



# **Starting Guide**TARGET2/T2S-Consolidation

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## **Version Control**

Version	Chapter	Explanation
1.0		First version
2.0	Step 2 Step 4 Step 6 3., 4., 5., 6., 7., 8.	Update and inclusion of new chapters
3.0	3.	Inclusion of further information regarding standing orders (events and application examples)
4.0	Step 4	Clarification on notation of DN in DN-BIC Routing
5.0	Data Warehouse	Inclusion of Information regarding Data Warehouse





## **Starting Guide T2**

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## Aim of this document

This document aims to assist participants of the T2 service in their concrete configuration of static data necessary for being able to send and receive cash transfers and perform the basic functions in the T2 service.

This document is no substitution for the respective user documentation, namely the UHBs and UDFSes for the CRDM, CLM and RTGS components. However, it aims to provide information on the basic / most prominent static data configurations and the sequence in which they should be entered.

The steps described in the following sections have to be performed in the Graphical User Interface (GUI) of either the CRDM, the CLM or the RTGS component by user(s) of each party granted with the relevant roles. The roles have to be granted to the users by the admin user(s) which have been setup by the respective CB.1



## IMPORTANT General Remark:

If you use roles in the 4-eyes principle (recognisable by the designation 4E), reference data entries have to be confirmed by a second user.

The second user can access the necessary confirmation screen in the CRDM GUI via the path: Common - Services - Data Changes.

Further Details can be found in Step 6.

If you have any questions or proposals for amending this document, please do not hesitate to contact us by e-mail (targetservices-test@bundesbank.de).

For technical questions, we provide a template on our homepage for opening a ticket with the responsible colleagues: https://www.bundesbank.de/content/885444 Please feel free to send it to "targetservices-test@bundesbank.de".

<sup>&</sup>lt;sup>1</sup> The overview of roles and privileges is also available in Excel format: https://www.bundesbank.de/content/875172





## **Business context of technical terms:**

In order to technically verify who is allowed to send messages or perform specific actions in T2 and to address network traffic to the relevant parties, a unique identifier is needed. The T2 service is therefore making use of the so called distinguished name (DN).

For **U2A users** the DN is required to identify the person who is allowed to perform an action via the GUI.

**A2A users** are required to be able to send (and receive) ISO compliant messages to/from T2.

A **distinguished name (DN)** identifies a person or an application interacting with T2. A DN is a sequence of attribute-value assertions separated by commas.

In concrete terms, there are two DNs involved for a correct set-up:

- The User Certificate Distinguished Name (DN1) is used to sign the payload of a message e.g. pacs.009 as the Business Sender, i.e. to create the signature which
  - has to be added to the Business Application Header (BAH, head.001) of a message. To create a User Certificate Distinguished Name see Step 2Step 2.
- The Party Technical Address (DN2) is used to establish the NSP connection with ESMIG:
   On the one hand, it is used by the Technical Sender of a message. On the other hand, it

In most cases, Business Sender (DN1) and Technical Sender (DN2) are the same. They may differ e.g. in case a service provider establishes the network connectivity / sends the message.

should be mentioned as Requestor DN in the technical header of a message.





## **Mandatory configurations**

## **Step 1: Creation of the Party Technical Address**

Done by the CB

The creation of the Party Technical Address (DN2) in CRDM and its linkage to the desired Network Services (e.g. T2CLM.SWIFT.MSGSNF) is done by the Central Bank based on the registration form.

The notation of a Party Technical Address is as follows:

- Attributes (cn, ou, o) in lower case.
- No space after comma



## IMPORTANT:

We recommend A2A users to choose all 15 Network Services, that are available per NSP (except SWIFT, SWIFT.NOTIF, SIA and SIA.NOTIF as they are only relevant for TIPS). This is not relevant for U2A only users.

## Step 2: Creation of the User Certificate Distinguished Name and its linkage to a user

The following description is **valid for U2A- and A2A-Users**.

If the Participant intends to operate using the **A2A** channel, at least one A2A-User is required, representing the Participant's back-office application. In this case the User's System User Reference field should match the one foreseen to be used in the messages' Business Application Header (BAH) field /Document/AppHdr/Fr/FIId/FinInstnId/ClrSysMmbId/MmbId.

**U2A**-Users may be created to represent users interacting with the Graphical User Interfaces.

CRDM does not make a distinction between A2A- and U2A-Users. Proper configuration of certificates is required to enable each channel.

## Step 2a: Creation of the User Certificate Distinguished Name

**GUI: CRDM** 

Necessary Screen: Certificate Distinguished Names - New<sup>2</sup>

Path: Common – Access Rights Management – Certificate Distinguished Names – New

Enter the DN (DN1) of the person or application that shall interact with TARGET<sup>3</sup>. Your Network Service Provider assigns the DN.

<sup>&</sup>lt;sup>2</sup> CRDM UHB v2.0 chapter 2.3.3.5

<sup>&</sup>lt;sup>3</sup> Common Errors:









## IMPORTANT:

Please exercise particular caution to the correct notation for User Certificate Distinguished Names.

The correct notation depends on the type of the DN:

- → U2A DN:
  - Attributes (CN, OU, O) in upper case.
  - Space after comma
    - o Example SWIFT: CN=Max-Mustermann, OU=t2, O=abcdxxyy, O=swift
    - o Example SIA: CN=Max Mustermann, OU=U2A, O=12345, DC=sianet, DC=sia, DC=eu

#### → A2A DN:

- Attributes (CN, OU, O) in upper case.
- No space after comma
  - o Example SWIFT: CN=appl, OU=t2, O=abcdxxyy, O=swift
  - o Example SIA: CN=appl, OU=t2, OU=cert, OU=tips, O=12345, DC=sianet, DC=sia, DC=eu



## Step 2b: Creation of a User

**GUI: CRDM** 

Necessary Screen: User - New/Edit4

Path: Common - Access Rights Management - Users - New

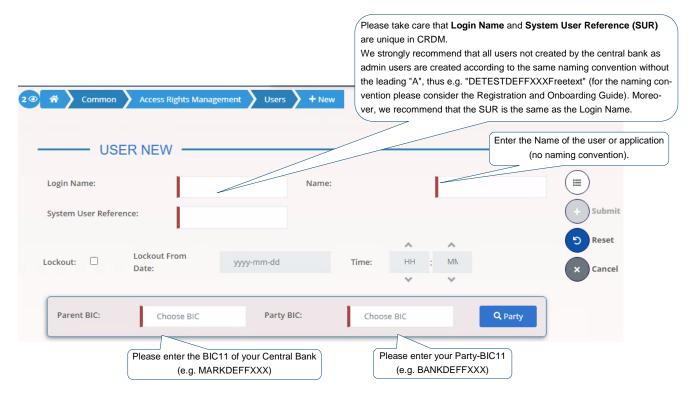
<sup>-</sup> Error E041 indicates incorrect notation of A2A DN.

<sup>-</sup> Error DRCA002 "Distinguished Name already used" also occurs with deleted DNs as well as with existing DNs that differ only with respect to upper and lower case letters. In these cases, please contact targetservices-test@bundesbank.de with the current as well as the new DN and we will forward the issue.

<sup>&</sup>lt;sup>4</sup> CRDM UHB v2.0 chapter 2.3.3.3







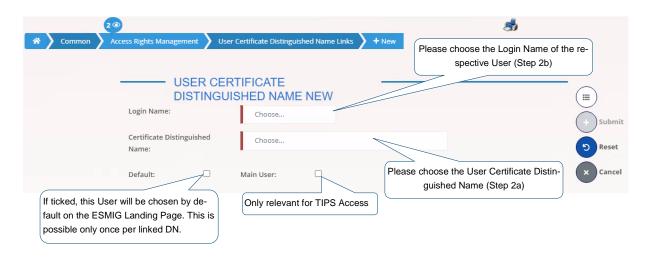
## Step 2c: Link the User Certificate Distinguished Name with the User

**GUI: CRDM** 

Necessary Screen: User Certificate Distinguished Name Link - New<sup>5</sup>

<u>Path:</u> Common – Access Rights Management – User Certificate Distinguished Name Links – New

This step has to be performed for each user.



<sup>&</sup>lt;sup>5</sup> CRDM UHB v2.0 chapter 2.3.3.7





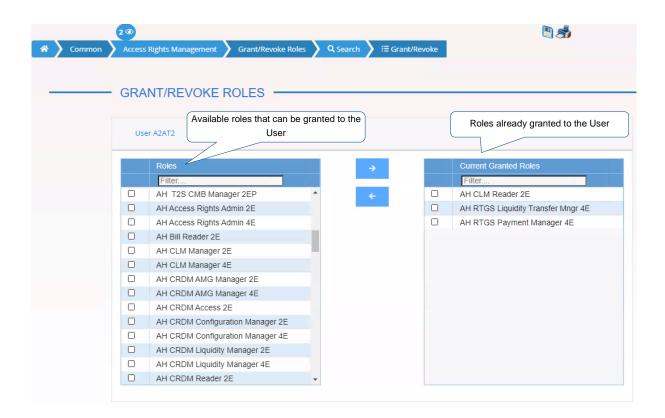
## Step 3: Grant roles to the User

The following description is **valid for U2A- and A2A-Users** and is to be performed for each user.

**GUI:** CRDM

Necessary Screen: Grant/Revoke Role - New/Edit<sup>6</sup>

Path: Common – Access Rights Management – Grant/Revoke Roles – Grant/Revoke Roles Search Screen → Search Button (specify the "Login Name")



The Eurosystem has created harmonised roles to make it easier for you to maintain the authorisations of your users. The overview of roles and privileges is also available in Excel format: <a href="https://www.bundesbank.de/content/875172">https://www.bundesbank.de/content/875172</a>

The User Handbook of each service provides the information for which screen / action which privilege is needed. The list mentioned above provides the role to be assigned to a user, which includes the needed privilege.<sup>7</sup>

<sup>6</sup> CRDM UHB v2.0 chapter 2.3.3.15

<sup>&</sup>lt;sup>7</sup> The links to the User Handbooks can be found here <u>Documentation & FAQs | Deutsche Bundesbank</u> or on page 2 of the following complete overview of the documents on the TARGET2/T2S consolidation project: <a href="https://www.bundes-bank.de/en/tasks/payment-systems/target2-t2s-consolidation/overview-of-available-and-upcoming-documents-on-the-target2-t2s-consolidation-project-860130">https://www.bundes-bank.de/en/tasks/payment-systems/target2-t2s-consolidation/overview-of-available-and-upcoming-documents-on-the-target2-t2s-consolidation-project-860130</a>





## Step 4: Creation of the DN-BIC Routing

The following description is **NOT relevant for U2A-only Users**.

The DN-BIC Routing is the precondition to receive pacs.- and selected camt.-messages8. It is only relevant for the RTGS settlement service (and TIPS). The Party Technical Address (DN2) that shall receive pacs.- and selected camt.-messages needs to be linked written and stored as Certificate DN to the BIC of an Authorised Account User (AAU-BIC) of the RTGS DCA<sup>9</sup>.

In order to identify Direct Participants, Multi-Addressee and Addressable BICs for the RTGS Directory, the Authorised Account User (AAU) is used to store the reference data (BIC and participant type) in CRDM.

For the following Participation Types chosen as AAU a DN-BIC Routing needs to be established:

- "Direct",
- "Multi Addressee Branch of Direct Participant" and
- "Multi Addressee Credit Institution"
- NOT for "Addressable BICs".

The creation of the AAU is done by the Central Bank based on the registration form.

The following entries are necessary for a correct DN-BIC Routing:

- 1) Creation of the DN that shall receive messages from RTGS, as Party Technical Address (via the registration form). Please use the correct notation: attributes in lower case / no space after comma.10
- 2) Creation of the DN that was entered as Party Technical Address, as Certificate Distinguished Name (see Step 2a), please use the notation for an A2A DN: attributes in upper case / no space after comma.11
- 3) Creation of the DN that was entered as Party Technical Address and Certificate Distinguished Name, for the DN-BIC Routing. During this creation, the notation used for the Party Technical Address OR the notation used for the Certificate Distinguished Name can be used. Please consider the correct notation for the information after "=" (the exact notation provided by the NSP).

<sup>&</sup>lt;sup>8</sup> DN-BIC Routing is used for the following message types: pacs.004/008/009/010 and camt.056/029 in RTGS.

<sup>9</sup> For setup of the DN-BIC Routing it is necessary that at least one Party Technical Address and at least one Authorised Account User are created.

In case the notation of the Party Technical Address is not correct, you will receive an error 8002.

<sup>&</sup>lt;sup>11</sup> A link to a user (User Certificate Distinguished Name Link) is necessary if this DN shall also be used to send messages to TARGET (see Step 2c).





#### Example:

The party MARKDEFFXXX has the DN **cn=test,o=abcxxx,o=nsp** and wants to use it for receiving e.g. pacs.-messages.

In this scenario, the DN should be present in CRDM as:

Party Technical Address (PTA)

Certificate DN

DN-BIC Routing

cn=test,o=abcxxx,o=nsp

CN=test,O=abcxxx,O=nsp

CN=test,O=abcxxx,O=nsp

<u>oder</u>

cn=test,o=abcxxx,o=nsp

The notation of the attributes
(upper or lower case) is determined by the use / creation of the DN in CRDM.

The information after the "=" has in any case to be written as

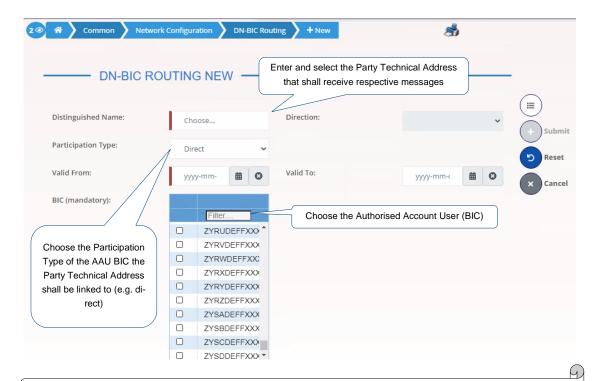
provided by the NSP.

will be linked to the AAU "MARKDEFFXXX" being the "direct participant" of an RTGS DCA.

The configuration in this example leads to the result that an incoming pacs.-message addressed to "MARKDEFFXXX" in the Business Application Header (BAH) will be sent from RTGS to the technical address "cn=test,o=abcxxx,o=nsp".

**GUI:** CRDM

<u>Necessary Screen:</u> Distinguished Name-BIC Routing - New/Edit<sup>12</sup> <u>Path:</u> Common – Network Configuration – DN-BIC Routing – New



IMPORTANT: Please take care that the BIC and the Participation Type match with the information stored in the Authorised Account User.

<sup>&</sup>lt;sup>12</sup> CRDM UHB v2.0 chapter 2.3.6.2





## **Step 5: Routing-Configuration**

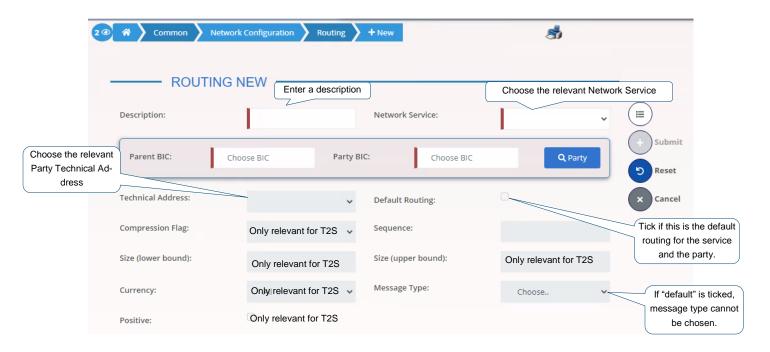
This routing configuration is required to receive notifications and reports. This is **not relevant** for U2A-only participants. For A2A participants it is absolutely necessary to configure at least the default routing.

IMPORTANT: Without setting up a default routing in CRDM a CLM and RTGS participant will automatically be treated as U2A-only participant.

**GUI: CRDM** 

Necessary Screen: Routing - New/Edit<sup>13</sup>

Path: Common – Network Configuration – Routing – New





## MPORTANT:

Please define a default routing for each Network Service (e.g.

T2CLM.SWIFT.FILESNF and T2RTGS.SWIFT.MSGRT) you chose in the registration form. In case that specific messages within a network service shall be routed individually, a separate routing configuration for this specific message type needs to be set up in addition to your necessary default routing configuration.

<sup>13</sup> CRDM UHB v2.0 chapter 2.3.6.4





## **Step 6: Confirmation of tasks**

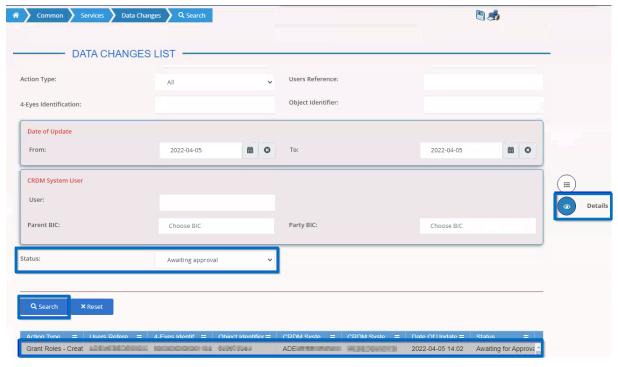
If you use roles in the 4-eyes principle (recognisable by the designation 4E), reference data entries have to be confirmed by a second user.

**GUI:** CRDM

Necessary Screen: Data Changes – Search/List<sup>14</sup>

Path: Common - Services - Data Changes

Please Search your action you would like to confirm or revoke.

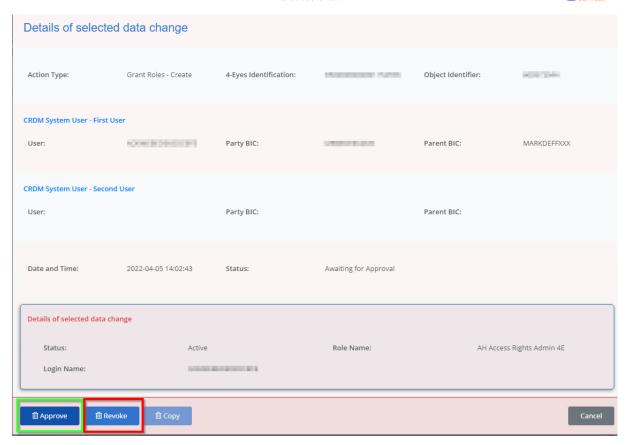


Via the *Details*-Button further details regarding the selected action can be seen on the Data Changes - Details screen. The approval or revocation of the action can be done by clicking on the respective button on the bottom of the screen.

<sup>14</sup> CRDM UHB v2.0 chapter 2.2.1.1











## **Optional configurations**

## 1. Create a Message Subscription

T2 does not sent notifications (except for errors) automatically to a party (e.g. camt.054 – Debit/Credit Notification). To receive notifications you have to actively subscribe for. This is done via the Message Subscription functionality.

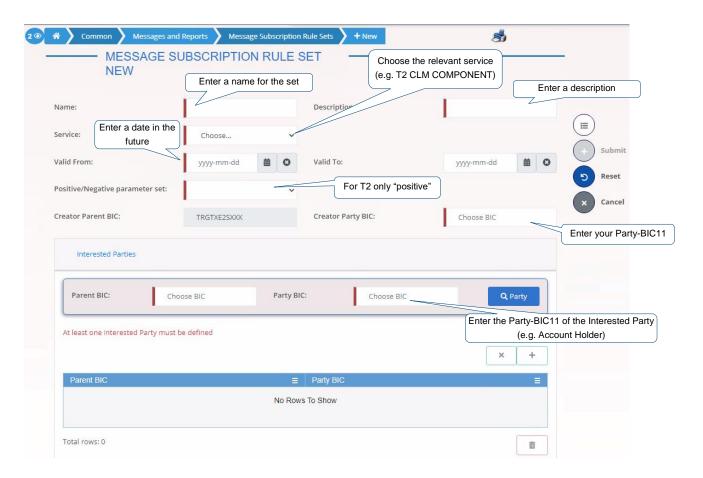
One or several Message Subscription Rule Set(s) may be configured for a party per service.

### Step 1a: Create a Message Subscription Rule Set

**GUI: CRDM** 

Necessary Screen: Message Subscription Rule Set - New/Edit<sup>15</sup>

Path: Common - Messages and Reports - Message Subscription Rule Set - New



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<sup>15</sup> CRDM UHB v2.0 chapter 2.3.4.3



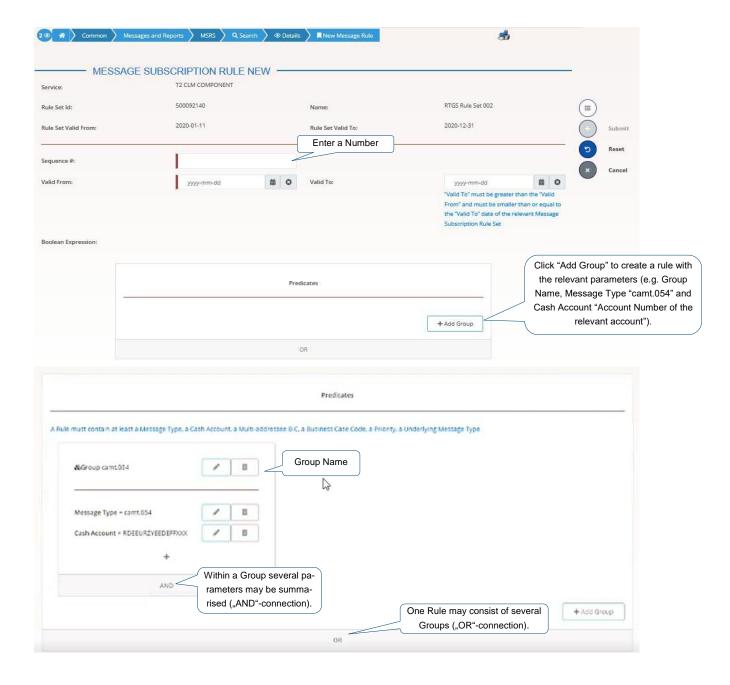


### Step 1b: Create a Message Subscription Rule

**GUI: CRDM** 

Necessary Screen: Message Subscription Rule - New/Edit 16

<u>Path:</u> Common – Messages and Reports – Message Subscription Rule Set - Search/List – Choose a Message Subscription Rule Set – Details – Message Subscription Rule – Add Rule



<sup>&</sup>lt;sup>16</sup> CRDM UHB v2.0 chapter 2.3.4.4





## Examples<sup>17</sup>:

Business Case	Parameter	Parameter value	
Receive a camt.054 (credit/debit no-			
tification) for all your accounts in one	Message type <sup>18</sup>	Camt.054	
settlement service (e.g. CLM)			
Receive a pacs.002 for all your ac-	Message type <sup>19</sup>	Pacs.002	
counts in RTGS	wessage type		
Receive a camt.054 (credit/debit no-	Message type	Camt.054	
tification) for one specific account in	wessage type		
one settlement service (e.g. CLM)	Cash Account	MDEEURBANKDEFFXXX	
Receive a camt.077 (Invoice)	Message type	Camt.077	

## 2. Report Configuration

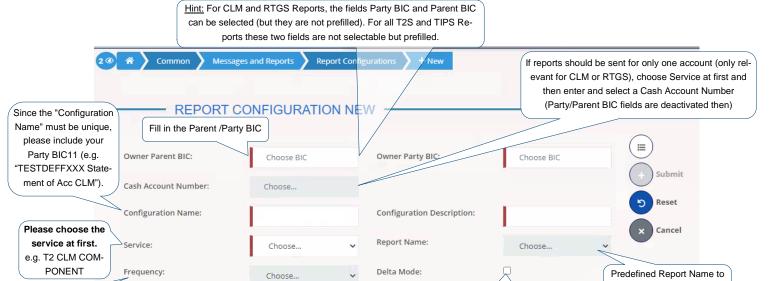
The Report Configuration needs to be set up to receive reports like the RTGS Directory and/or the Statement of Accounts (camt.053).

The following description is relevant for U2A- and A2A-Users.

#### **GUI: CRDM**

Necessary Screen: Report Configuration - New/Edit<sup>20</sup>

Path: Common – Messages and Reports – Report Configuration – New



Not relevant for T2

[Screen continues on the next page.]

System Entity Wide

Reporting Flag:

Not relevant for T2

be chosen e.g. CLM State-

ment of Accounts

<sup>&</sup>lt;sup>17</sup> Further examples can be found in CRDM UDFS v. 2.2 chapter 1.2.3.3

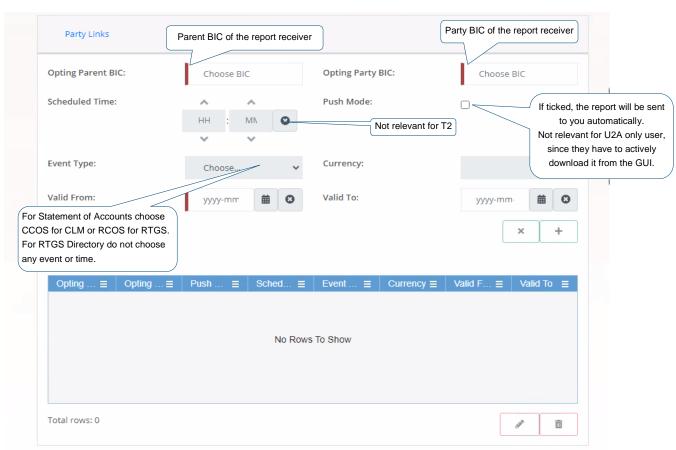
<sup>&</sup>lt;sup>18</sup> It is not necessary to enter a specific cash account.

<sup>&</sup>lt;sup>19</sup> It is not necessary to enter a specific cash account.

<sup>&</sup>lt;sup>20</sup> CRDM UHB v2.0 chapter 2.3.4.7









### **IMPORTANT:**

A report can be configured on party level or on account level. That means:

- If a report e.g. a statement of accounts for the service CLM or RTGS is configured on party level (without defining a cash account), the system will generate one statement of account per account (of that service).
  - Only in that case a payment bank can receive a statement of account for its RTGS Sub-Accounts.
- If a report for the service CLM or RTGS is configured on account level, it is only
  possible to select MCAs (for CLM) or RTGS DCAs (for RTGS). It is not possible
  to select any other account type like e.g. an RTGS Sub-Account.

## 3. Standing Order Configuration for Liquidity Transfers

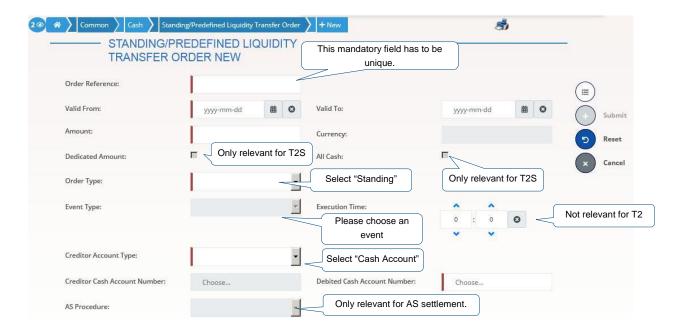
A standing order for liquidity transfers can be created via CRDM GUI (U2A). This functionality offers the possibility to create a daily liquidity transfer. In T2 it is not possible to create a predefined liquidity transfer order. This is only relevant for T2S.





#### **GUI:** CRDM

<u>Necessary Screen:</u> Standing/Predefined Liquidity Transfer Order - New/Edit<sup>21</sup> <u>Path:</u> Common – Cash – Standing/Predefined Liquidity Transfer Order – New



Further details on the possible events can be found in the following tables:

- CLM UDFS v2.2 (chapter 4.5, table 21)
  - With Debit Account in CLM only the Events CESO and CCII are possible
    - CESO "Execution of standing orders in CLM" (planned time of the event is 19:30)
    - CCII "Cut-off for CLM RTS" (planned time of the event is 18:00)
- RTGS UDFS v2.2 (chapter 4.5, table 22)
  - With Debit Account in RTGS only the Event RESO, RRII, RSIC, RLSO are possible
    - RESO "Execution of standing orders in RTGS" (planned time of the event is 19:30)
    - RRII "Start of RTGS RTS II" (for this event there is no planned time as it starts directly after RTS I)
    - RSIC "Start of settlement window for interbank and customer payments" (planned time of the event is 2:30)
    - RLSO "Execution of standing orders after last settlement attempt in RTGS" (planned time of the event is after 18:00)

A standing Order to a sub-account or a Technical Account needs to have an AS procedure. Otherwise, it is not processed. In this case, no event is necessary.

<sup>&</sup>lt;sup>21</sup> CRDM UHB v2.0 chapter 2.3.2.10





### **Examples:**

<b>Business Case</b>	Involved accounts	Event to be	Amount
		entered	
Daily transfer of a fixed	<ul> <li>Debit of the CLM</li> </ul>	CESO	Individual amount to be de-
amount from CLM to	MCA		fined
RTGS at the start of	<ul> <li>Credit on the</li> </ul>		
the business day	RTGS DCA		
Daily transfer of the	Debit of the RTGS	RLSO	Maximum amount:
whole balance of the	DCAs		9,999,999,999,999.99
RTGS DCA to CLM at	<ul> <li>Credit on the CLM</li> </ul>		<ul> <li>While typing the num-</li> </ul>
the end of the busi-	MCA		bers of the amount the
ness day			thousand separator will
			not be shown
			In case the balance is
			lower than the maximum
			amount entered in the
			standing order, a partial
			settlement will take place
			without any further set-
			tlement attempt. Conse-
			quently, the whole
			amount of the RTGS
			DCA will be transferred.

## 4. Standing Order Configuration for Limits

A standing order for limit can be created via CRDM GUI (U2A). This functionality offers the possibility to create a daily bilateral/multilateral limit. A multilateral limit can only be created if at least one bilateral limit is defined.

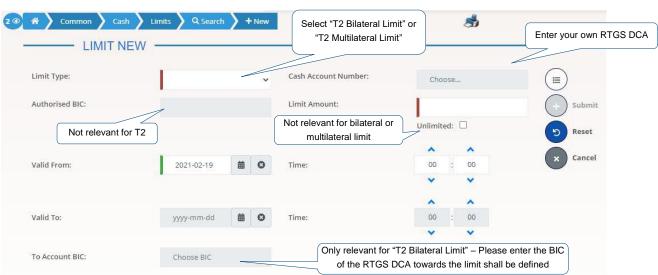
**GUI:** CRDM

<u>Necessary Screen:</u> Limits - New/Edit<sup>22</sup> <u>Path:</u> Common - Cash - Limits - New

 $<sup>^{\</sup>rm 22}$  CRDM UHB v2.0 chapter 2.3.2.5







## 5. Standing Order Configuration for Reservation

A standing order for reservation can be created via CRDM GUI (U2A). This functionality offers the possibility to create a reservation for different purposes:

- Reservation in CLM for the settlement of Central Bank Operations
- Reservation in RTGS for payments with the priority "high" and "urgent" as well as AS transfers
- Reservation in RTGS for payments with the priority "urgent" and AS transfers

For functional details please see our training material published on <a href="https://www.bundes-bank.de/content/842930/">https://www.bundes-bank.de/content/842930/</a>

## 5.1 Standing Order for Reservation for Central Bank Operations

**GUI:** CRDM

<u>Necessary Screen:</u> Standing Order for Reservation - New/Edit<sup>23</sup> Path: Common – Cash – Standing Order for Reservation – New



<sup>&</sup>lt;sup>23</sup> CRDM UHB v2.0 chapter 2.4.1.13





## 5.2 Standing Order for Reservation for payments and AS transfers (RTGS)

**GUI:** CRDM

<u>Necessary Screen:</u> Standing Order for Reservation - New/Edit<sup>24</sup> <u>Path:</u> Common – Cash – Standing Order for Reservation – New



#### Two options are available:

- Choose "High" for the reservation for payments with the priority "high" and "urgent" as well as AS transfers or
- Choose "Urgent" for the reservation for payments with the priority "urgent" and AS transfers

## 6. Floor/Ceiling Configuration

### 6.1 Floor/Ceiling Notification

CLM/RTGS sends a notification in U2A or A2A mode with the information that a floor or ceiling amount was breached on the MCA/RTGS DCA by a payment/AS transfer. The following setup has to be done in advance.

**GUI:** CRDM

Necessary Screen: Cash Account - New/Edit<sup>25</sup>

Path: Common – Cash – Cash Accounts – Search – click on "Edit"-button

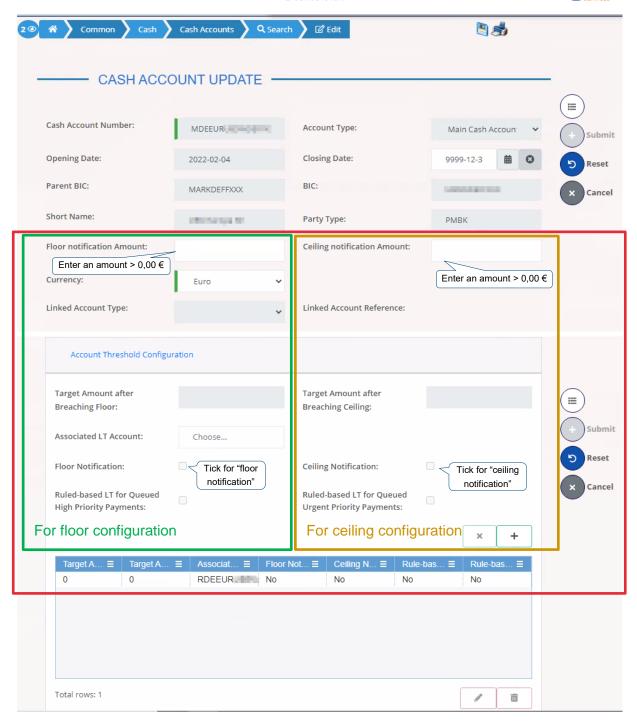
All the other fields are pre-filled by the Central Bank based on the information provided with the registration form.

<sup>25</sup> CRDM UHB v2.0 chapter 2.3.2.3

<sup>&</sup>lt;sup>24</sup> CRDM UHB v2.0 chapter 2.4.1.13









## IMPORTANT:

For the correct configuration of the notification, it is necessary to define both - the notification amount and the notification check box.





## 6.2 Rule-based liquidity transfer order due to floor/ceiling breach

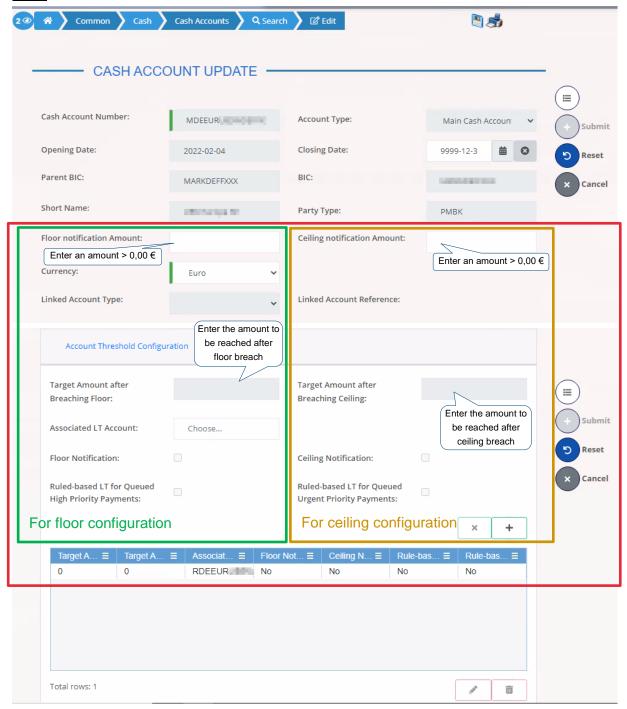
CLM/RTGS initiates a rule-based liquidity transfer in case a floor/ceiling amount has been breached by a payment/AS transfer. The following setup has to be done in advance.

### Step 1: Definition of the Floor/Ceiling (Target) Amounts

**GUI:** CRDM

Necessary Screen: Cash Account - New/Edit<sup>26</sup>

Path: Common – Cash – Cash Accounts – Search – click on "Edit"-button



<sup>&</sup>lt;sup>26</sup> CRDM UHB v2.0 chapter 2.3.2.3





All the other fields are pre-filled by the Central Bank based on the information provided with the registration form.



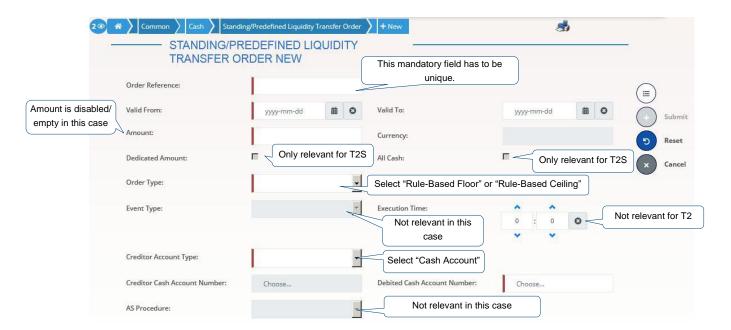
#### IMPORTANT:

For the correct configuration of the rule-based liquidity transfer it is necessary to define both amounts – meaning the notification amount and the target amount after breaching.

### Step 2: Set up of the rule-based liquidity transfer order

#### **GUI: CRDM**

<u>Necessary Screen:</u> Standing/Predefined Liquidity Transfer Order - New/Edit<sup>27</sup> <u>Path:</u> Common – Cash – Standing/Predefined Liquidity Transfer Order – New





#### IMPORTANT:

In case of a **floor breach**, the account to be credited will be the one where the floor was defined.

If the account to be debited belongs to a different party, the standing order has to be set up by the account holder of the account to be debited.

In case of **ceiling breach**, the account to be debited will be the one where the ceiling was defined.

Rule-based liquidity transfer orders have to be defined separately for floor and ceiling.

<sup>&</sup>lt;sup>27</sup> CRDM UHB v2.0 chapter 2.3.2.10





## 7. Rule-based liquidity transfer order due to queued payments/ AS transfers

RTGS initiates a rule-based liquidity transfer in case

- a "high", "urgent" payment or an AS transfer gets queued (Option 1) or
- an "urgent" payment or an AS transfer gets queued (Option 2).

The liquidity will then be pulled from the MCA that was defined as Associated LT Account (via the registration form).

**GUI:** CRDM

Necessary Screen: Cash Account - New/Edit<sup>28</sup>

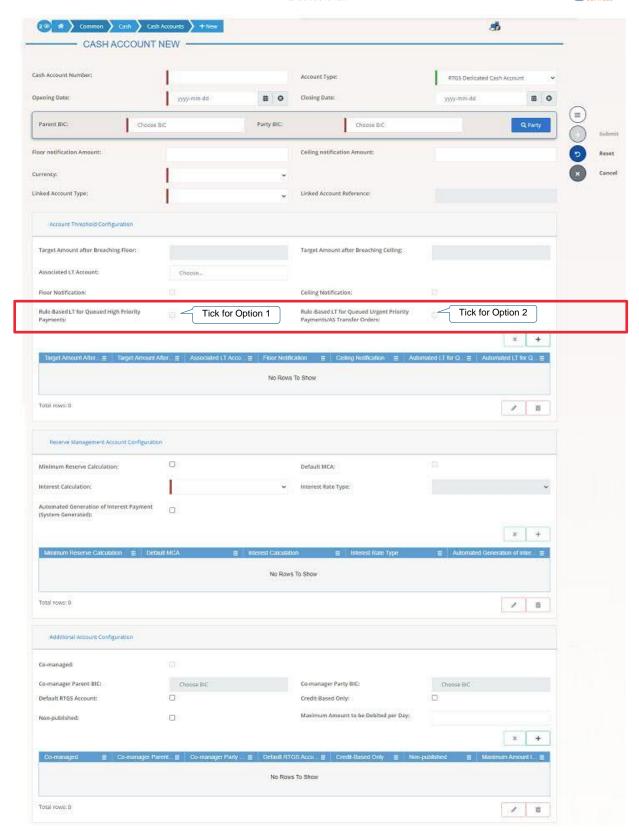
Path: Common – Cash – Cash Accounts – Search – click on "Edit"-button

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<sup>&</sup>lt;sup>28</sup> CRDM UHB v2.0 chapter 2.3.2.3







The majority of the fields is already pre-filled based on the information provided in the registration form.







## 

For this rule-based liquidity transfer no separate liquidity transfer order has to be created in CRDM. The account to be debited is the Default Main Cash Account defined as "Associated LT Account".

## 8. Account Monitoring Group

With an Account Monitoring Group several accounts can be grouped for liquidity monitoring purposes in the CLM GUI. The accounts may be owned by different parties. The following account types can be added to an Account Monitoring Group: MCA, RTGS DCA, T2S DCA and TIPS Account.

Only the group leader can create the Account Monitoring Group and will have the overview of the liquidity of the included accounts. The respective Account Holders can add their accounts to an existing Account Monitoring Group.

## **Step 1: Creation of the Account Monitoring Group**

This step needs to be done by the Account Monitoring Group Leader.

**GUI: CRDM** 

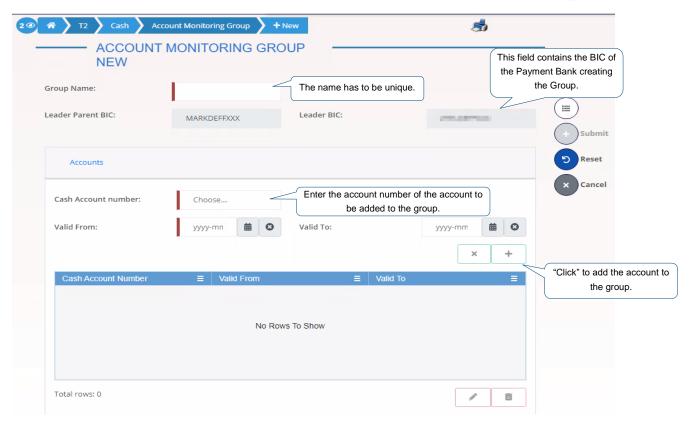
Necessary Screen: Account Monitoring Group - New/Edit<sup>29</sup>

Path: T2 - Cash - Account Monitoring Group - New

<sup>&</sup>lt;sup>29</sup> CRDM UHB v2.0 chapter 2.4.1.3







## Step 2: Adding accounts to an existing group

This step needs to be done by the Account Holder of the account to be added.

1. At first search the respective Account Monitoring Group with its *Group Name*.

**GUI:** CRDM

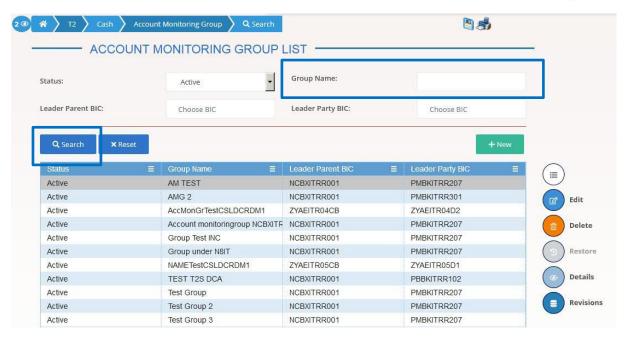
Necessary Screen: Account Monitoring Group – Search/List<sup>30</sup>

Path: T2 - Cash - Account Monitoring Group - Search

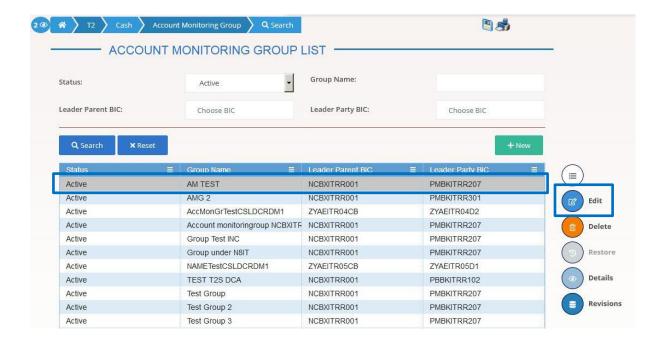
<sup>&</sup>lt;sup>30</sup> CRDM UHB v2.0 chapter 2.4.1.1







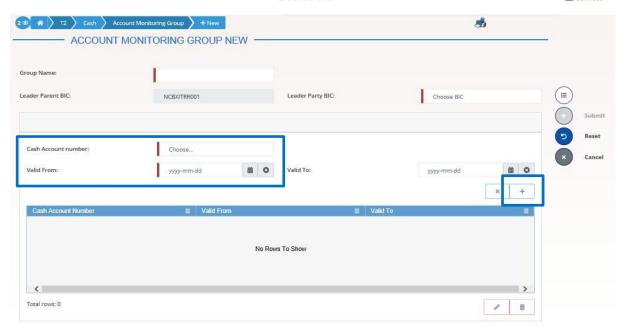
2. Select the respective group to which the account shall be added and "click" on the "Edit"-Button.



3. CRDM will redirect you to the Screen shown in Step 1 "Creation of the Account Monitoring Group". Please enter the *Cash Account number* of the account to be added and the *Valid from* and "click" the "+"-symbol.









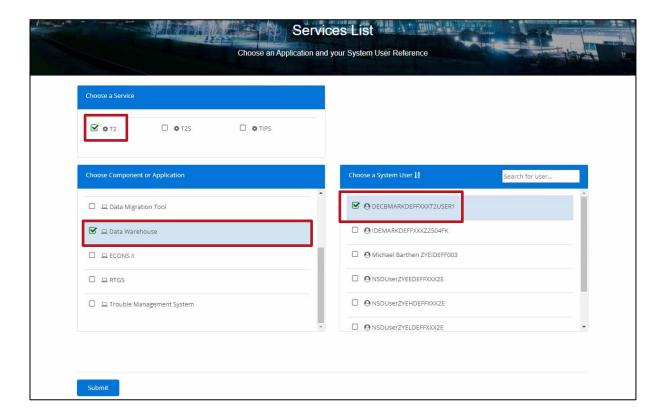


## Data Warehouse - most important aspects at a glance

## 1 Structure of DWH

In the DWH, the information from T2 (CLM and RTGS) is stored for all past business days t-1 and can be retrieved.

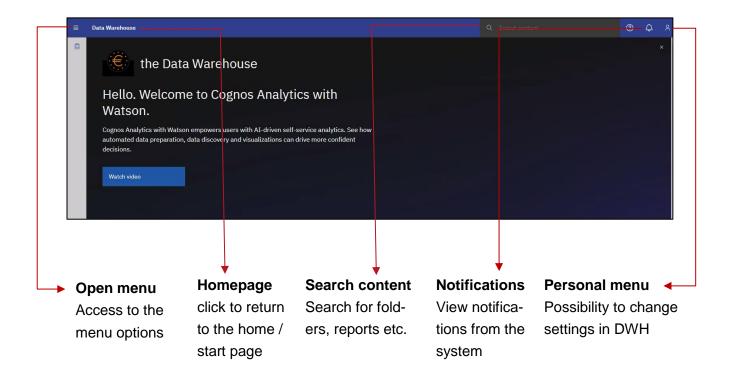
For the login in the DWH the component "Data Warehouse" has to be selected in ESMIG.



After successful login to the data warehouse via ESMIG, the following start page appears:











## 2 Query of a "Predefined" Report

In the DWH, all users have the possibility to query so-called "predefined" reports.

To query a report (e.g. account statement or transaction query), we recommend selecting the requested report directly via the search content.



The following reports are available

Report name	short description		Authorised Users		
		Payment Banks	Ancillary Systems	Co-Manager	
ANS01	Overview of AS Transfer Orders		X		
BDY01	Business day event/delay information and settlement opening time		Х		
IDC03	Credit line/IDC averages and maxima (account level)		Х		
IDC05	Maximum of credit line used		Х		
MIR01	Minimum reserve information	Х			
PAR02	List of active Direct and Indirect Participants according to RTGS Directory	Х	Х		
STA01	Statement of account (single account)	Х	Х		
STA02	Statement of account (co-managed accounts)			Х	
STF01	Standing facilities information	Х			
TRN01	Cash transfer (order) search and details	Х	Х		
TRN02	Monthly overview of domestic and cross-border payments				
TRN03	Monthly peak day and peak hour in terms of vol- ume and value of cash transfer orders	Х			
TRN05	Monthly overview of cash transfer orders per party	Х			
TRN06	Monthly share of Indirect Participant, addressable BIC and multi-addressee payments as part of total Direct Participant's activity	х			
TRN08	Business activity of a party/parties	X			

## 2.1 Statement of account (single account) (STA01)

With the report STA01, the account statement of a single account for a selected business day or individual periods can be queried and downloaded U2A.





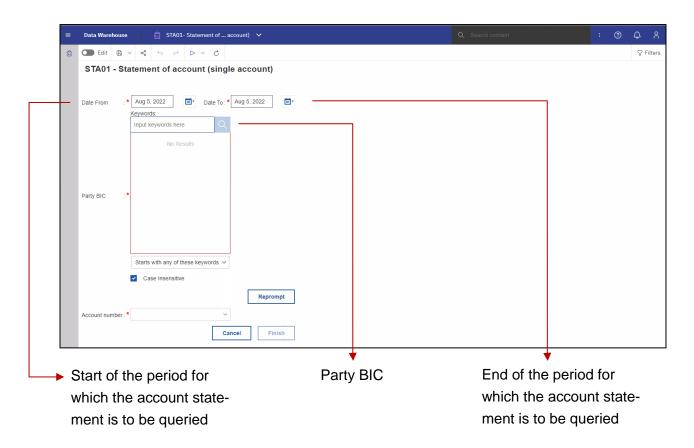
Enter the required report - STA01 - in the search field and confirm the entry (either by pressing the Enter key or by clicking on the suggestion that appears in the GUI).



The result of the query will be shown as follows:



After selecting the report type, a menu opens for entering the filter criteria for the report you are looking for. All fields marked with a red star are mandatory fields that must be filled in.

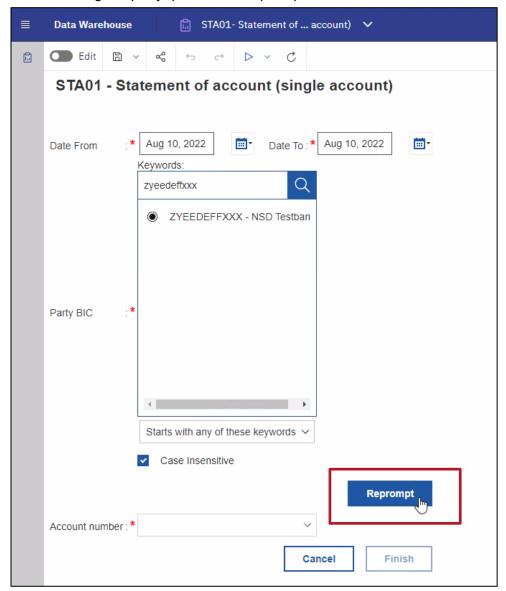






First, the period for the account statement must be defined. Then the party BIC must be entered via the field "Input keywords here" and then the magnifying glass symbol on the right side must be pressed. All entries matching the keywords entered appear in the large field. The correct one is to be selected by clicking on it.

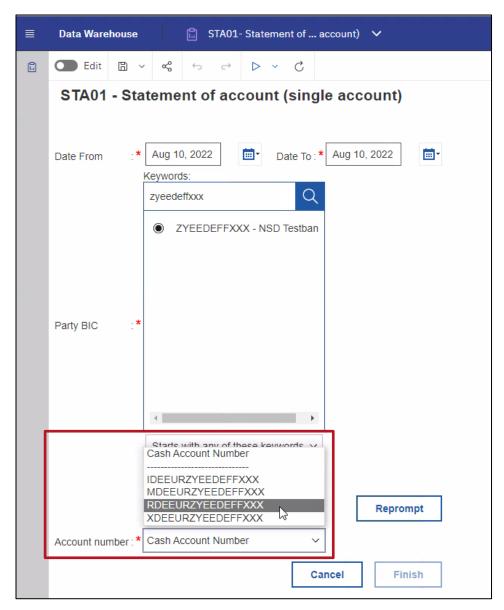
After selecting the party, press the "Reprompt" button.



This fills the selection mask of the available accounts ("Account number"). An account is to be selected from these.



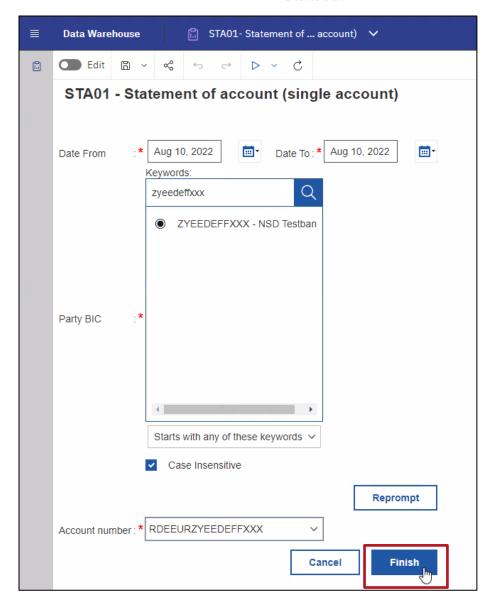




Press the "Finish" button. The "Finish" button is only activated when all mandatory fields have been filled in.



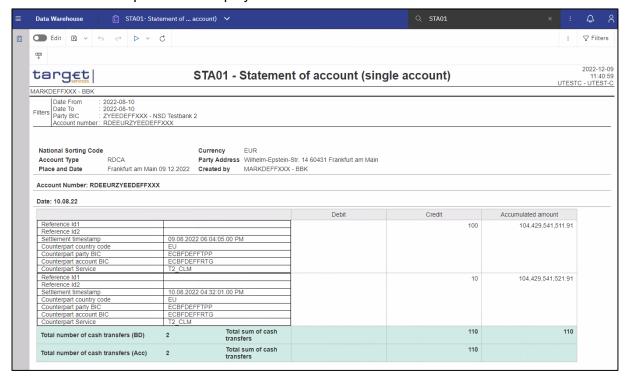




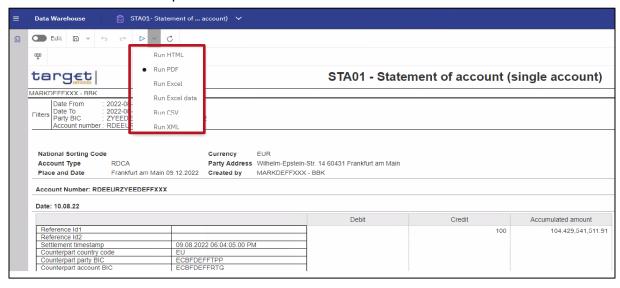




The result of the report is first displayed in HTML format.



To download the data or the report, press the button "Run as". This allows you to select the format in which the report is to be run.







The report is then automatically downloaded in the selected format.

target	STA01 - Sta	tement o	of account (	single account)	2022-12-0 11:50:1 UTESTC - UTEST-
MARKDEFFXXX - BBK					312313 31231
Date To : 202	22-08-10 22-08-10 EEDEFFXXX - NSD Testbank 2 EEURZYEEDEFFXXX	2			
National Sorting Code		Currency	EUR		
Account Type RD0	CA	Party Address	Wilhelm-Epstein-Str.	14 60431 Frankfurt am Main	
Place and Date Fra	nkfurt am Main 09.12.2022	Created by	MARKDEFFXXX - BBH	<	
Account Number: RDEEURZ	YEEDEFFXXX				
Date: 10.08.22	YEEDEFFXXX			Debit	
Date: 10.08.22	YEEDEFFXXX			Debit	
Date: 10.08.22  Reference Id1 Reference Id2				Debit	
Date: 10.08.22  Reference Id1 Reference Id2 Settlement timestamp	VEEDEFFXXX  09.08.2022 06:04:05.00 PM	И		Debit	
Reference Id1 Reference Id2 Settlement timestamp Counterpart country code		И		Debit	
Reference Id1 Reference Id2 Settlement timestamp Counterpart country code Counterpart party BIC	09.08.2022 06:04:05.00 PN EU ECBFDEFFTPP	И		Debit	
Reference Id1 Reference Id2 Settlement timestamp Counterpart country code Counterpart party BIC Counterpart account BIC	09.08.2022 06:04:05.00 PN EU ECBFDEFFTPP ECBFDEFFTG	И		Debit	
Reference Id1 Reference Id2 Settlement timestamp Counterpart country code Counterpart party BIC Counterpart account BIC Counterpart Service	09.08.2022 06:04:05.00 PN EU ECBFDEFFTPP	И		Debit	
Reference Id1 Reference Id2 Settlement timestamp Counterpart country code Counterpart party BIC Counterpart acount BIC Counterpart Service Reference Id1	09.08.2022 06:04:05.00 PN EU ECBFDEFFTPP ECBFDEFFTG	Л		Debit	
Reference Id1 Reference Id2 Settlement timestamp Counterpart country code Counterpart party BIC Counterpart account BIC Counterpart service Reference Id1 Reference Id2	09.08.2022 06:04:05.00 PN EU ECBFDEFFTPP ECBFDEFFRTG T2_CLM			Debit	
Reference Id1 Reference Id2 Settlement timestamp Counterpart country code Counterpart account BIC Counterpart service Reference Id1 Reference Id2 Settlement timestamp	09.08.2022 06:04:05.00 PN EU ECBFDEFFTPP ECBFDEFFTG			Debit	
Reference Id1 Reference Id2 Settlement timestamp Counterpart country code Counterpart party BIC Counterpart account BIC Counterpart service Reference Id1 Reference Id2	09.08.2022 06:04:05.00 PN EU ECBFDEFFTPP ECBFDEFFRTG T2_CLM			Debit	





## 2.2 Query Cash transfer details (TRN01)

Transactions of previous business days can be queried using the TRN01.

Enter the required report - TRN01 - in the search content field and confirm the entry (either by pressing "Enter" or by clicking on the suggestion that appears in the GUI).



The result will be shown as follows:



After selecting the report type, a menu opens for entering the filter criteria for the report you are looking for. All fields marked with a red star are mandatory to be filled in.



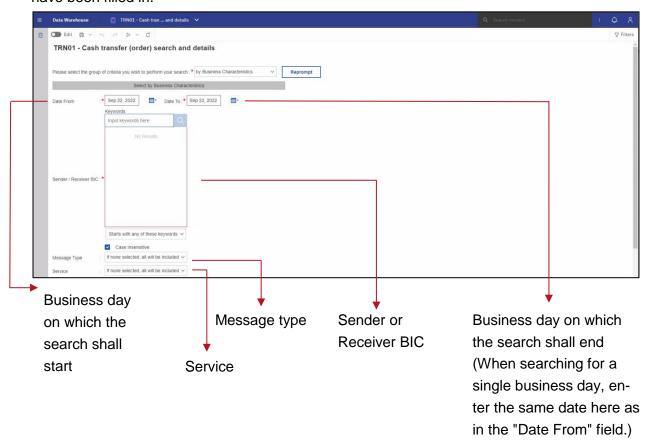
The user has the choice of searching on the basis of the transaction reference or on the basis of "Business Characteristics". It is recommended to search for "Business Characteristics". After selecting "Business Characteristics", the button "Reprompt" must be pressed in order to apply the change.

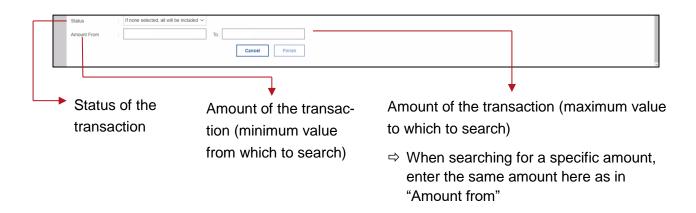






The "Finish" button is only activated when all mandatory fields marked with a red star "\*" have been filled in.





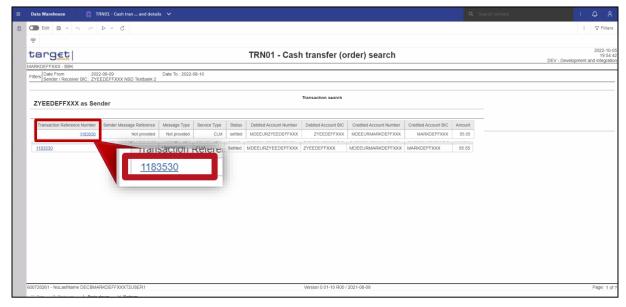
Finally the button "Finish" can be pressed.

When all mandatory fields have been filled in the "Finish" button will be activated.





The result shows all cash transfers that match the entered filter criteria.



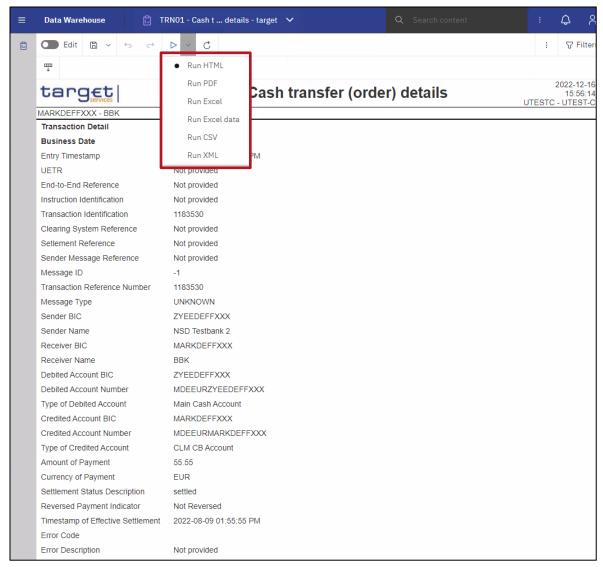
By clicking on the "*Transaction Reference Number*" further details of the cash transfer will be displayed.



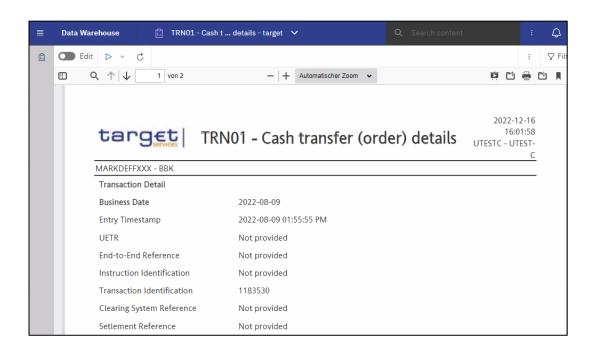
To download the data or report, press the button "Run as". Hereby the format of the download can be chosen.







The report will be downloaded in the chosen format.



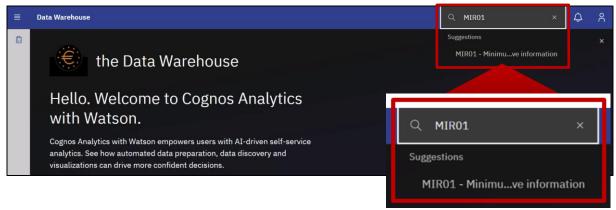




## 2.3 Query of minimum reserve fulfilment (MIR01)

The MIR01 report contains periodic information on the fulfilment of minimum reserves and the corresponding interest charged / credited. It is available individually for each institution and can be accessed by the participants themselves.

Enter the required report - MIR01 - in the search content field and confirm the entry (either by pressing "Enter" or by clicking on the suggestion that appears in the GUI).



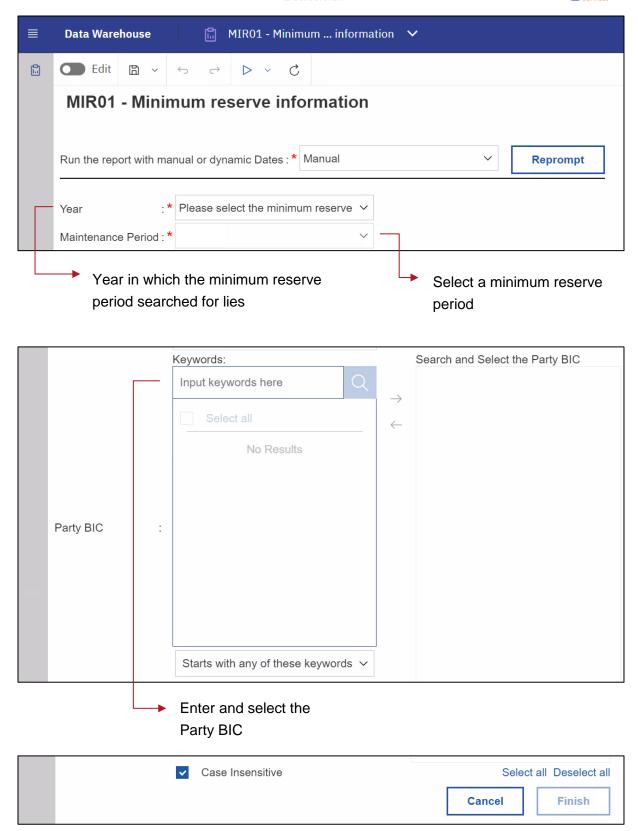
The result will be shown as follows:



After selecting the report type, a menu opens for entering the filter criteria for the report you are looking for. All fields marked with a red star are mandatory to be filled in.







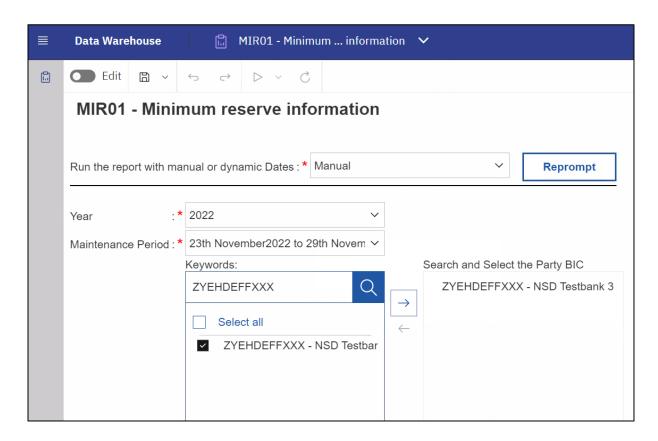
First select the year in which the required minimum reserve period took place. By entering the year, the selection field "Maintenance Period" is activated. The corresponding minimum reserve period must be selected here.





Both the year and the maintenance period are mandatory fields for accessing the report. Only when both fields have been filled in is the "Finish" button at the bottom of the screen activated and the report can be started.

Then, select your party BIC. This is done by entering the BIC in the "*Input Keywords here*" field and then clicking on the magnifying glass icon "C" to the right. Select your specific Party-BIC and use the arrow-symbol " to transfer it to the right column. To create the report, press the "Finish" button.



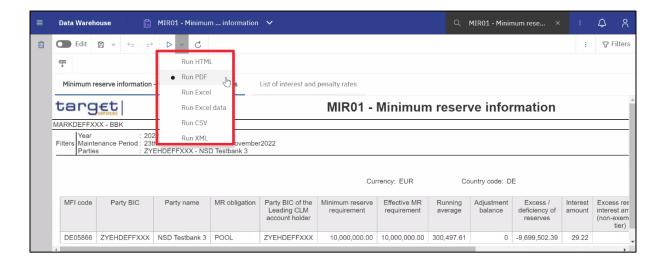
The result shows the information on the fulfilment of minimum reserves and the corresponding interest charges/credits for the selected reserve period.







To download the data or report, press the button "Run as". Hereby the format of the download can be choosen.



The report will be downloaded in the chosen format.

