

**Data Transform  
User Guide  
8.7**

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## Introduction

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This document serves as the user manual for using the Data Transformation functionality which was introduced in Gold Client version 8.0. This functionality replaces the /HTG/TRANSFORM configuration screen used in previous versions of Gold Client.

Gold Client is delivered with default configuration; however, users are provided the flexibility to define their own data transformation routines for any table and field; this configuration is defined in a simple hierarchical manner where a rule may have one or more tables defined, and each table may have one or more fields defined. Each field can then have its transformation logic defined as required (e.g. blank, fixed value, random, derived, etc.).

- Transformation Rule
  - Table 1
    - Field A
  - Table 2
    - Field A
    - Field B
    - Field C

Once defined, transformation rules can be assigned to Client Construct and Data Echo data types as per the organization's requirements. This assignment means that the data transformation logic within the assigned rule will be performed automatically during the data export irrespective of the user's actions. This is done in order to help safeguard sensitive data. To provide an example, transformation rule BP01 (designed to transform Business Partner data) could be assigned to Client Construct data type BUSINESS PARTNERS and/or to Data Echo data type CA - BUSINESS PARTNERS.

It is possible to assign a transformation rule to multiple data types, including any custom data types that may have been defined; however, it is not possible to assign multiple transformation rules to one data type.

*An important point to share is the best practice recommendation of not transforming key fields as doing so could significantly impact data integrity in the target client. If your organization has a requirement of transforming data that is stored in a table's key field, we suggest that you reach out to the Attunity team for support.*

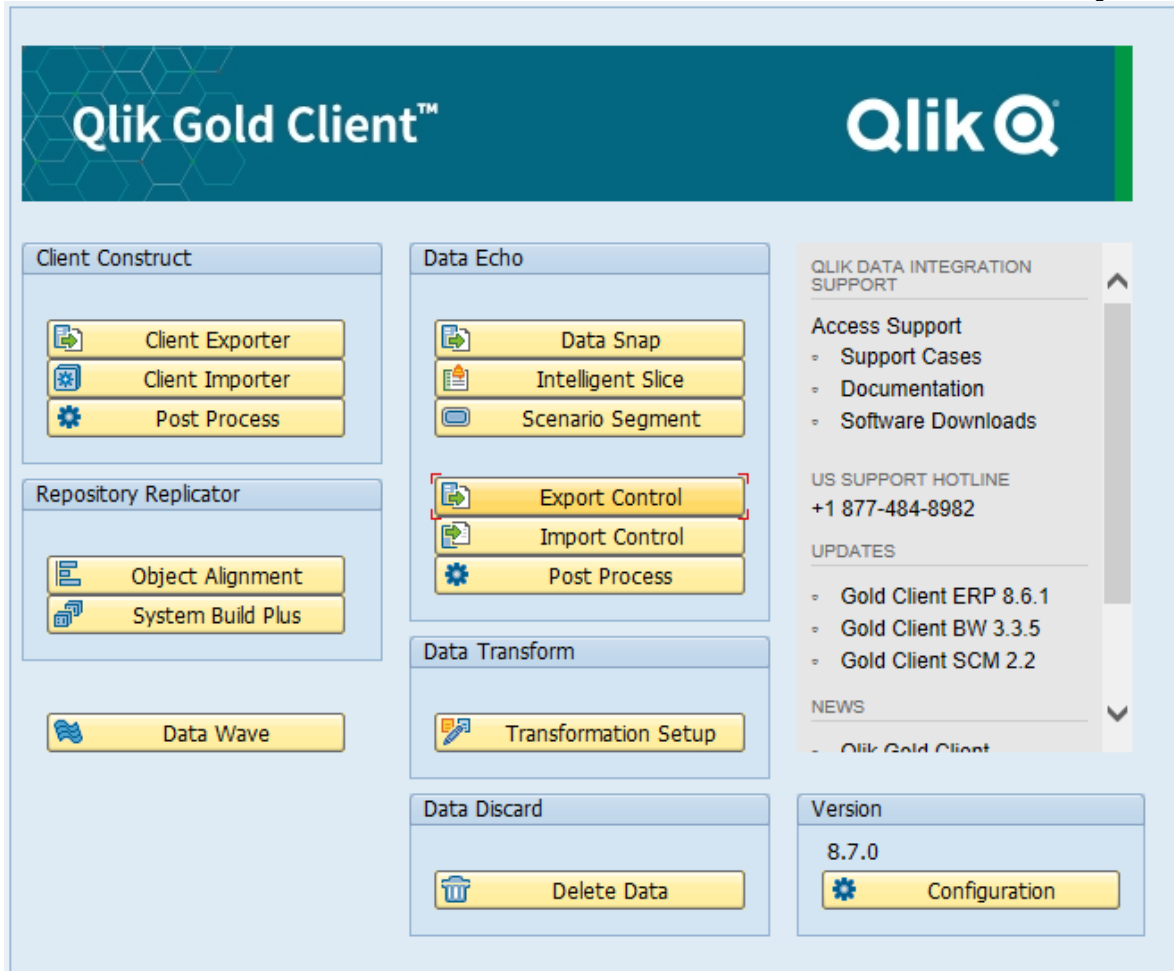
Freely request Attunity support if assistance is needed in defining this configuration and/or assigning the transformation rules to the Client Construct and Data Echo data types.



## Gold Client Transformation Rules Front End

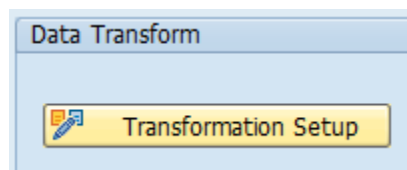
The Gold Client Front End is initiated via Transaction Code /nZGOLD.  
The main Gold Client screen is shown (Fig. 1.0).

Figure 1.0



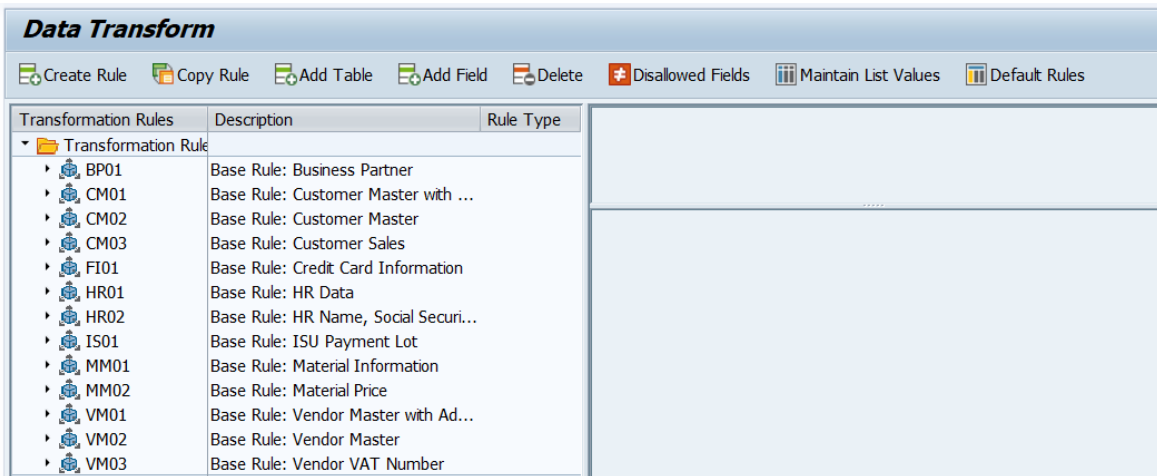
To access the Data Transform user interface, click the Transformation Rules button (Fig. 1.1).

Figure 1.1



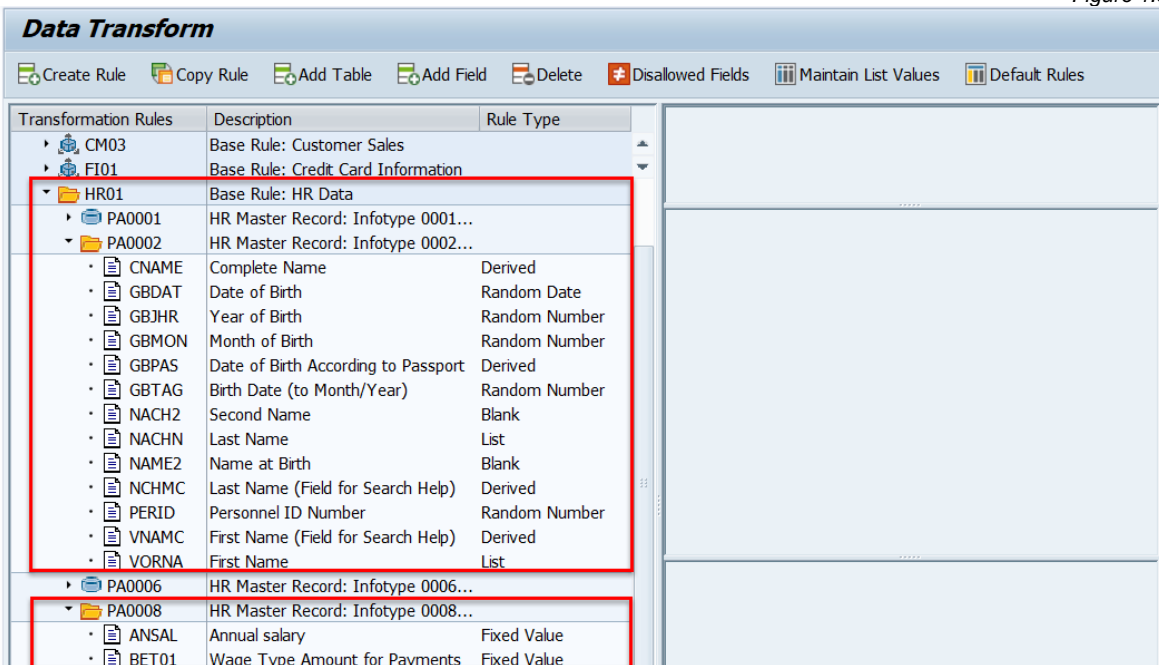
The Data Transform main screen will display (Fig. 1.2).

Figure 1.2



The details, such as tables and fields assigned to each rule, can be viewed by expanding the tree structure for each rule (Fig. 1.3).

Figure 1.3



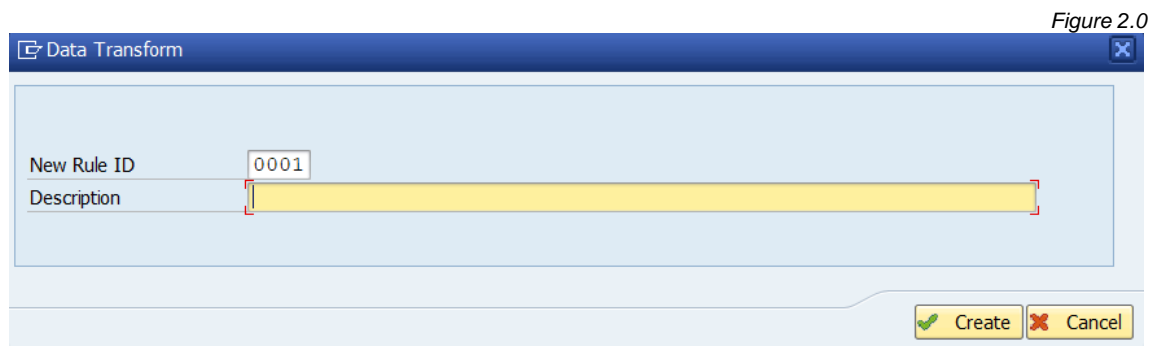
## Rules

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A Transformation Rule is a grouping of tables and fields that will be manipulated during export based on the details defined within the rule. It is possible to create new rules as well as copy existing rules. Copying a rule will copy all of its details (tables, fields, masking specifics) as well. It is common to copy the various default rules and then customize them according to the organization's specific requirements.

To create a new rule, select the 'Create Rule' button located on the toolbar; a child window will display (Fig. 2.0). Do the following:

- Enter a four-character value in the New Rule ID field (Required)
- Enter a description of the rule in the Description field (Required)
- Click the Create button



To copy an existing rule, select the 'Copy Rule' button located on the toolbar; a child window will display (Fig. 2.1). Do the following:

- Enter a four-character value in the New Rule ID field (Required)
- Enter a description of the rule in the Description field (Required)
- Click the Create button



Figure 2.1

The screenshot shows a dialog box titled "Data Transform". It contains the following fields:

- Source Rule ID: CM02
- Description: Base Rule: Customer Master
- New Rule ID: 0001
- Description: (This field is highlighted in yellow and is currently empty.)

At the bottom right, there are two buttons: "Create" (with a green checkmark icon) and "Cancel" (with a red X icon).

Once a rule is created, tables need to be added to it. **Note:** A table can be defined in multiple Transformation Rules.

To add a table, do the following:

- Highlight a rule in the left menu by single-clicking on it
- Select the 'Add Table' button located on the toolbar
- Input the table name and click the green checkbox button (Fig. 2.2)

Figure 2.2

The screenshot shows a dialog box titled "User Input". It contains a single text input field labeled "Tablename", which is highlighted in yellow. At the bottom right, there are two buttons: a green checkmark button and a red X button.

The newly added table should appear under the rule within the list of Transformation Rules. In this example, table KNA1 has been assigned to transformation rule 0001 (Fig. 2.3).

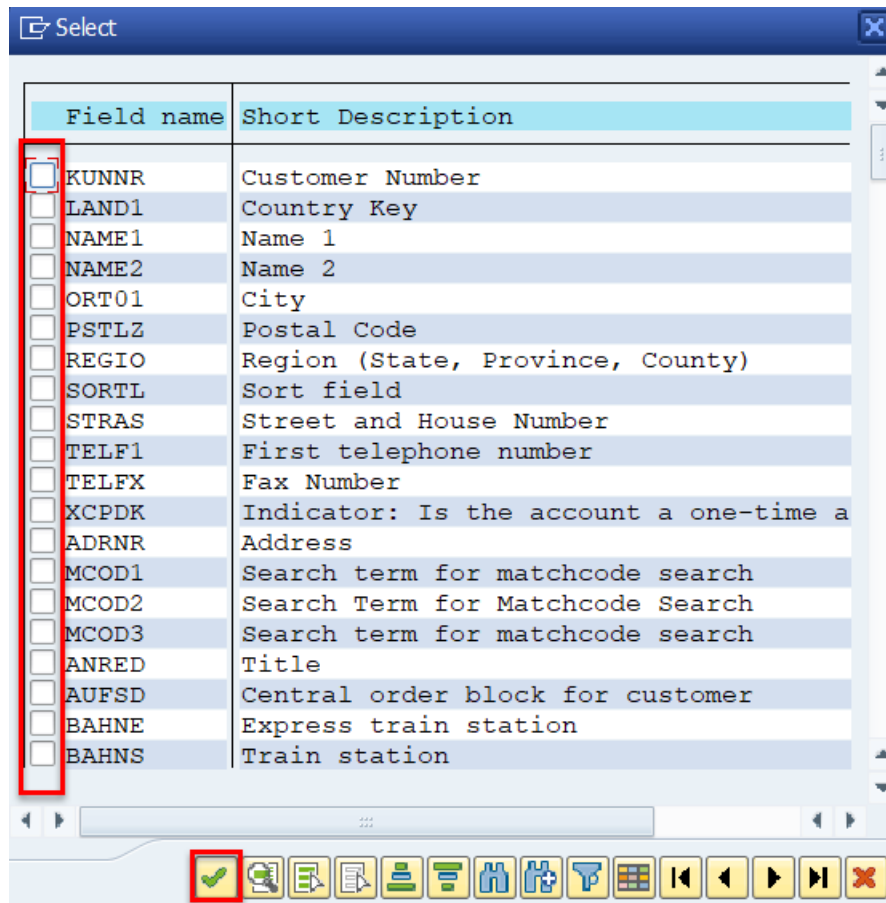
Figure 2.3

Transformation Rules	Description	R..
▶ MM02	Base Rule: Material Price	
▶ VM01	Base Rule: Vendor Master with Ad...	
▶ VM02	Base Rule: Vendor Master	
▶ VM03	Base Rule: Vendor VAT Number	
▼ 0001	New Transformation Rule	
• KNA1	General Data in Customer Master	

The next task is to add one or more fields to the table. To add a field, do the following:

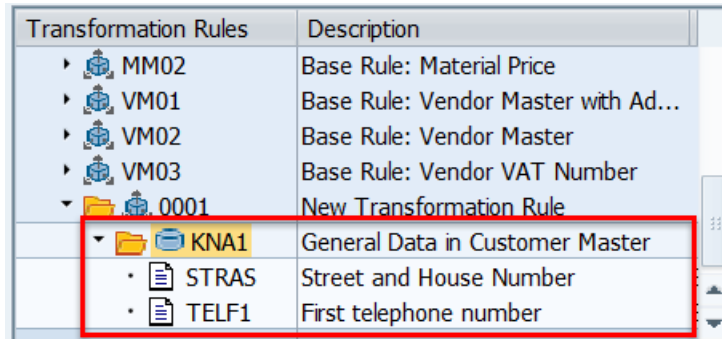
- Highlight a table in the left menu by single-clicking on it
- Click the 'Add Field' button located on the toolbar; a child window will display with the fields that exist within the selected table's structure; in this example, the fields for table KNA1 are displayed (Fig. 2.4)
- Select one or more fields by ticking the checkboxes and then click the green checkmark button

Figure 2.4



The selected fields should appear under the rule the table within the list of Transformation Rules. In this example, fields STRAS and TEFL1 have been added to table KNA1 (Fig. 2.5).

Figure 2.5



Transformation Rules	Description
▶ MM02	Base Rule: Material Price
▶ VM01	Base Rule: Vendor Master with Ad...
▶ VM02	Base Rule: Vendor Master
▶ VM03	Base Rule: Vendor VAT Number
▼ 0001	New Transformation Rule
▼ KNA1	General Data in Customer Master
• STRAS	Street and House Number
• TELF1	First telephone number

## Transformation Types

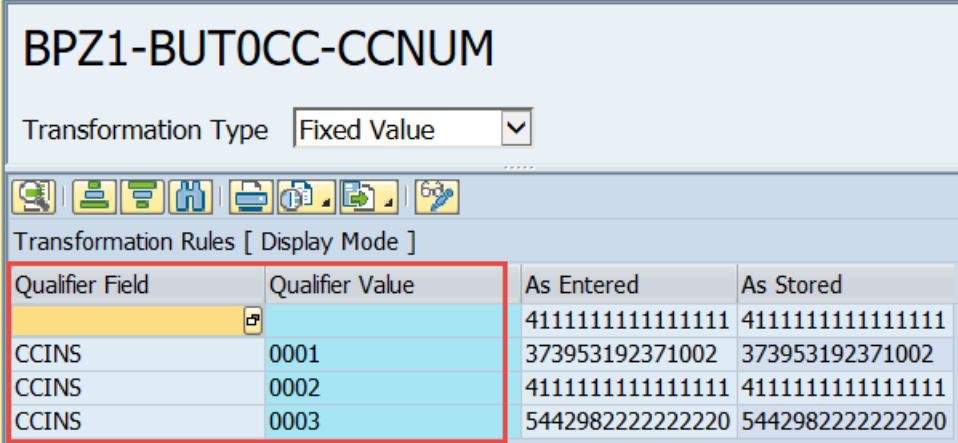
A transformation type defines the method for how the value stored in the field will be changed during export. All transformed values are written to the export file so that there is no risk when importing the data into the target. A transformation type can be viewed by double-clicking on a field name in the Transformation Rule List.

There are nine different Transformation Types to select from and the details associated to each are displayed on the subsequent pages. When assigning a field to a table, the default Transformation Type assigned will be Blank, but the user is free to update the type as required.

It is possible to deploy qualifiers as a condition to determine if the Transformation Type is to be executed during export; this is done by populating the 'Qualifier Field' and 'Qualifier Value' fields. The Qualifier Field must be part of the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is valid for the field type. Using the qualification functionality is entirely optional. As of Gold Client 8.7.2025.02, the Qualifier field can be a blank value.

Here is an example that is provided to Gold Client customers as part of the default configuration where the qualifier field is CCINS (locate in the BUTOCC table) and the qualifier values are '0001' (AMEX), '0002' (Visa), or '0003' (MasterCard) (Fig. 3.0). The values in these two columns create the conditions necessary to determine how the value should be transformed.

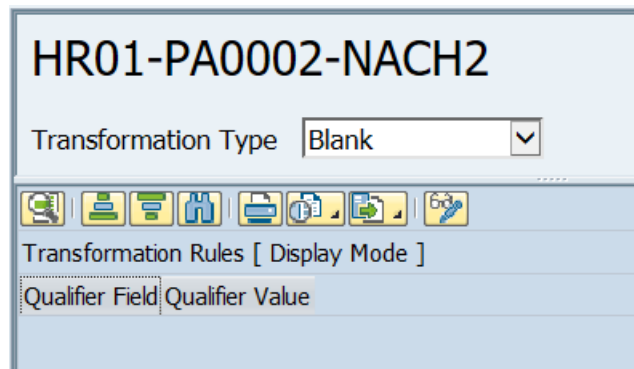
Figure 3.0



Qualifier Field	Qualifier Value	As Entered	As Stored
		4111111111111111	4111111111111111
CCINS	0001	373953192371002	373953192371002
CCINS	0002	4111111111111111	4111111111111111
CCINS	0003	5442982222222220	5442982222222220

**Blank** – the value is replaced with a blank value. A Transformation Type of type Blank will appear like this example on the right portion of the screen (Fig. 3.1).

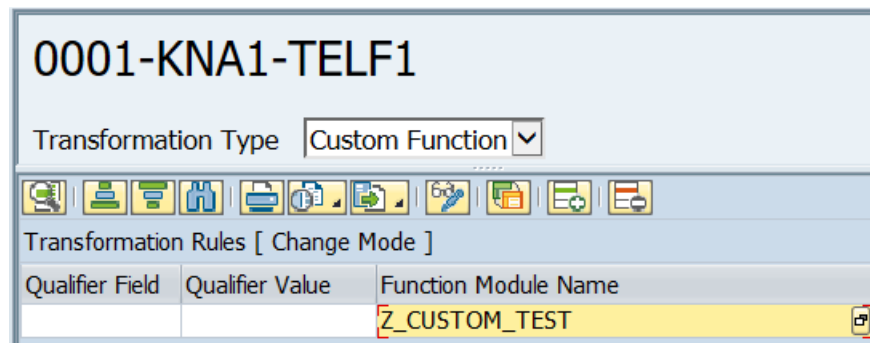
Figure 3.1



Qualifier Field / Qualifier Value – Can be used as a condition to see if the Transformation Type is executed during export. The Qualifier Field must be from the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is acceptable for the field type. The Qualifier is optional functionality in assigning a condition for the Transformation Type.

**Custom Function** – the value is replaced with the output from a custom function. Custom functions can be used in situations where existing transformation types do not match a user's transformation requirements. An example of a Custom Function transformation type (Fig. 3.2).

Figure 3.2



Qualifier Field / Qualifier Value – Can be used as a condition to see if the Transformation Type is executed during export. The Qualifier Field must be from the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is acceptable for the field type. The Qualifier is optional functionality in assigning a condition for the Transformation Type.

Function Module Name – The function module (accessible by transaction SE37) to be executed when the table is exported.

**Derived (Equal)** – the value is replaced with the value of another table and field in the export file. A subset of the value can be used by defining a number in the 'Src. Bytes' field to capture the first number of characters in the field. An example of a Derived (Equal) transformation type (Fig. 3.3). In this config example, the transformed value from table PA0002 and field GBTAG will be used as the source for the value being masked in table PA0002 and field GBPAS.

Figure 3.3



Qualifier Field / Qualifier Value – Can be used as a condition to see if the Transformation Type is executed during export. The Qualifier Field must be from the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is acceptable for the field type. The Qualifier is optional functionality in assigning a condition for the Transformation Type.

Method – Set to 'E' to use Transformation Type of Derived (Equal)

Table – Table that the derived value will be sourced from

Multiplier – Not used with Derived (Equal)

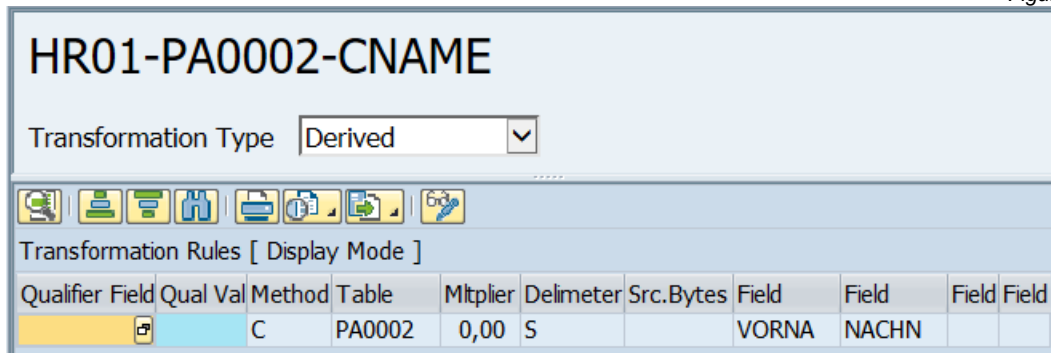
Delimiter - Not used with Derived (Equal)

Src. Bytes – First number of characters that will be derived from the field

Field Name – The field that will be used for the derived value

**Derived (Concatenation)** – the value is replaced with a combination of field values from another table in the export file where up to four fields can be combined. The fields can be separated by a space, comma, decimal, slash, and backslash. An example of a Derived (Concatenation) transformation type (Fig. 3.4). In this config example, the transformed values from table PA0002 and fields VORNA and NACHN will be concatenated together, along with a Delimiter of 'S' (space), to create the transformed value in table PA0002 and field CNAME.

Figure 3.4



Qualifier Field / Qualifier Value – Can be used as a condition to see if the Transformation Type is executed during export. The Qualifier Field must be from the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is acceptable for the field type. The Qualifier is optional functionality in assigning a condition for the Transformation Type.

Method – Set to C to use Transformation Type of Derived (Concatenation)

Table – Table that the derived value will come from

Multiplier – Not used with Derived (Concatenation)

Delimiter – Inserts a separator between the concatenated values. The following options can be selected:

- <Blank> - No separator
- S - Space
- C - Comma
- D - Decimal
- / - Slash
- \ - Backslash

Src. Bytes – First number of characters that will be derived from the fields

Field Name – The fields that will be used for the derived value. Up to four fields can be defined for concatenation.

**Derived (Multiply)** – the value is replaced with the product of a numeric field in the export and the value in the Multiplier field. An example of a Derived (Multiply) transformation type (Fig. 3.5). In this example, the value stored in table PA0008 field BET01 will be multiplied by 10x and this value is then stored in PA0008 field ANSAL.

Figure 3.5

Qualifier Field	Qual Val	Method	Table	Mltplier	Delimiter	Src.Bytes	Field	Field	Field	Field
		M	PA0008	10,00			BET01			

Qualifier Field / Qualifier Value – Can be used as a condition to see if the Transformation Type is executed during export. The Qualifier Field must be from the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is acceptable for the field type. The Qualifier is optional functionality in assigning a condition for the Transformation Type.

Method – Set to M to use Transformation Type of Derived (Multiply)

Table – Table that the derived value will come from.

Multiplier – The number used to multiply the value

Delimiter - Not used with Derived (Multiply)

Src. Bytes – Not used with Derived (Multiply)

Field Name – The field that will be used for the derived value

**Fixed Value** – the value is replaced with the value defined in the As Entered field. An example of a Fixed Value transformation type (Fig. 3.6). In this example, all values in table PA0009 and field BANKN is transformed to 9999999999999999.

Figure 3.6

Qualifier Field	Qual Val	As Entered	As Stored
		9999999999999999	9999999999999999

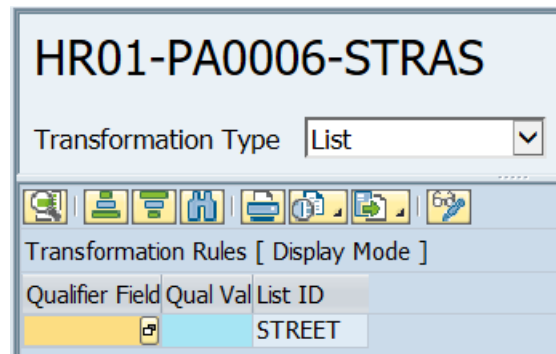


Qualifier Field / Qualifier Value – Can be used as a condition to see if the Transformation Type is executed during export. The Qualifier Field must be from the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is acceptable for the field type. The Qualifier is optional functionality in assigning a condition for the Transformation Type.

As Entered – The value is used to replace the field value during the export. The primary difference between As Entered and As Stored is that date formatting is taken into account on As Entered, while the actual database entry is shown in As Stored. Unlike much of SAP, these fields are case-sensitive, so care should be taken to avoid assigning a lower-case value to an upper case-only field.

**List** – the value is replaced with one from a user-defined list of values from the entered List ID. An example of a List transformation type (Fig. 3.7). In this example, all values in table PA0006 and field STRAS will be randomly transformed based on the values that have been maintained within the list named STREET.

Figure 3.7

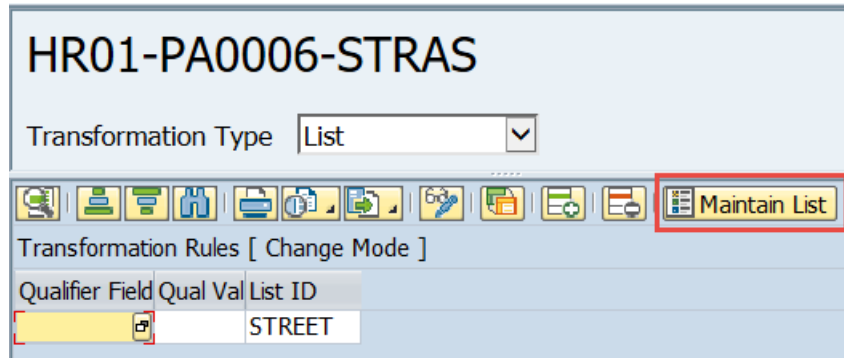


Qualifier Field / Qualifier Value – Can be used as a condition to see if the Transformation Type is executed during export. The Qualifier Field must be from the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is acceptable for the field type. The Qualifier is optional functionality in assigning a condition for the Transformation Type.

List ID – Name of the List to be used during the export. **If the list does not exist, Gold Client will prompt the user to create the list.**

Convert the screen to change mode for the Maintain List button to appear (Fig. 3.8). Selecting this button will open a new window where maintenance can be executed for any List, including the creation of new lists (Fig. 3.10).

Figure 3.8



Selecting the 'Maintain List Values' button located on the toolbar of the main Transformation Rules screen (Fig. 3.9) can also be used to reach the same screen for performing list maintenance (Fig. 3.10).

Figure 3.9

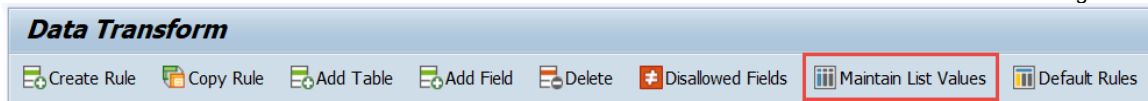
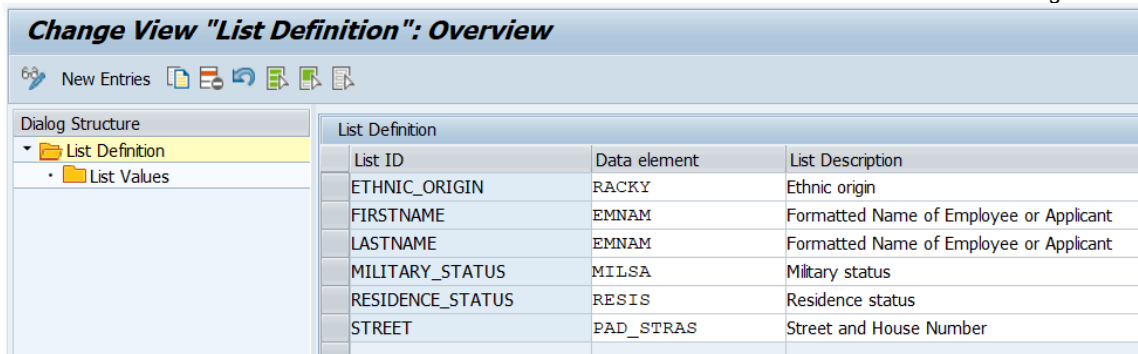
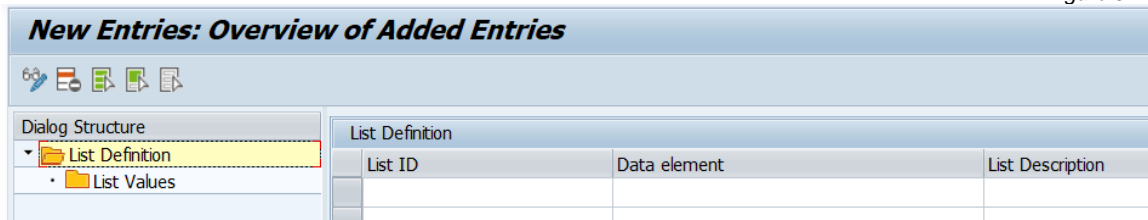


Figure 3.10



To create a new list, select the 'New Entries' button; input a List ID, the relevant Data element, and list description (Fig 3.11).

Figure 3.11



To assign entries to this new list or to change an existing list, select the row of a List ID and then open the sub-folder named List Values located in the Dialog

Structure menu (Fig. 3.12). On the "List Values" screen, values can be entered manually, copied/pasted, or uploaded using the availability utility (Fig. 3.13).

Figure 3.12

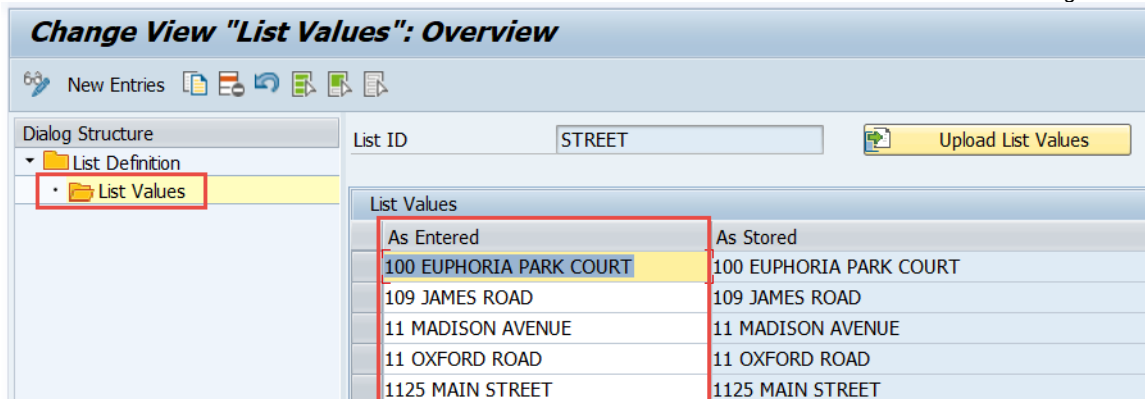
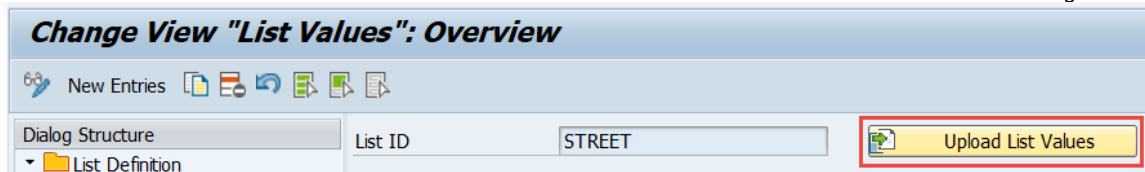
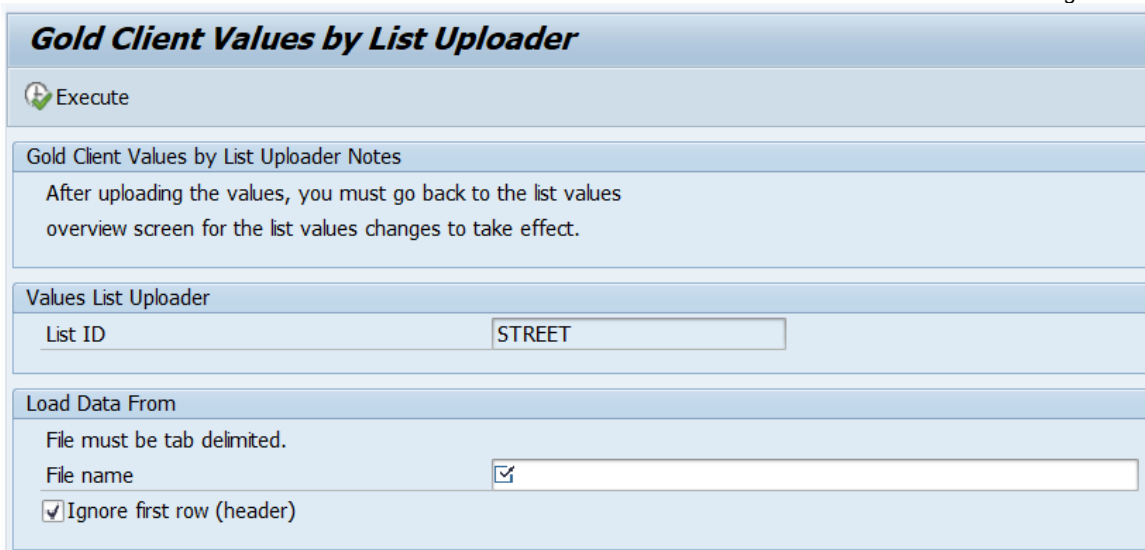


Figure 3.13



Selecting the 'Upload List Values' button directs the user to a new screen where a tab delimited (\*only\*) file can be selected and uploaded (Fig. 3.14).

Figure 3.14



Unlike much of SAP, the fields maintained in the Lists are case-sensitive, so care should be taken to avoid assigning a lower-case value to an upper case-only field.

**Random Number** – the existing number is replaced with a number between the entered 'Low Value' and 'High Value' with intervals based on the 'Step Value' field. An example a Random Number transformation type (Fig. 3.15). In this example, all values in table PA0002 field PERID will be randomly selected so that it falls within the range of 111111111 and 999999999 but because the step value is 1000, each number will end with 000. If the user wanted to consider every available number within the numeric range, then the step value would need to be set as 1.

Figure 3.15

Qualifier Field	Qual Val	Low value	High value	Step value
		111111111	999999999	1000

**Qualifier Field / Qualifier Value** – Can be used as a condition to see if the Transformation Type is executed during export. The Qualifier Field must be from the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is acceptable for the field type. The Qualifier is optional functionality in assigning a condition for the Transformation Type.

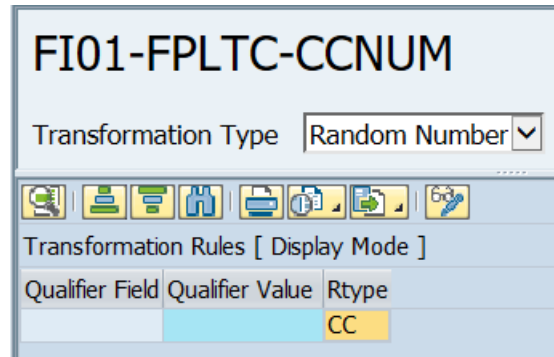
**Low Value** – the lowest number that could be assigned to the field during export

**High Value** – the highest number that could be assigned to the field during export

**Step Value** – the interval used to between the Low Value and High Value

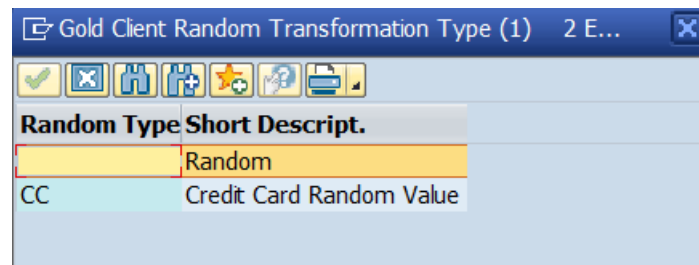
For transforming credit card numbers, there exists a unique solution. There is a setting named Random Type that is available for use with Random Number transformation type. It is offered only when field CCNUM is selected for transformation (Fig. 3.16). It processes the credit card number transformation differently. Rather than using low value, high value, and step value, it will generate a valid credit card number per set validation checks in your system. This reduces the risk of error when processing the credit card number.

Figure 3.16



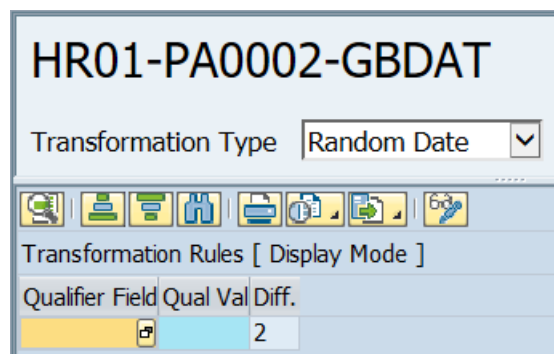
When you add field CCNUM to any transformation rule, random type = CC (for Credit Card Random Value) will be automatically assigned and it cannot be changed (Fig. 3.17).

Figure 3.17



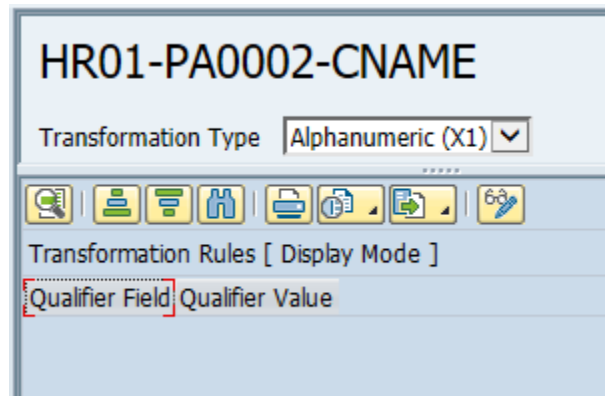
**Random Date** – the existing date is replaced with a date that has a random month and day. The year is increased or decreased by the factor entered in the Year Differential field. An example of a Random Date transformation type (Fig. 3.18). In this example, the value in table PA0002 field GBDAT will have a random month and date, but the year will only change to be +/- 2 years from the real year since that is the value stored in the Year Differential field. This gives the user control over how old or how recent the transformed year should be.

Figure 3.18



**Alphanumeric (X1)** – the value is replaced using the original value but switching any letter to X and any number to 1. An example of an Alphanumeric transformation (Fig. 3.19). In this example if the CNAME field would contain the following string “Name Test 12-23” the result will be “XXXX XXXX 11-11”.

Figure 3.19



Qualifier Field / Qualifier Value – Can be used as a condition to see if the Transformation Type is executed during export. The Qualifier Field must be from the same table in the Transformation Rule. The Qualifier Value must be listed in a format that is acceptable for the field type. The Qualifier is optional functionality in assigning a condition for the Transformation Type.

Year Differential – maximum amount that will be added to or removed from the year portion of the date field.

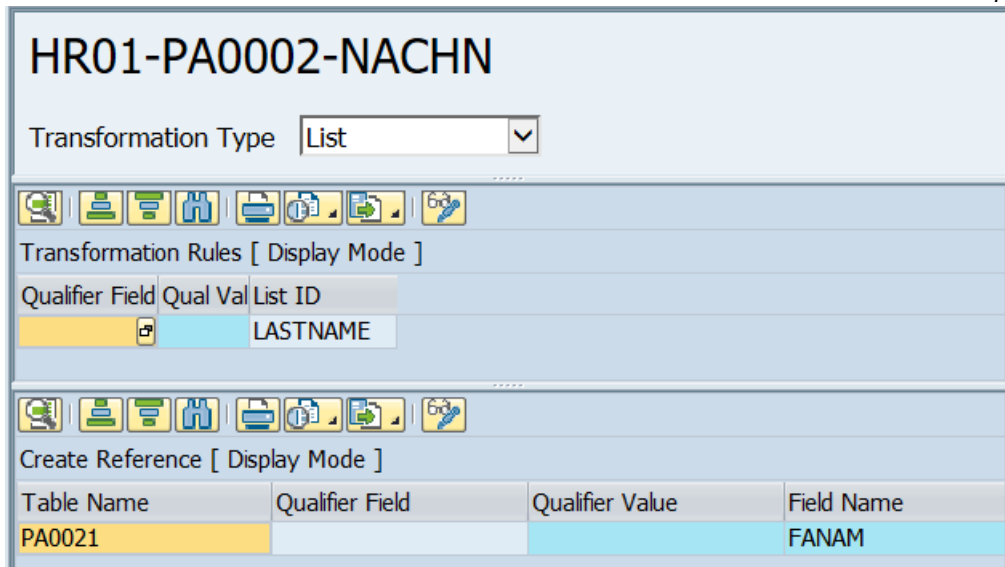
## Reference Fields

To help keep transformed values for different fields consistent, Reference Fields can be defined as part of a Transformation Rule. This configuration allows values in different fields to be transformed to the same value during the export process.

Fields that are masked using a Reference cannot be maintained directly because of this relationship. If a field needs to use some other transformation type, the reference must first be deleted and then changes to it can be deployed.

Reference Fields can be defined in the lower right-hand corner of the Transformation Rules screen (Fig. 4.0). In this example, table PA0021 field FANAM will be converted to match the transformed value in table PA0002 field NACHN.

Figure 4.0

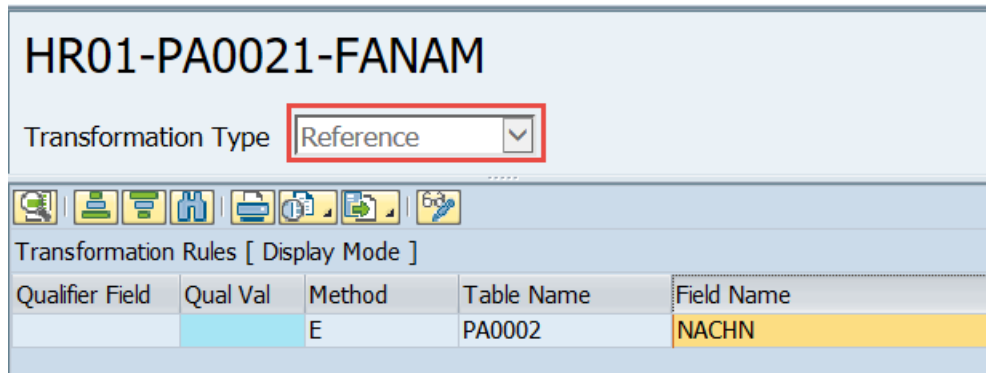


Fields that have a Reference assignment are displayed as Rule Type 'Reference' (Figs. 4.1 and 4.2).

Figure 4.1

Table Name	Qualifier Field	Qualifier Value	Field Name	Rule Type
PA0021			FANAM	Reference
			EMRGN	Blank
			FAVOR	Reference
			FCNAM	Derived
			FGBDT	Reference
			FGBNA	Blank

Figure 4.2

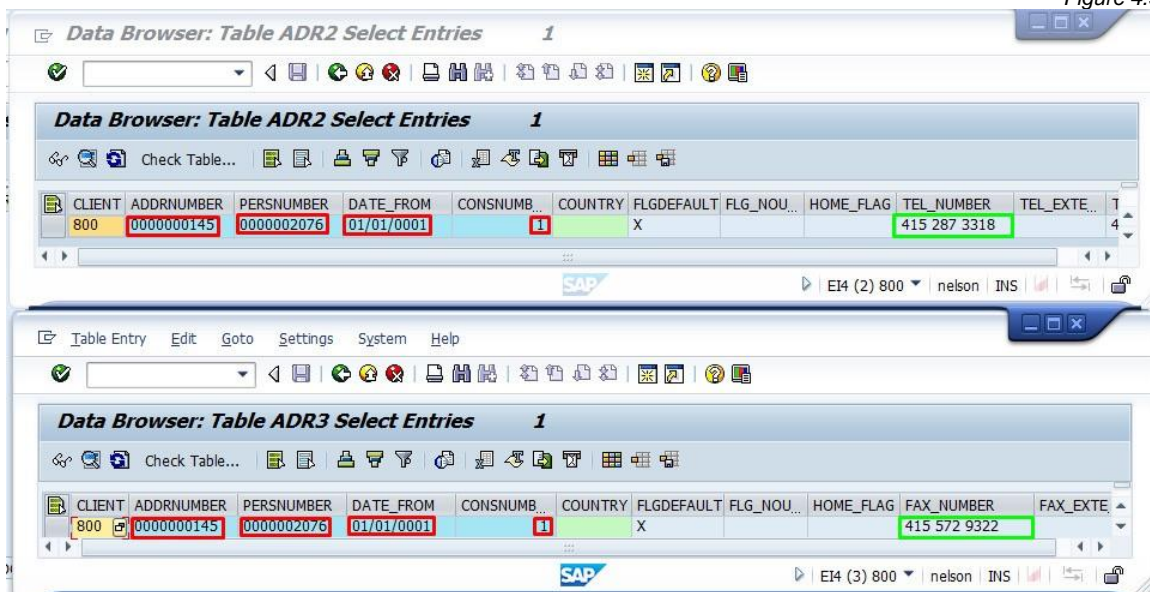


Reference and Derive Transformation Types will capitalize lower case values if the recipient field does not accept lower case values.

When a Reference/Derive is made, Gold Client will use three different methods to determine which records to keep in sync:

- If the tables have identical key fields, it will match on identical key values. For example, ADR2 and ADR3 share identical keys so any value assigned to one table can be easily referenced/derived to the other table (Fig. 4.3).

Figure 4.3



- If both the reference and derived tables are PA#### tables for HR, then the reference will only coordinate on the PERNR field.
- If neither of the above options are present, then the derived table will look for a linkage describing the relation between the two tables (Fig. 4.4).



Figure 4.4

Linkages [ Display Mode ]					
Recipient DT	VBFA Fl.	Inactiv			
CA - CENTRAL ADDR MGMT - ADR2		<input type="checkbox"/>			
CA - CENTRAL ADDR MGMT - ADR3		<input type="checkbox"/>			
CA - CENTRAL ADDR MGMT - ADRT		<input checked="" type="checkbox"/>			
CA - CENTRAL ADDRESS MANAGEMENT		<input checked="" type="checkbox"/>			

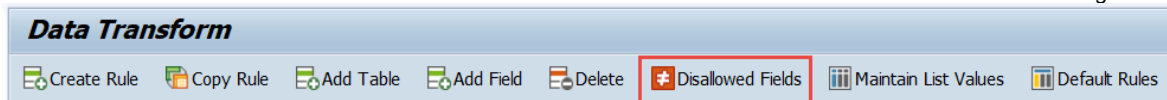
CA - CENTRAL ADDR MGMT - ADR2									
OpParen	AND/OR	NOT	Rec. Tab.	Recip. Field	Operator	Prv. Field	Val	ClParen	
<input checked="" type="checkbox"/>			ADR2	ADDRNUMBER	=	ADRNR			

References can only pass across one level, so a reference cannot be made to a reference. References cannot be passed across different jobs on parallel processing.

## Disallowed Fields

Fields can be excluded from being defined in any Transformation Rule. This feature can be used to help ensure that data integrity is maintained during the copy process. To manage the disallowed fields, select the 'Disallowed Fields' button located on the toolbar (Fig. 5.0).

Figure 5.0



Disallowing fields can be applied at the Transformation Rule or table level. To disallow fields across all rules and tables use an asterisk in the Transformation Rule or Table Name fields (Fig. 5.1).

Figure 5.1

**Display View "Disallow scrambling of these fields": Overview**

Disallow scrambling of these fields

	Transformation Rule	Table Name	Field Name
	*	*	BEGDA
	*	*	ENDDA
	*	*	KUNNR
	*	*	PERNR
	*	PA0002	SUBTY

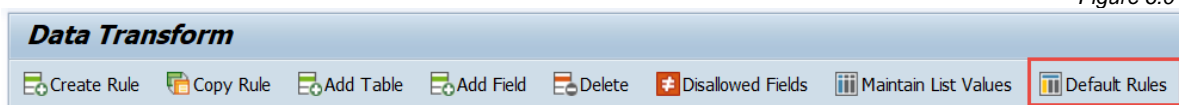
## Default Rules

---

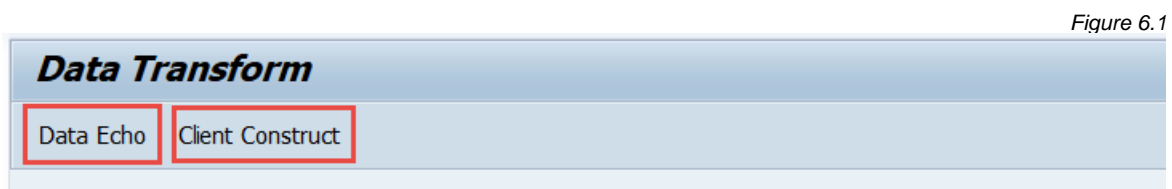
Transformation rules only add value if they are assigned to Data Echo and/or Client Construct data types. This assignment is important because the data transformation will occur automatically during the export process *but only for those data types which have a rule assigned*. Users who initiate exports do not need to take any actions for transformation to occur because of this rule assignment.

A transformation rule can be assigned to one or more data types; however, each data type can have only one transformation rule assigned.

To assign a transformation rule as a default, click the 'Maintain Default Rules' button located on the Toolbar (Fig. 6.0).



A new screen will appear where the Data Type - Transformation Rule assignment can be maintained. Assignments may need to occur for both Data Echo and Client Construct data types so select the respective button as required in order to perform maintenance (Fig. 6.1). The default view for this screen is Data Echo.



Examples of assignments for both Data Echo and Client Construct data types (Figs. 6.2 and 6.3).

Figure 6.2

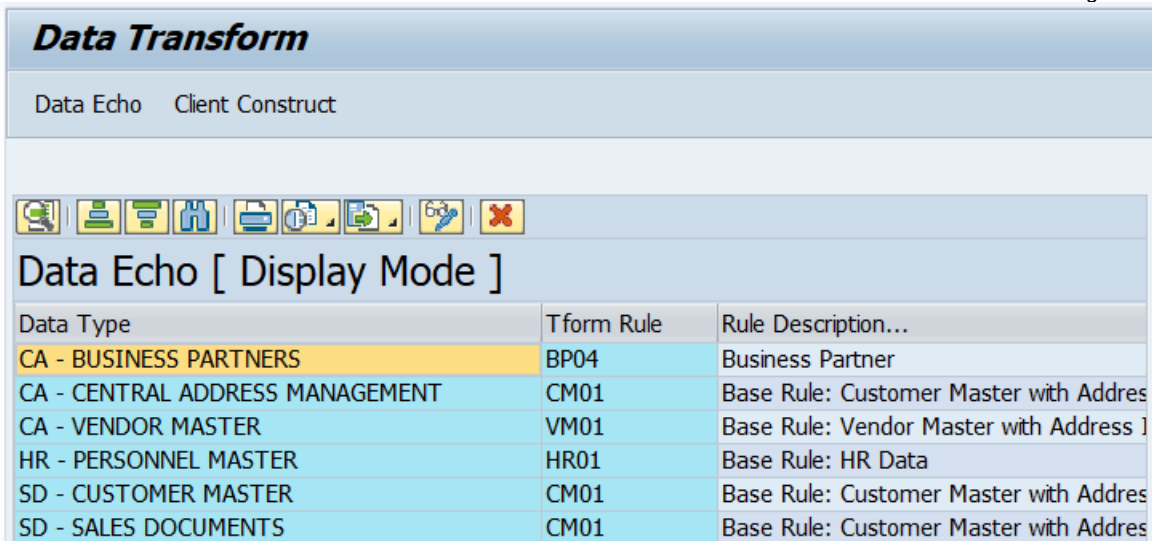
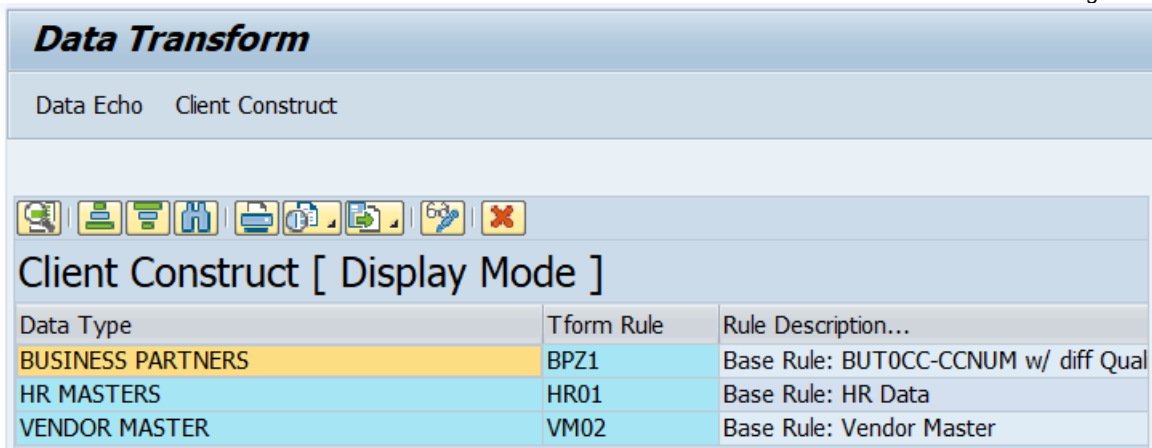


Figure 6.3



Select the 'pencil' icon in order to convert the screen from display mode to change mode (Fig. 6.4). Select the 'add row' icon in order to add a new entry. When changes are complete, use the 'save' icon (Fig. 6.5).

Figure 6.4

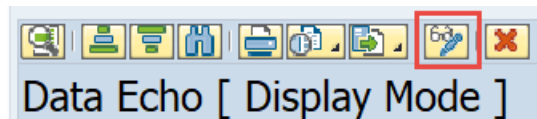
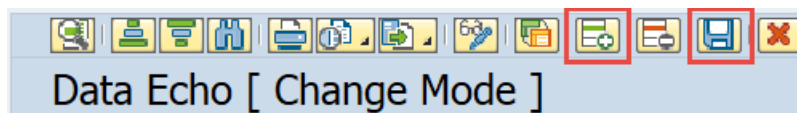


Figure 6.5



## Export using Transformation Rules

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As stated in the previous section, if transformation rules have been assigned to Data Echo and/or Client Construct data types, data transformation will occur for those data types automatically during the export process whether initiated via the Data Snap, Export Control, or Client Exporter functions; however, there is the ability to change the rule or inactivate it for a given export. Taking this action has no impact on the actual configuration.

The ability to circumvent the Data Transformation config is controlled through Gold Client security and this access should be provided to a very limited number of users. For example, end-users should not be granted this ability but perhaps the team's 2-3 administrators should have this access as there may be times when the team needs to perform data copies without data transformation on a case-by-case basis. If the user does not have this exceptional access assigned, the 'Data Transform' button will either be suppressed or not displayed thereby preventing the user from selecting it. Reference the [Gold Client Security Document](#) for more details.

The content in this section focuses first on export functions Data Snap and Export Control and following that is content on the Client Exporter function.

### Export Control and Data Snap

To overwrite or inactivate the transformation rule from the Export Control or Data Snap screens, select the 'Data Transform' button located on the toolbar of the respective screen (Figs. 7.0 - 7.1).

Any changes to the transformation must occur prior to initiating the export.

Figure 7.0

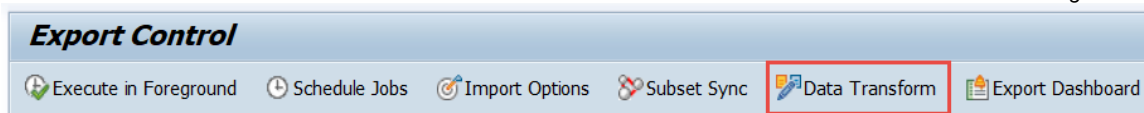
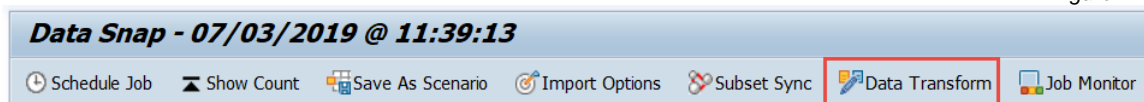
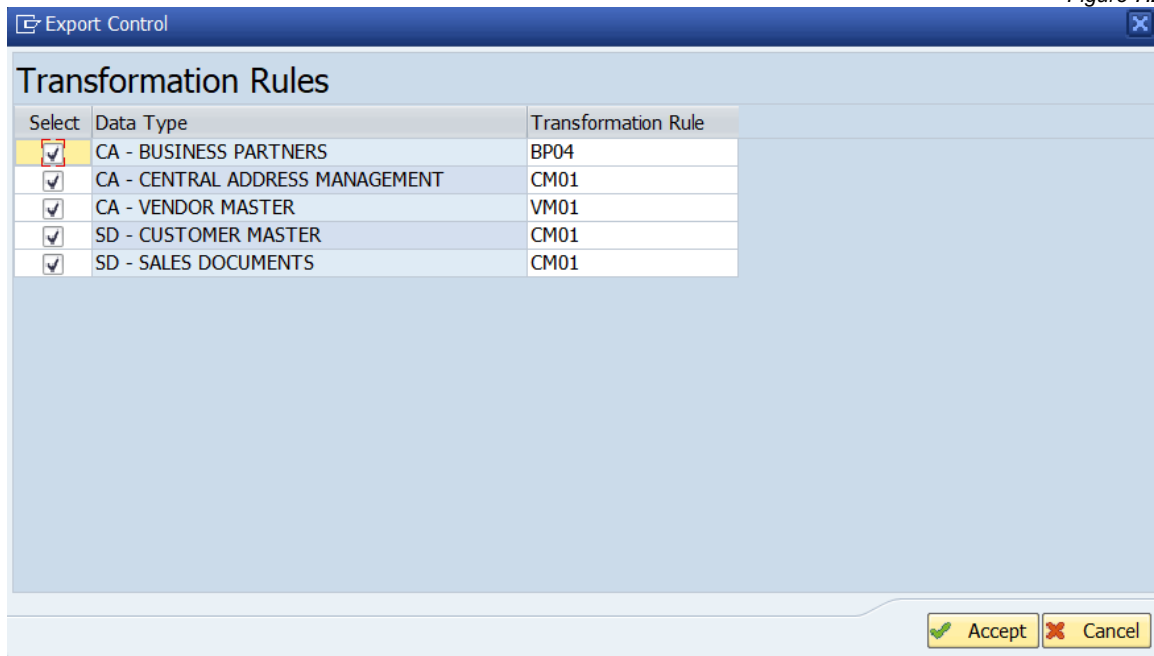


Figure 7.1



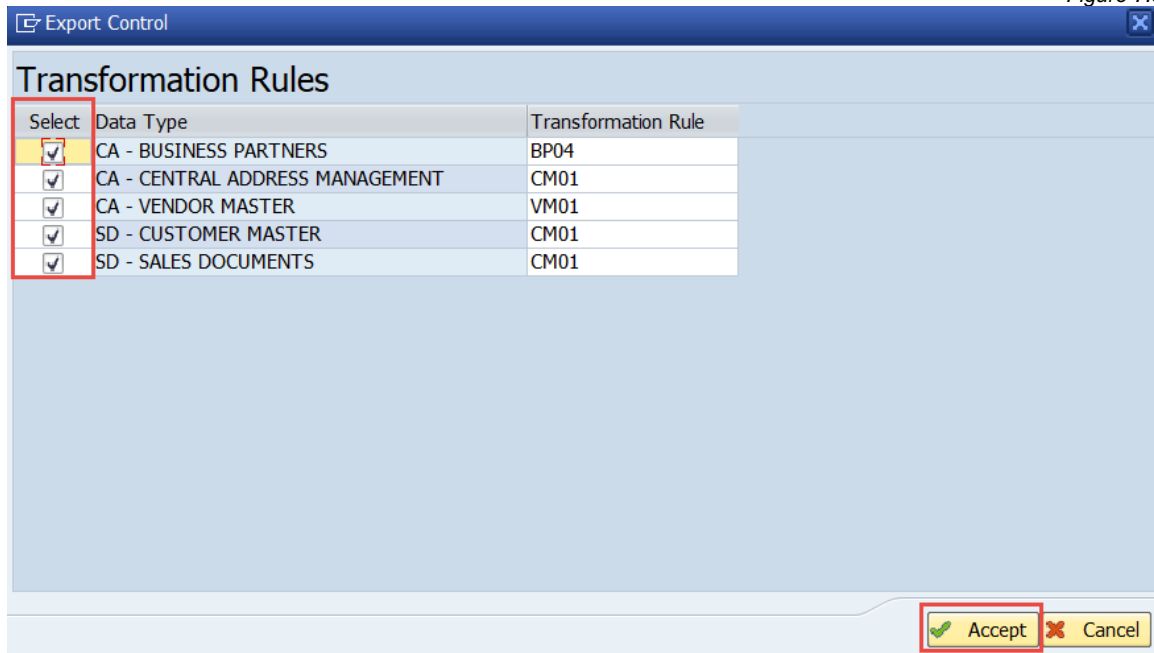
When selecting the 'Data Transform' button, a child window will appear with only those Data Types which have a default transformation rule assigned \*and\* are relevant to the export being initiated. In this example, five data types are relevant to the given export and have rules assigned (Fig. 7.2).

Figure 7.2



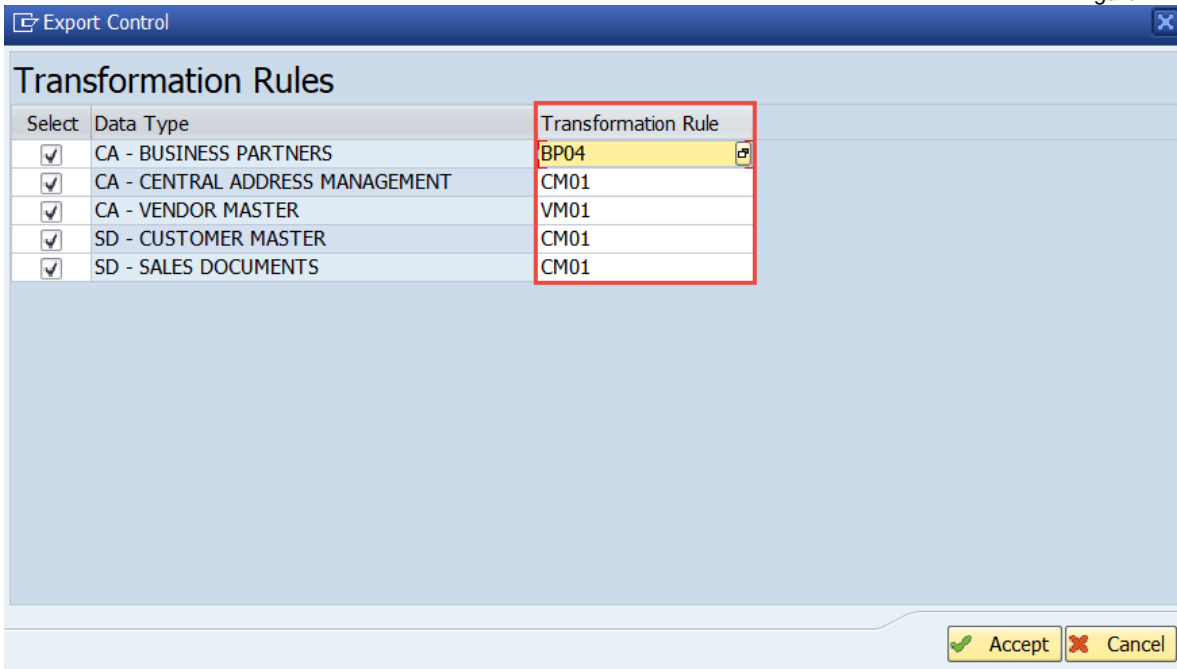
The user has the choice whether to accept using the default transformation rule(s). To accept, simply click the 'Accept' button; if choosing not to accept, uncheck the 'Select' checkbox next to one or more data types and then the click the 'Accept' button (Fig. 7.3).

Figure 7.3



The user may also select a different transformation rule when needed (Fig. 7.4).

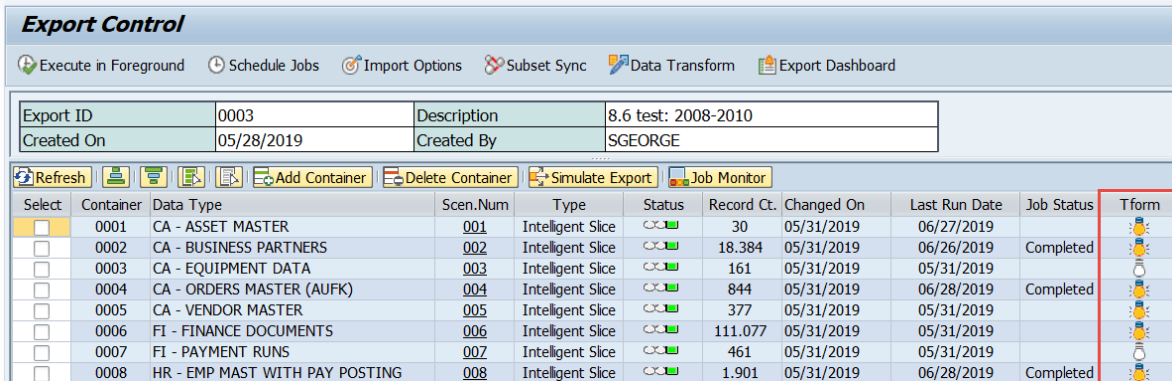
Figure 7.4



To help provide the user visibility to those data types having a default transformation rule assigned, the Export Control screen contains a column called "Tform". If the data type has a transformation rule assigned, the light bulb will be lit (Fig. 7.5).

Selecting or deselecting the transformation rule (as noted in the previous steps) will not change whether the bulb is lit or not as this indicator is driven only by what is defined in the Data Transformation config.

Figure 7.5

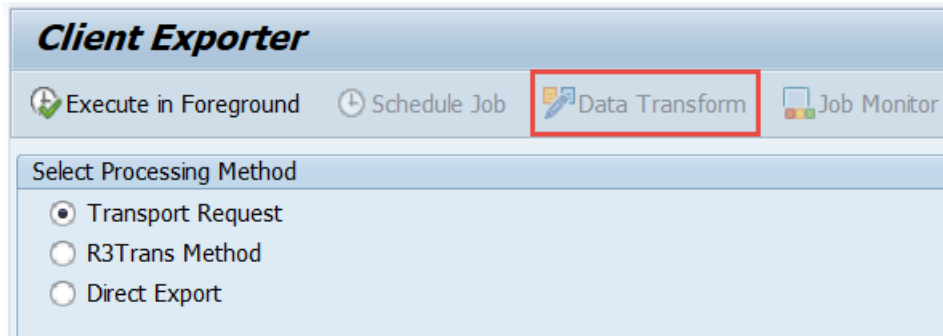


## Client Exporter

To apply transformation to an export initiated via the Client Exporter function, you must use the processing method named Direct Export as the other processing methods utilize SAP's R3Trans functionality and therefore do not support data transformation.

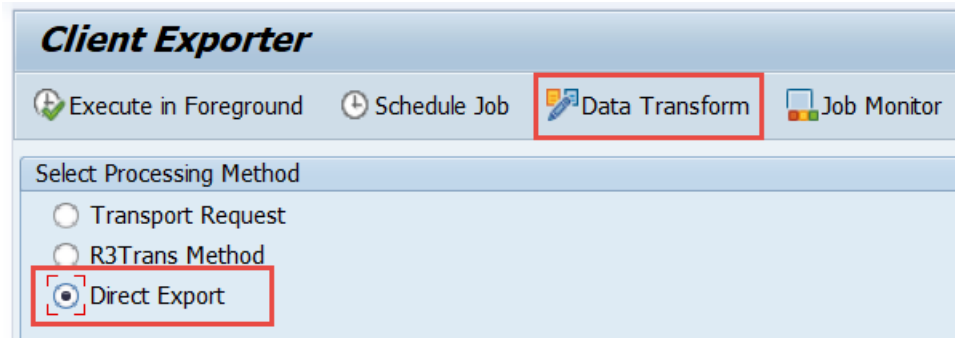
This is the default screen when first accessing Client Exporter and the 'Data Transform' button is suppressed (Fig 7.6).

Figure 7.6



Once the Direct Export method is selected, the screen will refresh and the 'Data Transform' button can be selected (Fig. 7.7).

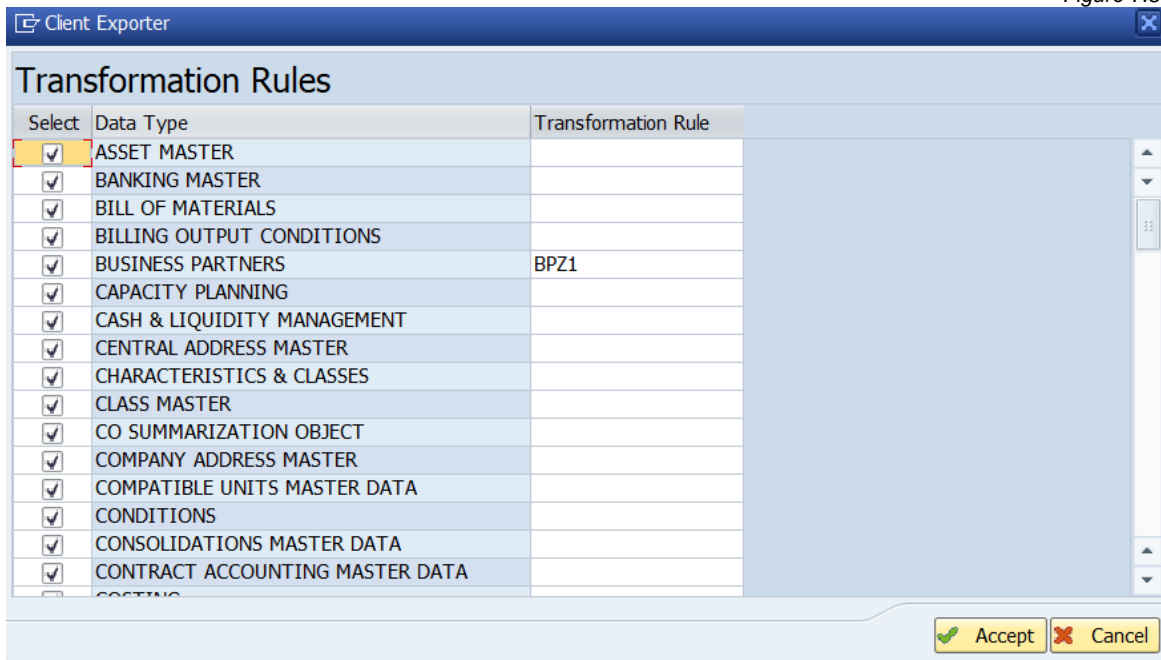
Figure 7.7



When selecting the 'Data Transform' button, a child window will appear with those Data Types selected by the user and a transformation rule displayed next to those data types where a rule has been assigned within the Data Transformation config. In this example, all data types are displayed, but only a few of them - one being BUSINESS PARTNERS - show a rule being assigned (Fig. 7.8).



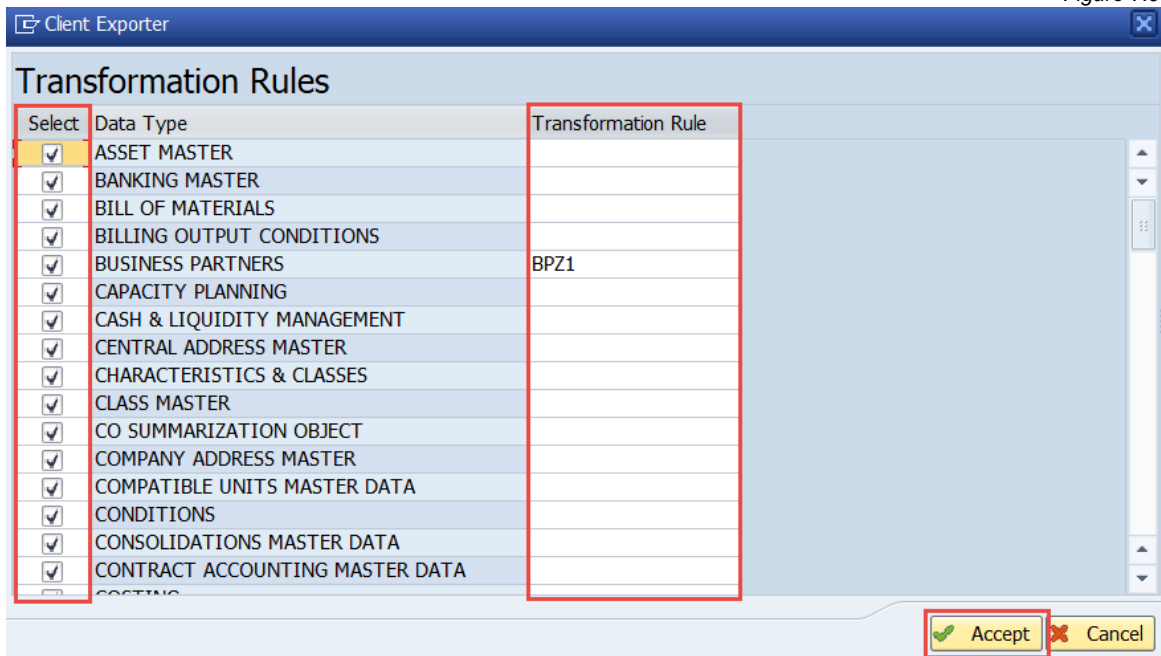
Figure 7.8



The user has the choice whether to accept using the default transformation rule(s). To accept, simply click the 'Accept' button; if choosing not to accept, uncheck the 'Select' checkbox next to one or more data types and then click the 'Accept' button. The user may also select a different transformation rule when needed (Fig. 7.9).

Be aware that deselecting a data type which has no transformation rule assigned, has no impact since no transformation will occur.

Figure 7.9



## Function module /HTG/GLC\_HR\_C\_01 (PERID Transformation)

In some cases, data transformation on field Personnel ID Number (PERID) on table PA0002 when using transformation type random number is not random enough with large data exports. It results in duplicate transformed values. This has been corrected by using transformation type custom function module instead.

In the transformation rule, configure PA0002-PERID for the custom function module type using function module /HTG/GLC\_HR\_C\_01.

Figure 8.0

A new number range object has been added called /HTG/PERID. In the source system, execute transaction SNRO. Enter object /HTG/PERID and click the Number Range button. Select the appropriate Country Grouping from the dropdown and click Change Intervals. Add the desired interval, making sure not to select the option for external numbering, and save it. Execute this for all Country Groupings (field MOLGA) needed. Please note that if you use a particular Country Grouping but do not define it in the new number range, if you export a PERNR with transformation enabled, Gold Client will not know what number range to use so PERID will be set to blank.

Figure 8.1

Figure 8.2

Upon export, Gold Client configuration table, /HTG/TF\_SSNNO, is populated in the source system containing the transformation values for PA0002-PERID. Every time a personnel number (PERNR) with PA0002-PERID transformation enabled is exported, it will check this table. If the PERNR is already in this table, it will use the transformed PERID listed. If not, it will transform it using the proper range defined and update this table so the PERNR/PERID values are saved.

To delete any PERNR values for a given country grouping from table /HTG/TF\_SSNNO, run transaction /HTG/ZDELPERID. Then upon a new export of that PERNR, if transformation is enabled, it will be added to the table again but with a new transformed PERID.

Figure 8.3

The screenshot shows the 'HR: cleanup perid' transaction selection criteria. It includes a 'Selection Criteria' section with the following fields:

Field	Value	Operator	Value	Action
Country Grouping	<input type="text"/>	to	<input type="text"/>	<input type="button" value="Add"/>
Delete Records	<input type="checkbox"/>			

The end result is a guaranteed unique PA0002-PERID value.

## Security

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There are several activities within the Gold Client authorization object ZGCSGCSGCS with which to manage the various maintenance tasks that can be performed within the Transformation Setup config (Fig. 9.0). Reference the [Gold Client Security Document](#) for more details.

Figure 9.0

60	Data Transform: Transformation Setup
61	Data Transform: Change Rules
62	Data Transform: Maintain Disallowed Fields
63	Data Transform: Maintain List Values
64	Data Transform: Maintain Default Rules
65	Data Transform: Client Construct
66	Data Transform: Export TRA Details
67	Data Transform: Display Transformed Fields

### **Activity 60:** Data Transformation: Transformation Setup

This activity gives the user access to the Transformation Rules button located on the main Gold Client screen. It also provides read-only access to the Transformation Rules screen. If this activity is not assigned, then the Transformation Rules button will be disabled.

### **Activity 61:** Data Transformation: Change Rules

This activity gives the user access to: create and copy rules, add tables and fields to new and existing rules, delete rules, delete tables and fields from existing rules. If this activity is not assigned, then the various buttons that are used to perform these functions will be disabled.

### **Activity 62:** Data Transformation: Maintain Disallowed Fields

This activity gives the user access to maintain entries in the Disallowed Fields table. If this activity is not assigned, the Disallowed Fields button can still be selected by the user; however, they are not provided access to the maintenance functions.

### **Activity 63:** Data Transformation: Maintain List Values

This activity gives the user access to maintain entries within the various (random) Lists. If this activity is not assigned, the Display List Values button can still be selected by the user; however, they are not provided access to the maintenance functions.

**Activity 64:** Data Transformation: Maintain Default Rules

This activity gives the user access to manage Default Rules. If this activity is not assigned, the Default Rules button can still be selected by the user; however, they are not provided access to the maintenance functions.

**Activity 65:** Data Transformation: Client Construct

This activity gives the user access to select or deselect Data Transformation button locate on the Client Exporter screen (but only when using the Direct Export method as this is the only method that allows data transformation to occur).

**Activity 67:** Data Transformation: Display Transformed Fields

This activity gives the user access to display what fields were transformed from an export. This allows users to see sensitive data in the source and target system and so access to this utility should be thoroughly considered before providing to users.

## Support Information

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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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