
**Data Echo Advanced Config
User Guide
8.6**

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Introduction

This document serves as the User Manual for configuring Data Echo® Data Types utilized to selectively copy Master and/or Transactional Data.

This is an advanced feature of Gold Client and incorrect configuration may result in long running exports and/or other issues. Please consult with Qlik Analytics (ISR) Ltd. for any questions related to this document.

Illustrated in this guide are the step-by-step instructions for understanding and configuring Data Echo data types.

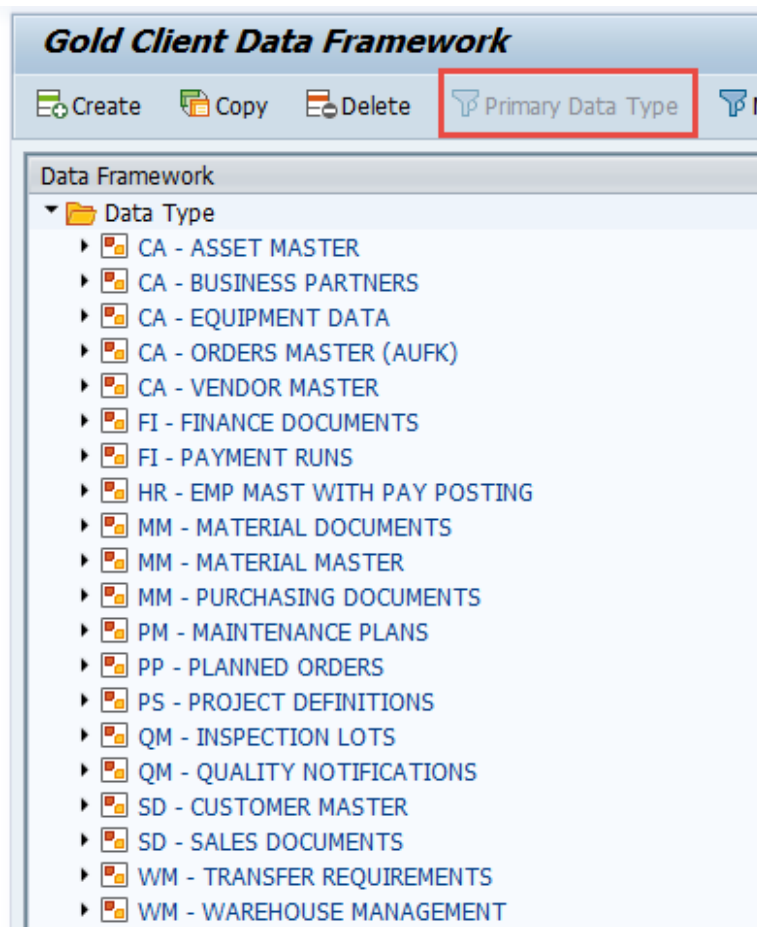
Navigating the Framework

Various content about the Data Echo Framework and how best to navigate within it.

The default view of this screen shows only those Data Types which have been defined as 'Primary' and therefore the Primary Data Type filter is suppressed since this filter is deployed by default (Fig. A.0).

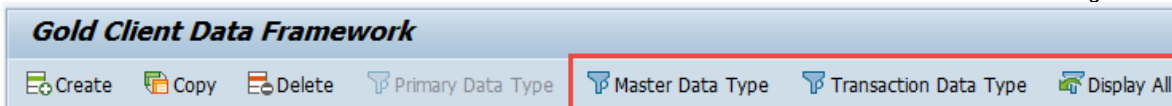
Please note that the 'Primary' setting identifies those Data Types as the ones which sit at the very top of their respective hierarchies and as per Qlik best practices should most often be used to initiate data copies in order to achieve the highest level of data integrity within the target client.

Figure A.0



To view only master, only transactional, or all Data Types, select the respective filter: Master Data Type, Transaction Data Type, or Display All (Fig. A.1).

Figure A.1



Other functions are also available which are located on this same toolbar (Fig. A.2)

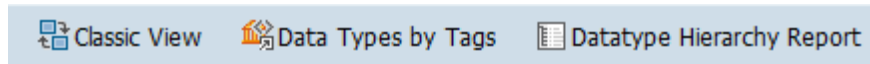


Figure A.2

The '**Classic View**' redirects the user to the previous version of the Data Echo Framework which has really been left here for legacy users of Gold Client. It is not recommended that this version be used since it is now several years old and is no longer being enhanced.

The '**Data Types by Tags**' function allows users to search for Data Types by whatever tags have been defined by the organization. When selecting this function, a new window will appear showing which tags, if any, have been defined. The user can select one or more tags which will cause the list of Data Types to be filtered accordingly based on the Tag-Data Type assignment. For more content around how Tags are defined and deployed, reference the section named 'Maintain Data Type Tags' within the document titled *Gold Client Configuration and Utilities*.

The '**Datatype Hierarchy Report**' is a useful feature that provides a user a top-down view of the full hierarchy for a given Data Type. This report has existed for several years; however, this button (essentially a short-cut) was only added to the Data Echo Framework as part of the 8.6.1 release and is intended to help the user navigate their way through the complex and multi-layered hierarchy.

To make use of this report, the user's cursor control must be focused on a Data Type, either one from the left-hand structure or on one as a recipient (linked) Data Type; see examples 'A' and 'B' in this screen capture (Fig. A.3).

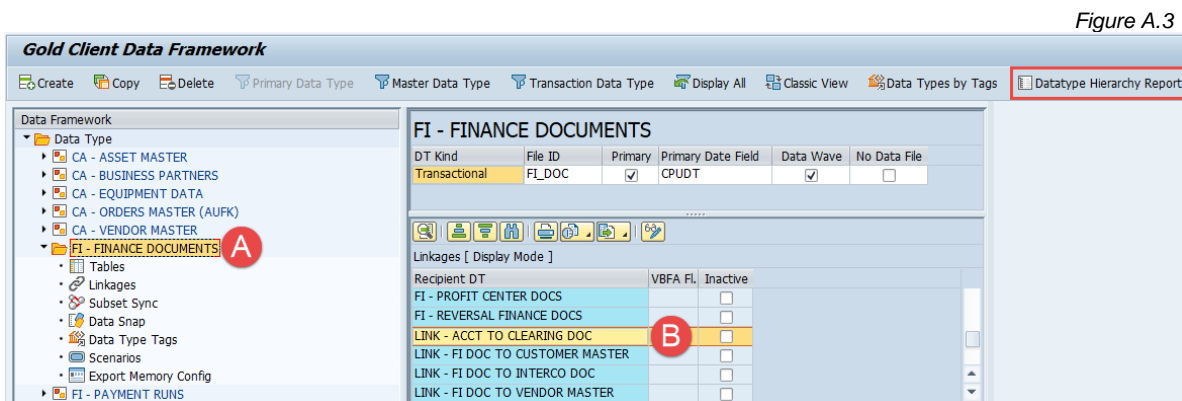


Figure A.3

If the cursor control is focused anywhere other than on a Data Type, the following error message should be displayed (Fig. A.4).

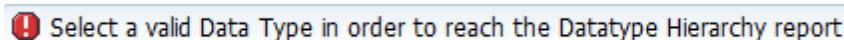


Figure A.4

For more content on using this report, reference the section named 'Data Type Hierarchy Report' within the document titled *Gold Client Configuration and Utilities*.

When displaying a Data Type, the relevant content will always be displayed at right within a series of sub-screens. The header details are always in the top-level screen (Fig. A.5).

Figure A.5

DT Kind	File ID	Primary	Primary Date Field	Data Wave	No Data File
Transactional	SD_SD_	<input checked="" type="checkbox"/>	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The second sub-screen will contain various content based on which maintenance view is selected (Fig. A.6). The content most likely to be displayed here based on the user's selection will be the list of table relations when selecting the 'Tables' view (Fig. A.7) or the list of recipient (child) Data Types when selecting the 'Linkages' view (Fig. A.8).

Figure A.6

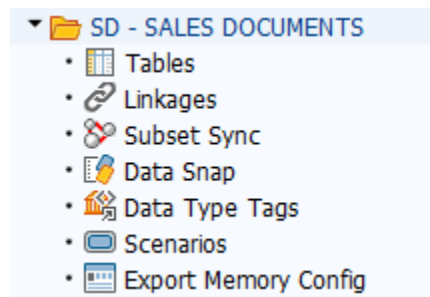


Figure A.7

SD - SALES DOCUMENTS

DT Kind	File ID	Primary	Primary Date Field
Transactional	SD_SD_	<input checked="" type="checkbox"/>	ERDAT

Tables [Display Mode]

Table Name	Source	Head Flg	Sec.Flag	Data Eleme
CEERROR	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
CKMLKALNR	EBEW	<input type="checkbox"/>	<input type="checkbox"/>	
COER	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
EBEW	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
EBEWH	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	
EBII	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	

Figure A.8

SD - SALES DOCUMENTS

DT Kind	File ID	Primary	Primary Date Field
Transactional	SD_SD_	<input checked="" type="checkbox"/>	ERDAT

Linkages [Display Mode]

Recipient DT	VBFA Fl.	Inactive
CA - CHANGE DOCUMENTS		<input type="checkbox"/>
CA - OUTPUT STATUS		<input type="checkbox"/>
CA - SERIAL NUM FOR SALES ORDERS		<input type="checkbox"/>
CA - TEXT		<input type="checkbox"/>
FI - CASH MGMT FOR SD DOCUMENTS		<input type="checkbox"/>
FI - REVENUE RECOGNITION		<input type="checkbox"/>

Double-clicking on a row in the second sub-screen will cause the related content (if any) to display in the third sub-screen. The content most likely to be displayed here based on the user's selection will be the common fields that are used to define a table relation (Fig. A.9) or the mapping details used to relate Data Types (Fig. A.10).

Figure A.9

SD - SALES DOCUMENTS

DT Kind	File ID	Primary	Primary Date F
Transactional	SD_SD_	<input checked="" type="checkbox"/>	ERDAT

Table Name	Source	Head Flg	Sec.Flag	Data Eleme
CEERROR	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
CKMLKALNR	EBEW	<input type="checkbox"/>	<input type="checkbox"/>	
COER	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
EBEW	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
EBEWH	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	
EBII	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	

Table Fld	Src Fld
VBELN	VBELN

Figure A.10

SD - SALES DOCUMENTS

DT Kind	File ID	Primary	Primary Date Field	Data Wave	No Data File
Transactional	SD_SD_	<input checked="" type="checkbox"/>	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Recipient DT	VBFA Fl.	Inactive
CA - CHANGE DOCUMENTS	<input type="checkbox"/>	<input type="checkbox"/>
CA - OUTPUT STATUS		<input type="checkbox"/>
CA - SERIAL NUM FOR SALES ORDERS		<input type="checkbox"/>
CA - TEXT		<input type="checkbox"/>
FI - CASH MGMT FOR SD DOCUMENTS		<input type="checkbox"/>
FI - REVENUE RECOGNITION		<input type="checkbox"/>

OpParen	AND/OR	NOT	Rec. Tab.	Recip. Field	Operator	Prv. Field	Value	ClParen
			CDHDR	OBJECTCLAS	EQ		'VERKBELEG'	
	AND		CDHDR	OBJECTID	LIKE	VBELN		

The only time the fourth sub-screen is used is when a Data Type link must use either concatenation or truncation logic as part of the mapping details that link Data Types. Here is an example of concatenation being used where static value 'OR' must be concatenated to the front of the AUFNR (order) value (Fig. A.11).

Note that an asterisk must be added to the 'Provider Field' in order to add concatenation or truncation logic (see black arrow).

Figure A.11

PP - PRODUCTION ORDERS

DT Kind	File ID	Primary	Primary Date Field	Data Wave	No Data File
Transactional	PP_ORD	<input type="checkbox"/>	GSTRI	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Linkages [Display Mode]

Recipient DT	VBFA Fl.	Inactive
CA - INSTALLED BASE		<input type="checkbox"/>
CA - OBJECT STATUS		<input type="checkbox"/>
CA - SERIAL NUM FOR PP ORDER		<input type="checkbox"/>
CA - TEXT		<input type="checkbox"/>
CO - COSTING (COES)		<input type="checkbox"/>
CO - COSTING (COFP)		<input type="checkbox"/>

CA - OBJECT STATUS

OpPar...	AND/OR	NOT	Rec. Tab.	Recip. Field	Operator	Prv. Field	Value	ClPar...
			JSTO	OBJNR	=	*		

CA - OBJECT STATUS

Prv. Field	Value	Position	Length
<input type="checkbox"/>	OR		
AUFNR			

Here is an example of truncation being used where the value stored in field WADONR must be truncated in order to pass the relevant value to table IFLOT and field TPLNR (Fig. A.12).

Figure A.12

LINK - WORK AREA TO INFO OBJECTS

DT Kind	File ID	Primary	Primary Date Field	Data Wave	No Data File
Other	LWA2IO	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Linkages [Display Mode]

Recipient DT	VBFA Fl.	Inactive
HR - PERSONNEL MASTER		<input type="checkbox"/>
PM - FUNCTIONAL LOCATIONS		<input type="checkbox"/>

PM - FUNCTIONAL LOCATIONS

OpPar...	AND/OR	NOT	Rec. Tab.	Recip. Field	Operator	Prv. Field	Value	CPar...
			IFLOT	TPLNR	=	*		

PM - FUNCTIONAL LOCATIONS

Prv. Field	Value	Position	Leng...
WADONR		6	30



Data Echo Data Types

Overview


Data Echo Data Types are logical groupings of SAP Transactional or Master Data and the linkages between tables that maintain data integrity when exporting/importing.

These Data Types are grouped at a Transaction/Document level. For instance, there is a single Data Type for Sales Documents (i.e. `SD - SALES DOCUMENTS`). This Data Type includes all tables related to Sales Documents; however, this Data Type does not include downstream (Recipient) tables, like those related to Deliveries, for example.

The 'reach' of a Data Type should not extend past its own referential boundaries. There may be exceptions to this standard, but this is typically the rule.

Configuring and Creating Data Echo Data Types

To maintain or create a Data Echo Data Type, go to the Gold Client front end (Transaction ZGOLD).

Select the  button located in the bottom of the screen; this will lead to the Gold Client Setup Utility page. From here, open folders Configuration > Framework, and then select Data Echo (Fig. 1.0)

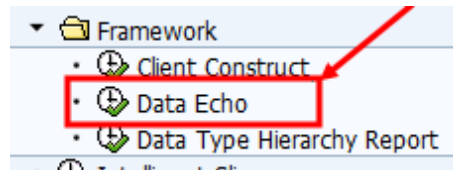
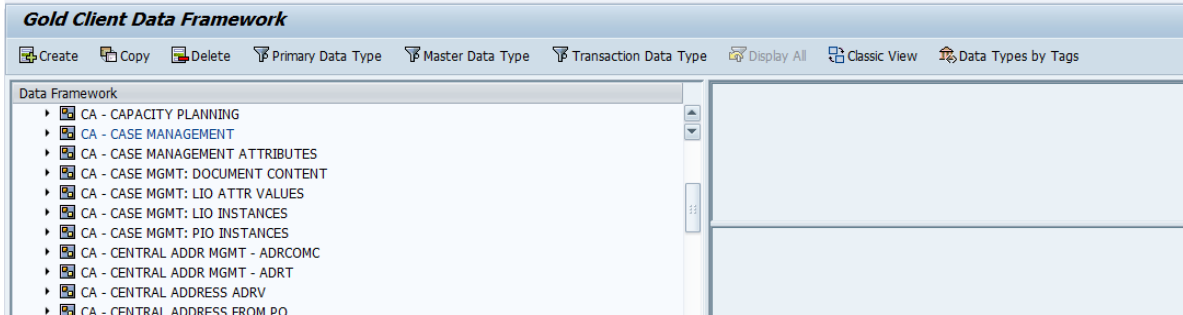


Figure 1.0

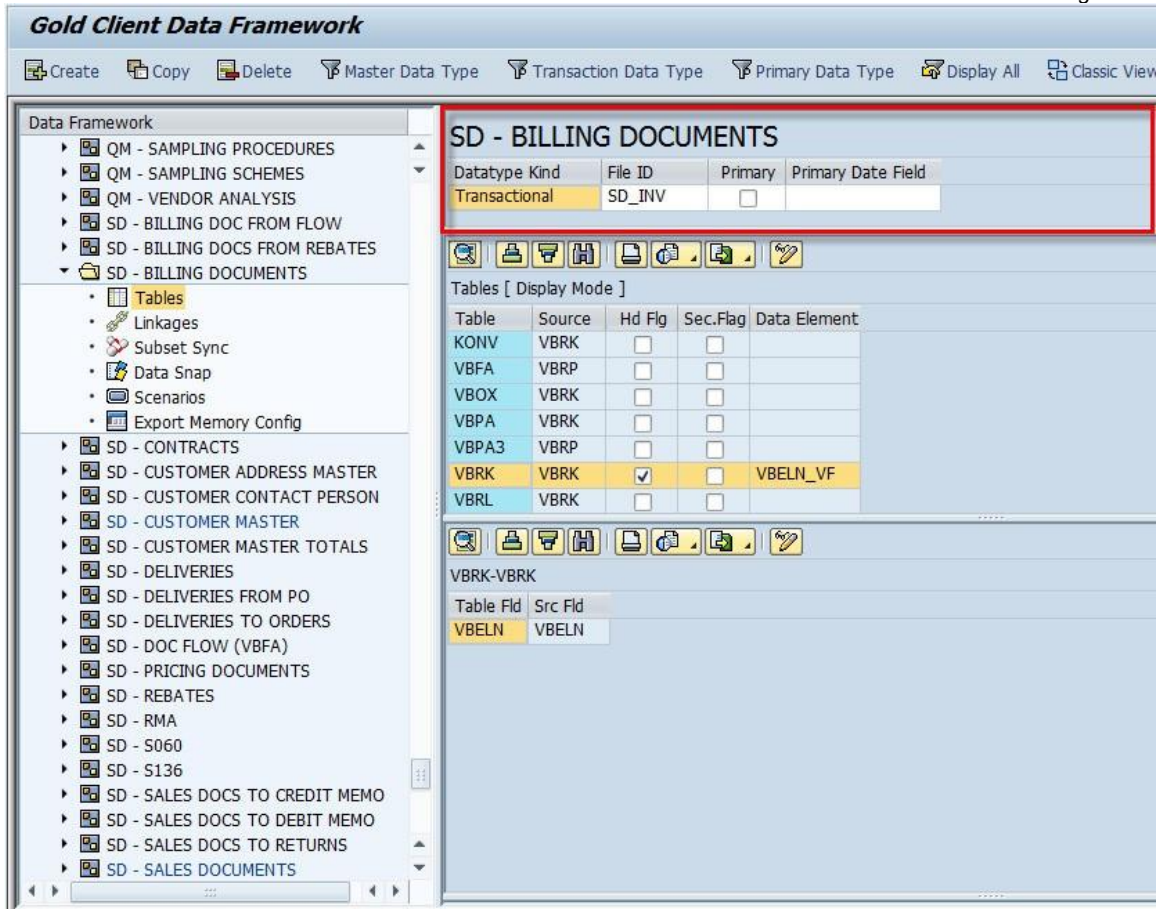
The Gold Client Data Framework is displayed listing all the configured Data Types (Fig. 1.1).

Figure 1.1



There is a Data Type function at the top level of the cluster; this is where the Data Type is defined. The Data Type contains a long name, Data Type kind (transactional, master, or other), a File ID that is used as part of the data filename (and to which the value must be unique), as well as a Primary indicator and related Primary Date Field which are relevant to the Intelligent Slice functionality (Fig. 1.2).

Figure 1.2



The configuration of a Data Type occurs through a combination of Table Links and Field Links. Select a Data Type on the left-hand side of the screen and then select **Tables** located under the Data Type (Fig. 1.3); this displays the tables in the Data Type. To better explain this, consider this review of the **SD - SALES DOCUMENTS** Data Type:

- The standard **SD - SALES DOCUMENTS** Data Type contains 40 tables. Every Data Type must have a Header table defined. In this case the Header table is **VBAK** (Sales Document Header table). This is clearly indicated by the **Header Flag** field in the **Tables** view.

Figure 1.3

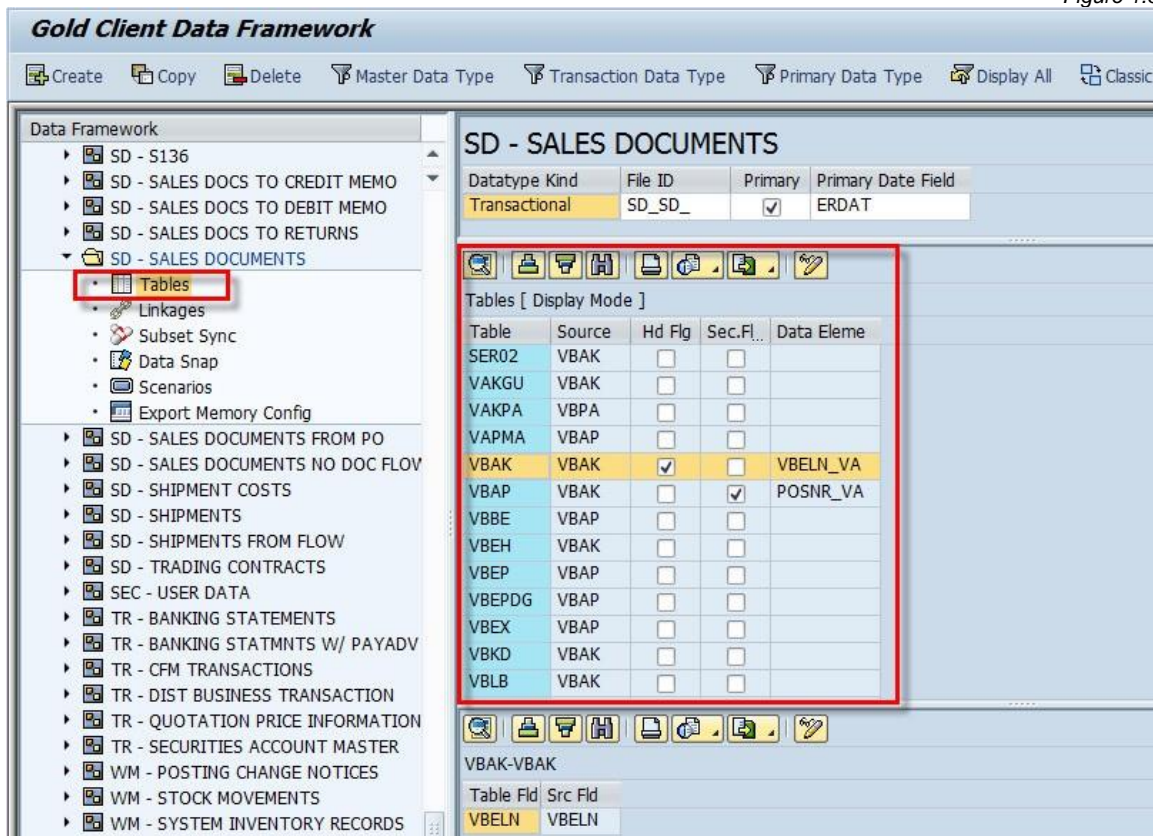
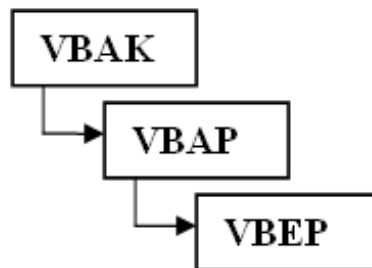


Table Links

Table Links function through a parent-child relationship. The table listed in the right-hand column is the parent table, and the table in the left-hand column is the child table. These links can only move three levels deep within a particular Data Type. This restriction exists to prevent reaching out of the boundaries of a Data Type. Below is an illustration (Fig. 2.0) showing the table relationships of a few SD - SALES DOCUMENTS tables.

Figure 2.0



Basics and Best Practices on Table Relationships:

- All Data Types must have one, and only one, Header table defined.
- Table relationships can only go three levels deep.
 - To avoid very complex table joins, a restriction exists that only allows for a parent-child-grandchild depth in the Data Type. This also helps to ensure that a Data Type does not reach past its boundaries and extend into another Data Type’s territory. There are very rarely any cases when a Data Type has Table links more than three levels deep.
 - An example in the SD – SALES DOCUMENTS Data Type (Fig. 2.1) is the following link:

VBAK – VBAP – VBEP

VBAK is the Header table, which VBAP links from. VBEP then links from VBAP. This table link cannot extend any further at this point (i.e. another table cannot link off VBEP in this example).

Figure 2.1

SD - SALES DOCUMENTS				
Datatype Kind	File ID	Primary		
Transactional	SD_SD_	<input type="checkbox"/>		
Tables [Display Mode]				
Table	Source	Head Flg	Sec.Flag	Data Eleme
VAKPA	VBPA	<input type="checkbox"/>	<input type="checkbox"/>	
VAPMA	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	
VBAK	VBAK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VBAP	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
VBBE	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	
VBEH	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
VBEP	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	
VBEPDG	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	

Field Links

Tables link together through Field Links. To view the Field Links for a table relationship, double-click on a Table Link. The Field Links display in the lower screen cluster for the selected table relationship. Tables VBAK and VBAP are related by Field Link VBELN-VBELN (Sales Document Number). (Fig. 3.0)

The parent and child fields are the same in this particular instance but may not be in some situations. To allow for this, the `Source` field as well as the `Target` field must be defined.

Figure 3.0

SD - SALES DOCUMENTS



Datatype Kind	File ID	Primary	Primary Date Field
Transactional	SD_SD_	<input type="checkbox"/>	

Tables [Display Mode]

Table	Source	Head Flg	Sec. Flag	Data Eleme
VAKPA	VBPA	<input type="checkbox"/>	<input type="checkbox"/>	
VAPMA	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	
VBAK	VBAK	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
VBAP	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
VBBE	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	
VBEH	VBAK	<input type="checkbox"/>	<input type="checkbox"/>	
VBEP	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	
VBEPDG	VBAP	<input type="checkbox"/>	<input type="checkbox"/>	

VBAP-VBAK

Table Fld	Src Fld
VBELN	VBELN

To assign Field Links go into change mode by selecting the  icon. Next, select the  **Common Fields** option to assist with the identification of Field Links; it will run a report displaying the common fields between the tables. (Fig. 3.1)



Important Note: Even if there are common fields between tables with identical names, there is no guarantee that the data contained within will always match. This feature is provided as a starting point; it is suggested that the data be viewed within t-code `SE16` to ensure that the data for the respective tables links together.

Basics and Best Practices on Field Links:

- When specifying the Header table's Field Links, simply include a 1 to 1 relationship for all of the Key Fields in the table.
- Use the `Common Fields Utility` to identify common fields between two tables; utilize this as a starting point for the link. It is more than likely that if the tables belong in the same Data Type they will share at least one common field, most likely a Key Field on both tables.
- Be careful when linking tables together with Item Number fields such as `POSNR`. In some cases the Item Numbers may not be identical between tables. There are situations when Item Number needs to be used to link tables, so if uncertain, review the data via `SE16` to ensure in all situations that the Item Number is required to link the tables.
- Whenever possible, utilize Key Fields to link tables. This helps ensure that the tables link together and that the export of the data will perform well.
- If Key Fields are not available or common to link between tables, utilize Indexed fields whenever possible. To review what indices exist for a table go to transaction `SE11`, view the table, and select the `Indexes` button.

Creating a Data Type


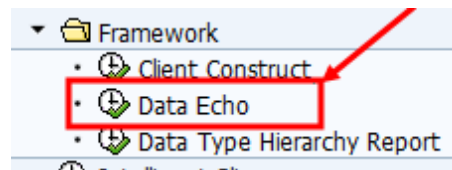
1. Go to the Gold Client main page by way of transaction ZGOLD
2. Select the  button located in the bottom of the screen; this will lead to the Gold Client Setup Utility page. From here, open folders Configuration > Framework, and then execute Data Echo (Fig. 4.0)

Figure 4.0



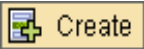
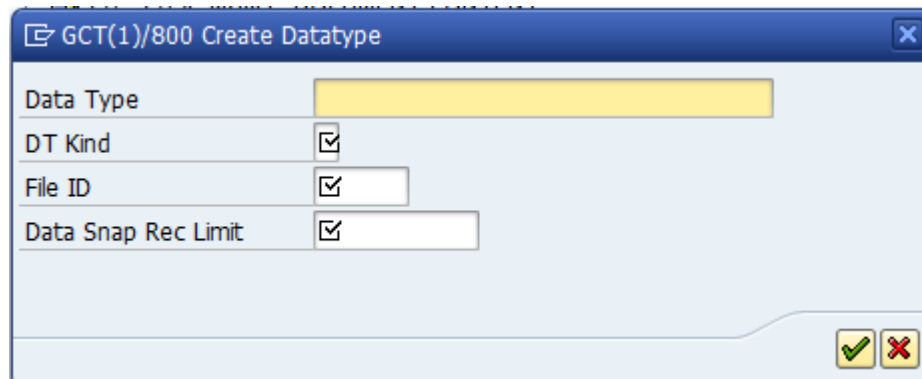

3. Select the  button located on the toolbar; the 'Create Datatype' child window appears (Fig. 4.1).

Figure 4.1



- Specify a Data Type Description
 - Start the description with a two-digit module such as 'CA' for Cross Application or 'SD' for Sales & Distribution.
Refer to the delivered Data Types for examples (i.e. SD - SALES DOCUMENTS).
- Specify the Data Type Kind (DT Kind) – Transactional, Master Data, or Other
 - This is simply a classification, but keep in mind that if a type is specified as 'Other,' the Data Type cannot be utilized to create a

Scenario. When attempting to create a new Scenario, all Data Types classified as 'Other' will be filtered out.



- Specify a File ID – This is the Key for the Data Type and must be unique. Typically, it is an abbreviation of the description.
- Specify a Data Snap Rec limit – Always make this value '1000' unless otherwise instructed by Attunity.
- Select  to complete this task and then be sure to save your work.

Define Table Links

1. Select the newly created Data Type and then select **Tables** (Fig. 5.0)

Figure 5.0



2. Select 
 3. Add a row 
- This creates an empty **Tables** row where the Data Type tables can be defined with their respective parent table links. Remember that the Table Links can only go three levels deep.
4. Enter the Header table in both the Table and Source columns and check the box in the **Header Flag** field to identify it as the Header (Fig. 4.3).
Note: Saving any changes is not possible without first defining a Header.
 5. Enter any other Table Links which need to be defined.
 6. Use the 'Enter' key to validate the entries. If there are any issues with the configuration specified, warnings will appear at this point; however, the existence of a Header table is not checked until saving changes.
 7. Save all changes

In Figure 5.1, the SD - SALES DOCUMENTS example explained in Figure 2.1 has been replicated. VBAK has been defined as the Header table, VBAP links off of VBAK, and VBEP links off of VBAP.

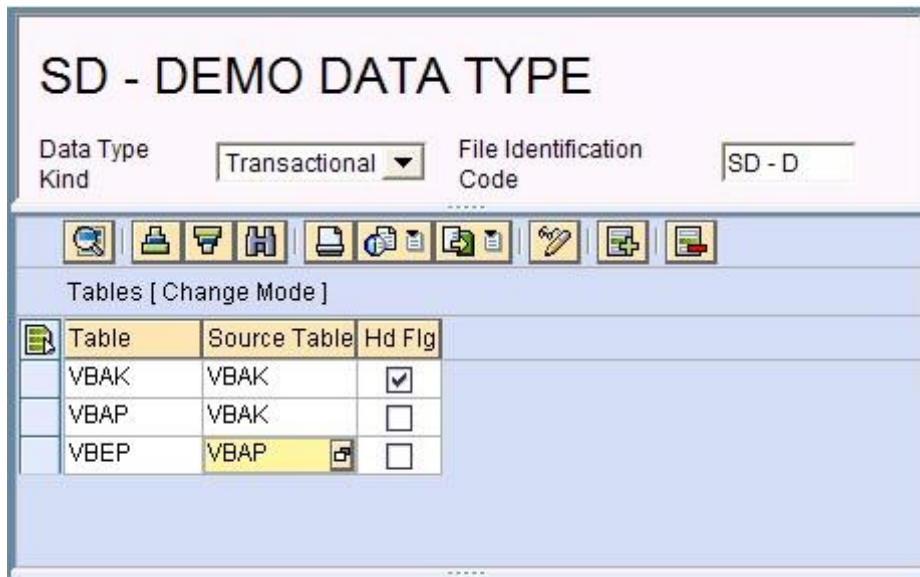





Figure 5.1

Define Field Links

1. Double click on a table link; the field links are maintained in the next sub-screen (Fig. 6.0 and 6.1).
2. Select 
3. Select  Common Fields Utility to check the common fields between the tables.
4. Select  Transfer Selected Fields; this will populate the common fields for you

Alternatively, the fields can be entered manually based on the results of the Common Fields Utility and/or other investigations into the data linkage. Remember: Utilize Key Fields and Indexed Fields whenever possible to achieve the best performance when exporting data.

5. Save your changes
6. Repeat steps 1-5 to create Field Links for all Table Links.

Important: If a Field Link is not defined for a Table Link, data in the child table for that Table Link cannot be exported.

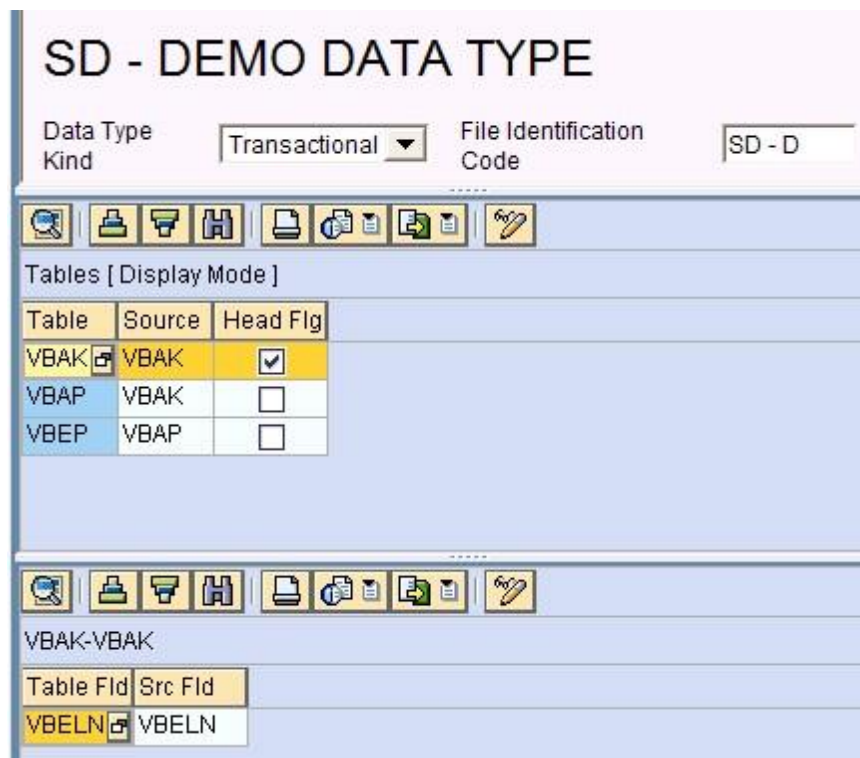


Figure 6.0

Define Field Links

Figure 6.1

SD - DEMO DATA TYPE

Data Type Kind: Transactional | File Identification Code: SD - D

Tables [Display Mode]

Table	Source	Head Flg
VBAK	VBAK	<input checked="" type="checkbox"/>
VBAP	VBAK	<input type="checkbox"/>
VBEP	VBAP	<input type="checkbox"/>

VBEP-VBAP

Table Fld	Src Fld
POS...	POSNR
VBELN	VBELN

Configuration Change Log

If the configuration setting FRAMEWORKLOG is active (Fig. 7.0), any changes made to the Data Framework will be logged, and any comments related to the change can be added into the 'Enter Reason for Change' window which appears whenever changes are saved (Fig 7.1).

Miscellaneous Configuration	
Functionality	Active
FRAMEWORKLOG	<input checked="" type="checkbox"/>

Figure 7.0

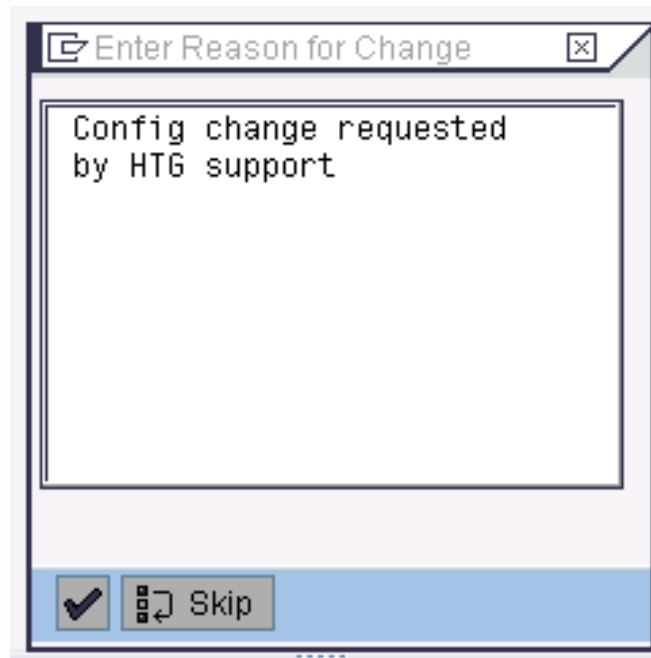


Figure 7.1


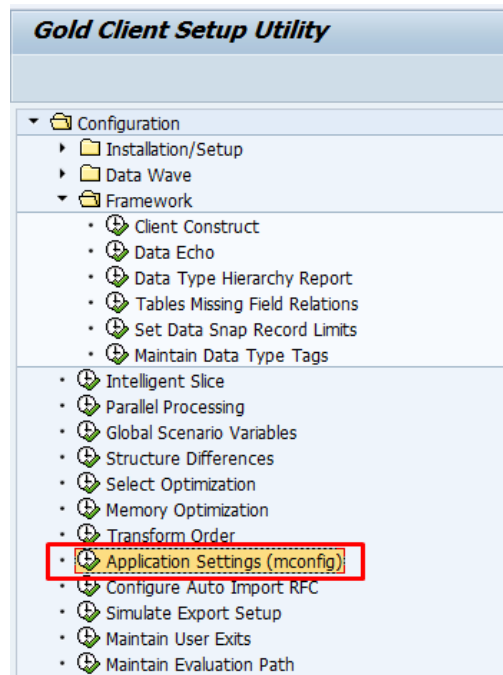
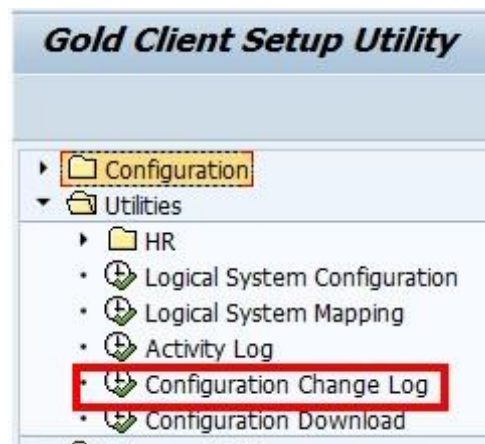
This setting can be viewed or modified within the Gold Client Configuration settings as needed. To access, select the  Configuration button located in the bottom of the main Gold Client screen (t-code ZGOLD); the Gold Client Setup Utility page will be displayed. From here, open the Configuration folder and then execute Application Settings (mconfig) (Fig. 7.2).

Figure 7.2



The change log can be accessed from the same Gold Client Setup Utility page. From here, open the Utilities folder and then select Configuration Change Log (Fig. 7.3).


Figure 7.3






The Configuration Change Log selection screen appears (Fig. 7.4).

Figure 7.4

Configuration Change Log



Selection Criteria			
User Name	<input type="text"/>	to	<input type="text"/> 
Change Date	<input type="text"/>	to	<input type="text"/> 
Data Type	<input type="text"/>	to	<input type="text"/> 

Provider to Recipient Linkages

Overview

Provider to Recipient linkages are utilized to link Data Types together. They allow Data Types to be linked as necessary to maintain document flow integrity. Some configuration is delivered standard with Gold Client, but since document flow is unique to every company, some configuration typically occurs during installation or post-installation. This flexibility allows specific configuration of Gold Client to meet a company's individual requirements.

As mentioned in the Data Echo data type section of this document, a specific Data Type can only travel three levels deep in the Table Link configuration. This should prevent the Data Type from reaching outside of its boundaries. To obtain downstream documents out of a Data Type's range, utilize a Provider to Recipient linkage.

Provider to Recipient Linkages

There are two primary types of Provider to Recipient (P2R) linkages:

A to B link

This is the standard link between two Data Types wherein they share common fields and can directly link to each other.

- An example of this is the linkage from MM - PURCHASING DOCUMENTS to CA - CHANGE DOCUMENTS. Field EBELN (Purchase Order Number) on table EKKO (A) links to field OBJECTID on table CDHDR (B). The field names are not identical, but the Object Value (OBJECTID) field on CDHDR contains the PO Header Number (as well as other Document Numbers, given this is a Cross Application table) (Fig. 8.0).

Figure 8.0

The screenshot displays the Gold Client Data Framework interface. On the left, a tree view shows the 'Data Framework' structure, with 'Linkages' highlighted under 'MM - PURCHASING DOCUMENTS'. The main window shows the configuration for 'MM - PURCHASING DOCUMENTS' with a 'Transactional' datatype and 'MM_PD' as the File ID. Below this, a 'Linkages [Display Mode]' table lists various recipient data types. The 'CA - CHANGE DOCUMENTS' linkage is highlighted in red. At the bottom, a detailed linkage table shows the relationship between 'CDHDR.OBJECTID' and 'EKKO.EBELN'.

Datatype Kind	File ID	Primary	Primary Date Field
Transactional	MM_PD	<input checked="" type="checkbox"/>	AEDAT

Recipient DT	VBFA Fl.	Inactive
CA - ATTACHMENT LIST		<input checked="" type="checkbox"/>
CA - CHANGE DOCUMENTS		<input type="checkbox"/>
CA - FOREIGN TRADE (EXP/IMP)		<input checked="" type="checkbox"/>
CA - OUTPUT STATUS		<input type="checkbox"/>
CA - TEXT		<input type="checkbox"/>
CA - VENDOR MASTER		<input type="checkbox"/>
CO - COMMITMENT LINE ITEMS		<input checked="" type="checkbox"/>
LINK - OBJECT TO SRRELROLES		<input type="checkbox"/>
LINK - PO TO CONSUMPTIONS		<input type="checkbox"/>
LINK - PO TO DELIVERY		<input type="checkbox"/>
LINK - PO TO DELIVERY (EXPE)		<input type="checkbox"/>

OpParen	AND/OR	NOT	Rec. Tab.	Recip. Field	Operator	Prv. Field	Value	CParen
	AND		CDHDR	OBJECTCLAS	EQ		'EINKBELEG'	
			CDHDR	OBJECTID	LIKE	EBELN		

A to B to C link

This is a more complex link type that requires an intermediary table to complete the link from one Data Type to another. This is typically the case for the Sales & Distribution document flow. Depending on a company's configuration, all or most of the document flow will be controlled through table VBFA.

- An example of this linkage type is MM - PURCHASING DOCUMENTS to LINK - PO TO DELIVERY. Going from the Purchase Order Header table EKKO directly to the Delivery Document Header table LIKP is not possible. This link must be completed through table EKES. To do this, Data Type 'LINK - PO TO DELIVERY' is utilized as the "B" Link and this Data Type only contains table EKES. The figures below provide a good illustration of this type of complex relation.

MM - PURCHASING DOCUMENTS linked to LINK - PO TO DELIVERY is based on EKES-EBELN being equal to EKKO-EBELN (Fig 8.1).

Figure 8.1

The screenshot displays the 'Gold Client Data Framework' interface. On the left, a tree view shows the 'Data Framework' structure, with 'MM - PURCHASING DOCUMENTS' expanded and 'Linkages' highlighted. The main area shows the configuration for 'MM - PURCHASING DOCUMENTS' with the following details:

Datatype Kind	File ID	Primary	Primary Date Field
Transactional	MM_PD	<input checked="" type="checkbox"/>	AEDAT

Below this, a table lists various linkages:

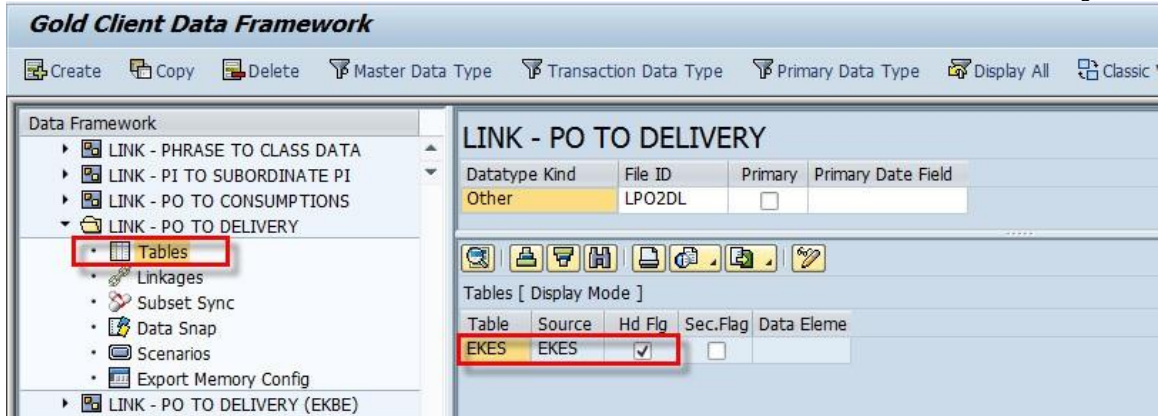
Recipient DT	VBFA Fl.	Inactive
LINK - OBJECT TO SRRELROLES		<input type="checkbox"/>
LINK - PO TO CONSUMPTIONS		<input type="checkbox"/>
LINK - PO TO DELIVERY		<input checked="" type="checkbox"/>
LINK - PO TO DELIVERY (EKBE)		<input type="checkbox"/>
LINK - PO TO GOODS ISSUE		<input type="checkbox"/>
LINK - PO TO GOODS RECEIPT		<input type="checkbox"/>
LINK - PO TO INVOICE RECEIPT		<input type="checkbox"/>
LINK - PO TO PAYMENT		<input type="checkbox"/>

At the bottom, a detailed configuration table for 'LINK - PO TO DELIVERY' is shown:

OpParen	AND/	NOT	Rec. Tab.	Recip. Field	Operator	Prv. Field	Value	CParen
<input checked="" type="checkbox"/>			EKES	EBELN	=	EBELN		

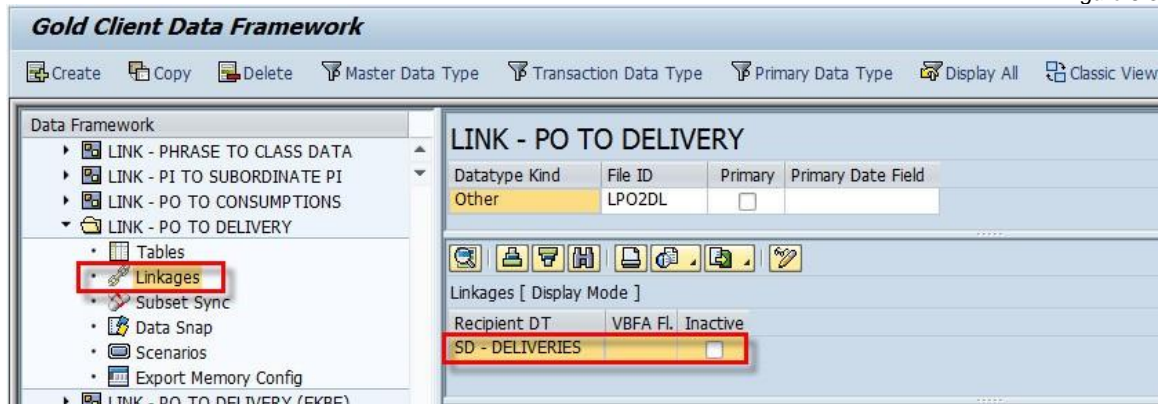
See table details for Data Type LINK - PO TO DELIVERY; the only table defined is EKES (Fig. 8.2).

Figure 8.2



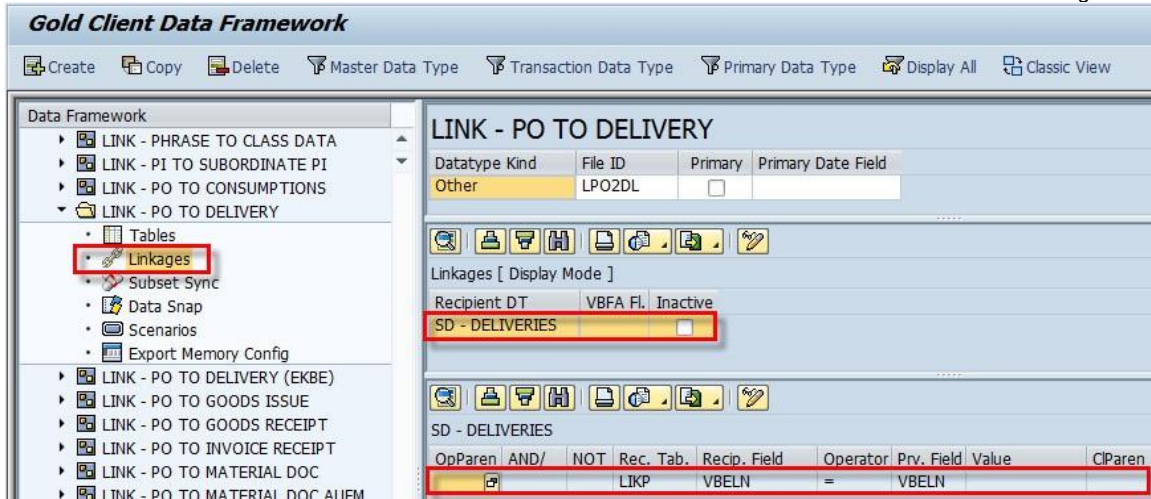
Here is the Link for Data Type LINK - PO TO DELIVERY to SD - DELIVERIES (Fig. 8.3).

Figure 8.3



Here are the Linkage details for LINK - PO TO DELIVERY to SD - DELIVERIES. This linkage is based on EKES-VBELN being equal to LIKP-VBELN (Fig. 8.4).

Figure 8.4



Configuring Provider to Recipient Linkages

To maintain a Linkage between Provider and Recipient Data Types, do the following:


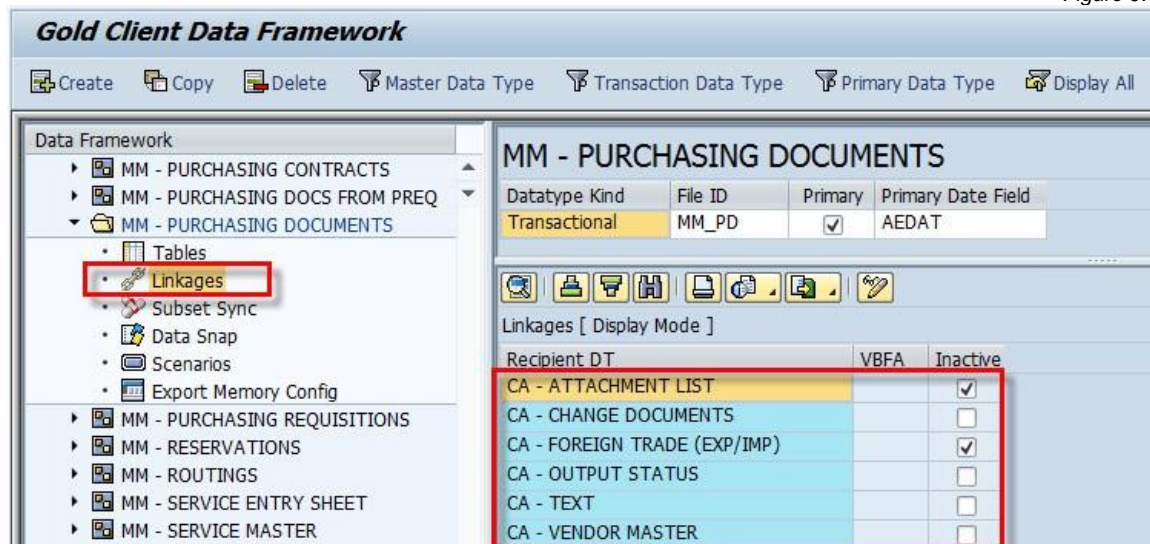
1. Go to the main Gold Client screen (Transaction ZGOLD)
2. Select the  **Configuration** button located in the bottom of the screen; this will lead to the Gold Client Setup Utility page. From here, open folders Configuration > Framework, and then execute Data Echo
3. Choose a Data Type and then select **Linkages** located under the Data Type; this displays any Recipient Data Types existing for that Data Type (Fig 9.0).

Figure 9.0




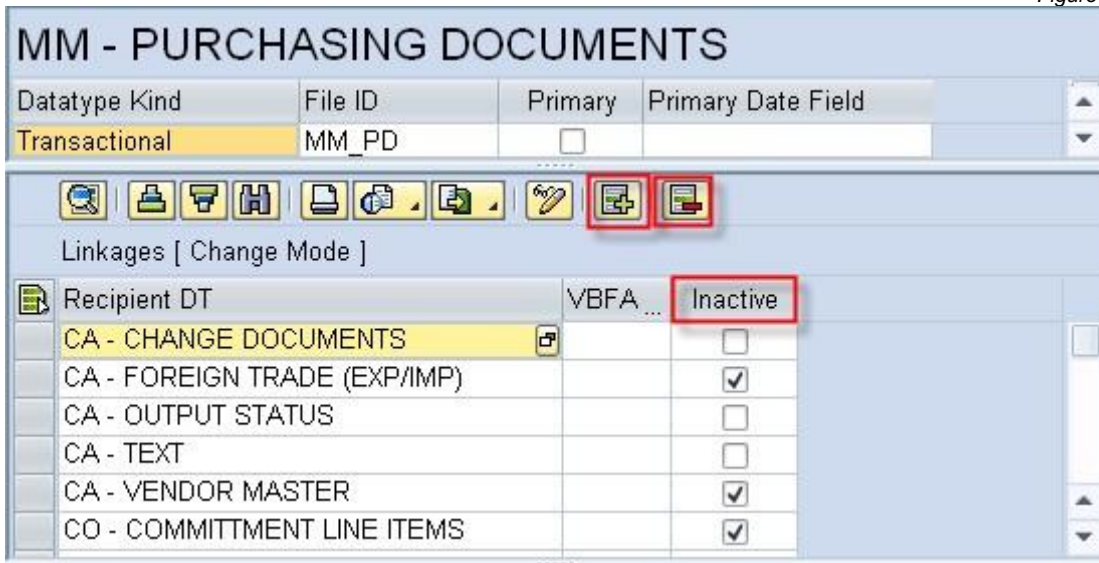
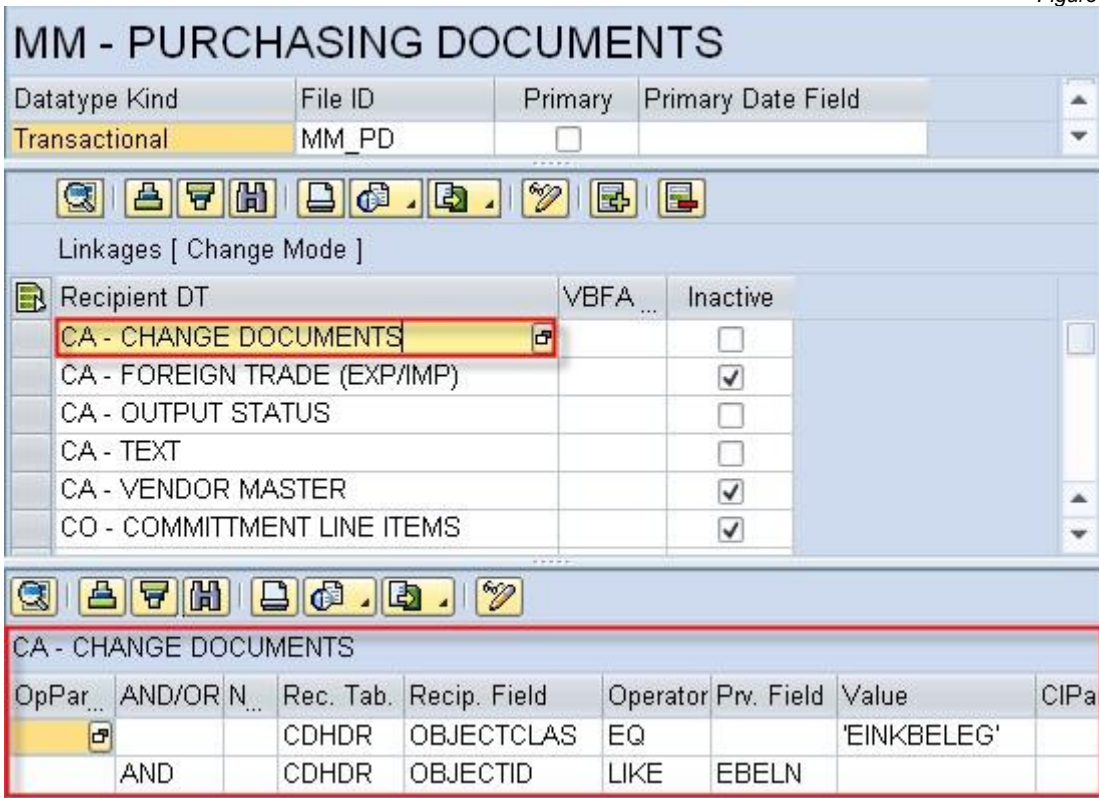
4. Select the  icon to convert the sub-screen from display to change mode
5. Now it's possible to make any necessary changes (Fig. 9.1)
 - a. add a new entry using the 'New row' icon
 - b. delete an entry using the 'Delete row' icon
 - c. activate or inactivate data type linkages
6. Once changes are complete, be sure to save your work

Figure 9.1



To maintain Linkage Details between Provider and Recipient Data Types, double-click on the Recipient data type that needs to be changed; the result is that the sub-screen displays with the existing Linkage Details, if any (Fig. 9.2). Convert the sub-screen from display to change mode and make changes as needed.

Figure 9.2

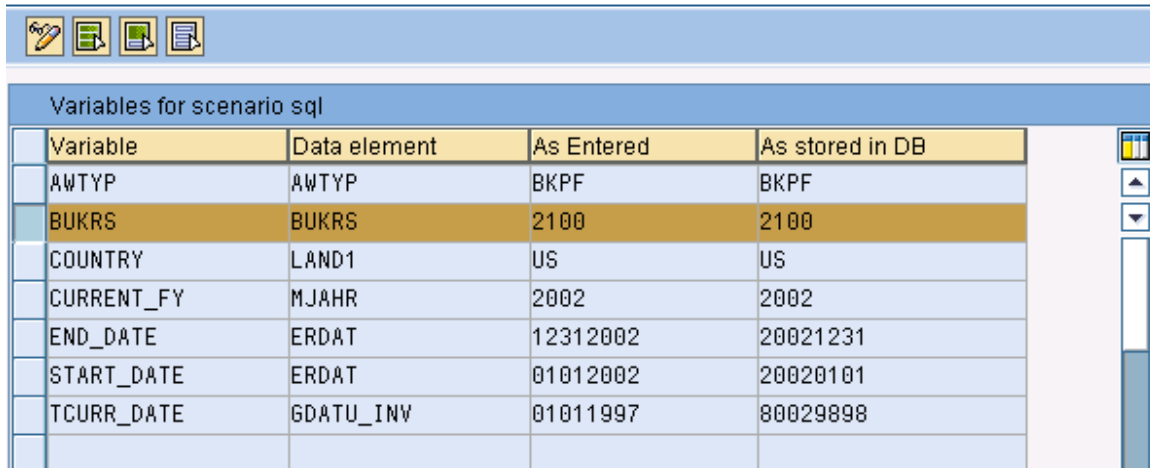


Using Scenario Variables in Provider to Recipient Linkages

Variables that are used in Scenario Segments can also be leveraged when linking data types together within the Gold Client configuration. In this example, a variable named "BUKRS" (Company Code) has a scenario variable created for it with an assigned value of '2100' (Fig. 10.0)

Figure 10.0

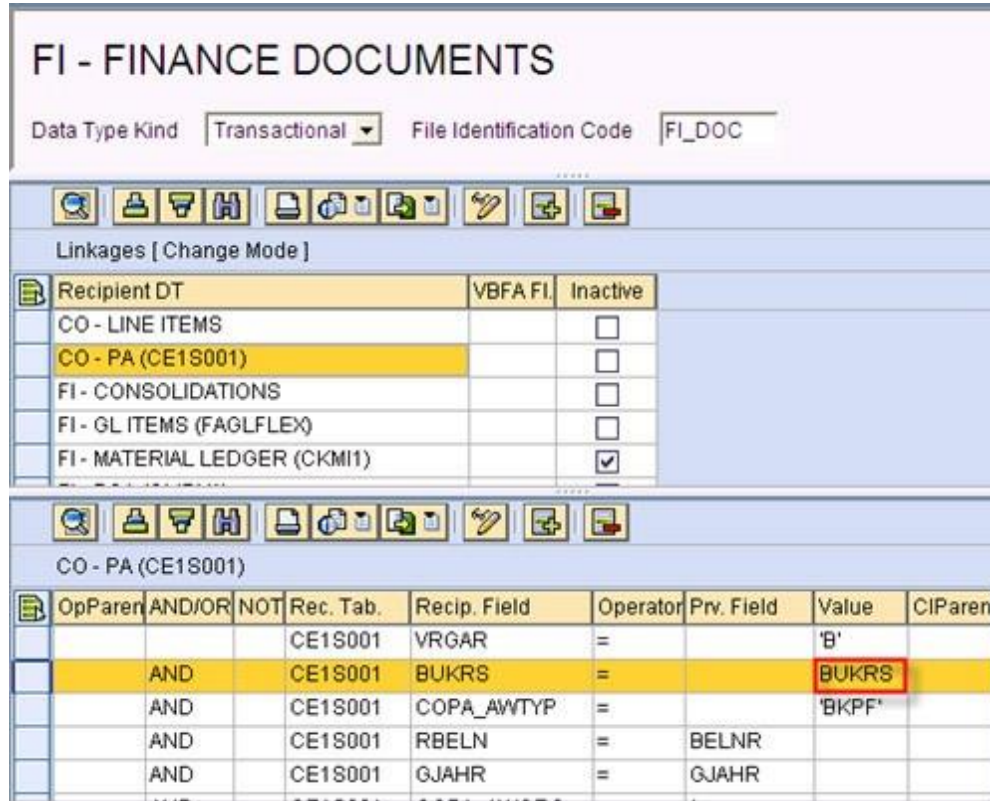
Display View "Variables for scenario sql": Overview



Variable	Data element	As Entered	As stored in DB
AWTYP	AWTYP	BKPF	BKPF
BUKRS	BUKRS	2100	2100
COUNTRY	LAND1	US	US
CURRENT_FY	MJAHR	2002	2002
END_DATE	ERDAT	12312002	20021231
START_DATE	ERDAT	01012002	20020101
TCURR_DATE	GDATU_INV	01011997	80029898

If the user wants to leverage the variable as part of their Data Type linkage criteria, it can be selected in the dropdown on the Value column (Fig. 10.1).

Figure 10.1



Rather than hard-coding the value of '2100', using the variable can be a time saver because the user can periodically update the variable and all Scenario Segments and Linkage Details calling that variable will automatically use the newly assigned value.

If a user attempts to delete a scenario variable that is used in a link to a Recipient Data Type, a warning message will appear informing the user that this deletion cannot occur until the scenario variable is removed from the linkage details within the Data Framework.

Data Snap Configuration

The Data Snap functionality enables the completion of the export in a one-step process. Simply select the data to be exported, input the relevant selection criteria and execute the process. As such, Data Snap must be configured for each relevant Data Type in order to allow for various user inputs which comprise their selection criteria. This screen has a similar look to SE16 except the user can build the selection screen themselves and may use multiple tables to do so.

Follow the steps below to configure a Data Snap screen:


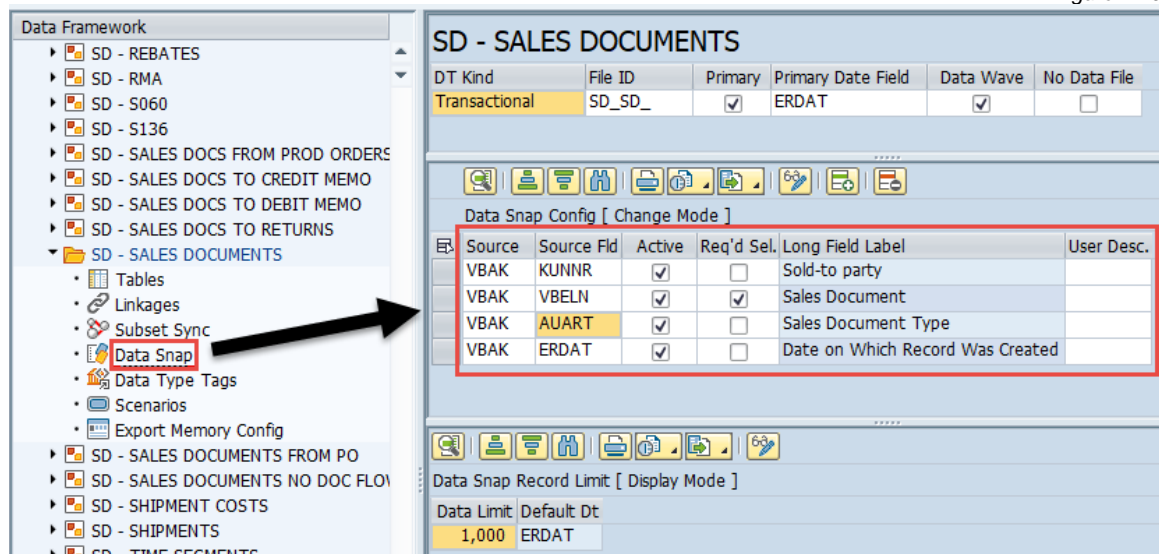
1. Go to the main Gold Client screen (Transaction ZGOLD)
2. Select the  **Configuration** button located in the bottom of the screen; this will lead to the Gold Client Setup Utility page. From here, open folders Configuration > Framework, and then execute Data Echo
3. Choose a Data Type and then select **Data Snap** located under the Data Type; this displays the Data Snap configuration, if any, that exists for the given Data Type (Fig 11.0).

Figure 11.0



DT Kind	File ID	Primary	Primary Date Field	Data Wave	No Data File
Transactional	SD_SD_	<input checked="" type="checkbox"/>	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source	Source Fld	Active	Req'd Sel.	Long Field Label	User Desc.
VBAK	KUNNR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sold-to party	
VBAK	VBELN	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sales Document	
VBAK	AUART	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sales Document Type	
VBAK	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Date on Which Record Was Created	

Data Limit	Default Dt
1,000	ERDAT


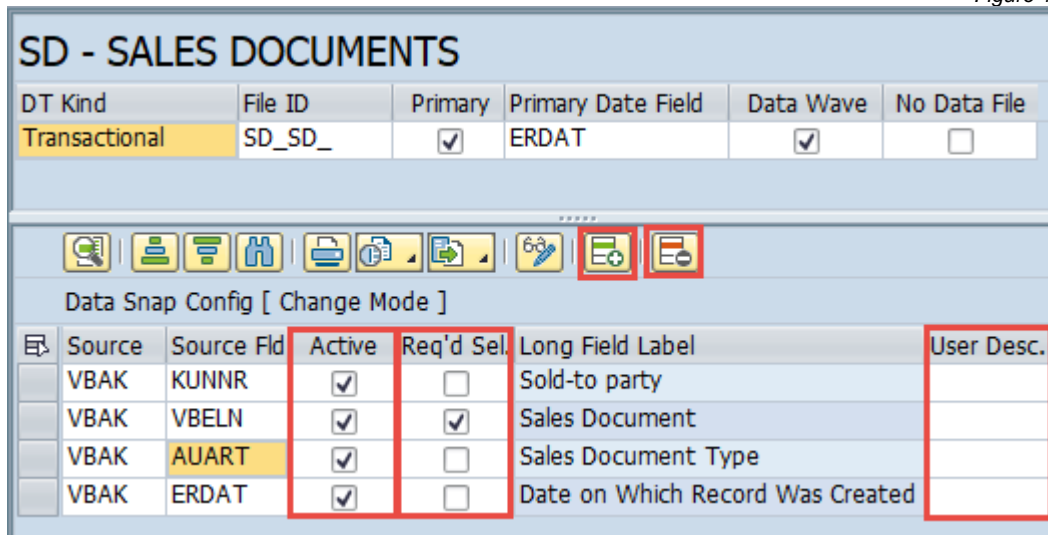
4. Select the  icon to convert the sub-screen from display to change mode
5. Now it is possible to make any necessary changes like those below (Fig. 11.1)
 - a. Add a new entry using the 'New row' icon
 - b. Delete an entry using the 'Delete row' icon
 - c. Set fields to be active or inactive
 - i. "Active" means that the field will appear on the Data Snap screen so that it is available for use
 - ii. At least one field must be set as active, and the purpose of this requirement is to help the export run in a more efficient manner
 - d. Set fields to be required or not
 - i. "Req'd Sel." means that this field must be populated with data when executing Data Snap exports
 - ii. At least one field must be set as required
 - e. Add user descriptions for fields, which if populated, are used instead of SAP's long field label

Figure 11.1



DT Kind	File ID	Primary	Primary Date Field	Data Wave	No Data File
Transactional	SD_SD_	<input checked="" type="checkbox"/>	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source	Source Fld	Active	Req'd Sel.	Long Field Label	User Desc.
VBAK	KUNNR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sold-to party	
VBAK	VBELN	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sales Document	
VBAK	AUART	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sales Document Type	
VBAK	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Date on Which Record Was Created	

The tables and fields defined in the Data Snap configuration will appear on the Data Snap screen for the chosen data type. A check mark will be present in any fields requiring input. Data must be entered in the required fields; all other fields are optional entries (Fig. 11.2).

Figure 11.2

Data Snap - 03/11/2020 @ 10:22:31

Processing Options

Export Description

Data Selection Criteria

Sales Document	<input checked="" type="checkbox"/>	to	<input type="text"/>	<input type="button" value="Add"/>
Sold-to party	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Add"/>
Created on	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Add"/>
Sales Document Type	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Add"/>

If the Data Snap screen is accessed but displays this error, it simply means that the Data Snap screen has not yet been configured for the selected Data Type (Fig. 11.3). In other words, no tables and fields have been defined to represent the selection criteria that would be available for the user. At least one table and field must be defined within the Data Snap configuration in order to bypass this error.

Figure 11.3

Data Snap

Select Data Type:

! Datatype [CA - VENDOR MASTER] is not configured for Data Snap.

Other Data Snap Config Changes

If you want to change the maximum number of records that are permitted for the execution of a Data Snap export, this is maintained in the sub-screen below that of the screen definition in the field named 'Data Limit' (Fig. 11.4). The default parameter in Gold Client for all data types is 1,000 which aligns with Qlik's recommended best practice.

Figure 11.4

SD - SALES DOCUMENTS

DT Kind	File ID	Primary	Primary Date Field	Data Wave	No Data File
Transactional	SD_SD_	<input checked="" type="checkbox"/>	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>

.....

Data Snap Config [Change Mode]

Source	Source Fld	Active	Req'd Sel.	Long Field Label	User Desc.
VBAK	KUNNR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sold-to party	
VBAK	VBELN	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sales Document	
VBAK	AUART	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sales Document Type	
VBAK	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Date on Which Record Was Created	

.....

Data Snap Record Limit [Display Mode]

Data Limit	Default Dt
1,000	ERDAT

Additionally, a new field named 'Default Dt' was added in release 8.6.1 (Fig. 11.5). To understand the purpose of this field it is first helpful to know that Data Snap functionality has been enhanced in this release to allow users to export data volumes up to the maximum (the value defined within the 'Data Limit' field for the given Data Type) even though their selection criteria finds more than the max allowed. In previous versions, if the user's selection criteria found more than the max allowed, their only options were to granularize their selection criteria and/or increase the data limit value.

Figure 11.5

SD - SALES DOCUMENTS

DT Kind	File ID	Primary	Primary Date Field	Data Wave	No Data File
Transactional	SD_SD_	<input checked="" type="checkbox"/>	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Data Snap Config [Change Mode]

Source	Source Fld	Active	Req'd Sel.	Long Field Label	User Desc.
VBAK	KUNNR	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sold-to party	
VBAK	VBELN	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Sales Document	
VBAK	AUART	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sales Document Type	
VBAK	ERDAT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Date on Which Record Was Created	

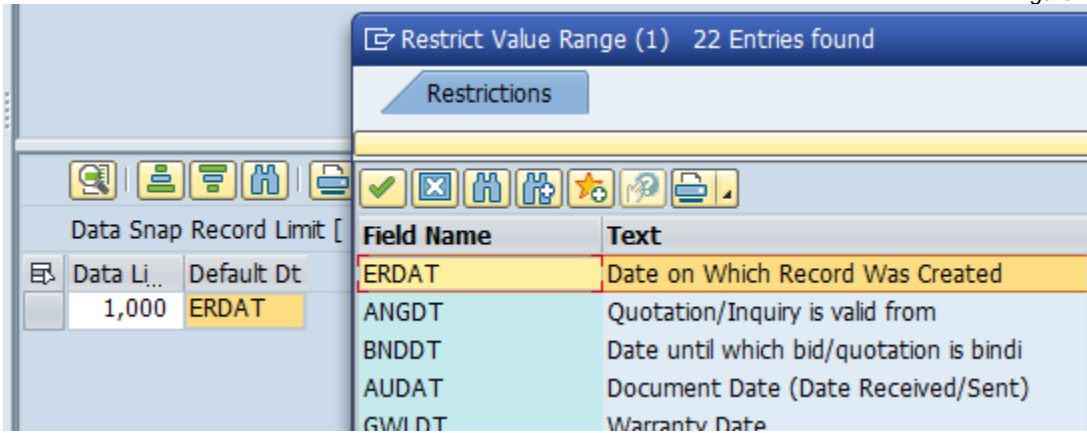
Data Snap Record Limit [Display Mode]

Data Limit	Default Dt
1,000	ERDAT

Since Data Snap will now allow users to proceed with their export, the question existed regarding what data should be included in the export. The Qlik team felt that it would be logical to allow for the option to be date-driven and that the selection most users would want is to export the most recent data working back in time historically until the max number of records were exported. Although using the Created-On date seems to be the most natural fit here, users have been given the ability to configure whatever date that is most suitable to their requirements.

The user can select from whatever date-related fields exist within the respective table. In the example of SD - SALES DOCUMENTS, since VBAK is the header table, the list of date fields available for section are those which are part of this table (Fig. 11.6). If the given data type does not have a default date value defined, the Data Snap export will simply export the first records found when querying the table.

Figure 11.6



Inactive Feature on Recipient Data Types

When displaying Recipient Data Types there is a column enabling the user to make a Recipient Data Type inactive, if for any reason it is not needed. To make this change, do the following:


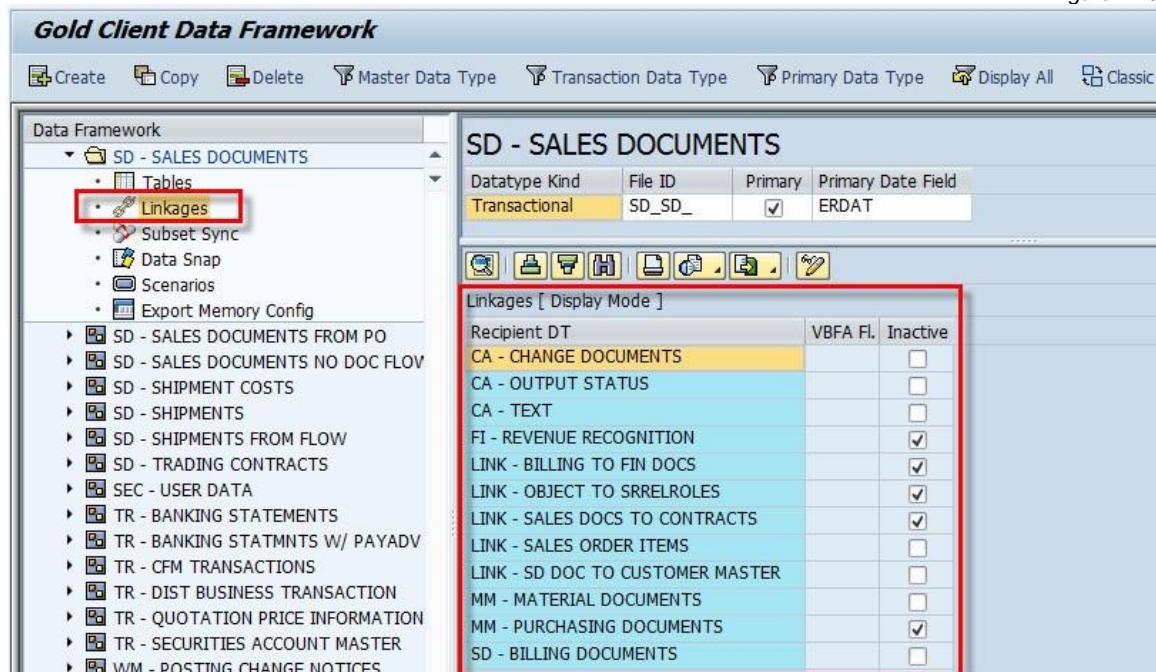

1. Go to the main Gold Client screen (Transaction ZGOLD)
2. Select the  **Configuration** button located in the bottom of the screen; this will lead to the Gold Client Setup Utility page. From here, open folders Configuration > Framework, and then execute Data Echo
3. Choose a Data Type and then select **Linkages** located under the Data Type; this displays any Data Type Linkages which exist for the selected Data Type in the sub-screen on the right (Fig 12.0).

Figure 12.0



The screenshot shows the 'Gold Client Data Framework' interface. The left sidebar shows a tree view with 'SD - SALES DOCUMENTS' expanded, and 'Linkages' selected. The main area displays the configuration for 'SD - SALES DOCUMENTS' with a table of linkages. A red box highlights the 'Linkages [Display Mode]' table.

Recipient DT	VBFA Fl.	Inactive
CA - CHANGE DOCUMENTS		<input type="checkbox"/>
CA - OUTPUT STATUS		<input type="checkbox"/>
CA - TEXT		<input type="checkbox"/>
FI - REVENUE RECOGNITION		<input checked="" type="checkbox"/>
LINK - BILLING TO FIN DOCS		<input checked="" type="checkbox"/>
LINK - OBJECT TO SRRELROLES		<input checked="" type="checkbox"/>
LINK - SALES DOCS TO CONTRACTS		<input checked="" type="checkbox"/>
LINK - SALES ORDER ITEMS		<input type="checkbox"/>
LINK - SD DOC TO CUSTOMER MASTER		<input type="checkbox"/>
MM - MATERIAL DOCUMENTS		<input type="checkbox"/>
MM - PURCHASING DOCUMENTS		<input checked="" type="checkbox"/>
SD - BILLING DOCUMENTS		<input type="checkbox"/>

4. Select the  icon to convert the sub-screen from display to change mode
5. Now it's possible to inactivate - or activate - any Recipient Data Types
 - a. Checking a box in the **Inactive** column inactivates the link and thereby excludes that Data Type from the data export process
 - b. Un-checking a box in the **Inactive** column activates the link and thereby includes that Data Type in the data export process
6. Save your changes

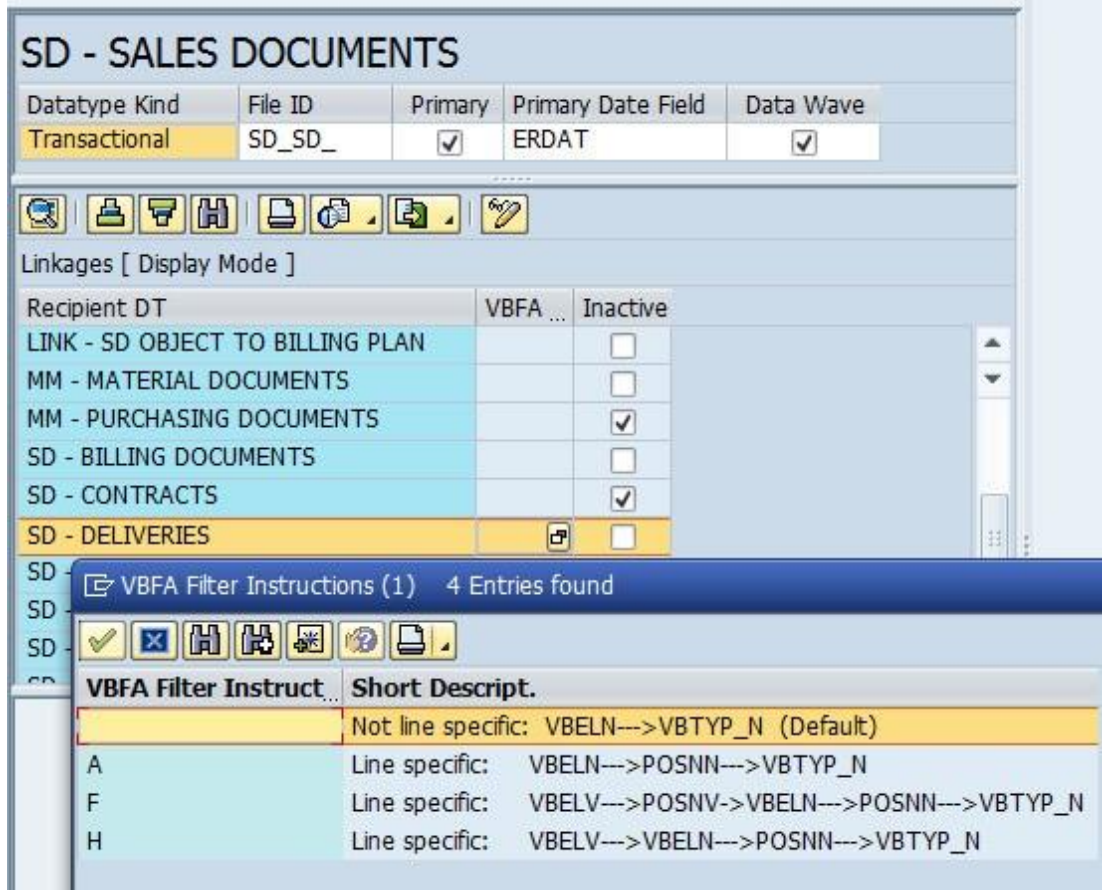
VBFA Filtering Option in Utilities

VBFA Filtering is an advanced feature that links to a Recipient Data Type, with VBFA as the header. The user may identify a unique header in one of two ways:

- Uniqueness of the combination of subseq. doc ONLY
- Uniqueness of the combination of subseq. doc and subsequent POSNR
- INFORMATION FROM TEAM NEEDED HERE FOR LINE FILTER F
- INFORMATION FROM TEAM NEEDED HERE FOR LINE FILTER H

To enable or disable this function in the Recipient Data Type with VBFA as the header, select VBFA Filt. to choose either one of these options (Fig. 13.0).

Figure 13.0



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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