

How to Copy Master Data Using a Delta Refresh Process

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Introduction

The purpose of this document is to explain how Gold Client can be used to set up a reoccurring process that will help keep the master data in the respective target client fresh by periodically copying master data that has been newly created and/or changed in your production system.

This guide provides the necessary steps for copying master data based on date ranges, specifically using Created-On and Changed-On dates, as the basis for the data selection. Other dates could be used in this process, but the guide uses only these two.

For most organizations, the Gold Client steps defined in this guide could be deployed by your team's designated Gold Client Superusers as long as they have the necessary access within Gold Client. The Basis team may need to assist in select areas, particularly when it comes to managing RFCs.

It is possible to use this same process for copying transactional data; however, this document specifically focuses on master data since keeping it refreshed is a more common requirement among Gold Client customers.

If your organization feels the need to vary from the recommended processes documented here, freely contact the Qlik team to discuss alternative approaches and potential impacts.

Process Overview

Important: This use case assumes that a target client has already been created using Gold Client software and Qlik's recommended best practices which means that an initial mass load of all master data into the target client has already been performed. Reference the document named *How to Build a Target Client Using a Repeatable Process* for details about this process.

It is first necessary for your organization to determine which data objects are in scope for the delta refresh process; some typical examples are materials, customers, vendors, cost centers, assets, GL accounts, internal orders, and equipment, but this list is not comprehensive. Once this list of data objects is known, the team must then create Scenarios for each data object that covers the scope of data to be copied.

For each data object that is to be copied, two scenarios could be created; the first is using a Created-On date, and the second, a Changed-On date. Each organization can decide if only one or both dates should be included in the refresh process. For the purposes of providing holistic documentation, this guide covers both sets of dates. This guide assumes that the organization will always use the Created-On date at minimum.

Using a Changed-On date for certain data objects is not as easy as it may seem. Objects like Customers, Vendors, and GL Accounts do not contain a Changed-On date field on their respective tables so this means that the Change Document header table (CDHDR) must be used as the basis for the Scenario instead. What this means is that to create the Scenario in a meaningful (and optimal) manner is that the Change Document object type must be known. Please be aware that configuration may need to be added to the Data Echo framework to support these requirements. *Tip: see the Appendix for a list of the more common master data Change Object types.*

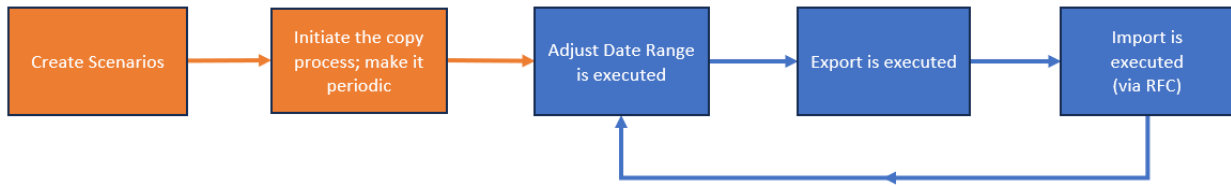
Be aware that creating the various Scenarios represents the majority of setup work that must be performed, but once done, Qlik advises customers to extract maximum value from the Gold Client solution by taking advantage of fully automating the refresh process. This can be achieved in the following ways:

- Setting up the export job to occur periodically (according to your use case); this is typically weekly or monthly.
- Including the 'Adjust Date Range' function so that the Scenarios' selection criteria is automatically updated to use the respective date ranges; for typical use cases, this is best thought of as 'today' minus 7-days for weekly refreshes or 'today' minus 30-days for monthly refreshes (this update frequency should align with the export frequency).
- Using the Auto-Import option so that the import process runs automatically after the export is complete.

Note: The Auto-Import function uses an RFC connection and so this would have to be setup in advance. Contact the Qlik team for support on this topic, if needed.

This figure provides a visual representation of this data copy use case. The steps in orange represent the one-time setup tasks while the steps in blue represent those steps executed as part of the automated process (Fig. 0.1).

Figure 0.1



Creating Data Scenarios

Prior to copying data, your organization must first identify which data objects are in scope for the given data refresh process. Once this list is known, the team must then create a series of Scenarios that covers the scope of data to be copied. This section focuses on how to create these Scenarios.

For each data object that is to be copied, two Scenarios could be created. The first is using a Created-On date, and the second, a Changed-On date; in this manner, data that has been created or changed within the selected date range will be included in the data copy. Each team can decide if only one or both dates should be included in the process. For the purposes of providing holistic documentation, this section covers both Created-On and Changed-On dates.

For some data objects it may be necessary to create a Scenario for Changed-On dates using the Change Document table (CDHDR) because the data object's header table does not contain a Changed-On date. A couple examples of this are Customer (KNA1) and Vendor (LFA1). Accounting for this variable, there are three different types of Scenarios that could be created and so the section of this document is organized accordingly:

1. Using the Created-On date from the data object's header table
2. Using the Changed-On date from the data object's header table
3. Using the Changed-On date from the Change Document header table (CDHDR)

This document assumes that the user will most likely create all three types of Scenarios and so the content is structured in this sequence, but this is entirely optional and up to the user to determine when one, two or all three are needed.

Creating Scenarios Using the Data Object's Created-On Dates

This section is relevant when needing to create Scenarios using Created-on dates. Multiple data objects will be selected in this example, including Business Partners, Customers, Equipment, Materials, and Vendors.

The process outlined below uses the Data Wave function and within it, the embedded Intelligent Slice function because its typical configuration uses Created-On dates by default, but using this function is not a requirement. Users are free to use the embedded Data Snap function instead or some combination of these two functions. In fact, using Data Snap may be required for those Data Types which are not configured for Intelligent Slice.

1. In the Source client (typically Production), go to t-code /n/HTG/ZGOLD and select the button named 'Data Wave' (Fig. 1.0)

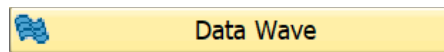


Figure 1.0

2. On the following screen, select the 'Create' button (Fig. 1.1)

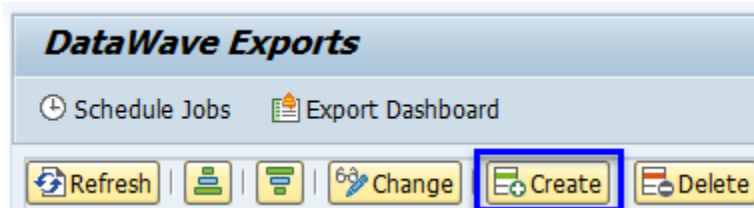


Figure 1.1

3. In the pop-up window, input a description for the Data Wave ID and then select the 'Continue' button (Fig. 1.2). The program appends a new row to the table (Fig. 1.3).
 1. This input describes the purpose or use case for the Data Wave ID. A generic example is "Master Data delta refresh".

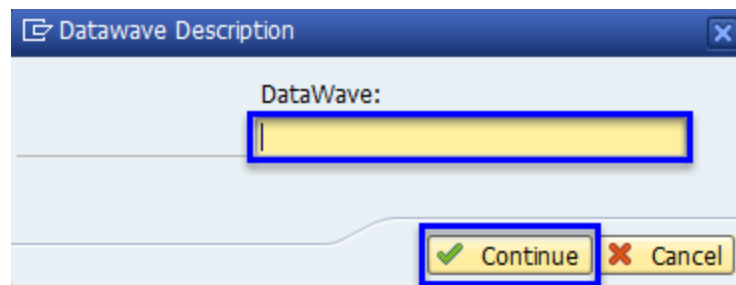


Figure 1.2

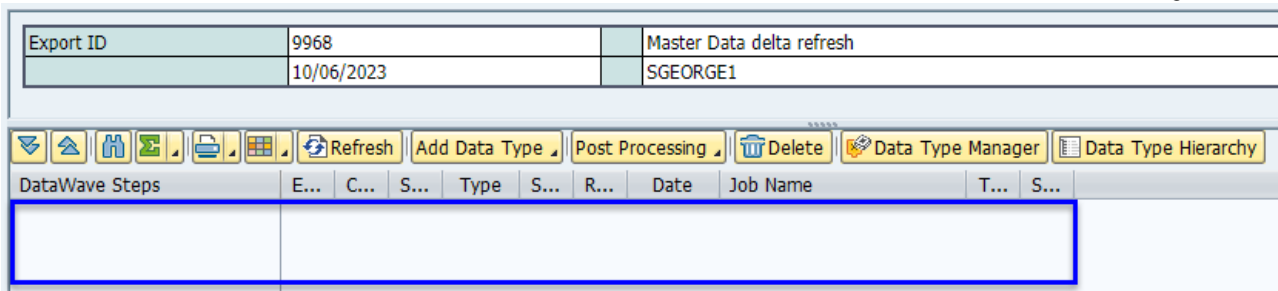
Select	DataWave ID	Owner	DataWave Description	No. of C...	Created On	RFC Destination	System ID
<input type="checkbox"/>	9968	SGEORGE1	Master Data delta refresh		10/06/2023		

Figure 1.3

4. Click on the Data Wave ID to display the details screen (Fig. 1.3). This shows the contents of the Data Wave ID to be empty (Fig. 1.4). At this point, the user will begin

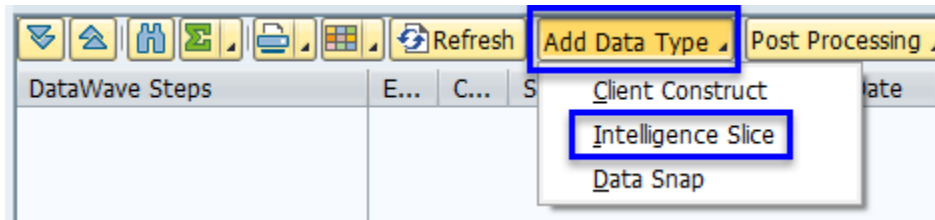
creating the relevant Scenarios and this is typically done using a combination of Intelligent Slice and Data Snap functionality, both of which are covered in this section.

Figure 1.4



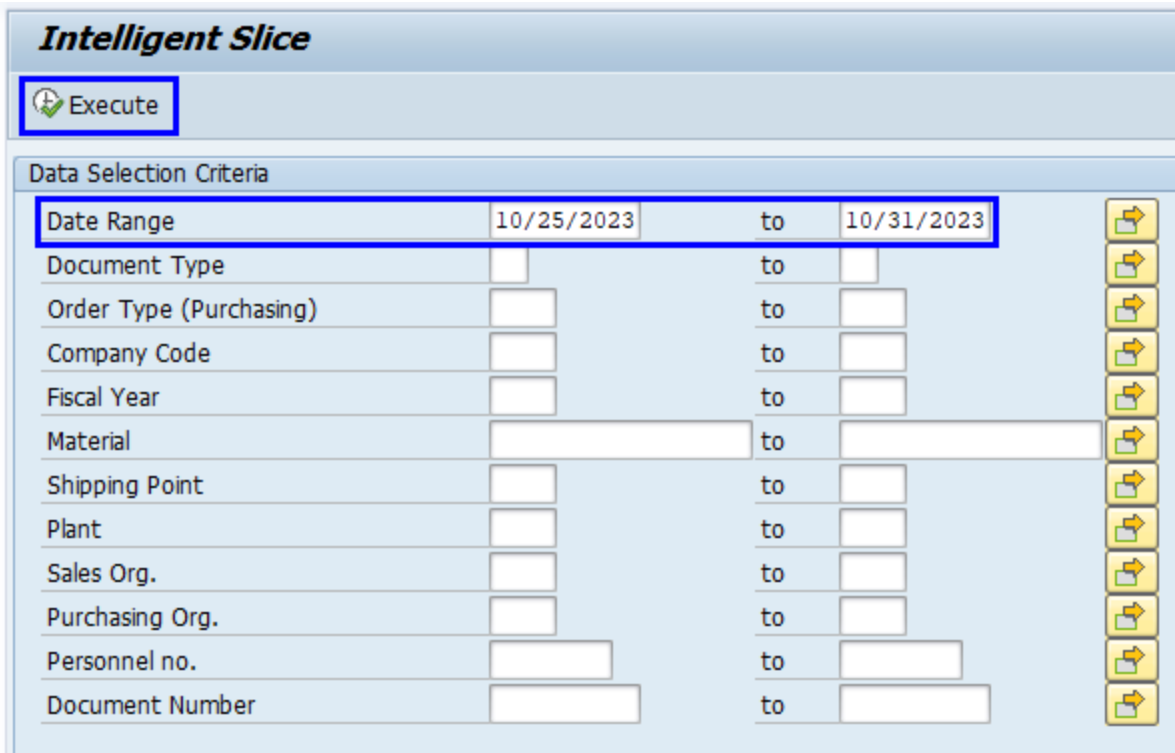
5. Click the 'Add Data Type' button and select 'Intelligent Slice' from the list (Fig. 1.5)

Figure 1.5



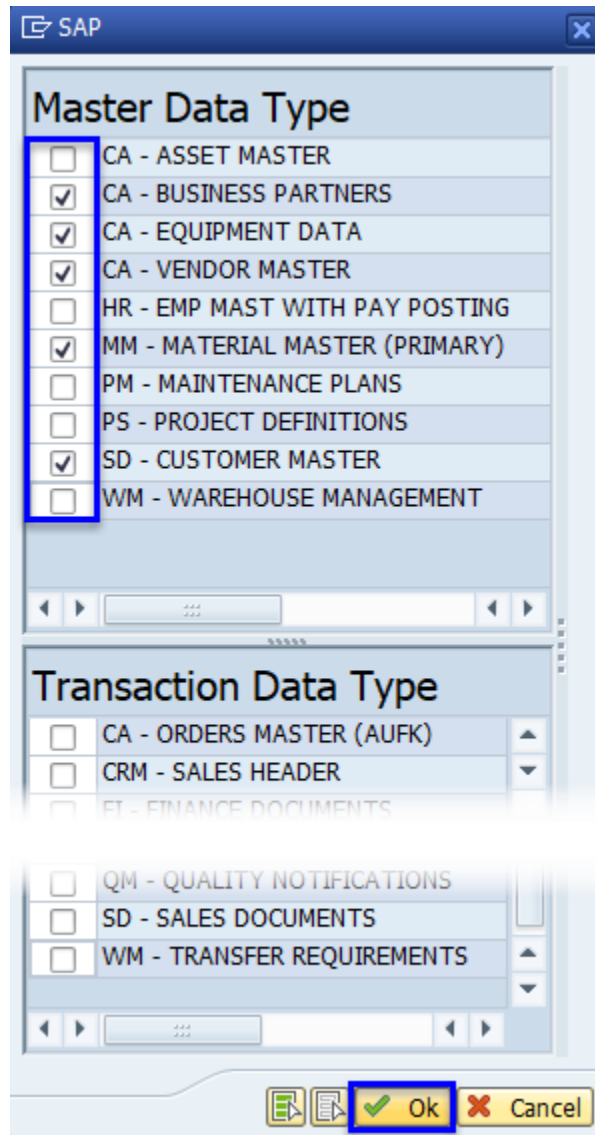
6. On the next screen, input the relevant range and, optionally, any other inputs that may be applicable to the team's use case and the data being selected for refresh. Select the 'Execute' button when done (Fig. 1.6).

Figure 1.6



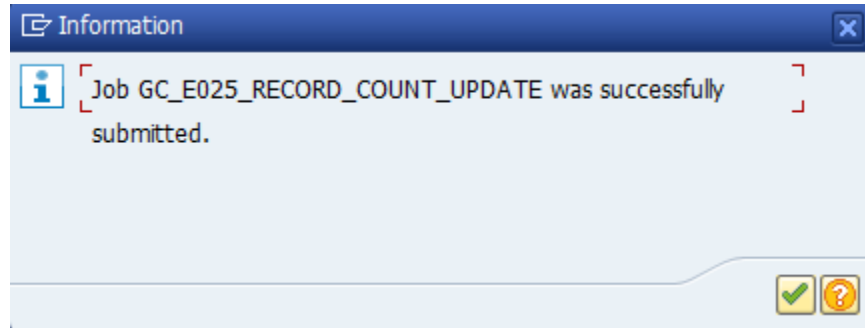
7. The system will respond with a pop-up window containing a list of various Master and Transactional Data Types. Select those Master Data Types which are relevant to the team's use case and click 'Ok' when done (Fig. 1.7).

Figure 1.7



8. The system will respond with a pop-up message indicating that a background job has been submitted (Fig. 1.8). This job is querying the database to identify how many records are found based on the selection criteria inputs and the selected Data Types from the preceding steps. Close this window.

Figure 1.8



- The system will respond with another pop-up message indicating the Export ID and number of Containers created (Fig. 1.9). Close this window. The system will return the user back to the Data Wave screen where the select Data Types and Scenario Numbers will be visible (Fig. 1.10).

Figure 1.9

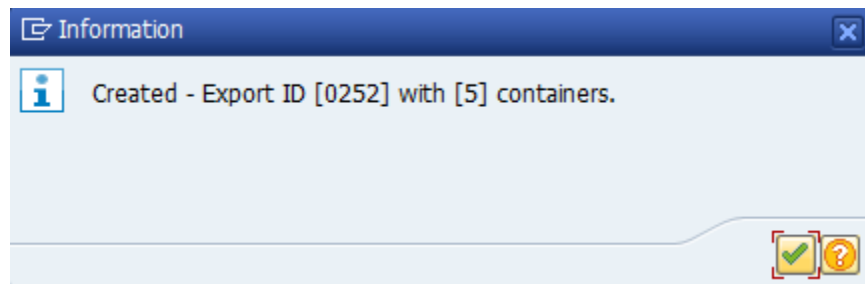


Figure 1.10

DataWave Steps	E...	C...	S...	Type	S...	R...	Date
▼ Data Echo	0000	0000	000			0	00/00/...
• CA - BUSINESS PARTNERS	0252	0001	074	Intelligent Slice		0	00/00/...
• CA - EQUIPMENT DATA	0252	0002	042	Intelligent Slice		0	00/00/...
• CA - VENDOR MASTER	0252	0003	049	Intelligent Slice		0	00/00/...
• MM - MATERIAL MASTER	0252	0004	088	Intelligent Slice		0	00/00/...
• SD - CUSTOMER MASTER	0252	0005	044	Intelligent Slice		0	00/00/...

This process is now complete. If the team's use case requires Scenarios with Changed-On dates, reference the next section.

Creating Scenarios Using the Data Object's Changed-On Dates

This section is used when needing to create a Scenario for a data object using Changed-On dates. This content uses the equipment master data object as an example. The equipment header table, EQUI, contains a Changed-On field, and the Data Type named CA - EQUIPMENT DATA is used to create the Scenario.

1. In the Source client (typically Production), go to t-code /n/HTG/ZGOLD and select the Data Wave function (Fig. 2.0)

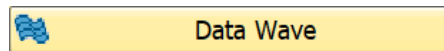


Figure 2.0

2. Click on the Data Wave ID that was created during the previous process (Fig. 2.1). The Scenarios that were added previously should be visible (Fig. 2.2).

Select	DataWave ID	Owner	DataWave Description	No. of C...	Created On	RFC Destination	System ID
<input type="checkbox"/>	9968	SGEORGE1	Master Data delta refresh		10/06/2023		

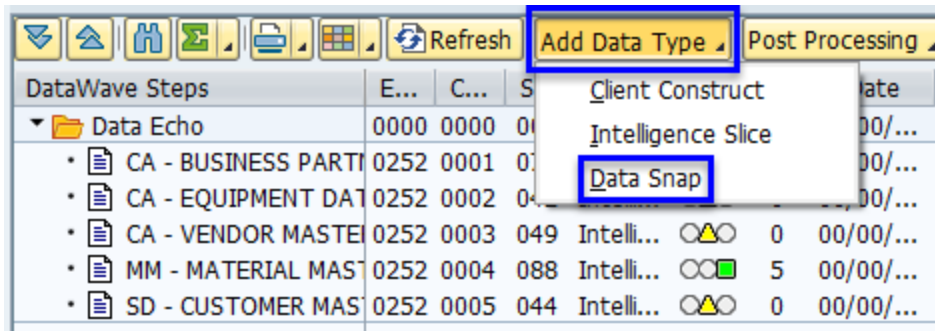
Figure 2.1

DataWave Steps	E...	C...	S...	Type	S...	R...	Date
▼ Data Echo	0000	0000	000			0	00/00/...
• CA - BUSINESS PARTNERS	0252	0001	074	Intelligent Slice		0	00/00/...
• CA - EQUIPMENT DATA	0252	0002	042	Intelligent Slice		0	00/00/...
• CA - VENDOR MASTER	0252	0003	049	Intelligent Slice		0	00/00/...
• MM - MATERIAL MASTER	0252	0004	088	Intelligent Slice		0	00/00/...
• SD - CUSTOMER MASTER	0252	0005	044	Intelligent Slice		0	00/00/...

Figure 2.2

3. Click the 'Add Data Type' button and then select 'Data Snap' from the list (Fig. 2.3)

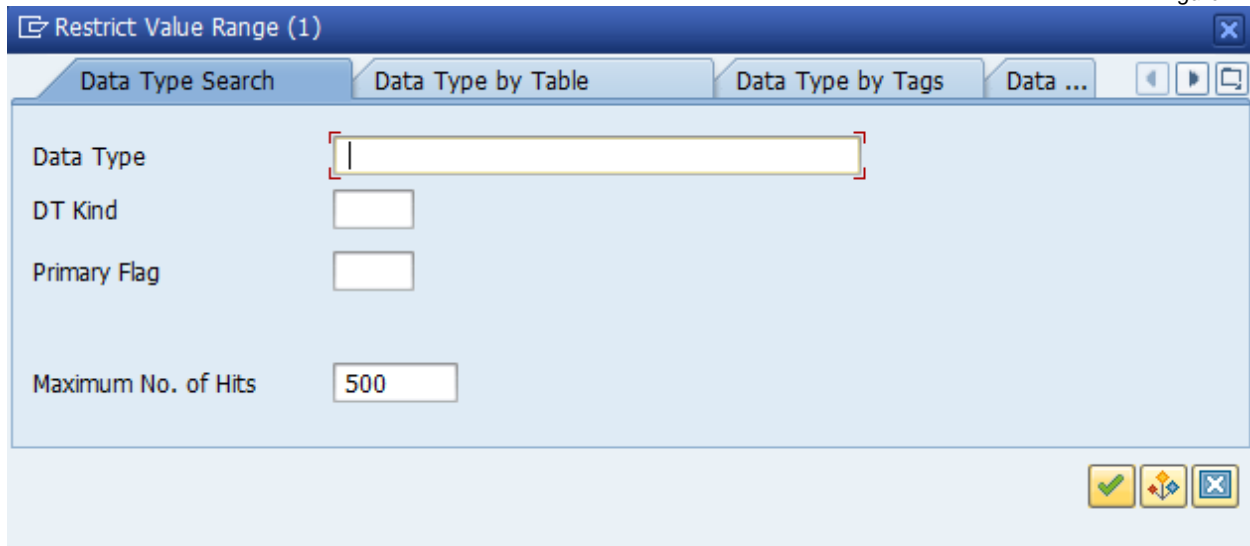
Figure 2.3



4. A new window appears which provides the ability to search for a Data Type (Fig. 2.4). Input the criteria accordingly and select the respective Data Type.

Tip: The Appendix contains a list of the most commonly used master Data Types available in Gold Client.

Figure 2.4



5. Once the Data Type has been selected, a new screen appears where the respective selection criteria can be entered (Fig. 2.5)

Important: As the figure (Fig. 2.5) shows, there may not always be a Changed-On date field readily available for the given Data Type and so this means having to deploy a small amount of configuration first. *Reference the section in the Appendix named Configuring Data Snap for instructions on how to make this change.*

This is how the screen would look after adding the Changed-On date field to the Data Snap configuration (Fig. 2.6). It is okay that the Equipment field is set as a mandatory entry because most Data Snap fields will accept an asterisk (*) as a valid entry.

Figure 2.5

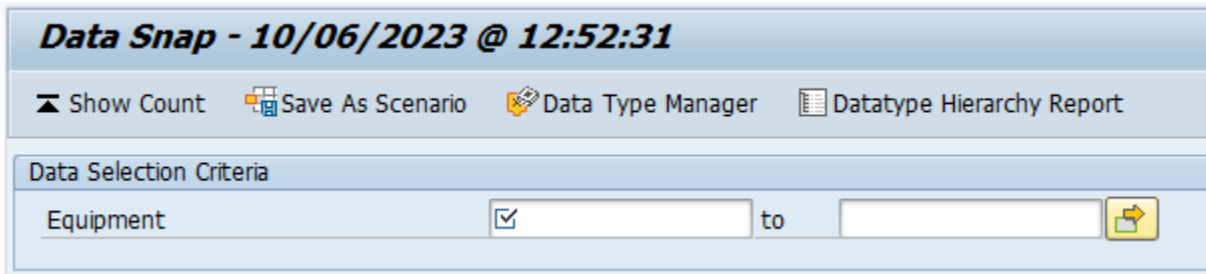
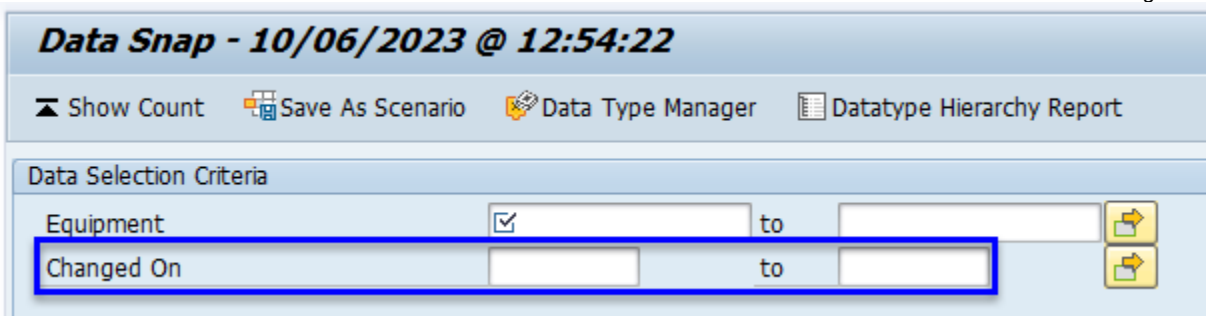


Figure 2.6



- Input the respective date range and any mandatory inputs and then select the 'Save As Scenario' button (Fig. 2.7). Click the 'Online' button when the system asks how to "Execute Save Scenario" (Fig. 2.8). Close any subsequent messages that may appear (Fig. 2.9).

Figure 2.7

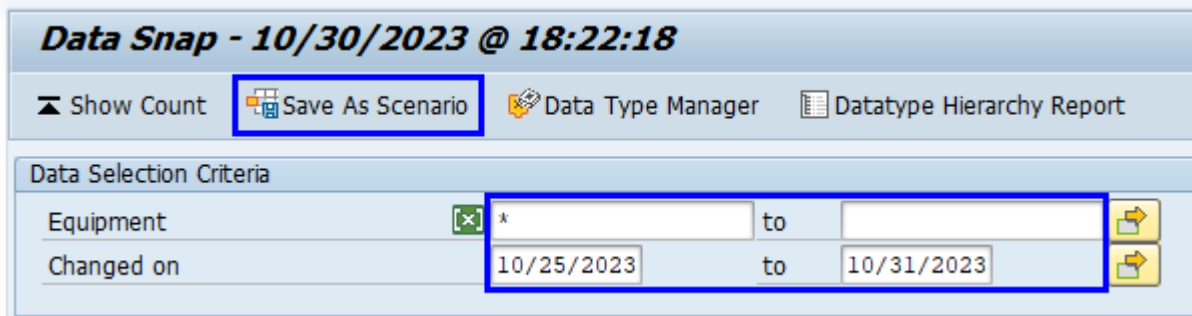


Figure 2.8

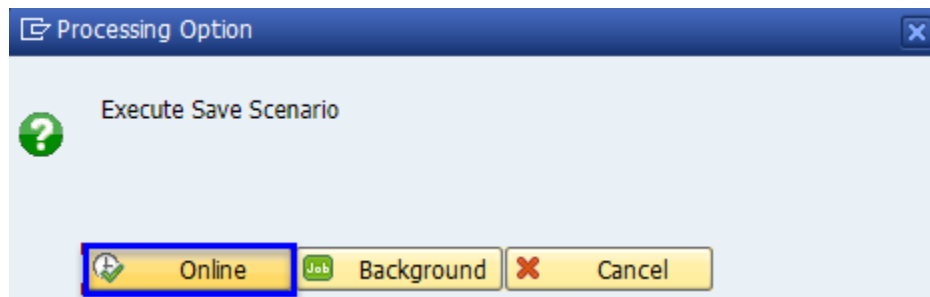
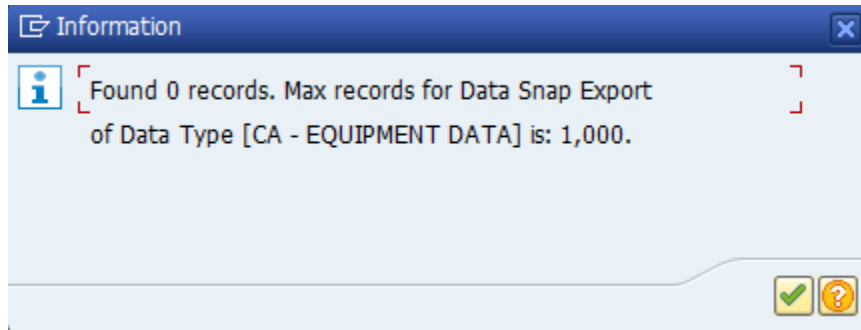


Figure 2.9



- The system responds with a message at the bottom of the screen showing the saved Scenario number (Fig. 2.10) and adds it to the Data Wave ID (Fig. 2.11).

Figure 2.10

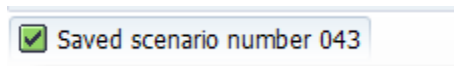


Figure 2.11

DataWave Steps	E...	C...	S...	Type	S...	R...
<ul style="list-style-type: none"> Data Echo <ul style="list-style-type: none"> CA - BUSINESS PARTNERS CA - EQUIPMENT DATA CA - VENDOR MASTER MM - MATERIAL MASTER SD - CUSTOMER MASTER CA - EQUIPMENT DATA 	0000	0000	000			0
	0252	0001	074	Intelligent Slice	🟡🟢	0
	0252	0002	042	Intelligent Slice	🟡🟢	0
	0252	0003	049	Intelligent Slice	🟡🟢	0
	0252	0004	088	Intelligent Slice	🟢🟢	5
	0252	0005	044	Intelligent Slice	🟡🟢	0
	0252	0006	043	Data Snap		0

- Repeat steps 3-7 above for any other Data Types which need to be included in the delta refresh process. In this example (Fig. 2.12), Scenarios have been subsequently created for CA - BUSINESS PARTNERS and MM - MATERIAL MASTER using a Changed-On date range as the selection criteria.

The end result is that there are now five Data Types with Scenarios using a Created-On date range (blue) and three of these same Data Types now have Scenarios using a Changed-On date range (orange).

Figure 2.12

DataWave Steps	E...	C...	S...	Type	S...	R...
▼ Data Echo	0000	0000	000			0
• CA - BUSINESS PARTNERS	0252	0001	074	Intelligent Slice	○△○	0
• CA - EQUIPMENT DATA	0252	0002	042	Intelligent Slice	○△○	0
• CA - VENDOR MASTER	0252	0003	049	Intelligent Slice	○△○	0
• MM - MATERIAL MASTER	0252	0004	088	Intelligent Slice	○△○	5
• SD - CUSTOMER MASTER	0252	0005	044	Intelligent Slice	○△○	0
• CA - EQUIPMENT DATA	0252	0006	043	Data Snap	○△○	0
• CA - BUSINESS PARTNERS	0252	0007	075	Data Snap	○△○	1
• MM - MATERIAL MASTER	0252	0008	089	Data Snap	○△○	3

This process is now complete. If the team's use case requires Scenarios with Changed-On dates that must leverage the Change Document (CDHDR) table, reference the next section.

Creating Scenarios Using Change Documents

This section is used when there is a need to create Scenarios that must leverage Change Documents as the basis for the selection criteria since the data object's primary table does not contain a Changed-On date. This section's content will use the customer, GL account, and vendor as examples because the header tables for these data objects, KNA1, SKA1, and LFA1 respectively, do not contain a Changed-On field.

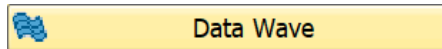
Important:

Please be aware that Qlik strongly recommends using a custom data type to create these Scenarios so that this data refresh is isolated from other copy processes that are already using existing data type CA - CHANGE DOCUMENTS.

- Customers who installed Gold Client in 2024 or later will have received a data type named **CA - CHANGE DOCS FOR MD REFRESH** as part of the default configuration set provided by Qlik which is intended for this use case and so no config changes are required. Freely proceed with the steps below to create Scenarios accordingly.
- Customers who installed Gold Client prior to 2024 will likely need to create a new data type and the instructions are located in the Appendix. If your team has already created a custom 'Change Document' data type for this use case, then there is no need to create another one. If unsure, consider executing the 'Data Type Table Query' (located in the Configuration menu) for table CDHDR to see what data types currently exist in your Gold Client configuration. Once the data type exists, proceed with the steps below to create Scenarios accordingly.

1. In the Source client (typically Production), go to t-code /n/HTG/ZGOLD and select the Data Wave function (Fig. 3.0)

Figure 3.0



2. Click on the same Data Wave ID that was created earlier in the process (Fig. 3.1). The Scenarios that were added previously should be visible (Fig. 3.2).

Figure 3.1

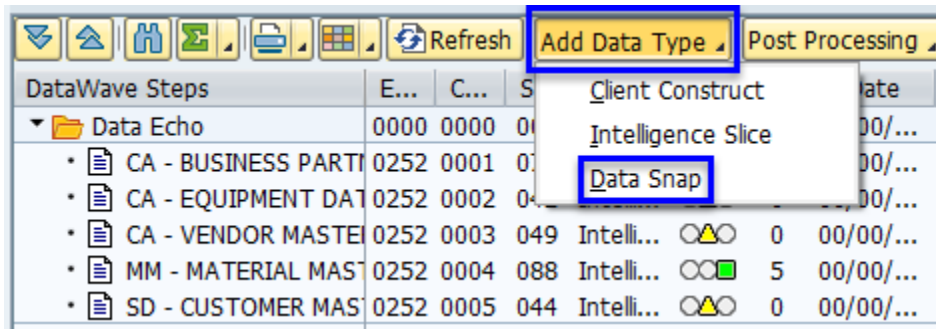
Select	DataWave ID	Owner	DataWave Description	No. of C...	Created On	RFC Destination	System ID
<input type="checkbox"/>	9968	SGEORGE1	Master Data delta refresh		10/06/2023		

Figure 3.2

DataWave Steps	E...	C...	S...	Type	S...	R...
▼ Data Echo	0000	0000	000			0
• CA - BUSINESS PARTNERS	0252	0001	074	Intelligent Slice	○▲○	0
• CA - EQUIPMENT DATA	0252	0002	042	Intelligent Slice	○▲○	0
• CA - VENDOR MASTER	0252	0003	049	Intelligent Slice	○▲○	0
• MM - MATERIAL MASTER	0252	0004	088	Intelligent Slice	○○■	5
• SD - CUSTOMER MASTER	0252	0005	044	Intelligent Slice	○▲○	0
• CA - EQUIPMENT DATA	0252	0006	043	Data Snap	○▲○	0
• CA - BUSINESS PARTNERS	0252	0007	075	Data Snap	○○■	1
• MM - MATERIAL MASTER	0252	0008	089	Data Snap	○○■	3

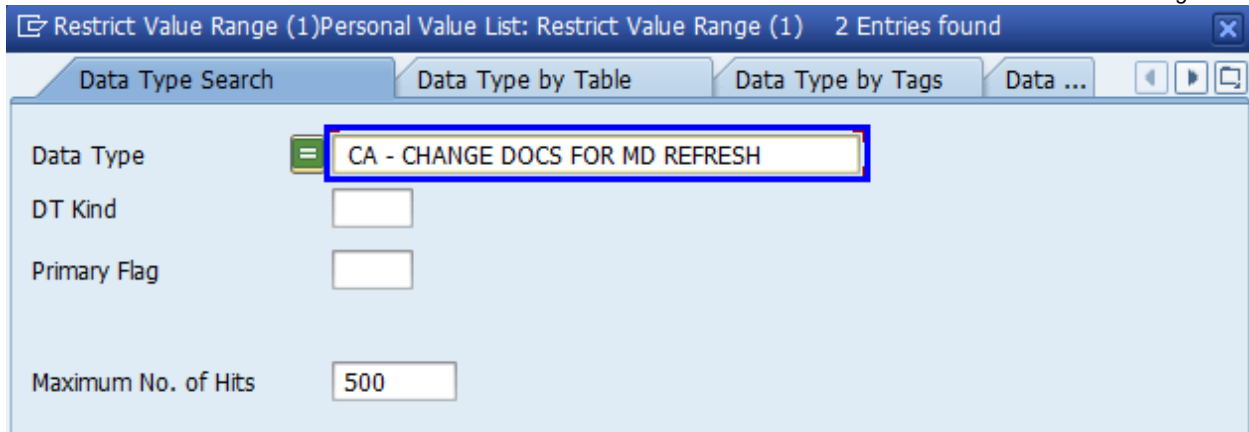
3. Click the 'Add Data Type' button and then select 'Data Snap' from the list (Fig. 3.3)

Figure 3.3



4. A new window appears which provides the ability to search for a Data Type. Input criteria accordingly so that Data Type CA - CHANGE DOCS FOR MD REFRESH (or your custom named data type) can be selected (Fig. 3.4).

Figure 3.4



5. On the next screen, input the date range and the relevant Change Document object types that need to be included in the export (Fig. 3.5)
 - a. In this example, Change Document objects KRED, DEBI, and SACH are used which represent Vendors, Customers, and GL Accounts respectively (Fig. 3.6)
 - b. **Tip:** see the Appendix for a list of the more common master data Change Object types

Figure 3.5

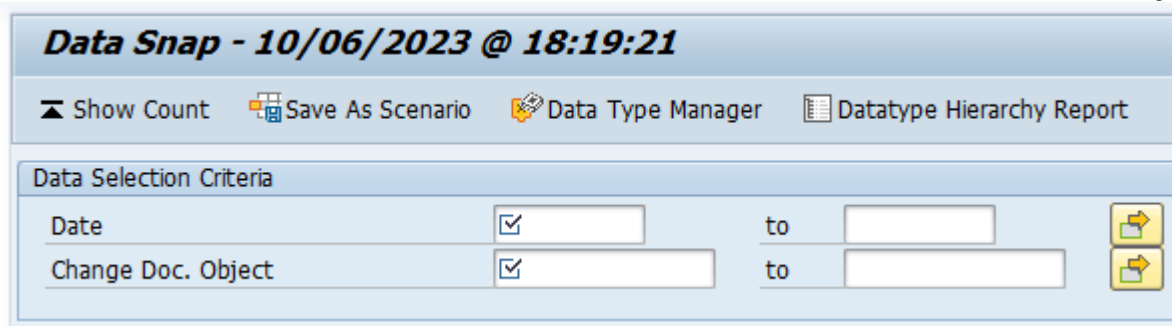
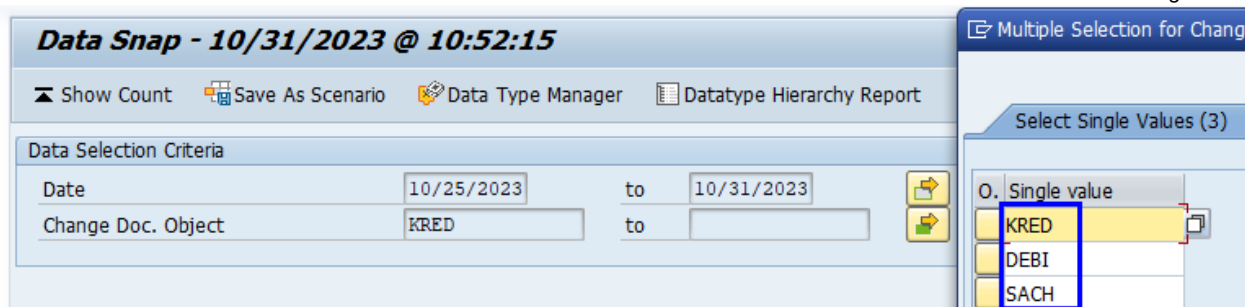
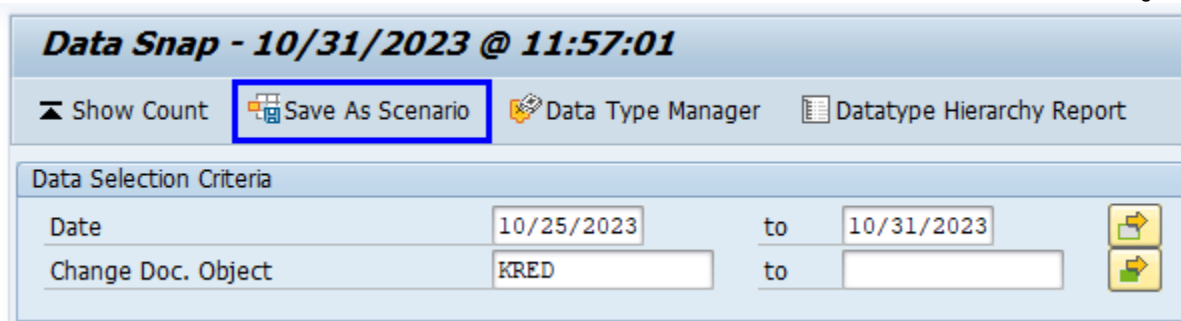


Figure 3.6



6. Click the 'Save As Scenario' button to generate the Scenario (Fig. 3.7)

Figure 3.7



7. Click the 'Online' button when the system asks how to "Execute Save Scenario" (Fig. 3.8). Close any subsequent messages that may appear (Fig. 3.9).

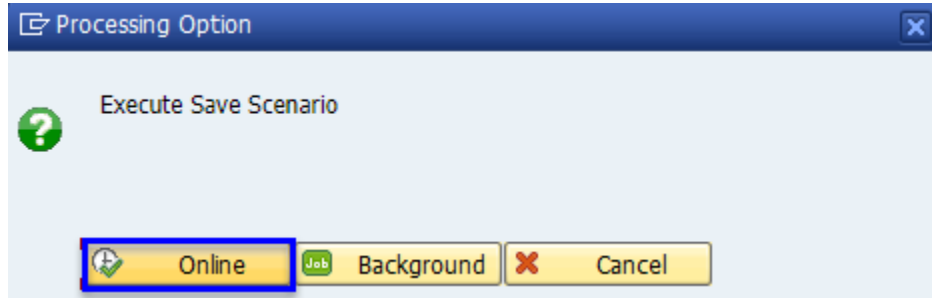


Figure 3.8

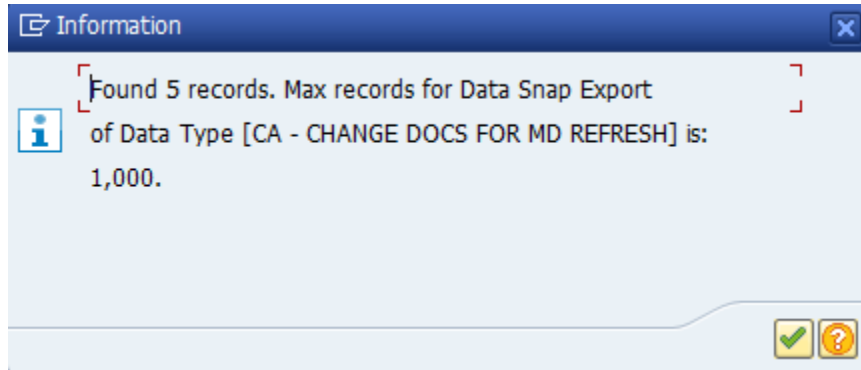


Figure 3.9

- The system responds with a message at the bottom of the screen showing the saved Scenario number (Fig. 3.10) and adds it to the Data Wave ID (Fig. 3.11).

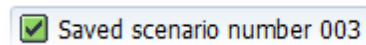


Figure 3.10

DataWave Steps	E...	C...	S...	Type	S...	R...
Data Echo	0000	0000	000			0
• CA - BUSINESS PARTNERS	0252	0001	074	Intelligent Slice	🟡🟡	0
• CA - EQUIPMENT DATA	0252	0002	042	Intelligent Slice	🟡🟡	0
• CA - VENDOR MASTER	0252	0003	049	Intelligent Slice	🟡🟡	0
• MM - MATERIAL MASTER	0252	0004	088	Intelligent Slice	🟢🟢	5
• SD - CUSTOMER MASTER	0252	0005	044	Intelligent Slice	🟡🟡	0
• CA - EQUIPMENT DATA	0252	0006	043	Data Snap	🟡🟡	0
• CA - BUSINESS PARTNERS	0252	0007	075	Data Snap	🟢🟢	1
• MM - MATERIAL MASTER	0252	0008	089	Data Snap	🟢🟢	3
• CA - CHANGE DOCS FOR MD REFRESH	0252	0009	003	Data Snap		0

Figure 3.11

The process for completing the various Scenarios is now complete and the user can move on to setting up the copy process.

Copying the Master Data

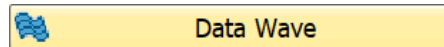
Once the various Scenarios have been created, the data export will need to be scheduled for its first execution and setup to occur on a periodic basis.

A key part of this periodic-automated process is the use of the 'Adjust Date Range' utility. Including this program in the export process will ensure that the date ranges used in the various Scenarios are being updated accordingly as it is important to move the Created-On and Changed-On date ranges forward in the future so that the data selection criteria always uses 'today' as the end date and looks backward in time for the respective number of days. A typical weekly refresh would use 'today minus 7-days' logic and a monthly refresh would use 'today minus 30-days' logic. If the date ranges are not adjusted, then this process would simply export the same set of data over and over again using a static date range.

Qlik also recommends using the optional settings for automating the import so that way the copy process is fully automated. In this manner, the import initiates automatically once the data has been exported. If the user defers this option, then the data imports can still be initiated manually via the Import Control function and steps 2-3 can be skipped in the process below.

1. In the Source client (typically Production), go to t-code /n/HTG/ZGOLD and select the Data Wave function (Fig. 4.0)

Figure 4.0



2. Click the 'Select' box for the respective Data Wave ID and then select the 'Import Options' button (Fig. 4.1)

Figure 4.1

DataWave Exports

Schedule Jobs | Export Dashboard

Refresh | Change | Create | Delete

Show All | **Import Options** | Data Transform | Data Exclusions | Subset Sync | Adjust Date Utility | Job Monitor

Select	DataWave ID	Owner	DataWave Description	No. of C...	Created On	RFC Destination	System ID
<input checked="" type="checkbox"/>	9968	SGEORGE1	Master Data delta refresh	9	10/06/2023		

3. A new window appears where the user has many options available (Fig. 4.2)
 - a. Input the RFC value for the respective target where the data will be imported
 - b. Select the 'Parallel Processing On Import' box if you want the import to use parallel jobs; if not, leave it unselected
 - c. Choose either the 'Replace Conflicting Data' or 'Skip Conflicting Data' option accordingly
 - d. Click 'Accept' when done (note: other settings in this window can be freely ignored)
 - e. A message at the bottom of the screen should appear indicating that the options have been updated (Fig. 4.3)

Figure 4.2

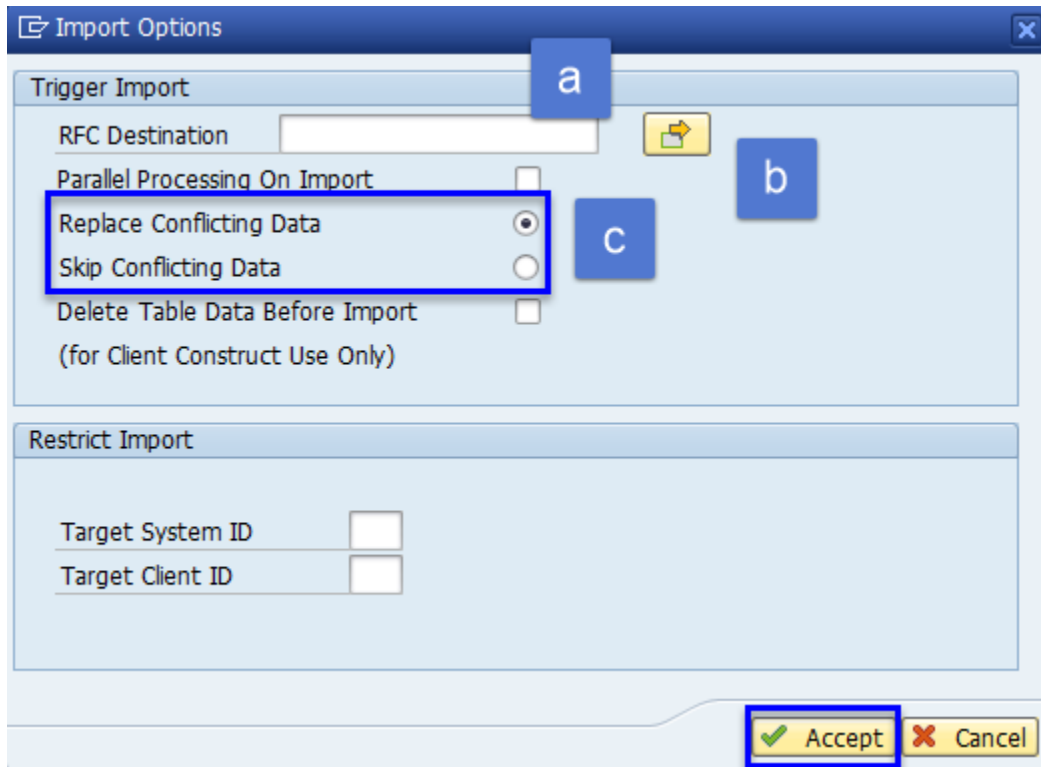
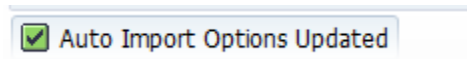
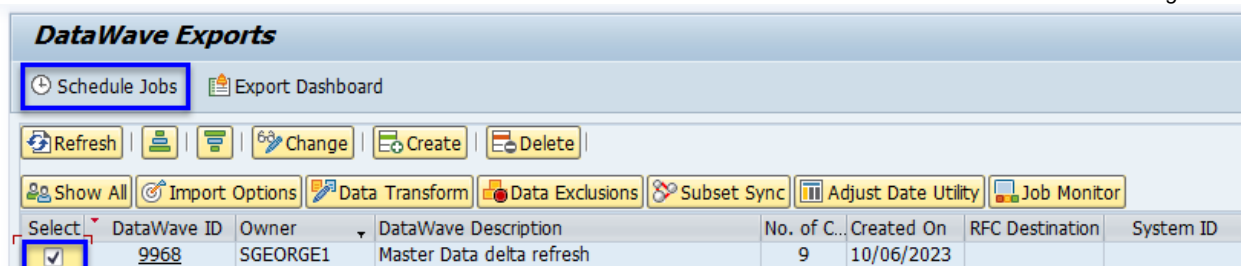


Figure 4.3



4. Click the 'Select' box for the respective Data Wave ID and then select the 'Schedule Jobs' button (Fig. 4.4)

Figure 4.4



5. A new window appears where the user has many options available (Fig. 4.5)
 - a. Input a job name as this is a mandatory entry
 - b. Select the respective frequency for initiating the export
 - i. Be sure to select Daily, Weekly, or Monthly so that the export is performed on a periodic basis with respect to the team's use case
 - c. Choose whether or not to use the 'Parallel Processing' option (it is selected by default)
 - d. Choose the date and time to run the initial export
 - e. Click the 'Run Date Utility' box so that the date ranges used in the various Scenarios' selection criteria will be updated automatically
 - i. See Fig. 4.6-4.7 for examples
 - f. Select the option to designate the number of days this utility looks back in time (from the Start Date)
 - i. Qlik advises using the setting that best aligns with the export's frequency; for example, if the export is scheduled to run weekly, then set this utility to be weekly as well.
 - g. Click 'Accept' when done

Figure 4.5

Figure 4.6

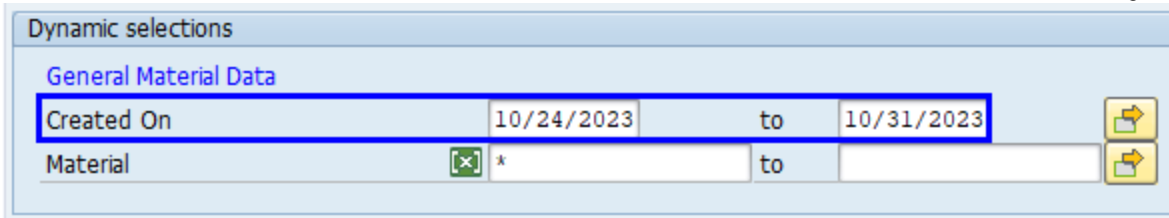
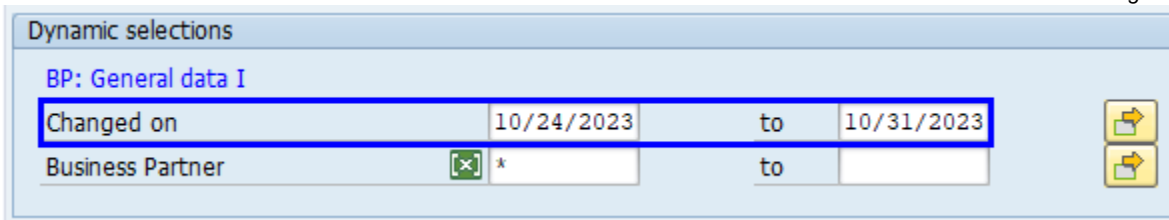
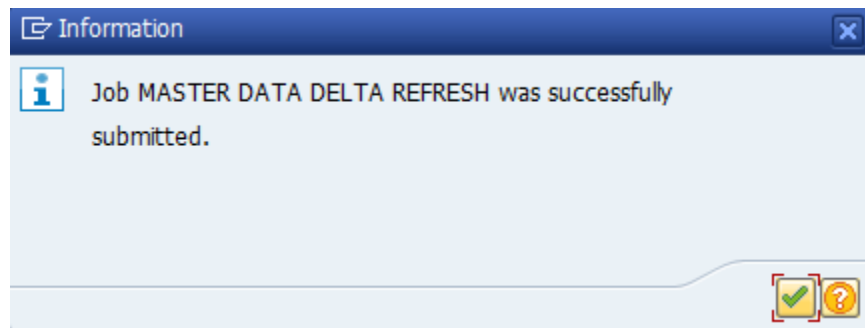


Figure 4.7



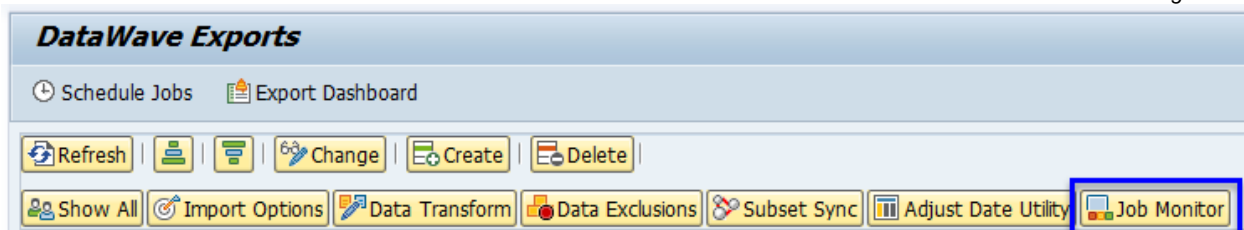
6. A message should appear indicating that the export has been submitted (Fig. 4.8). Close this message.

Figure 4.8



7. Go to SAP's Job Monitor to confirm that the job has been submitted successfully. This can be done via the 'Job Monitor' button (Fig. 4.9) or via standard SAP functionality (t-code SM37).

Figure 4.9



8. Optionally, check that the start date, start time, and job frequency are defined as expected (Fig. 4.10). The job should have two steps where the first is to run the Adjust Date Range Utility and the second is to run the export (Fig. 4.11).

Figure 4.10

General Data	
Job Name	MASTER DATA DELTA REFRESH
Job Class	C
Status	Released
Target	sap-gct_GCT_00
Spool List Recipient	

Job Start	Job Frequency
Planned Start	Weekly
Date 10/09/2023	
Time 17:30:00	

Figure 4.11

Step List Overview

Refresh Spool All Spool Lists

No.	Program name/command	Prog. type	Spool list	Parameters	User	Lang.
1	/HTG/GLC_UTL_R_50	ABAP		&00000000000020	SGEORGE1	EN
2	/HTG/GCS_ECC_EXP_P_00	ABAP		&00000000002136	SGEORGE1	EN

At this point, the setup is complete, and the copy process should be executed according to when it was scheduled. Once the data copy is complete, the team should verify that the expected data was copied successfully.

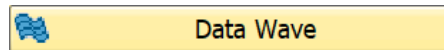
Appendix

Configuring Data Snap

If you need to customize the Data Snap screen to include the Created-On or Changed-On fields, there are multiple ways to do so within Gold Client, but the following steps describe how to do so using Data Wave since that is the dominant function used in this delta refresh process.

1. Go to /n/HTG/ZGOLD and select the Data Wave function (Fig. 5.0)

Figure 5.0



2. Click on the respective Data Wave ID to reach the details screen (Fig. 5.1)

Figure 5.1

Select	DataWave ID	Owner	DataWave Description	No. of C...	Created On	RFC Destination	System ID
<input type="checkbox"/>	9968	SGEORGE1	Master Data delta refresh		10/06/2023		

3. Select the Data Type which requires configuration changes and then select the 'Data Type Manager' button (Fig. 5.2)
 - a. **Important:** For this to work, the entire row must be selected and not just the Data Type field (Fig. 5.3). To select the row, click on the icon next to the Data type (see arrow in Fig. 5.2).

Figure 5.2

Export ID	9968	Master Data delta refresh
	10/06/2023	SGEORGE1
	GCT_200	sap-gct_GCT_00

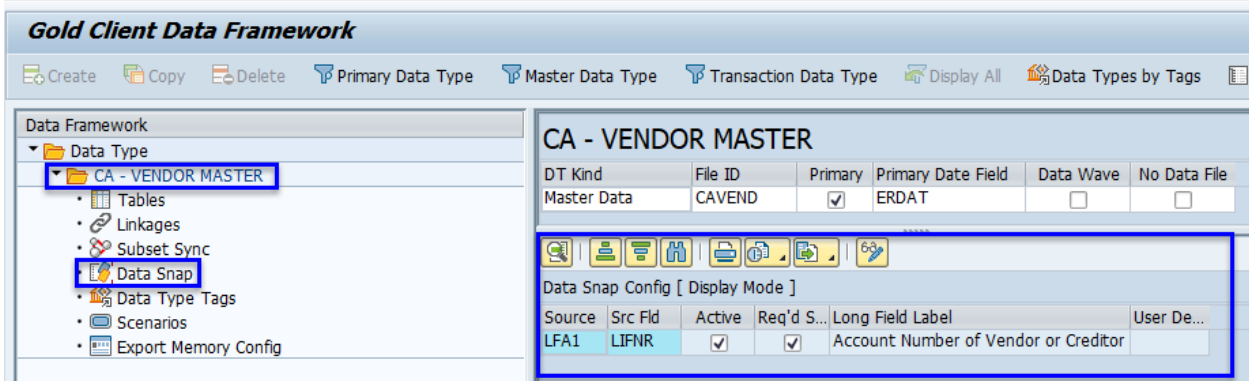
DataWave Steps	E...	C...	S...	Type	S...	R...	Date	Job Name	T...	S...
▼ Data Echo	0000	0000	000			0	00/00/...			
CA - BUSINESS PARTNERS	0252	0001	074	Intelli...	○△○	0	00/00/...	MASTER DATA DELTA RE...	🔧	🔧
CA - EQUIPMENT DATA	0252	0002	042	Intelli...	○△○	0	00/00/...	MASTER DATA DELTA RE...	🔧	🔧
CA - VENDOR MASTER	0252	0003	049	Intelli...	○△○	0	00/00/...	MASTER DATA DELTA RE...	🔧	🔧

Figure 5.3

DataWave Steps	E...	C...	S...	Type	S...	R...	Date	Job Name	T...	S...
▼ Data Echo	0000	0000	000			0	00/00/...			
CA - BUSINESS PARTNERS	0252	0001	074	Intelli...	○△○	0	00/00/...	MASTER DATA DELTA RE...	🔧	🔧
CA - EQUIPMENT DATA	0252	0002	042	Intelli...	○△○	0	00/00/...	MASTER DATA DELTA RE...	🔧	🔧
CA - VENDOR MASTER	0252	0003	049	Intelli...	○△○	0	00/00/...	MASTER DATA DELTA RE...	🔧	🔧

4. On the next screen, open the Data Type, select the 'Data Snap' maintenance view, and then deploy config changes as required (Fig. 5.4)

Figure 5.4

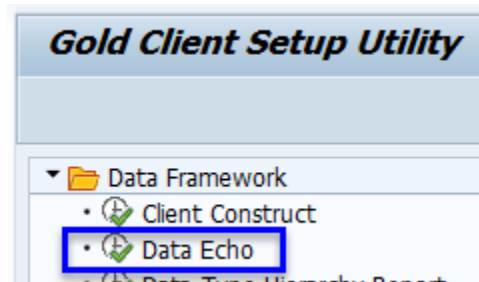


5. Save changes and exit when done; this will return the user to the Data Wave details screen

How to Create a New Data Type (CA - CHANGE DOCS FOR MD REFRESH)

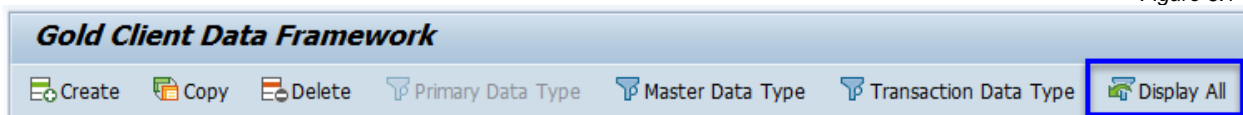
1. In the Source client (typically Production), go to t-code /n/HTG/ZGOLD and select the Configuration button. From the Gold Client Setup Utility screen, select the executable named Data Echo (Fig. 6.0).

Figure 6.0



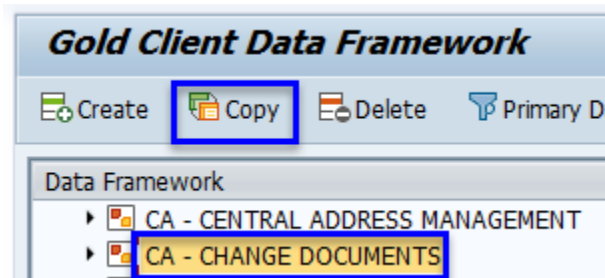
2. Select the 'Display All' filter/button so that all data types appear in the left-hand frame (Fig. 6.1)

Figure 6.1



3. Locate the data type named CA - CHANGE DOCUMENTS and select it. Use the 'Copy' function to create a new iteration of this data type (Fig. 6.2)

Figure 6.2



4. Name the data type CA - CHANGE DOCS FOR MD REFRESH (or something similar if you prefer) and input a File ID of CACDMD (Fig. 6.3)

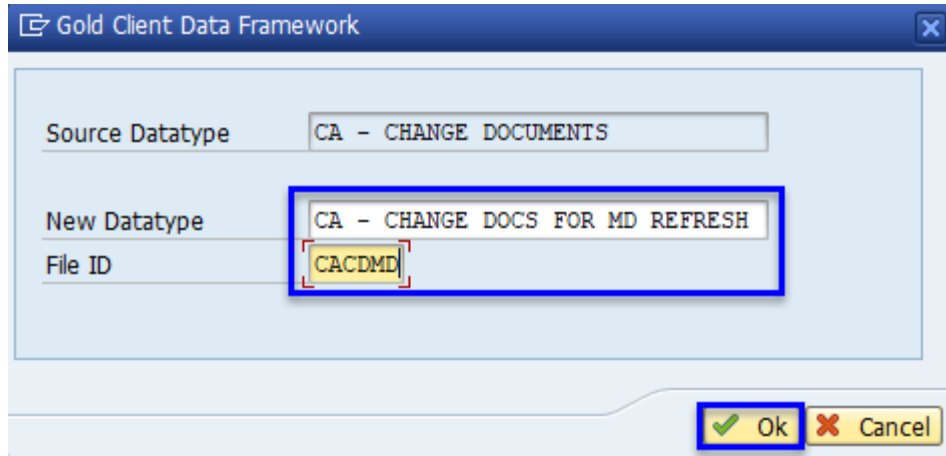


Figure 6.3

5. The newly created Data Type will be appended to the end of the Data Type list; locate the new data type and open it (Fig. 6.4). Then double-click on the 'Linkages' maintenance view (Fig. 6.5).

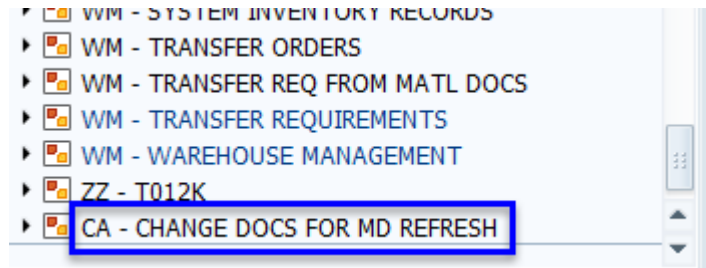


Figure 6.4

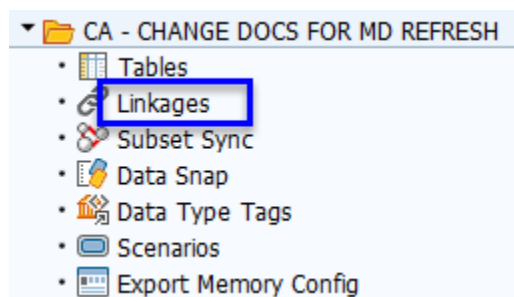
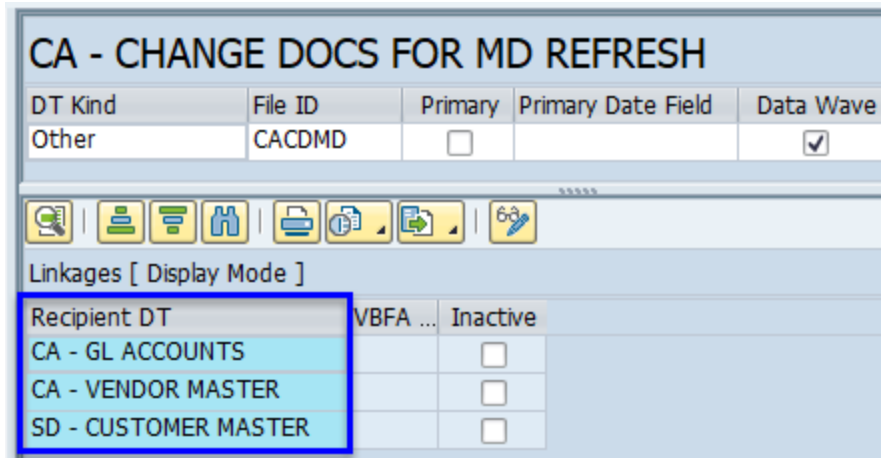


Figure 6.5

6. Add a link to each relevant Data Type; in this example, a link is added to CA - GL ACCOUNTS, CA - VENDOR MASTER, and SD - CUSTOMER MASTER (Fig. 6.6). Repeat this linking process for any other Data Types as per the team's use case.

Figure 6.6



7. For each Data Type linked in the previous step, it is *critical* to add the linkage details so that Gold Client is informed of the relation between the two data objects (Fig. 6.7 - 6.10)
 - a. **Note:** Defining this configuration is very important for this data to be copied successfully. Be aware that this config may vary greatly from one Data Type to the next and that the screen captures below provide some examples but are not meant to be a comprehensive list.
 - b. **Note:** The linkage details used for Data Type CA - GL ACCOUNTS (Fig. 6.7- 6.8) is unusual in that truncation must be used to dissect the Chart of Accounts value and the GL Account value from the concatenated value stored in the CDHDR-OBJECTID field. Other Data Types may require similar logic depending on how the data is stored in this table-field.

Figure 6.7

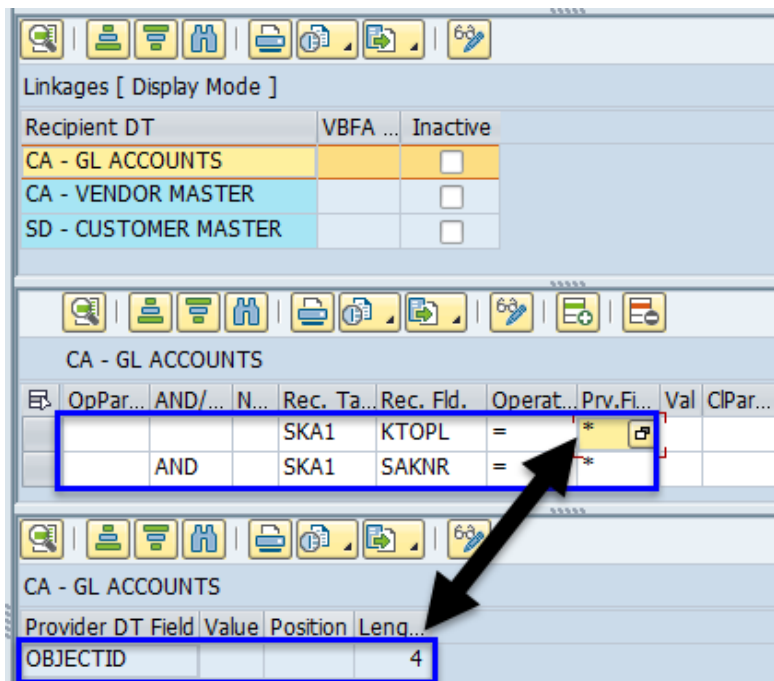


Figure 6.8

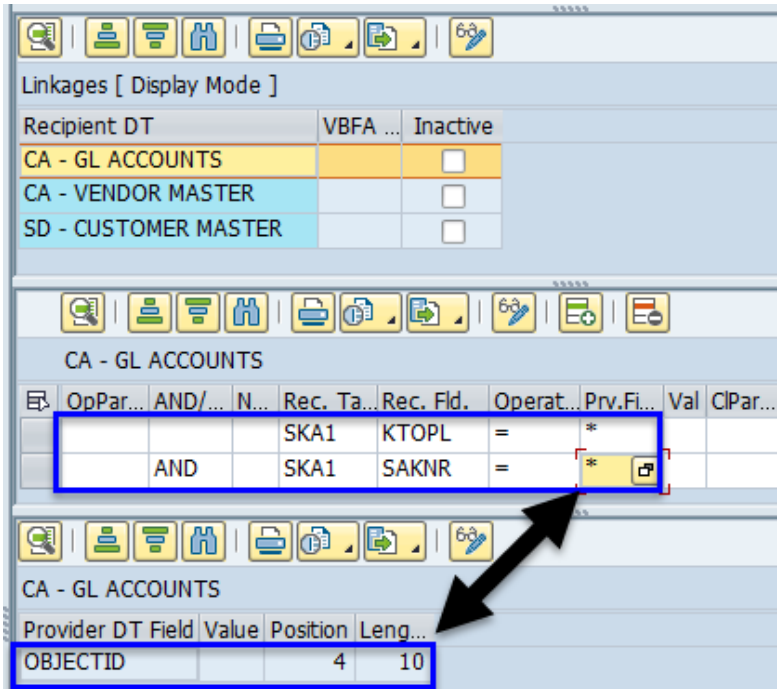


Figure 6.9

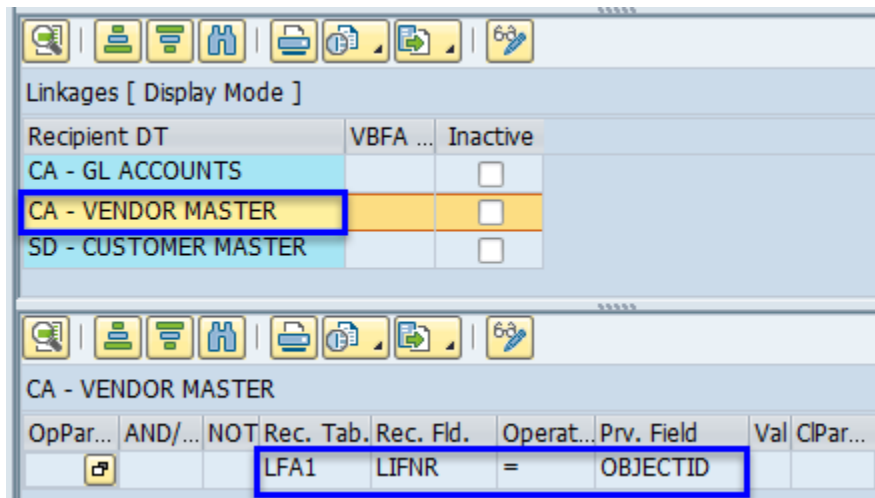
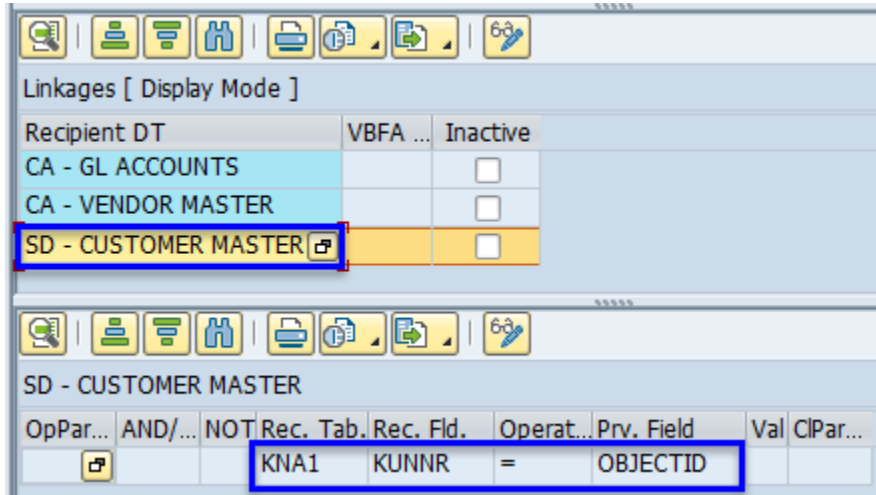
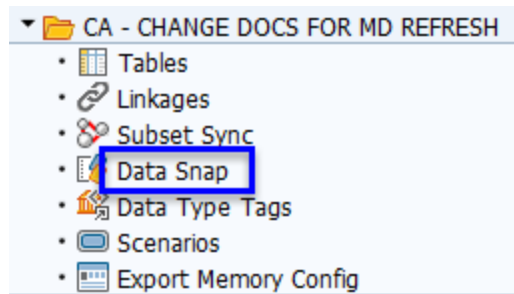


Figure 6.10



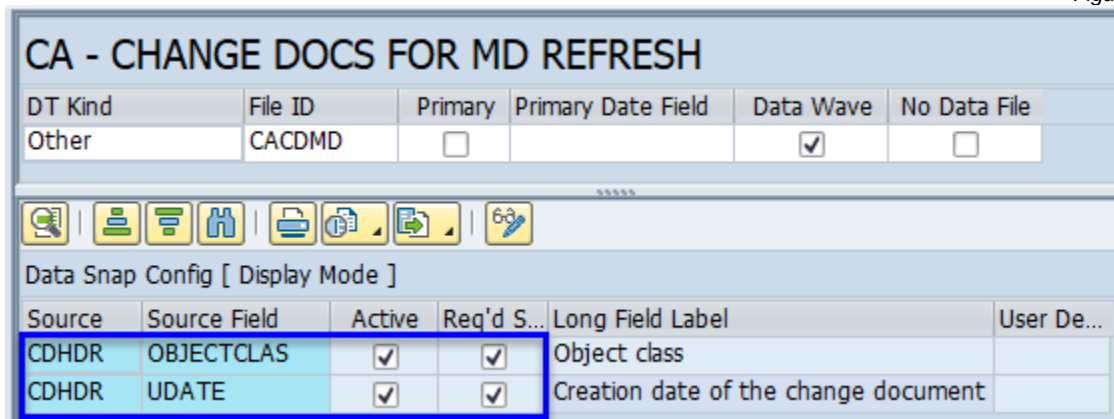
8. Remaining within the newly copied Data Type, select the 'Data Snap' maintenance view (Fig. 6.11)

Figure 6.11



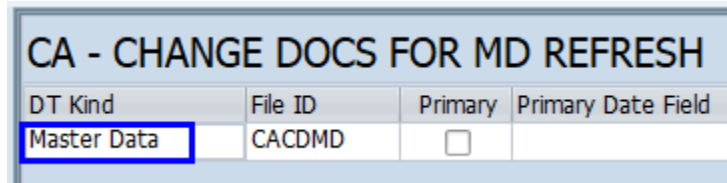
9. Define the Data Snap configuration using fields OBJECTCLAS and UDATE (Fig. 6.12)

Figure 6.12



10. Lastly, update the 'DT Kind' field from the value of 'Other' to 'Master Data'. The primary benefit of this change is that this improves the user's ability to search for and select this Data Type when creating Scenarios (Fig. 6.13).

Figure 6.13



DT Kind	File ID	Primary	Primary Date Field
Master Data	CACDMD	<input type="checkbox"/>	

11. Be sure to save changes and exit the Data Echo framework

List of Commonly Used Data Types

The list of Gold Client data types in the table below represents those which tend to be the most commonly used for copying master data. This is not a complete list but rather a subset of the available data types that are delivered standard with the Gold Client software. The Data Type's respective header table and its Created-On and Changed-On fields are listed as well. Freely utilize t-codes SE11 or SE12 to see a table's structure within your team's respective environments. Freely build Scenarios using these dates and/or other dates as your team sees fit.

Data Object	Data Type	Header	Created-On	Changed-On
Asset	CA - ASSET MASTER	ANLA	ERDAT	AEDAT
Bill of Material	CA - BILL OF MATERIALS	STKO	ANDAT	AEDAT
Business Partner	CA - BUSINESS PARTNERS	BUT000	CRDAT	CHDAT
Cost Center	CA - COST CENTERS	CSKS	ERSDA	None
Customer	SD - CUSTOMER MASTER	KNA1	ERDAT	None
Equipment	CA - EQUIPMENT DATA	EQUI	ERDAT	AEDAT
Functional location	PM - FUNCTIONAL	IFLOT	ERDAT	AEDAT
GL Account	CA - GL ACCOUNTS	SKA1	ERDAT	None
Maintenance plan	PM - MAINTENANCE PLANS	MPLA	ERSDT	AEDAT
Material	MM - MATERIAL MASTER	MARA	ERSDA	LAEDA
Personnel data	HR - PERSONNEL MASTER	PA0003	AEDTM	AEDTM
Profit Center	CA - PROFIT CENTERS	CEPC	ERSDA	None
Project	PS - PROJECT DEFINITIONS	PROJ	ERDAT	AEDAT
Purchasing Info	MM - PIR	EINA	ERDAT	None
Routing	MM - ROUTINGS	PLKO	ANDAT	AEDAT
Vendor	CA - VENDOR MASTER	LFA1	ERDAT	None
WBS Element	PS - WBS ELEMENTS	PRPS	ERDAT	AEDAT
Work Center	CA - WORK CENTER	CRHD	BEGDA	Multiple fields

Change Document Object Types

This list contains those details relevant for using Change Document Objects as the basis for the export when the data object table itself does not contain a Changed-On field; by no means is this a complete list. Freely query table **TCDOB** ("Objects for change document creation") for additional data objects as needed. And keep in mind that you only need to use these details to copy those data objects whose header table does not have a Changed-On date field.

Data Object	Data Type	Header Table	Change Doc Objects
Customer	SD - CUSTOMER MASTER	KNA1	BPAR DEBI TESTRF
Document	CA - DOCUMENT MANAGEMENT	DRAD	DOKUMENT
GL Account	CA - GL ACCOUNTS	SKA1	SACH
Purchasing Info	MM - PIR	EINA	INFOSATZ
Vendor	CA - VENDOR MASTER	LFA1	KRED KRED_N

Adding Scenarios to Existing Data Wave IDs

If you already have a Data Wave ID included in a periodic export and you choose to add more Scenarios to that Data Wave ID, be aware that the export must be reinitialized (from Data Wave) so that the newly added Scenarios are included in the periodic export. If this is not done, then any newly added Scenarios will not be included. Subsequently, any exports that are already scheduled should be deleted since the old export job would be replaced by the new export job.

Additional Resources

All support-related content, including the PDFs listed below, is available from the Qlik Help website, <https://help.qlik.com/en-US/gold-client/Content/GoldClient/Home.htm>.

For Data Wave related support, reference the *Data Wave User Guide*.

For help deploying configuration changes, such as adding tables-fields to the Data Snap screen, reference the *Data Echo Advanced Config User Guide*.

Support Information

Qlik Analytics (ISR) Ltd. can be contacted either by telephone or via email. Any support related issue regarding problems with or use of the Gold Client software and process can be reported for resolution.

If our offices are closed, or staff is unable to directly respond to a support request, we will respond within 24 hours of the initial call. Problems related to the export or import processing may require code enhancements. If a code enhancement or fix is required, resolution time may vary.

As per the maintenance agreement, any repairs or enhancements to the Gold Client software will immediately be deployed to all customers up-to-date with their maintenance contract. It is the choice of the customer as to if and when such enhancements are implemented. In addition, customers may request a planning session with Qlik to review changes in the software and how the changes might impact their environment.

We can also be contacted to discuss application or feasibility of using the Gold Client process to resolve a current challenge the project team faces. When this is required, a planning session can be scheduled in advance to ensure proper participation by both Qlik and the client.

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