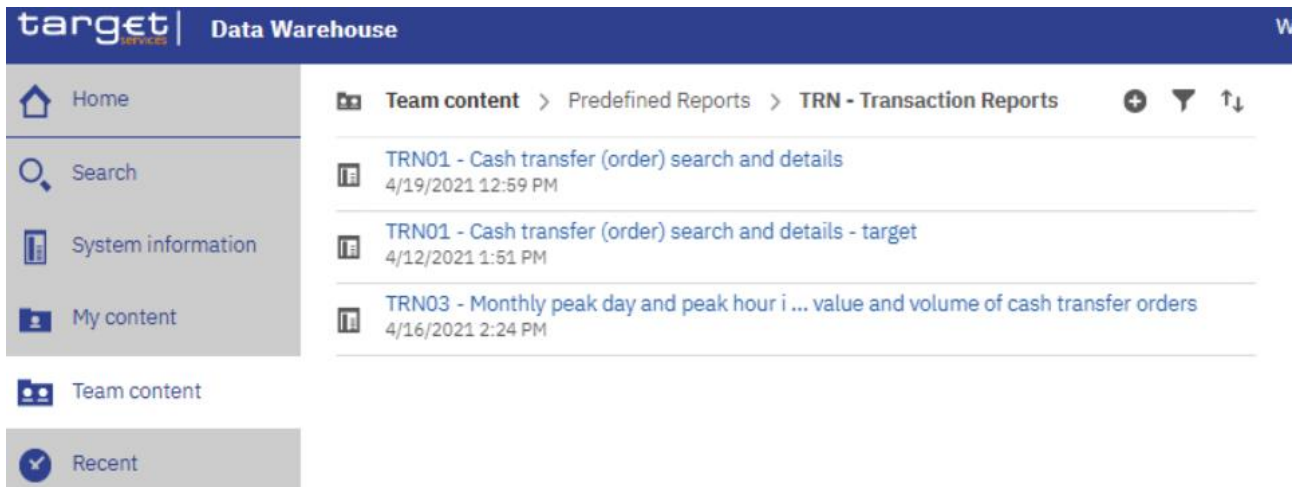


Figure 285 - Functional security - Ancillary System user

## 6.2 Data security

Users are accessing data through predefined reports or reports they develop themselves (only advanced users).

In both cases, a report is related to one Data package, which describes the database in business terms allowing advanced users to easily develop reports.


The package also dictates the access to the data according to user-id, which is related to one party and the relevant cash accounts.

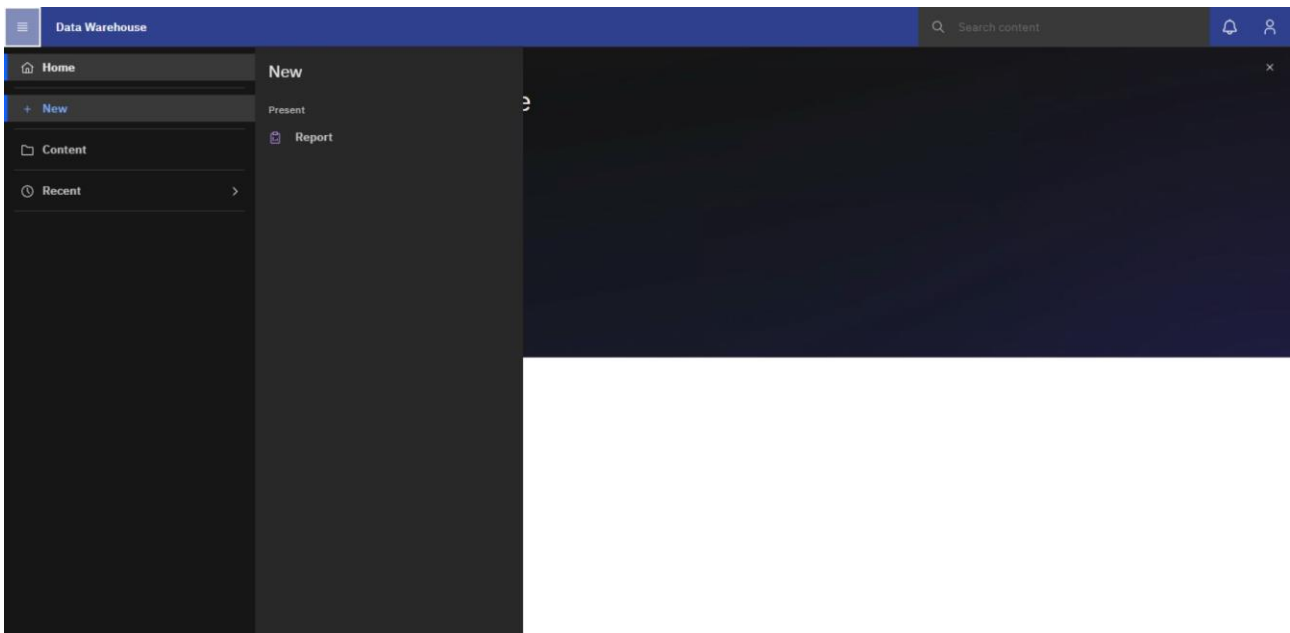
The general rules followed are:

- I PB and AS users are allowed to see granular and aggregated data provided by predefined reports and related to their party / cash accounts. They are also able to see data of Cash Accounts that do not belong to them, e.g. as Co-manager, or Account Monitoring group leader.
- I CB users are allowed to see granular and aggregated data related to their party / cash accounts along with the data that parties within their system entity are able to see. Additionally, they are also able to see aggregated system-wide data.


## 7 Creating reports (just advanced users)



Create a report by clicking the “**Open menu**” icon (  ) on the left side of the Global application bar and then clicking on “New” and “Report”. When you create a report, you are actually creating a report specification. The report specification defines the queries and prompts that are used to retrieve data and the layouts and styles used to present the data. For simplicity, the report specification is named by the same name as the report.



**Figure 286 - Creating reports - Welcome page – Open menu - New - Report**

To adapt predefined reports, navigate to the report click on “**Action menu**”  and select “**Edit report**”. The report will be displayed in the edit view. All report adaptations can be executed in the same way as how to create a new report from scratch.

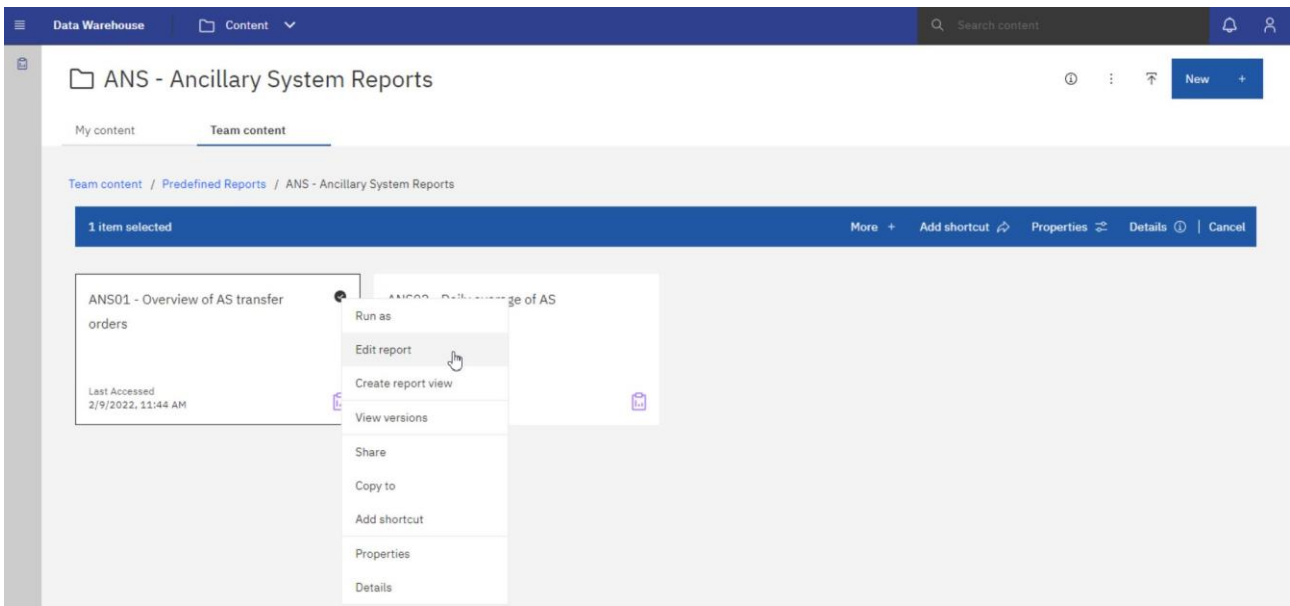


Figure 287 - Creating reports - Predefined Reports - Edit report



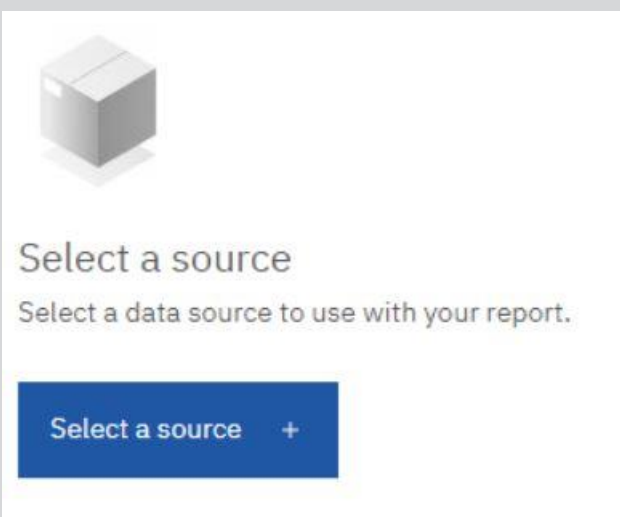

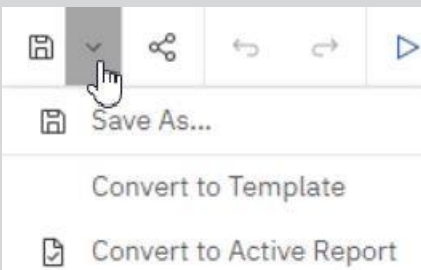
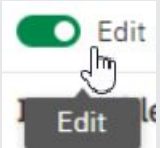


## 7.1 The user interface

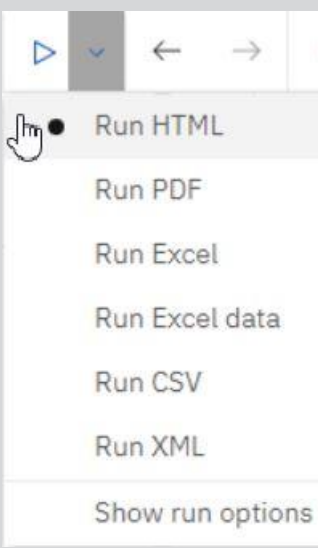


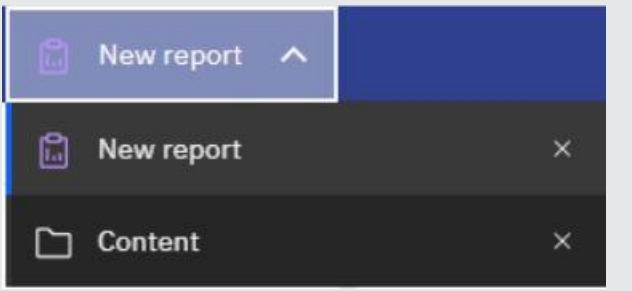
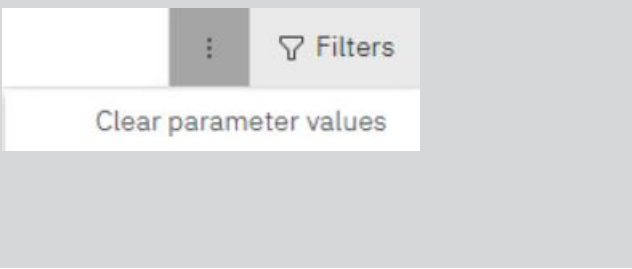
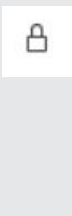
This chapter gives an overview in the creation of a new report.

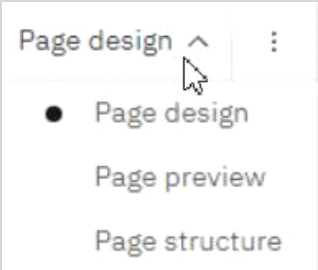
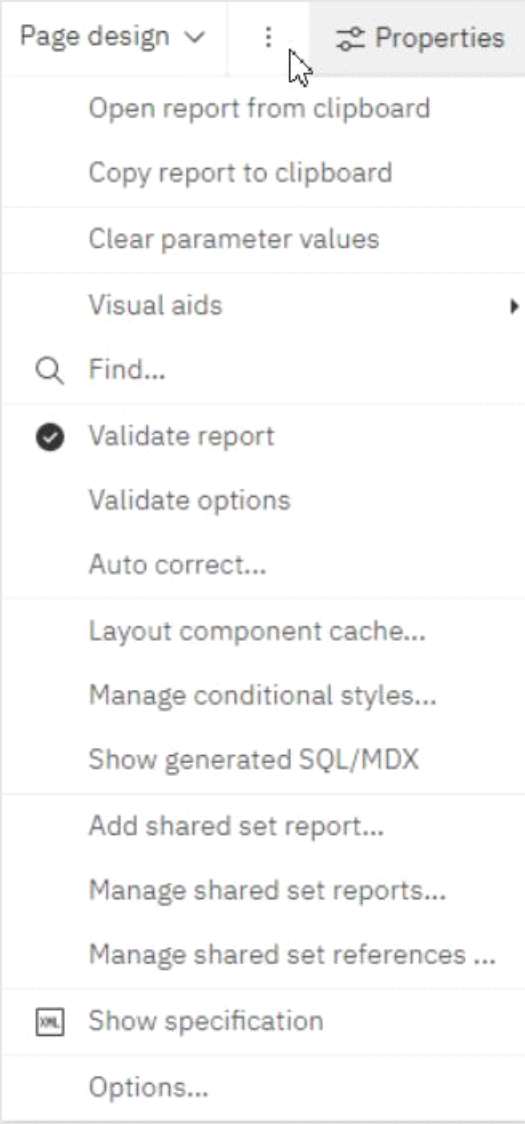

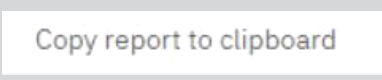
This is the first screen when creating a new report.



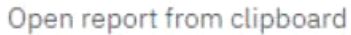
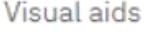

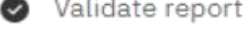
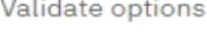
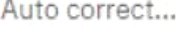


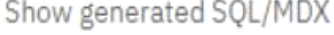



Figure 288 - The user interface- Creating a report

| Reporting icon  | Description   |
|---|---|
|    | Navigation menu   |
|    | Data source   |
|   | <p>Data items</p> <p>The first Symbol is only visible if you did not select a source.</p> <p>Than you can select the source you need from the team content.</p> |
|  | Toolbox   |
|  | <p>Save as</p> <p>Convert to Template</p> <p>Convert to Active Report</p>   |
|  | <p>Toggle between editing the report and viewing the report.</p> <p><b>Tip:</b> These two states are referred to as edit mode and view mode.</p>                |
|  | Undo last action you made to the report   |
|  | Redo the last change you made to the report   |

|   |  |
|---|--|
|    | <p>Specify run options for the report and run the report. Run options include output format, orientation of the report, how much data to return, language, rows per page, accessibility features, bidirectional support and performance details. Appears only in edit mode.</p>  |
|   | <p>Run the report using the current run options. The data is refreshed (database re queried) only if you change the output format from the last time you ran the report. To change the output format, click the down arrow. Appears only in view mode.</p>   |
|  | <p>Refresh the report using the same prompt values. Appears only in view mode.</p> <p><b>Note:</b> To ensure that the data is refreshed, disable the “Use local cache” property in the properties for the query.</p>   |
|  | <p>Switch between the Welcome page and other views that you have open in the DWH GUI.</p>  |
|  | <p>Parameter values stored by the DWH server include sign-on, validation, and prompt information. For example, if you define two data source connections in the DWH portal that point to the same data source, you are prompted to choose one when you run a report. This information is stored so that you are not prompted each time you run the report.</p> |
|  | <p>Toggle between locking and unlocking objects on the canvas. To manipulate the contents of some objects, you must first unlock the object. For example, you have a list that contains the column “<b>Product Name</b>”. You want to insert a graphic inside the “<b>Product Name</b>” column to show</p>   |

|   |  |
|---|--|
|   | <p>an image of each product. Unlock the list to insert the image object inside a list column.</p>  |
|    | <p>Switch between page design, page preview, or page structure view.</p>   |
|   | <p>When you click on the "More" icon (  ) the following options are available to choose:</p> <ul style="list-style-type: none"> <li>  Open report from clipboard</li> <li>  Copy report to clipboard</li> <li>  Visual aids</li> <li>  Find...</li> <li>  Validate report</li> <li>  Validate options</li> <li>  Auto correct</li> <li>  Layout component cache</li> <li>  Manage conditional styles</li> <li>  Show generated SQL/MDX</li> <li>  Add shared set report</li> <li>  Manage Shared Set Reports</li> <li>  Manage Shared Set References</li> <li>  Show specification</li> <li>  Options...</li> </ul> |
|  | <p>You can copy a report specification to the clipboard so you can open it from the clipboard later.</p>   |



|   |   |
|---|---|
|    | <p>You can open a report specification that was previously copied to the clipboard. This is useful for importing an XML report specification from outside the DWH environment.</p>  |
|    | <p>Visual aids include options to help you when you are designing reports in the layout.</p>  |
|    | <p>You can quickly locate specific objects in a report by using “Find”.</p>   |
|    | <p>Validate your report to ensure that it contains no errors.</p>   |
|    | <p>If you require more details from the validation process.</p>   |
|    | <p>If you encounter validation errors and want to identify incorrect objects in your report</p>   |
|    | <p>In the layout component cache you can see which template (report) is used. In case there is a change in the template (report) you can see where the source of the change is.</p> |
|  | <p>You can view, modify, or delete the conditional styles that are applied to your report. You can also define a new conditional style.</p>   |
|  | <p>View the SQL or MDX for the entire report.</p>   |
|  | <p>A report specification is an XML file that you can view.</p>   |
|  | <p>Please see Chapter “<b>Options in Reporting</b>” for detailed information.</p>   |
|  | <p>Toggle between showing and hiding the Properties pane for the active object. The properties that are displayed are different, depending on the object.</p>                       |

**Table 93 - The user interface - Report icons and functions**

DWH - Reporting has three views in which you can author reports: Page design view, Page preview view, and Page structure view.

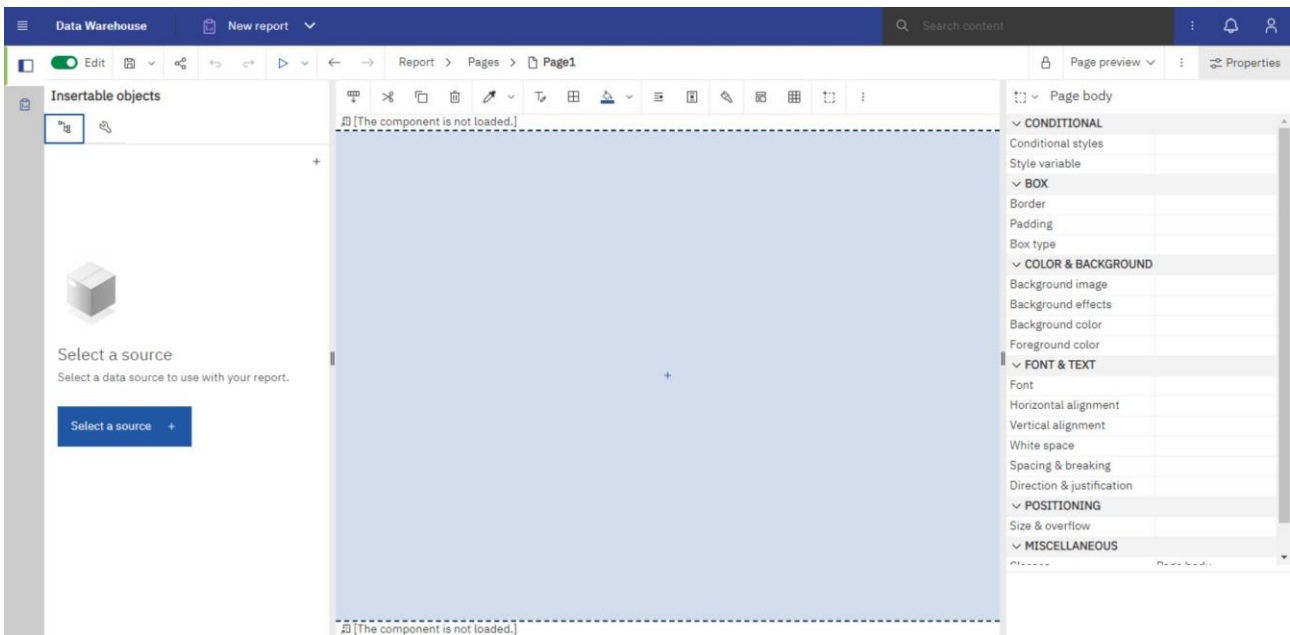


Figure 289 - The user interface - Page Preview

You choose a report authoring view by selecting one of them on the application bar. Different options are available in each view, so you often need to use all views. For example, you must use the **“Page design”** and **“Page structure”** views to remove sections in relational reporting.

Page design view:

The default view in DWH - Reporting. In this view, you can see what your report will look like after you run it.

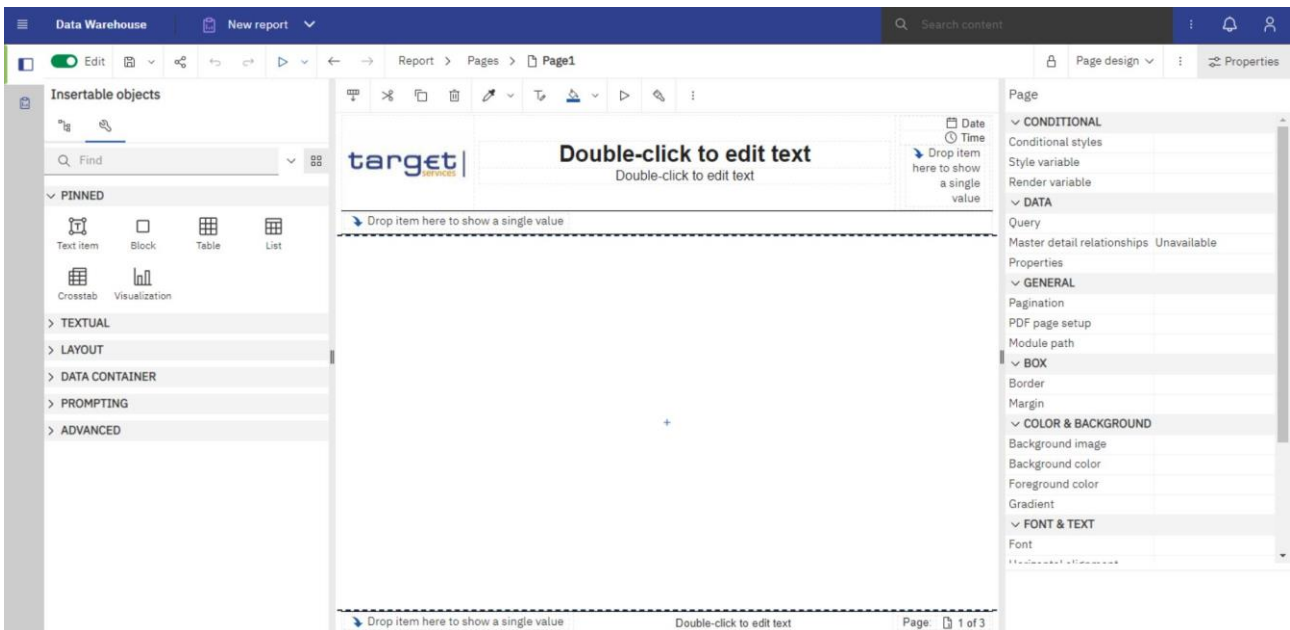
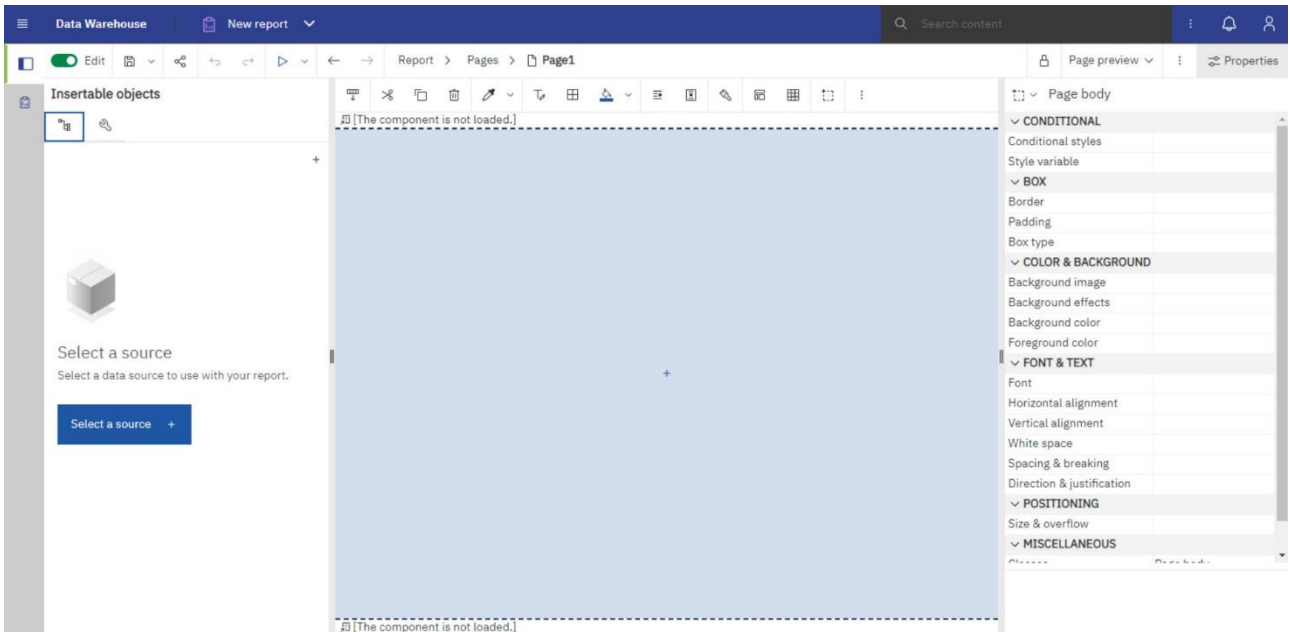


Figure 290 - The user interface - Page design view

Page preview view:

Shows you the current report page with live data. In this view, you can edit the report, such as inserting data items into empty data containers.

When you are authoring an DWH Active Report, the “**Page preview**” view shows you live data as you format the report.

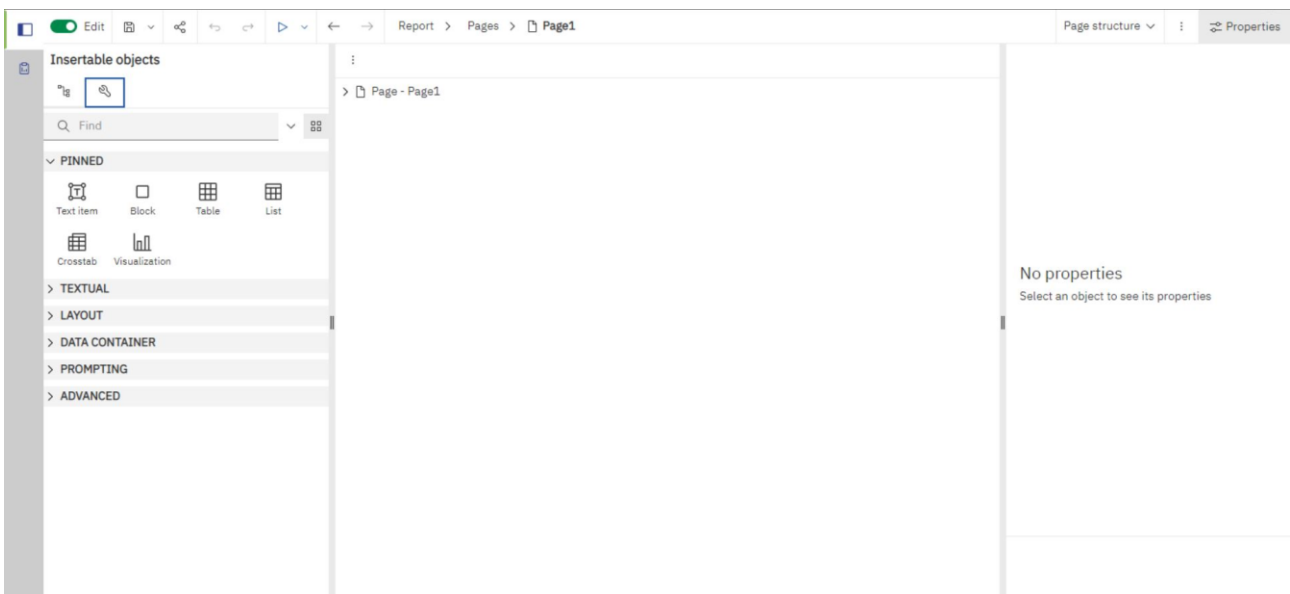


**Figure 291 - The user interface - Page structure preview**

Here it looks the same as the design view, but you cannot add objects (plus symbol) here.

Page structure view:

Displays an overview of all of the report objects in your report in a tree structure, which is organized by page.



**Figure 292 - The user interface - Page structure view**

[Create a report](#) [▶ 374] details the process of report creation further by providing a step-by-step guidance.

### 7.1.1 On-demand toolbar

The on-demand toolbar (formerly known as the report object toolbar) contains the actions you can perform on an object.

You can disable the on-demand toolbar.

The following list shows the actions that are available from the on-demand toolbar. The actions that appear depend on the type of object that is active on the canvas:

#### **Pin and Unpin**



**Figure 293 - On-demand toolbar - Pin and Unpin**

When the on-demand toolbar is pinned, it stays at the upper left corner of the canvas, regardless of which object is active.



When it is unpinned, it floats near the object that is active.



You can also control the display of the on-demand toolbar by setting the “**Show on demand toolbar on right-click**” option

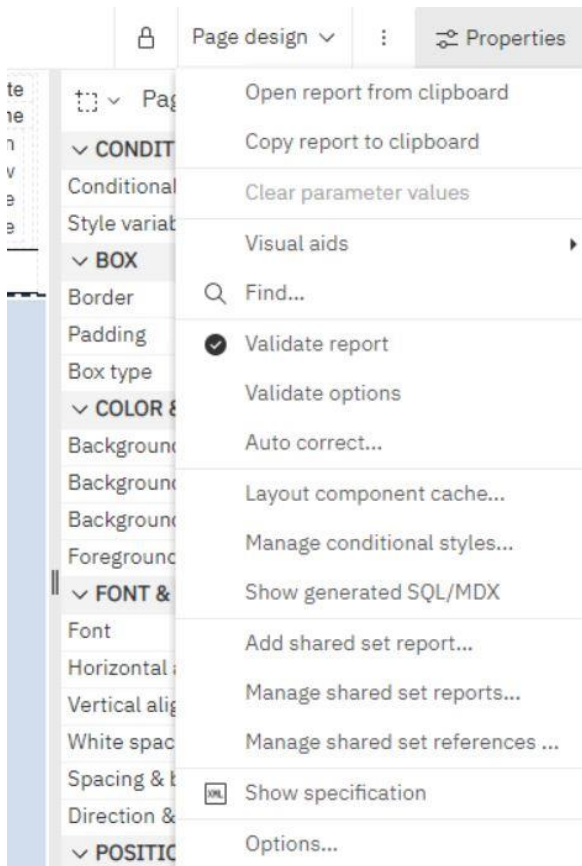
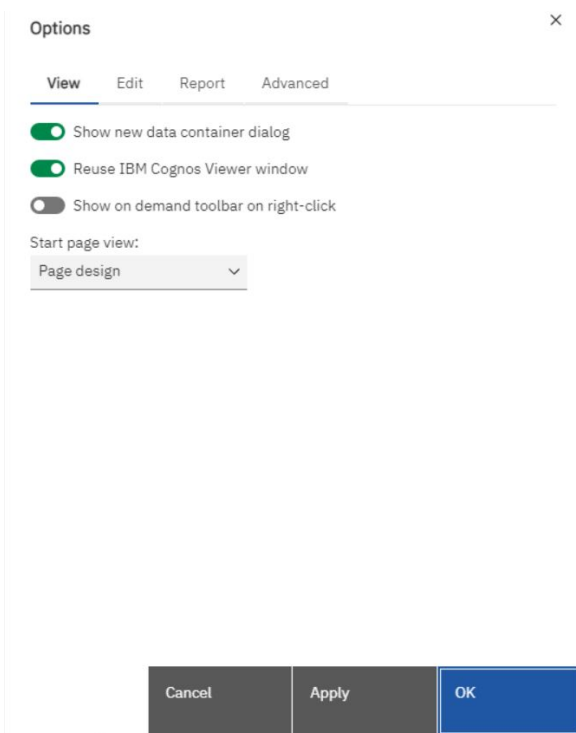






Figure 294 - On-demand toolbar - More icon

Click the “More” icon (  ).




**Figure 295 - On-demand toolbar - More icon - Options**

When the **“Show on demand toolbar on right-click”** check box is selected, the on-demand toolbar displays when you right-click an object. When cleared, the on-demand toolbar displays when you click an object. If the on-demand toolbar is pinned, it appears at the top left corner of the canvas, regardless of the setting of the **“Show on demand toolbar on right-click”** option.

**“Cut”** (  ), **“Copy”** (  ), **“Paste”** (  ) and **“Delete”** (  )

Cut, copy, paste, or delete an object

**“Filters”** (  )

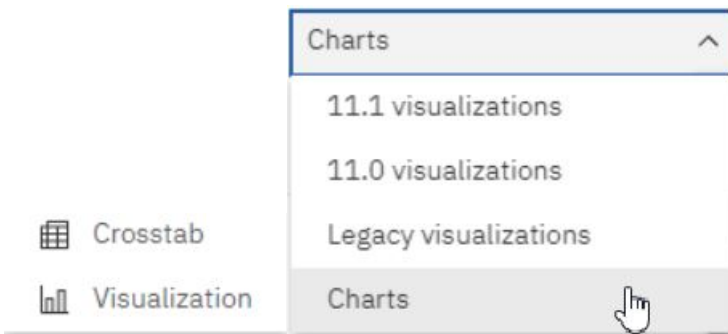
Click the **“Filters”** icon to add, edit, or delete filters or add filter text to the visualization

**“Swap rows and columns”** (  )

In a table, switch the row and columns around


You can only swap columns and rows in a crosstab or in a Visualization from the Visualization gallery window

**“Charts”**




**“Apply style”** (  )

Apply a custom or default style

**“Font”** (  )

Edit the font for an object

**“Border”** (  )

Apply a border. You can choose the style, width, and colour.

**“Background colour”** (  )

Apply a background colour

**“Horizontal alignment”** (  )


Change the horizontal alignment

**“Vertical alignment”** (  )

Change the vertical alignment

**“Style current selection”** (  )

Create and apply a custom style to the selected object

**“Apply layout”** (  )

Select a different layout for the report

**“Insert table”** (  )

Insert a table

**“Select ancestor”** (  )

Select the layout component that is the ancestor of our current selection.

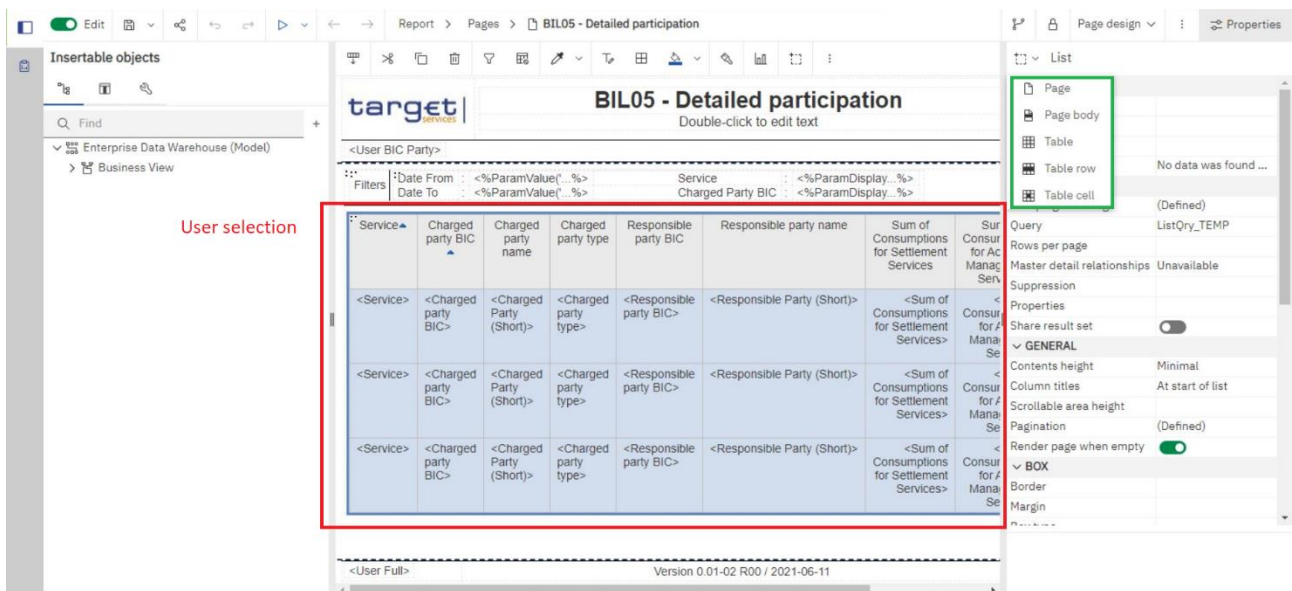




Figure 296 - On-demand toolbar - Select ancestor

**“More”** (  )


Other actions that vary, depending on the type of object that is active. For example, for a visualization, you can change the headers and footers. For a table, you can apply a table style. For a table cell, you can build a prompt page.


7.1.2 Sources tab

**Sources** (  )

The **“Sources”** tab (  ) contains items from the package selected for the report, such as data items and calculations. When you drag an item to the canvas, the visualization recommender chooses a visualization to represent the data. If you do not like the visualization, you can change it.




Search through the sources by typing a value in the “**Find**” field (  ). As you type, the items that match your search string appear in the tab.

All the items in the “**Sources**” tab (  ) have an icon that describes the item purpose.

|   |               |
|---|---------------|
|    | Package       |
|    | Namespace     |
|    | Folder        |
|    | Dimension     |
|    | Hierarchy     |
|    | Level         |
|    | Member        |
|    | Query Subject |
|    | Character     |
|  | Measure       |
|  | Integer       |
|  | Date / Time   |

Figure 297 - Sources tab - Sources items

### 7.1.3 Data items tab

The “**Data Items**” tab (  ) shows the queries in the report.

### 7.1.4 Toolbox bar

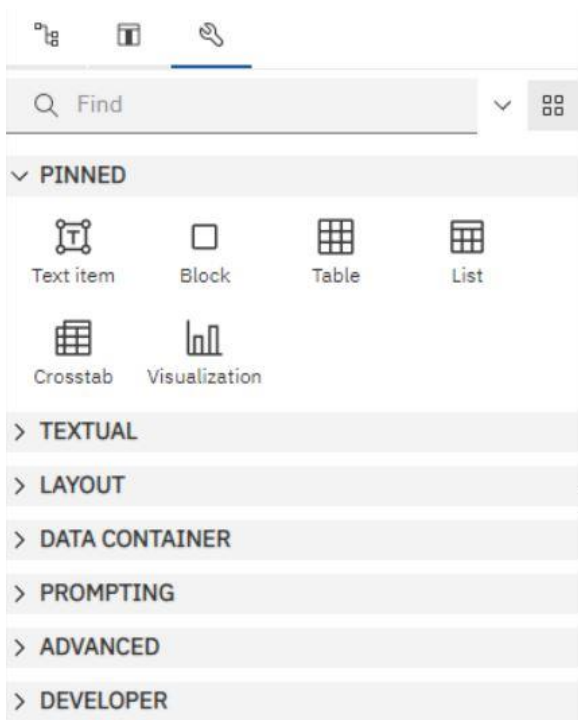



Figure 298 - Toolbox bar

The “**Toolbox**” tab (  ) contains various objects that you can add to a report, such as visualizations, text, layout objects, and prompts. You can also add advanced objects such as custom controls and hyperlinks. Depending on the type of object, you can drag it from the Toolbox to the canvas or double-click it to open a window in which you define values for the object. When the object is placed on the canvas, its properties are displayed in the “**Properties Pane**”.

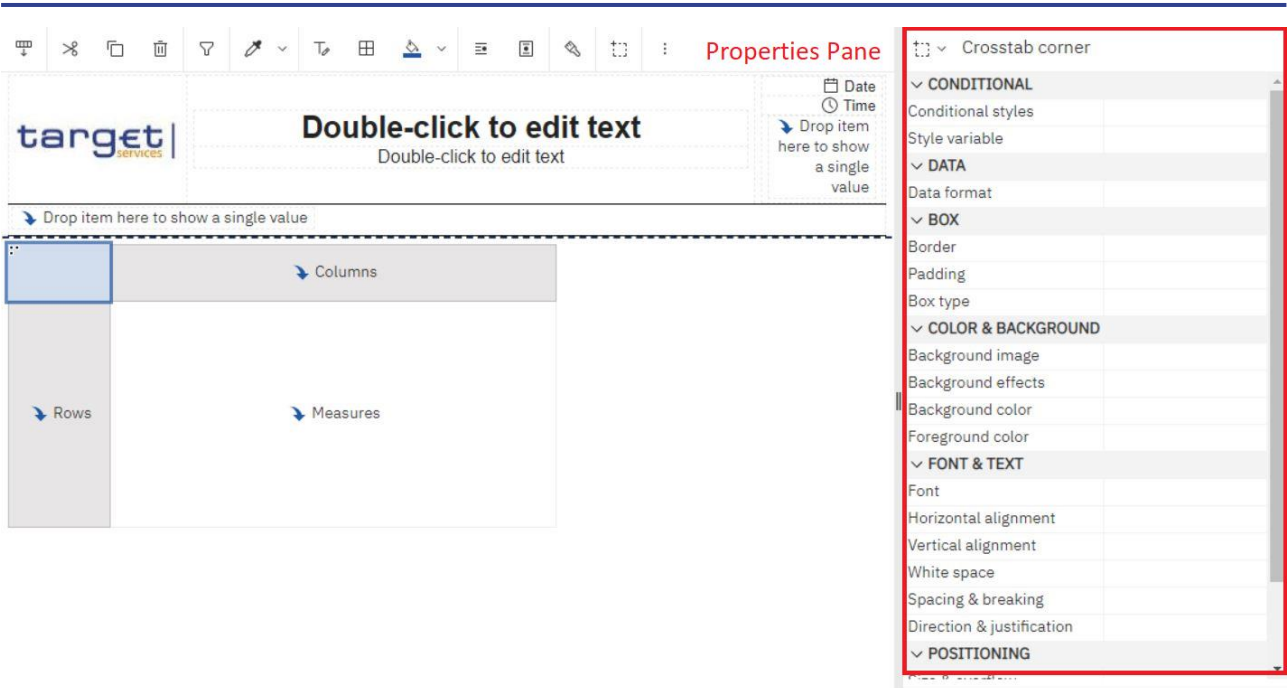








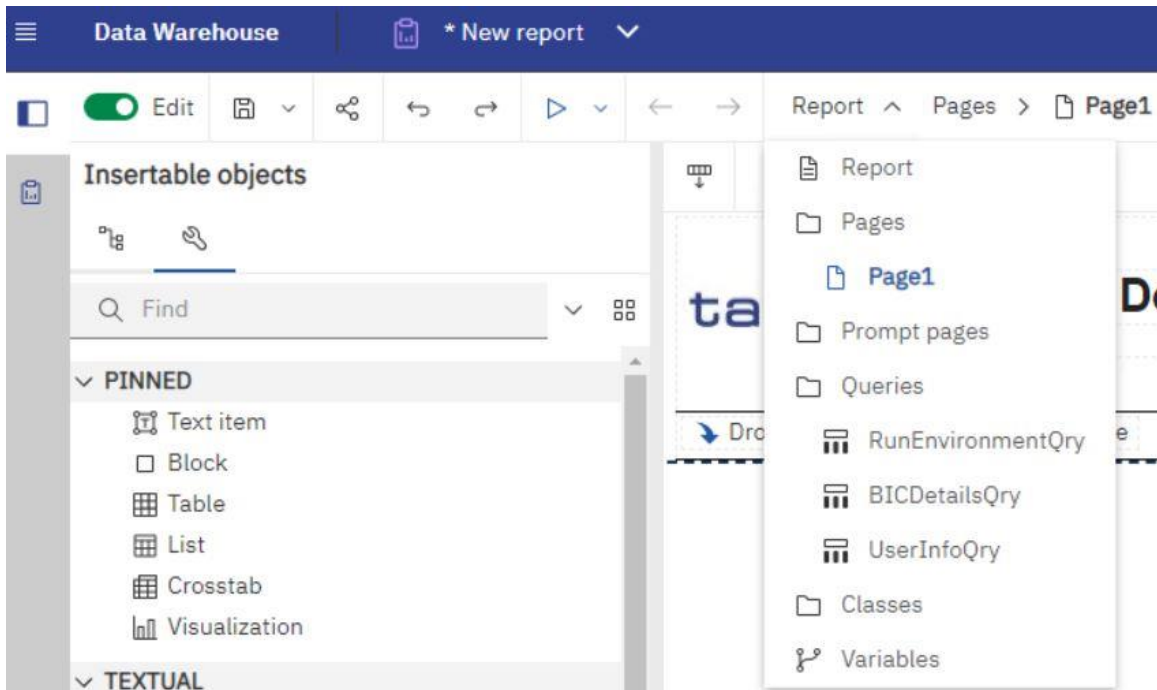
Figure 299 - Toolbox bar - Properties Pane

Search through the objects by typing a value in the “Find” field (  Find ). As you type, the items that match your search string appear in the tab.

Toolbox items are organized into groups. Click (  ) to show all of the items available in each group or (  ) to collapse the groups. Click (  ) to toggle between a list view or a tree view of the items in the groups.

Add items that you use often to the **PINNED** group. Items in the **PINNED** group appear in the “Add circular menu” icon (  ) on the canvas when you create a new report. To add a toolbox item to the “**PINNED**” group, right-click the item and click “Add to pinned toolbox items” (  Add to pinned toolbox items ). To remove an item from the “**PINNED**” group, right-click the item and click on “Remove from pinned toolbox items” (  Remove from pinned toolbox items ).


### 7.1.5 Report overview pane



**Figure 300 - Report overview pane**

Click Report in the navigation drop-down to see the following information:

1. A description of the report
2. Data sources used in the report
3. The parameters used in the report
4. Number of report objects
5. Number of page objects

Click **“Validate report”** (  ) to validate the report specification.

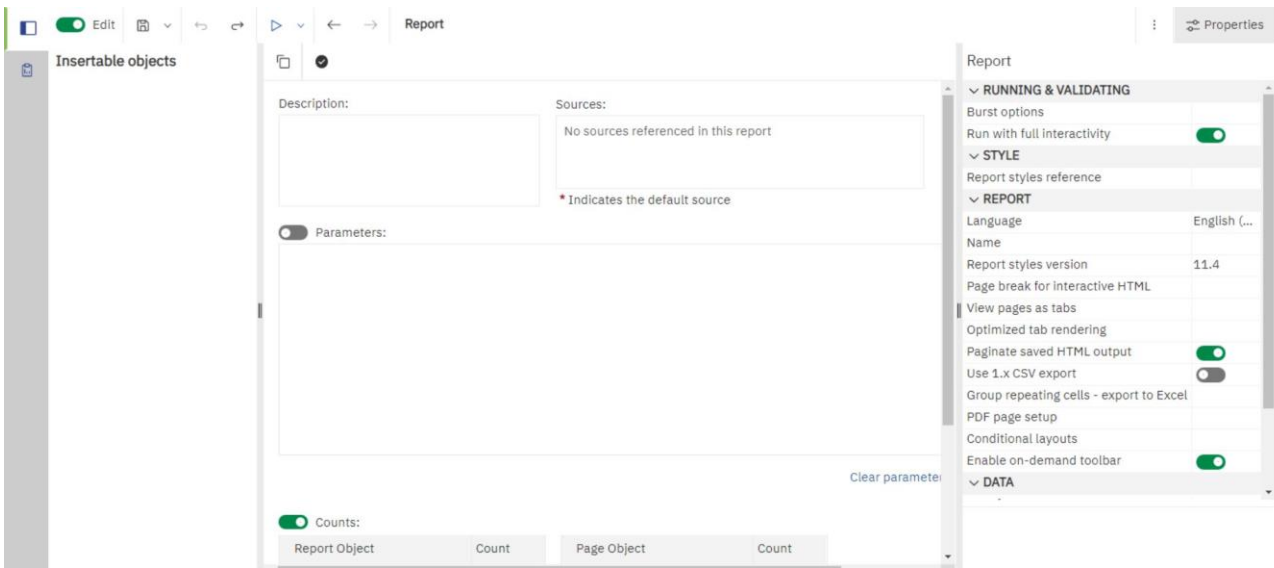



Figure 301 - Report overview pane - Validate report

### 7.1.6 Pages pane

Click on **“Pages”** (  Pages ) to view or create new report pages and prompt pages, and to create and modify classes. You can insert a page, a set of pages, or a reference to a report from the pages pane.

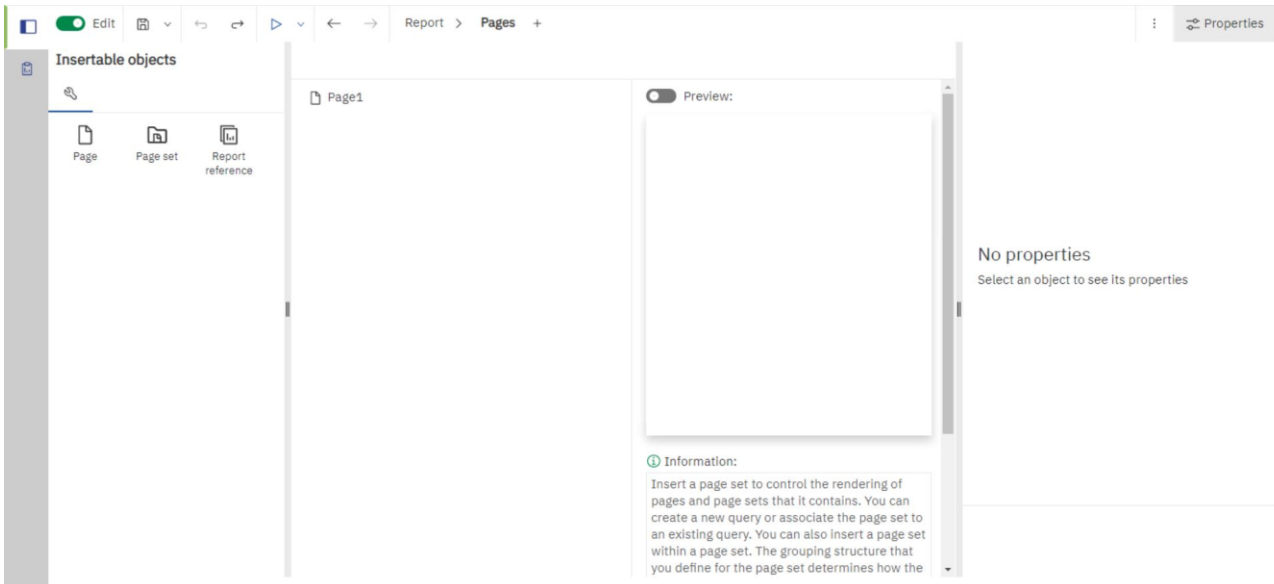



Figure 302 - Pages pane

### 7.1.7 Queries pane



Click on (  ) to create or modify queries in relational reporting or dimensional reporting and to perform complex tasks, such as defining joins, unions, intersects, excepts, and writing SQL and MDX statements.

Click a specific query to add a calculation, detail or summary filter, or a set expression.

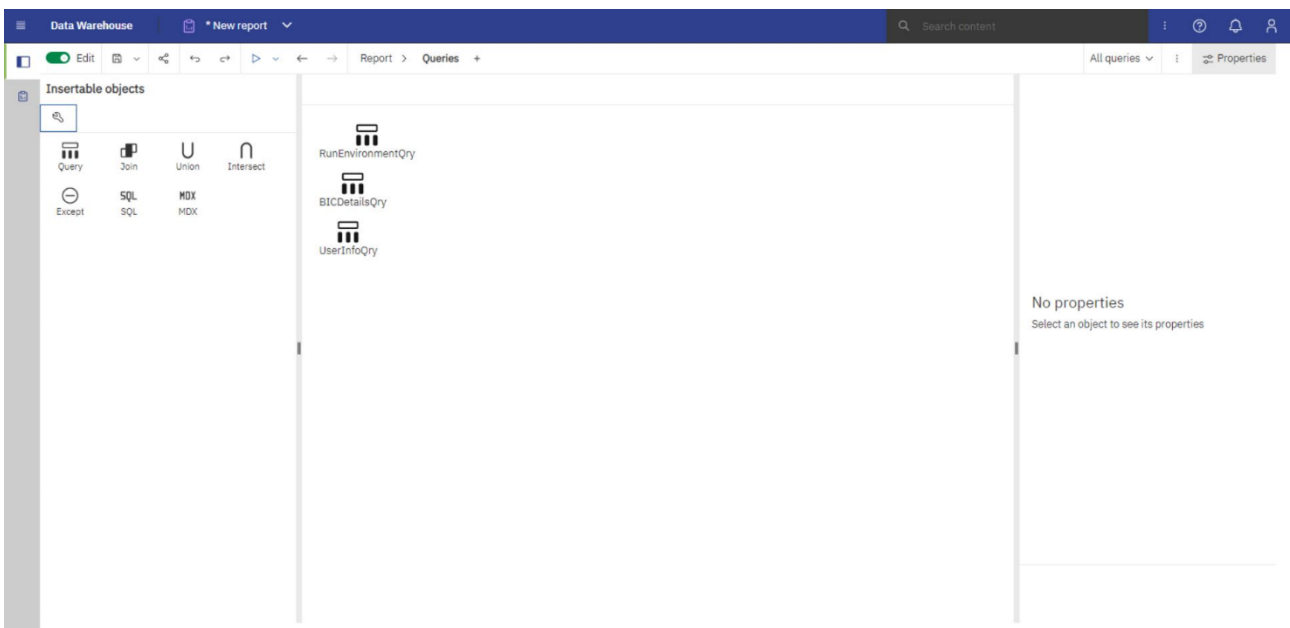



Figure 303 - Queries pane

### 7.1.8 Classes pane

Click on “Classes” (  ) to define a style. For example, you can define a style for the title of an axis. You can then apply the style to all axis titles in the report.

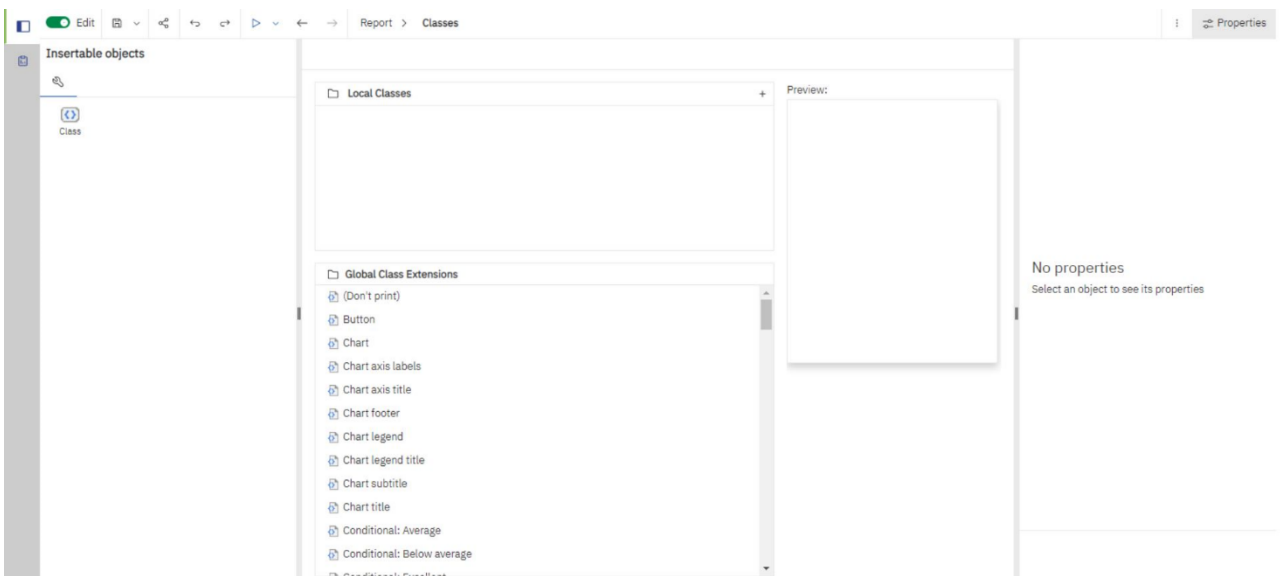



Figure 304 - Classes pane

### 7.1.9 Variables pane

Click on **“Variables”** (  Variables ) to add a variable that has values in a different language, values as strings, and values in Boolean.

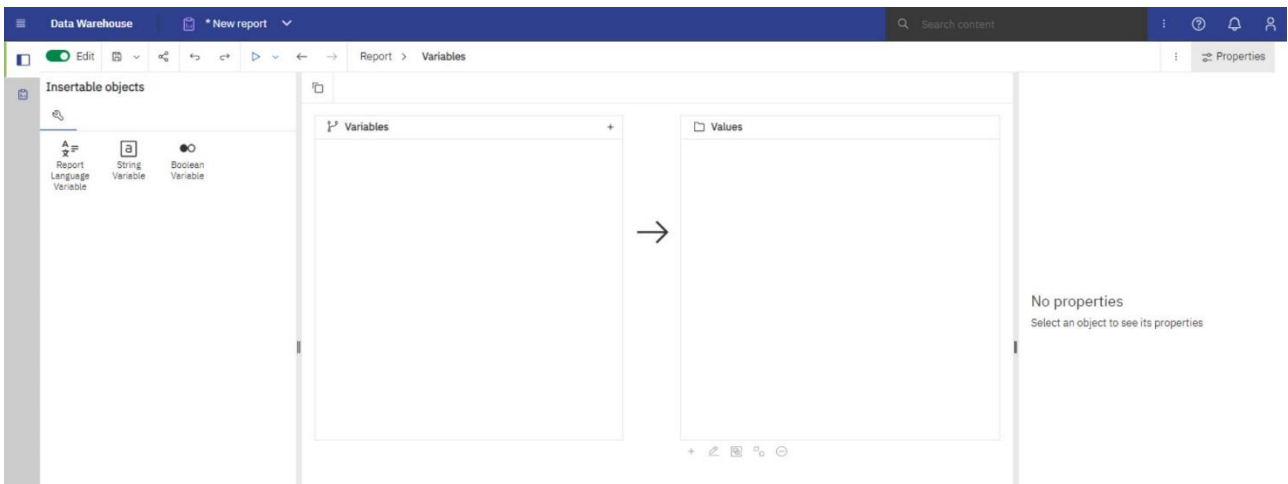



Figure 305 - Variables pane

### 7.1.10 Filters pane

The Filters pane is (  ) available when the user runs the report in HTML. It displays all filters that are created by the report consumer on the report output. When you click a filter in this pane, all data containers that use the selected filter are automatically highlighted in the report. When a data container is selected, the


filter pane is updated instantly to display only filters that are applied to the selected data container. You can edit or delete the filter directly in the pane.

You can resize the filter pane, and pin or unpin the pane depending on the screen resolution. Report authors can also make an authored filter visible to report consumers so that they can interact with it in this pane.

The pane cannot be used to create or view low-level filter expressions that are manually created in the expression editor. By default, interactive filtering is disabled for filters that were created in earlier versions of the DWH software.

This feature is not available for active reports.

### 7.1.11 Properties pane

The properties pane lists the properties that you can set for an object in a report or for the entire report. The properties that are displayed vary depending on the type of object. When you specify a value for a property, press “**Enter**”, click another property, or save the report to ensure that the value is saved. Click on (  ) to show or hide the properties pane.

At the “**Report**” level, you can set the following properties:



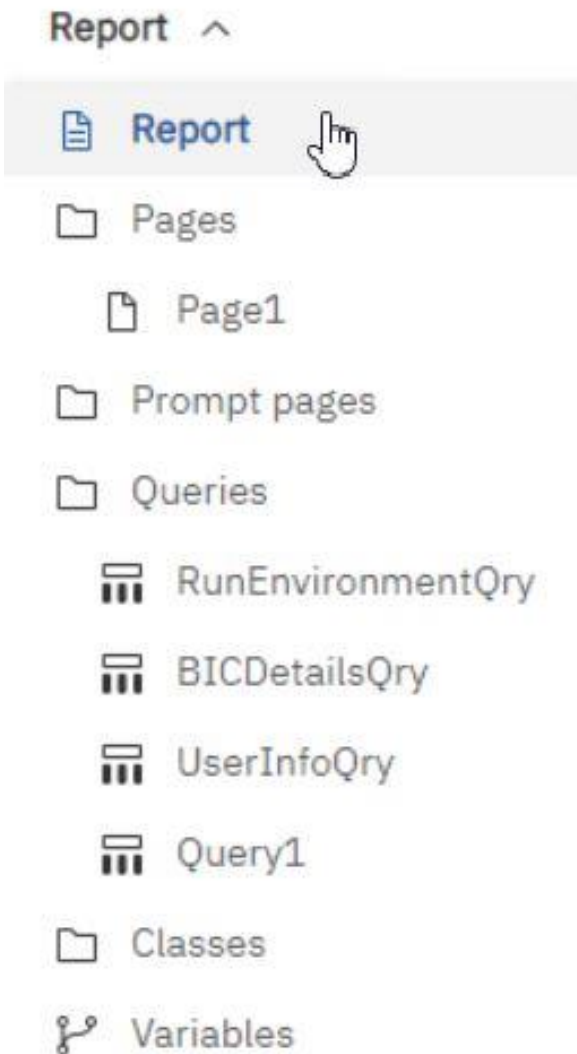


Figure 306 - Properties pane - Report level

### **Burst options**

Specifies the data item on which to burst reports. Specify recipients.

Bursting a report is running a report and sending the report to recipients, dividing the results according to which results they have access.

By clicking on the right side of the “**Burst options**” property, the following window pops out

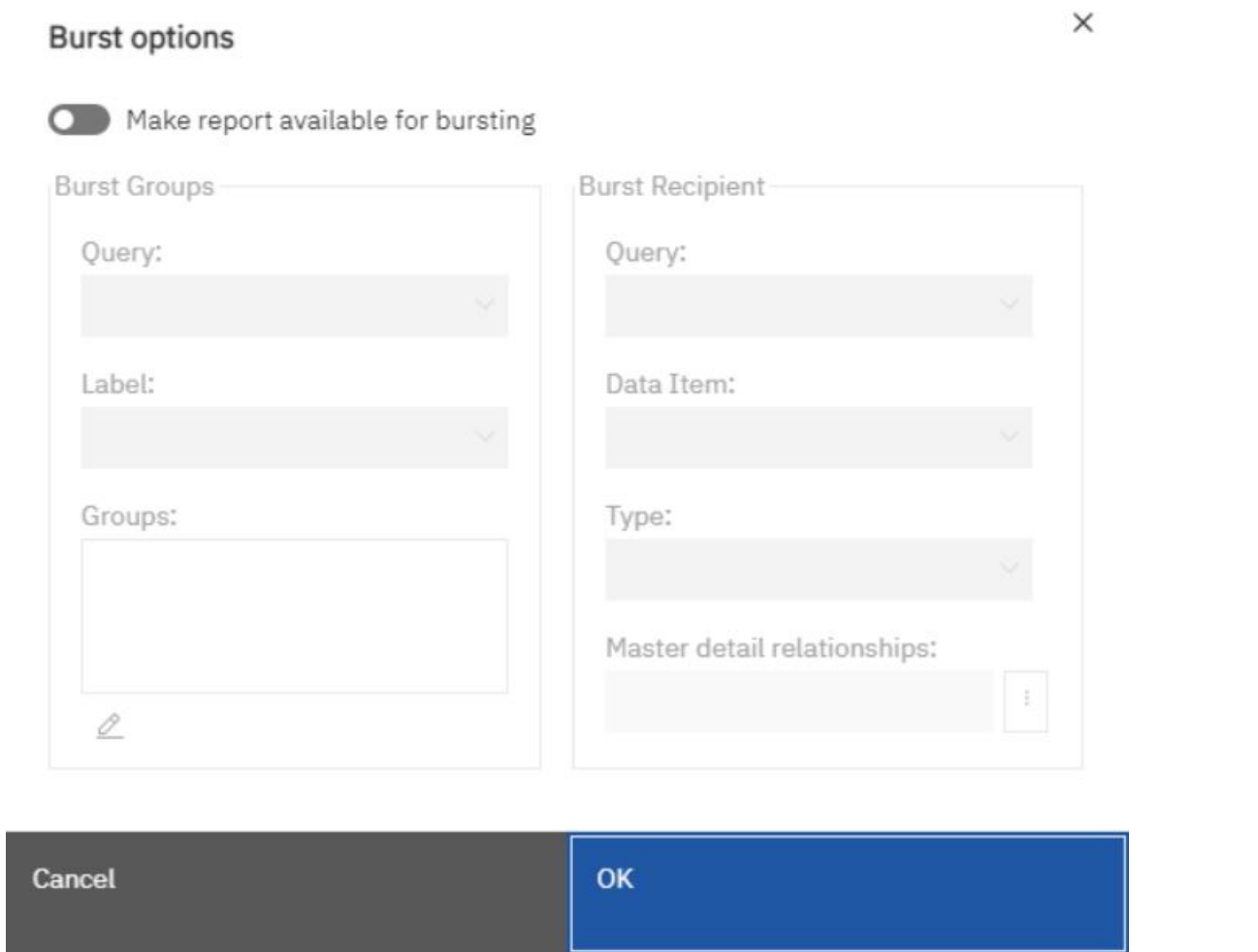




Figure 307 - Properties pane - Report level – Burst options (2)

By clicking on the right side, or dragging the marble to the right of the checkbox (  ) at the left of “**Make report available for bursting**” the user is presented with the bursting properties:

**Burst Groups:** in the **Query** box you can select the query that contains the data item on which to burst

**Label:** you can select the data item with which to label each burst report.

By clicking on the edit button (  ), you can drag from the “**Data items**” the data item on which to burst to the Groups folder and then click on “**OK**”.

Under **Burst Recipient**, in the **Query** box, you can select the query that contains the data item to be used as the distribution list.

In the **Data Item** box, you can select the data item that contains the recipients.

In the **Type** box, choose the method to burst the report:

Directory entries: you can distribute reports to folders that recipients can access in the Cognos Analytics portal.

**Run with full interactivity**

Enable users to change the report

By default, reports that are created are set to run with full interactivity

**Style**

Apply local and global styles from another report

**Language**

Specifies the language package

**Name**

Name of the report, specified when you save it

**Report styles**

Specifies the product classes used to format objects. You can select between 1.x, 8.x, 10.x, 11.x, 11.4 and 11.5.

**Page break for interactive HTML**

For reports with multiple data containers, specifies whether to render the default number of rows of each data container on each page.

**View pages as tabs**

In HTML output, specifies whether to show each report page in its own tab, and the location where the tabs appear in the browser.

**Paginate saved HTML output**

Specifies whether to create multiple pages or one scrollable page.

**Use 1.x CSV export**

Not applicable.

**Group repeating cells - export to Excel**

When you produce reports in Excel format, you can choose to group repeating cells into a single merged cell.

**PDF page setup**

Sets PDF page options

**Conditional layouts**

Add layouts to a report based on conditions

**Data formats**

Specifies the default data format properties for each type of data

**Package-based drill-through source**

Enable or disable the report to be used as the source during a package drill-through. This property can also be set in the drill through definitions property.

**Dynamic filtering**

When the report is a drill-through target, specifies whether to apply more filtering when names from the context in the source report match names of items in the target report. This property can also be set in the drill through definitions property.

For other types of objects, like containers, you can set conditional styles, queries, pagination, margins, colour and background, font and text, and many other properties.

## 7.2 Report Layout, queries and objects

All reports have two components: a layout component that defines the report appearance and a query component that defines report data. Understanding these components will help you design effective reports.

### 7.2.1 Layout

A layout is a set of pages that defines the appearance and formatting of a report. When you design the layout of a report, you:

- | present the data in a meaningful way by using lists, crosstabs, charts, and maps
- | add formatting, such as borders, colour, images, and page numbers
- | specify how the data flows from one page to the next

When you create a report, consider the following structural elements:

- | Define the page structure.

Determine what goes into the page header, body, and footer. The page header contains information that appears at the top of each page. The page body contains information that starts on the first instance of the page. If there is too much data to fit on a single page, it continues across all instances of the page. The page footer contains information that appears at the bottom of each page.

- I Identify horizontal bands of information.

Look for natural bands of information running across the page. Each of these bands typically translates into a block.

- I Identify vertical bands of information.


In each horizontal band of information, look for bands that run up and down the page. Each of these bands typically translates into table cells.

- I Decide which data frames to use to lay out the data.

Choose a list, crosstab, chart, repeater, or text frame.

- I Set properties at the highest level item possible.

By setting properties at the highest level, you set them once instead of setting them for each child object. For example, if you want all text items in a report to appear in a specific font, set the font for the page.

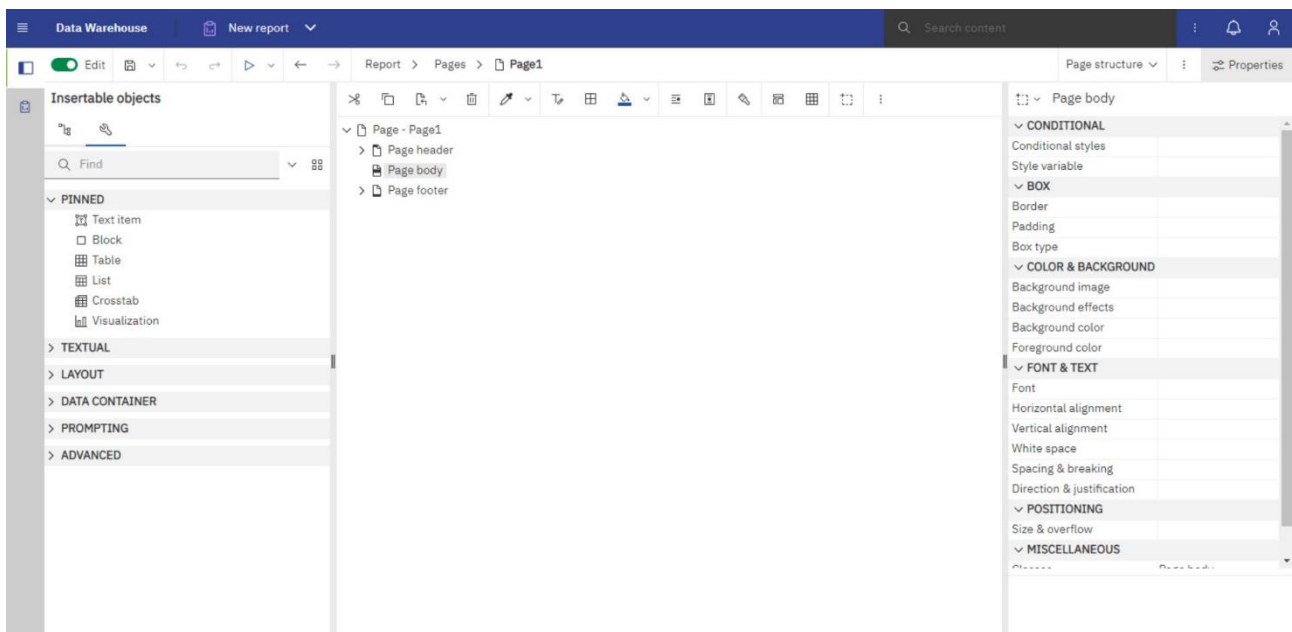
When setting properties for an object, click the “**Select ancestor**” icon (  ) in the Properties pane title bar to see the different levels available.

- I Use padding and margins to create white space.

Do not use fixed object sizing unless it is absolutely necessary. When you specify that an object has a fixed size, your layout becomes less flexible.

### 7.2.1.1 The Function of the page structure view

When you add objects to a report, you usually work in the layout. An alternative view of the report is available. To view the report in a different way, select at the right of the top Page design and then click “**Page structure**”.



**Figure 308 - The user interface - Report Layout, queries and objects - Layout - Page structure**

Use the page structure view to view the entire contents of a report page in a tree structure. Using a tree structure is useful for locating the objects in a page and troubleshooting problems with nested objects.



**Figure 309 - The Function of the page structure view**

Use the “**Page structure**” view:

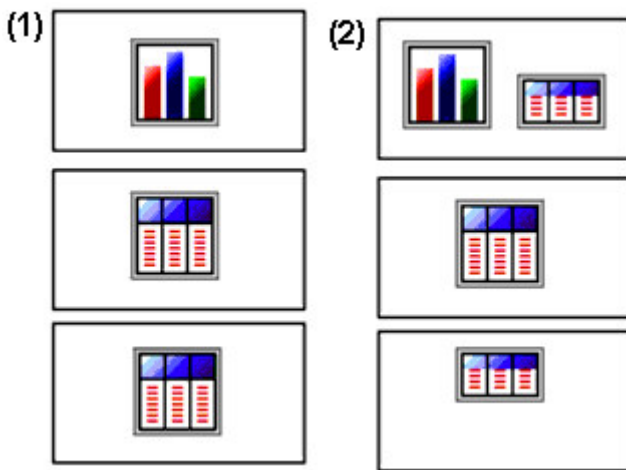
- | To quickly move objects from one area of a page to another. If you have a complex layout, it may be difficult to select, cut, and paste objects in the layout view. Objects are easier to locate in the “**Page structure**” view.
- | When you want to modify object properties, you can navigate to the layout or in the “**Page structure**” view. To switch back to the report layout, select “**Page design**” at the right of the top.

### 7.2.1.2 Pages

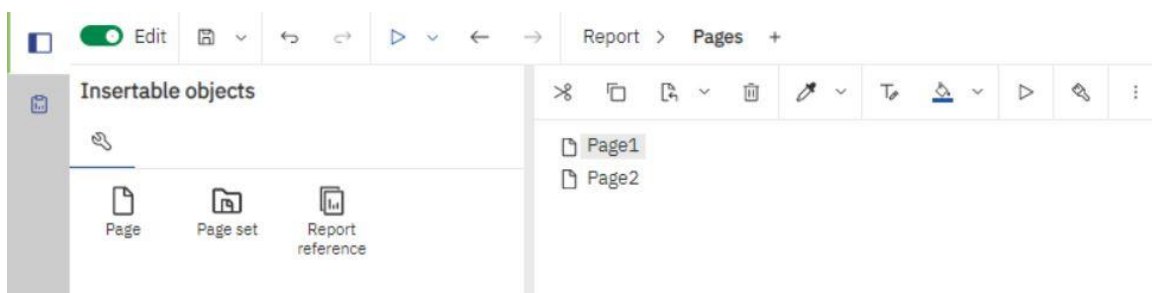
Pages are containers for the layout objects that you use to build a report. A page is made up of the following mandatory and optional components:

- | page header (optional)
- | page body (mandatory)
- | page footer (optional)

When you run a report, the amount of data queried often exceeds one page. As a result, a page will repeat until all the data is shown. You have control over how data flows from one page to the next. For example, here are alternative representations of a report that contains a chart and a lengthy list.



1. The chart appears on its own page. The list begins on the next page and fills subsequent pages until all rows appear.



**Figure 310 - Report Layout, queries and objects - Pages**

It is necessarily to create two pages for this approach.



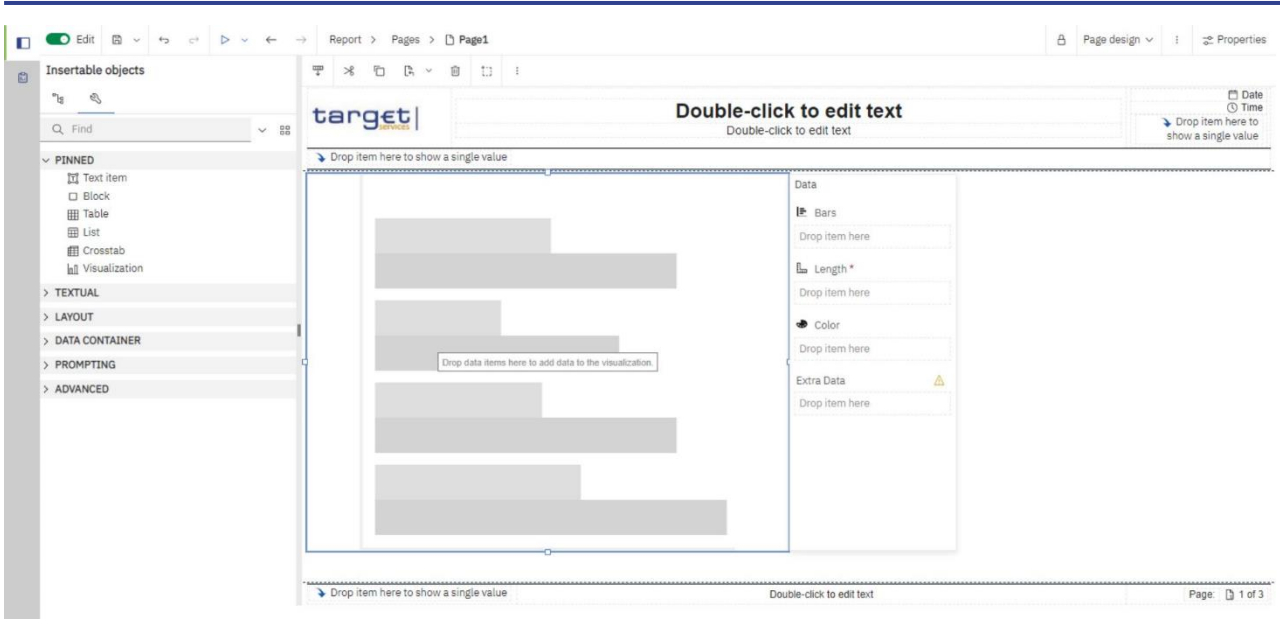


Figure 311 - Report Layout, queries and objects - Pages - First page

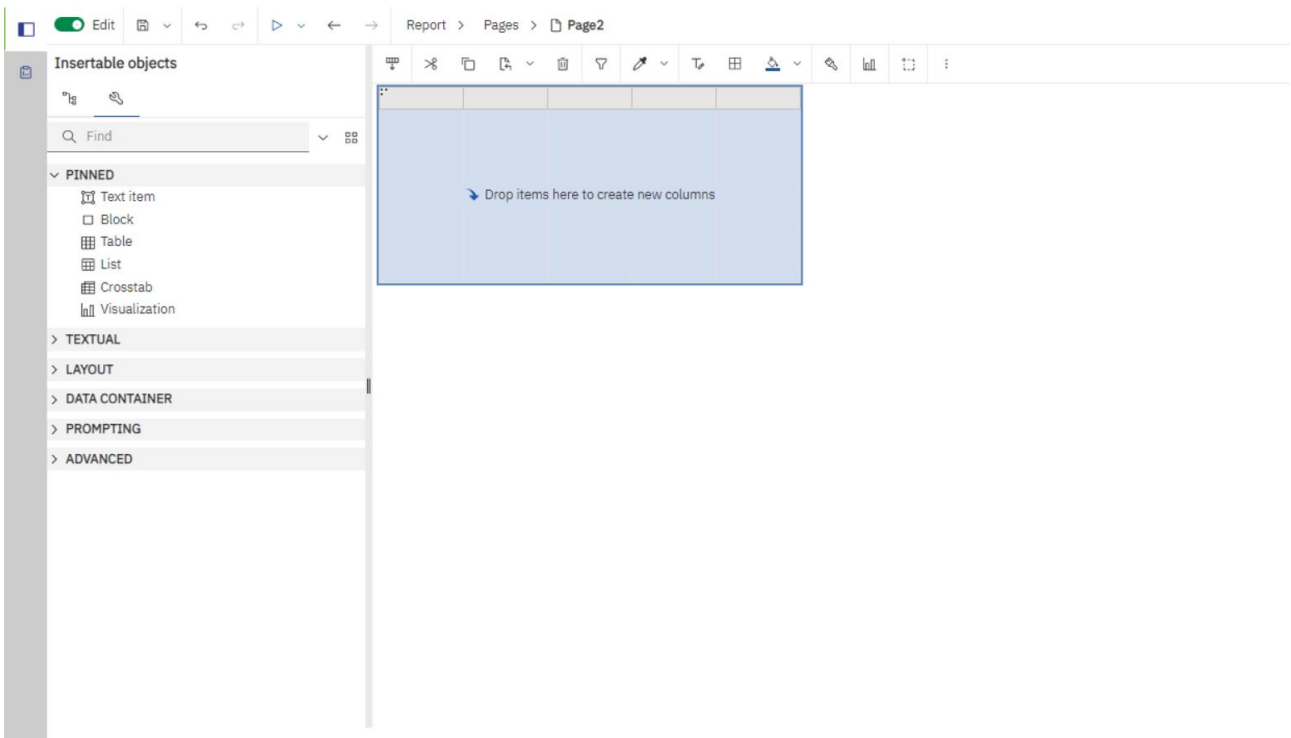
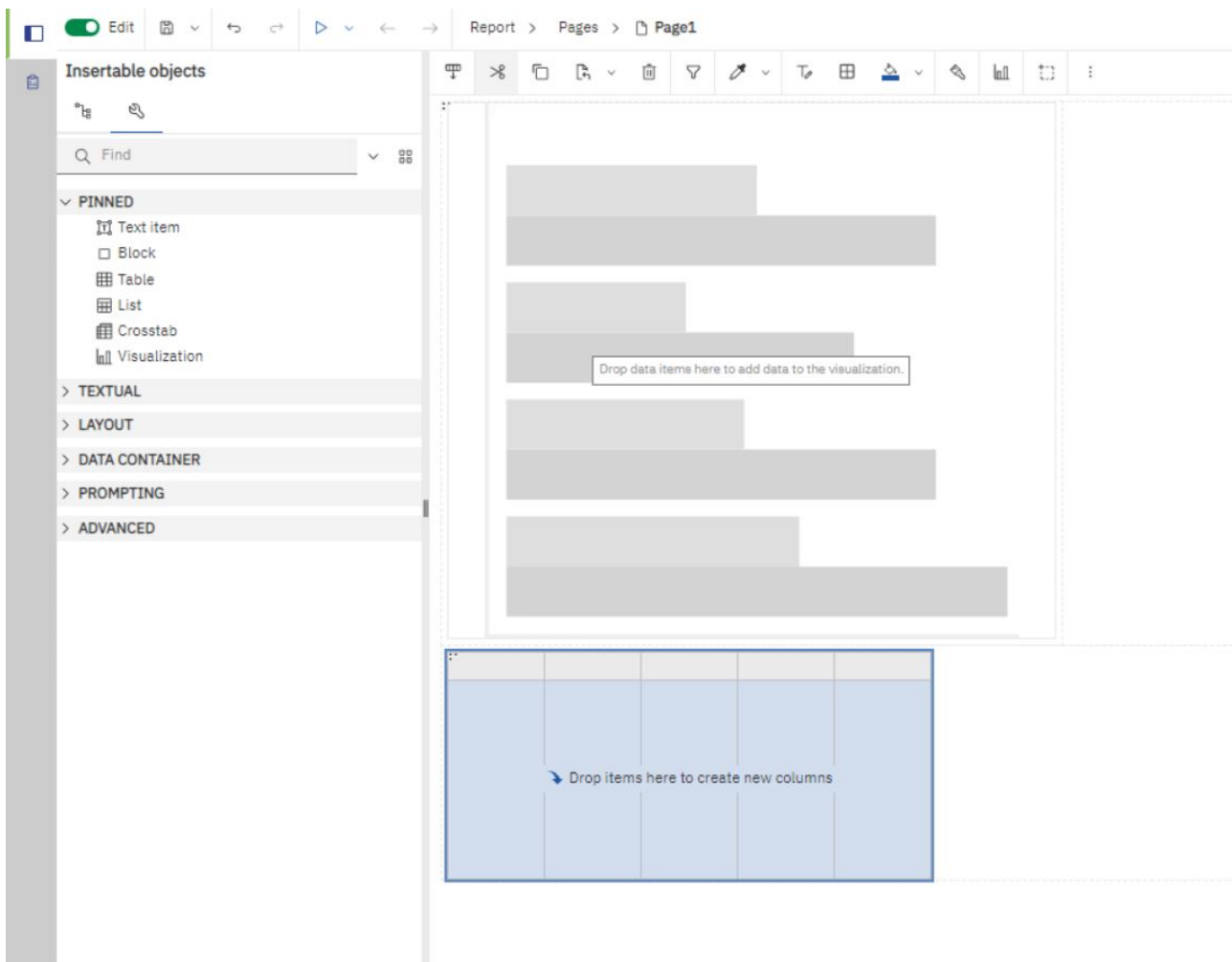


Figure 312 - Report Layout, queries and objects - Pages - Second page

2. The chart and the first few rows of the list appear on the first page. The rest of the data in the list appears on the subsequent pages.



**Figure 313 - Report Layout, queries and objects - Pages - Chart and first rows of the table on the first page**

### 7.2.1.3 Guided Report Layout

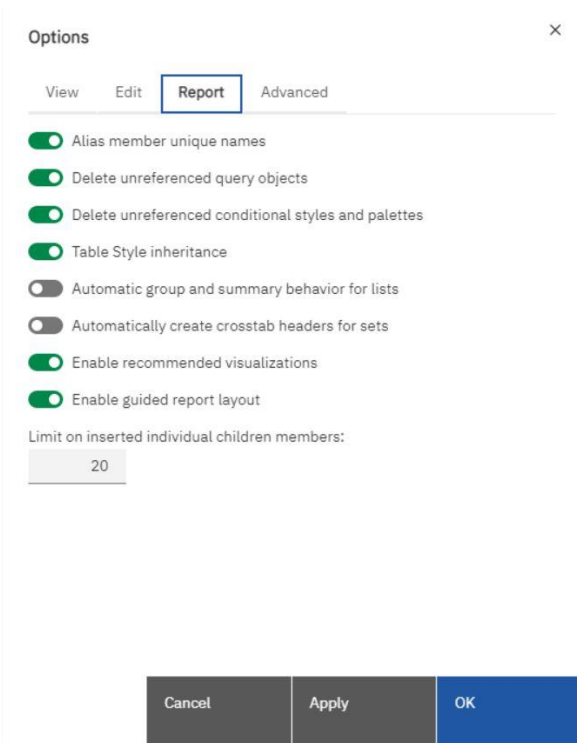
Guided report layout helps you to create a report layout more quickly and dynamically by simplifying the process of adding objects to the canvas.

Here are some of the features of guided report layout:

- | Visual indicators that show you where an object is going to be placed before you drop it on to the canvas.
- | When you drag a measure on to the canvas, you get a summarized text item with a descriptive label and formatting.
- | When you drag a column that is not a measure on to the canvas, you get a list with a descriptive title.
- | You can place objects on the left, in the middle, right, top, or bottom of a container with one gesture.
- | Tables use percentage sizing which ensures that different screen resolutions are supported.
- | You can resize an object by dragging one of its grippers.
- | You cannot drop a crosstab space object on to the canvas.

Guided report layout is enabled by default for the benefit of users that are new to report authoring. If you prefer not to use guided report layout, you can disable it.

1. Click on the “More” icon (  ), click on “Options” icon (  ), and then click on the Report tab.



**Figure 314 - Guided Report Layout - More icon - Options - Report**

2. Clear the Enable guided report layout check box.
3. Click OK.

The "Apply" button is present in every pop up window next to the "OK" button. It serves as a preview. When the user wants to make any change and see the outcome step by step, can click the "Apply" button to see the effect the change has made to the result and when the result is the expected, click on "OK" button.

### 7.2.1.4 Specify the font for a report

You can specify the font for text in a report.

#### **Procedure**

Click the object.

To specify the default font for the report, click the page.

Do one of the following:

From the report object toolbar, click the “**Font**” icon and then specify the font properties.



In the Properties pane, double-click the “**Font**” property and specify the font properties.

To specify the colour of the text, from the report object toolbar, click the “**Font**” icon, and then click Foreground colour. Alternatively, you can specify the colour of the text by clicking the Foreground colour property for the object.

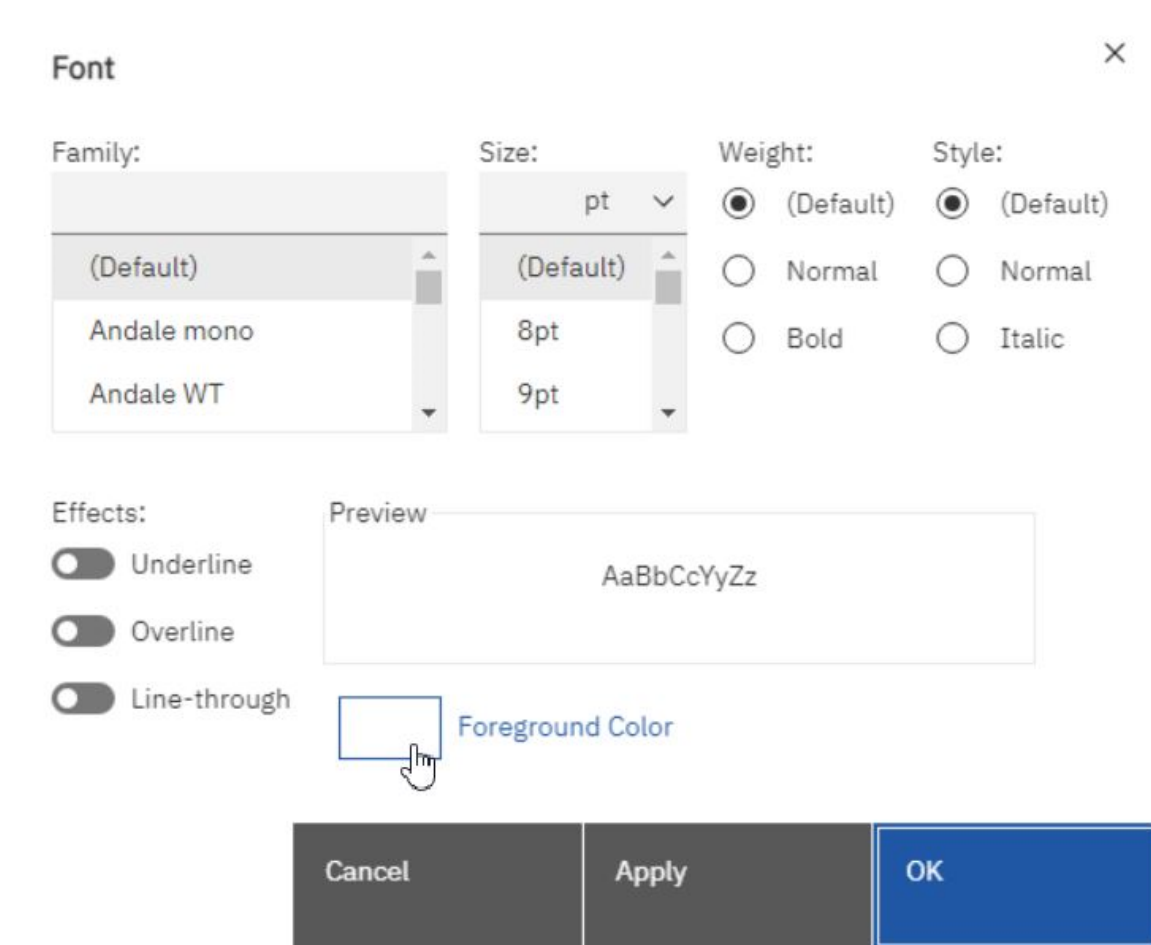


Figure 315 - Specify the font for a report - Font icon - Foreground Color

Type a list of fonts in the Family box if you are not sure whether a specific font is installed on a user's computer. For example, if you type Times New Roman, Arial, monospace, The Reportstudio checks to see if Times New Roman is installed. If it is not, Reporting checks for Arial. If Arial is not installed, the mono-space font used by the computer is used.

If you clicked “**Default**” for any of the font properties, the default value for the property is used. Default values are stored in a style sheet that is used across all DWH tools. You can modify default values by modifying classes.

### 7.2.2 Queries

Queries determine what data items appear in the report. Sometimes you want detailed rows of data, which you obtain by using a simple SELECT statement. Other times you must calculate totals or averages using summary functions and grouped columns or must apply filters to show only the data you want.

DWH - Reporting automatically creates the queries you need as you build reports. However, you can modify these queries or create your own custom queries to get the results you want.

The Queries are depending on the templates and the package you have selected when you are creating a report. Here is an Example how the query looks if you selected “Eurosystem2” in the templates of the report.

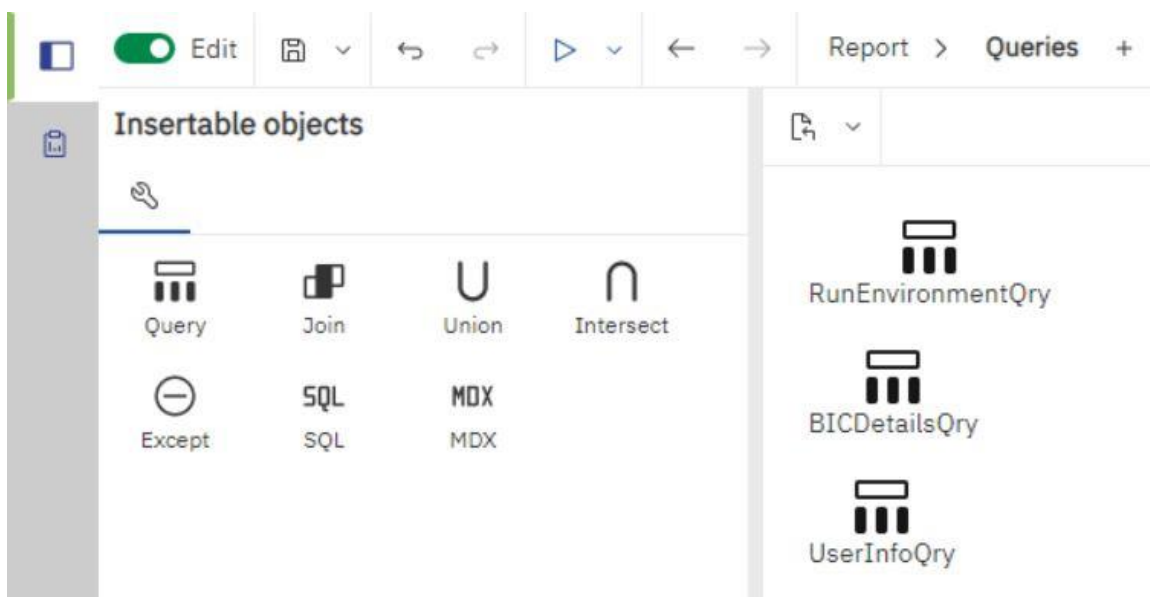


Figure 316 - Queries - Query example of Eurosystem2 template

### 7.2.3 Report objects

You build reports by adding objects and manipulating them to obtain the results you want. To understand how to work with objects in DWH - Reporting, you must be familiar with the following concepts:

#### **Objects as containers**

Objects, such as tables, blocks, and any report frame, are containers in which you can insert other objects. For example, you can insert a list in one cell of a table and a chart in another.

You can also nest objects to create a sophisticated layout. For example, you can insert a map and a list in a cell of table.

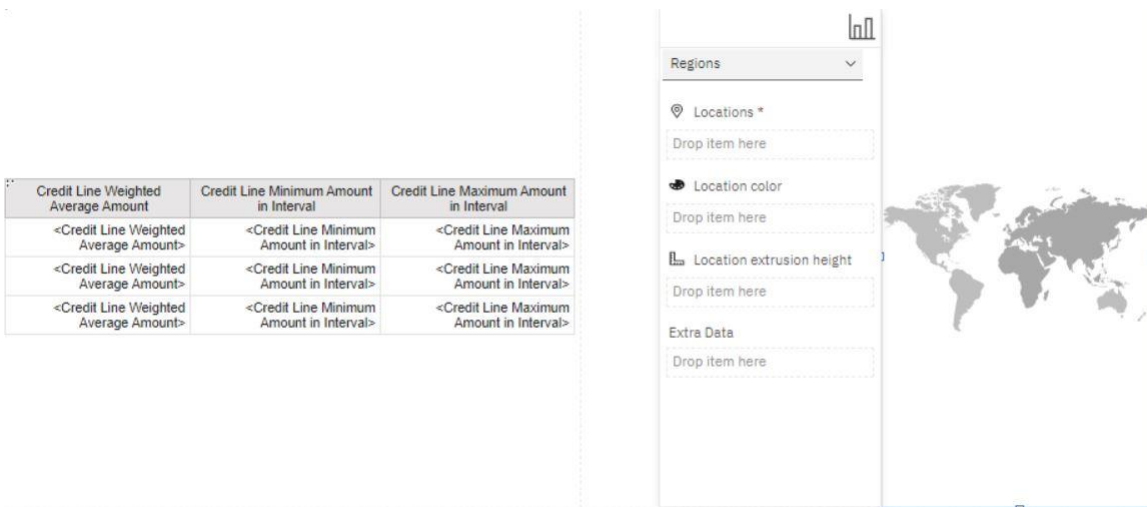



Figure 317 - Report objects - Insert map and list in a cell of table

**Locking and unlocking objects**

To manipulate the contents of some objects, you must first unlock the object. For example, you have a list that contains the column “**Product Name**”. You want to insert a graphic inside the “**Product Name**” column to show an image of each product. Unlock the list to insert the image object inside a list column.

To unlock a report, click the “**Lock**” icon (  ) in the application bar. All layout objects in a report are unlocked. Note that this setting is not saved with the report.


**Hierarchy of objects**

In DWH - Reporting, objects are organized hierarchically. For example, a list contains list columns, and each list column contains a text item, which is the name of the inserted data item.

The hierarchy of objects is useful to remember when you apply formatting because formatting is applied to the child objects of the object. For example, you can specify that all list column titles in a list have red as the background colour. The formatting is automatically applied to any new columns you add to the list because the formatting is applied to the list and is therefore applied to the objects in the list. If you apply formatting to a specific object, it will override the same formatting specified for the parent object.

**Searching**

You can quickly locate specific objects in a report by using “**Find**”:

- I Click the “**More**” icon (  ).
- I Click “**Find**” (  Find... ).

Find what:

Any objects

- 1 Click "Find what" ( Any objects ) and choose the type of object to find.

Options

Text:

- 1 In the "Options" ( ) box, specify the search criteria.

For example, if you want to find the objects that reference a specific data item, you must specify the query that contains the data item and the data item name.

Find
×

Find what:

Any objects
▼

Options

Text:

View

Show hidden objects

Results:


| Object (Name/Data Item) | Contained In | Matched Text |
|-------------------------|--------------|--------------|
| (Empty results area)    |              |              |

Close

Find Next

Find All

Figure 318 - Report objects - Find - Find objects in the query

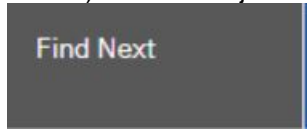
- To search for objects that are hidden in the report, in the “View” box (  Show hidden objects ), select the Show hidden objects check box.



- Click “Find All” (  ) or “Find Next” (  ).

All objects that meet the search criteria are listed under “Results” (  ). The first object that meets the



search criteria is highlighted in the list. Continue clicking “Find Next” (  ) to show all other objects that meet the search criteria.

In some cases, such as searching for a data item that is used to define a conditional style, the Report Studio cannot directly select the object in the report. Instead, Reporting selects the object that uses the object for which you are searching.

### 7.2.3.1 Mostly Used Objects

You add layout objects to a page when you create a report. Below are objects that you will use often when building reports in DWH - Reporting:

- List**

Add a list to show data in rows and columns.



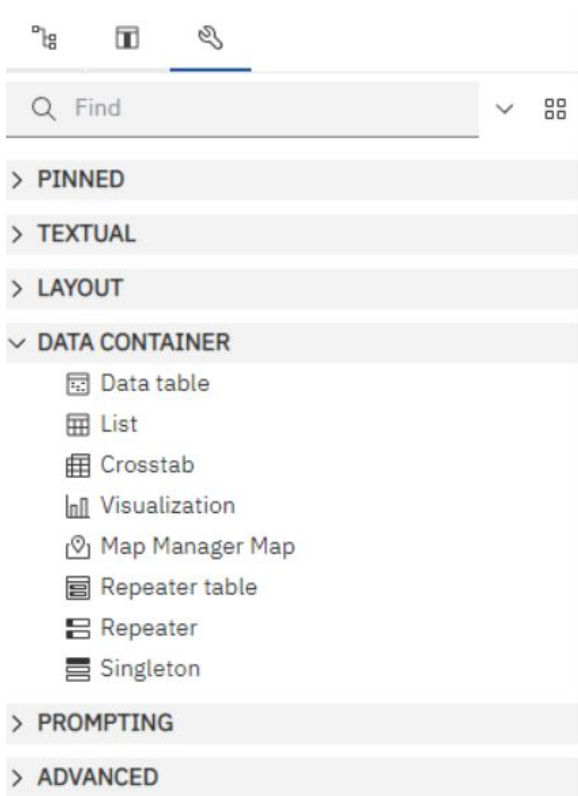


Figure 319 - Report objects - Mostly Used Objects - Data container - List

**Crosstab**

Add a crosstab to show data in a grid with dimensions along the rows and columns and measures in the cells or intersection points. (see list)

**Chart or Visualization** (see list)

**Map**

(see list)

**Repeater**

Add a repeater to show each instance of a certain column or data item in a separate frame. (see List)

**Text**

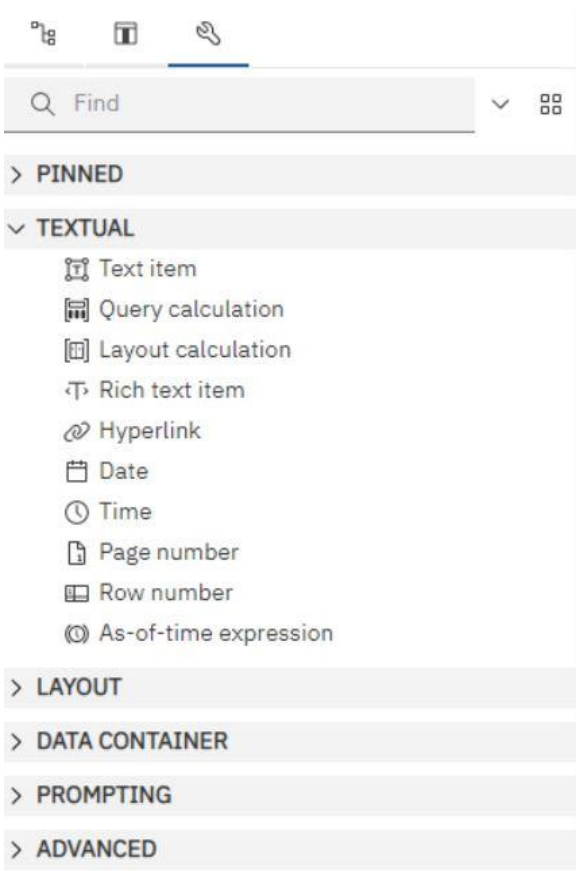


Figure 320 - Report objects - Mostly Used Objects - Textual

**Block**

Add a block to hold text or other information. Blocks are often used to lay out horizontal bands of information.

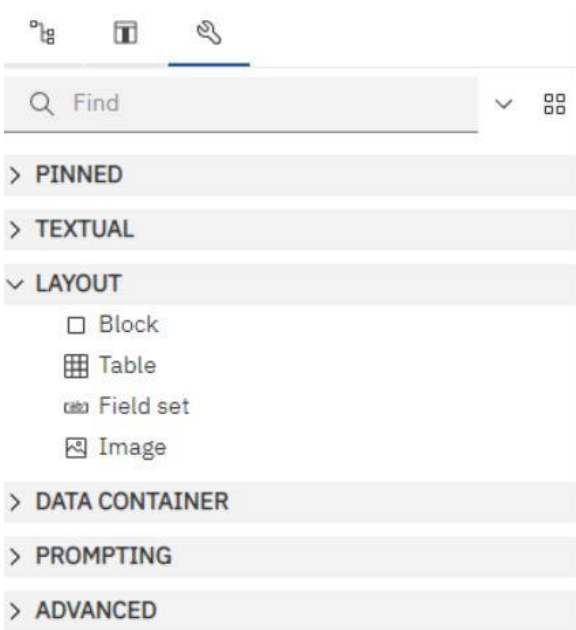


Figure 321 - Report objects - Mostly Used Objects - Layout

(See Block)

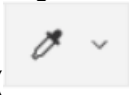
### 7.2.3.2 Copy object formatting

You can quickly copy the formatting of items in your report, such as fonts, colours, borders, and number formats, and apply that formatting to other items.

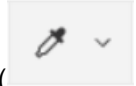
- I Click an item that has the formatting to copy.
- I Do one of the following:
  - To copy all the formatting applied to the item, from the object toolbar, click the **“Pick up style”** icon (

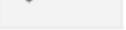


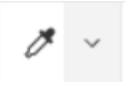

), by clicking on the down arrow to the right, click the item to format, and then click the

**“Apply style”** icon (  ).

- To copy only one of the formatting styles, click the down arrow to the right of the pick-up style button



and click the style to copy. Then click the item to format and click the **“Apply style”** button (  ).

- I If you want to make changes to a style that you copied, click the **“Pick-up style options”** button (  ) and click **“Edit dropper style”** (  ).

In the Style dialog box, specify basic and advanced style characteristics.

### 7.2.3.3 Add borders to a formatting object

You can add borders to objects in a report such as a column, a header, or a footer or to the whole report.

You can also add borders using the report object toolbar by clicking the **“Border”** icon (  ).

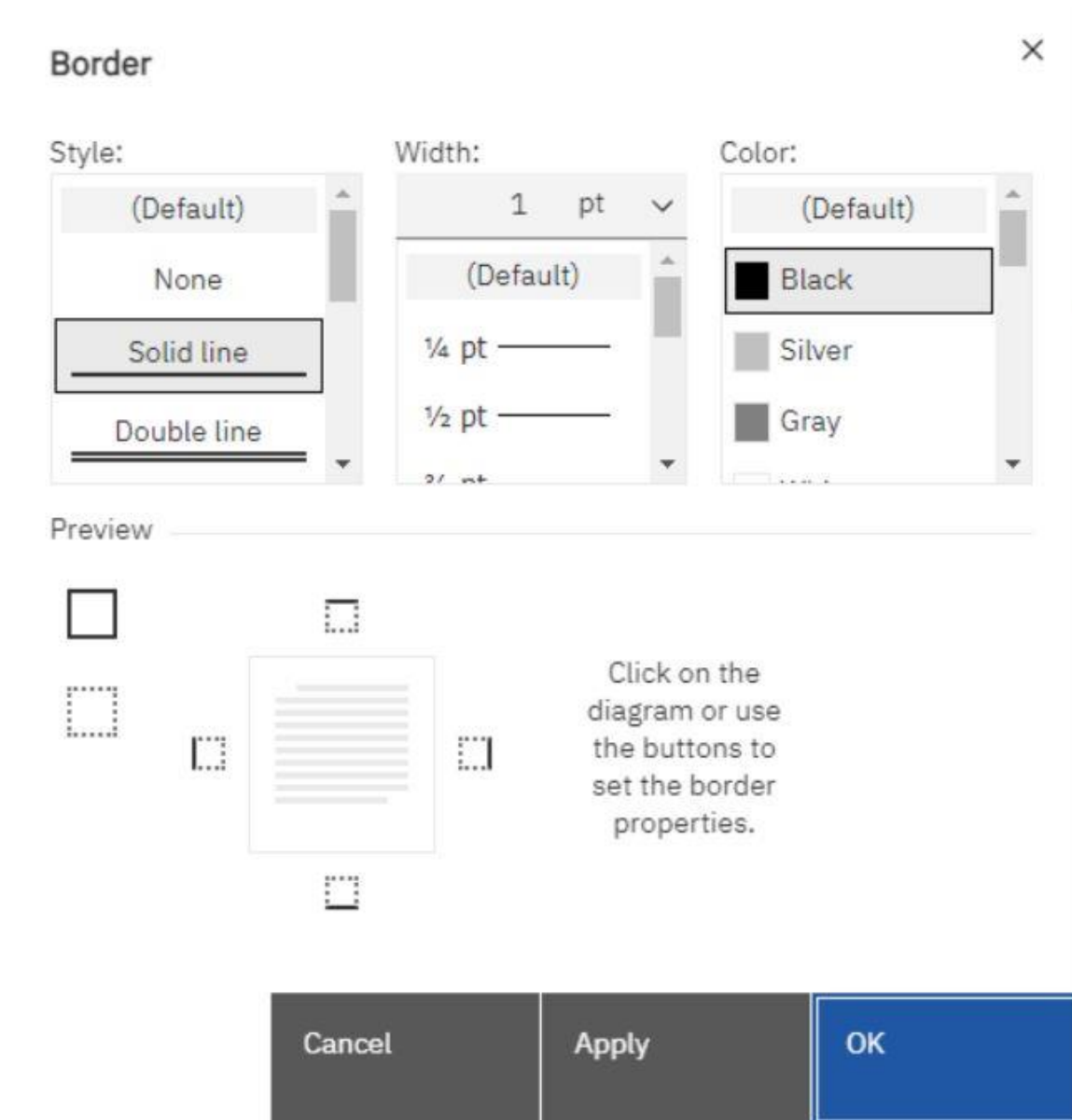




Figure 322 - Report objects - Add borders to a formatting object

- Alternatively click on the object to which to add a border.

To quickly select the parent of an object, click the object, and then click the “**Select ancestor**” icon select

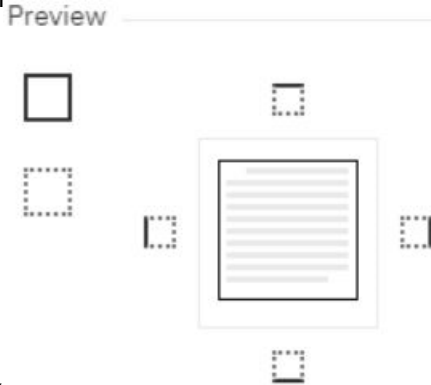
(  ) in the title bar of the Properties pane.

▼ BOX

- In the Properties pane, double-click the “**Border**” property (  ) and select values in the Colour, Style, and Width boxes.

Specifying a width using % as the unit of measure is not supported when producing reports in PDF.

- Apply the selected values to the top, bottom, left side, right side, or all sides of the object by clicking the



appropriate button in the “**Preview**” section ( ).

## 7.3 Relational and Dimensional Reporting

You can create reports in DWH - Reporting using either a relational reporting style or a dimensional reporting style.

The Reporting tools and query language are the same for both styles. However, it is important to choose a reporting style to ensure that you are making the most of your data and to avoid mixing dimensional and relational concepts.


### 7.3.1 How to choose a reporting style

When authoring a report, first choose your preferred reporting style for working with data: relational or dimensional. You can choose a reporting style from your viewpoint:

- If you think about your data as tables and columns, you have a relational viewpoint and should use a relational reporting style.
- If you think about your data as a number of dimensions intersecting at cells, you have a dimensional viewpoint and should use a dimensional reporting style.

### 7.3.2 Relational reporting style

The relational reporting style consists of lists. You focus the data with filters and summarize with header and footer summaries.

- If your data is purely relational, then only query subjects and query items appear in the “**Source**” tab (  ), and you must use the relational reporting style.

- If your data is dimensional, then dimensions appear in the “Source” tab (————), and you can still use a relational reporting style, but instead of query items (columns) and query subjects (tables), you use measures, levels, and level properties.

Here is an example of relational style reporting with dimensional data.

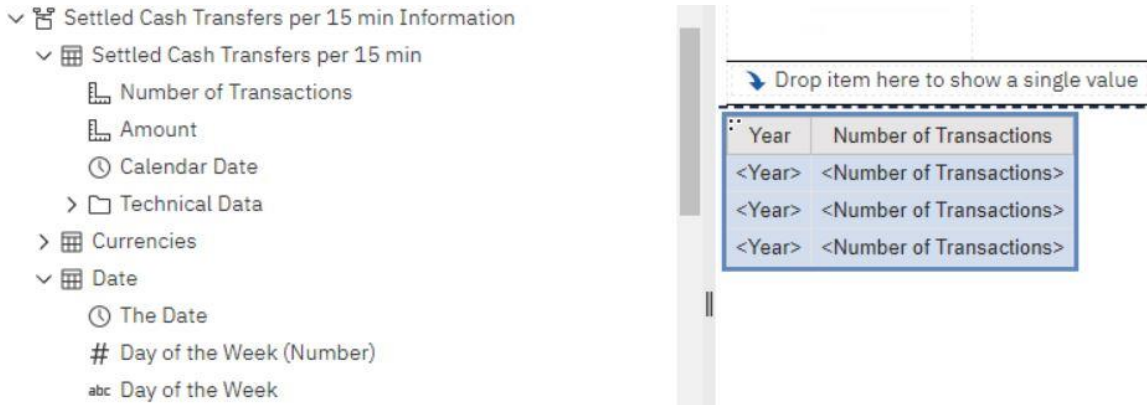


Figure 323 - Relational reporting style - Dimensional data

### 7.3.3 Dimensional reporting style

The dimensional reporting style consists of measures and members from different hierarchies arranged in a crosstab with cell values at the intersections. You focus the data with set expressions that navigate from specific members in the hierarchy and summarize with set summaries.

Here is an example of dimensional style reporting with dimensional data.

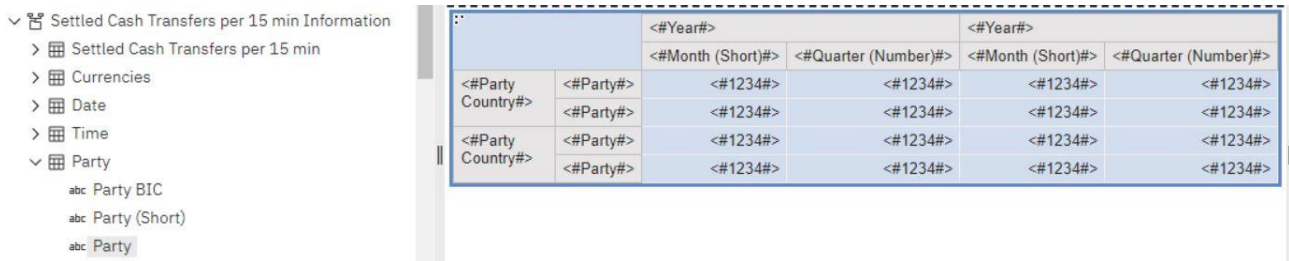


Figure 324 - Dimensional reporting style - Dimensional data (2)

### 7.3.4 Insert a Query Calculation

When working with dimensional data, insert a query calculation into your report to add a new row or column with values that are based on a calculation. For example, you create a query calculation named Euros that converts dollars to euros by multiplying an existing dollar measure by a conversion rate. Euros can then be displayed to end users in a separate row or column.

In the Report studio you can create the following types of calculations:



Create calculated members or calculated measures where the expression is a member or a tuple-based (as opposed to property-based) value expression. For example, [2013] - [2012] is a calculated member and [Revenue] - [Planned Revenue] is a calculated measure.

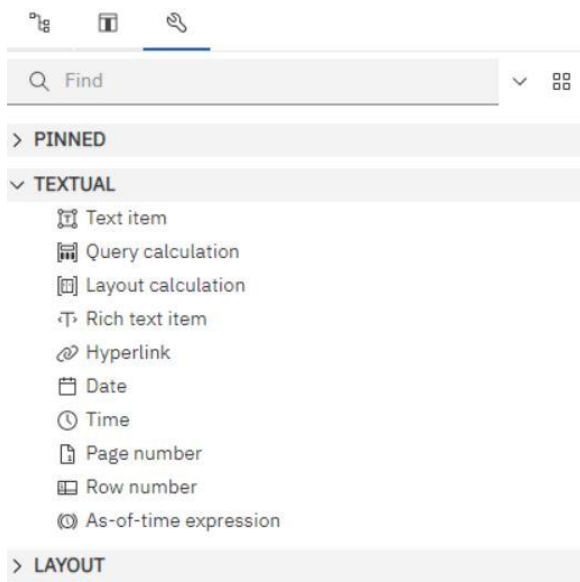
Use set expressions to create calculated sets of members. For example, children ([2012]) is a set expression that displays the child members of 2012.

You must base each set expression on a hierarchy and the set expression must contain only members from this hierarchy.

Create value expressions when you want to insert a string, number, date, or interval value.

**Procedure**

1 Click the “**Toolbox**” icon (  ) and drag “**Query calculation**” (  **Query calculation** ) to the report.



**Figure 325 - Insert a Query Calculation**

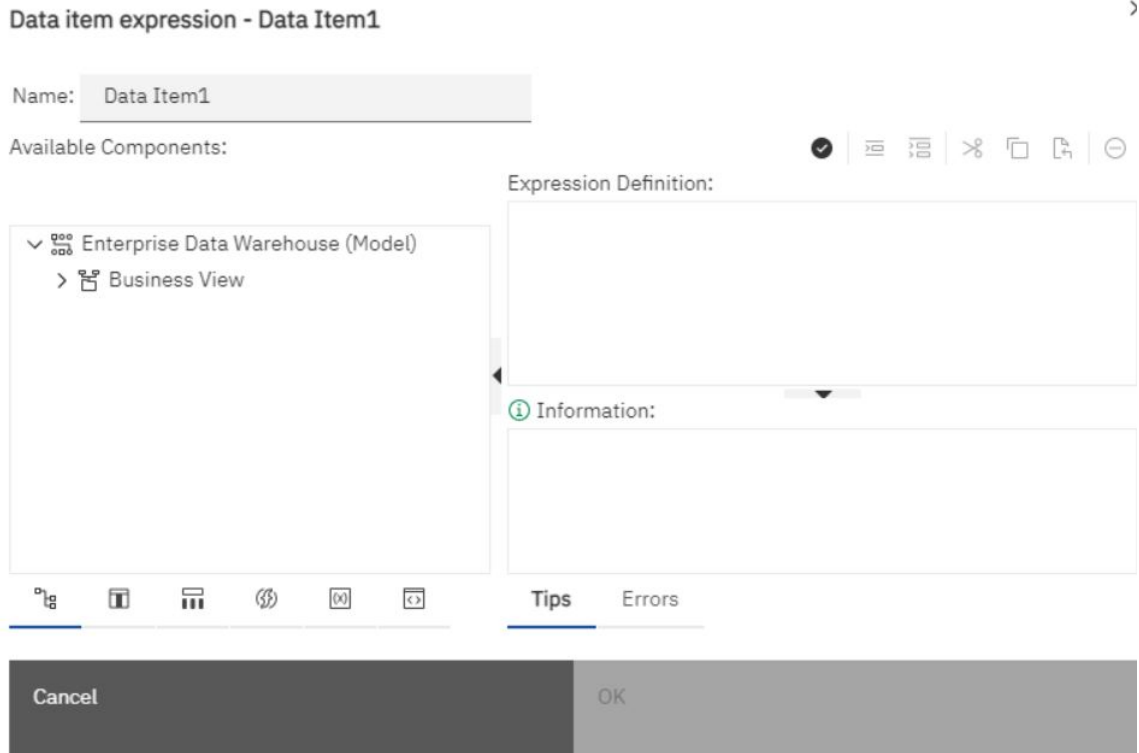
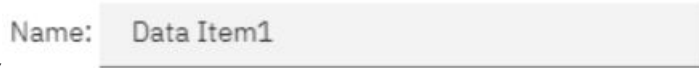


Figure 326 - Insert a Query Calculation - Specify Query Calculation

- Click the type of calculation you want to create and if required, select the hierarchy that contains the data that is the focus of your calculation.

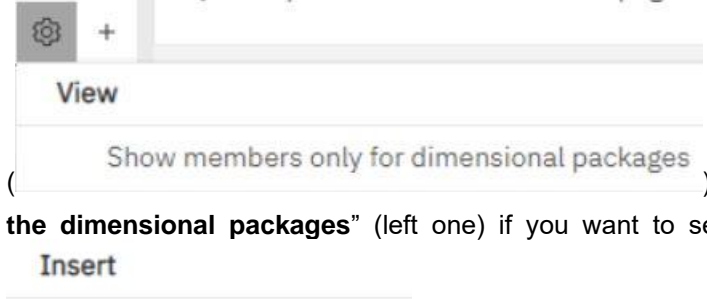


- In the “Name” box ( ), type a meaningful name for the calculation.

For example, if you are calculating the difference between 2012 revenue and 2011 revenue, you could name your expression 2012 - 2011 Revenue.

- In the Available Components pane, define the calculation:


1. Specify how you want to view the available data items in your data package by clicking the “View” button



( ) and then select “Show members only for the dimensional packages” (left one) if you want to select only one item or the “Insert” button ( )

Individual members  
 Create sets ) if you want to select multiple items.



2. To add data items that are not shown in the report, on the “**Source**” tab (  ), double-click the data items.

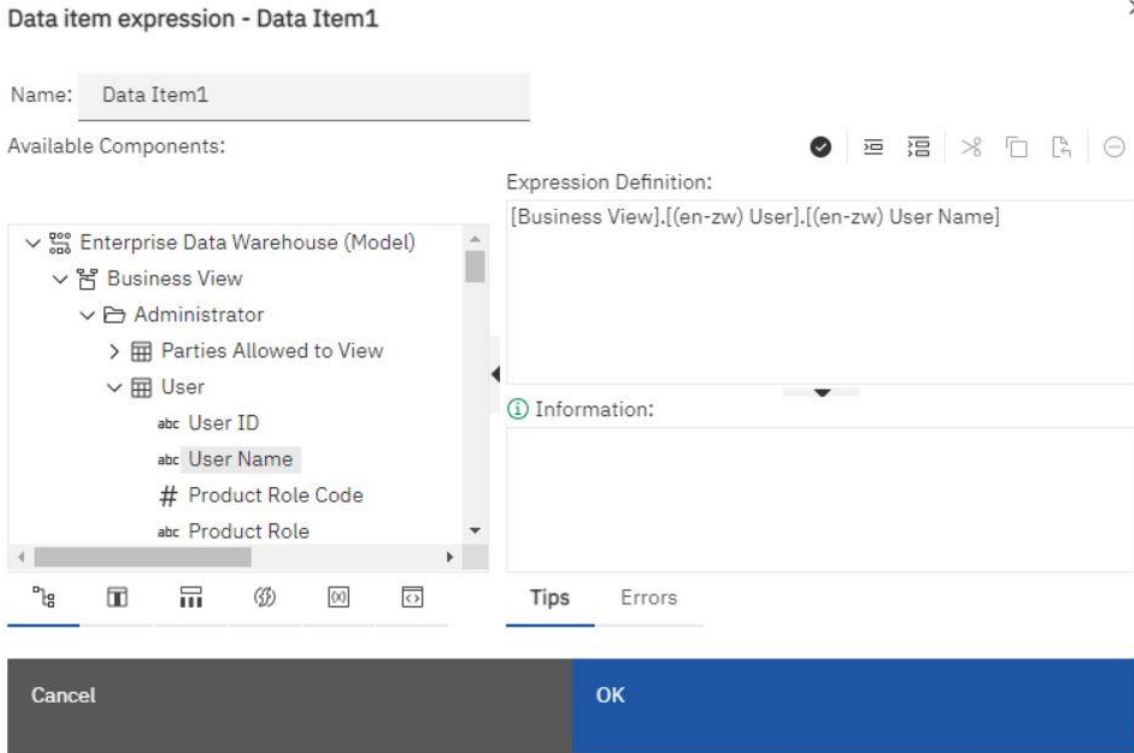






Figure 327 - Insert a Query Calculation - Specify Query Calculation - Data items

3. To add data items that are in the report but not necessarily in the model, such as calculations, on the “**Data items**” tab (  ), double-click the data items.

4. To add data items from a specific query, on the “**Queries**” tab (  ), double-click data items. The items you will see are the items you already placed in your report.

5. To add functions, summaries, and operators, on the “**Functions**” tab (  ), double-click elements.

6. To add a value that is derived from a parameter, on the “**Parameters**” tab (  ), double-click a parameter. The items you will see are the parameters you already set in the report.

Parameters define prompts, drill-through reports, and master detail relationships.

You can also type the calculation directly in the “**Expression Definition**” ( **Expression Definition:** ) box.

When typing date values, ensure that the date format is correct for your database type.

To copy and paste expression components in the Expression Definition pane, you can use the “**Copy**” button copy icon and the “**Paste**” button paste icon

- 1 Click the “**Validate**” button (  ).

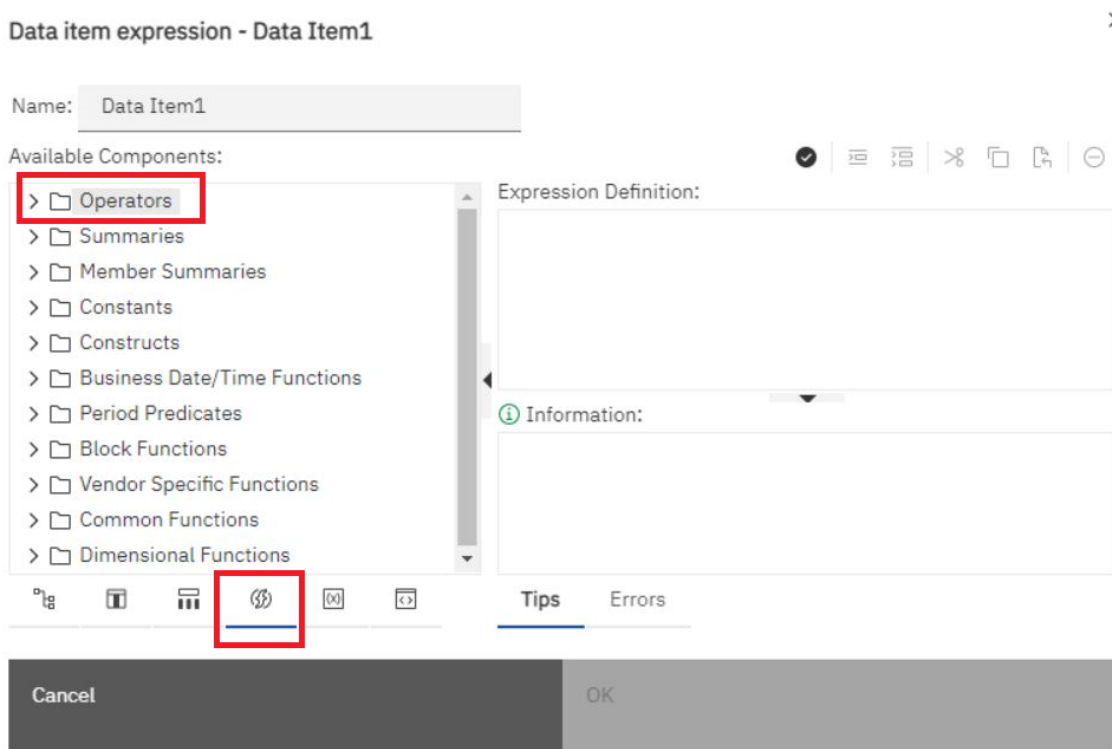
Any validation errors appear on the Errors tab of the Information pane.

To copy and paste expression components in the “**Expression Definition**” pane, you can use the “**Copy**” button (  ) and the “**Paste**” button (  ).

### 7.3.4.1 Functions for data items

When you insert a calculation there are a lot of functions you can do with the data. Try to use the functions that are appropriate for the selected data type. For example a percentage function only makes sense for decimal number data in contrast to the date or a text. Double-click the function to add it to the data item. When you click only one time on the function you can see the information in the information box what the function is for, an Example of the function, the Result and the correct Syntax you have to use.

#### Operators:



**Figure 328 - Insert a Query Calculation - Operators**

In the operator functions you can add the general mathematical functions like plus, minus, for all, or a combination of it like for all ‘data item’ < 15 and > 18.

You can also find the functions “**like**” and “**contains**” that can be helpful when searching within data.

The **“like”** function can be used when searching a string within a string. Here, the percent sign (%) represents zero, one or multiple characters, and the underscore sign (\_) represents any character. You can find the **“like”** function under **“Operators”** folder in **“Functions”** tab.

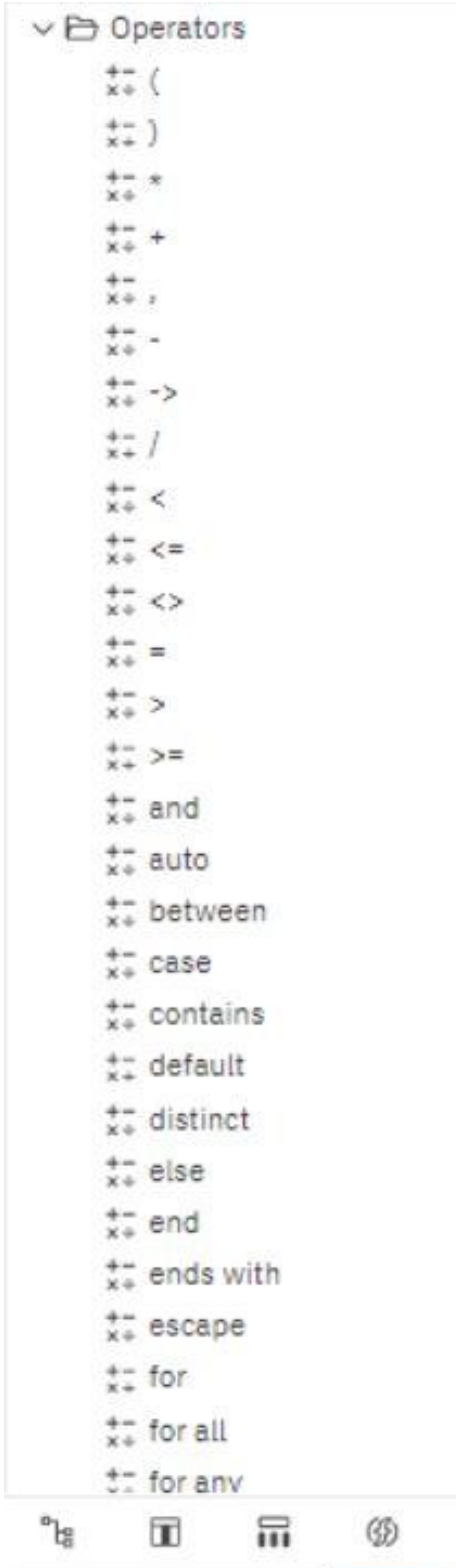


Figure 329 - Insert a Query Calculation - Operators - Function tab

In the following example we are searching for any Party that contains the string “Ban” in its name:

```

CASE
WHEN [(en-zw) Invoice Data Info],[(en-zw) Party Charged Name CRDM],[(en-zw) Party Short Name] like '%Ban%'
THEN 1
ELSE 0
END

```

Figure 330 - Insert a Query Calculation - Searching the string

That is the result:

| Party (Short)                 | Flag |
|-------------------------------|------|
| Æro Pensionsbank              | 0    |
| America First Savings & Loans | 0    |
| Aphrodite's Mutual            | 0    |
| Apollon Bank                  | 1    |
| Ares Bank                     | 1    |
| Årø Land Pandebrev            | 0    |
| Artemis Bank                  | 1    |
| Athena National Bank          | 1    |
| Auslandskassenverein i.L.     | 0    |
| Bågå Credit                   | 0    |
| Banca de Bondi                | 1    |
| Banco de Isthmus              | 1    |
| Banco di San Giorgio          | 1    |
| Banco Português de Negócios   | 1    |
| Bank of Korea                 | 1    |
| Bank of New England           | 1    |
| Bankhaus Goldscheider         | 1    |
| Bankhaus Medici               | 1    |
| Banki Kiribati                | 1    |
| Bankia                        | 1    |

Figure 331 - Insert a Query Calculation - Searching the string - Results

In the next example the use of underscore sign ( ) twice in the function like '%Ban\_\_' returns Parties that have the string “Ban” followed by exactly two characters:

```

CASE
WHEN [(en-zw) Parties - Cash Accounts - Other Info].[(en-zw) Parties].[(en-zw) Party (Short)] like '%Ban__%'
THEN 1
ELSE 0
END

```

Figure 332 - Insert a Query Calculation - Searching the string (2)

That would be the result:

| Party (Short)                 | Flag |
|-------------------------------|------|
| Ærø Pensionsbank              | 0    |
| America First Savings & Loans | 0    |
| Aphrodite's Mutual            | 0    |
| Apollon Bank                  | 0    |
| Ares Bank                     | 0    |
| Årø Land Pandebrev            | 0    |
| Artemis Bank                  | 0    |
| Athena National Bank          | 0    |
| Auslandskassenverein i.L.     | 0    |
| Bågø Credit                   | 0    |
| Banca de Bondi                | 1    |
| Banco de Isthmus              | 1    |
| Banco di San Giorgio          | 1    |
| Banco Português de Negócios   | 1    |
| Bank of Korea                 | 1    |
| Bank of New England           | 1    |
| Bankhaus Goldscheider         | 1    |
| Bankhaus Medici               | 1    |
| Banki Kiribati                | 1    |
| Bankia                        | 1    |

Figure 333 - Insert a Query Calculation - Searching the string - Results (2)

You can find tips about this function in the “**Tips**” tab in the expression definition window:

Data item expression - Flag



Name: Flag

Available Components:



- Enterprise Data Warehouse (Model)
  - Business View

Expression Definition:

```

CASE
WHEN [(en-zw) Parties - Cash Accounts - Other Info].[en-zw) Parties].[en-zw) Party (Short)] like '%Ban__%'
THEN 1
ELSE 0
END
    
```

Information:

**string1 LIKE string2 [ESCAPE char]**  
 Determines if "string1" matches the pattern of "string2", with the character "char" optionally used to escape characters in the pattern string. This syntax supports both metacharacters: The percent sign (%) represents zero, one or multiple characters, and the underscore sign ( ) represents any character.



Tips Errors

Cancel OK

Figure 334 - Insert a Query Calculation - Data item expression - Tips tab – Information

The “**contain**” function, can also be found under “**Operators**” folder in “**Functions**” tab:



Figure 335 - Insert a Query Calculation - Operators

This function determines if a string exists in a string, but in a different context than the “like” function. In the following example we are looking for any Party that has the string “Ban” in its name:

```

CASE
WHEN [(en-zw) Parties - Cash Accounts - Other Info],[[en-zw) Parties],[[en-zw) Party (Short)] contains 'Ban'
THEN 1
ELSE 0
END

```

**Figure 336 - Insert a Query Calculation - Searching the string - Different context than the “like” function**

That would be the result:

| Party (Short)                 | Flag |
|-------------------------------|------|
| Æro Pensionsbank              | 0    |
| America First Savings & Loans | 0    |
| Aphrodite's Mutual            | 0    |
| Apollon Bank                  | 1    |
| Ares Bank                     | 1    |
| Årø Land Pandebrev            | 0    |
| Artemis Bank                  | 1    |
| Athena National Bank          | 1    |
| Auslandskassenverein i.L.     | 0    |
| Bågå Credit                   | 0    |
| Banca de Bondi                | 1    |
| Banco de Isthmus              | 1    |
| Banco di San Giorgio          | 1    |
| Banco Português de Negócios   | 1    |
| Bank of Korea                 | 1    |
| Bank of New England           | 1    |
| Bankhaus Goldscheider         | 1    |
| Bankhaus Medici               | 1    |
| Banki Kiribati                | 1    |
| Bankia                        | 1    |

**Figure 337 - Insert a Query Calculation - Searching the string - Different context than the “like” function - Results**

The “**contain**” function could be useful when you wish to search for a string that could have the character “%” or “\_”, by also using the term “**literal**”



Data item expression - Flag

Name: Flag

Available Components:

- Enterprise Data Warehouse (Model)
  - Business View

Expression Definition:

```

CASE
WHEN [(en-zw) Parties - Cash Accounts - Other Info].[(en-zw) Parties].[(en-zw) Party (Short)] contains literal 'Bank_'
THEN 1
ELSE 0
END
    
```

Information:

**string1 contains [LITERAL] string2**  
 Determines if "string1" contains "string2". This syntax supports both metacharacters: The percent sign (%) represents zero, one or multiple characters, and the underscore sign (\_) represents any character. The optional LITERAL keyword indicates how '%' and '\_' are interpreted. When the LITERAL keyword is present, '%' and '\_' are not to be treated as metacharacters (see Example 3 and 5). Otherwise, in the absence of the LITERAL keyword, '%' and '\_' behave as metacharacters (see Example 1, 2 and 4).

Example 1: [PRODUCT\_LINE] contains 'door'

Tips Errors

Cancel OK

Figure 338 - Insert a Query Calculation - Data item expression - Tips tab - Information - Literal

You can find tips about this function in the “**Tips**” tab of the expression window

Data item expression - Flag

Name: Flag

Available Components:

- Enterprise Data Warehouse (Model)
  - Business View

Expression Definition:

```

CASE
WHEN [(en-zw) Parties - Cash Accounts - Other Info].[(en-zw) Parties].[(en-zw) Party (Short)] contains literal 'Bank_'
THEN 1
ELSE 0
END
    
```

Information:

**string1 contains [LITERAL] string2**  
 Determines if "string1" contains "string2". This syntax supports both metacharacters: The percent sign (%) represents zero, one or multiple characters, and the underscore sign (\_) represents any character. The optional LITERAL keyword indicates how '%' and '\_' are interpreted. When the LITERAL keyword is present, '%' and '\_' are not to be treated as metacharacters (see Example 3 and 5). Otherwise, in the absence of the LITERAL keyword, '%' and '\_' behave as metacharacters (see Example 1, 2 and 4).

Example 1: [PRODUCT\_LINE] contains 'door'

Tips Errors

Cancel OK

Figure 339 - Insert a Query Calculation - Data item expression - Tips tab - Information - Literal (2)

**Summarize Functions:**



**Figure 340 - Insert a Query Calculation - Summarize Functions**

The summarize function are very useful when you have a large amount of decimal data. It will help you to show the data that is more important to you.

**Member Summaries:**

- ▼  Member Summaries
  -  aggregate
  -  average
  -  count
  -  maximum
  -  median
  -  minimum
  -  percentage
  -  percentile
  -  quantile
  -  quartile
  -  rank
  -  standard-deviation
  -  total
  -  variance

**Figure 341 - Insert a Query Calculation - Member Summaries**

The member Summaries only work with dimensional data. Ask your Administrator if you do not know about the data item you like to select. If it work you can categories and summarize the whole or a part of the hierarchy of the dimensional selected item.

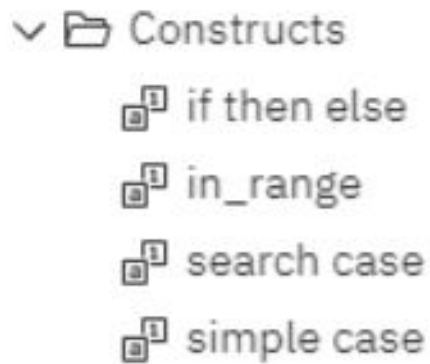
**Constants:**



**Figure 342 - Insert a Query Calculation - Constants**

The Constant functions help you to add, as the name says, a Constant. This can be a date, time or a special Number you select if you make a double click on the function you want.

**Constructs:**



**Figure 343 - Insert a Query Calculation - Constructs**

The Constructs functions are useful if you want to mark a scenario. You can select here a condition to the data item. For example you can select if then else and combine it with a Constant you want to pop up in the report. It could look like that:

If 'NumberofTransactions' is > 1000 then Timestamp with timezone.

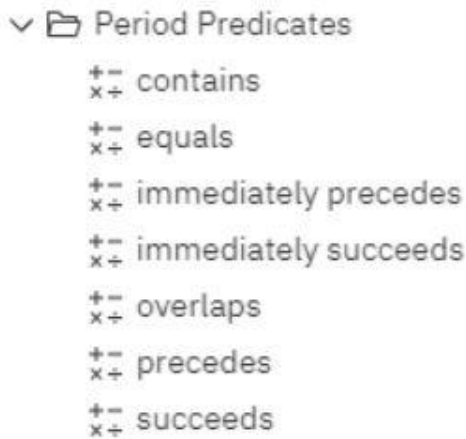
**Business Date/Time functions:**

- ▼ Business Date/Time Functions
  - #() \_add\_days
  - #() \_add\_hours
  - #() \_add\_minutes
  - #() \_add\_months
  - #() \_add\_seconds
  - #() \_add\_years
  - #() \_age
  - #() \_date\_to\_int
  - #() \_day
  - #() \_day\_of\_week
  - #() \_day\_of\_year
  - #() \_days\_between
  - #() \_days\_to\_end\_of\_month
  - #() \_end\_of\_day
  - #() \_first\_of\_month
  - #() \_from\_unixtime
  - #() \_hour
  - #() \_last\_of\_month
  - #() \_make\_timestamp
  - #() \_minute
  - #() \_month
  - #() \_months\_between
  - #() \_second
  - #() \_shift\_timezone
  - #() \_start\_of\_day

**Figure 344 - Insert a Query Calculation - Business Date/Time Functions**

These functions help you to calculate time-data. Just double-click the function you need and add the data item to it.

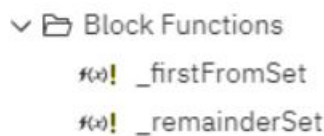
**Period Predicates:**



**Figure 345 - Insert a Query Calculation - Period Predicates**

This functions help you to search in the data to the data item you want to highlight. You can set the function for example equal to a constant.

**Block functions:**



















**Figure 346 - Insert a Query Calculation - Block Functions**

The Block function are use full when you want to select a block of multiple data in the report. You just have to specify which data items should be marked.

**Vendor Specific functions:**

This function is not recommended for beginners. You can change the datatype into another. First of all it is necessary to know which data type the selected data item has. Do this only if really necessary. It could be that the data is not readable after adding the function to the data item.

**Common functions:**

- ▼  Common Functions
  - ▼  A-C
    -  abs
    -  cast
    -  ceil
    -  ceiling
    -  char\_length
    -  character\_length
    -  coalesce
    -  current\_date
    -  current\_time
    -  current\_timestamp
  - ▼  D-G
    -  exp
    -  extract
    -  floor
  - ▼  H-L
    -  ln
    -  localtime
    -  localtimestamp
    -  lower



- #() mod
    - #() nullif
    - #() occurrences\_regex
    - #(!) octet\_length
    - #(!) period
    - #() position
    - #() position\_regex
    - #() power
  - #() \_round
    - #() random
    - #() row
    - #() sqrt
    - #() substring
    - #() substring\_regex
    - #(!) trim
    - #() upper
    - #() width-bucket
  - #() arccos
    - #() arcsin
    - #() arctan
    - #() cos
    - #() coshyp
    - #() sin

**Figure 347 - Insert a Query Calculation - Common Functions**

These function are used to return a different value from the selected data item. You can return the position, the sinus, or if it is null able from the data item.

**Dimensional functions:**

- ▼  Dimensional Functions
  - ▼  A-C
    - #0! ancestor
    - #0! ancestors
    - #0! bottomCount
    - #0! bottomPercent
    - #0! bottomSum
    - #0! caption
    - #0! children
    - #0! closingPeriod
    - #0! cousin
  - >  Advanced
  - ▼  D-G
    - #0! defaultMember
    - #0! descendants
    - #0! except
    - #0! filter
    - #0! firstChild
    - #0! firstSibling
  - >  Advanced
  - ▼  H-L
    - #0! head
    - #0! hierarchize
    - #0! hierarchy
    - #0! intersect
    - #0! item








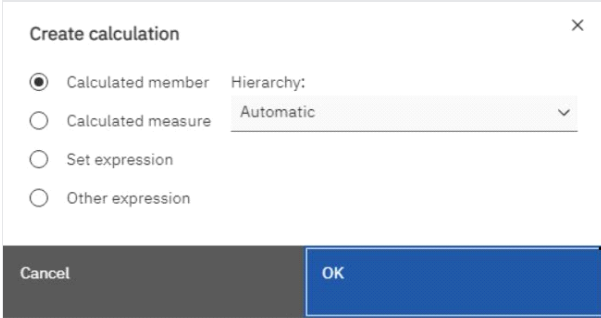
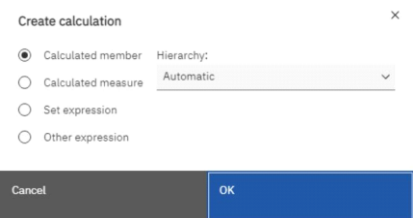
**Figure 348 - Insert a Query Calculation - Dimensional Functions**

These functions are used if you want to select a “partner” of the dimensional data item. You can choose the parent the Child or the previous member next to the data item you selected. For Example the selected data item is Month and you choose in the Source of the Data item the April 2019. Then will the function return the value the parent the second quarter, the Child all Days of April and the previous member the Month March 2019.

### 7.3.5 Guidelines for each reporting style

This user guide is divided into relational and dimensional reporting sections so that you can follow the best practices for using this product with the reporting style that you have chosen. The following table outlines the best practices for both reporting styles.


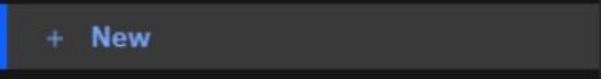

| Item  | Relational reporting   | Dimensional reporting   |      |  |        |                    |  |                       |   |                 |                             |
|---|--|---|------|--|--------|--------------------|--|-----------------------|---|-----------------|-----------------------------|
| Report type   | <p>Lists</p> <p>Crosstabs pivoted from lists</p> <p>Charts created from lists</p> <p>Maps created from scratch or from lists</p>   | <p>Crosstabs</p> <p>Charts created from scratch or from crosstabs</p> <p>Maps created from scratch or from crosstabs</p>  |      |  |        |                    |  |                       |   |                 |                             |
| Package tree  | <p>In the “Source” tab () , click the “Options” icon () , and then click “Show members only for dimensional package”.</p> <p>If you are using dimensional data, hide members in the source tree by right-clicking the tree, clicking “Package tree settings...” () , and clearing the check boxes for “Members”</p> <div> <p>Settings</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Members</li> <li><input checked="" type="checkbox"/> Levels</li> <li><input checked="" type="checkbox"/> Members for each level</li> <li><input checked="" type="checkbox"/> Member properties</li> </ul> </div> <p>and</p> <p>“Members for each level”.</p> <div> <p>Settings</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Members</li> <li><input checked="" type="checkbox"/> Levels</li> <li><input checked="" type="checkbox"/> Members for each level</li> <li><input checked="" type="checkbox"/> Member properties</li> </ul> </div> <p>The view will include the following:</p> <ul style="list-style-type: none"> <li>  package</li> <li>  folder</li> <li>  namespace</li> <li>  query subject</li> </ul> | <p>In the “Source” tab () , click the “Options” icon () , and then click “Show members only for dimensional package”.</p> <p>Ensure that the option “Create sets” is selected.</p> <div> <table border="1"> <tr><td>View</td></tr> <tr><td>Show members only for dimensional packages</td></tr> <tr><td>Insert</td></tr> <tr><td>Individual members</td></tr> <tr><td><input checked="" type="radio"/> Create sets</td></tr> <tr><td>Member insert options</td></tr> <tr><td><input checked="" type="radio"/> Insert single member</td></tr> <tr><td>Insert children</td></tr> <tr><td>Insert member with children</td></tr> </table> </div> <p>The view will include the following:</p> <ul style="list-style-type: none"> <li>  package</li> <li>  folder</li> <li>  measure</li> <li>  member</li> <li>  named set</li> </ul> | View | Show members only for dimensional packages | Insert | Individual members | <input checked="" type="radio"/> Create sets | Member insert options | <input checked="" type="radio"/> Insert single member | Insert children | Insert member with children |
| View  |  |   |      |  |        |                    |  |                       |   |                 |                             |
| Show members only for dimensional packages            |  |   |      |  |        |                    |  |                       |   |                 |                             |
| Insert  |  |   |      |  |        |                    |  |                       |   |                 |                             |
| Individual members                                    |  |   |      |  |        |                    |  |                       |   |                 |                             |
| <input checked="" type="radio"/> Create sets          |  |   |      |  |        |                    |  |                       |   |                 |                             |
| Member insert options                                 |  |   |      |  |        |                    |  |                       |   |                 |                             |
| <input checked="" type="radio"/> Insert single member |  |   |      |  |        |                    |  |                       |   |                 |                             |
| Insert children                                       |  |   |      |  |        |                    |  |                       |   |                 |                             |
| Insert member with children                           |  |   |      |  |        |                    |  |                       |   |                 |                             |

|                  |  |  |
|------------------|--|--|
|                  | <ul style="list-style-type: none"> <li>  query item</li> <li>  measure</li> <li>  level</li> </ul>   |  |
| Inserting data   | <p>From the package tree, add query items or levels to the report.</p> <p>Avoid using hierarchies directly in the report.</p> <p>Avoid using named sets.</p>   | <p>From the package tree, add sets of members to the report.</p> <p>You can also choose to insert just the member, just the children of the member, or the member and its children.</p>  |
| Calculating data | <p>Add query calculations using only relational and common constructs.</p> <p>Choose only <b>“Other expression”</b>.</p>  | <p>Add query calculations using only dimensional and common constructs.</p> <p>Use <b>“Other expression”</b> only for value calculations.</p> <p>Avoid <b>“Common functions”</b></p>  <p>that are marked with an exclamation mark (!) because they have limited support.</p> |
| Summarizing data | <p>Headers and footers in lists</p> <p>Crosstab member summaries; for example, aggregate within detail</p>   | <p>Member set summaries; for example, aggregate within set</p>   |

|                         |  |  |
|-------------------------|--|--|
| Focusing data           | Add detail or summary filters to view only the data you want to see. For example, add the “Quarter” query item to a list and filter by Q3. | Add only the relevant members to an edge of the crosstab or to the context filter. For example, only add the Q3 member to your report.<br><br>Use a set expression such as “Topcount” or “Filter”. |
| Drilling                | Drilling through by value  | Drilling through by member<br><br>Drilling up and down   |
| Page and section breaks | Simple page breaks<br><br>Page sets<br><br>Sections<br><br>Master detail relationships using parameterized filters                         | Simple page breaks<br><br>Page sets<br><br>Page layers<br><br>Master detail relationships using parameterized edge or slicer expressions   |

Table 94 - Guidelines for each reporting style

## 7.4 Create a report

Create a report by clicking the “Open menu” icon (  ) and then clicking on “New” icon (  ) and “Report” icon (  ) in the DWH portal on the left side.

### 7.4.1 Templates and themes

The DWH includes several basic report templates and colour themes that you can choose from when you create a new report.

The templates and themes are stored in the Templates.zip deployment file. If you do not see the list of templates and themes when you create a new report, ask your administrator to import the deployment file into the DWH Administration. After the deployment file is imported, the templates appear in the Templates folder in Team content.

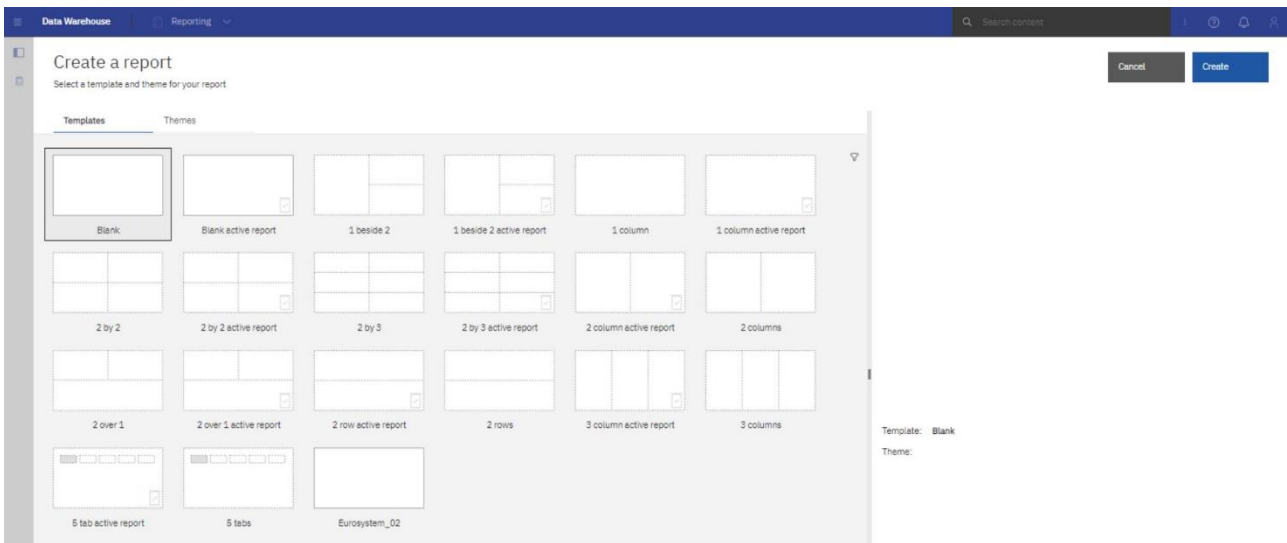


Figure 349 - Templates and themes - Templates

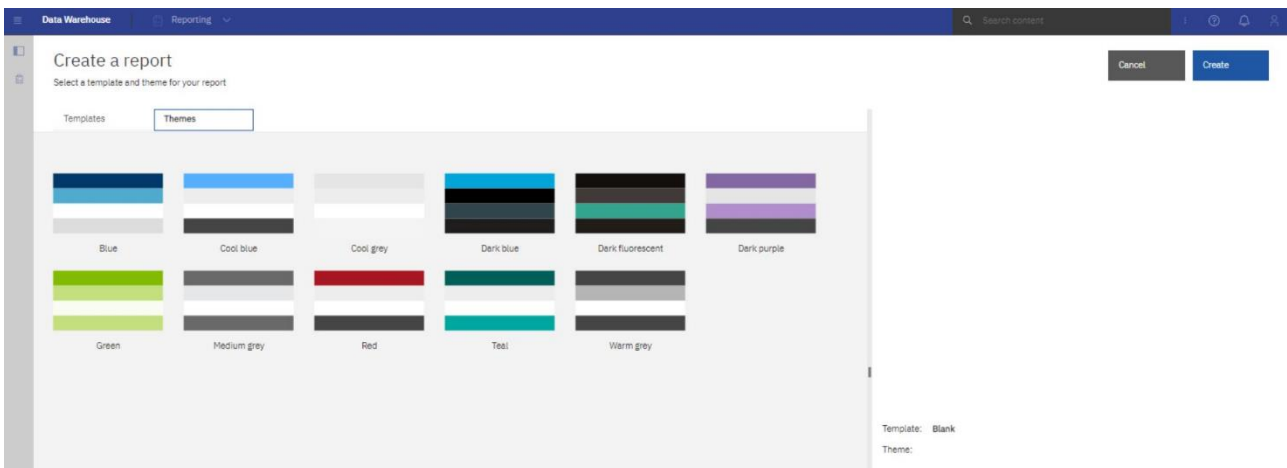


Figure 350 - Templates and themes - Themes

### 7.4.2 Adding data

You can add data from multiple packages that use the dynamic query mode, from a single package that uses the compatible query mode, or from a single data module.


The following list provides information about authoring reports that reference multiple packages.

You must set one of the packages as the default package.

When a report is run, the DWH checks the package capabilities of the package that is used by the report. In a report that references multiple packages, package capabilities are checked only for the default package.

- ! A query can reference only one package.

- | Query set operations (join, union, intercept, except), master detail relationships, and the Build prompt page tool are not supported.
- | Drill through and external data are supported only for the default package.

Click the “Data items” icon (  ).

Click the “Add a source” icon (  ).

Open the packages that you want or open a single data module.

If you opened multiple packages, to specify a package as the default package, right-click an item in the package and select “Set default package”.

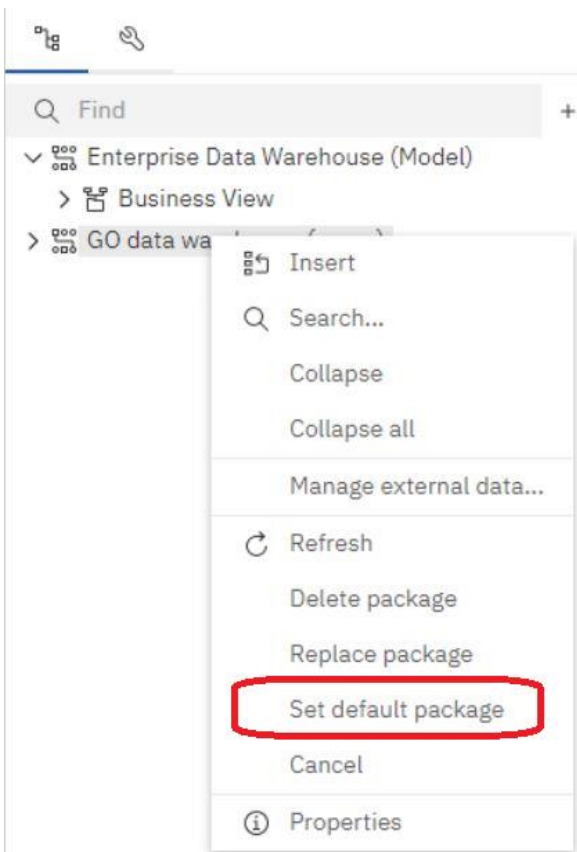
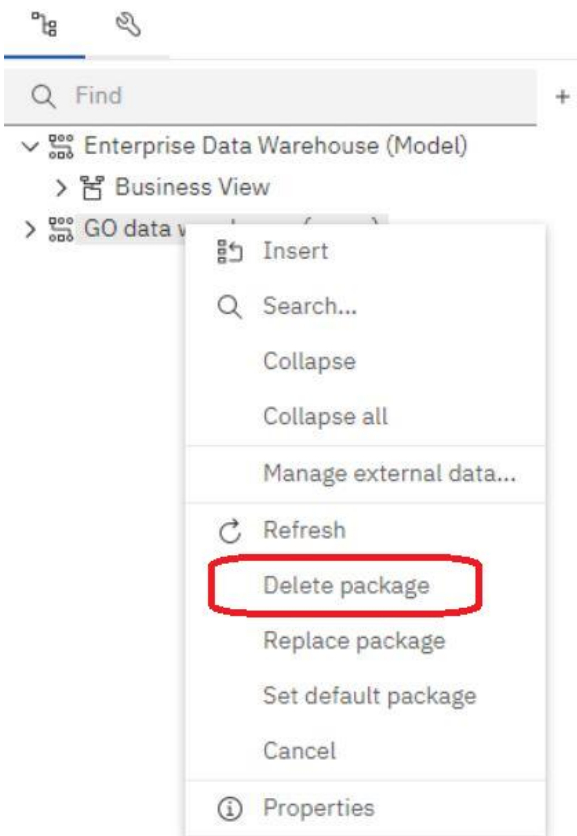


Figure 351 - Adding data - Add a source - Right click item - Set default package

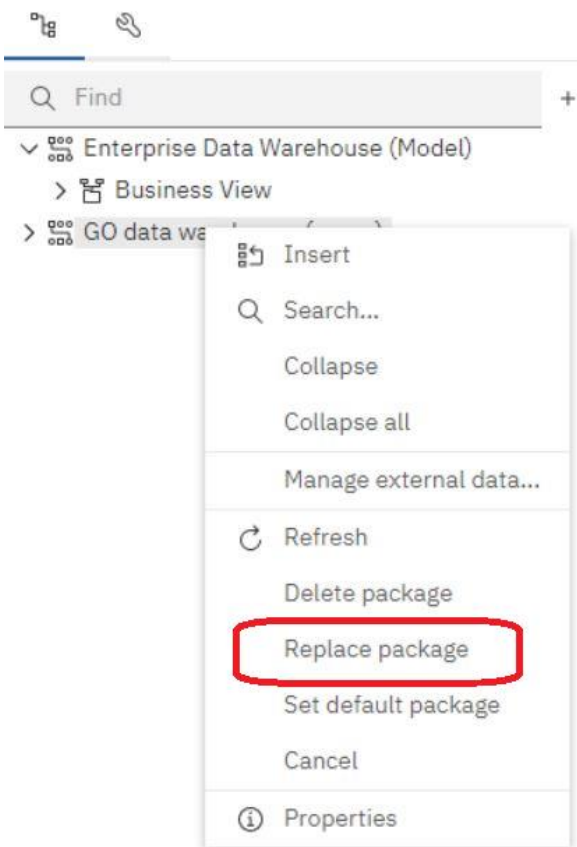
To delete a package, right-click an item in the package and select “Delete package”.





**Figure 352 - Adding data - Add a source - Right click item - Delete package**

To replace a package by another package, right-click an item in the package and select "**Replace package**".



**Figure 353 - Adding data - Add a source - Right click item - Replace package**

If queries exist that use the package that you are replacing, model paths in the queries are updated to the new package.

### 7.4.3 Insert a single data item

You can insert a single data item anywhere in your report using the singleton object. The singleton object retrieves only the first row value for that query. Inserting a single data item is useful when you want to show a value that is independent from the rest of the values in the report or when you want to insert some boilerplate text, such as a company name and address. For example, you can add the total revenue value in the header of each page in a report.

You can associate multiple singleton objects with a single query in relational reporting and dimensional reporting to optimize performance, such as when all the data items in the singleton are from the same database table. In addition, two or more singletons can reference data items from the same query. This is useful when using a single query is more efficient to display a set of single values than using multiple queries.

You can also filter the data item in the singleton. For example, you can show the total revenue for only the year 2012.

Queries that are associated to a singleton object are not supported when producing report output in delimited text (CSV) format.

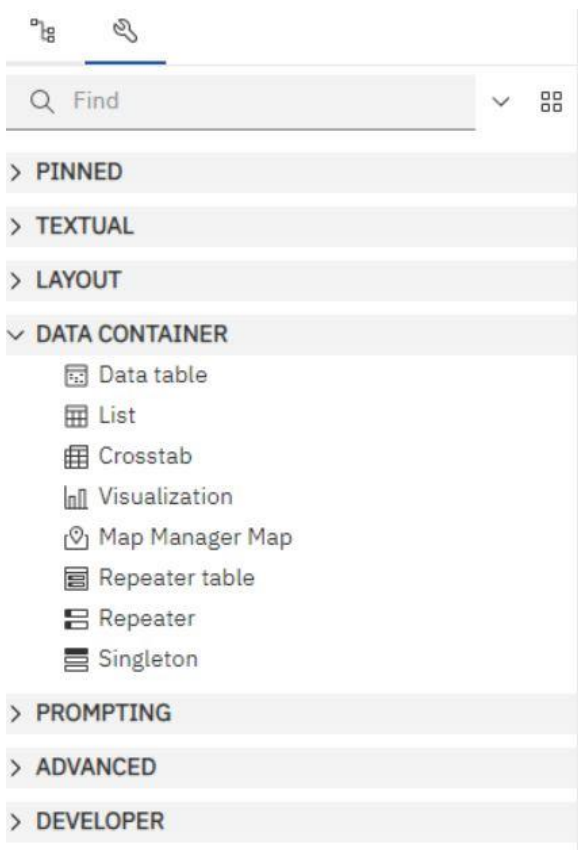


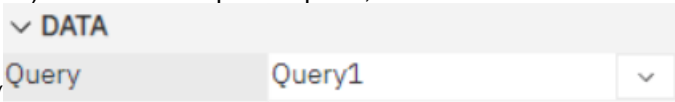


Figure 354 - Insert a single data item - Data container - Singleton

Click the **“Toolbox”** icon (  ) and drag Singleton to the report. An empty data container is created.



Click the **“Source”** tab (  ), and drag a data item into the Singleton container.

To change the query associated to the singleton object, select the singleton, click on the **“Show properties”** icon (  ) and in the Properties pane, click the down arrow at the right of the **“Query”** property

and make changes (  ).


#### 7.4.4 Validate a report

Validate your report to ensure that it contains no errors. When you open a report created in a previous version, it is automatically upgraded and validated.

- I Click the **“More”** icon (  ), and click **“Validate”** Report (  ).
- I A message box appears indicating whether any errors were found in the report.

| Validation level          | Description  |
|---------------------------|--|
| <b>Error</b>              | Retrieves all errors returned from the query   |
| <b>Warning</b>            | Retrieves all errors and warnings returned from the query. This is the default validation level.   |
| <b>Key transformation</b> | In addition to errors and warnings, retrieves informational messages describing important transformation steps from the report specification to the native query sent to the data source.<br><br>These messages can show the cause of errors and warnings returned from the query. |
| <b>Information</b>        | Retrieves errors, warnings, key transformations and other information related to query planning and execution.   |

Table 95 - Validate a report

If you require more detail from the validation process, click the **“More”** icon (  ), click the **“Validate options”** property, and do the following:

- Click one of the following validation levels.


- Click the right side of the **“Interactive data check”** box (  **Interactive data** ) to specify that no query optimization is to be used.

- The Interactive data check box controls how queries will be processed during validation.

- Clear the Interactive data check box to set the query property Execution optimization property to All Rows.

- A message box appears indicating whether any errors were found in the report.

- To view messages that result from the conversion of your report to use the dynamic query mode instead of the compatible query mode, click the right side of the **“Dynamic query migration”** check

 **Dynamic query migration** box ( ).

- Revalidate your report.

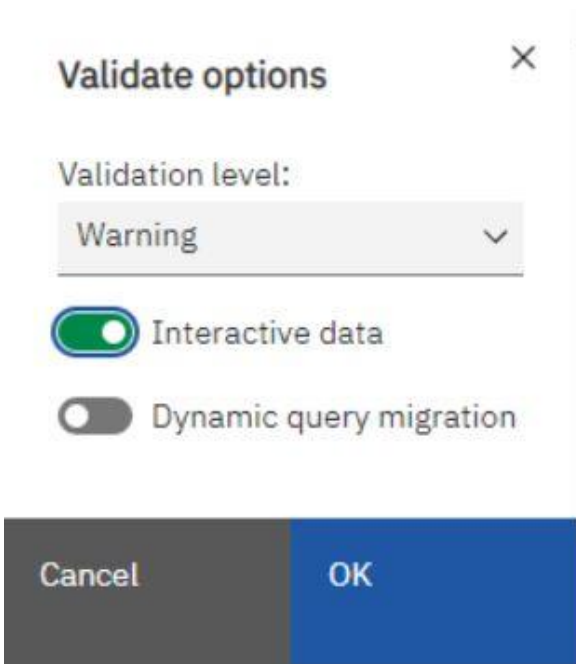


Figure 355 - Validate a report - Validate options

## 7.5 Options in Reporting

### 7.5.1 View Options

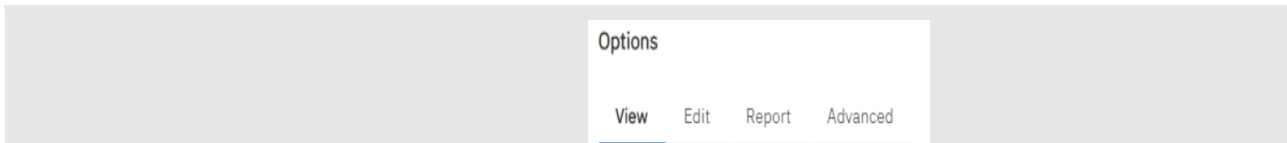
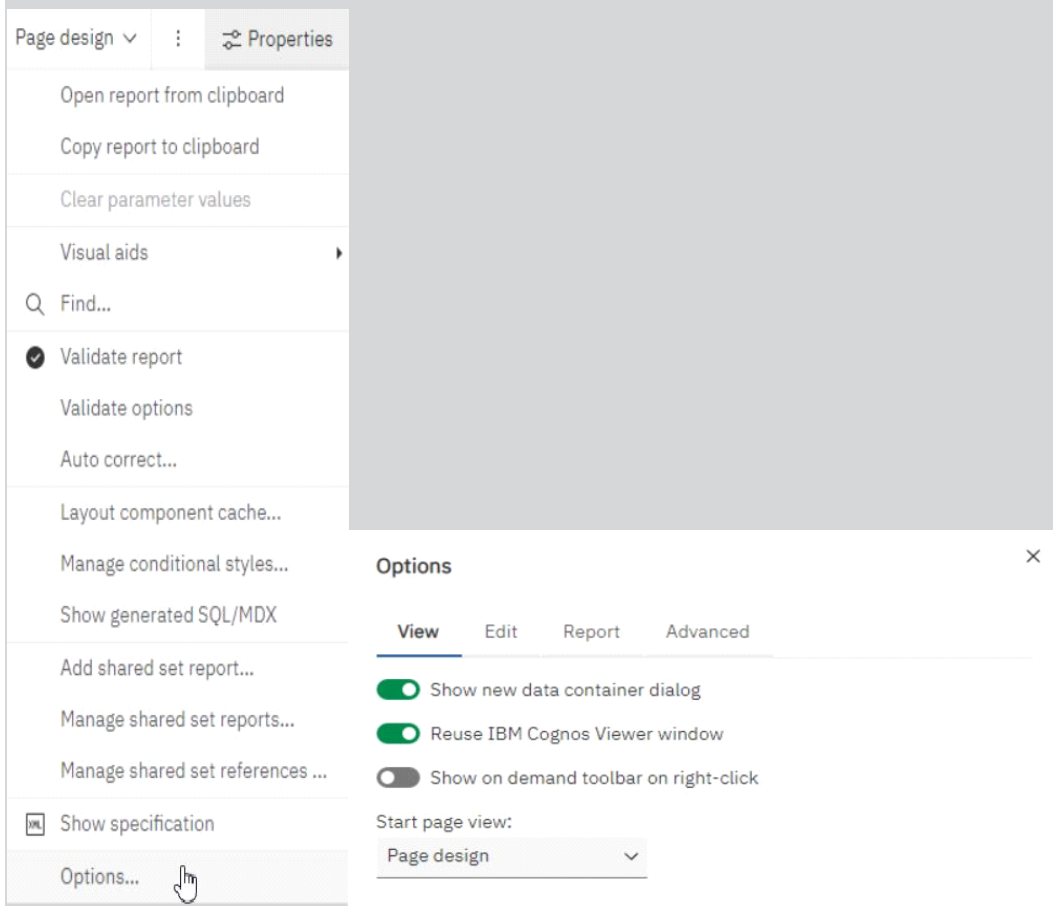


Table 1. Descriptions of the options on the “View” tab ( ) of the “Options” window

Click the “More” icon ( ), and click “Options”.



| Option                         | Description   |
|--------------------------------|---|
| Show new data container dialog | Shows the new data container dialog boxes when the Show this dialog in the future check box was previously cleared. |

|                                       |  |
|---------------------------------------|--|
| Reuse IBM Cognos Viewer window        | Reuses the same DWH Viewer window when you rerun a report without first closing the window.  |
| Show on demand toolbar on right-click | Show the report object toolbar only when you right-click the object. The default setting is to show report object toolbars when you highlight an object. You can control when you want to see these toolbars by enabling this feature, which is also used for accessibility. When you author reports with accessibility features enabled, the Show on-demand UI on right click option is automatically selected. As a result, report object toolbars do not appear. To show an object's toolbar, navigate to the object and press the Enter key. |
| Start page view                       | Enables you to start Reporting in Design, Structure, or Preview view. For the change to take effect, you must close and then restart Reporting.  |

**Table 96 - View Options**

### 7.5.2 Edit Options

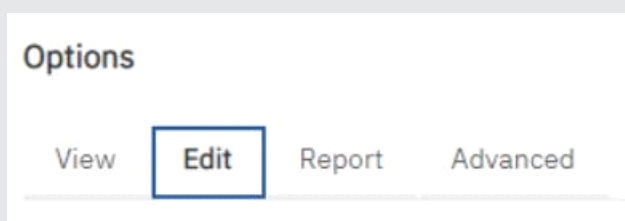
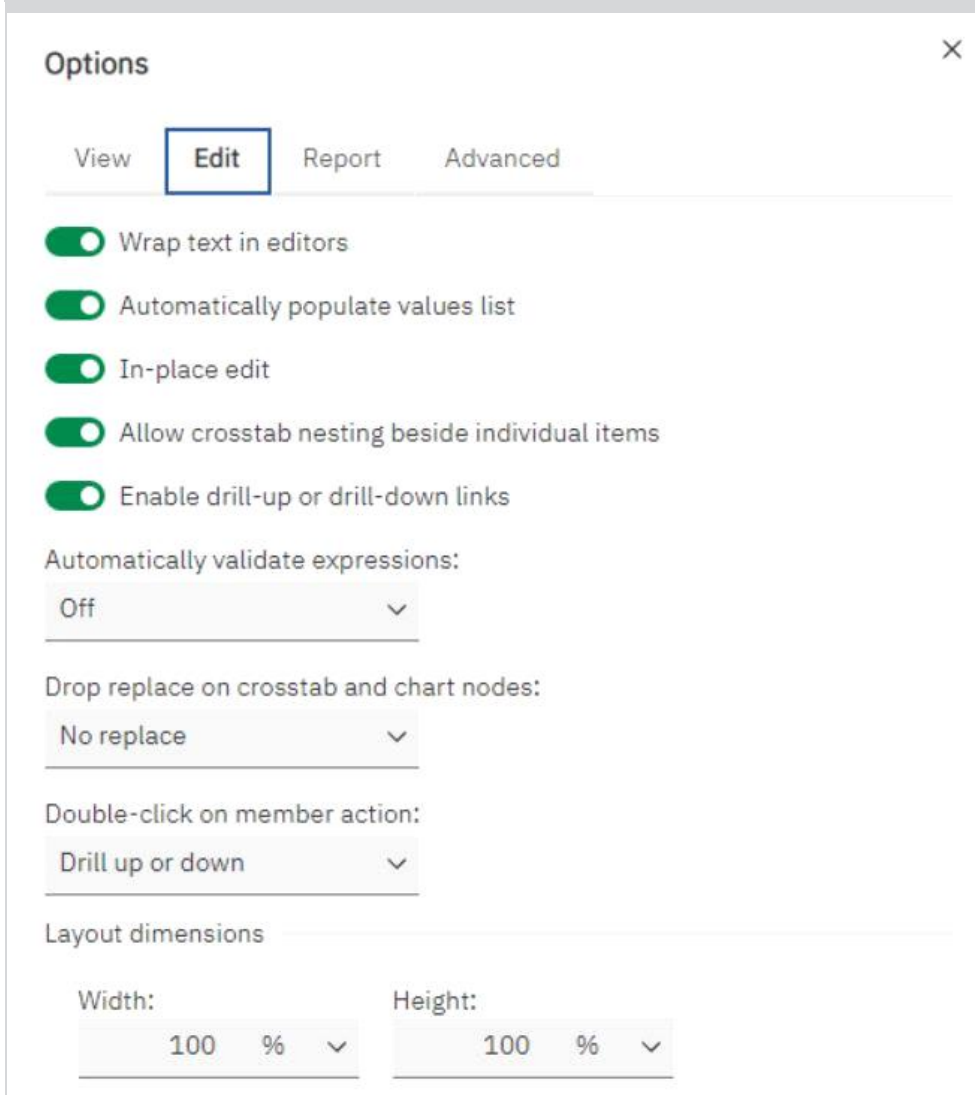


Table 2. Descriptions of the options on the “Edit” tab ( ) of the “Options” window



| Option                             | Description   |
|------------------------------------|---|
| Wrap text in editors               | Automatically wraps text in all editors where you can define expressions.   |
| Automatically populate values list | When building expressions in the expression editor, automatically shows values when you browse the data of a data item. |



|  |  |
|--|--|
| Automatically validate expressions             | Automatically validates calculations, such as filters, created in the expression editor.   |
| In-place edit                                  | Enables the editing of text in place when double-clicking.   |
| Allow crosstab nesting beside individual items | Specifies to create a crosstab node when a data item is inserted in a crosstab. This option allows nesting under individual items instead of only on the entire crosstab edge.   |
| Enable drill-up or drill-down links            | For data items where drill-up or drill-down is possible, enables drill-up or drill-down links. When you select a data item, it becomes a link that you can click to drill up or down. Also, you can still double-click data items to drill up and down. By default, this option is enabled. You can also control drill options in the Properties pane. At the report level, in the Data section. |
| Drop replace on crosstab and chart nodes       | When you use drag-and-drop techniques, this setting determines the behaviour for replacing an item.  |
| Double-click on member action                  | When working with dimensional data, specifies what happens when you double-click a member data item.<br><br>By default, you drill down or up on the item that you double-click.  |
| Layout dimensions                              | Specifies the width and height of the area where you will create reports.  |

**Table 97 - Edit Options**

### 7.5.3 Report Options

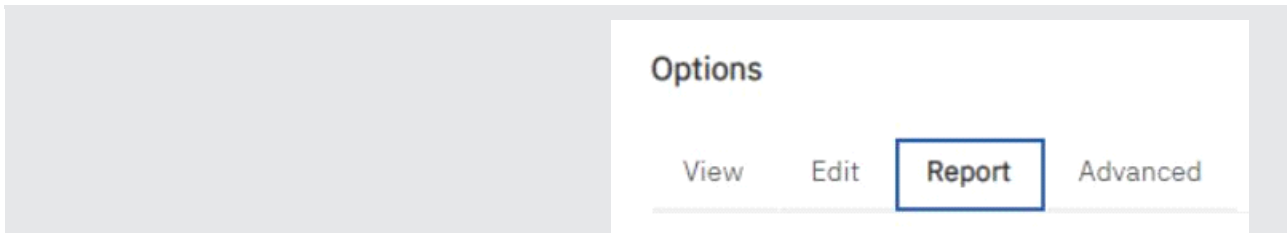
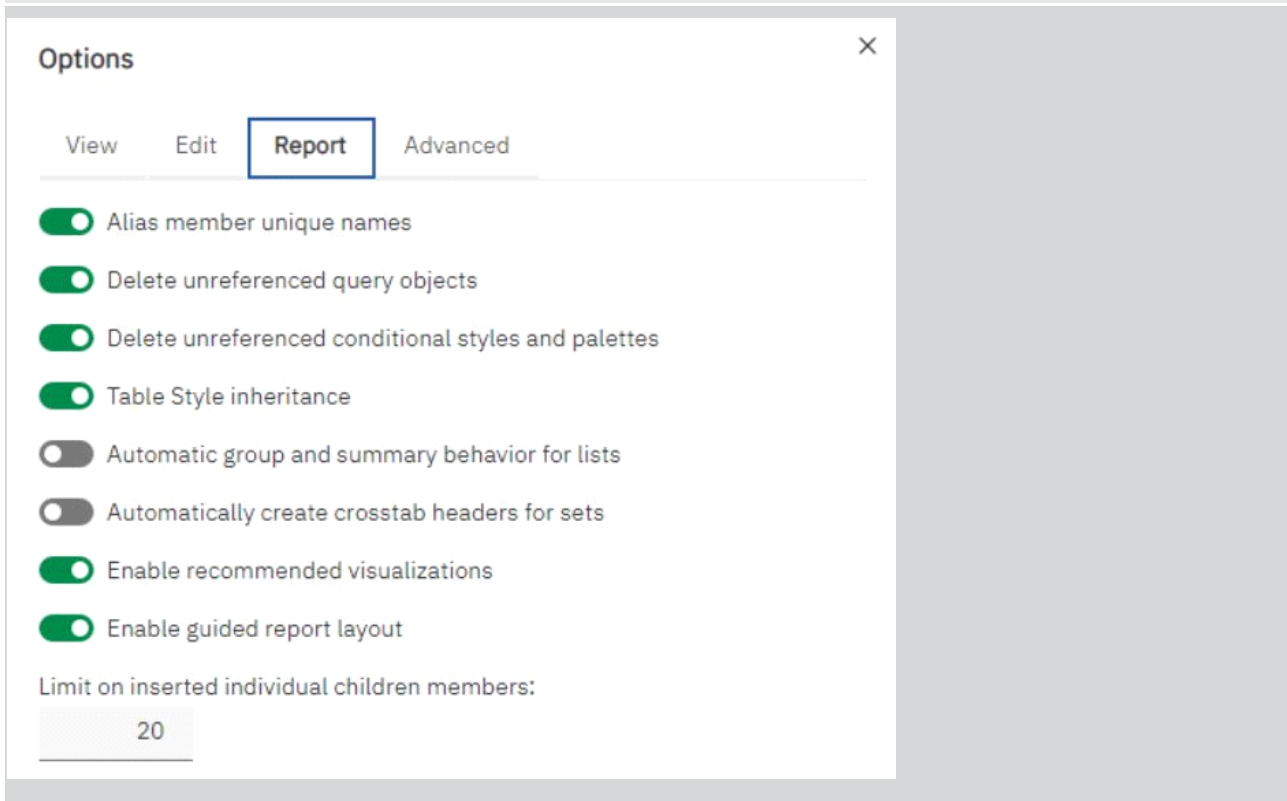


Table 3. Descriptions of the options on the “Report” tab ( ) of the “Options” window



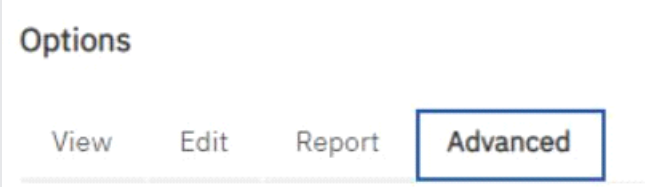
| Option  | Description   |
|---|---|
| Alias member unique names                           | When working with a dimensional data source, creates an alias when you add a member to the report or to an expression.                            |
| Delete unreferenced query objects                   | Automatically deletes query objects linked to another object. For example, if you delete a list, the query linked to the list is deleted as well. |
| Delete unreferenced conditional styles and palettes | Automatically deletes conditional styles or palettes when the last data item that refers to the conditional style or palette is also deleted.     |
| Table Style inheritance                             | When a table style is applied to a list or crosstab, specifies whether new objects inserted in the list or crosstab should inherit the style.     |

|   |  |
|---|--|
| Automatic group and summary behaviour for lists | When working with lists, automatically adds an overall aggregate summary in the list footer and a summary for any groups in the list. When grouping a column, automatically makes it the first column in the list.       |
| Automatically create crosstab headers for sets  | When adding sets in a crosstab that uses a dimensional data source, automatically adds header labels on new columns and rows. The headers help consumers of the report to understand where the data is in the hierarchy. |
| Enable recommended visualizations               | Enable or disable the visualization recommender.   |
| Enable guided report layout                     | Enable or disable guided report layout.  |
| Limit on inserted individual members            | This is an option used in dimensional data sources that is a different form than the one used in the DWH.  |

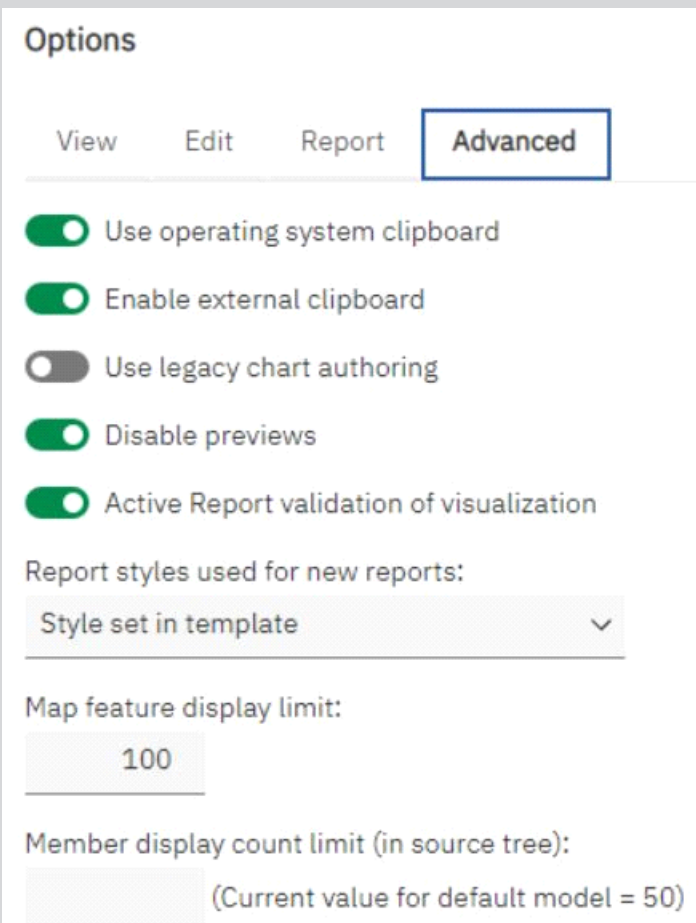
**Table 98 - Report Options**

### 7.5.4 Advanced Options

Table 4. Descriptions of the options on the “Advanced” tab (



) of the “Options” window



| Option                         | Description  |
|--------------------------------|--|
| Use operating system clipboard | Uses the Microsoft Windows (or other operating system) clipboard instead of the internal Reporting clipboard.  |
| Use legacy chart authoring     | Enables you to create new reports using the legacy charts instead of the default charts and disables the automatic upgrade of charts in existing reports to the current default charts. Select this check box if you do not want to upgrade the charts in your existing reports. |
| Disable previews               | When editing properties such as date and number formatting, does not display a sample of the formatting that is applied to data. When this option is not   |

|   |   |
|---|---|
|   | <p>enabled, either sample data or data from your data source is displayed with formatting options applied.</p> <p>Additionally, when in Page Design view, displays a static image for a chart instead of updating the chart with a preview of your chart, using simulated data.</p> |
| Active Report validation of visualization   | Specifies whether to validate visualizations in an active report when the report is run from Reporting.   |
| Report styles used for new reports          | Specifies which report styles to use by default when creating new reports.  |
| Map feature display limit                   | When working with maps, specifies the maximum number of features that can appear in a map.  |
| Member display count limit (in source tree) | When working with dimensional data, specifies the maximum number of members that can appear in the Source tab before you must perform a search.   |

**Table 99 - Advanced Options**

## 7.6 Working with lists

Lists are used to show detailed information from your database, such as product lists and customer lists.

A list shows data in rows and columns. Each column shows all the values for a data item in the database or a calculation based on data items in the database.

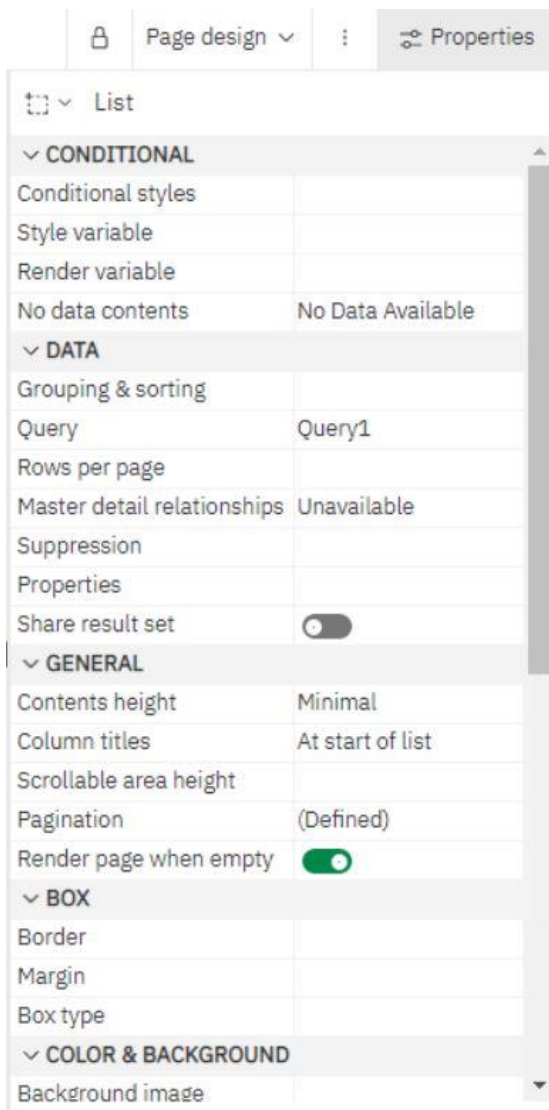
| User ID   | User Name   | User BIC   | Environment Name   | Environment ID   |
|-----------|-------------|------------|--------------------|------------------|
| <User ID> | <User Name> | <User BIC> | <Environment Name> | <Environment ID> |
| <User ID> | <User Name> | <User BIC> | <Environment Name> | <Environment ID> |
| <User ID> | <User Name> | <User BIC> | <Environment Name> | <Environment ID> |

A list showing User ID, User Name, User BIC, Environment Name and Environment ID.

You can specify whether to automatically add an overall aggregate summary in the list footer and a summary for any groups in the list by selecting Automatic group and summary behaviour for lists in the DWH - Reporting options. The default aggregation as specified in your enterprise data source is used.

### 7.6.1 Set list properties

Format lists to give them the appearance you want. You can specify formatting for individual column titles or bodies or for all columns in a list. When you specify formatting for all columns in a list, the formatting is automatically applied to new columns you subsequently add.








**Figure 356 - Set list properties**

You can also quickly format lists by applying table styles.









Formatting for specific columns overrides formatting for entire columns. For example, you specify red as the background colour for a specific column body and green as the background colour for all columns. When you run the report, the specific column body is red and the remaining columns in the list are green. New columns added to the list will be green.

**Procedure**

1. To format an individual column, do the following:
  - Click the column title or column body.
  - To format the text in the column title or the data in the column body, click the “More” icon (  ), then click on “Columns title style” (  Columns title style ) or “Column body style” (  Columns body style ), and then select the formatting style in the properties pane.



- To format the whole column, click the **"Select ancestor"** icon (  ) in the title bar of the Properties pane and click **"List column"** (  List column ).
- In the Properties pane, set the property value.  
For example, to specify a background colour, click **"Background colour"** and choose the colour.

2. To format all columns, do the following:

- Click a column in the list.
- To format list column bodies, click the **"Select ancestor"** (  ) icon in the title bar of the Properties pane and click **"List columns body style"** (  List columns body style ).
- To format list column titles, click the **"Select ancestor icon"** (  ) in the title bar of the Properties pane and click **"List columns title style"** (  List columns title style ).
- To format entire columns, click the **"Select ancestor"** icon (  ) in the title bar of the Properties pane and click **"List columns"** (  List columns ).
- To format the entire list, click the **"Select ancestor"** button (  ) in the title bar of the Properties pane and click **"List"** (  List ).  
You can also click the container selector (three orange dots) of the list to select it.
- In the Properties pane, set the property value.  
For example, to specify a background colour, click **"Background colour"** and choose the colour.

### 7.6.2 Hide column in reports

You can hide columns from the output of list reports. If you select to hide a column, the query for that column is still executed.

- I Select the column that you want to hide.
- I Click the **"Select ancestor"** icon (  ) in the title bar of the Properties pane and click **"List column"** (  List column ).
- I Set the **"Render"** property to **"No"**.



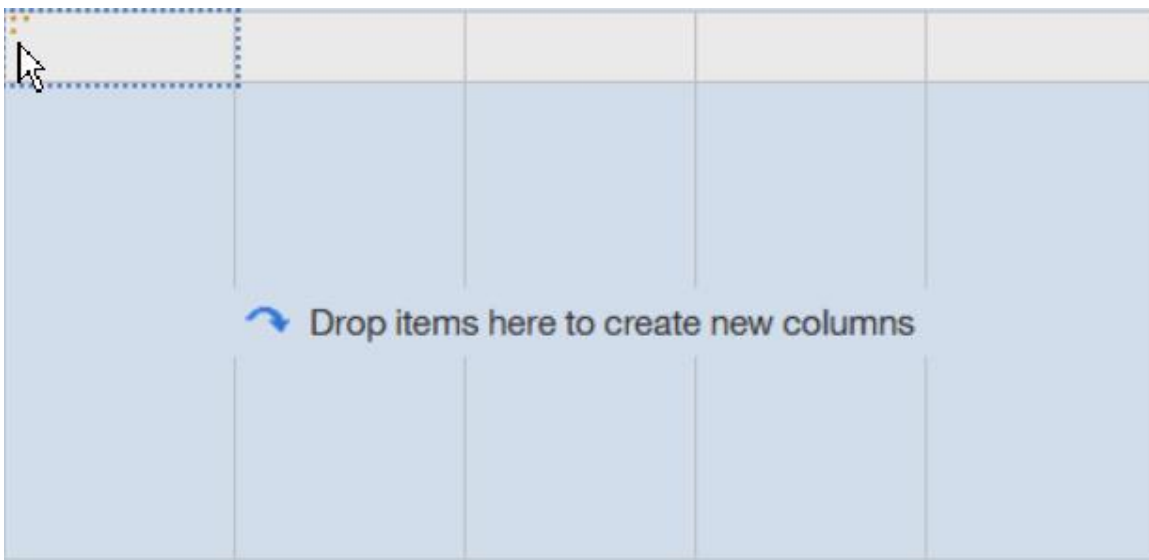
**Figure 357 - Hide column in reports -List column properties - Conditional - Set Render to No**

So the result is: When you run your report, the column is hidden in the report output.


### 7.6.3 Create a scrollable list

When the list contains many rows of data, it is clever to use a list you can scroll:

- I Select the entire list by clicking the container selector (three orange dots) of the list.



**Figure 358 - Create a scrollable list**

- I In the DWH toolbar, click the “**Show properties**” icon (  ).
- I In the properties sheet of the list, specify the height of the scrollable area, in pixels, that you want by typing a value in the Scrollable area height property.



| GENERAL                |                                     |
|------------------------|-------------------------------------|
| Contents height        | Minimal                             |
| Column titles          | At start of list                    |
| Scrollable area height |                                     |
| Pagination             | (Defined)                           |
| Render page when empty | <input checked="" type="checkbox"/> |

Figure 359 - Create a scrollable list - Properties - General - Scrollable area height

### 7.6.4 Using Repeaters

Use repeaters to repeat items when you run the report. For example, you can use repeaters to create mailing labels, including customer names and addresses.

To build a repeater, drag the “**Repeater**” or “**Repeater table**” object from the “**Toolbox**” tab to the work area

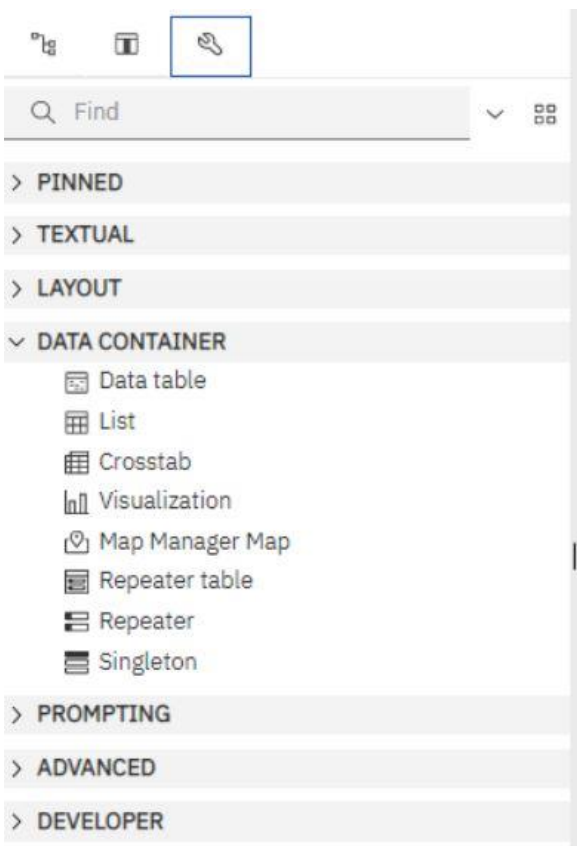


Figure 360 - Using Repeaters - Data container - Repeater/Repeater table

Use repeaters to repeat items across a single row without a particular structure. For example, you want to create a list that contains Year, and Number of Transactions. For each year, you want all “**Number of Transactions**” to appear in a single row. To do this, create a list with Year as a column and a repeater as a second column.

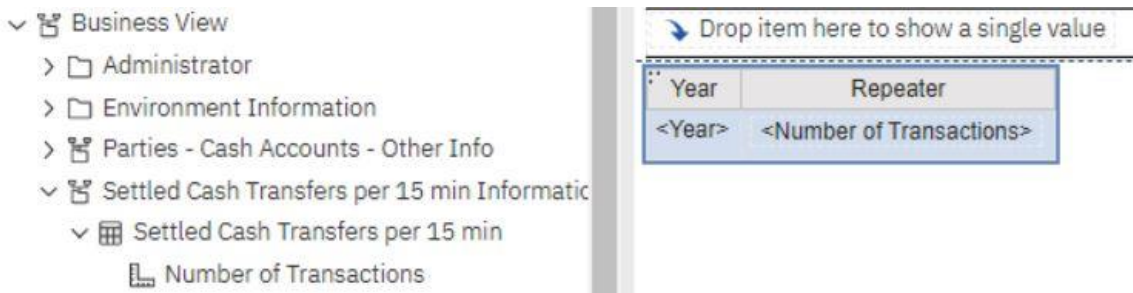


Figure 361 - Using Repeaters - List with all Number of Transactions in a single row

Then insert “Number of Transactions” into the repeater.

Use “Repeater table” to repeat items in a table structure. Drop the items in the repeater, and modify the properties of the repeater to obtain the results you want.

For example, you can specify how many frames appear per page in a repeater table by typing values in the “Across” and “Down” properties.

| GENERAL                |                                     |
|------------------------|-------------------------------------|
| Repeater direction     | Left to right, top to b...          |
| Across                 | 2                                   |
| Down                   | 3                                   |
| Pagination             |                                     |
| Render page when empty | <input checked="" type="checkbox"/> |


Figure 362 - Using Repeaters - Properties - General - Across and Down

Horizontal pagination is not supported for data containers, such as lists or crosstabs, which are nested in repeater tables.

### 7.6.5 Change a list into a crosstab

Change a list into a crosstab to view your data from a different perspective.

Click the columns to appear as columns or nested columns in the crosstab.

From the report object toolbar, click the “More” icon (  ) and choose “Pivot List to Crosstab”.

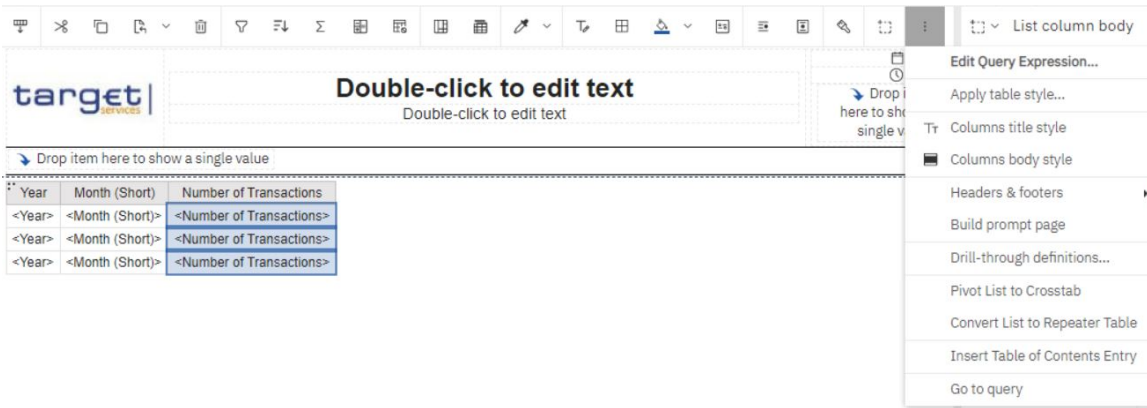



Figure 363 - Change a list into a crosstab - More icon - Pivot List to Crosstab

The list becomes a crosstab with the columns you selected in step 2 appearing as columns and nested columns. The unselected columns, except for measures, appear as rows and nested rows. If you have one measure, it becomes the cells of the crosstab. If you have more than one measure, they appear as columns.

To make all measures appear as rows, swap columns and rows (  ).

## 7.7 Working with crosstabs

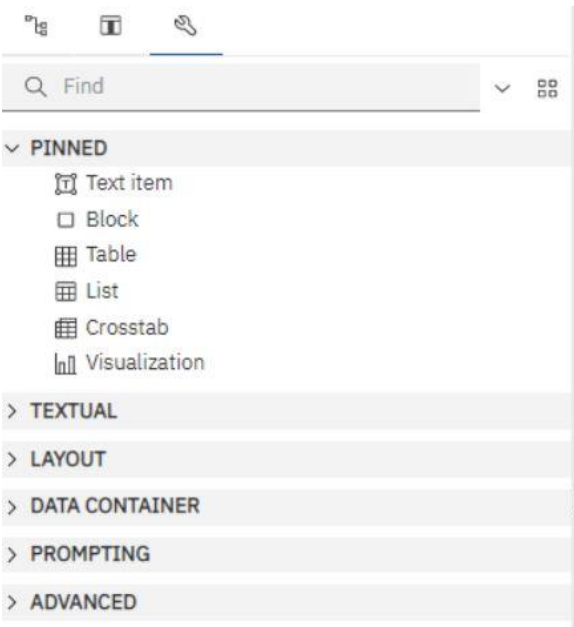


Figure 364 - Working with crosstabs - Data container - Crosstab

Use crosstab reports, also known as matrix reports, to show the relationships between three or more query items. Crosstab reports show data in rows and columns with information summarized at the intersection points.

Swap columns and rows to look at information from a different perspective. This may help you discover high and low points in the data that you had not previously noted.

You can only swap columns and rows in a crosstab or chart. In a chart, you swap the x- and y-axes.

From the toolbar, click the “**Swap rows and columns**” button (  )

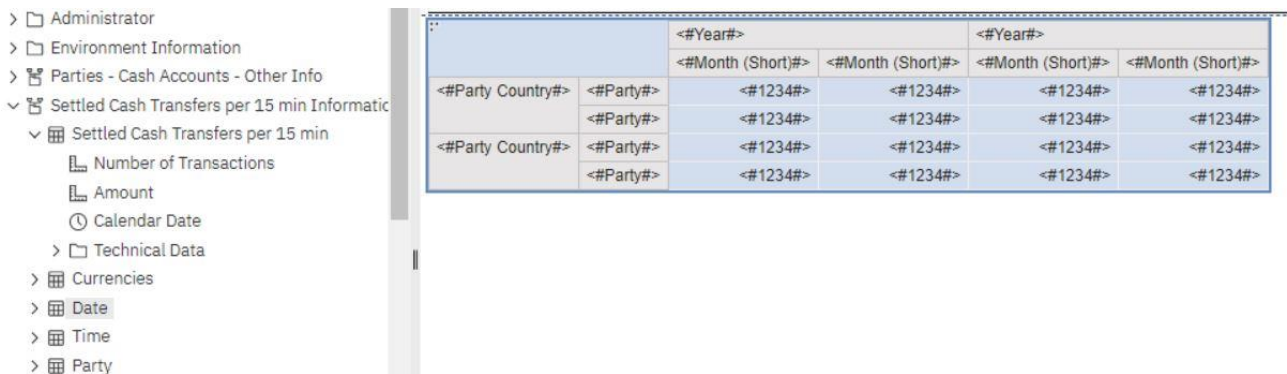
In the report, the rows become the columns and the columns become the rows.

### 7.7.1 Crosstab nodes and Crosstab nodes members

When you add data items to crosstabs rows and columns, you create crosstab nodes and crosstab node members. These objects allow you to easily create crosstabs, by dragging data items to crosstabs. Cross-tabs are dimensional objects that have row edges and column edges. Each edge is composed of a set of crosstab nodes. Each crosstab node contains the following:

- 1 One or more crosstab node members.
- 1 Zero or one nested crosstab node, which contains one or more crosstab node members or nested crosstab nodes.

Each crosstab node member refers to a data item that contains an expression to define the members in the crosstab. The following crosstab contains four crosstab nodes.



**Figure 365 - Crosstab nodes and Crosstab nodes members**

1. Crosstab node 1 contains a single node member for the total. This node refers to the data item Total (Party Country).
2. Crosstab node 2 contains a crosstab node member that refers to the data item Party Country. This member has a nested crosstab node containing a crosstab node member that refers to the data item Party.
3. Crosstab node 3 contains a single node member for the average. This node refers to the data item Average (Party Country).
4. Crosstab node 4 contains a crosstab node member that refers to the data item “**Year**”. This member has two nested crosstab nodes. The first node contains a crosstab node member that refers to the data item “**Month**”. The second node contains a crosstab node member for the total. This node refers to the data item “**Total**” (Month).

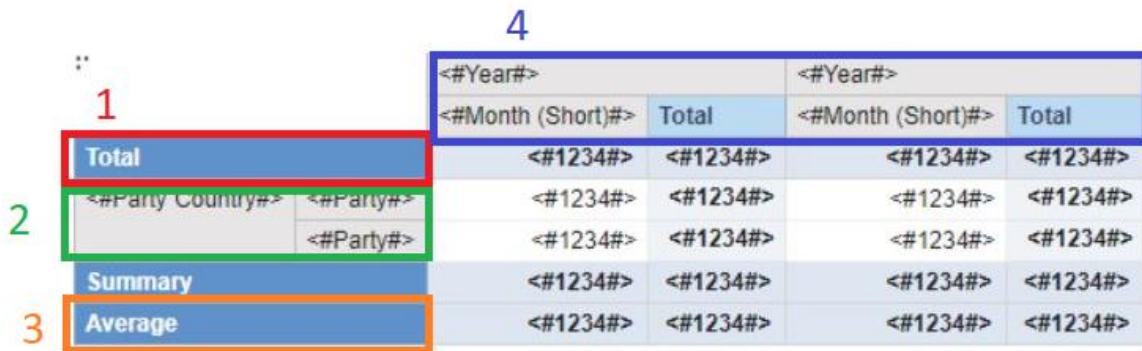


Figure 366 - Crosstab nodes and Crosstab nodes members (2)


Nodes are also created when you add data items to charts.

Crosstab nodes can be placed anywhere in the crosstab. For example, in the previous diagram, you can drag **Month** under **Average** to create a row edge.

To move nested items from one edge to another, ensure that you select the crosstab node and not the crosstab node member. For example, in the previous diagram, you want to move **Party Country** and **Party** to the column edge. To do this, click **Party Country** and, in the Properties pane, click the **Select ancestor** (



Node. Both **Party Country** and **Party** are selected.

The DWH - Reporting option Allow crosstab nesting beside individual items (**More** icon in the application bar (  ), Options, Edit tab) affects the drag-and-drop behaviour in crosstabs. When the option is turned on and you add a data item to a crosstab, the item is created as a crosstab node. In addition, you can nest items under individual items instead of only on the entire crosstab edge. If the option is turned off, the item is created as a crosstab node member to an existing crosstab node.

For example, in the previous diagram, if the option is turned on and you drag **Week** or **Day** from the **Source** tab to beneath Year, Day or Week becomes a new peer node to **Year**. If the option is turned off, **Day** or **Week** becomes a new peer node to **Year** and has **Month** as a nested crosstab node. This happens because instead of adding a new node, you are adding a new member to the existing node that already contains **Year**.

To create discontinuous crosstabs, turn the option on. If you want the items on the edges of crosstabs to be related (contain the same nested items), turn the option off.

### 7.7.2 Set Crosstabs properties


Format crosstabs to give them the appearance you want. You can specify formatting for rows, columns, and fact cells in a crosstab or for the entire crosstab. When you specify formatting for all rows, columns, fact cells,

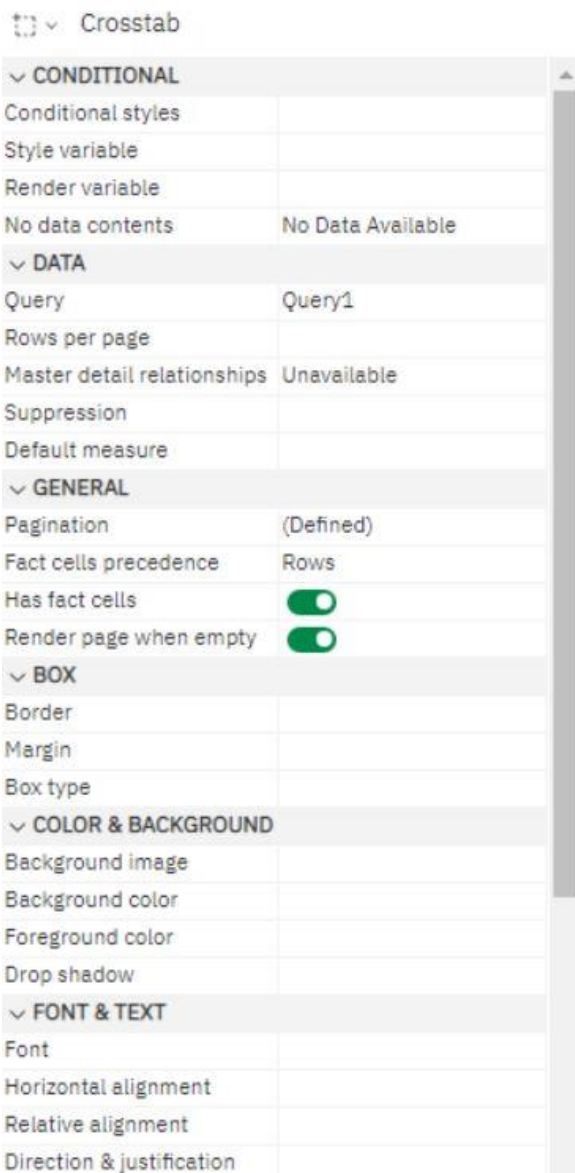
or the crosstab, the formatting is automatically applied to any new items you add. If you apply the same styles, such as font colour, to crosstab rows, columns, and crosstab intersections, the styles are applied in the following order:

- | Crosstab fact cells
- | fact cells in the outermost rows
- | fact cells in the innermost rows
- | fact cells in the outermost columns
- | fact cells in the innermost columns
- | crosstab intersections

The style applied to the last object in the list overrides styles applied to previous objects. In addition, class styles are applied before styles that you apply manually.

You can also quickly format crosstabs by applying table styles and add white space to a crosstab by inserting crosstab space objects.

In cases where fact cell formatting applied to rows conflicts with fact cell formatting applied to columns, you can set the "**Fact cells precedence**" property in the Properties pane to determine whether the row formatting or the column formatting precedence has. To set this property, click anywhere in the crosstab, click the "**Select ancestor**" icon (  ) in the title bar of the Properties pane, and click "**Crosstab**".




**Figure 367 - Set Crosstabs properties**

Or you can click the container selector (three orange dots) of the crosstab to select it.


1. To format the entire crosstab, do the following:


- Click anywhere in the crosstab.


- Click the “**Select ancestor**” icon (  ) in the title bar of the Properties pane and click “**Crosstab**”.
- In the Properties pane, set the property value.

For example, to specify a background colour, click “**Background colour**” and choose a colour.

2. To format all rows, columns, or fact cells, click a row, column, or fact cell in the crosstab and then do the following:

- If you clicked a row, click the “**Select ancestor**” icon (  ) in the title bar of the Properties pane and click “**Crosstab rows**”.

- If you clicked a column, click the “**Select ancestor**” icon (  ) in the title bar of the Properties pane and click **Crosstab Columns**.

- If you clicked a fact cell, click the “**Select ancestor**” button (  ) in the title bar of the Properties pane and click “**Crosstab fact cells**”.


- In the Properties pane, set the property value.

For example, to specify a background colour, click “**Background colour**” and choose the colour.

You can also right-click the row or column and click “**Select fact cells**”.

3. To format all crosstab cells for a specific row or column, do the following:

- Click the row or column.

- Click the “**Select ancestor**” icon (  ) in the title bar of the Properties pane and click “**Crosstab member fact cells**”.


You can also right-click the row or column and click “**Select member fact cells**”.

- In the Properties pane, set the property value.

For example, to specify a background colour, click “**Background colour**” and choose the colour.

4. To format all row or column titles, do the following:

- Click a row or column title.


- Click the “**Select ancestor**” icon (  ) in the title bar of the Properties pane and click “**Crosstab rows**” or “**Crosstab columns**”.

- In the Properties pane, set the property value.

For example, to specify a background colour, click “**Background colour**” and choose the colour.

5. To format an individual row, column, or intersection, do the following:

- Click the row, column, or intersection.

To format the data in a row, column, or intersection, click the “**Lock page objects**” (  ) icon to unlock then click the text item to format.


- In the Properties pane, set the property value.


For example, to specify a background colour, click “**Background colour**” and choose the colour.



### 7.7.3 Create a Single-Edge crosstab

Create a single-edge crosstab report to show data in a list-like form. For example, to show the quantity of products sold for each year and for each order method, you could create a crosstab with Year and Month as rows and Number of Transactions per Day as the measure.

Click the **“Toolbox”** icon () (—————), and drag a crosstab object to the work area.

From the **“Sources”** tab () (—————), drag data items to the **“Rows”** or **“Columns”** drop zone.

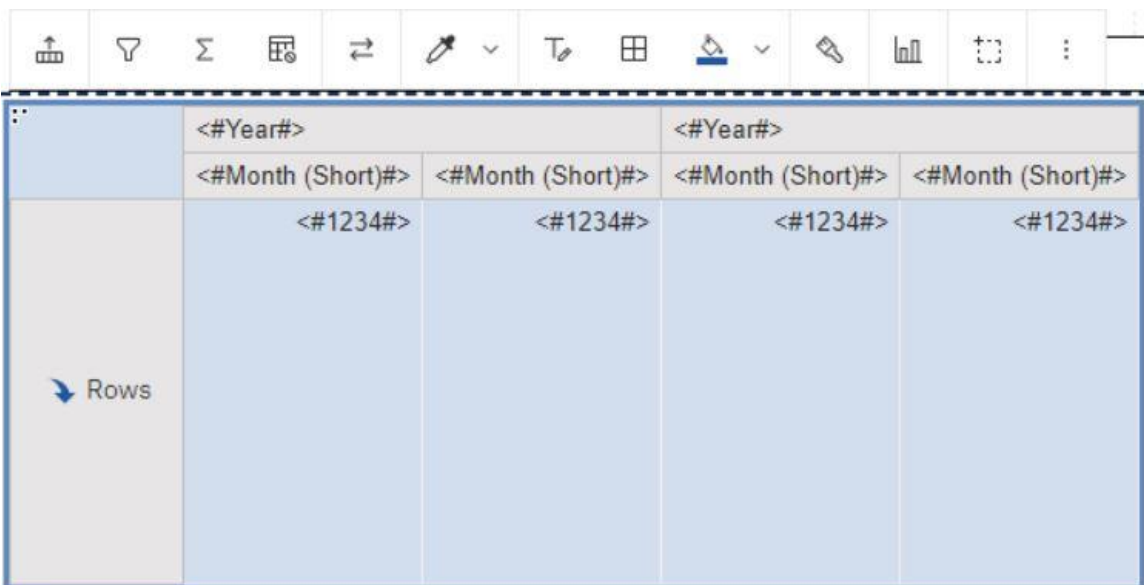
A black bar indicates where you can drop the data item.

Repeat step 2 to insert additional data items:

If you dragged the data item in step 2 to the **“Rows”** drop zone, drag the additional items above or below the first item.

If you dragged the data item in step 2 to the **“Columns”** drop zone, drag the additional items to the left or right of the first item.

To add measures to the crosstab, drag the measures to the **“Measures”** drop zone.



|  | <#Year#>          |                   | <#Year#>          |                   |
|--|-------------------|-------------------|-------------------|-------------------|
|  | <#Month (Short)#> | <#Month (Short)#> | <#Month (Short)#> | <#Month (Short)#> |
|  | <#1234#>          | <#1234#>          | <#1234#>          | <#1234#>          |

**Figure 368 - Create a Single-Edge crosstab**

When you run the report, a crosstab is produced that has only one edge.

### 7.7.4 Create a nested Crosstab

Nest data in a crosstab report to compare information by using more than one data item in a column or row. For example, a report shows the number of transactions by country party per year. You decide to add a data

item to further break down the number of transactions by “Month”. When nesting columns in a crosstab report, there are four distinct drop zones where you can insert a new data item. The drop zone you choose will define the relationship between the data item and the column.

The following relationships are created when you insert a data item as a row:

Inserting a data item to the left or right of a column creates a parent-child relationship between them. When you insert a data item to the left of a column, the data item becomes a parent to the column. When you insert a data item to the right of a column, the data item becomes a child of the column.

Inserting a data item above or below a column creates a union relationship between them.

The following relationships are created when you insert a data item as a column:

Inserting a data item to the left or right of a column creates a union relationship between them.


Inserting a data item above or below a column creates a parent-child relationship between them. When you insert a data item above a column, the data item becomes a parent to the column. When you insert a data item below a column, the data item becomes a child of the column.

For example, you have a crosstab with “Country Party” as rows and “Party” as nested row. For columns, you have “Year” with “Month short” or “Month” as a nested column.

In this crosstab, “Party Country” is a parent to “Party”.

“Month” and “Month short” are peers.

“Year” is a parent to “Month” or “Month short”.

- 1 From the “Sources” tab (  ), click the data item to add.
  - 1 Drag the data item to the report as a nested column or nested row.
- A black bar indicates where you can drop the data item.
- 1 Repeat steps 1 to 2 to add other nested columns or rows.

|                   |           | <#Year#>          |                   | <#Year#>          |                   |
|-------------------|-----------|-------------------|-------------------|-------------------|-------------------|
|                   |           | <#Month (Short)#> | <#Month (Short)#> | <#Month (Short)#> | <#Month (Short)#> |
| <#Party Country#> | <#Party#> | <#1234#>          | <#1234#>          | <#1234#>          | <#1234#>          |
| <#Party Country#> | <#Party#> | <#1234#>          | <#1234#>          | <#1234#>          | <#1234#>          |
| <#Party Country#> | <#Party#> | <#1234#>          | <#1234#>          | <#1234#>          | <#1234#>          |
| <#Party Country#> | <#Party#> | <#1234#>          | <#1234#>          | <#1234#>          | <#1234#>          |

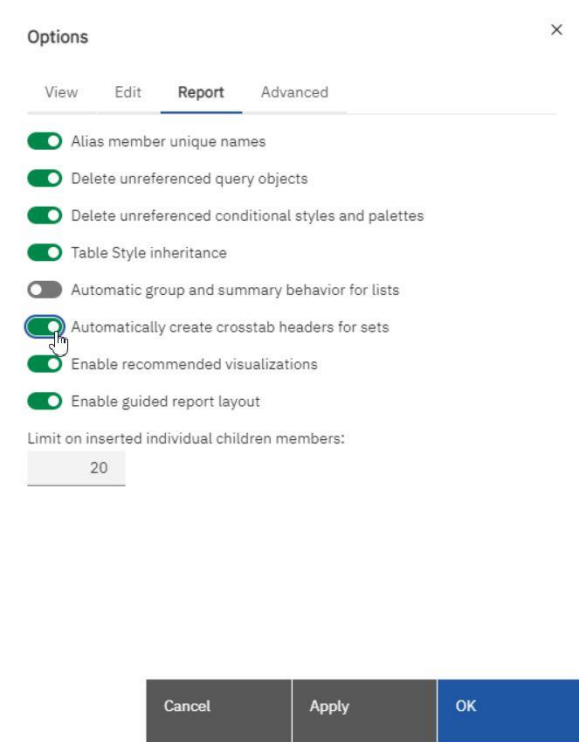
Figure 369 - Create a nested Crosstab

### 7.7.5 Creating headers automatically for sets in crosstabs

You can automatically add header labels on columns and rows when working with sets in a crosstab that uses a dimensional data source. The headers help consumers of the report to understand where the data is in the hierarchy.

Header labels are added only when you add new sets to your crosstab. The labels are not added to existing sets. After you enable this option, it remains on until you disable it, and applies to any new crosstabs that you create.

Click the “More” icon (  ), click “Options”, then click the “Report” tab.



**Figure 370 - Creating headers automatically for sets in crosstabs**

Select “Automatically create crosstab headers for sets”.

Click OK.

Header labels are now created in the rows and columns in a crosstab.

### 7.7.6 Showing Crosstab values as percentages

When you work with dimensional data sources, you can show crosstab values as a percentage of a summary instead of the actual values. When you show values as a percentage, you can compare the contribution of an item to the whole.

You can show crosstab values as a percentage of a summary on the rows, the columns, or the rows and columns.

By default, the summary type that is used to calculate the percentages is Automatic summary. When you show values as a percentage, a percentage measure data item is created.


You can also create a custom percentage calculation. For example, you can show values as a percentage of an intersection (tuple). Or you can show values as a percentage of a different summary type, such as **“Maximum”**.

When you show values as a percentage, the fact cells are formatted with the percent data format. When you show the actual values, the fact cells are formatted with the number format. If you modify the data format of the actual values, the change is lost when you switch between showing the actual values and percentage values.

You can show values as a percentage only in crosstabs. If you insert a chart, you cannot fill the chart with data from a crosstab that shows values as a percentage. If you create a chart from a crosstab that shows values as percentages, an empty chart is created in the report.

- I Select the measure for which you want to show values as a percentage.

If there is only one measure in the crosstab, click the crosstab corner.

- I From the report object toolbar, click the **“More”** icon (  ), click **“Show value as”**, and click the percentage values that you want to show.

- I If you click Custom, provide the information that is required to calculate the percentage values.

- To change the default name of the percentage data item that you are creating, type the new name in the Name field.
- In the Percentage based on box, choose to build the percentage data item based on a summary of sets in the crosstab or based on an intersection (tuple).
- If you choose to build the percentage data item based on a summary of sets, in the Choose sets box, click the sets that you want to use. Then, click **“Summary type”** and select the summary that you want to use to calculate the percentage values.

If there is more than one data item on the crosstab edge that you chose for the sets, select which data item that you want to use.

- If you choose to build the percentage data item based on an intersection (tuple), click the ellipsis and select the items that you want to use to create the intersection.
- Click **“OK”**.

- I To edit a measure percentage data item, follow these steps.

- Select the measure.

- From the report object toolbar, click the **“More”** icon (  ), click **“Show value as”** > Edit.


- Modify the information for the data item as described in step 3.
- If you replaced a set in the crosstab with a different set, in the Choose sets box, click “**Existing sets**” when you want to base the percentage values on the set that you replaced.

### 7.7.7 Specify the Default Measure

You can specify the default measure for crosstabs and certain chart types. Specify the default measure to be used when the measures cannot be determined by what is on the edges. For example, you create a crosstab with “**Order method**” as rows and “**Product line**” as columns. You add “**Quantity**” and “**Revenue**” as nested rows, making “**Order method**” their parent. You then add “**Country**” or “**Region**” under “**Order method**”. Since there is no measure specified for “**Country**” or “**Region**”, you specify the default measure so that data is returned for each country or region.

In crosstabs, DWH - Reporting automatically sets the default measure when you insert a measure into the crosstab cells.

I To specify the default measure for a crosstab, do the following:

- Click any part of the crosstab, and then click the “**Select ancestor**” icon (  ) in the title bar of the Properties pane.
- Click Crosstab.

You can also click the container selector (three orange dots) of the crosstab to select it.

Set the “**Default measure**” property to the default measure.

| DATA                        |                        |
|-----------------------------|------------------------|
| Query                       | Query1                 |
| Rows per page               |                        |
| Master detail relationships | Unavailable            |
| Suppression                 |                        |
| Default measure             | Number of Transactions |

**Figure 371 - Specify the Default measure**

I To specify the default measure for a chart, drag the measure to the Default measure box in the chart.

### 7.7.8 Indent data

You can indent crosstab node members to set them apart from surrounding data.

When you insert a hierarchy in rows, all members are automatically indented according to their level. By default, the first member in a set is not indented. If you insert a hierarchy in columns, the members are not automatically indented. You can change the indentation properties of members in the report.

Relative indentation means that the member will shift by one tab when the member's level increases relative to the previous member in the hierarchy.

Indenting based on the level in the hierarchy means that the member will shift the number of tabs equivalent to the level in the hierarchy.

You can also indent objects by applying padding.

- I Click the crosstab node member to indent.
- I In the Properties pane, set the “**Level indentation**” property to your indentation type, length, and direction.

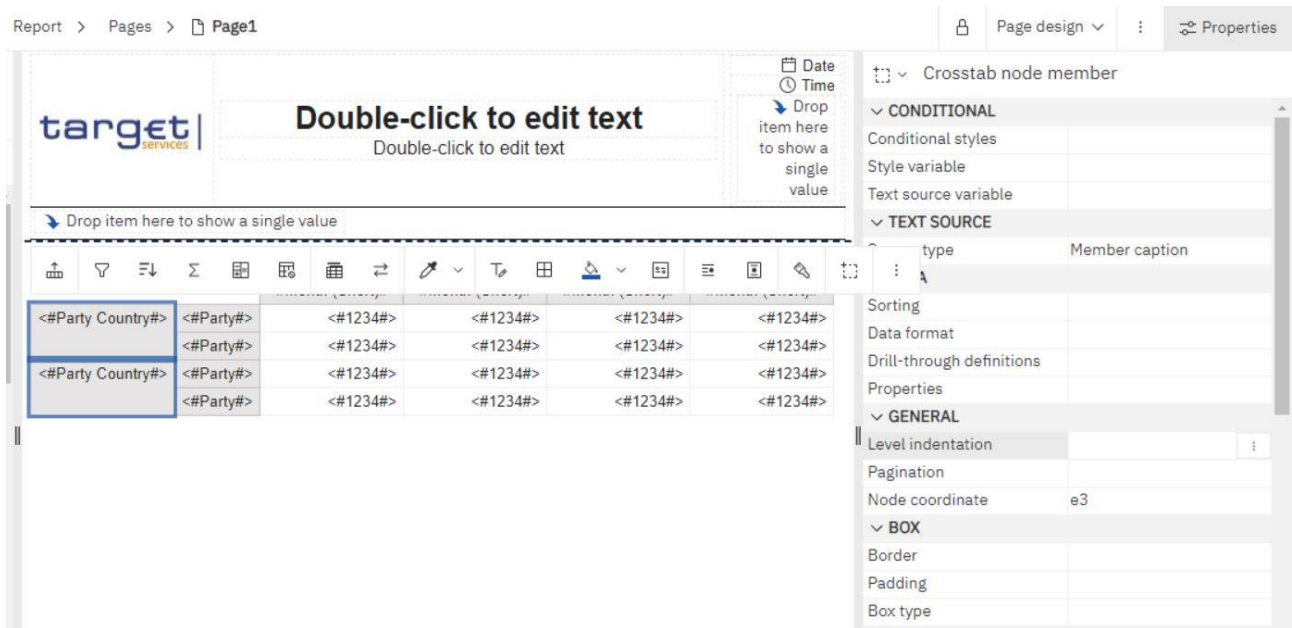



Figure 372 - Indent data - Properties pane - General - Level indentation

## 7.8 Working with Visualisations

Before creating visualizations, review the available visualisations to select the best type for your needs.

To view the available visualization types, add a Visualization object from the “**Toolbox**” pane (  ) to an existing report.

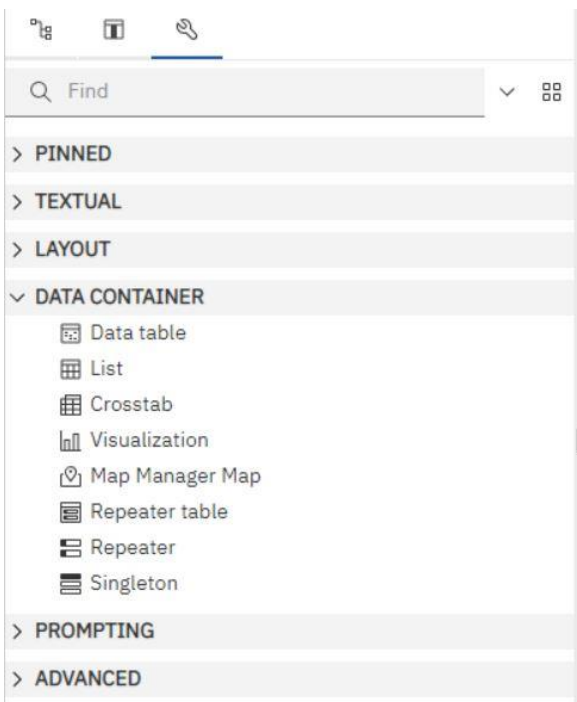


Figure 373 - Working with Visualisations - Data container - Visualization

In the Visualization gallery window, select “11.1 Visualizations” from the menu.

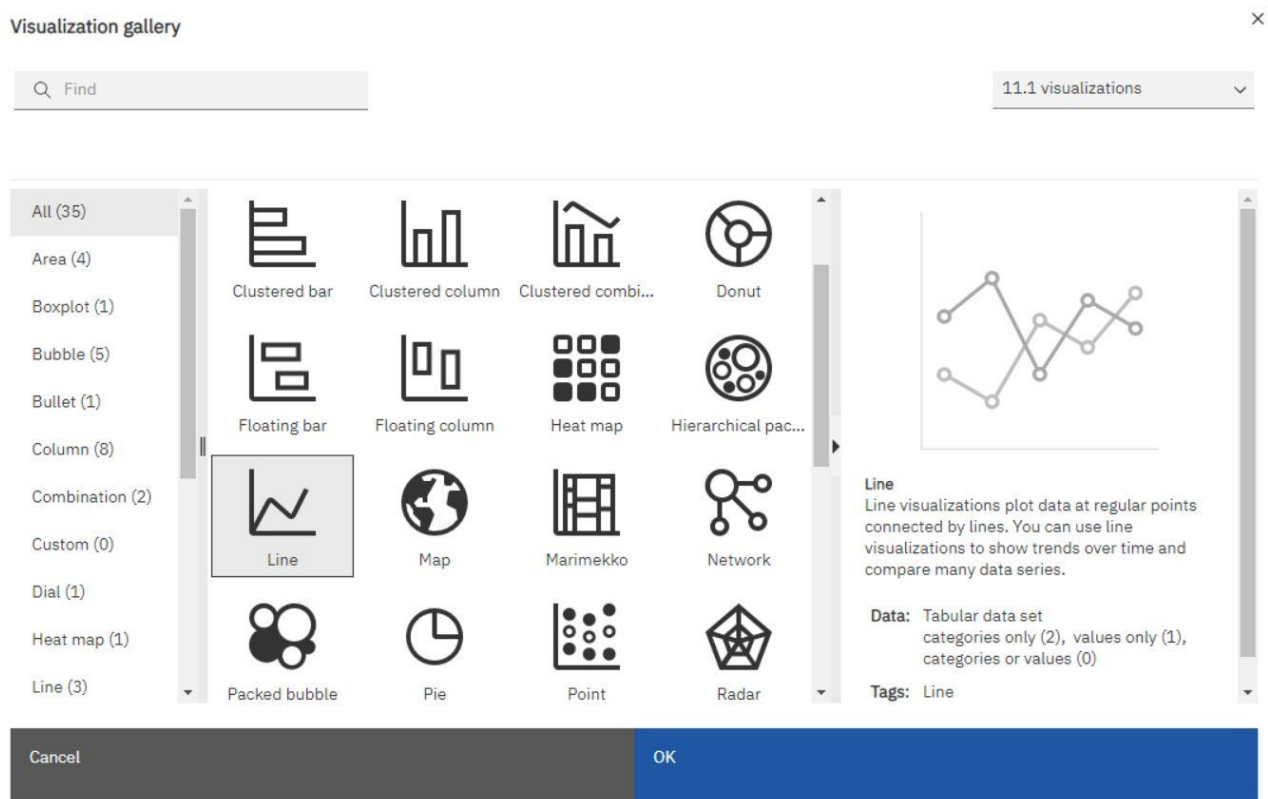


Figure 374 - Working with Visualisations - Visualization gallery

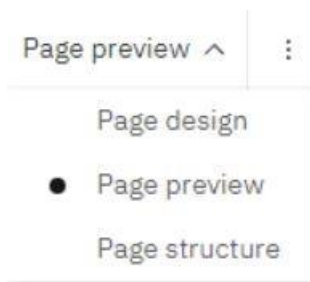


To create charts, drag data items from the “**Source**” tab (————) to the measures, data series and categories drop zones.

When you are working with dimensional data sources, do not insert member properties in the series or categories of a chart. By default, DWH - Reporting groups items that are inserted in these areas. Grouping member properties produces a warning when you validate the report.

To help you when creating visualizations, you can do the following:

- I Preview your visualization style changes:



As you author your visualization and edit the visualization properties, DWH - Reporting provides you with a preview of your visualization, using simulated data. This allows you to view your style changes without running your report. You need to run your report to see the visualization with your actual data. You can disable the visualization preview in the options.

- I Resize your visualization:
- I Move the visualization drop zones into flyouts so that they appear only when you pause your pointer over the visualization.


After you create a basic visualization, modify the various chart objects to customize your visualization.

The DWH provides a number of recommended visualisations based on the data that you are working with.

Using a machine learning pipeline that is derived from training data and the input from visualization specialists, the DWH matches your data with the visualizations that illustrates your data.

When you drag a measure or column on to the canvas, the DWH chooses a recommended visualization for you. You can change it by selecting another visualization from either recommended visualizations or from all visualizations.

### 7.8.1 Comparing measures in a visualization

You can compare measures from the same category in a visualization by adding multiple measures to the measure fields 

For example, you can compare the unit price with the unit sale price.

- I Create a bar or column visualization.



- Drag a member to the Bars field.

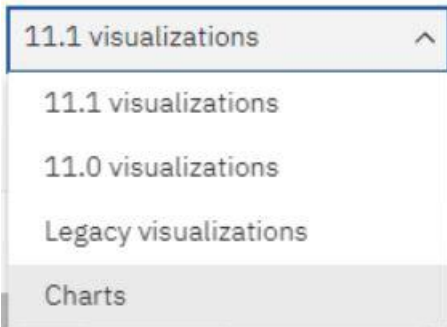
The visualization display different bars for the measures. The colouring is determined by the measures from the Length field.

Comparing measures is only available for the following visualization:

Area, Bar, Column, Hierarchical packed bubble, Packed bubble, Point, Clustered combination, Stacked combination, Line, Tiled map, Pie, Radar, Treemap, Waterfall and Wordcloud.

### 7.8.2 Adding a baseline to a visualization

Baselines are horizontal or vertical lines that cut through the “**chart**” to indicate major divisions in the data. Baselines can be used only in the “**Charts**”



For example, you can add a baseline to show a sales quota or break-even point.

In visualizations, you can define baselines by values on the numeric axis or the category axis.

Each baseline represents a value on an axis.

Depending on the type of visualization, you can use the following options to position the baseline.

| Option              | Description   |
|---------------------|---|
| Numeric Value       | Uses a static numeric value.  |
| Category Index      | Uses the index value of the data item in the categories axis.<br>For example, a Category index value of 1 indicates that the baseline is at the first data item. This is the default. |
| Percent on Axis (%) | Uses a percentage of the full range of the axis.  |

**Table 100 - Adding a baseline to a visualization**

For example, if the axis range is “-500 to 1100”, a Percent on Axis value of 25% puts the baseline at “-100” (25% of the range, 1600).

- Click the visualization in a report.

- Depending on your chart and the type of baseline you want to add, in the Properties pane , under “Visualizations” > “Annotations”, select the “Baselines”

| CHART ANNOTATIONS  |           |
|--------------------|-----------|
| Legend             | Top right |
| Numeric baselines  |           |
| Category baselines |           |

- Click the “New” icon ( + ) and choose the type of baseline from the list.

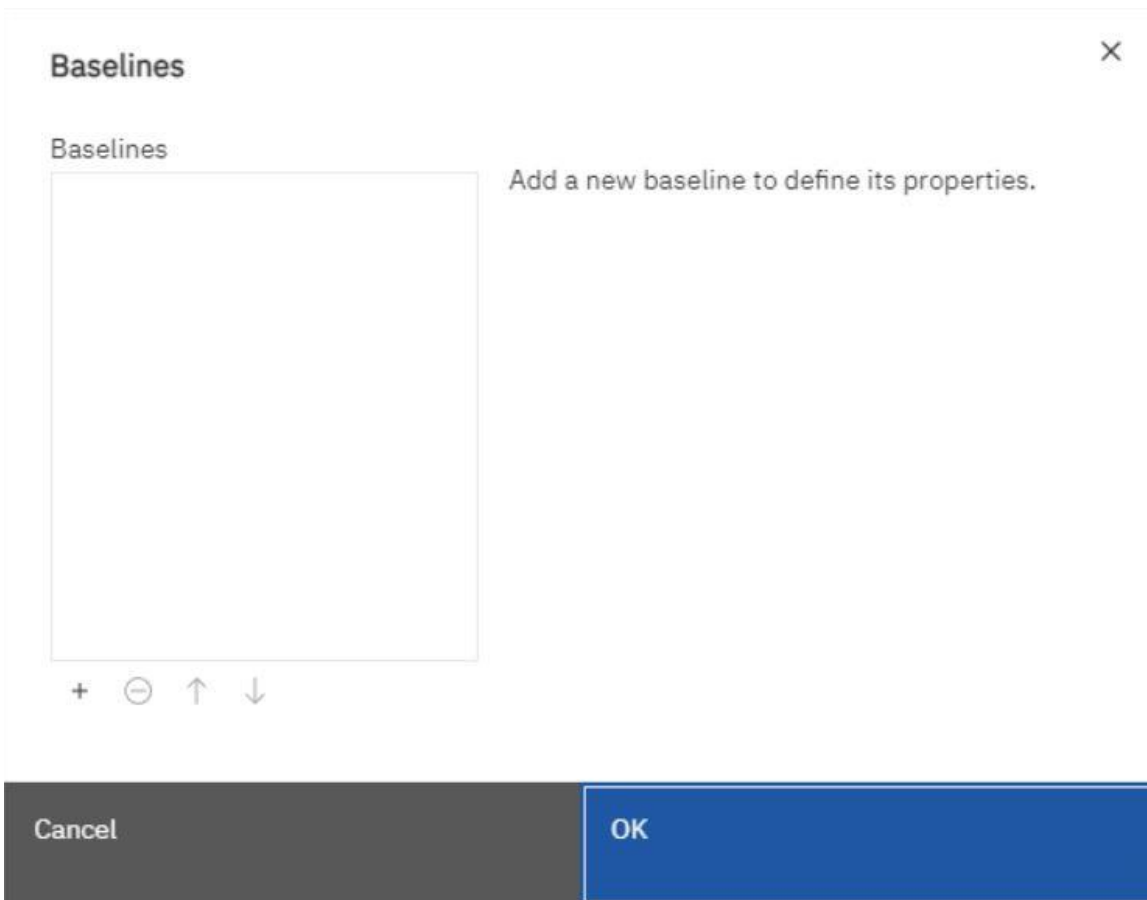


Figure 375 - Adding a baseline to a visualization

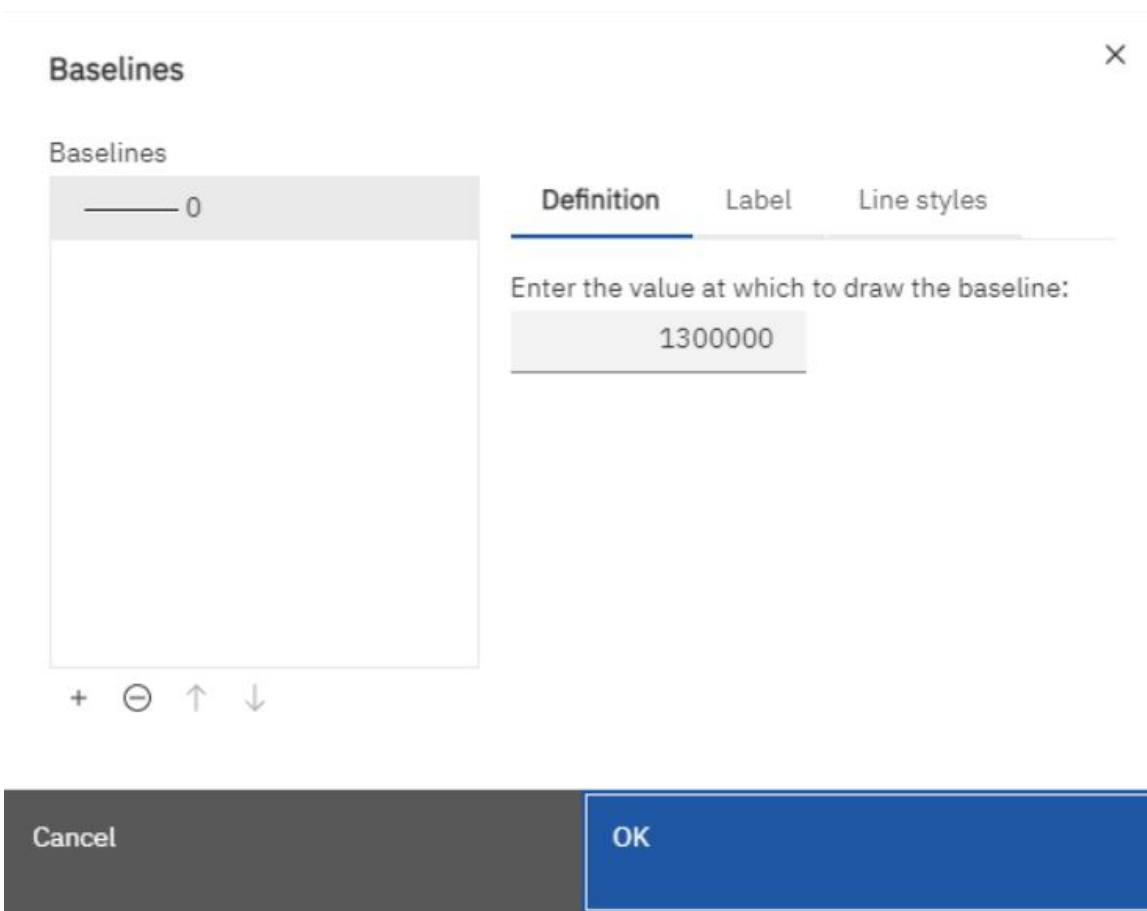


Figure 376 - Adding a baseline to a visualization - Baselines

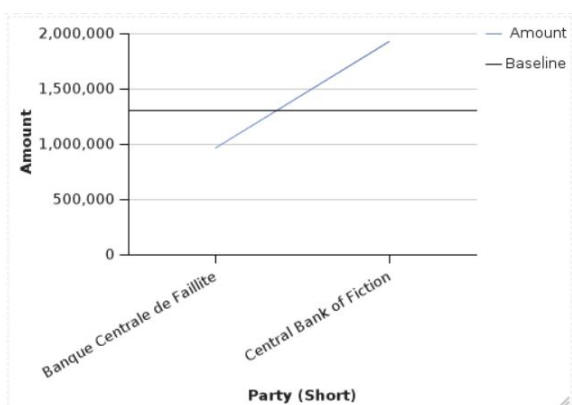


Figure 377 - Adding a baseline to a visualization - Baseline at 1.300.000

- | Specify the necessary criteria for the baseline position.
- | Under “**Baseline Properties**”, type a label for the baseline and specify the line style and colour and the position of the label from the Baseline menu.

🔍 Numeric baseline

|                             |             |
|-----------------------------|-------------|
| <b>CONDITIONAL</b>          |             |
| Render variable             |             |
| <b>DATA</b>                 |             |
| Query                       | Query1      |
| Master detail relationships | Unavailable |
| Properties                  |             |
| <b>GENERAL</b>              |             |
| Line style                  | (Defined)   |
| <b>CHART ANNOTATIONS</b>    |             |
| Numeric baselines           | (Defined)   |

Figure 378 - Adding a baseline to a visualization - Baseline properties

The new baselines appear in the Baselines box.

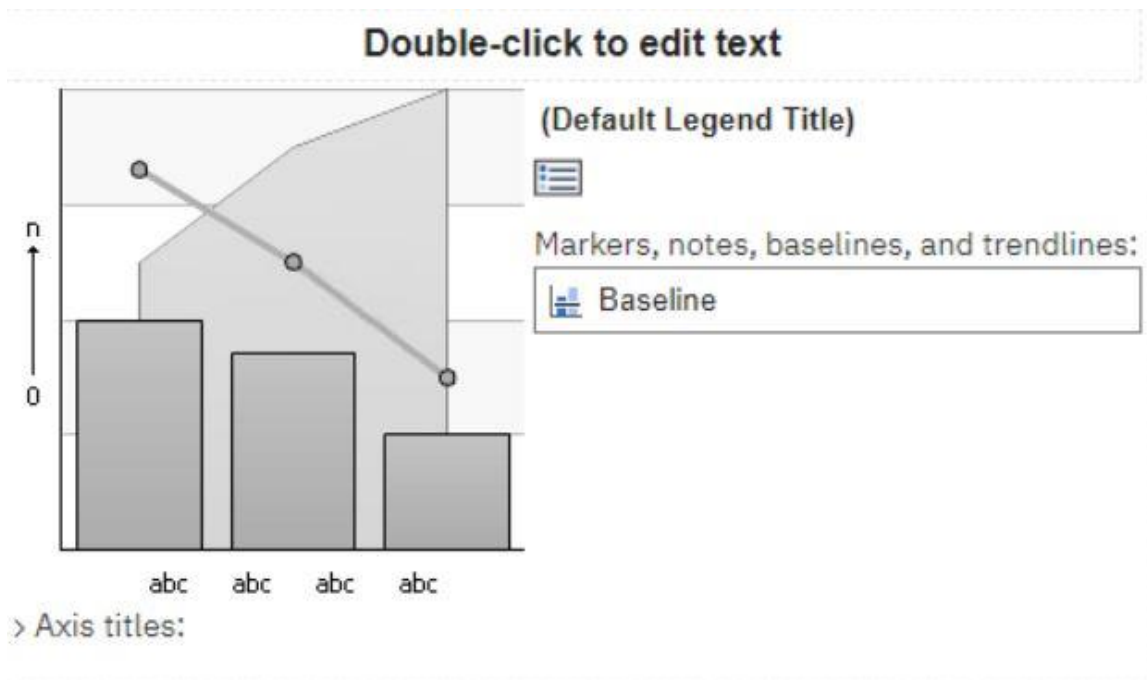


Figure 379 - Adding a baseline to a visualization - Baselines box


To delete a baseline, select the baseline in the Baselines box and click the "Delete" icon (🗑️).

### 7.8.3 Change visualization from one type to another


You can change a visualization from one type (for example, a bar chart) to another type (for example, a line chart).

When you change an existing visualization to a new visualization type, DWH - Reporting keeps the properties from the existing visualization if those properties exist in the new chart type. For example, if you change a pie

visualization to a bar visualization, Reporting maps your visualization palette to the new visualization, but does not map the exploding slices, because the exploding slices property does not exist in a bar visualization.

- | Click a visualization and, from the report object toolbar, click the **“Change chart type”** icon (  ).
- | From the list, select a new chart type.
- | If some chart properties cannot be converted, the **“Chart property changes dialog box”** appears notifying you of the properties that cannot be converted.

## 7.9 Charts

You can use reporting to create many chart types, such as column, bar, area, and line charts. To add a **“Chart”** to your report, you have to click on the **“Toolbox”** (  ) and select **“Visualization”**. In the **“Visualization gallery”** window select **“Charts”** instead of **“11.1 visualization”**.

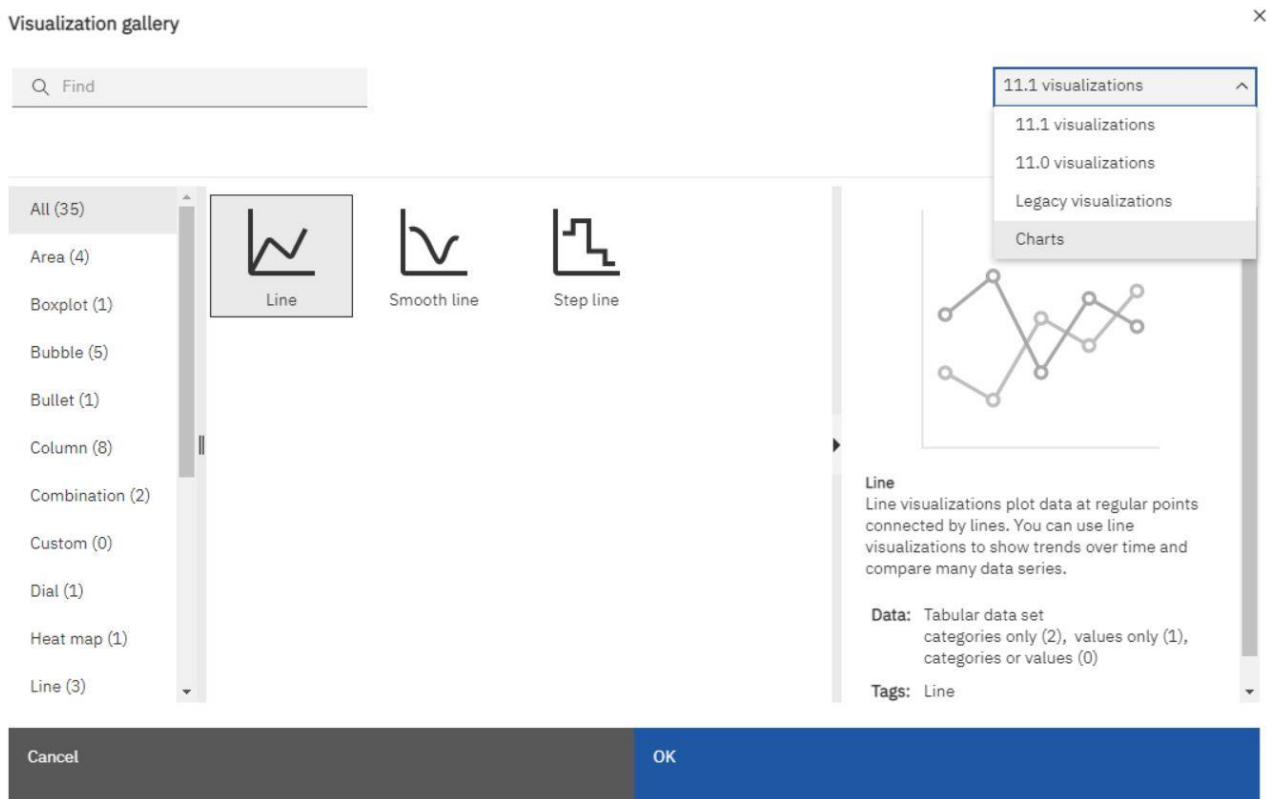



Figure 380 - Charts - Visualization gallery

### 7.9.1 Change Chart from one type to another

You can convert a chart from one type (for example, a bar chart) to another type (for example, a line chart).

When you convert an existing chart to a new chart type, DWH - Reporting keeps the properties from the existing chart if those properties exist in the new chart type. For example, if you convert a pie chart to a bar chart, Reporting maps your chart palette to the new chart, but does not map the exploding slices, because the exploding slices property does not exist in a bar chart.

1 Click a chart and, from the report object toolbar, click the “**Change chart type**” icon (  ).

From the list, select a new chart type.

If some chart properties cannot be converted, the “**Chart property changes dialog box**” appears notifying you of the properties that cannot be converted.

### 7.9.2 Customizing chart properties

After you create a chart, you can customize it by changing its properties.











You select the chart object in DWH – Reporting to view its properties. Some properties are dependent on the existence of other properties.

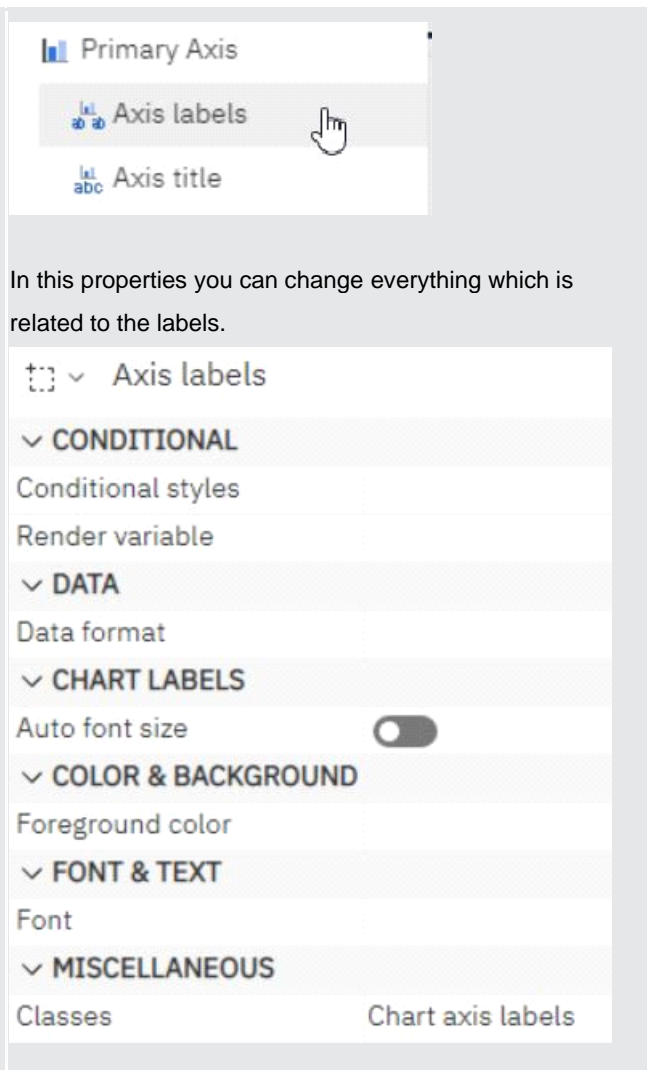
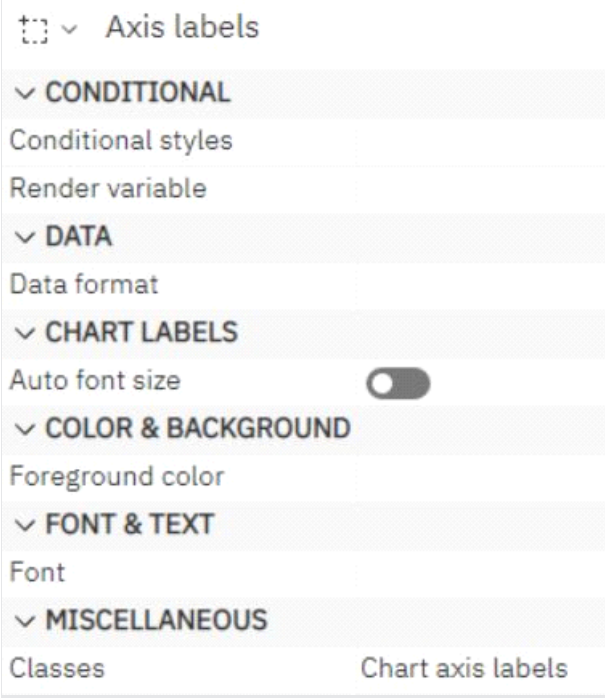
If you are familiar with using conditional variables, you can customize the chart to change its appearance or provide information in response to expressions or conditions.

As you edit the chart properties, Reporting provides you with a preview of your chart, using simulated data. This allows you to view your style changes without running the report. You can disable the chart preview in the options.

The following table shows some of the properties you can change in charts. These properties are available when you select the chart object unless specified otherwise in the Action to perform in the Properties pane column.

| Goal  | Action to perform in the Properties pane  |       |      |          |      |        |      |
|---|---|-------|------|----------|------|--------|------|
| Hide or show the title, subtitle, or footer | Select the chart. Under “ <b>Chart Titles</b> ”, set the “Title”, “Subtitle”, or “Footer” property. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>∨ CHART TITLES</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Title</td> <td style="text-align: right; padding: 2px;">Show</td> </tr> <tr> <td style="padding: 2px;">Subtitle</td> <td style="text-align: right; padding: 2px;">Hide</td> </tr> <tr> <td style="padding: 2px;">Footer</td> <td style="text-align: right; padding: 2px;">Hide</td> </tr> </table> </div> | Title | Show | Subtitle | Hide | Footer | Hide |
| Title                                       | Show  |       |      |          |      |        |      |
| Subtitle                                    | Hide  |       |      |          |      |        |      |
| Footer                                      | Hide  |       |      |          |      |        |      |
| Hide or show the legend                     | Select the chart. Under “ <b>Chart Annotations</b> ”, set the “ <b>Legend</b> ” property.   |       |      |          |      |        |      |











|   |  |
|---|--|
|   | <p>▼ CHART ANNOTATIONS</p> <p>Legend <span style="float: right;">Top right</span></p> <p>Numeric baselines</p> <p>Category baselines</p> <p>Trendlines</p> <p>Markers</p> <p>Notes</p>   |
| <p>Hide or show baselines</p>           | <p>Select the chart. Under <b>“Chart Annotations”</b>, set the <b>“Baselines”</b> property.</p> <p>▼ CHART ANNOTATIONS</p> <p>Legend <span style="float: right;">Top right</span></p> <p>Numeric baselines</p> <p>Category baselines</p> <p>Trendlines</p> <p>Markers</p> <p>Notes</p>   |
| <p>Change the colours of the labels</p> | <p>Select <b>“Select a chart object”</b>.</p> <div style="border: 1px solid #ccc; padding: 5px;"> <p>Select a chart object</p> <ul style="list-style-type: none"> <li> Line</li> <li> Legend</li> <li> Legend title</li> <li> Chart title</li> <li> Primary Axis</li> <li> Axis labels</li> <li> Axis title</li> <li> Category axis</li> <li> Axis labels</li> <li> Axis title</li> </ul> <p>Select a chart object <span style="float: right;">↕ ^</span></p> </div> <p>Then select one of the <b>“Axis labels”</b></p> |

|                         |  |
|-------------------------|--|
|                         |  <p>In this properties you can change everything which is related to the labels.</p>  |
| Hide or show trendlines | Select the chart. Under “ <b>Chart Annotations</b> ”, set the “ <b>Trendlines</b> ”.   |
| Hide or show markers    | Select the chart. Under “ <b>Chart Annotations</b> ”, set the “ <b>Markers</b> ” property.   |
| Hide or show notes      | Select the chart. Under “ <b>Chart Annotations</b> ”, set the “ <b>Notes</b> ” property.   |
| Hide or show the axes   | Select the chart. Click “ <b>Select a chart object</b> ” Select the Y Axis (Primary Axis) or the X Axis (Category Axis).   |




Hide or show the axis title or axis line

Select a chart object

-  Line
-  Legend
-  Legend title
-  Chart title
-  Primary Axis
-  Axis labels
-  Axis title
-  Category axis
-  Axis labels
-  Axis title

Select a chart object ^

In the properties you can hide or show the Axis labels.

 Primary Axis

▼ GENERAL

|                           |           |
|---------------------------|-----------|
| Axis line                 | (Defined) |
| Gridlines                 | (Defined) |
| Minor gridlines           |           |
| Number of minor intervals | 2         |
| Axis range                | Automatic |
| Axis labels               | Show      |
| ▼ CHART TITLES            | Show      |
| Axis title                | Hide      |

Select the axis. Under "**General**", set the Axis Line or Axis Title property.

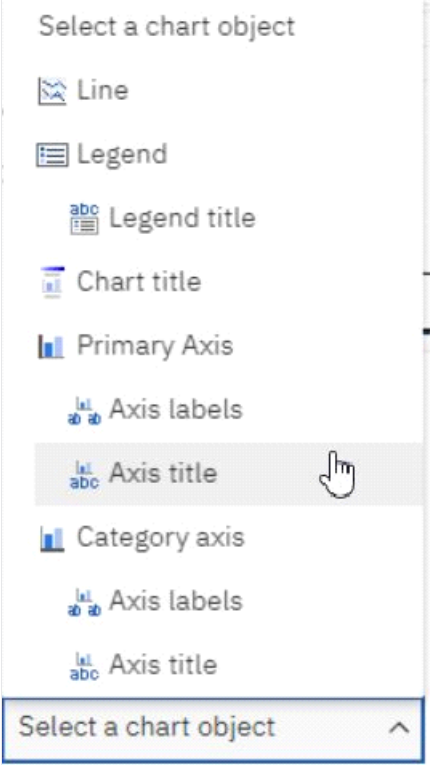
The screenshot shows a software interface for configuring a chart. A dropdown menu titled "Select a chart object" is open, listing various chart components: Line, Legend, Legend title, Chart title, Primary Axis, Axis labels, Axis title, Category axis, and another set of Axis labels and Axis title. Below the menu is a configuration panel for the "Primary Axis".

| GENERAL                   |           |
|---------------------------|-----------|
| Axis line                 | (Defined) |
| Gridlines                 | (Defined) |
| Minor gridlines           |           |
| Number of minor intervals | 2         |
| Axis range                | Automatic |
| Axis labels               | Show      |
| CHART TITLES              |           |
| Axis title                | Show      |











Change an axis title

Select the axis title.

Change axis properties, such as range, scale interval etc.



Select a chart object

-  Line
-  Legend
-  Legend title
-  Chart title
-  Primary Axis
-  Axis labels
-  Axis title
-  Category axis
-  Axis labels
-  Axis title

Select a chart object ^

Under **“General”**, set the **“Default title”** property to **“No”**, and then double-click the axis title and type a new title.

Axis title

▼ **CONDITIONAL**

Conditional styles

Render variable

▼ **DATA**

Query Query1

Master detail relationships Unavailable

Properties

▼ **GENERAL**

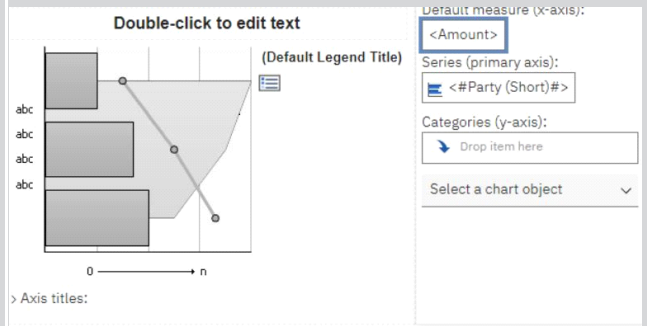
Default title

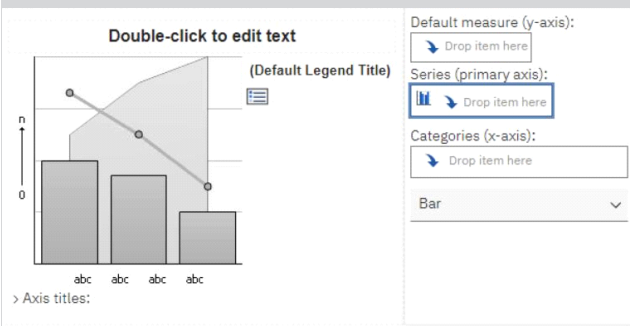
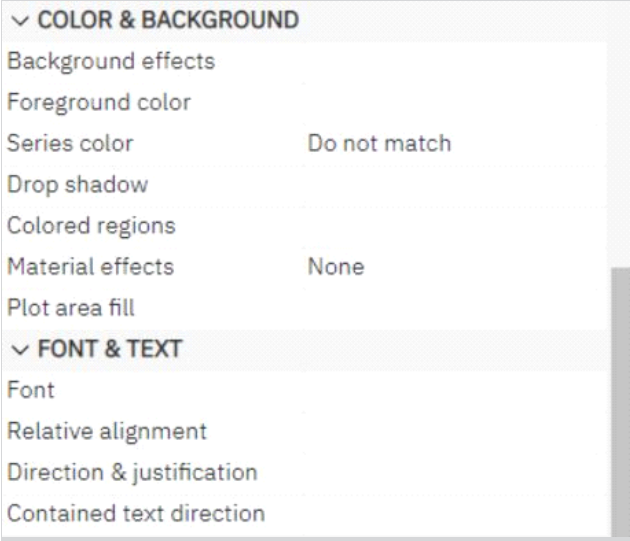
You can use the Properties pane to change the axis title properties, such as font, positioning, colour etc.


Change axis properties, such as range, scale interval etc.

Select the chart. Click **“Select a chart object”** Select the **“Primary axis”**. In the properties under **“General”** select **“Axis range”**.

|                                  |   |
|----------------------------------|---|
|                                  | <p>Primary Axis</p> <p>GENERAL</p> <p>Axis line (Defined)</p> <p>Gridlines (Defined)</p> <p>Minor gridlines</p> <p>Number of minor intervals 2</p> <p>Axis range Automatic</p> <p>Axis labels Show</p> <p>CHART TITLES</p> <p>Axis title Show</p> <p>Set the "Maximum" value, "Minimum" value or "Major interval"</p> <p>Axis Range</p> <p>Maximum</p> <p><input checked="" type="radio"/> Automatic</p> <p><input type="radio"/> Manual:</p> <p>Minimum</p> <p><input checked="" type="radio"/> Automatic</p> <p><input type="radio"/> Manual:</p> <p><input checked="" type="checkbox"/> Include zero</p> <p><input type="checkbox"/> Logarithmic scale</p> <p>Major interval</p> <p><input checked="" type="radio"/> Automatic</p> <p><input type="radio"/> Manual:</p> <p>Cancel Apply OK</p> |
| <p>Hide or show the tooltips</p> | <p>Select the chart. Under "General" in the properties, set the "Tooltips" property.</p>  |

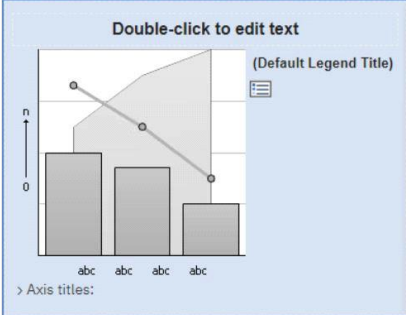
|  |  |
|--|--|
|  | <div> <p>▼ GENERAL</p> <p>Chart orientation: Vertical</p> <p>Depth: 0</p> <p>Combinations: Primary Axis</p> <p>Tooltips: Absolute</p> <p>Matrix rows and columns: None</p> <p>Pagination: Absolute</p> <p>Render page when empty: Cumulative</p> <p>▼ CHART TITLES</p> </div> <p>When you pause your pointer over a data marker in the report output, the corresponding absolute or cumulative value appears in a tooltip.</p> <p>Tooltips are not supported in PDF output.</p> |
| <p>Change the data format</p>  | <p>Select the item you want to change the data format from the chart object.</p> <div>  </div> <p>In the properties under “Data”, set the “Data format” property.</p> <div> <p>▼ Default Measure</p> <p>▼ CONDITIONAL</p> <p>Conditional styles</p> <p>▼ DATA</p> <p>Data format</p> </div>  |
| <p>Change the white space around the chart</p>                                   | <p>Select the chart. Under “Box”, set the “Padding” or “Margin” property.</p>   |
| <p>Change the colour or pattern in the palette for columns, lines, and areas</p> | <p>Select the item “Series” from the chart object.</p>  |

|  |   |
|--|---|
|  |  <p>In the properties under <b>“Colour &amp; Background”</b>, set the palette or conditional palette property.</p>  |
| <p>Change the chart orientation</p>                                  | <p>Select the chart. In the Properties pane, under <b>“General”</b> select Chart Orientation, for Vertical or Horizontal presentation.</p>  |
| <p>Change the default colour or font for all chart objects</p>       | <p>Select the chart. Under <b>“Colour &amp; Background”</b>, set the “Background effects”, <b>“Foreground colour”</b>, or fill effects property.</p>  <p><b>▼ COLOR &amp; BACKGROUND</b><br/>         Background effects<br/>         Foreground color<br/>         Series color Do not match<br/>         Drop shadow<br/>         Colored regions<br/>         Material effects None<br/>         Plot area fill<br/> <b>▼ FONT &amp; TEXT</b><br/>         Font<br/>         Relative alignment<br/>         Direction &amp; justification<br/>         Contained text direction</p> |
| <p>Override the default font or colour for axes and chart values</p> | <p>Click <b>“Select a chart object”</b> then select the <b>“Axis labels”</b> or <b>“Axis title”</b> to set the <b>“Font”</b>, <b>“Foreground colour”</b>, or fill effects property.</p>   |



**Double-click**

Double-click to




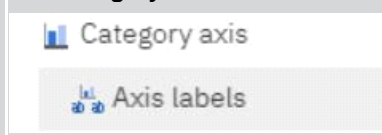
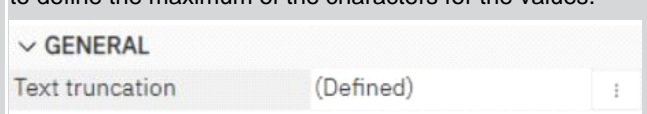
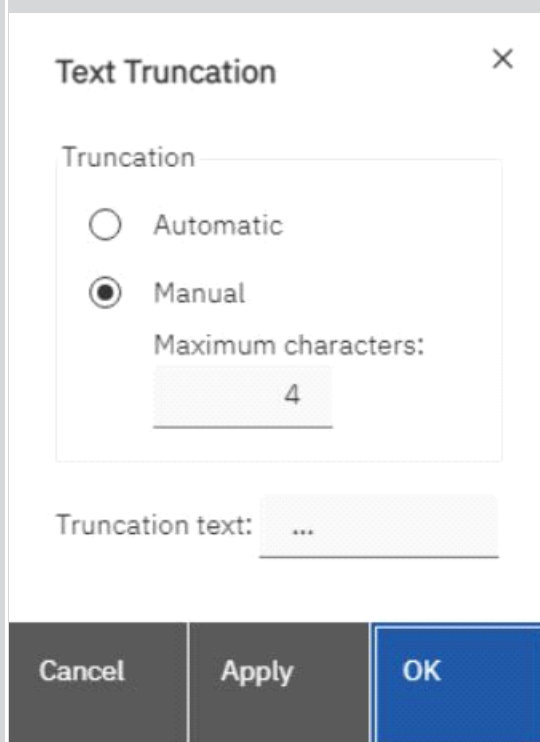
Select a chart object

- Bar
- Legend
- Legend title
- Chart title
- Primary Axis
- Axis labels
- Axis title
- Category axis
- Axis labels
- Axis title

Select a chart object ^

Axis labels
📌

| CONDITIONAL        |                   |
|--------------------|-------------------|
| Conditional styles |                   |
| Render variable    |                   |
| DATA               |                   |
| Data format        |                   |
| CHART LABELS       |                   |
| Auto font size     | No                |
| COLOR & BACKGROUND |                   |
| Foreground color   |                   |
| FONT & TEXT        |                   |
| Font               |                   |
| MISCELLANEOUS      |                   |
| Classes            | Chart axis labels |




|   |  |
|---|--|
| <p>Insert a background image or watermark in the chart body.</p>                          | <p>Select the chart object.</p> <p>In the properties under “<b>Colour &amp; Background</b>” select the “<b>Background effects</b>” to set the image.</p>   |
| <p>Go to another report</p>   | <p>Select the chart. Under “<b>Data</b>”, set the “<b>Drill-through definitions</b>” property.</p>   |
| <p>Specify which labels and values to use when generating the text shown on the chart</p> | <p>Select the chart. Click “<b>Select a chart object</b>” then select the “<b>Category axis</b>” “<b>Axis labels</b>”.</p>  <p>In the properties under “<b>General</b>” select “<b>Text truncation</b>” to define the maximum of the characters for the values.</p>   <p>When you show all the labels and values on some chart types, such as scatter charts, bubble charts, and polar charts, the text shown might be too long</p> |

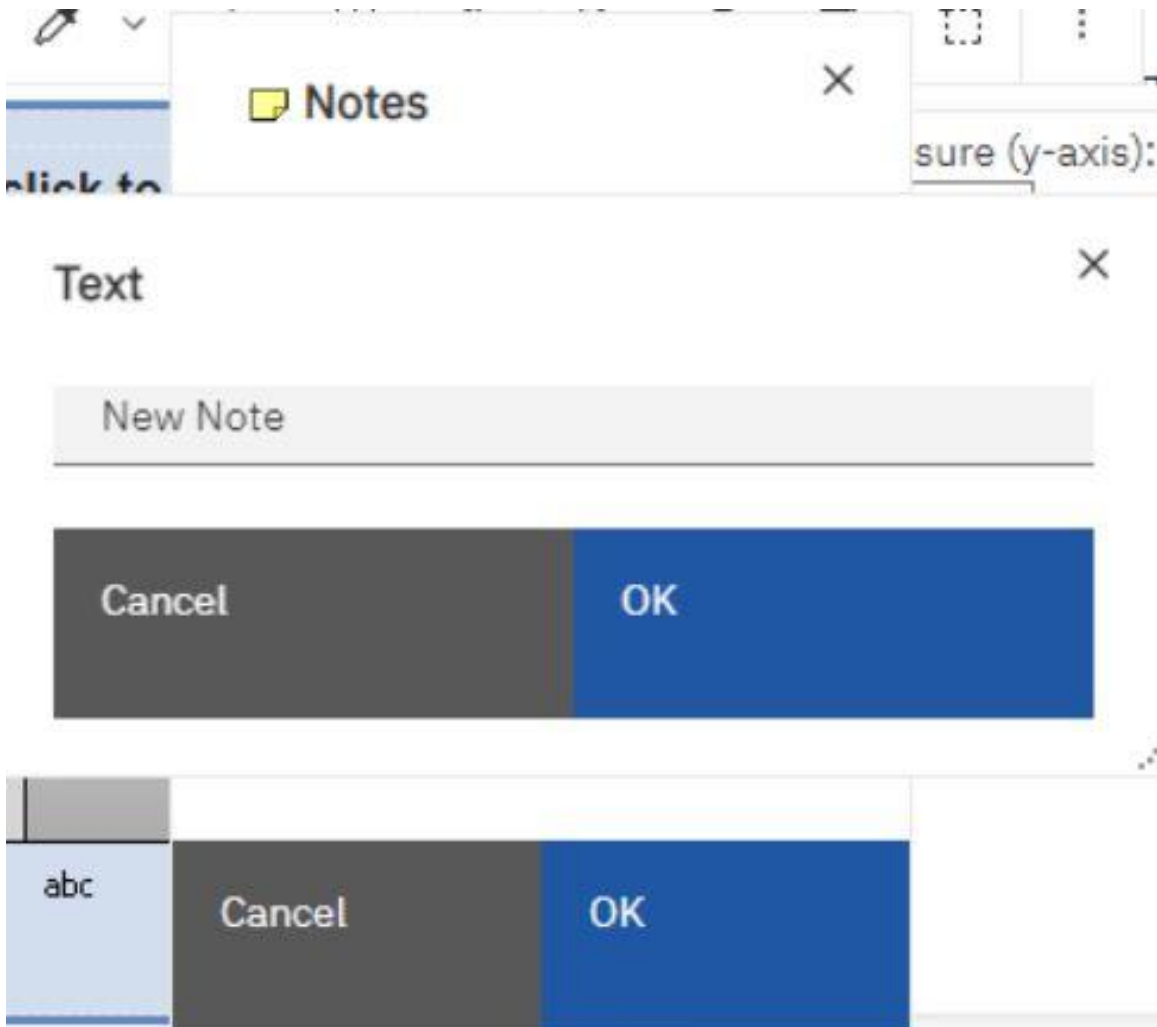


**Table 101 - Customizing chart properties**

### 7.9.3 Adding a note to a chart

You can add and position multiple notes on your chart.

- | Select the chart object.
- | In the Properties pane (  Properties ), under “**Chart Annotations**”, double-click the “**Notes**” property.
- | Click the “**New**” icon (  ).
- | Type the note text in the “**Text box**” and click “**OK**”.
- | To delete a note, click the note and click the “**Delete**” button (  ). To move a note up or down in the list, click the up or down arrows.



**Figure 381 - Adding a note to a chart**

- | In the “Notes dialog box”, click “OK”.



- I Only for Current Default Chart:
- I To position the note, do the following :
  - Click the note icon (  ) in the chart.
  - In the Properties pane, under “**Positioning**”, double-click the “**Position**” property.
  - To align the note horizontally, click the left, middle, or right alignment button.
  - To align the note vertically, click the top, middle, or bottom alignment button.
  - To set the margins around the chart body, type margin values and choose margin units.
  - To display the note at a set distance from the sides of the chart area, from the “**Anchor**” list, click “**Relative to chart**”.
  - To display the note at a set distance from the sides of the chart body, from the “**Anchor**” list, click “**Relative to chart body**”.
  - To display the note at a set distance from a data item, from the “**Anchor**” list, click “**Report expression**”, click the three dots button beside “**Expression**”, and enter an expression in the “**Report expression dialog box**”.
  - To edit the text, double-click the text next to the note object (  ) in the chart.



Figure 382 - Adding a note to a chart - Position the node / Expression

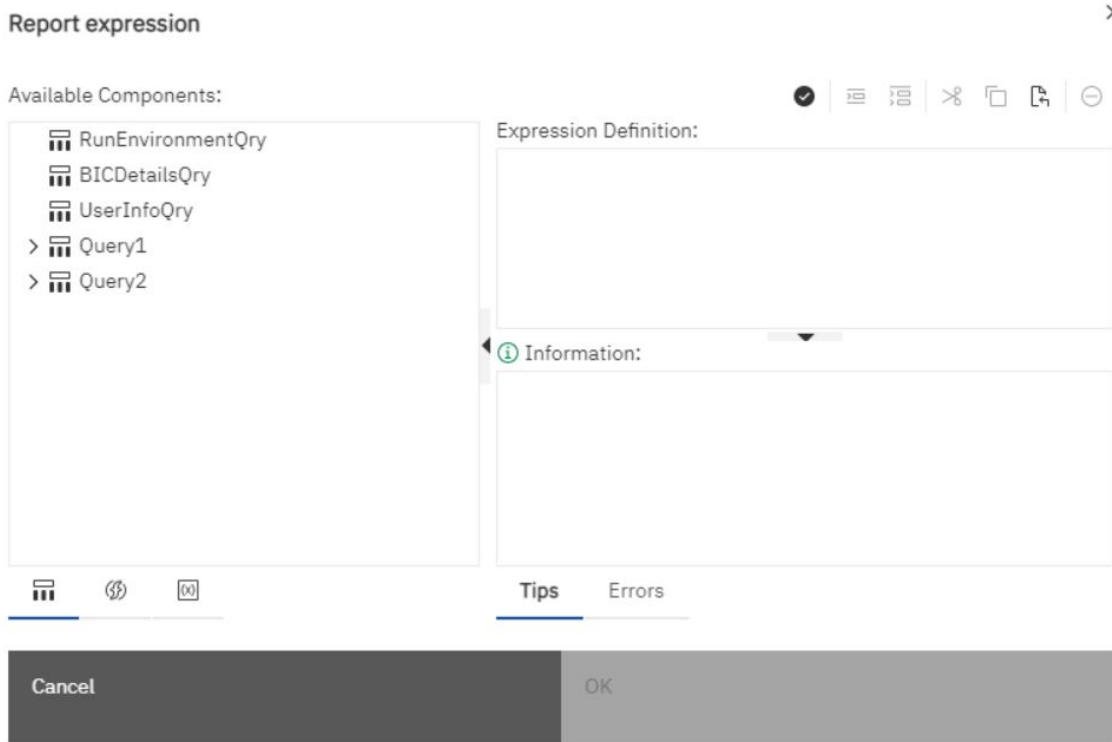



Figure 383 - Adding a note to a chart - Report expression

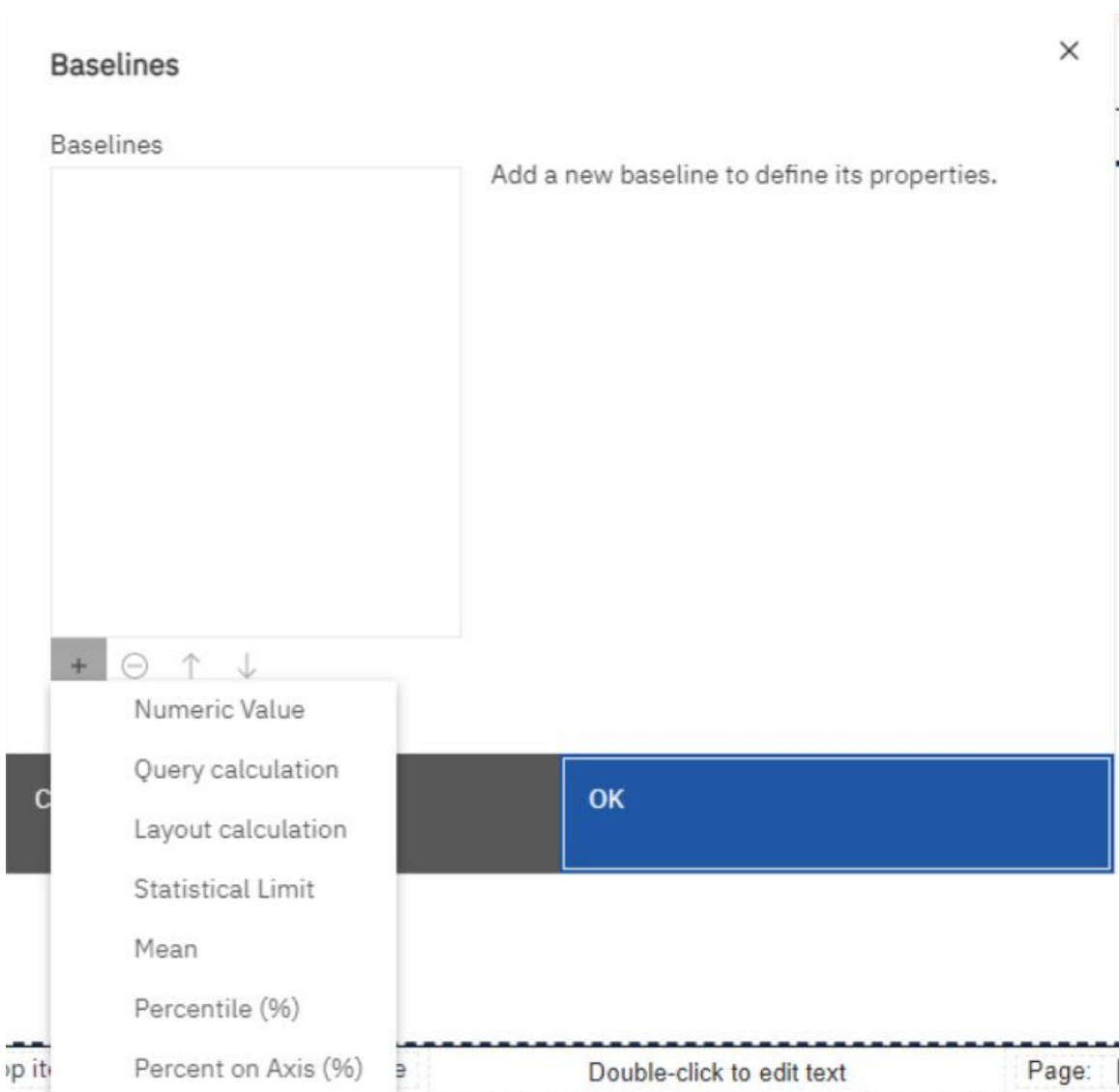
### 7.9.4 Adding a baseline to a chart

In charts, you can define baselines by values on the numeric axis or the category axis.




- I Click the chart object.
- I Depending on your chart and the type of baseline you want to add, in the Properties pane, under “**Chart Annotations**”, double-click the “**Numeric baselines**” or “**Category baselines**” property.

| CHART ANNOTATIONS  |           |
|--------------------|-----------|
| Legend             | Top right |
| Numeric baselines  |           |
| Category baselines |           |

- I Click the “**New**” icon (  ) and choose the type of baseline from the list.



**Figure 384 - Adding a baseline to a chart**

- | Specify the necessary criteria for the baseline position
- | Under “**Baseline Properties**”, type a label for the baseline and specify the line style.
- | To remove the baseline from the legend, delete the label.
- | If you add more than one baseline, specify their order using the up and down arrows.
- | The new baselines appear in the markers, notes, baselines, and trendlines box.
- | To change the label that appears next to the baseline, under the markers, notes, baselines, and trendlines box, double-click the placeholder text next to the “**Baseline**” icon (  ) numeric and type your text.
- | To change the line style, select the chart and in the Properties pane, under “**Chart Annotations**”, double-click the “**Baselines**”, “**Numeric baselines**”, or “**Category baselines**” property.
- | To delete a baseline, select the “**Baseline**” icon (  ) and click the “**Delete**” button (  ).

### 7.9.5 Adding a marker to a chart

Markers are symbols that you add to a chart to designate points of significance that can help you analyse or understand the data.

For example, you might want to add a marker to designate the time when a significant event happened, such as the date when a new product was launched.

You can add a marker to combination, progressive column, pareto, scatter, and bubble charts.

When you define the position of the marker, you define the X- and Y-axes coordinates for the placement of the symbol. You can position the marker in the chart using the following options.

| Option              | Position  |
|---------------------|---|
| Numeric Value       | Uses a static numeric value.  |
| Query Calculation   | Uses a query calculation from the same query or from a different query.   |
| Layout Calculation  | Uses a layout calculation.  |
| Statistical Minimum | <p>Uses the following expression:</p> $25\text{th percentile value} - 1.5 * (75\text{th percentile value} - 25\text{th percentile value})$ <p>For example, if 2.5 is the 25th percentile and 7.5 is the 75th percentile, the statistical minimum is -5 <math>[2.5 - 1.5(5) = -5]</math>.</p> <p>Statistical minimum uses percentiles to determine values, and might not always appear in the chart if the values are off the axis.</p>  |
| Statistical Maximum | <p>Uses the following expression:</p> $75\text{th percentile value} + 1.5 * (75\text{th percentile value} - 25\text{th percentile value})$ <p>For example, if 2.5 is the 25th percentile and 7.5 is the 75th percentile, the statistical maximum is 15 <math>[7.5 + 1.5(5) = 15]</math>. Statistical maximum uses percentiles to determine values, so the marker might not always appear on the chart if its value is off the axis.</p> |
| Mean                | Uses the statistical mean plus or minus a number of standard deviations based on all charted data values on the specified axis.   |
| Percentile          | Uses a specified percentile.  |
| Percent on Axis     | Uses a percentage of the maximum axis value.  |

**Table 102 - Adding a marker to a chart**

If you apply more than one marker, you can specify the order in which they should be drawn when the report runs. If you have two markers with the same coordinates, the first one in the list is drawn first and the next one is drawn after the first.

To add a marker in a current default chart do the following:

1. Select the chart object.
2. In the Properties pane, under “**Chart Annotations**”, double-click the “**Markers**” property.
3. Click the “**New**” icon ( + ), and then set the marker properties
4. In the Based on box, select the chart object that will determine the marker position.
5. In the “**Numeric position**” box, specify how you want to define the position on the numeric (Y) ax-is.
6. In the “**Category position**” box, specify how you want to define the position on the category (X) axis.
7. In the marker “**Label**” box, type the label that you want to give to the marker.
8. In the marker “**Size**” box, specify the size of the marker symbol.
9. To specify the colour, fill, and shape of the marker symbol, click the “**Colour and style**” box.
10. If you add more than one marker, specify their order by using the up and down arrows.
11. The new markers appear in the “**markers, notes, and baselines box**”.

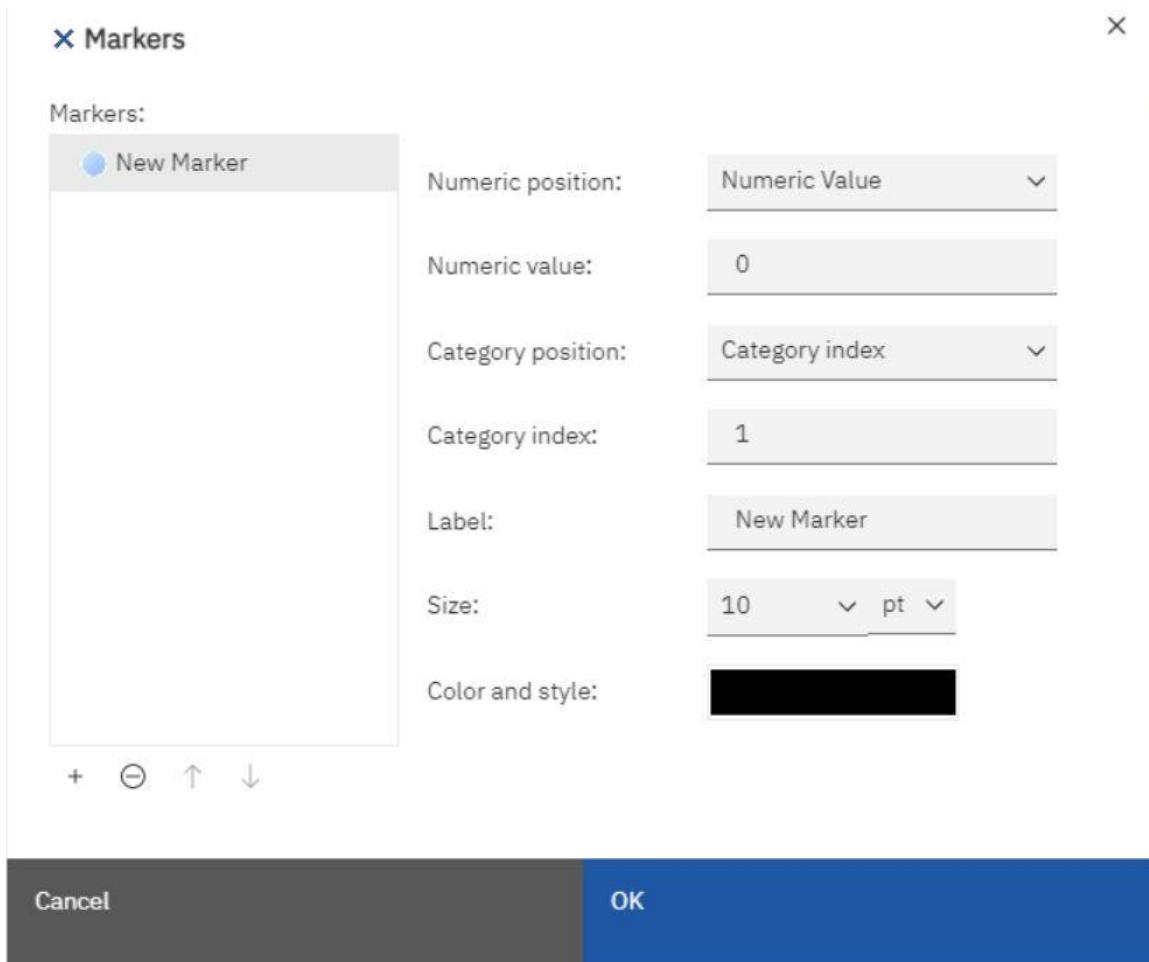


Figure 385 - Adding a marker to a chart

## 7.9.6 Creating a drill-down Chart

If you use a dimensionally-modelled data source, you can create a chart that allows you to drill down to lower-level data or drill up to higher-level data.

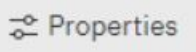

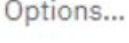
Drilling up and down allows you to view more general or more detailed information on your data within a predefined dimensional hierarchy.

This is an example of a dimensional hierarchy:

All Years - Year - Quarter - Month

Before you begin, ensure that you are using a dimensionally-modelled data source.

1 Open a chart that uses a dimensionally-modelled data source.

1 Click the “**Show properties**” icon (  ), click the “**More**” icon (  ), click “**Options**” (  ), and then, in the “Edit” section, click on “**Enable drill-up or drill-down links**”.

By default, the system determines which items can be drilled on based on the dimensional structure.

The chart generates links for any item that can be drilled down on.

You can drill down or drill up by right-clicking and choosing the action from the context menu. The menu items are unavailable if an item cannot be drilled up or down on.

## 7.10 Adding prompts to filter data

You can add prompts to a report to add interactivity for users. Prompts act as questions that help users to customize the information in a report to suit their own needs. For example, you create a prompt so that users can select a product type. Only products belonging to the selected product type are retrieved and shown in the report.

Prompts are composed of three interrelated components: parameters, prompt controls, and parameter values. Parameters are based on parameterized filters and form the questions to ask users. Prompt controls provide the user interface in which the questions are asked. Parameter values provide the answers to the questions.

The Reportstudio provides several ways to create prompts.

- 1 build your own prompt and prompt page
- 1 create a parameter to produce a prompt
- 1 insert prompts directly into the report page

In dimensional reporting, you can also define prompts using context filters.

If you include reports from different packages in an interactive dashboard that uses global filters, ensure that you use the same parameter name for the prompt in all the reports. You can also use context filters, also known as slicer filters, to focus the data in your report.

### Syntax of Prompt Expressions

Prompt expressions use the following syntax, where p represents the parameter name.

You can also use these expressions to create parameterized data items that you can then use in master detail relationships.

The type of expression you use depends on whether you have chosen relational or dimensional reporting style. For more information about reporting styles, see Relational and dimensional reporting styles.

| Relational: Detail Filter Expressions  | Dimensional: Context (Slicer) or Edge Expressions  |
|--|--|
| <p><code>[data item] = ?p?</code></p> <p>for single-select prompts and master detail relationships</p> | <p><code>[level or hierarchy]-&gt;?p?</code></p> <p>For single-select member prompts and master detail relationships</p>   |
| <p><code>[data item] in ?p?</code></p> <p>for multi-select prompts</p>                                 | <p><code>set([level or hierarchy]-&gt;?p?)</code></p> <p>For multi-select member prompts</p> <p><code>filter ([set], [property expression] = ?p? )</code></p> <p>For single-select value prompts and master detail relationships</p> <p>A property expression is an expression that is assigned to a property to enable dynamic update of the property when the report runs.</p> <p><code>filter ([set], [property expression] IN ?p? )</code></p> <p>For multi-select value prompts</p> <p>A property expression is an expression that is assigned to a property to enable dynamic update of the property when the report runs.</p> |

**Table 103 - Adding prompts to filter data**

## 7.10.1 Build your own Prompt and Prompt page

Create your own prompt and prompt page to control how they appear in a report.

### Procedure

- In the navigation menu, click **“Report”** and then click **“Prompt pages”**.



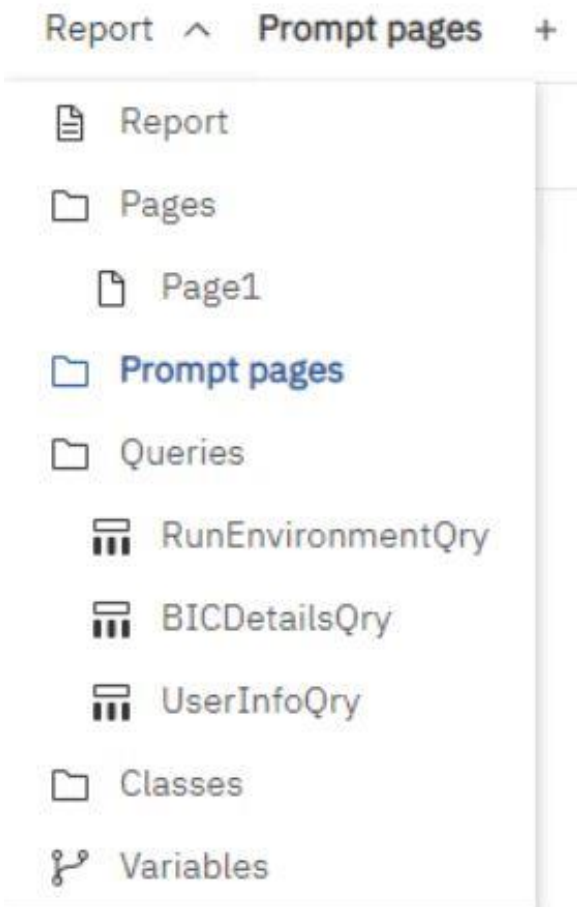




Figure 386 - Build your own Prompt and Prompt page

- I Click the “**Toolbox**” icon (  ), and drag “**Page**” to the “**Prompt pages box**”.
- I Double-click the page you just created.
- I Click the “**Toolbox**” icon (  ), expand “**Prompting**”, and then drag one of the following prompt controls to the prompt page.

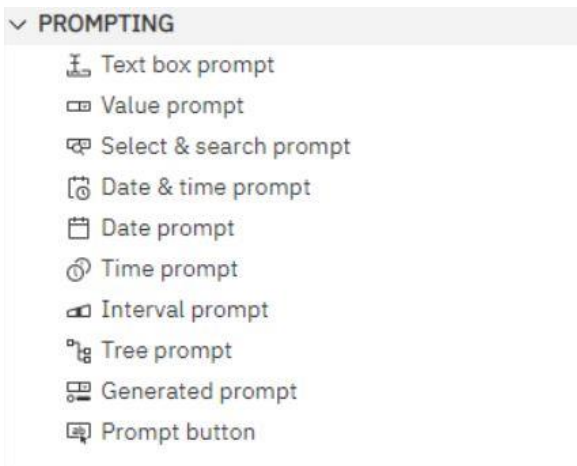


Figure 387 - Build your own Prompt and Prompt page - Prompting

| Prompt control         | Description  |
|------------------------|--|
| Text box prompt        | Retrieves data based on a value that user's type. Use this control when users know exactly what value they want to enter, such as a name or account number.  |
| Value prompt           | Retrieves data based on values that users select from a list. Use this control to show a list of possible values from which users can choose. The maximum number of items that can appear in a list is 5000.   |
| Select & search prompt | Retrieves values based on search criteria that users specify. Data is then retrieved based on values users select from the search results. Use this control instead of a value prompt if the list of values is very long, which can slow down performance. Users have the option of performing a case sensitive or case insensitive search. A case sensitive search is faster, while a case insensitive search usually returns more values. You cannot use this control if you are working with SAP BW data sources. |
| Date prompt            | Retrieves data based on a date that users select. Use this control to filter a date column. Users can retrieve data for a specific day, a set of days, or a range of days.   |
| Time prompt            | Retrieves data based on a time that users select. Use this control to restrict a report to a particular time or time range. For example, users can see how many orders are received after business hours. Users can then use this information to determine the number of staff needed to work after hours.   |

|                    |  |
|--------------------|--|
| Date & time prompt | Retrieves data based on a date and time that users select. Use this control to filter a datetime or timestamp column. This control is useful for specifying ranges. For example, users can retrieve all orders received from Monday at 12:00 a.m. to Friday at 5:00 p.m.   |
| Interval prompt    | Retrieves data based on a time interval that users specify. Use this control to retrieve data that is related to the passage of time. For example, users can retrieve a list of products that were returned 30 or more days after they were purchased.   |
| Tree prompt        | Retrieves data based on values that users select from a list. Values are organized hierarchically. This control is useful when you are working with dimensional data sources. Data is shown from the top of a dimension hierarchy to the most detailed member, and users can choose the level of detail they want to view in the report. For more information about tree prompts, see Control the Data That Appears in a Tree Prompt. Tree prompts let you page through large numbers of prompt values with a More link at the bottom of the tree. |
| Generated prompt   | Selects a prompt control based on the data type of the data item. This control acts like a placeholder. When users run the report, the control is replaced by the appropriate prompt control. For example, if users are prompted for date values, the control is replaced by a date & time prompt.   |

**Table 104 - Build your own Prompt and Prompt page**

The Prompt Wizard dialog box appears.

- I If you are creating a text box, date, time, date and time, interval, or generated prompt, do the following:
  - Create a new parameter for the prompt or use an existing or global parameter.
  - Click **“Next”**.

### Prompt Wizard - Date prompt ✕

**Choose Parameter**  
Create a new parameter or use an existing parameter from a previously authored expression.

---

Create a new parameter

Parameter1

Use existing parameter

▼

Use global parameter

▼

Cancel

< Back

Next >

Finish

**Figure 388 - Build your own Prompt and Prompt page - Prompt Wizard dialog box**

- If you created a new parameter, define the expression by selecting a data item from the package and the operator to use.
- Make the prompt optional clicking the left side of the **“Make the filter optional”** check box.

Prompt Wizard - Date prompt



Create Filter

Choose the package item that will be used to filter the report.

Create a parameterized filter

Package item:

Operator:

Parameter:

Make the filter optional

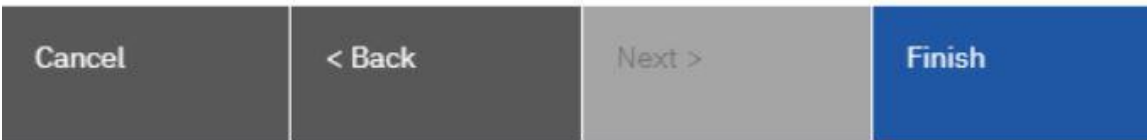
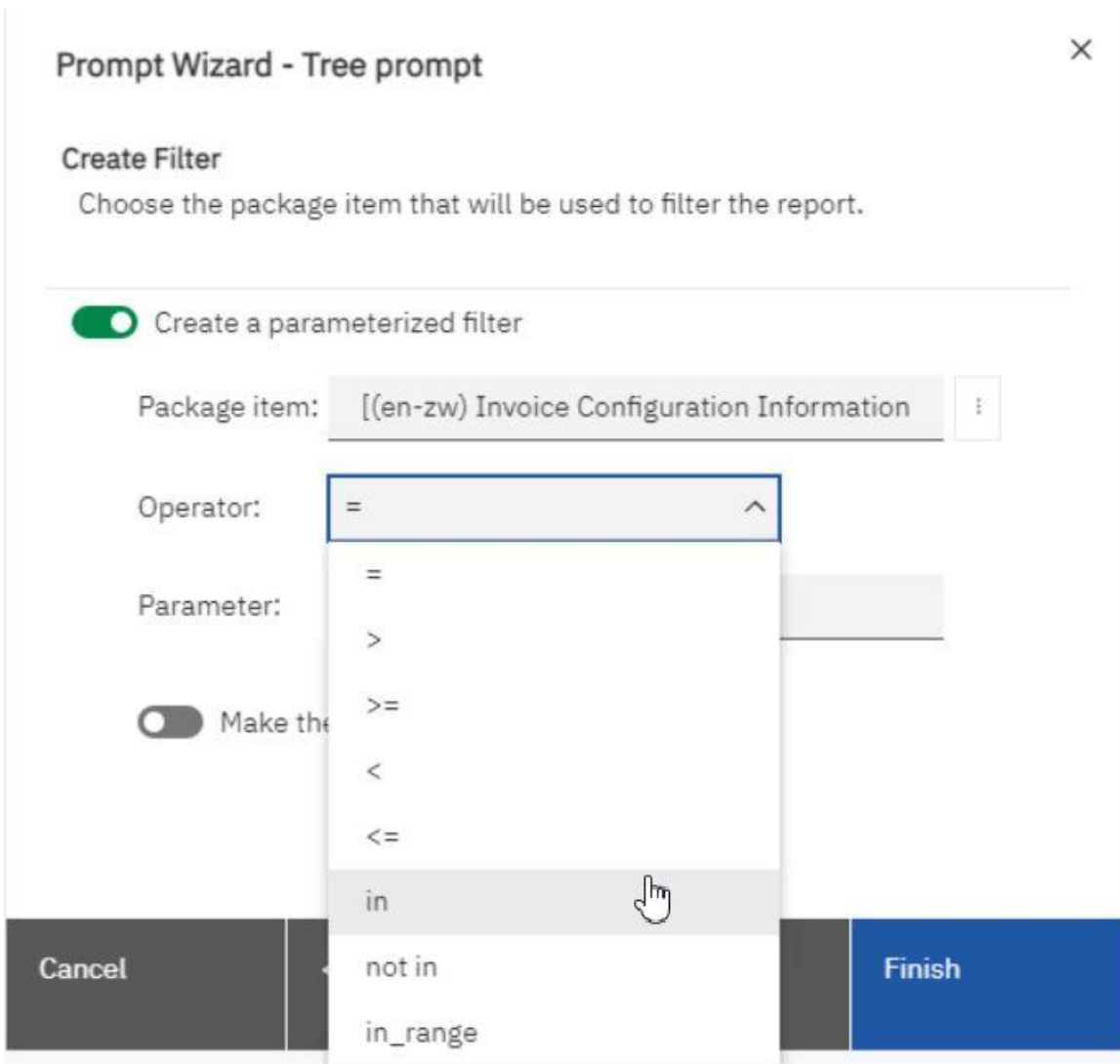


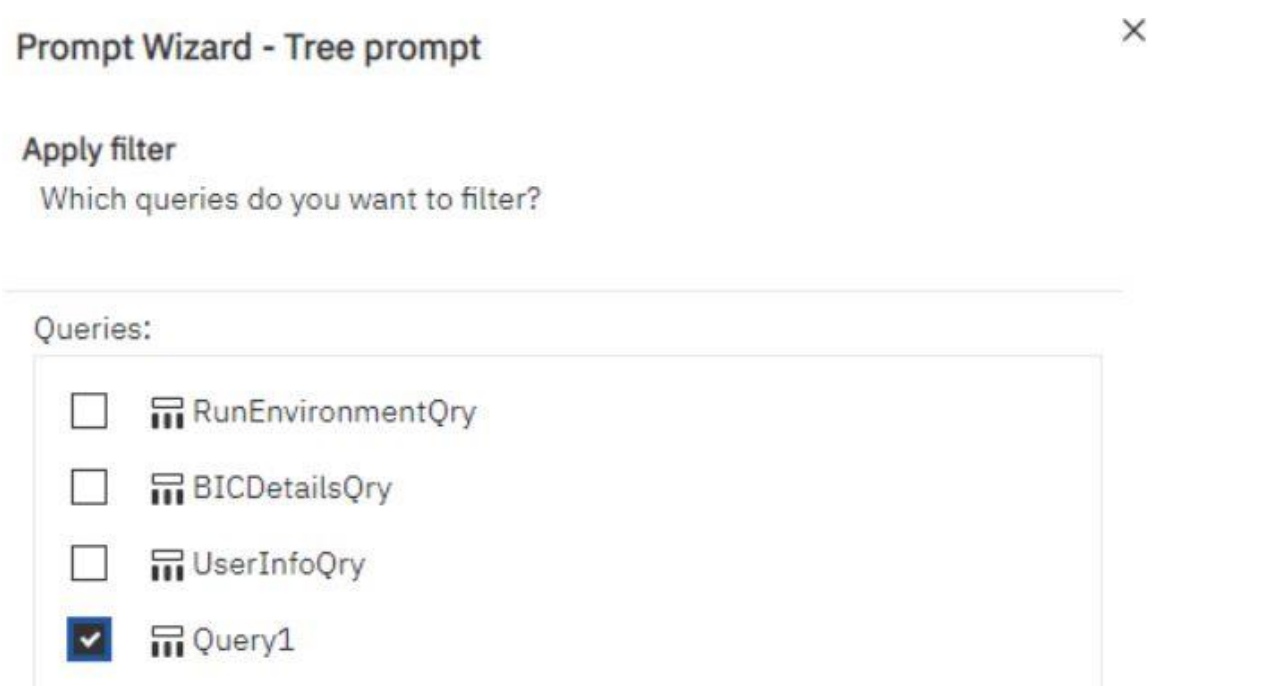
Figure 389 - Build your own Prompt and Prompt page - Prompt Wizard dialog box - Make the filter optional

- I If you are creating a “Value”, “Select & search”, or “Tree” prompt, do the following:
  - Create a new parameter for the prompt or use an existing or global parameter.
  - Click “Next”.
  - If you created a new parameter and you want to use the parameter to filter data, select the “**Create a parameterized filter**” check box and define the expression by selecting a data item from the package and the operator to use.
    - If you are creating a tree prompt, you must choose “in” in the “Operator” box.



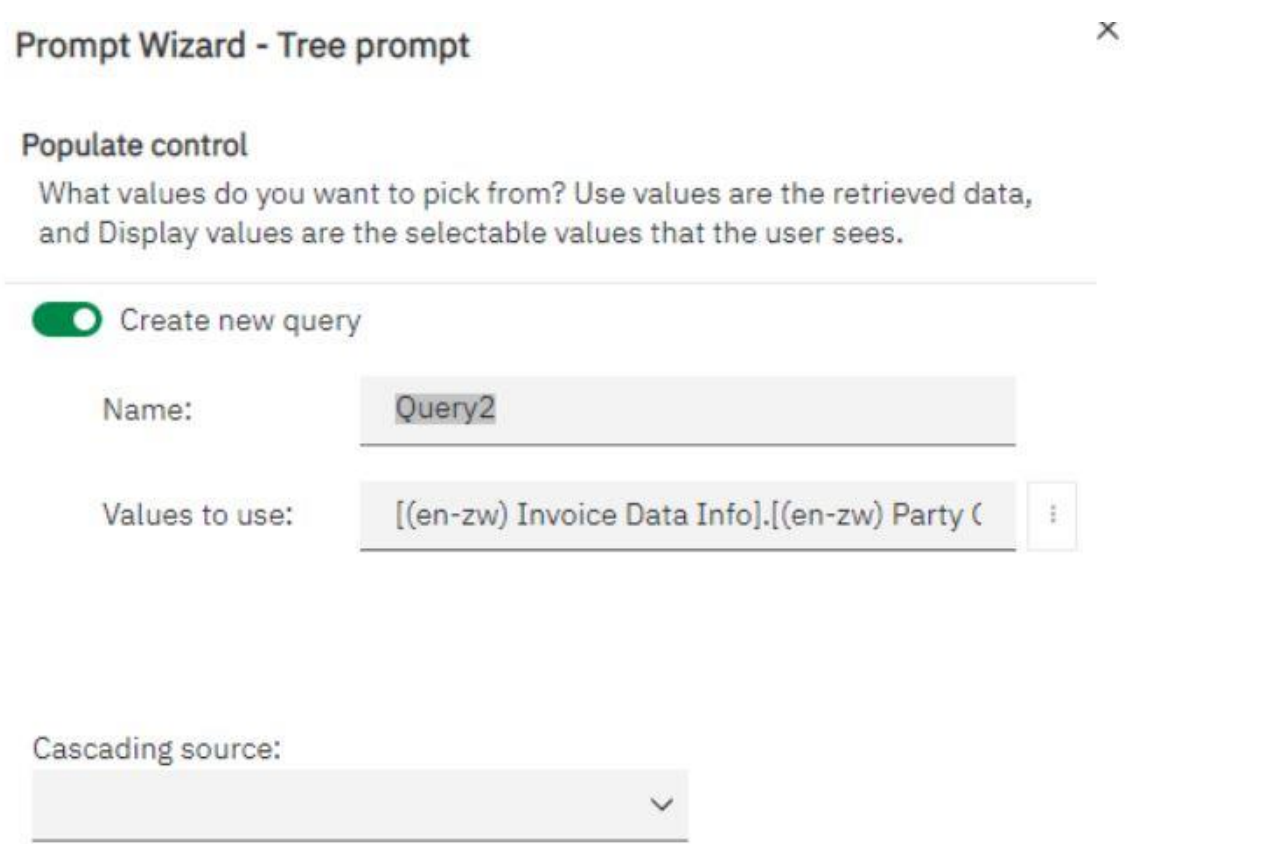
**Figure 390 - Build your own Prompt and Prompt page - Prompt Wizard - Tree prompt**

- You can also use a parameter to provide a value for a layout calculation, such as showing a user's name in the report. When the report is run, you can use a parameter to prompt the user to type his name and have it appear in the report.
  - Make the prompt optional by clicking the left side of the “Make the filter optional” check box.
- Click **“Next”**.
  - If you created a parameterized filter and you have more than one query defined in the report, select the check box for the query on which to filter and click **“Next”**.




**Figure 391 - Build your own Prompt and Prompt page - Prompt Wizard - Tree prompt - Apply filter**

- Select the **“Create new query”** check box to create the query that will be used to build the list of data values shown when the report is run.



**Figure 392 - Build your own Prompt and Prompt page - Prompt Wizard - Tree prompt - Create new query**

- Do not create a new query if you want to link the prompt to an existing query or if you intend to create the query at a later time.
- Click the tree dots button beside Values to use and click the data item on which to prompt.

I To choose a data item that is different than what users will see when they are prompted, click the tree dots button  beside “**Values to display**” and click the data item.

- To create a cascading prompt, in the “**Cascading source**” box, click the parameter that represents the cascade source.

I Click “**Finish**”.

The prompt control is added to the prompt page. A prompt page is like a report page. You can insert graphics and text and apply formatting.

You can also modify the properties of the prompt control by clicking it and making changes in the Properties pane.

### 7.10.2 Create a Prompt Directly in a Report Page

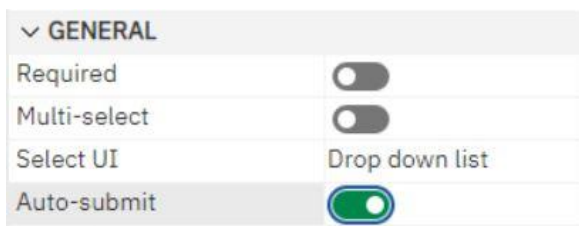
You can add prompt controls directly in a report page instead of creating a prompt page.

Prompt controls that are added to report pages will not appear in the following:

- I saved reports
- I PDF reports
- I scheduled reports

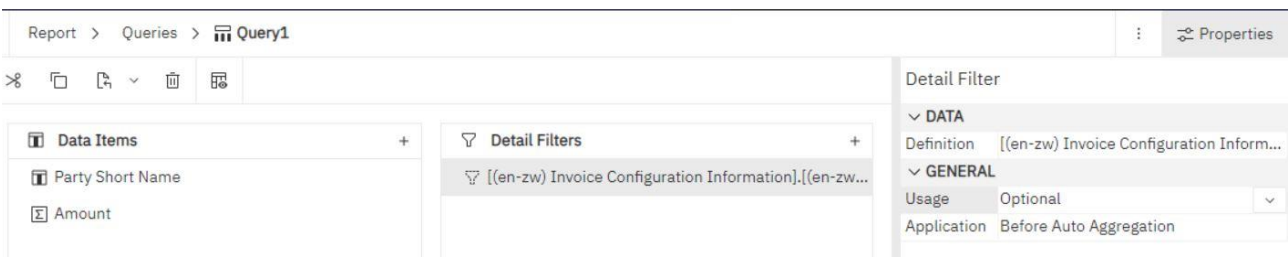
Prompt controls are interactive. They are used to satisfy parameter values before running a report. As a result, prompt controls added to a report page only appear when you run the report in HTML format. When you run a report in HTML format, users select which values they want to see, and the report is refreshed, producing a new report.

For the previously listed non-interactive reports, prompt parameter values must be collected and satisfied before the report is run. If you wish to create a prompt directly to the prompt page, make sure to set the “**Required**” under the “**General**” properties to “**No**”, the “**Auto-submit**” to “**Yes**” and the “**Usage**” of the “**Detail Filters**” to “**Optional**”.




To set the “**Detail Filters**” to “**Optional**” select the query that renders the results, click on the filter and set it up in the properties.

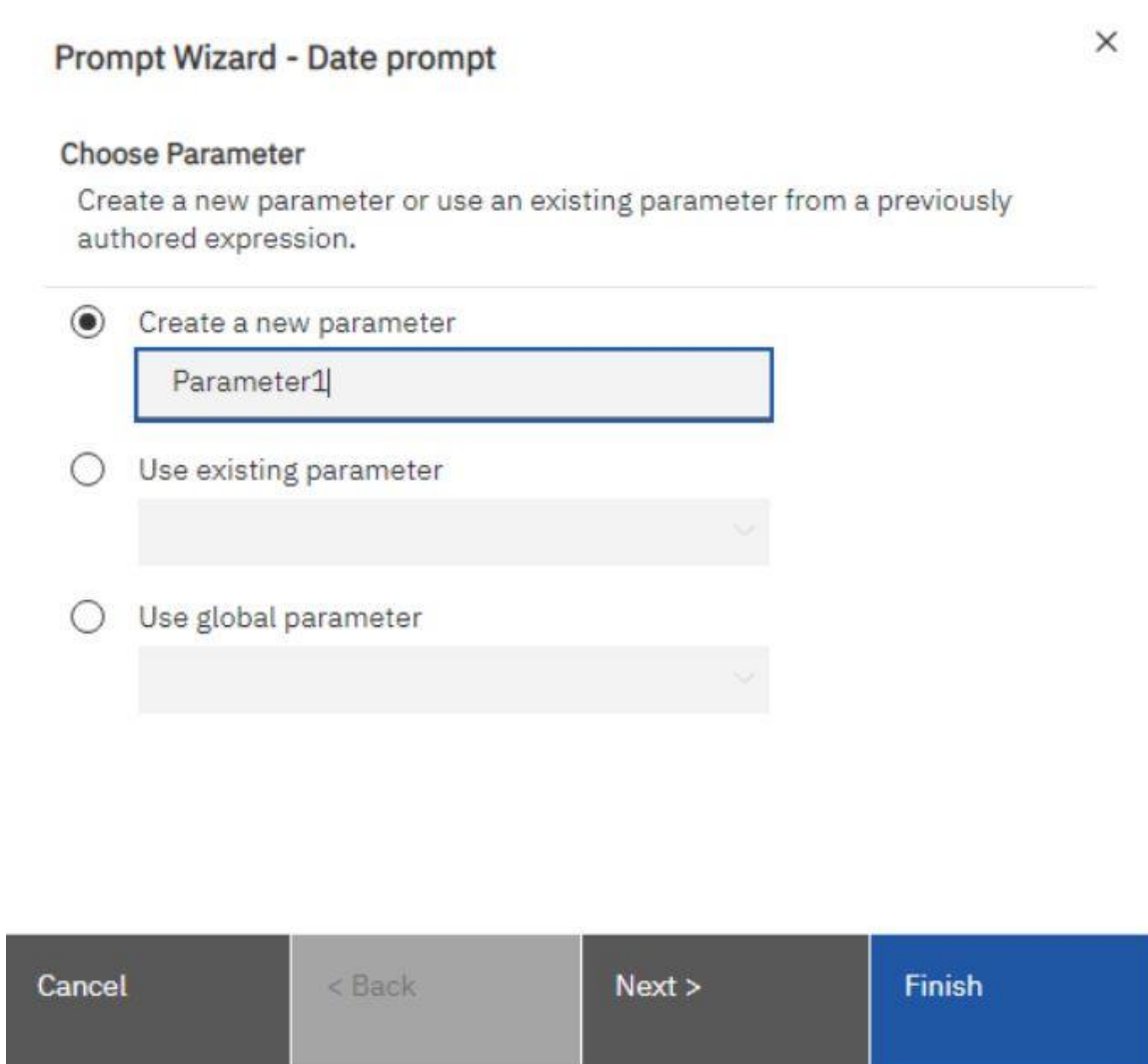




**Figure 393 - Create a Prompt Directly in a Report Page**

For inserting a prompt in your report page do the following:

- 1 Click the “**Toolbox**” icon (  ), drag a prompt control to the report.  
The Prompt Wizard dialog box appears.



**Figure 394 - Create a Prompt Directly in a Report Page - Prompt Wizard - Date prompt**

- 1 Provide the information necessary to create the prompt.

Make the prompt optional by clicking the left side of the **“Make the filter optional”** check box. Otherwise, when you run the report for the first time, the prompt appears in a generated prompt page rather than in the report page. Alternatively, you can specify a default selection for the prompt.

Prompt Wizard - Date prompt ✕

Create Filter

Choose the package item that will be used to filter the report.

Create a parameterized filter

Package item:  ⋮

Operator:  ▼

Parameter:

Make the filter optional

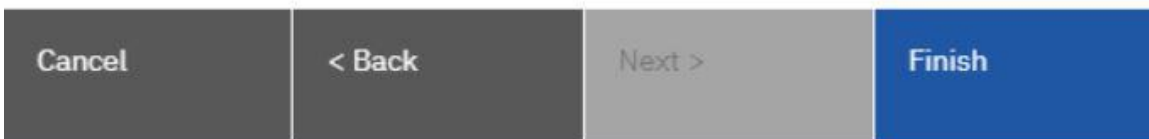




Figure 395 - Create a Prompt Directly in a Report Page - Prompt Wizard - Date prompt - Make the filter optional

- | In the work area, click the prompt.
- | In the Properties pane, set the **“Auto-submit”** property to **“Yes”**.

If you do not set the **“Auto-submit”** property to **“Yes”**, the report will not refresh when users select a different prompt value.

An alternative to setting the prompt to auto-submit is to add a prompt button from the **“Toolbox”** icon (  ) and set its **“Type”** property to **“Finish”**.

 Prompt button

|                      |        |
|----------------------|--------|
| ▼ <b>CONDITIONAL</b> |        |
| Style variable       |        |
| ▼ <b>GENERAL</b>     |        |
| Type                 | Finish |

The prompt control is added to the report page. You can modify its properties by clicking it and making changes in the Properties pane.

### 7.10.3 Control the data that appears in a tree prompt

You can control what data appears in a tree prompt and how the data is structured to get the results that you want. To do this, you add various functions to the filter expression.

In addition, the operator that you chose in the “**Prompt Wizard**” dialog box controls what appears next to each prompt value. If the “**Operator**” is “**in**” or “**not in**”, check boxes appear next to each prompt value. If the “**Operator**” is equals “**(=)**”, no check boxes appear.

Please be advised that the tree prompt could only be used with multidimensional data.

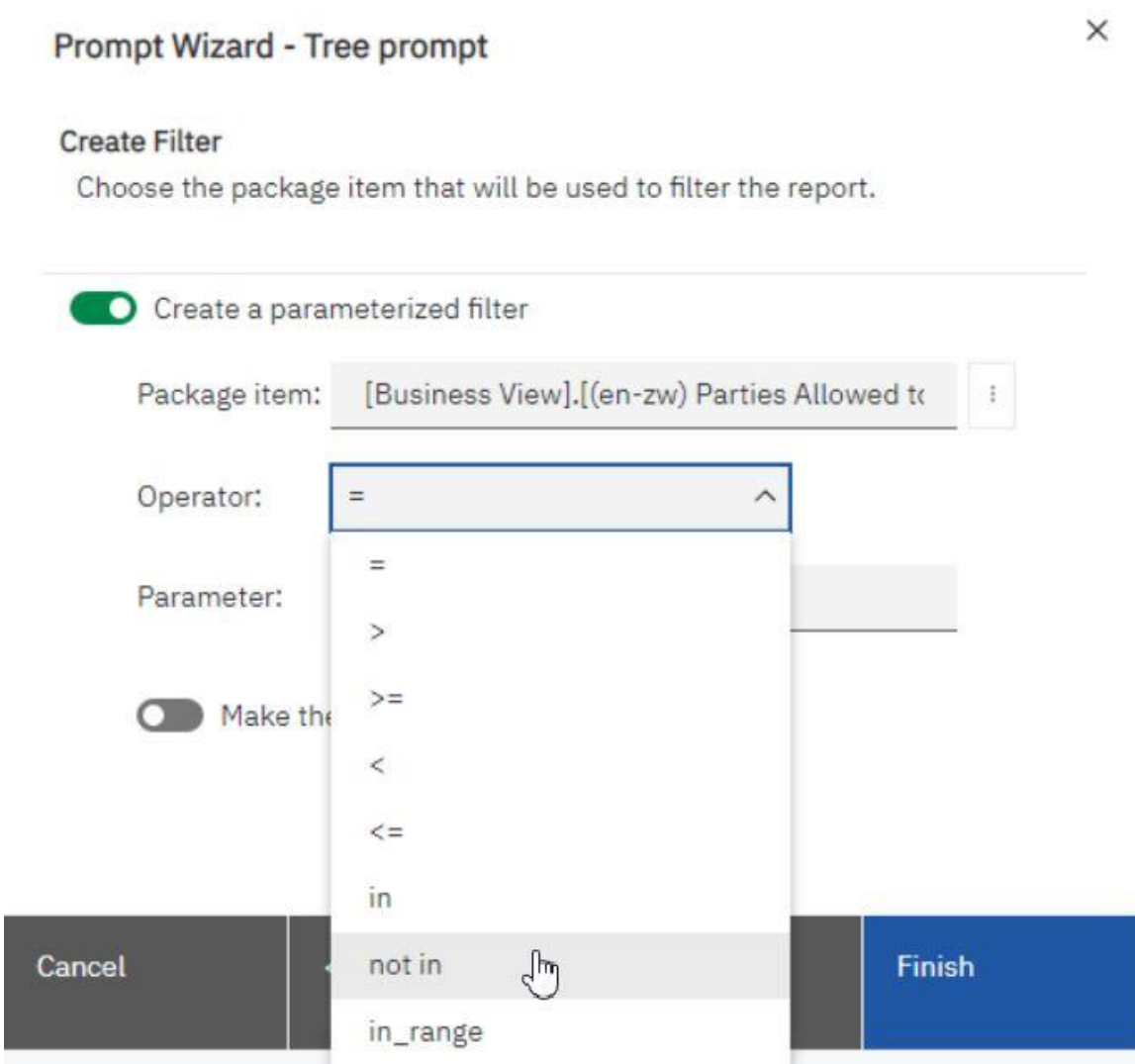



Figure 396 - Control the data that appears in a tree prompt - Prompt Wizard - Operator

- I Click the “Data items” icon (  ), and click the query that is associated with the prompt.
- I In the Data Items pane, double-click the data item on which you are prompting.
- I In the “Expression Definition” box, type one of the following functions.

| Goal   | Function                                 |
|--|--|
| Show the hierarchical structure of all members in the hierarchy. If this function is not used, all members are shown in a flat list.   | rootmembers (data_item)                  |
| Show the descendants of the data item in a hierarchical structure where x represents the level. For example, if you are prompting on the Year hierarchy and x=1, you will see 2020, 2021, and 2022 in the tree. If x=2, you will see 2020 Q1, 2020 Q2 etc. | descendants (rootmembers (data_item), x) |
| Show the children of a member. For example, 2018 Q1, 2018 Q2, 2018 Q3, and 2018 Q4 appear for the member 2018.   | children (member)                        |

**Table 105 - Control the data that appears in a tree prompt**

## 7.10.4 Modifying prompts

For each prompt you create, you can modify its properties by specifying values in the Properties pane. Some properties you set for a prompt may be overridden under some conditions. For example, some properties set for the filter associated with a prompt may override the corresponding prompt property. By default, when you create a prompt, the Reportstudio selects the prompt control interface. You can change the prompt control interface depending on the type of prompt you created.

### 7.10.4.1 Choose a drop-down list, a list box, or a radio button group:

The following example is made for a value prompt:

- I Click the prompt control.
- I In the Properties pane, set the “**Select UI**” property to the interface

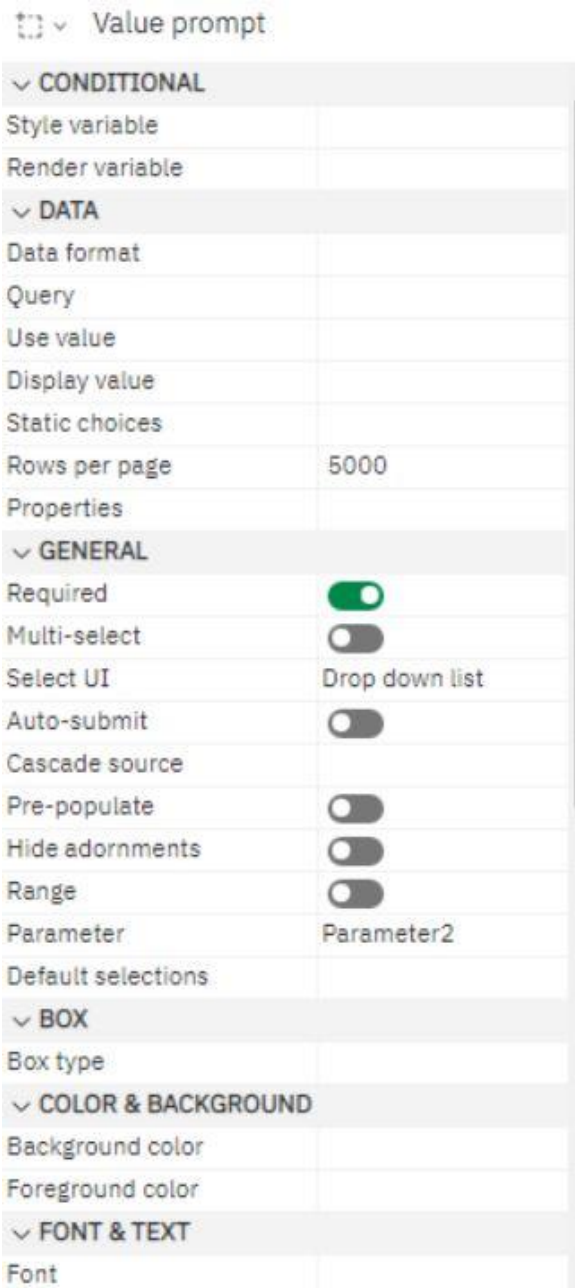


Figure 397 - Modifying prompts - Properties - General - Select UI - List box

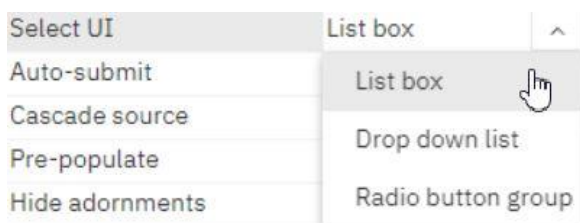
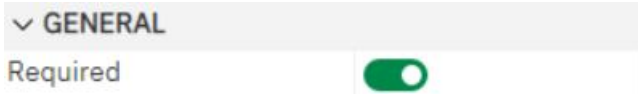



Figure 398 - Modifying prompts - Properties - General - Select UI - List box

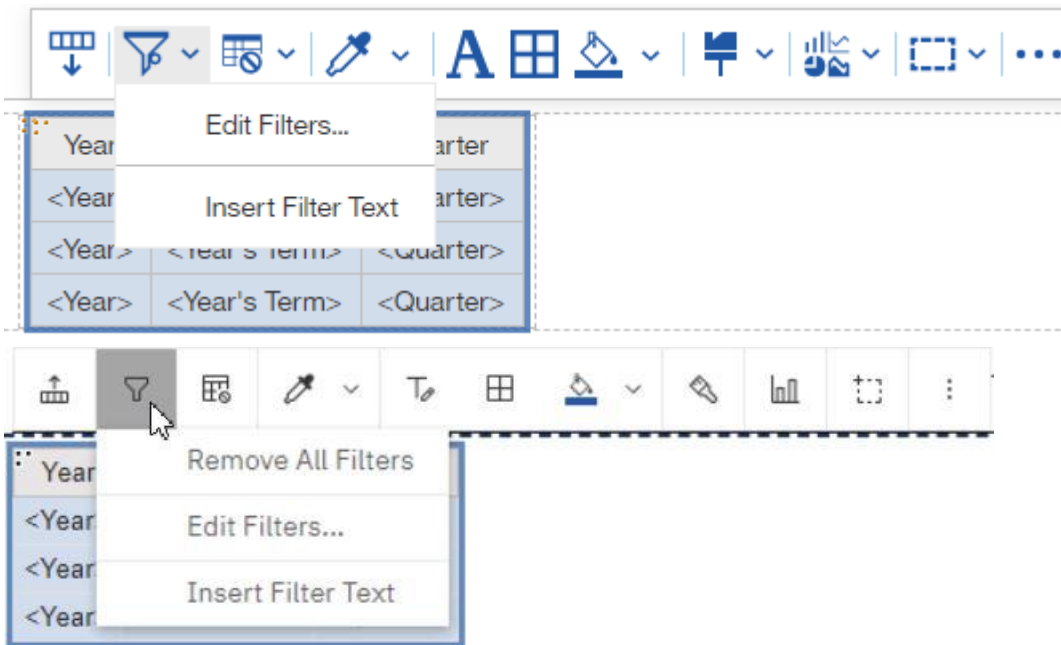
### 7.10.4.2 Prompt requires user input

You can specify that a prompt requires user input before the report can run.

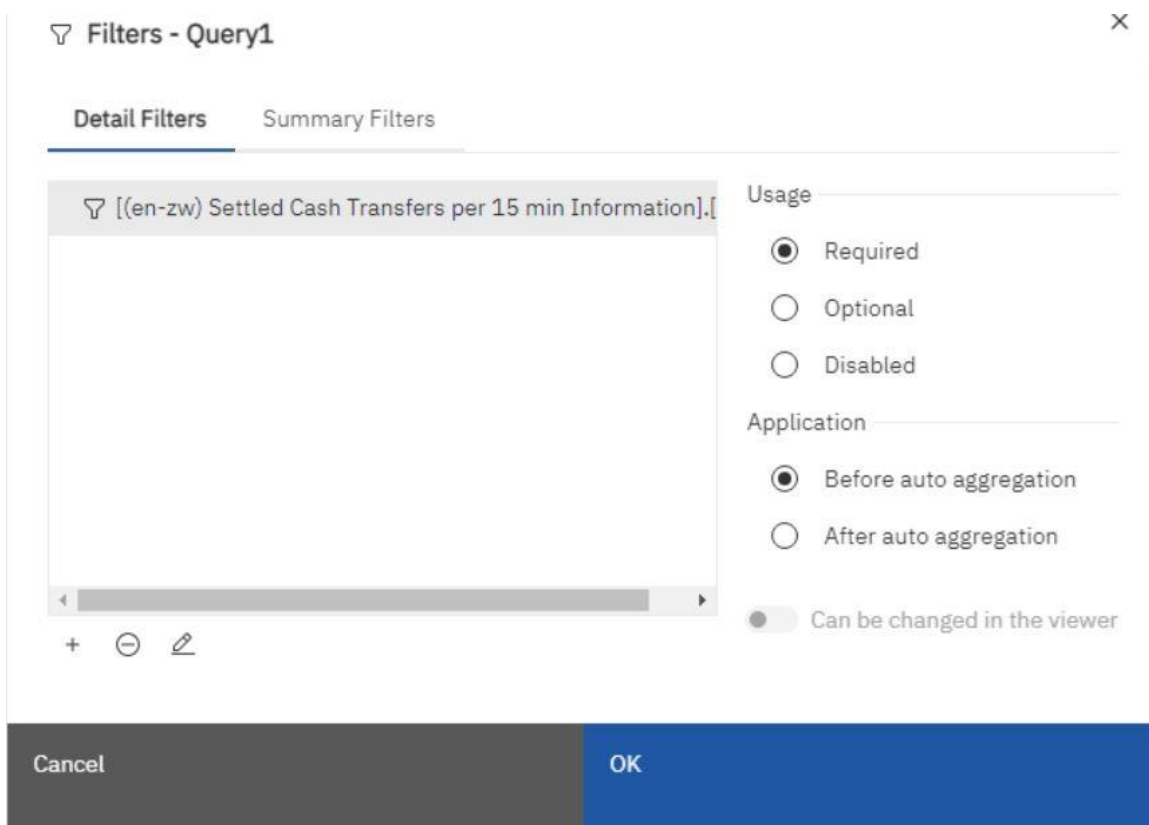
- I Click the prompt control.
- I In the Properties pane, click the left side of the “**Required**” property checkbox.



- I Click the “**Pages**” icon (  Pages ), and click a report page.
- I Click the report object associated with the prompt, from the report object toolbar, click “**Filters**” and then click “**Edit filters**”.



- I Click the filter associated with the prompt.
- I In the “**Usage**” box, click “**Required**”.



**Figure 399 - Modifying prompts - Filters - Usage box**

When you run the report, a star appears next to the prompt indicating that the user must select or type a value.

If you have a cascading prompt and the parent prompt control is required, the child prompt control is disabled. This ensures that users choose at least one value in the parent prompt before they can choose a value in the child prompt. Conversely, if the parent control is optional, then the child control is populated. This gives users the ability to choose values in the child prompt without having to choose a value in the parent prompt.

### 7.10.4.3 Selecting multiple values in a prompt

You can create a prompt in which a user can select more than one value. For example, you have a prompt to select a product line. You can set the prompt so that users can select more than one product line. If you enable multiple selections, the “Autosubmit” property is always set to “No”.

If you have a prompt that is used in both a single value context and a multivalue context, the most restrictive context (usually the single value context) takes precedence. If you run into a problem where you have a multivalue prompt but can only select one value, then check to see if the prompt is used in more than one context.



- | Click the prompt control.
- | In the Properties pane, choose whether to allow users to specify more than one value or a range of values:
  - To allow users to specify more than one value, set the “**Multiselect**” property to “Yes”.



Value prompt

|                    |                                     |
|--------------------|-------------------------------------|
| ▼ CONDITIONAL      |                                     |
| Style variable     |                                     |
| Render variable    |                                     |
| ▼ DATA             |                                     |
| Data format        |                                     |
| Query              |                                     |
| Use value          |                                     |
| Display value      |                                     |
| Static choices     |                                     |
| Rows per page      | 5000                                |
| Properties         |                                     |
| ▼ GENERAL          |                                     |
| Required           | <input checked="" type="checkbox"/> |
| Multi-select       | <input checked="" type="checkbox"/> |
| Select UI          | List box                            |
| Auto-submit        | <input type="checkbox"/>            |
| Cascade source     |                                     |
| Pre-populate       | <input type="checkbox"/>            |
| Hide adornments    | <input type="checkbox"/>            |
| Range              | <input type="checkbox"/>            |
| Parameter          | Parameter2                          |
| Default selections |                                     |

Figure 400 - Modifying prompts - Properties - General - Multi-select

- I Click the “Pages” icon (  Pages ), and click a report page.
- I Click the report object associated with the prompt, from the report object toolbar, click “Filters” (  ) and then click “Edit filters”.
- I Double-click the filter associated with the prompt.

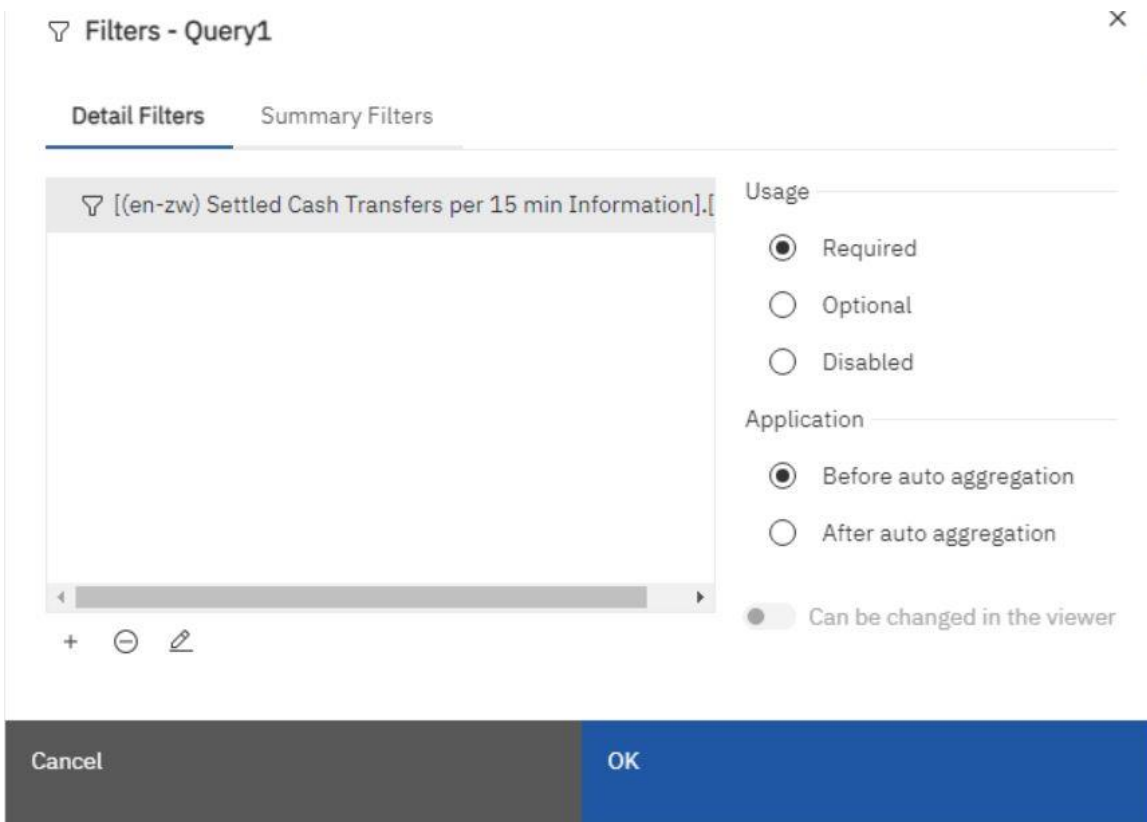



Figure 401 - Modifying prompts - Filters - Edit filters

Click the “**Edit**” icon (  ) and type an operator like the following example:

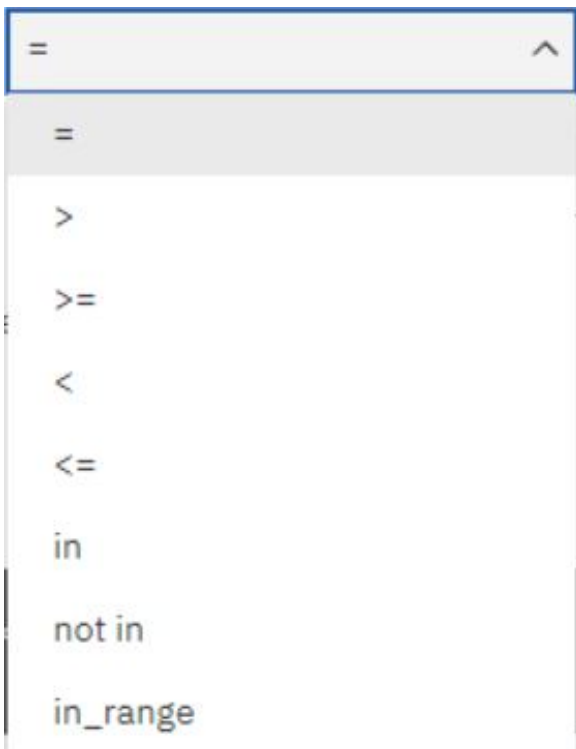


Figure 402 - Modifying prompts - Operator

Detail filter expression - Query1

Available Components:

- Enterprise Data Warehouse (Model)
  - Business View

Expression Definition:

```
[[en-zw] Parties - Cash Accounts - Other Info].[en-zw] Parties].  
[[en-zw] Party (Short)] = ?Parameter1?
```

Figure 403 - Modifying prompts - Detail filter expression

- I If you are creating a multi-select prompt, change the “Operator” to “in”. For example, [Product\_line] in ?Product line? where [Product\_Line] is the name of the data item allows users to select multiple product lines.
- I If you are creating a range prompt, change the “Operator” to “in\_range”. For example, [Margin] in\_range ?Margin? where [Margin] is the name of the data item allows users to specify a margin range.

After creating the prompt you can hold “Strg” to select more than one value.

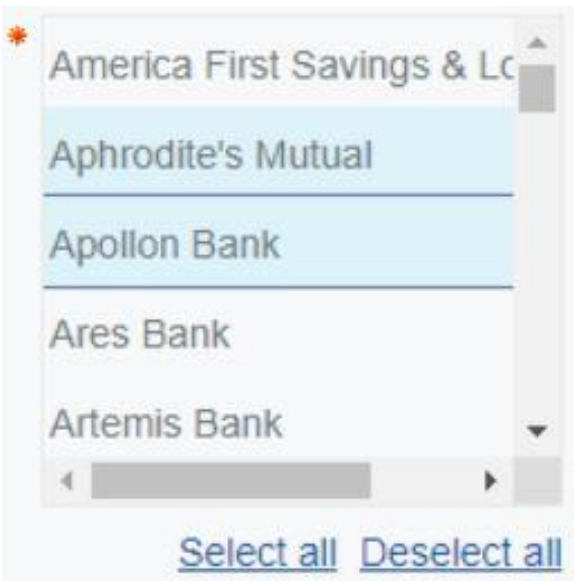


Figure 404 - Modifying prompts - Select more than one value

Another possibility is to click the prompt control and set the “Select UI” in the properties to “Check box group”.



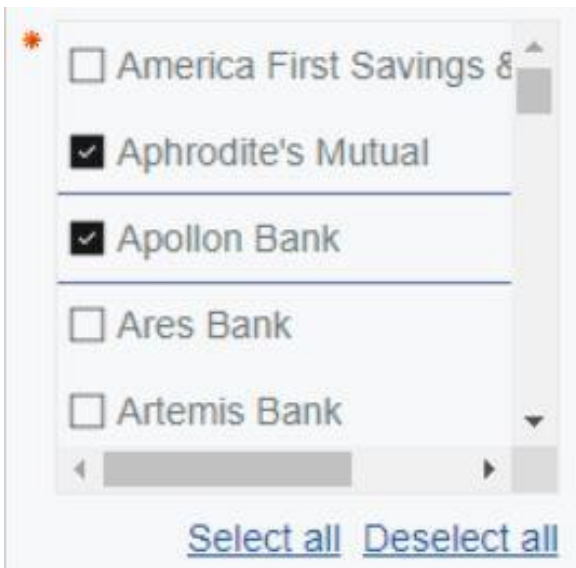


Figure 405 - Modifying prompts - Check box group - Select more than one value

#### 7.10.4.4 Show or Hide Prompt Status

Each prompt you create in a report provides dynamic validation when the report is run. Validity checks are performed to ensure that the data is correct and that required values are supplied. For example, a star appears next to each required prompt. Click the prompt control.

- In the Properties pane, under “**General**” click the right side of the “**Hide adornments**” property to hide the prompt characters or click the left side to show them.

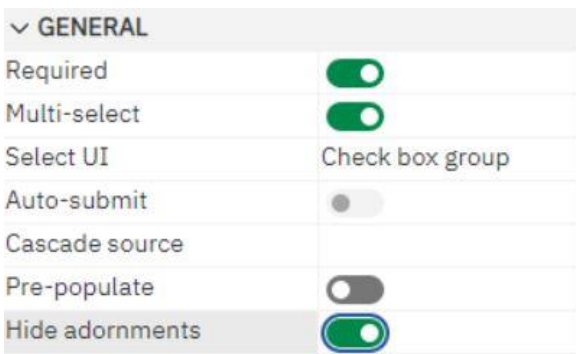



Figure 406 - Modifying prompts - Properties - General - Hide adornments

#### 7.10.4.5 Specify a Default Selection for a Prompt

You can specify a default selection for a prompt so that users do not have to select or type a value when they run the report.

- Click the prompt control.
- To define a range of values, in the Properties pane, click the right side of the “**Range**” property.

3. To specify more than one default selection, in the Properties pane, click the right side of the **“Multi-select”** property to **“Yes”**.
4. In the Properties pane, double-click the **“Default selections”** property.
5. Click the **“Add”** button (  ) and do one of the following:
  - If you chose to define a single value, type the value as the default selection.
  - If you chose to define a range of values, type the minimum and maximum values of the range in the **“Minimum value”** and **“Maximum value”** boxes, respectively.

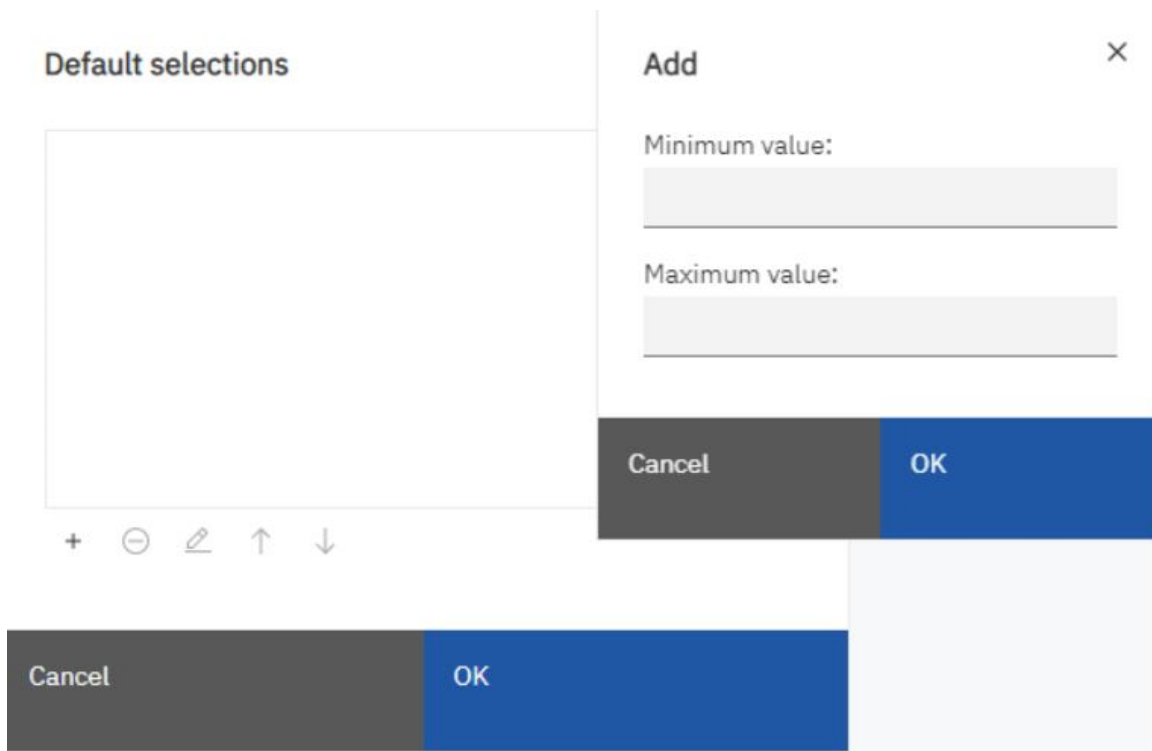


Figure 407 - Modifying prompts - Properties - Default selections - Minimum value/ Maximum value

6. Repeat step 4 to specify other default selections.

#### 7.10.4.6 Customize Prompt Text

You can customize the instructional text that appears around prompts. For example, a value prompt with multiple selections includes a **“Select all”** link below the choices that you can customize to text other than **“Select all”**.

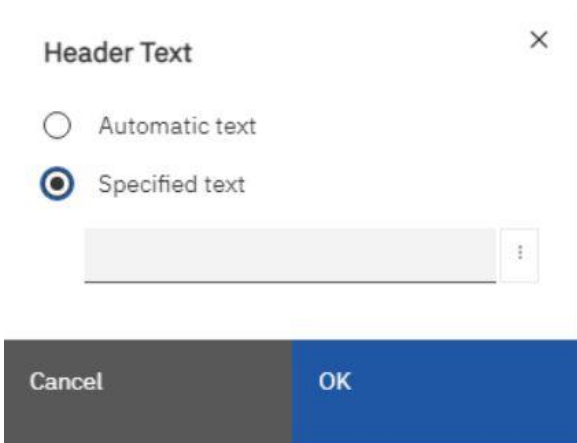
- I Click the prompt control.
- I To change the default prompt text, in the Properties pane, double-click any of the properties under **“Prompt Text”** which you want to change.

When you select a property in the Properties pane, its description appears in the information pane below the Properties pane.

| ▼ PROMPT TEXT             |           |
|---------------------------|-----------|
| Header Text               | Automatic |
| Choices text              | Automatic |
| From text                 | Automatic |
| To text                   | Automatic |
| Lowest value text         | Automatic |
| Highest value text        | Automatic |
| Choices select all text   | Automatic |
| Choices deselect all text | Automatic |
| Results select all text   | Automatic |
| Results deselect all text | Automatic |
| Deselect text             | Automatic |
| Insert text               | Automatic |
| Remove text               | Automatic |

**Figure 408 - Modifying prompts - Properties - Prompt Text**

- 1 Click **"Specified text"**, and then click the three dots button.



**Figure 409 - Modifying prompts - Properties - Prompt Text - Header Text**

- 1 In the **"Localized text"** dialog box, type the text that you want to appear.

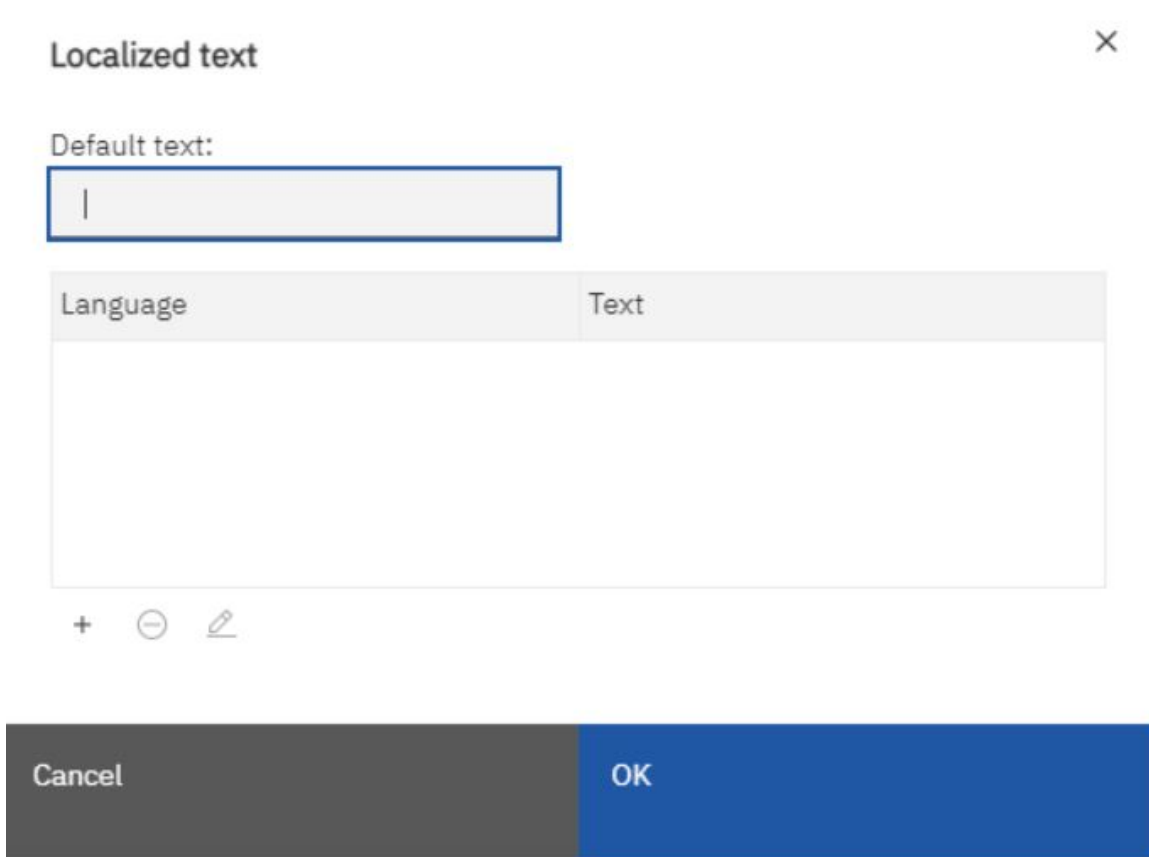


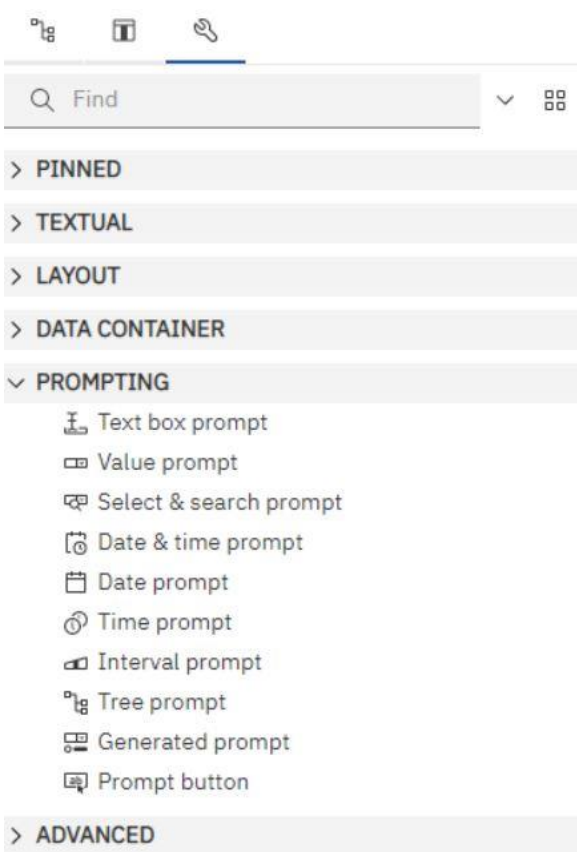


Figure 410 - Modifying prompts - Properties - Prompt Text - Header Text - Localized Text

#### 7.10.4.7 Add prompt buttons

Add prompt buttons so that users can submit selected items, cancel reports, or navigate between pages. When you are building prompts and prompt pages, you may have to add **“Prompt buttons”** to submit selections. Some prompt controls, such as the **“Value prompt”**, can be set to submit selections automatically. Other prompt controls, such as the **“Date prompt”**, require a **“Prompt button”**.

- 1 Click the **“Toolbox”** icon () () , drag **“Prompt button”** to the work area.



**Figure 411 - Modifying prompts - Add prompt buttons - Toolbox - Prompt button**

- 1 Click the prompt button and, in the Properties pane under “**General**”, set the “**Type**” property to one of the following actions.

| Goal                           | Action |
|--------------------------------|--------|
| Cancel the report              | Cancel |
| Go to the previous prompt page | Back   |



|   |          |
|---|----------|
| Go to the next prompt page  | Next     |
| Run the report  | Finish   |
| Reprompt the user<br>Reprompting users is useful when you have cascading prompts. | Reprompt |

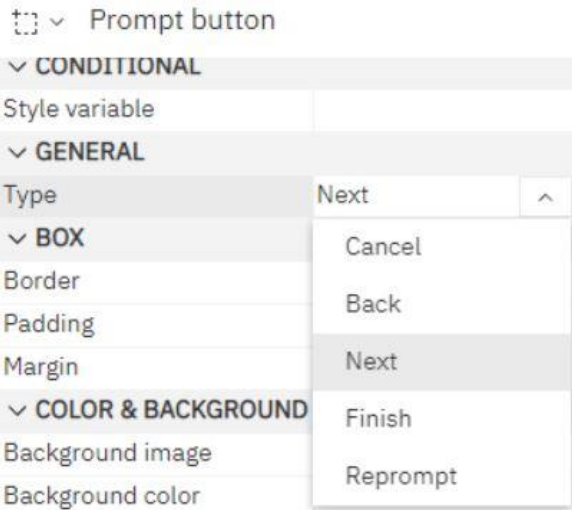


Figure 412 - Modifying prompts - Add prompt buttons - Prompt button properties - General - Type

#### 7.10.4.8 Create a Cascading Prompt

Create a cascading prompt to use values from one prompt to filter values in another prompt. For example, a report contains the columns “Product line” and “Product type”. You create prompts for these columns, and you specify that the “Product type” prompt is a cascading prompt that uses “Product line” as the source. When users select a product line, they see only the product types related to the selected product line.

- l To make the cascading source a required prompt, select it and, in the Properties pane, set the “**Required**” property under “**General**” to “**Yes**”.
- l Click the prompt control to use as a cascading prompt.
- l In the Properties pane, double-click the “**Cascade source**” property.

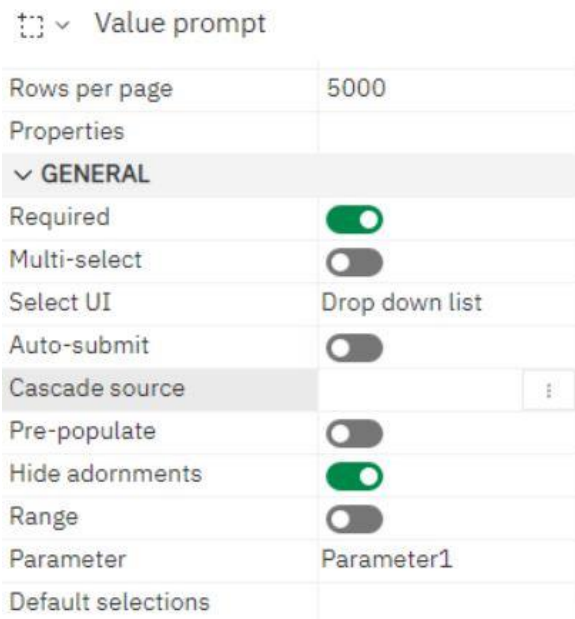


Figure 413 - Modifying prompts - Value prompt - Properties - General - Cascade source

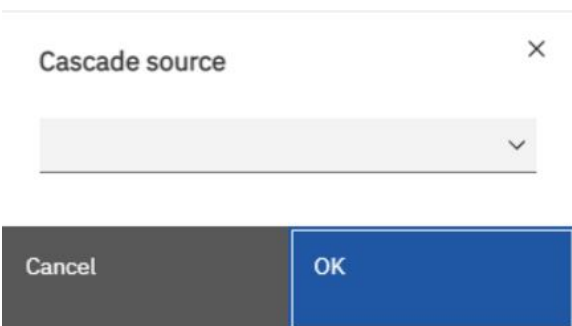

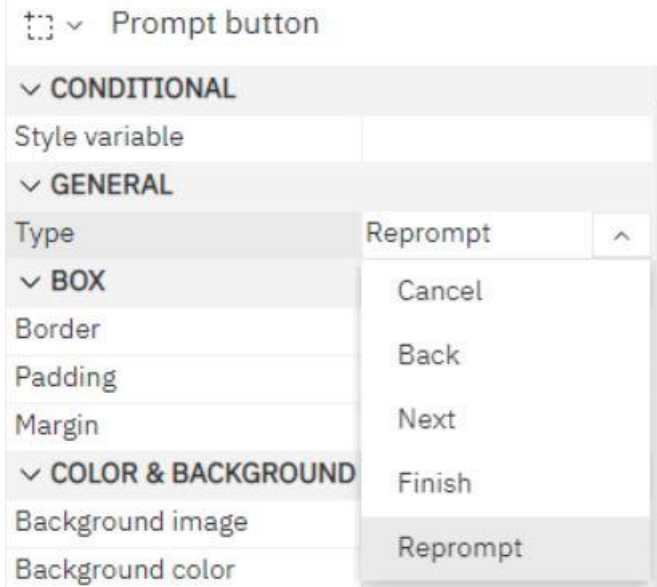



Figure 414 - Modifying prompts - Value prompt - Properties - General - Cascade source - Select Parameter

- | Click the parameter that represents the cascade source.
- | If the prompt allows users to select multiple values, add a **“Prompt button”** to the cascade source to provide the cascading prompt with the appropriate values:
  - Click the **“Toolbox”** icon () , drag **“Prompt button”** to the report.

- Click the prompt button and in the Properties pane, set the **"Type"** property to **"Reprompt"**



- To change the text in the prompt button, click the **"Toolbox"** icon (  ), drag the **"Text item"** from the toolbox to the prompt button and type the text.

## 8 Additional information

### 8.1 DWH data objects

The following table contains all data objects used in predefined reports as prompt or output data. The user can also choose these objects for user defined reports. DWH data objects are attributes, which contain business information.

| DWH objects   | Description  | Measure/Object |
|---|--|----------------|
| Account Balance at EoD                                      | Account balance of a cash account per day at close of business   | Measure        |
| Account Balance at SoD                                      | Account balance of a cash account per day at start of business   | Measure        |
| Account BIC   | BIC11 of the account   | Object         |
| Account Monitoring Group name                               | Name of the Account Monitoring Group   | Object         |
| Account number  | The account number is an alphanumerical string which uniquely identifies an account  | Object         |
| Account owner BIC   | BIC11 of an account owning party   | Object         |
| Account owner name  | Name of an account owning party  | Object         |
| Account type  | Types of cash accounts which can be debited and credited, e.g. MCA   | Object         |
| Accrued excess reserve interest amount (non-exemption tier) | Accrued interest amount for Effective MR requirement reached, calculated Actual/360 using the "Excess reserve interest rate (non-exempt tier)" of the current maintenance period, and the average of MR amount totals during the current minimum reserve maintenance period, which exceeds the sum of MR obligation and exempt excess reserve. | Measure        |
| Accrued excess reserve interest amount (exemption tier)     | Accrued interest amount for Effective MR requirement reached, calculated Actual/360 using the "Excess reserve interest rate (exempt tier)" of the  | Measure        |

| DWH objects                  | Description   | Measure/Object |
|------------------------------|---|----------------|
|                              | current maintenance period, and the average of MR amount totals during the current minimum reserve maintenance period, which exceeds the MR obligation up to the maximum amount of the exempt excess reserve. |                |
| (Accrued) MR interest amount | Amount of MR interest for the displayed maintenance period  | Measure        |
| Accumulated balance          | Accumulated EoD balance per Leading CLM account holder  | Measure        |
| Addressable BIC              | BICs that are reachable as correspondent in the role of a correspondent or a branch (Participation types 05 – 08 according to the RTGS Directory).  | Object         |
| Adjustment balance           | It is the balance, that is needed at the end of each future business day in order to exactly fulfil the minimum reserve requirement in the remainder of the current minimum reserve maintenance period.       | Measure        |
| Amount From/To               | Identifies the settlement amount of a cash transfer order   | Measure        |
| Amount of payment            | Settlement amount of a cash transfer order; for unsettled cash transfer orders the intended settlement amount   | Measure        |
| Ancillary system             | A system in which payments or securities are exchanged and/or cleared, while the ensuing monetary obligations are settled in another system, typically an RTGS system.  | Object         |
| Ancillary system type        | Type of an AS , identifying it as e.g. a clearing house, a security settlement system or a retail payment system  | Object         |
| AS BIC and short name        | BIC11 and name of an ancillary system   | Object         |

| DWH objects              | Description  | Measure/Object |
|--------------------------|--|----------------|
| AS settlement procedure  | A specific set of processes and functions in the T2 Service that an ancillary system can use for the settlement of AS transfer orders.                         | Object         |
| Attribute name           | Name of the attribute  | Object         |
| Average value            | Daily amount totals of settled cash transfer orders per day in a given time period   | Measure        |
| Average volume           | Daily average number of settled cash transfer orders per day in a given time period  | Measure        |
| Balance of account (SoD) | Identifies a starting balance of a cash account.   | Measure        |
| Balance                  | Identifies a starting, running or closing balance of a cash account.   | Measure        |
| Banking Group name       | Name of the Banking Group the party belongs to   | Object         |
| Beneficiary BIC          | BIC of the beneficiary   | Object         |
| BIC                      | An eleven-digit code consisting of the BIC8 followed by a branch code of three characters which is used to identify any branch or reference of an institution. | Object         |
| Bilateral limit          | The maximum daily outflow of liquidity for payments with normal priority defined by an RTGS Account Holder for one of its RTGS DCAs towards another RTGS DCA.  | Measure        |
| Billing period end       | End of the billing period  | Object         |
| Billing period start     | Start of the billing period  | Object         |
| Business case code       | A four-letter code indicating the business context of a business case to a cash transfer or a credit line modification   | Object         |

| DWH objects                     | Description   | Measure/Object |
|---------------------------------|---|----------------|
| Business date                   | Indicates the business date   | Object         |
| Calculation includes data until | Date of the last business day, which was imported into DWH as the base for minimum reserve interest calculations.   | Object         |
| Capital refund                  | Total value of cash transfer orders, which reduce the balance of an overnight deposit or a marginal lending account at a given date (off-leg).                                | Measure        |
| Capital set-up                  | Total value of cash transfer orders, which build up the final balance of an overnight deposit or a marginal lending account until close of business of a given date (on-leg). | Measure        |
| Cash Transfer Category          | Category which is technically using the contents of field "Business case code" in CLM and RTGS cash transfer tables.  | Object         |
| Cash transfer type              | Type of the cash transfer   | Object         |
| Charged party BIC               | BIC of the charged party  | Object         |
| Charged party name              | Name of the charged party   | Object         |
| Classification                  | Classification of transaction according to statistical classification   | Object         |
| Clearing System Reference       | Clearing system reference, which an acting monetary financial institution can provide as an identifier of a cash transfer order   | Object         |
| Contingency account number      | The account number of a contingency account   | Object         |
| Contingency session             | Contingency sessions from opening to closing time of ECONSH   | Object         |
| Counterparty account BIC        | Service name of the cash account, which is the opposite (debited or credited) cash account in a cash transfer order   | Object         |

| DWH objects                | Description  | Measure/Object |
|----------------------------|--|----------------|
| Counterparty country code  | Country code (ISO 3166-1) of the monetary financial institution which is the opposite (debited or credited) party in a cash transfer order     | Object         |
| Counterparty party BIC     | BIC of the monetary financial institution which is the opposite (debited or credited) party in a cash transfer order                           | Object         |
| Counterparty service       | Service of the counterparty  | Object         |
| Country code               | Two-digit alphabetic code identifying a country ISO 3166-1   | Object         |
| Credit                     | Settlement amount of a single cash transfer order or the total of settlement amounts of cash transfer orders, credited to a given cash account | Measure        |
| Credit line amount         | Commitment to grant intraday credit on demand based on collateral provided to a CB   | Measure        |
| Credit line amount at EoD  | Credit line amount per party and day at close of business  | Measure        |
| Credit line amount at SoD  | Credit line amount per party and day at start of business  | Measure        |
| Credited Account           | Identifies the credited account  | Object         |
| Credited Account Number    | Number of a cash account, credited by a cash transfer order  | Object         |
| Credited Account BIC       | BIC of a cash account, credited by a cash account order  | Object         |
| Credit based only flag     | Flag indicating if the account is credit based only  | Object         |
| Credit line amount: Maxima | Maximum of the credit line amount at that day  | Measure        |
| Cross border               | Identifies a cash transfer order where the debited and credited parties are subject to different CBs.  | Object         |



| DWH objects            | Description  | Measure/Object |
|------------------------|--|----------------|
| Currency (code)        | Three digit alphabetic code identifying a currency (ISO 4217) of a cash account, a party or a cash transfer order  | Object         |
| Daily average value    | Identifies the average of settlement amounts of cash transfer orders of a certain state and priority in a given time period. When the order state indicates not-settled cash transfer orders, then the average is calculated on the base of intended settlement amounts. | Measure        |
| Daily average volume   | Identifies the average number of cash transfer orders of a certain state and priority in a given time period.  | Measure        |
| Date (from)            | Business date (from)   | Object         |
| Date (to)              | Business date (to)   | Object         |
| Debit                  | Settlement amount of a single cash transfer order or the total of settlement amounts of cash transfer orders, debited to a given cash account  | Measure        |
| Debited Account        | Identifies the debited account   | Object         |
| Debited Account Number | Number of a cash account, debited by a cash transfer order   | Object         |
| Debited Account BIC    | BIC of a cash account, debited by a cash account order   | Object         |
| Default MCA            | A party must mark one of its MCAs as "Default" for its usage in automatic processes of Standing Facility Services, Minimum Reserve Management, BILL and Central Bank operations(CBO).  | Object         |
| Default MCA number     | Account number of the default MCA of the party   | Object         |
| Deletion status        | Indicates if a party is active or deleted  | Object         |
| Direct Participant     | RTGS Account Holder  | Object         |

| DWH objects                 | Description   | Measure/Object |
|-----------------------------|---|----------------|
| Direct Participant name     | Name of the RTGS Account Holder   | Object         |
| Direct Participants Overall | Number of Direct Participants in a system entity at a given date  | Object         |
| Domestic                    | Identifies a cash transfer order where the debited and credited parties are subject to the same CB.   | Object         |
| Effective MR requirement    | Accumulated amount of minimum reserves within the maintenance period, which are held either under direct and indirect MR, obligation or within a MR pool of parties each day of the maintenance period. | Measure        |
| Effective time              | Time when the event actually occurs   | Object         |
| End time                    | Time when the event ended.  | Object         |
| End to End Reference        | End-to-End reference which an acting monetary financial institution can provide as an identifier of a cash transfer order.  | Object         |
| Entity name                 | Name of the data entity in BILL (used for critical data)  | Object         |
| Entry Timestamp             | Timestamp at which a cash transfer order entered CLM or RTGS (A2A or U2A).  | Object         |
| Error Code                  | Error code which CLM or RTGS assigned to a cash transfer order; is empty for correctly processed cash transfer orders.  | Object         |
| Error Description           | Error description which CLM or RTGS assigned to a cash transfer order; may be empty for correctly processed cash transfer orders.   | Object         |
| Event                       | Business day event  | Object         |
| Event code                  | Code of the business day event  | Object         |

| DWH objects   | Description  | Measure/Object |
|---|--|----------------|
| Excess/deficiency of reserves                       | Difference between the average of MR amount totals during the current minimum reserve maintenance period and the minimum reserve requirement | Measure        |
| Excess reserve exemption factor                     | Factor for the calculation of the excess reserve exemption tier on the base of the minimum reserve amount                                    | Object         |
| Excess reserve interest amount (exemption tier)     | Amount of interest, paid for holdings exceeded the required minimum reserves within the exemption tier                                       | Measure        |
| Excess reserve interest amount (non-exemption tier) | Amount of interest, paid for holdings, which exceeded the required minimum reserves exemption tier.  | Measure        |
| Global Filters                                      | Global Filters used in the Statistical Classification of Transaction for CLM and RTGS  | Object         |
| Highest community level                             | Highest community value (of the credit line amount)  | Object         |
| Highest community value                             | Highest community value of queued cash transfer orders for the default MCAs in CLM   | Measure        |
| Highest community volume/                           | Highest community volume of queued cash transfer orders for the default MCAs in CLM  | Measure        |
| Hour  | Date and hour  | Object         |
| Injection or drain of liquidity                     | Sum of credited (injected) - Sum of debited (drained) amount of liquidity transfers on an account  | Measure        |
| Instruction Identification                          | Instruction identification which an acting monetary financial institution can provide as an identifier of a cash transfer order              | Object         |
| Interest  | Interest amount paid or received for balances kept in an overnight deposit or marginal lending account.                                      | Measure        |

| DWH objects                           | Description  | Measure/Object |
|---------------------------------------|--|----------------|
| Intraday credit use: Weighted average | Weighted average of the intraday credit line use of that day   | Measure        |
| Last update timestamp                 | Timestamp of the last update of an attribute   | Object         |
| Leading CLM Account Holder BIC        | BIC11 of a Leading CLM Account Holder  | Object         |
| Leading CLM Account Holder name       | Name of a Leading CLM Account Holder   | Object         |
| LEI                                   | Legal entity identifier  | Object         |
| Liquidity Transfer Group name         | Name of the Liquidity Transfer Group   | Object         |
| Local Filters                         | Local Filters used in the Statistical Classification of Transaction for CLM and RTGS   | Object         |
| Lowest community value                | Lowest community value of queued cash transfer orders for the default MCAs in CLM  | Measure        |
| Lowest community value (credit line)  | Lowest community value of the credit line amount in the chosen period  | Measure        |
| Lowest community volume               | Lowest community volume of queued cash transfer orders for the default MCAs in CLM   | Measure        |
| Maintenance period                    | The period over which compliance with minimum reserve requirements is calculated and for which such minimum reserves must be held on reserve accounts. | Object         |
| Maxima                                | Maximum of the credit line amount at that day and/or Maximum of the intraday credit line use at that day.  | Measure        |
| Message ID                            | Message Identifier provided in a cash transfer order message   | Object         |
| Message in XML-Format                 | Inbound message in XML format  | Object         |

| DWH objects                    | Description  | Measure/Object |
|--------------------------------|--|----------------|
| Message type                   | ISO 20022 conform identifier for the type of a message exchanged with T2   | Object         |
| MFI code                       | Monetary financial institution code  | Object         |
| Minima                         | Minimum of the credit line amount, the amount of IDC used and the sum of values of queued cash transfer orders for the time band   | Measure        |
| Minimum reserve interest rate  | Rate (in %) to calculate the interest amount on minimum reserve.   | Object         |
| Minimum reserve obligation     | Minimum reserve obligation   | Object         |
| Minimum reserve requirement    | Amount of minimum reserve to be held at the end of each day of the maintenance period.   | Object         |
| Month (from)                   | Month (from)   | Object         |
| Month (to)                     | Month (to)   | Object         |
| MR calculated penalty amount 1 | Penalty calculated for a party, which missed the minimum reserve requirement in a maintenance period for the first time.   | Measure        |
| MR calculated penalty amount 2 | Penalty calculated for a party, which already missed the minimum reserve requirement in the previous maintenance period.   | Measure        |
| Multi-addressee                | An RTGS Actor which can submit/receive cash transfers directly to/from the system.   | Object         |
| Multilateral limit             | The maximum daily outflow of liquidity for payments with normal priority defined by an RTGS Account Holder for one of its RTGS DCAs towards all RTGS DCAs for which no bilateral limit has been defined. | Measure        |
| National Sorting Code          | National Sorting Code of the party   | Object         |
| New field value                | Value of the attribute after the change  | Measure        |

| DWH objects                                     | Description  | Measure/Object |
|---|--|----------------|
| Number of calendar days in the MP               | Number of all calendar days within a maintenance period  | Object         |
| Number of events (amount of credit line)        | Number of events within a system entity and a given time period, in which the total amount of credit lines changed           | Measure        |
| Number of events (cash transfer order)          | Number of events in a timeline, in which a credit line, intraday credit usage or a cash transfer order changed.              | Measure        |
| Number of MCAs with a credit line > 0           | Number of all MCAs, which had a credit line > 0 at least once during a certain time.   | Measure        |
| Number of MCAs with a negative intraday balance | Number of those MCAs that had a negative account balance at least once during a certain time                                 | Measure        |
| Number of indirect participants                 | Number of indirect participants in a system entity at a given time   | Measure        |
| Number of rejected transactions                 | Cash transfer orders which were not settled due to technical and/or business reasons.  | Measure        |
| Old field value                                 | Value of the attribute before the change   | Measure        |
| On behalf                                       | Indicates if cash transfer was inserted on behalf  | Object         |
| Originator party BIC                            | BIC of the party originating the charge  | Object         |
| Originator party name                           | Name of the party originating the charge   | Object         |
| Parent party BIC                                | Party BIC of the responsible CB in case the Party is a PB or AS  | Object         |
| Participation Type                              | Identifies the participation type  | Object         |
| Party   | Any legal entity or organisation interacting with one or more TARGET Service(s) that CRDM maintains in party reference data. | Object         |

| DWH objects                             | Description  | Measure/Object |
|---|--|----------------|
| Party address                           | Street, house number, postal code and city of a monetary financial institution                                       | Object         |
| Party BIC                               | BIC11 of a Party   | Object         |
| Party BIC and Name                      | BIC11 and short name of a Party, delimited by a hyphen   | Object         |
| Party closing date                      | Closing date of the party  | Object         |
| Party long name                         | Long name of a monetary financial institution  | Object         |
| Party opening date                      | Opening date of the party  | Object         |
| Party short name                        | Short name of a monetary financial institution   | Object         |
| Payment banks with a least one RTGS DCA | Number of payment banks with a least one RTGS DCA at a given date  | Measure        |
| Payment type                            | The payment type divides cash payment orders into liquidity transfers, credit transfers and direct debits            | Object         |
| Peak Day                                | Identifies the business day at which the maximum value respective volume total of cash transfer orders was reported. | Object         |
| Peak Day value                          | In DWH the business day at which the maximum value total of cash transfer orders of a given status was reported      | Measure        |
| Peak Day volume                         | In DWH the business day at which the maximum volume total of cash transfer orders of a given status was reported.    | Measure        |
| Peak Hour                               | Identifies the hour at which the maximum value resp volume total of cash transfer orders was reported.               | Object         |
| Peak Hour value                         | In DWH the hour at which the maximum value total of cash transfer orders of a given status was reported.             | Measure        |
| Peak Hour volume                        | In DWH the hour at which the maximum volume total of cash transfer orders of a given status was reported.            | Measure        |

| DWH objects  | Description   | Measure/Object |
|--|---|----------------|
| Peak IDC use                                       | Maximum of the used intraday credit in a given time interval.   | Measure        |
| Penalty rate 1 (single infringement)               | Rate (in %) to calculate the penalty as an interest amount on minimum reserve balances which did not meet the minimum reserve requirement in a maintenance period                                   | Measure        |
| Penalty rate 2 (repeated infringement)             | Rate (in %) to calculate the penalty as an interest amount on minimum reserve balances which did not meet the minimum reserve requirement in one or more consecutive maintenance periods            | Measure        |
| Planned time                                       | Time for which an event was originally planned  | Object         |
| Priority   | Identifies the priority of a cash transfer order  | Object         |
| Published BIC                                      | Account BIC that is published in the RTGS Directory   | Object         |
| Quantity   | Number of service items   | Measure        |
| Quarter  | Identifies the quarter of a year.   | Object         |
| Queued cash transfer order s for MCAs or RTGS DCAs | Value and volume of queued cash transfer orders   | Measure        |
| Queued cash transfer order value                   | DWH displays values of cash transfer order which in the course of a business day were released for settlement but could not be executed for an certain time interval due to the lack of liquidity.  | Measure        |
| Queued cash transfer order volume                  | DWH displays volumes of cash transfer order which in the course of a business day were released for settlement but could not be executed for an certain time interval due to the lack of liquidity. | Measure        |



| DWH objects                | Description  | Measure/Object |
|----------------------------|--|----------------|
| Receiver BIC               | BIC of the actor who is authorised to receive messages and/or files from CLM and/or RTGS.  | Object         |
| Receiver Name              | Short name of the actor who is authorised to receive messages and/or files from CLM and/or RTGS.   | Object         |
| Reference                  | Unique identifier assign to any transaction  | Object         |
| Reference 1                | Identifies a transaction identifier provided by an originating party. The used reference type depends on the message type and the cash transfer type of a cash transfer order.   | Object         |
| Reference 2                | Identifies a transaction identifier provided by an originating party. The used reference type depends on the message type and the cash transfer type of a cash transfer order.   | Object         |
| Reservation amount         | Amount of the reservation  | Measure        |
| Responsible party BIC      | Party BIC of CB responsible for the charged party.   | Object         |
| Responsible party name     | Name of the CB responsible for the charged party.  | Object         |
| Reversed Payment Indicator | Indicator to identify a payment order as the reversal of a previously settled payment order (occurs in AS settlement of type A and B)  | Object         |
| Revised time               | The foreseen time for an event.  | Object         |
| Running average            | The sum of daily balances from beginning of the maintenance period till the end of the maintenance period / total number of days in the maintenance period (for ongoing maintenance periods: sum of daily balances from beginning of the | Measure        |

| DWH objects                        | Description  | Measure/Object |
|------------------------------------|--|----------------|
|                                    | maintenance period till the day for which MR data is available in the DWH / total number of days in the maintenance period that have already been passed ).                          |                |
| Semester                           | Identifies the two halves of a year  | Object         |
| Sender BIC                         | BIC of the actor who is authorised to send messages and/or files to CLM and/or RTGS.   | Object         |
| Sender DN                          | Actor who is authorised to send messages and/or files to CLM and/or RTGS. The sender is identified by a distinguished name which is not part of the BAH or the Business File Header. | Object         |
| Sender Message Reference           | Message reference which is provided by the sender as an identifier of the message  | Object         |
| Sender Name                        | Short name of the actor who is authorised to send messages and/or files to CLM and/or RTGS.  | Object         |
| Service                            | Identifies the settlement service  | Object         |
| Service item category              | Category of the service item   | Object         |
| Service item code                  | Code of the service item   | Object         |
| Service item description           | Description of the service item  | Object         |
| Service Type                       | Identifies the settlement service  | Object         |
| Service party type                 | Identifies the settlement service a party belongs to   | Object         |
| Settlement Bank Account Group name | Name of the Settlement Bank Account Group  | Object         |
| Settlement Reference               | Settlement reference which an acting monetary financial institution can provide as an identifier of a cash transfer order  | Object         |

| DWH objects                       | Description   | Measure/Object |
|-----------------------------------|---|----------------|
| Settlement Status Description     | User comprehensible description of the status of a cash transfer order  | Object         |
| Settlement timestamp              | Timestamp of the settlement, cancellation or revocation of a cash transfer order, representing date, time at least milliseconds | Object         |
| Share (%)                         | Share of the usage of a service item within the month compared to the total of service items charged (in %)                     | Measure        |
| Standard deviation                | Average of the absolute deviations from an arithmetic average of amount totals of queued cash transfer orders.                  | Measure        |
| Status                            | Identifies status of a cash transfer order  | Object         |
| Sum of consumptions               | Number or consumptions of a given service item category   | Measure        |
| Time band                         | A given time period within a business day   | Object         |
| Timestamp of Effective Settlement | Timestamp at which a cash transfer order was effectively settled; empty for unsettled cash transfer orders                      | Object         |
| Total daily average volume        | The total daily average for a month as sum of daily averages  | Measure        |
| Total daily average value         | The total daily average for a month as sum of daily averages  | Measure        |
| Total(s)                          | Sum of values or volumes listed in a report   | Measure        |
| Transaction Category              | Transaction category distinguishes Interbank payments from "Customer payments".   | Object         |
| Transaction Classifier            | Classifier of the Statistical Classification of Transaction   | Object         |
| Transaction Identification        | Transaction identifier which an acting monetary financial institution can   | Object         |

| DWH objects  | Description   | Measure/Object |
|--|---|----------------|
|  | provide as an identifier of a cash transfer order   |                |
| Transaction Reference Number                                 | Unique identifier which CLM and RTGS assign to any transaction.   | Object         |
| Type of Credited Account                                     | Cash account type of the account, which is credited by a cash transfer order.   | Object         |
| Type of Debited Account                                      | Cash account type of the account, which is debited by a cash transfer order.  | Object         |
| UETR   | Universal-End-to-End-Transaction Reference which can be provided as an identifier of a cash transfer order                            | Object         |
| Unpublished BIC  | In DWH a cash account BIC is marked as "unpublished" that is not published in the RTGS Directory.                                     | Object         |
| User name  | Name of the user  | Object         |
| Value (in million)   | Sum of settlement amounts of cash transfer orders, displayed as the number in millions  | Measure        |
| Value of AS transfer orders – Settled                        | Sum of amounts of all AS transfer orders which were settled or partially settled for the respective AS.                               | Measure        |
| Value of AS transfer orders – Not settled                    | Sum of amounts of all AS transfer orders which were not settled (i.e. cancelled (revoked) or rejected) for the respective AS.         | Measure        |
| Value of cash transfer orders debited/credited/sent/received | Settlement amount total of cash transfer orders debited/credited/sent/received to a cash account of a party in a given time interval. | Measure        |
| Value of payments received                                   | Settlement amount total of settled cash transfer orders, a party received in a particular RTGS cash account in a                      | Measure        |

| DWH objects   | Description  | Measure/Object |
|---|--|----------------|
|   | given time period, grouped by payment type or message type   |                |
| Value of payments sent  | Settlement amount total of sent payments   | Measure        |
| Value of Settlement   | Settlement amount  | Measure        |
| Volume  | The number of cash transfer orders in a given time period.   | Measure        |
| Volume of AS transfer orders – Settled                        | Number of AS transfer orders which were settled or partially settled for the respective AS   | Measure        |
| Volume of AS transfer orders – Not settled                    | Number of AS transfer orders which were not settled (i.e. cancelled (revoked) or rejected) for the respective AS   | Measure        |
| Volume of cash transfer orders debited/credited/sent/received | Number of cash transfer orders debited/credited/sent/received to a cash account of a party in a given time interval.   | Measure        |
| Volume of payments received                                   | Number of received payments  | Measure        |
| Volume of payments sent                                       | Number of sent payments  | Measure        |
| Weighted average  | Weighted average value within a system entity or per party in a given time period.   | Measure        |
| Weighted average value  | Weighted average value of payment amount totals of queued cash transfer orders within a system entity or per party.  | Measure        |
| Weighted average volume/value                                 | Weighted average volume/value of queued cash transfer orders for the RTGS DCAs that are linked to a default MCA which had a credit line > 0 at least once a day. | Measure        |
| Year (from)   | Year (from)  | Object         |
| Year (to)   | Year (to)  | Object         |

**Table 106 - DWH objects**

## 8.2 CLM/RTGS inbound XML messages available in the DWH

The following list contains all xml message types available in the DWH which were processed in CLM or RTGS as inbound messages. Query messages as well as all outbound messages are not transferred to the DWH.

| Source            | Message type | Description   |
|-------------------|--------------|---|
| CLM               | camt.048     | Modify reservation  |
| CLM               | camt.049     | Delete reservation  |
| CLM               | camt.050     | Liquidity credit transfer   |
| CLM (CB specific) | camt.056     | FItoFI Cancellation request   |
| CLM (CB specific) | camt.998     | Modify credit line, Authorize penalty MR, Insert value of MR, Insert balance MR |
| CLM (CB specific) | pacs.009     | FI Credit transfer  |
| CLM (CB specific) | pacs.010     | FI Direct debit   |
| RTGS              | camt.007     | Modify transaction  |
| RTGS              | camt.011     | Modify limit  |
| RTGS              | camt.012     | Delete limit  |
| RTGS              | camt.048     | Modify reservation  |
| RTGS              | camt.049     | Delete reservation  |
| RTGS              | camt.050     | Liquidity credit transfer   |
| RTGS              | camt.056     | FItoFI Payment cancellation request   |
| RTGS              | pacs.004     | Payment return  |
| RTGS              | pacs.008     | Customer credit transfer  |
| RTGS              | pacs.009     | FI Credit transfer  |
| RTGS              | pacs.010     | FI Direct debit   |
| RTGS              | pain.998     | AS transfer initiation (ASTI)   |

**Table 107 - List of CLM/RTGS inbound messages**