# Configuration and Utilities User Guide 8.7

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A select number of utilities are also located from the main Gold Client screen under the function named **Post Process** (the one located within the Data Echo area). All of the utilities listed below have a common purpose and that is to perform conversion of client values that are stored as part of the data value.

### Conversion

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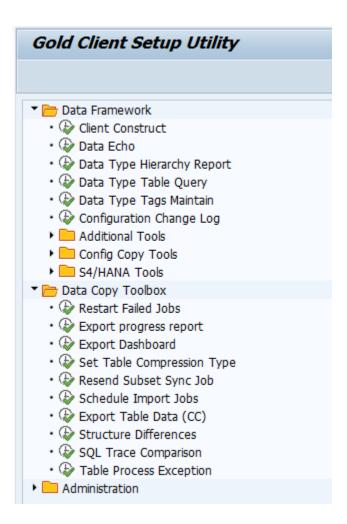
# **Support Information**

# Introduction

This user guide provides detailed insight into accessing and executing the various configuration functions and utilities available in Gold Client.

The Gold Client configuration and utilities are easily accessible from the main Gold Client page (transaction ZGOLD) by selecting the 'Configuration' button located in the lower right-hand corner. The result is that the Gold Client Setup Utility page is displayed; the default view is below (Fig 1.0). Within the Gold Client Setup Utility screen, the various functions are organized into three primary folders: Data Framework, Data Copy Toolbox, and Administration. A select number of functions are further organized into various sub-folders.

Figure 1.0



Figures 1.1 – 1.3 show all executables available within each of the primary folders.

Figure 1.1

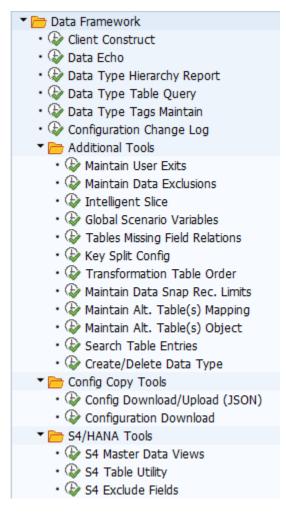


Figure 1.2

■ Data Copy Toolbox

Restart Failed Jobs

Export progress report

Export Dashboard

Set Table Compression Type

Resend Subset Sync Job

Schedule Import Jobs

Export Table Data (CC)

Structure Differences

SQL Trace Comparison

Table Process Exception

Figure 1.3

- ▼ Administration
  - Parallel Processing
  - Memory Optimization
  - Configure Auto Import RFC
  - Application Settings (MConfig)
  - Global Parameter Maintenance
  - 🏖 Maintain Timestamp Types
  - Map Table Names
  - ▼ 🛅 Logical System Conversions
    - A Logical System Configuration
    - Logical System Mapping
  - ▼ 🛅 Reports & Cleanup Utilities
    - Activity Log
    - Stranded Files Cleanup
    - 🏖 Table Cleanup Utility
    - Export ID Manager
    - 🏖 Scenario Manager
    - Custom Table Discovery
    - Activity Log Cleanup
  - ▼ 🛅 Installation/Setup
    - Programme Installation Setup
    - P Setup Confirmation
  - ▼ > SCM
    - APO-CIF Configuration
  - ▼ > Miscellaneous
    - W Change Gold Client File Path
    - 🕸 Memory Optimization Upgrade
    - Select Optimization

# Data Framework

### Client Construct

This is the entrance point to where all configuration maintenance can be performed in relation to the Client Construct functionality within Gold Client.

Due to the importance of this configuration, and the significant purpose it serves, a separate user guide exists. For more information and support, see the <u>Gold Client - Client Construct User Guide</u> which can be located on Qlik's customer support site.

### Data Echo

This is the entrance point to where all configuration maintenance can be performed in relation to the Data Echo functionality within Gold Client (Fig. 4.1).

Due to the importance and complexity of this configuration, and the significant purpose it serves, a separate user guide exists. For more information and support, see the <u>Data Echo Advanced Config User Guide</u> which can be located on Qlik's customer support site.

# Data Type Hierarchy Report

With many different Data Types and the various linkages that can exist among them, it can be very complicated to identify what data is being exported when using a particular Data Type. The Data Type Hierarchy Report can easily identify all of the different Data Types analyzed during the export process.

For example, to identify all recipient Data Types used by Sales Documents, execute the Data Type Hierarchy Report for data type SD - SALES DOCUMENTS (Fig. 2.0).



The report output displays all recipient data types in a hierarchical (top-down) format for the given data type. The default option is to display only those data types which are set as 'active' within the Data Echo Framework. To see all links within the hierarchy (both active and inactive), select the 'Inactive Linkages Displayed' radio button; the output will automatically refresh upon its selection. Freely select the 'Active Linkages Only' radio button and the output will refresh accordingly (Fig. 2.1).

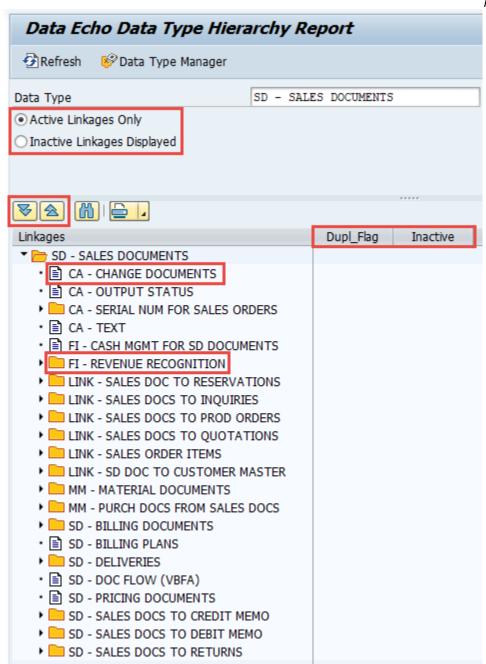
Within the output, related data types can be expanded individually by selecting the relevant folder, or all related data types can be expanded by selecting the 'Expand subtree' icon. Likewise, the data types can be collapsed individually by selecting the relevant folder, or all related data types can be collapsed by selecting the 'Collapse subtree' icon (Fig. 2.1).

Data types that have a document icon next to them represent those data types which have <u>no recipient</u> data types related to them; see data type CA – CHANGE DOCUMENTS as an example. Data types that have a folder icon next to them represent those data types which have <u>one or more recipient</u> data types related to them; see data type FI - REVENUE RECOGNITION as an example (Fig. 2.1).

The 'Dupl\_Flag' (Duplicate Flag) column indicates those Data Types which are linked more than once. The 'Inactive' column indicates if the Recipient data type is set as an inactive link from the Provider Datatype within the Data Echo Framework (Fig. 2.1).

Note that the Date Type can be changed directly from the output screen. If this action is taken, select the 'Refresh' button in order to update the report's output.

Figure 2.1



Users can also reach the Data Type Manager function from this report, either from the input screen (Fig. 2.2) or the output screen (Fig. 2.3). Selecting it from either location will direct the user to another screen where the configuration relevant to the given Data Type can be displayed. If the user has the proper authorizations, they would be able to deploy changes to this config, but if not, then the config would be display only. For more information, reference the <u>Gold Client Data Echo Advanced Configuration Guide</u>.

Figure 2.2



Figure 2.3



# Data Type Table Query

The Gold Client configuration has two principal parts which are known as the Client Construct framework and the Data Echo framework. This program allows users to perform a collective query of both config areas using one or more tables.

Users can benefit from this query function in two ways: (1) This is the first search function made available for the Client Construct config, and (2) A single search can now be performed which queries the whole configuration set.

The user may input one table, a range of tables, or use the multiple selection function accordingly. When done, select the Execute button (Fig. 3.0).

Figure 3.0



For example, a query using table MARA leads to this output (Fig. 3.1). The user is informed of which data types contain the given table in both the Data Echo and Client Construct frameworks.

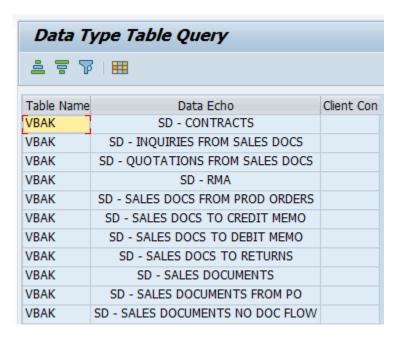
Figure 3.1

| Data Type Table Query |                                 |                       |
|-----------------------|---------------------------------|-----------------------|
|                       |                                 |                       |
| Table Name            | Data Echo                       | Client Construct      |
| MARA                  | MM - MATERIAL BOM COMPONENTS    |                       |
| MARA                  | MM - MATERIAL MASTER            |                       |
| MARA                  | MM - MATERIAL MASTER W/ VC DATA |                       |
| MARA                  | MM - MATERIALS WITH BOMS        |                       |
| MARA                  |                                 | MATERIAL MASTER & MRP |

Here is another example where a query using table VBAK is performed (Fig. 3.2). In this case, the VBAK table is found within a number of Data Echo data types but not within any Client Construct data types.

Please note that this query should include any custom data types that have been created within the customer's configuration.

Figure 3.2



# Data Type Linkage Query

In the Data Echo Framework, data types can have linkages downstream to other data types. This program allows users to perform a query of the linkage configuration using one or more data types.

This query has a few benefits. It can help with troubleshooting for missing data or show why data was included with an export. It could also be used to examine which data types are included with a refresh or delta copy. It is a quick way to see if a data type is an active or inactive recipient linkage.

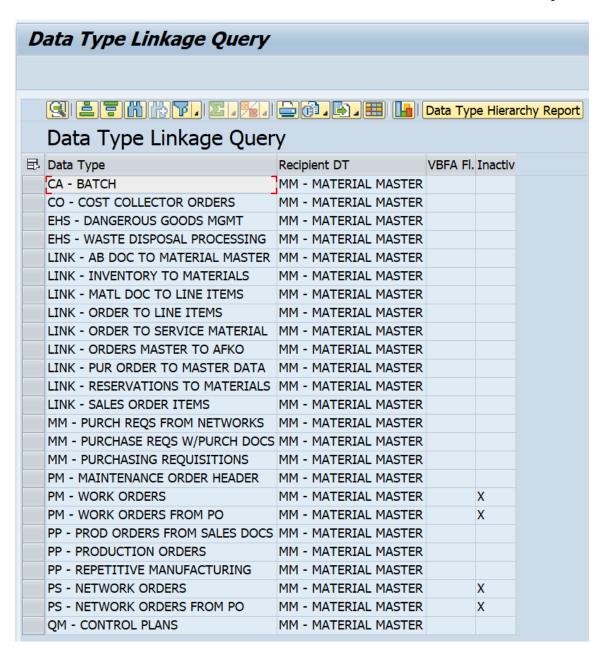
The user may input one data type, a range of data types, or use the multiple selection function accordingly. They can run the query from the perspective of the parent data type or the recipient (downstream) data type. By default, all linkages will be retrieved by the query, but it can be limited to only active linkages by using the Active Only checkbox. When the query criteria are entered, select the Execute button (Fig. 4.0).

Figure 4.0



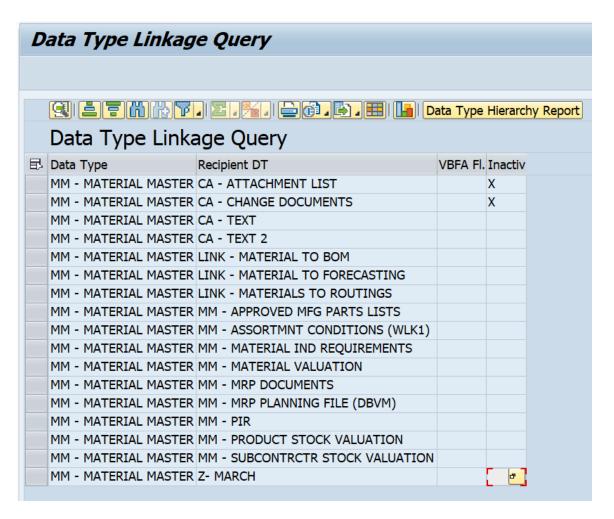
For example, a query using data type MM – MATERIAL MASTER as the recipient data type leads to this output (Fig. 4.1). The user is informed which data types have recipient linkage to data type MM – MATERIAL MASTER.

Figure 4.1



Another example, a query using data type MM – MATERIAL MASTER as the parent data type (Fig. 4.2). The user is informed which data types are recipient linkages downstream from data type MM – MATERIAL MASTER.

Figure 4.2



Optionally, the user can select a data type and execute the Data Type Hierarchy Report if more information is needed.

# Data Type Tags Maintain

This utility provides the ability to define tags and then assign them to one or more Data Types. The value of this activity is that it provides Gold Client users another way of searching for various Data Types and do so with values that are custom and relevant to the team. Some possible examples of tags can be seen below (Fig. 5.0).

Tag ID

Description

D-TYPE NOT RELEVANT

D-TYPE NOT VALIDATED

Copying data for this Data Type is being validated now

DATA TYPE VALIDATED

Copying data for this Data Type has passed validation

HIGHEST PRIORITY

Validating this data type has the highest priority!

TESTING IN PROGRESS

Tagure 5.0

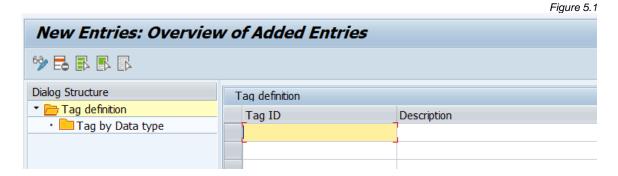
Description

Copying data type is not relevant to our organization

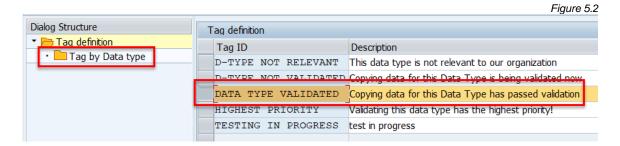
Copying data for this Data Type has passed validation

Validating this data type has the highest priority!

Select the 'New Entries' button and then input one or more Tag IDs and descriptions as required (Fig. 5.1).

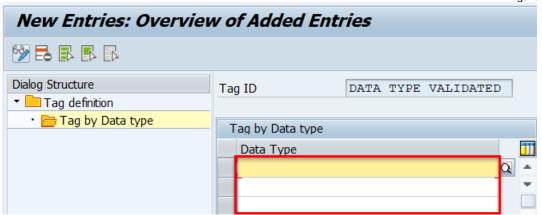


Select the row for a given Tag and then choose the 'Tag by Data type' folder from the Dialog Structure (Fig. 5.2).

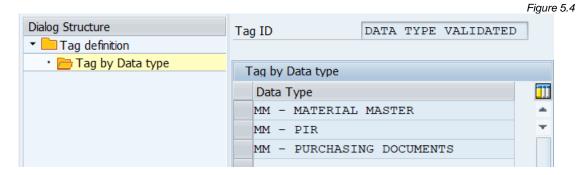


Select the 'New Entries' button and then input one or more Data Types as required (Fig. 5.3).

Figure 5.3



An example of results once Data Types have been entered (Fig. 5.4).

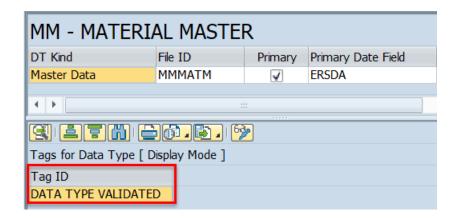


Once a tag has been defined, it is possible to display and maintain tag assignments within the Data Echo framework (Fig. 5.5 and 5.6). It is not possible to define tags from this perspective, only to assign them.

Figure 5.5



Figure 5.6



Once a tag has been assigned to at least one Data Type, it is possible to search for them. From the main Gold Client screen, select Data Snap. For the field named 'Select Data Type' use the search help function (Fig. 5.7) and select the search help named 'Data Type by Tags' (Fig. 5.8); an example of search help results (Fig. 5.9).

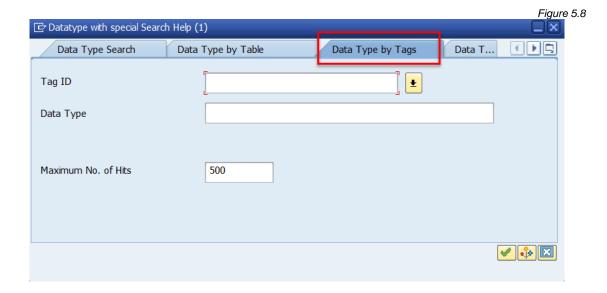
Figure 5.7

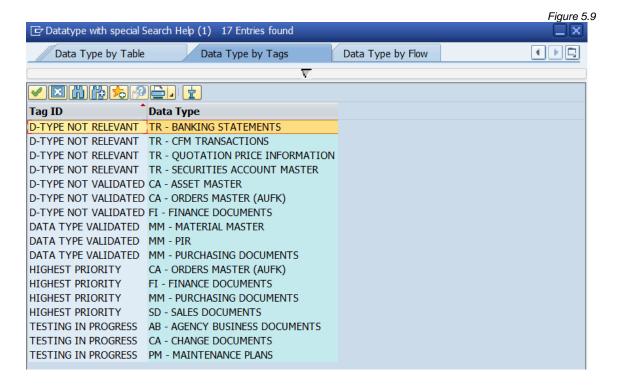
Data Snap

Pota Type Manager

Select Data Type:

SD - SALES DOCUMENTS





# Configuration Change Log

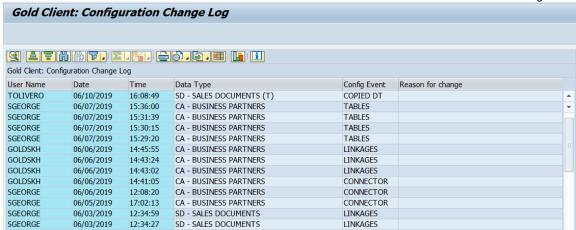
This report can be executed to display all changes made to the Client Construct and Data Echo frameworks. The report can be executed using optional filters: User Name, Change Date, and/or Data Type (Fig 6.0).

Figure 6.0



The execution of this utility's output (Fig. 6.1). Any comments entered by the user at the time of change are displayed in the 'Reason for change' column.

Figure 6.1



There are various config events that can be displayed:

- **CFG DOWNLD** Occurs when users perform a config download activity via the Config Download/Upload (JSON) function
- CFG UPLOAD Occurs when users perform a config upload activity via the Config Download/Upload (JSON) function
- **CONNECTOR** Subset Sync config has been maintained
- COPIED DT A new Data Type has been created via the copy function
- **DATASNAP** Data Snap config has been maintained
- DELETE DT A Data Type has been deleted
- **ECCONFIG** Memory parameters have been maintained
- **LINKAGES** A link from this Data Type has been maintained; this event also occurs with respect to maintaining the linkage details
- **NEW DT** A new Data Type has been created
- **TABLES** A table relation within this Data Type has been maintained; this event also occurs with respect to maintaining the common fields

# Data Framework - Additional Tools

### Maintain User Exits

This table is used to add programs that need to be applied during various times of the copy process. This typically involves some additional processing that is beyond just the copying of data from Source to Target or even data transformation.

It is generally recommended that users work with the Qlik support team when needing to make changes to existing user exits or when new user exits are required. This is to help ensure that this config is defined correctly and to help ensure that the user's requirements are successfully achieved.

The table is comprised of the following elements (Fig. 10.0):

- Table Name: input the relevant table
- Utility Type: when the user exit is to be applied
  - Available options are After Import, Before Import, During Export, and During Import
- Data Type: input if the user exit needs to apply to a specific Data Type
  - If left blank, the user exit will be applied to each Data Type that contains the relevant table (what is in the 'Table Name' field)
- Report Name: input the program name
- Active: check if the user exit is active or not
  - If an entry is set in the table as 'Active', and the given table is part of the export then the user exit will be executed automatically

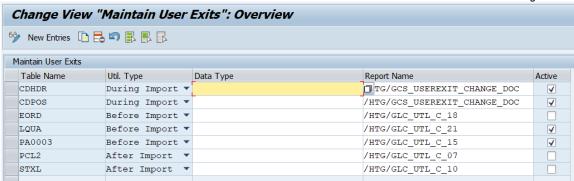


Figure 10.0

### Maintain Data Exclusions

The purpose of this config table is to provide users flexibility with respect to the config that is defined in the Data Echo framework (which can be thought of as a one-size-fits-all). Some SAP organizations may identify valid use cases where they want to occasionally exclude certain data objects from being included in some of their Data Echo exports. Here are a couple of examples:

- An SAP team's database contains millions upon millions of Change
  Documents; typically, the team wants to include these objects during small
  data copies, such as for a production support situation, but when copying
  large data volumes for example copying 6-months of data to create a new
  client they want to leave Change Docs behind since this will help reduce
  overhead in the client-refresh process and reduce the amount of space
  required in the target database.
  - The situation described above is common for Change Docs but could be applied to several other objects: Idocs, Workflow, Text, Outputs, and Attachments. This is a comprehensive list, but customers may identify other examples as well.
- An SAP team is creating a new client or refreshing an existing client and is
  following Qlik's best practice recommendation of having used the Client
  Construct functionality to perform a full copy of all master data. This team
  then wants to copy a timeslice of transactional data, say 6-months or 1-year.
  This slice of data will likely include various master data objects, most notably
  materials, customers, and vendors. One or more master data objects could be
  excluded from the transactional data copy if the team feels that including
  them is highly redundant.

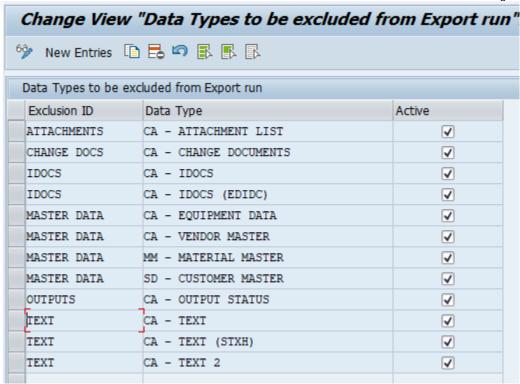
Historically, there have been two options for managing this situation: (1) set the various Data Type links to be inactive, and after the export is complete, set these same links back to being active again; (2) Copy the data type(s) to create an iteration and set the links from either the original or copied data type(s) to be inactive. Neither of these options are ideal and users could easily make mistakes which could have short-term or long-term impacts on future data copies.

Caution! Excluding some data objects from the copy could lead to impacts on the data quality / integrity so use this function with forethought and planning. Contact the Olik team for support or questions regarding this functionality.

To make this functionality available, this config table must first be maintained. The user will need to add one or more new entries by defining the following items; see sample entries from Qlik's system in case useful (Fig. 11.0).

- Exclusion ID: this is just a free text field that allows the user to create a name or grouping for the excluded object(s)
- Data Type: assignment of a Data Type to an Exclusion ID
- Active: determines whether the Data Exclusion Data Type assignment is available for users; basically, an on/off switch

Figure 11.0



A new button has been added to the toolbar on the Data Snap (Fig. 11.1) and Export Control (Fig. 11.2) screens that enable users to leverage this functionality.



Upon selecting this function, a new window appears which contains the list of Exclusion ID's that have been configured and set as active <u>and</u> are relevant to the Data Type(s) selected by the user (Fig. 11.3). This window allows the user to choose which exclusions to apply. The user ticks the relevant checkboxes and the Accept button.

### Notes:

- When using this functionality within Export Control, the user must first select one or more Data Types; if not, this message will appear (Fig. 11.4)
- Even though the Data Exclusions config table has been populated does not guarantee the user will be provided any options; this is because the selected Data Type's hierarchy is analyzed, and the dependent data types would need to be configured as active within the Data Echo Framework.

- To explain further, let's use this hypothetical example: a user creates in the Data Exclusions table an entry where an Exclusion ID is assigned to data type CA CHANGE DOCUMENTS. The user wants to initiate an export using data type SD SALES DOCUMENTS; however, the link from this data type to CA CHANGE DOCUMENTS is already set as <u>inactive</u> within the Data Echo framework. Since it's already being excluded within the config, there is nothing for this Data Exclusion functionality to do and so this config entry is ignored.
- In another example, the link from MM PURCHASING DOCUMENTS to CA - CHANGE DOCUMENTS is set as active in the Data Echo Framework, and so this Data Exclusion would be proposed for the user to choose.

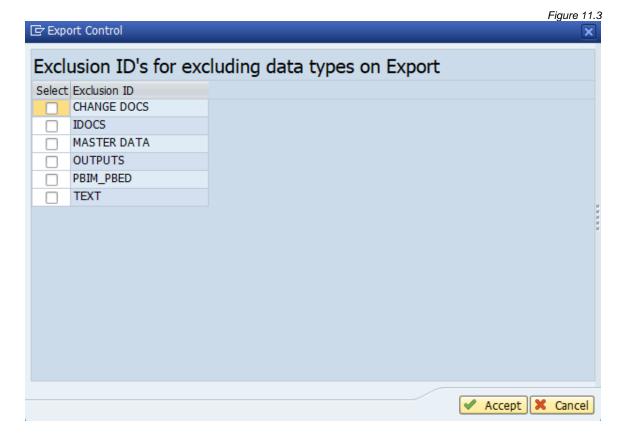


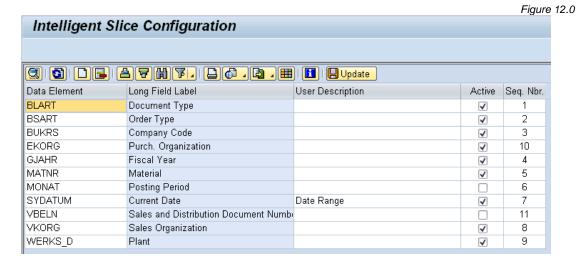
Figure 11.4



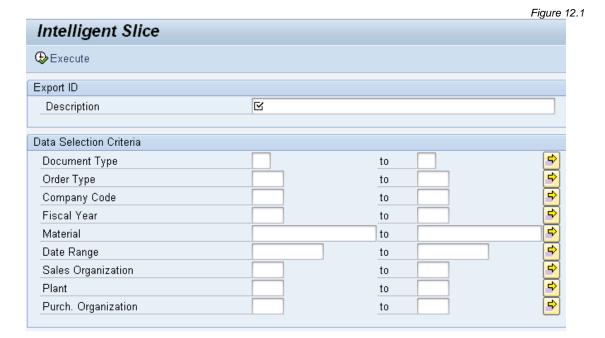
# Intelligent Slice

This utility provides an easy solution for maintaining the Intelligent Slice screen. From here, fields can be added, deleted, activated or deactivated, and even the sequence in which they appear on the screen. Even further, a user description can be defined which would then be displayed on the Intelligent Slice screen instead of SAP's long field label. An entry must be set as 'Active' to become visible on the Intelligent Slice screen (Fig. 12.0).

Be sure to select the Update button to save any changes which have been made.



The screen definition in Figure 6.0 controls the appearance of the Intelligent Slice screen (Fig. 12.1).



### Global Scenario Variables

This config area is used for creating static variables that can be used either as part of the Scenario creation or within the Data Echo framework itself.

The primary use case for creating variables is to limit the amount of historical data that is exported. For example, an organization is using the HR module and generates payroll data. A user may want to copy one or more Personnel Records but not copy multiple years of payroll data because it just adds overhead to the copy process and does not provide any meaningful value; instead, it makes more sense to truncate the collection process to be that of only the last 1-2 years (depending on the user's requirements). In order to fulfill this use case, there are two steps that need to be executed: (1) defining the variable and (2) applying the variable within the respective areas of the Data Echo config.

When in change mode, the New Entries selection enables the creation of a new variable definition in three steps:

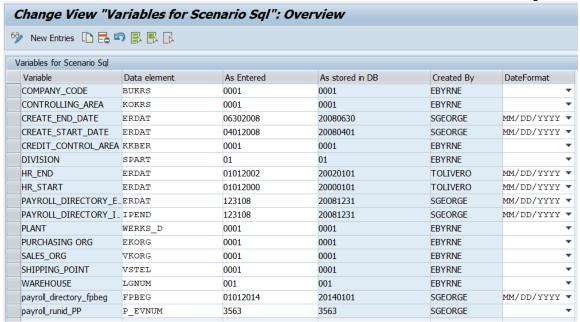
- Enter the variable name
- Input the Data Element to use (must be an existing Data Element)
- Enter the desired value

Once saved, the As Stored in DB column will show the value as it is stored in the database. Data elements of the same type (i.e. CHAR, DATS, and NUMC) can be used interchangeably, for example, ERDAT can be used for all date fields.

The 'Date Format' column is relevant when a date value is being entered in the 'As Entered' column. This format should default from the user's settings but can be changed here in case the user wants to input date value with a different format.

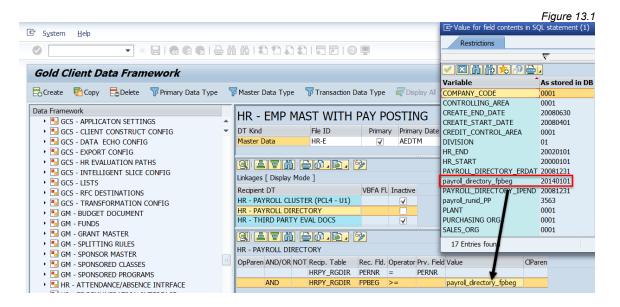
This image illustrates several examples of variables (Fig. 13.0).

Figure 13.0



This image illustrates an example of a variable being applied within the Data Echo framework when linking from one Data Type to another Data Type (Fig. 13.1). It is only possible to apply variables when linking two Data Types.

In this example, an export that uses Data Type HR - EMP MAST WITH PAY POSTING will perform a join to table HRPY\_RGDIR but the restriction of FPBEG >= 20140101 will be applied which will help limit the data that is exported (because this is the value assigned to the variable).



# Tables Missing Field Relations

This utility provides a quick way to check if any table relationships within the Data Echo configuration are missing their related common field entries. This program does not provide a way to fix the issue; instead, the user needs to add the missing fields within the Data Echo framework itself.

There is no input screen so selecting this executable immediately initiates the check. If issues are found, the output will look like this (Fig. 14.0), and if no issues are found, the output will look like this (Fig. 14.1).

Missing Common Fields for Table Relations

Table Name

CA - BUSINESS PARTNERS

Figure 14.0

Source Table

BUT000

Figure 14.1

Missing Common Fields for Table Relations

Data Type

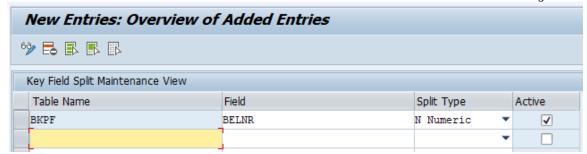
Table Name

Source Table

# Key Split Config

This screen is used to control which tables allow for splitting of table content in different Data Flows for export/import. This functionality is triggered when the configured table is a Header table in a Data Type, where it will split the table entries based on the last digit of the Field set for split.

Figure 15.0



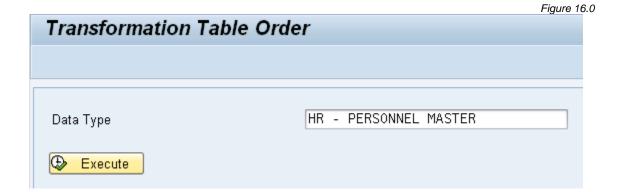
Example, splitting the export of BKPF entries based on document Number - BELNR (Fig. 15.0).

In the case of exporting FI - FINANCE DOCUMENTS using Parallel Processing, for a specific range of documents, it will separate the documents by the last digit and create a Container for each of them. In the import process it will allow to insert data in parallel to BKPF table.

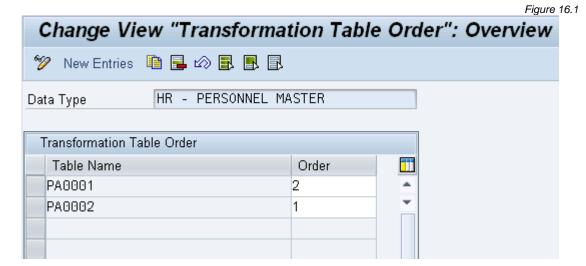
### Transformation Table Order

This table is used to control in which order the data within the listed tables is transformed. The use of this utility is typically related to HR data due to the need to both transform it and yet keep it in sync across various data tables.

The input screen requires the entry of a data type; once done, select 'Execute' (Fig. 16.0).



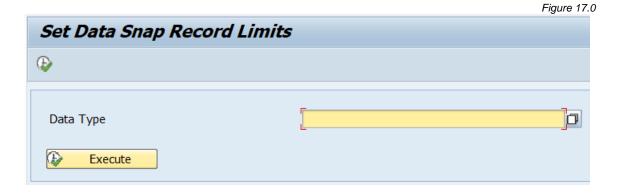
This table only requires the input of multiple tables and the order in which the data is to be transformed (Fig. 16.1).



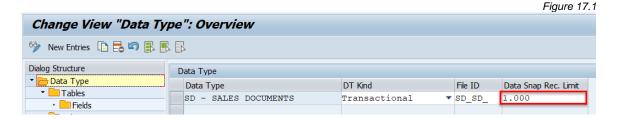
# Maintain Data Snap Rec. Limits

This utility provides an easy way to update the maximum number of records that is allowed when executing Data Snap exports.

Input the respective Data Type and then 'Execute' (Fig. 17.0).



Update the value stored in the 'Data Snap Rec. Limit' field as required (Fig. 17.1). Save changes and exit when done.



# Maintain Alt. Table(s) Mapping

The config defined in Maintain Alt. Table(s) Mapping table is dependent upon the config defined in the Maintain Alt. Table(s) Object table, so users should consider defining the config in that table first when needed.

Data objects whose key is based on <u>internal object numbers</u> can cause issues when copying data from one client to another. Good examples of this are Work Centers and WBS Elements. For example, WBS Elements have a WBS ID (POSID) definition but the key field is an internal number that is stored in the PSPNR field. A WBS Element named 'Project Analysis' may have been created in DEV and assigned to number 271, and later it was created in PROD but was assigned to number 158. If the WBS named 'Project Analysis' was copied from PROD to DEV, it would likely lead to data integrity issues because it would now exist twice under two different numbers and the relevant SAP programs will not likely know how to react since this situation should not occur.

Gold Client has been enhanced to manage this situation by translating the data while keeping the client-specific internal numbers. The configuration that is defined in this table is a key part of that translation process.

### Important!

- This configuration must be defined in <u>both the source and target clients</u> for positive results to be achieved
- Gold Client user exit /HTG/GLC\_UTL\_C\_19 must be defined and set as active for each relevant table that requires this "translation"
- MConfig parameter named WRITE\_TRANSLATION\_FILE must be defined and set as active
- Additional content for the two preceding points are listed towards the end of this section

To define entries, select the New Entries button (Fig. 18.0)

Figure 18.0



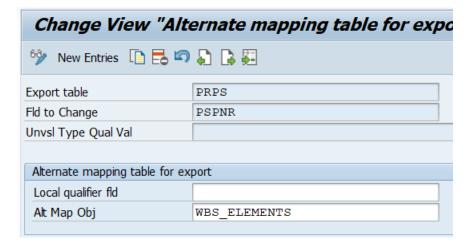
Input the respective entries into these fields; see examples for WBS Elements (Fig. 18.1) and Work Centers (Fig. 18.2). The last example shows the config table after entries have been defined (Fig. 18.3).

**Export table:** Table storing the internal object number to be changed **FId to Change:** This is the field that needs to have different values in both the source and target system for directly-created data to work together after import **Unvsl Type Qual Val:** This is an optional field that can be used as a selection filter; basically a qualifer. A value could be added to limit the types of data that this configuration will consider.

**Local qualifer fld:** This is tied directly to the master qualifier field. If the internal object number is tied to an object type, this field is the target table field which shares the object type.

Alt Map Obj: The config object defined within the Maintain Alt. Table(s) Object table

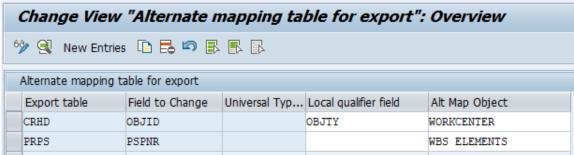
Figure 18.1



| Export table              | CRHD       |  |
|---------------------------|------------|--|
| Fld to Change             | OBJID      |  |
| Unvsl Type Qual Val       |            |  |
|                           |            |  |
| Alternate mapping table f | for export |  |
| Local qualifier fld       | ОВЈТҮ      |  |
| Alt Map Obj               | WORKCENTER |  |

Figure 18.2



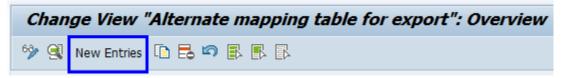


# Maintain Alt. Table(s) Object

The config defined in Maintain Alt. Table(s) Mapping table is dependent upon the config defined in the Maintain Alt. Table(s) Object table, so users should consider defining the config in this table first when needed.

To define entries, select the New Entries button (Fig. 19.0)

Figure 19.0



Input the relevant values; see below for details about each field and reference the examples shared for WBS Elements (Fig. 19.1) and Work Centers (Fig. 19.2). The last example shows the config table after entries have been defined (Fig. 19.3).

**Alt Map Obj:** name of object

**Alt MapObj Desc:** description of object

**Structure Name:** This is an /HTG/ structure created for the relevant object. This allows each object to share the same configuration table, and to limit the impact in time and space on each export. This structure is simply a view or structure containing each of the fields defined within this configuration.

**Unvsal Tab/View:** This is the table which holds the client-specific internal number and the universal description to define the object.

**Local Value:** This is the field where the client-specific internal number value is stored.

**Unvsal Type Qual Fld:** This field is intended to be a second key for the internal object number. It can also be used as possible filter criteria.

**Universal Field (including 2, 3, 4):** This allows the use of multiple fields for the universal descriptor that acts as the constant between all systems/clients. This field is in addition to the real key field.

Note: The structure used in this configuration should contain only the relevant fields from the translation master table; for instance, the work center structure /HTG/ALT\_CRHD needs to consist of only fields ARBPL, OBJID, OBJTY, and WERKS.

Figure 19.1

| New Entries: De         | New Entries: Details of Added Entries |  |
|-------------------------|---------------------------------------|--|
| % ₽ ₽ ₽                 |                                       |  |
| Alt Map Obj WBS         | ELEMENTS                              |  |
| Alternate mapping table | for export                            |  |
| Alt MapObj Desc         | WBS Elements                          |  |
| Structure Name          | PRPS                                  |  |
| Unvsal Tab/View         | PRPS                                  |  |
| Local Value             | PSPNR                                 |  |
| Unvsl Type Qual Fld     |                                       |  |
| Universal Field         | POSID                                 |  |
| Universal field 2       |                                       |  |
| Universal field 3       |                                       |  |
| Universal field 4       |                                       |  |

Figure 19.2

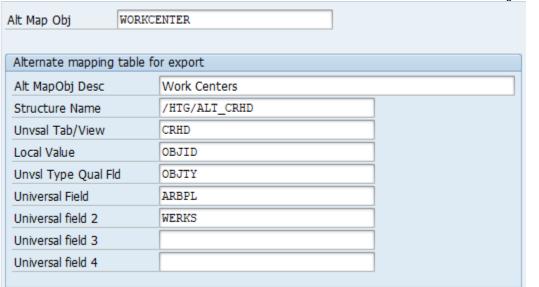
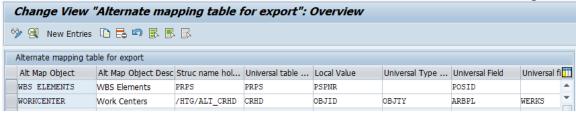


Figure 19.3



#### Search Table Entries

This program allows users to perform database queries to see the record count for various tables. The functionality is similar to SE16N where a user can input a table name and then perform a 'Number of Entries' count, but the advantage of this program is that users can perform the record count for multiple tables in a single execution. This utility will most likely be used by Gold Client admins -- users who are responsible for maintaining and enhancing their Gold Client configuration.

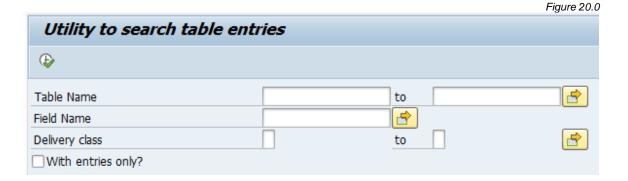
The following user inputs are available (Fig. 20.0):

**Table Name:** One or more tables, including a range

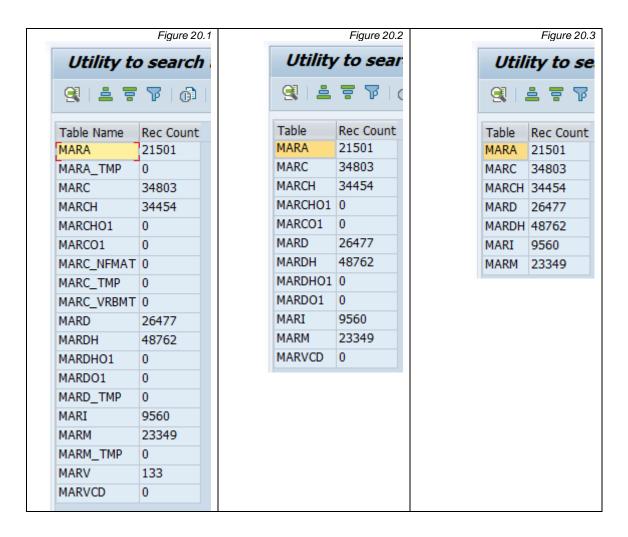
**Field name:** A field in which to apply a filter as part of the query **Delivery class:** One or more delivery classes, including a range

 Most users will input the value 'A' in this field when useful as this value is assigned by SAP to tables which store application (master and transactional) data

With entries only? Selecting this option will filter out tables having zero records



Here are some sample outputs having executed this program with various inputs. The first query used only a table name range of MARA - MARZ (Fig. 20.1). This same query was then executed with the added input of Delivery class equal to 'A' (Fig. 20.2). And lastly, it was executed again but with the added input of the 'With entries only?' option selected (Fig. 20.3). As expected, each additional input further reduces the number of entries returned.



The remaining option not yet discussed is to input a field value. In this example, the value WERKS has been added (Fig. 20.4). When selecting the Execute button, a new input screen appears, and the user is able to input one or more plants (Fig. 20.5).

Figure 20.5



Here is a sample output when a WERKS (Plant) input is applied. The record counts will reflect this input and a column will appear showing on which tables this input was applied (Fig. 20.6).

Figure 20.6

| Table   | Rec Count | WERKS |
|---------|-----------|-------|
| MARA    | 0         |       |
| MARC    | 4468      | X     |
| MARCH   | 4113      | X     |
| MARCHO1 | 0         | X     |
| MARCO1  | 0         | X     |
| MARD    | 2497      | X     |
| MARDH   | 4874      | X     |
| MARDHO1 | 0         | X     |
| MARDO1  | 0         | X     |
| MARI    | 557       | X     |
| MARM    | 0         |       |
| MARVCD  | 0         |       |

The user can populate an asterisk (\*) to find any tables with a WERKS field or input a value to find tables where records exist for a specific plant or group of plants.

### Create/Delete Data Type

This program is an alternative way to create a data type versus doing so directly within the Data Echo Framework. This utility will most likely be used by Gold Client admins -- users who are responsible for maintaining and enhancing their Gold Client configuration.

The following user inputs are available (Fig. 21.0)

**Table Name:** Table(s) which will be the Header table for the respective Data Type(s) to be created

**Datatype Kind:** The kind assigned to the Data Type ('M' for master data, 'T' for transactional, or 'Z' for other)

**Child Table Name:** Table(s) which will be related from the Header table(s)

**Field Name:** The common field which will be used to join the tables **Create Datatype:** Select this radio button to create the Data Type(s) **Delete Data type:** Select this radio button to delete the Data Type(s)

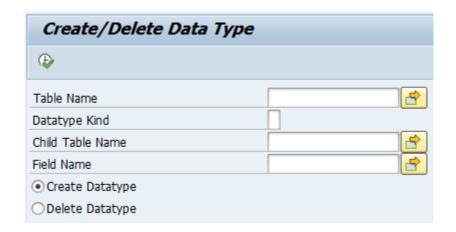


Figure 21.0

In this example, Table Name MARA, and Child Tables MARC, MARD, and MAKT are used to create a new data type (Fig. 21.1); the system responds with an output accordingly (Fig. 21.2). Note: the user has no control over the Data Type name.

Create/Delete Data Type

Table Name

Datatype Kind

Child Table Name

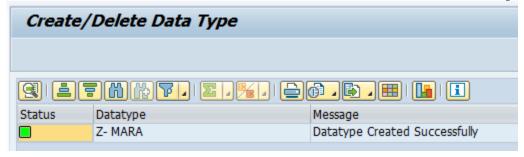
Field Name

● Create Datatype

○ Delete Datatype

Figure 21.1

Figure 21.2



If the user then opens the Data Echo Framework, the new Data Type(s) should be present (Fig. 21.3).

Figure 21.3

| Z- MARA    |            |          |     |          |      |          |        |  |
|------------|------------|----------|-----|----------|------|----------|--------|--|
| DT Kind    |            | File ID  |     | Prin     | nary | Primary  | / Date |  |
| Master Da  | ata        | MARA     |     |          |      |          |        |  |
|            |            |          |     |          |      |          |        |  |
|            |            |          |     | <b>3</b> | [6ĝ  | <u> </u> |        |  |
| Tables [ [ | Display Mo | de]      |     |          |      |          |        |  |
| Table      | Source     | Head Flg | Sec | .Flag    | Data | Eleme    |        |  |
| MAKT 🗗     | MARA       |          | [   |          |      |          |        |  |
| MARA       | MARA       | ✓        | [   |          |      |          |        |  |
| MARC       | MARA       |          | [   |          |      |          |        |  |
| MARD       | MARA       |          | [   |          |      |          |        |  |
|            |            |          |     |          |      |          |        |  |
|            |            |          |     |          |      |          |        |  |
|            |            |          |     |          |      |          |        |  |
| MAKT-MARA  |            |          |     |          |      |          |        |  |
| Table Fie  | ld Source  | Fld      |     |          |      |          |        |  |
| MATNR      | MATNR      |          |     |          |      |          |        |  |
|            |            | _        |     |          |      |          |        |  |

Field Table Name can accept multiple selections so if the user wants to create multiple data types, they can populate a list of tables to accomplish this. An example would be for Z\* tables where several standalone data types are needed.

## Data Framework - Config Copy Tools

### Config Download/Upload (JSON)

As the name suggests, this program is used to download and upload the Gold Client configuration. The intended use case for this program is to streamline support for customers who may need Qlik team assistance with updating their configuration; however, it can also be used to simply backup the configuration to file in case the need arises for restoration. Please see the primary use case "flow" below in case useful.

- Customer's User/Admin downloads their Gold Client config to file
- User/Admin sends config file to Qlik Support team via support case
- Qlik Support team uploads this config to internal systems
- Qlik Support team performs updates as required
- Olik Support team downloads this updated config to file
- Qlik Support team provides file to the User/Admin via support case
- User/Admin uploads config into their respective system(s)

To understand the true benefit of this solution, this same process has previously required the need to generate transports and to pass them back and forth between the customer's team and the Qlik team which, because transports were involved, typically required the involvement of the customer's Basis team since access to the operating system was required. This solution removes some of those potential bottlenecks thus helping streamline the process.

On the following pages, the introduction section shares useful and important information regarding all of the various settings and options available within this program; there are subsequent sections for initiating the download and upload processes.

#### Important Notes:

This program requires Gold Client security activity '85' which is the same one that users must have in order to perform maintenance to the Client Construct and Data Echo frameworks. It is therefore suggested that this download / upload program be accessed only by the team's administrators.

This program can be executed in Production systems; however, it contains important logic that restricts the content which can be downloaded and uploaded to **only those tables that reside within the /HTG/ (Gold Client) namespace**. This safeguard is in place so that users cannot accidentally or intentionally import or overwrite data in their Production system.

The Qlik team recommends using this program with some caution because if it were used incorrectly or maliciously, it could significantly impact a team's "golden" version of their Gold Client config; however, be mindful that this program can also be very useful in order to backup and restore a team's configuration.

### Introduction to Functionality

The initial Config Download/Upload (JSON) screen appears like this (Fig. 30.0).

- The 'Download' action is set by default
- The local path and filename default to C:\GoldClient\GoldClientConfig\_SID###.txt where the System ID and Client values are based on the system-client in which the user is signed in. In this example (Fig. 30.0), the system is EST and the client is 800.
- The text box shares some content around the logic that is used in order to determine which Gold Client tables are downloaded and/or uploaded



Figure 30.0

If the 'Upload' action is set by the user, the screen updates accordingly and introduces to the user two additional options (Fig. 30.1).

- "Table Update Instructions"
  - Delete all recs, then Insert
    - This option should be selected if a complete synchronization is the desired outcome as the program will purge all records from the relevant Gold Client config tables and then insert the records stored within the file
    - This is the default setting
  - Insert new, Modify existing
    - This option should be selected if only new config should be added and only changed config should be updated. All other config should remain as-is.
    - Selecting this setting may be useful if during the time that the Qlik team was enhancing the customer's config, that the customer was also deploying config changes within their system that would be lost when using the "Delete all recs, then Insert" option.
- "Post-Processing Options"
  - Remove Non-Existent Tables: This setting will execute a Gold Client program that is used to purge tables from the Gold Client configuration that does not exist in the respective system's data dictionary (DDIC).
  - Using a hypothetical example, the Qlik team adds 100 new tables to a customer's Gold Client configuration through the update process. This

- config is subsequently uploaded into the customer's system; however, of these 100 tables, 20 do not exist within the customer's system and so should be purged from their Gold Client config. Running this program will check and remove those tables accordingly. This would most likely occur when a customer is running an older version of SAP, but there may be other reasons for this outcome to occur.
- Note: it is not possible to run only this purging program from the Config Download/Upload (JSON) screen; however, it can be executed standalone from elsewhere within the Configuration menu when necessary. Go to the section named <u>Installation Setup</u> within this document for details.

Figure 30.1

| Config Download/Upload (JS   | SON)   |  |  |  |  |
|--|--|--|--|--|--|
| <b>€</b> Execute   |  |  |  |  |  |
| File Action  |  |  |  |  |  |
| ODownload  |  |  |  |  |  |
| <ul><li>●Upload</li></ul>  |  |  |  |  |  |
| Table Update Instructions  |  |  |  |  |  |
| <ul><li>Delete all recs, then Insert</li></ul>                           |  |  |  |  |  |
| ○Insert new, Modify existing   |  |  |  |  |  |
| Target or Source   |  |  |  |  |  |
| Local path and filename  | C:\GoldClient\GoldClientConfig_EST800-doc1.txt |  |  |  |  |
| Post-Processing Options  |  |  |  |  |  |
| Remove Non-Existent Tables   |  |  |  |  |  |
| Program Notes  |  |  |  |  |  |
| The Gold Client configuration downloaded by this program is sourced from |  |  |  |  |  |
| the Client Construct data type named:                                    |  |  |  |  |  |
| GOLD CLIENT ALL CONFIGURATION  |  |  |  |  |  |

### **Download process**

- 1. In order to execute a download, the user simply needs to confirm or update the file path and/or name and then click the 'Execute' button
- 2. Since the program is attempting to write a file to the user's local directory, this window may appear (Fig. 30.2). The user will need to select 'Allow' for the program to continue or otherwise select 'Deny'.
  - Selecting the latter option will cancel the process and the config will not be written to file
  - This window may not appear if the user has previously selected the 'Remember My Decision' checkbox
- 3. Once the program completes processing, an output appears on the screen; a sample of that output is displayed here (Fig. 30.3)
  - The output shows the tablename, the number of records written to file, and a status
  - The statuses are limited to 'SUCCESS' and 'NO DATA'; the latter status simply indicates that the table contained no data and so none was written to file; this is not an unusual result
  - If for some reason you anticipated a different outcome, it is recommended that you contact the Qlik team for support
- 4. Go to the respective file directory and open the file in case you wish to display its contents. If needed, send the file to the Qlik support team if the config is to be updated by them.

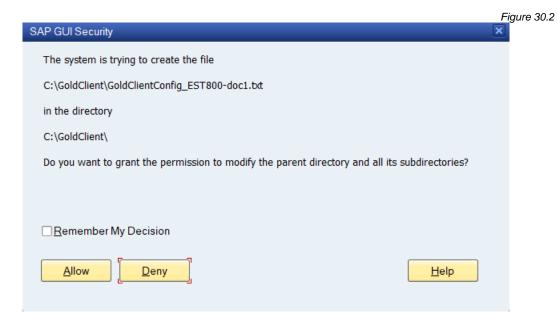
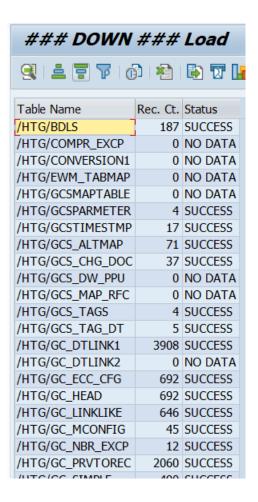


Figure 30.3



### **Upload process**

**Tip**: Prior to performing an upload it is recommended that you perform a new download to save off the configuration or at least have one from a recent download just in case it is necessary to use that file for restoration purposes.

- In order to execute an upload, the user must first select the Upload radio button
  - With this action, the screen will update accordingly
- 2. With regards to the Table Update Instructions, use the default setting of 'Delete all recs, then Insert' or update it to use 'Insert new, Modify existing'
- 3. With regards to the Post-Processing Option 'Remove Non-Existent Tables', select it as required
- 4. Click the 'Execute' button to initiate the upload process
- 5. A confirmation message will appear (Fig. 30.4); select 'Upd. Tables' to continue or 'Cancel' to abort the process



- 6. Since the program is attempting to access the respective file on the user's local directory, this window may appear (Fig. 30.5). The user will need to select 'Allow' for the program to continue or otherwise select 'Deny'.
  - Selecting the latter option will cancel the process and the config will not be uploaded
  - This window may not appear if the user has previously selected the 'Remember My Decision' checkbox



7. Once the program completes processing, one of two output versions will appear on the screen; the version that appears is based on whether the user selected the 'Remove Non-Existent Tables' option since it has its own output

- Both versions of the output show the tablename, the number of records read from the file, and a status (Fig. 30.6 and 30.7)
- If the 'Remove Non-Existent Tables' option was selected, a Post-Processing column will be visible, and content with respect to this program will appear at the end of the output (Fig. 30.7)
- The only status expected to appear in these outputs is 'SUCCESS'; if for some reason a different outcome is encountered, it is recommended that you contact the Qlik team for support

Figure 30.6

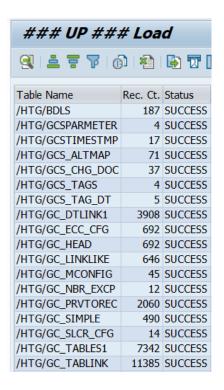
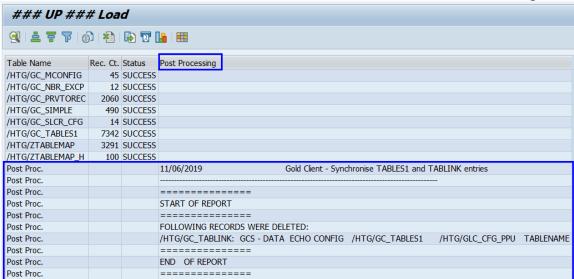


Figure 30.7

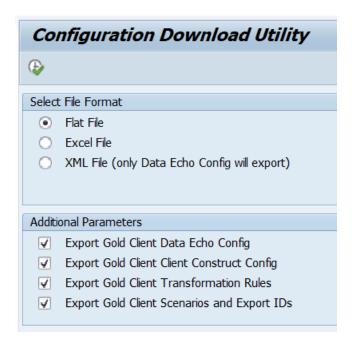


### Configuration Download

This utility allows a user to download the Gold Client configuration to several different formats. The most common use case is for copying the config from a higher-level system like Prod down to lower-level system. This can only be achieved using the 'Flat File' format. Freely download to Excel or XML when useful.

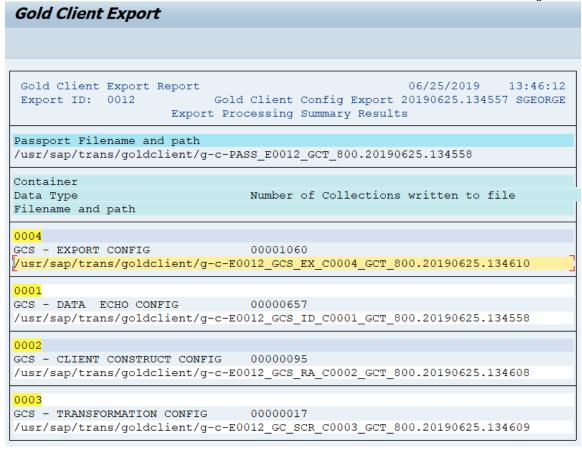
Select the radio button of the desired format, select which parameters should be included, and then select the Execute button to run the utility (Fig 31.0).

Figure 31.0



The Flat File format will generate export files for each option selected in the additional parameters section (Fig. 31.1). These export files can then be used to import this configuration into another client via the Import Control function.

Figure 31.1



The Excel File format (Fig. 31.2) will dump the contents of the Gold Client configuration tables to a series of Excel Spreadsheets (Fig. 31.3); each spreadsheet will be for a different Gold Client configuration table. When this format is selected, the default file path will be displayed; however, this path can be changed by the user as needed.

Figure 31.2

Configuration Download Utility

Select File Format

Flat File

Flat File

XML File (only Data Echo Config will export)

Default File Path

C:\GoldClient\GoldClientConfig.xls

Figure 31.3 Name Date modified Size Type GoldClientConfig\_gcs\_bdls\_20190610205827 Microsoft Excel 97... 14 KB 6/10/2019 2:58 PM GoldClientConfig\_gcs\_dtlink1\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 862 KB GoldClientConfig\_gcs\_ecc\_cfg\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 14 KB GoldClientConfig\_gcs\_head\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 56 KB GoldClientConfig\_gcs\_impdest\_20190610205827 Microsoft Excel 97... 6/10/2019 2:58 PM 1 KB GoldClientConfig\_gcs\_isconfig\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 2 KB GoldClientConfig\_gcs\_linklike\_20190610205827 Microsoft Excel 97... 6/10/2019 2:58 PM 105 KB GoldClientConfig\_gcs\_mconfig\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 2 KB GoldClientConfig\_gcs\_prvtorec\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 140 KB GoldClientConfig\_gcs\_simple\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 64 KB GoldClientConfig\_gcs\_syncrfc\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 1 KB GoldClientConfig\_gcs\_tables\_20190610205827 Microsoft Excel 97... 6/10/2019 2:58 PM 818 KB GoldClientConfig\_gcs\_tablink\_20190610205827 Microsoft Excel 97... 6/10/2019 2:58 PM 1,353 KB GoldClientConfig\_gcs\_userexits\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 1 KB GoldClientConfig\_gcs\_ztablemap\_20190610205827 6/10/2019 2:58 PM Microsoft Excel 97... 308 KB GoldClientConfig\_gcs\_ztablemap\_h\_20190610205... Microsoft Excel 97... 6/10/2019 2:58 PM 4 KB

The XML File format (Fig. 31.4) will only copy the Data Echo configuration to an XML format (Fig. 31.5).

|         |  |    |                    |                  | Fig  | ure 31.4 |
|---------|--|----|--------------------|------------------|------|----------|
| Selec   | t File Format                                |    |                    |                  |      |          |
| $\circ$ | Flat File                                    |    |                    |                  |      |          |
| $\circ$ | Excel File                                   |    |                    |                  |      |          |
| •       | XML File (only Data Echo Config will export) |    |                    |                  |      |          |
|         | Default File Path                            |    | C:\GoldClient\Gold | ClientConfig.xml |      |          |
|         |  |    |                    |                  |      |          |
|         |  |    |                    |                  | Fig  | ure 31.5 |
| Nar     | ne ^   | D  | ate modified       | Туре             | Size |          |
|         | GoldClientConfig                             | 6/ | 10/2019 3:00 PM    | XML Document     | 88   | 84 KB    |

## Data Framework - S4/HANA Tools

#### S4 Master Data Views

### Having this configuration table populated is critical for S4 systems!

This functionality has been specifically developed for use in HANA S4 systems. The reason is due to how S4 calculates values for some tables and fields on the fly -- one example is for various material stock quantities. Another way to think about this difference is that the values in these fields are no longer just attributes stored within a given table as they were in previous SAP versions.

The purpose of this config table is to convert Gold Client's use of performing selects on database tables to instead use their corresponding CDS views. The reason for doing this is to avoid the issue of **potentially significant performance issues** during data exports and other various Gold Client-related activities.

Please note: This config table is a <u>second-generation solution</u>. The first-generation solution was based on the S4 Exclude Fields config table, but customers should focus on utilizing this solution. If your organization has concerns about S4 performance issues and/or ensuring that you have the correct configuration set defined for this table, contact the Qlik team for support.

Customers who are running Gold Client on S4 systems should have, at minimum, this configuration set defined (Fig. 40.0 and 40.1).

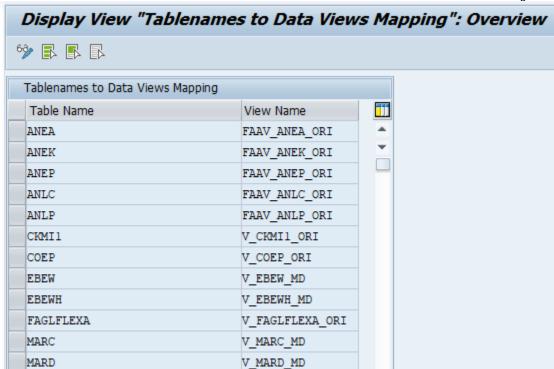


Figure 40.0

Figure 40.1

| Tablenames to Data Views | Mapping     |          |  |
|--------------------------|-------------|----------|--|
| Table Name               | View Name   | <u> </u> |  |
| MBEW                     | V_MBEW_MD   | ^        |  |
| MBEWH                    | V_MBEWH_MD  |          |  |
| MCHB                     | V_MCHB_MD   |          |  |
| MKOL                     | V_WKOL_MD   |          |  |
| MLCD                     | V_MLCD_ORI  |          |  |
| MLCR                     | V_MLCR_ORI  |          |  |
| MLHD                     | V_MLHD_ORI  |          |  |
| MLIT                     | V_MLIT_ORI  |          |  |
| MLPP                     | V_MLPP_ORI  |          |  |
| MSKA                     | V_MSKA_MD   |          |  |
| MSKU                     | V_MSKU_MD   |          |  |
| MSLB                     | V_MSLB_MD   |          |  |
| MSPR                     | V_MSPR_MD   |          |  |
| OBEW                     | V_OBEW_MD   |          |  |
| OBEWH                    | V_OBEWH_MD  |          |  |
| QBEW                     | V_QBEW_MD   |          |  |
| QBEWH                    | V_QBEWH_MD  |          |  |
| T012K                    | V T012K MIG |          |  |

### S4 Table Utility

Executing this program provides a user insight to those tables which are part of their respective Gold Client configuration (the Client Construct and Data Echo Frameworks) and have a CDS view assigned. This can be very useful for Gold Client administrators to ensure that these various tables are included within the **S4 Master Data Views** configuration.

If your organization has concerns about S4 performance issues and/or ensuring that you have the correct configuration defined, contact the Qlik team for support.

There are no user inputs. Executing the report will generate an output that contains content like this (Fig. 41.0, 41.1 and, 41.2). The config objects below are checked, and the table columns are populated accordingly based on these queries:

- Tables stored within a Data Echo data type (table name /HTG/GC\_TABLES1)
- Tables used for mapping relations between two Data Echo data types (table name /HTG/GC\_DTLINK1)
- Tables stored within a Client Construct data type (table name /HTG/ZTABLEMAP)

Figure 41.0

| S4 Table Utility |                                  |       |           |              |                    |                  |            |  |
|------------------|----------------------------------|-------|-----------|--------------|--------------------|------------------|------------|--|
|                  |                                  |       |           |              |                    |                  |            |  |
| Table Name       | Data Type                        | Table | View name | Recipient DT | Recipient DT Table | Master Data Type | Table Name |  |
| HTG/GC_TABLES1   | CO - LINE ITEMS (COEP ONLY)      | COEP  | V_COEP    |              |                    |                  |            |  |
| /HTG/GC_TABLES1  | LINK - OBJECT TO CONTROLLING DOC | COEP  | V_COEP    |              |                    |                  |            |  |
| /HTG/GC_TABLES1  | SD - INQUIRIES FROM SALES DOCS   | EBEW  | MBVEBEW   |              |                    |                  |            |  |
| /HTG/GC_TABLES1  | SD - QUOTATIONS FROM SALES DOCS  | EBEW  | MBVEBEW   |              |                    |                  |            |  |
| /HTG/GC_TABLES1  | SD - SALES DOCS FROM PROD ORDERS | EBEW  | MBVEBEW   |              |                    |                  |            |  |
| /HTG/GC TABLES1  | SD - SALES DOCS TO CREDIT MEMO   | EBEW  | MBVEBEW   |              |                    |                  |            |  |

Figure 41.1

| Table Name      | Data Type                       | Table | View name   | Recipient DT                   | Recipient DT Table | Master Data Type | Table Name |
|-----------------|---------------------------------|-------|-------------|--------------------------------|--------------------|------------------|------------|
| /HTG/GC_DTLINK1 | MM - MATERIAL MASTER            | MARC  | NSDM_V_MARC | LINK - MATERIAL TO FORECASTING | MARC               |                  |            |
| /HTG/GC_DTLINK1 | MM - MATERIAL MASTER            | MBEW  | MBVMBEW     | MM - MATERIAL VALUATION        | MBEW               |                  |            |
| /HTG/GC_DTLINK1 | MM - MATERIAL MASTER W/ VC DATA | MARC  | NSDM_V_MARC | LINK - MATERIAL TO FORECASTING | MARC               |                  |            |
| /HTG/GC_DTLINK1 | MM - MATERIAL MASTER W/ VC DATA | MARC  | NSDM_V_MARC | LINK - MATERIAL TO IBASE DATA  | MARC               |                  |            |
| /HTG/GC_DTLINK1 | MM - MATERIAL MASTER W/ VC DATA | MBEW  | MBVMBEW     | MM - MATERIAL VALUATION        | MBEW               |                  |            |
| /HTG/GC_DTLINK1 | MM - MATERIALS WITH BOMS        | MARC  | NSDM_V_MARC | LINK - MATERIAL TO FORECASTING | MARC               |                  |            |
| /HTG/GC_DTLINK1 | MM - MATERIALS WITH BOMS        | MBEW  | MBVMBEW     | MM - MATERIAL VALUATION        | MBEW               |                  |            |
| /HTG/GC_DTLINK1 | CO - LINE ITEMS                 | COEP  | V_COEP      | CO - LINE ITEMS (COEP ONLY)    | COEP               |                  |            |

Figure 41.2

| Table Name     | Data Type | Table  | View name    | Recipient DT | Recipient DT Table | Master Data Type            | Table Name |
|----------------|-----------|--------|--------------|--------------|--------------------|-----------------------------|------------|
| /HTG/ZTABLEMAP |           | QBEWH  | MBVQBEWH     |              |                    | MATERIAL MASTER & MRP       | QBEWH      |
| /HTG/ZTABLEMAP |           | MARD   | NSDM_V_MARD  |              |                    | MATERIAL MASTER & MRP       | MARD       |
| /HTG/ZTABLEMAP |           | MKOL   | NSDM_V_MKOL  |              |                    | MATERIAL MASTER & MRP       | MKOL       |
| /HTG/ZTABLEMAP |           | MSLB   | NSDM_V_MSLB  |              |                    | MATERIAL MASTER & MRP       | MSLB       |
| /HTG/ZTABLEMAP |           | MSPR   | NSDM_V_MSPR  |              |                    | MATERIAL MASTER & MRP       | MSPR       |
| /HTG/ZTABLEMAP |           | MARCO1 | OIB_V_MARCO1 |              |                    | HANA S4 PROXY OBJECT TABLES | MARCO1     |
| /HTG/ZTABLEMAP |           | MARDO1 | OIB_V_MARDO1 |              |                    | HANA S4 PROXY OBJECT TABLES | MARDO1     |
| /HTG/ZTABLEMAP |           | MCHBO1 | OIB_V_MCHBO1 |              |                    | HANA S4 PROXY OBJECT TABLES | MCHBO1     |
| /HTG/ZTABLEMAP |           | MKOLO1 | OIB_V_MKOLO1 |              |                    | HANA S4 PROXY OBJECT TABLES | MKOLO1     |
| /HTG/ZTABLEMAP |           | PBVPV  | MDCV_V_PBVPV |              |                    | MATERIAL MASTER & MRP       | PBVPV      |
| /HTG/ZTABLEMAP |           | MARCH  | NSDM_V_MARCH |              |                    | HANA S4 PROXY OBJECT TABLES | MARCH      |

#### S4 Exclude Fields

Please note: This config table is a first-generation solution; the <u>second-generation</u> <u>solution is based on the S4 Master Data Views config table</u>, so customers should focus on utilizing that solution. If your organization has concerns about S4 performance issues and/or ensuring that you have the correct configuration set defined for this table, contact the Qlik team for support.

This functionality has been specifically developed for use in HANA S4 systems. The reason is due to how S4 calculates values for some tables and fields on the fly -- one example is for various material stock quantities. Another way to think about this difference is that the values in these fields are no longer just attributes stored within a given table as they were in previous SAP versions.

The Qlik team has determined that exporting these calculated fields <u>may</u> cause performance/stability issues because of the calculations that are performed by the S4 application, and also that there is no value in copying them from the source to the target anyhow since the application will derive the calculated value. Therefore, it is necessary to exclude some fields from being included in the export and import processes. This is entirely different to how Gold Client has historically worked in that <u>all columns</u> on a table were <u>always included</u> in the export and import, and the user had no control to manipulate this outcome.

The user can add relevant tables and fields that need to be excluded during copy processing (Fig. 42.0). The Qlik team should be able to suggest some entries that belong in this table so freely submit a support case to the Qlik team for discussions as required.

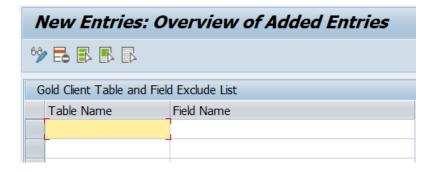


Figure 42.0

# Data Copy Toolbox

#### Restart Failed Jobs

Execute this utility when an export or import job has canceled for some reason and needs to be completed. The program does not start the process completely over but instead it attempts to complete whatever work remains.

To restart a process, input the following (Fig. 50.0):

- a Run Time ID value
  - this value can be found within the export or import job located near the top of the log (Fig. 50.1)
- select the appropriate processing option: Export or Import
  - If the Export option is chosen, select the appropriate type: Client Construct or Data Echo
  - If the Import option is chosen, the screen will change accordingly, including making visible the option of running the import using Parallel Processing (Fig. 50.2)
- additional processing options

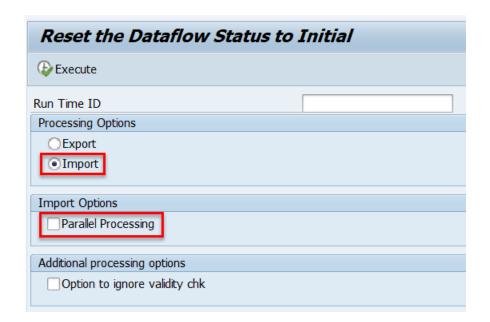
Figure 50.0

| Reset the Dataflow Status to Initial |  |  |  |  |  |
|--------------------------------------|--|--|--|--|--|
| Execute                              |  |  |  |  |  |
| Run Time ID                          |  |  |  |  |  |
| Processing Options                   |  |  |  |  |  |
| ● Export                             |  |  |  |  |  |
| ○ Import                             |  |  |  |  |  |
| Export Type                          |  |  |  |  |  |
| Client Construct                     |  |  |  |  |  |
| OData Echo                           |  |  |  |  |  |
| Additional processing options        |  |  |  |  |  |
| Option to ignore validity chk        |  |  |  |  |  |

Figure 50.1

| Jo  | b log   | Time     | Message text uncoded   |
|-----|---------|----------|--|
| 0.6 | /12/201 | 12.50.31 | Job started  |
|     |         |          | Step 001 started (program /HTG/GCS ECC EXP P 00, variant &000000 |
|     |         |          | *** START EXPORT****************                                 |
| 06  | /12/201 | 12:50:32 | ==> Export ID: 0013  |
| 06  | /12/201 | 12:50:32 | ==> Runtime ID: 001320190612185032                               |
| 06  | /12/201 | 12:50:32 | ==> Number of Containers: 1                                      |
| 06  | /12/201 | 12:50:32 | ==> Maximum Worker Jobs Allowed: 8                               |
| 06  | /12/201 | 12:50:32 | ==> STATUS Filename: g-c-STAT_E001320190612185032_GCT_800        |

Figure 50.2



The program will likely respond with a sequence of messages that will vary based upon the user's inputs. The first is just informational and provides the user some understanding as to the root cause (Fig. 50.3).



The next message provides the user the name of the background job that was submitted (Fig. 50.4). The job can be monitored using transaction code SM37.



### Export progress report

This report provides insight to the user to help them understand the progress of an in-flight export. Although the Export Progress Report can be used as a monitoring tool, be advised that the best overall monitoring tools are t-code SM37 or the Export Dashboard located within Export Control.

The user can display the data still to be exported ('In Progress' tab) as well as the data already exported ('Complete' tab). This report also provides the job log for the given export. This is a collective log so that even if the export was initiated as a parallel export, the logging details from <u>all</u> jobs will be displayed here (Fig. 51.0). If the export is complete, the details on the 'In Progress' and 'Complete' tabs will be empty; however, the 'Job Log' details will be present as long as the jobs have not been purged from the system.

Export Progress Report

Runtime ID

In Progress Complete Job Log

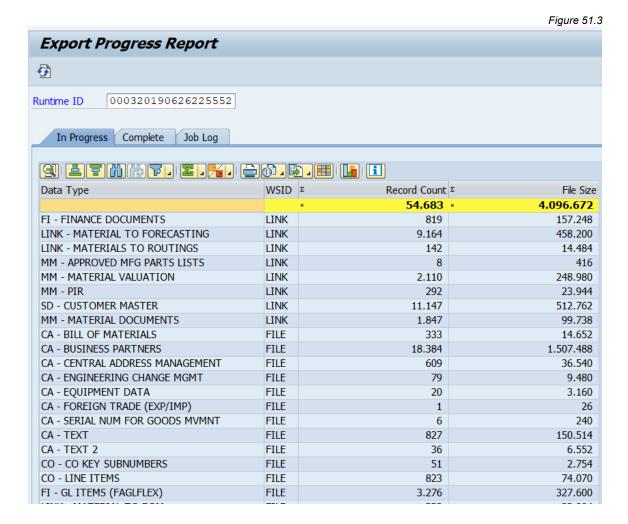
Figure 51.0

The only input required by the user is the Runtime ID; this detail is most easily located in the following places: at the very start of the parent's job log (Fig. 51.1), or within the name of the WORKER jobs (Fig. 51.2).

Figure 51.2

Once a Runtime ID has been entered, select the various tabs to see the relevant content (Fig. 51.3).

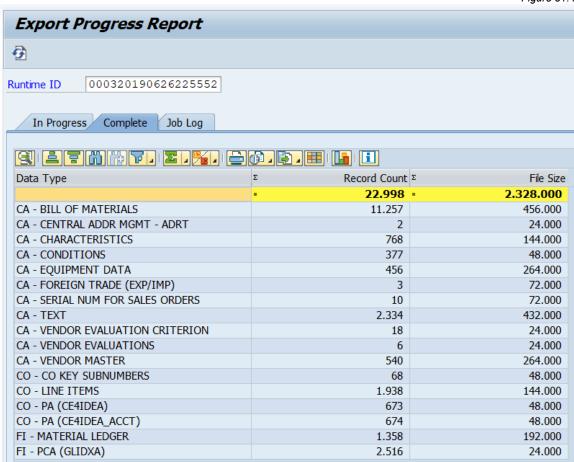
A user typically wants insight to try and understand how much longer the export will run and so the 'In Progress' tab is the most useful, but having this information is not all that meaningful without understanding how the export process works. When an export runs, it first interrogates the Data Echo configuration to identify all of the relevant data type links, and then once it has obtained this information, it then exports all of the data relevant to these data types. This is the reason the 'In Progress' tab includes in the 'WSID' column the value of either LINK or FILE. A LINK value indicates that the linkages for the given data type are being discovered, and a FILE value indicates that the data for that data type is being collected and written to file. Ultimately, all data types will complete both processes (except those data types which do not have links so they will only perform the FILE step) and the total Record Count will reach zero indicating that the export is complete. The larger the record counts and the more LINK entries there are, the longer the export is going to take to complete. Select the refresh button to update the report details.



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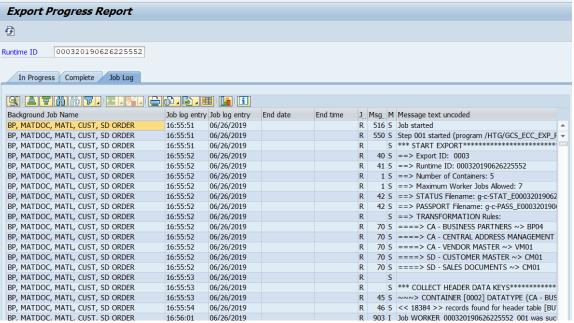
If useful, select the 'Complete' tab to see what data types have finished writing to file (Fig. 51.4). Practically speaking, this is probably useful only if the user is interested in seeing how much data has been exported so far.

Figure 51.4



If useful, select the 'Job Log' tab to see the collective logging details (Fig. 51.5). The first log displayed will be the parent job, but it is possible to scroll down through the log to eventually locate the logging for the various WORKER jobs.

Figure 51.5



### Export Dashboard

This program is appropriately named as it is a user's dashboard for managing exports. This dashboard is primarily designed for an advanced user, perhaps someone on the team who is tasked with performing data refreshes and/or copying large data volumes and thus requires advanced monitoring and administration functions because of these responsibilities. The idea is that this dashboard replaces and centralizes various SAP t-codes that could be used for monitoring purposes, primarily SM37 (Background Job monitor), SM50 (Work Process monitor for single instance), and SM66 (Work Process monitor for all instances).

The dashboard provides monitoring capabilities by displaying the following important elements: Job Name, Status, Start Date and Time, Duration, and other useful details like whether the export included data transformation and/or Subset Sync functionality. It is possible to display other more advanced details as well when useful.

The dashboard defaults the Start Date ('today' minus 30-days) and User Name; however, the user may change them as required (Fig. 52.0); if changed, select the Refresh button to update the output. The user may also wish to input one or more specific job names in order to filter the contents in the dashboard.

Export Dashboard

PRefresh

Start Date
User Name
SGEORGE

Job Name

Dob Name

Figure 52.0

Here is an example of the default content provided in the dashboard (Fig. 52.1). Most of the columns displayed are self-explanatory; however, here are a few details for those that may not be.

- **Status**: red = canceled export, yellow = active export, green = completed export
- Job Log: to display the log for a specific job, click 'Job Log'
  - This screen capture provides an example of the ALV-style job log that should be displayed (Fig. 52.2)
  - Tip: when placing a cursor on it, Job Log should become underlined indicating that it can be selected
- **Tform**: if a light bulb is displayed, data transformation was active for one or more Data Types for the export
- **Subset**: if a light bulb is displayed, Subset Sync was active for one or more Data Types for the export

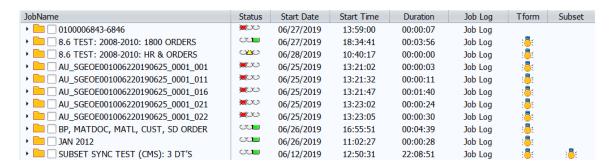
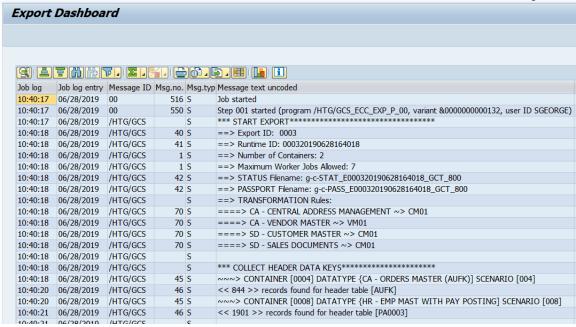


Figure 52.2



The dashboard also consists of these functions: Advanced Details, Job Variant Details, Export Progress, and Restart Failed Jobs (Fig. 52.3); see below for more details on each. **Note**: Advanced Details can be selected without selecting a specific job; however, the other functions require that a job be selected first. If not, the system will respond with the message of "Select one Job Name".

Figure 52.3



- Advanced Details provides additional details for an export (Fig. 52.4)
  - Current Table: from which table an export is actively working
  - Server: the server being used by an active export
  - Export GUID: the unique ID assigned to each export
  - Data Type: the last data type that was exported
  - LINK/FILE: in what stage an active export is working (LINK is displayed when the export is identifying the various dependent data

relations, and FILE is displayed when the export is collecting data and writing it to file)

- **Job Variant Details** displays the same content as if the user was in t-code SM37, selected an export job, and displayed the variant details (Fig. 52.5)
- Export Progress can be used to display details for an in-flight export; reference the section in this user guide named <u>Export progress report</u> for more details on utilizing this function
- Restart Failed Jobs can be used to restart an export that resulted in a canceled status; reference the section in this user guide named <u>Restart Failed</u> <u>Jobs</u> for more details on utilizing this function

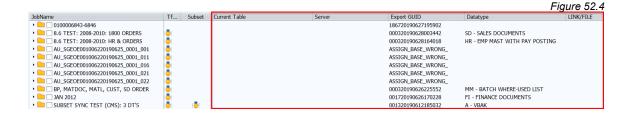
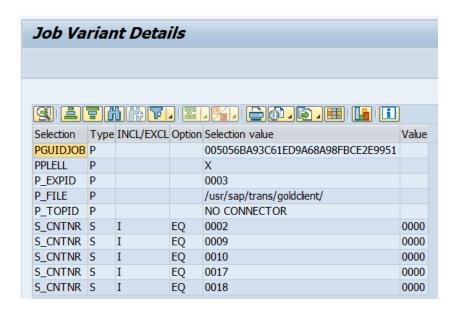
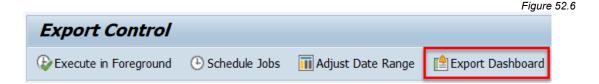


Figure 52.5



In addition to the Configuration menu, this function can also be accessed via the Export Control screen by selecting the Export Dashboard button (Fig. 52.6).

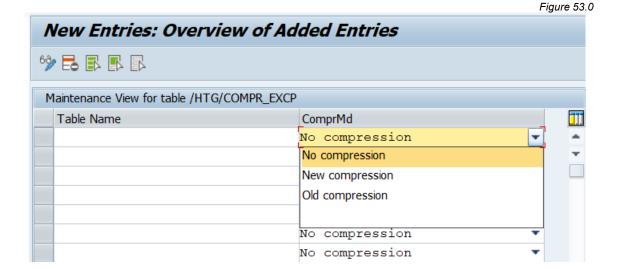


### Set Table Compression Type

This utility can be used to maintain compression settings. The Gold Client export program contains default compression logic but on occasion tables are found that require the use of a different compression types and so this table can be used to manage those exceptions.

Typically, Gold Client users will not know when this table needs to be populated and instead would be directed here by the Qlik support team.

Populating the table is straight forward in that the table requiring the exceptional compression is entered in the 'Table Name' column and the compression type is selected from the available list in the 'ComprMd' column (Fig. 53.0).



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### Resend Subset Sync Job

If a Subset Sync export cancels in the connected system, it is possible to restart it using Gold Client's **Resend Subset Sync Job** utility.

Input the following required and optional fields (Fig 54.0):

- Top GUID
- Run GUID
- Ensure that the 'Resend' button is selected
  - o There is also an option to perform the 'resend' in foreground

**Note**: The Top GUID and Run GUID values can be found towards the end of the respective export job log (Fig 30.1); copy and paste these values from the log into their respective fields

Click the 'Execute' button to initiate the process. The results of the initiated process can be checked via t-code SM37 in the connected Source system.

Figure 54.0

| Resend Subset Sync Job              |              |
|-------------------------------------|--------------|
| <b>&amp;</b>                        |              |
| Top GUID                            | K            |
| Run GUID                            | $oxed{oxed}$ |
| (TR)ansform (A)udit GUID            |              |
| Resend Execute Resend in Foreground |              |
| ODelete all /HTG/ Sync tab recs     |              |
| Reset Counter Num Range to          | 20000002     |
| Current # for /HTG/COUNT SNRO       | 0            |

| _                               |                     |              |          | Figure 30.1  |
|---------------------------------|---------------------|--------------|----------|--------------|
| *SUBSET SYNC JOB* START         |                     | *SUBSET      | SYNC JOB | *            |
| Gold Client Subset Sync Job [8. | 5 SUBSET SYNC TEST] | submitted to | RFCDEST  | [CR7CLNT800] |
| Source system                   | Datatype [SD - SALE | S DOCUMENTS] |          |              |
| will connect to Sync system     | Datatype [CRM - SAL | ES HEADER]   |          |              |
| TOP_GUID: 0017A4512C901EE69C8C8 | 76F0743CB00         |              |          |              |
| RUN GUID: 0017A4512C901EE69C8C8 | 76F0C248B00         |              |          |              |

### Schedule Import Jobs

As an alternative to using Gold Client's Import Trigger functionality, which occurs immediately following the completion of the export process, it's possible to schedule an import to execute on a schedule basis instead. This is one option (but not the only one) that can be useful for teams who want to automate their copy process.

Input the following required and optional fields (Fig. 55.0):

**Data Import radio button:** Selecting this option initiates the import process within the given client

**Data Discard radio button:** Selecting this option initiates the delete process within the given client

**Export ID:** Input one or more relevant values

**Export Date:** Input a number that represents the age of the files. For example, inputting a zero value informs the program to select only those files which were created 'today'; an input of one informs the program to select those files created today and 'yesterday'.

**Export System:** Input the system ID of the Source (from which system the files were written)

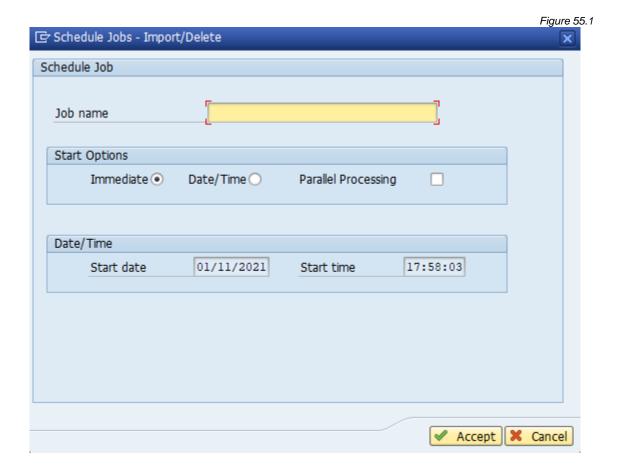
**File Path:** This value should be defaulted from what is assigned within the FILE t-code; however, this value can be changed as needed

**New Import Engine checkbox:** Selecting this option ensures that the new version of the import program is used. This option is set by default and is the recommended setting.

Figure 55.0

Once the inputs have been entered, select either the Execute button to run the import or delete process in foreground, or select the Schedule Job button to run the respective process as a background job. Selecting the latter option causes this

window to appear (Fig. 55.1). Input a job name and other possible options; select the Accept button to initiate the process. Use t-code SM37 to monitor the job.



Note: It is possible to save this screen's inputs to create a variant as per standard SAP functionality. This variant could then be used to setup a background job that is scheduled to run on a periodic basis.

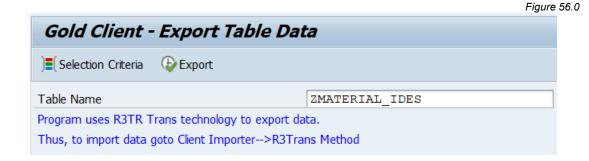
### Export Table Data (CC)

The Export Table Data utility provides the user another method for exporting data; however, this program is limited to copying data from only a single table, and the data can only be segmented on the first key field (not including the MANDT / Client field), and only single values (no ranges) can be used within the selection criteria.

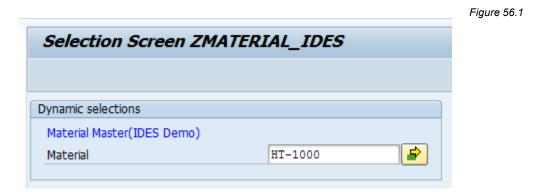
An R3Trans process is used in this program to export data just like the R3Trans method that exists within Client Exporter; however, when using Client Exporter all data within the table is exported, whereas this program allows the user the additional flexibility to export only a segment of the table data.

This program is most useful when there is a need to export a significant volume of data from a single table and where the selection can be segmented by the primary key field.

Enter a table name and then select the 'Selection Criteria' button; in this example, table ZMATERIAL\_IDES is entered (Fig 56.0).



On the following screen the first field on whichever table was entered will appear. Enter the data selection criteria as needed and then save the changes (Fig 56.1).



Once the data selections have been entered, return to the main screen and select the 'Export' button (Fig 56.2).

Figure 56.2



Enter a job name and then the 'Accept' button (Fig 56.3). A message will appear that the job has been submitted. The background job is used only to report when the R3Trans data collection has started and ended. The background job can be monitored via t-code SM37.



Once the export is complete, the import process can only be executed using the Client Importer function and the R3Trans Method. Refer to the <u>Client Construct User</u> Guide for instructions.

#### Structure Differences

Ideally, table structures should be identical when copying data between source and target clients. Gold Client export and import programs have progressively improved to handle these exceptions; however, imports may still fail on an occasional basis because of a structural delta. The import failure should generate a shortdump which can be analyzed to determine the problem table. This utility provides a technical solution for those instances when a failure occurs for a given table.

To make use of this solution, convert the screen to change mode and select the 'New Entries' button. Add the table in the Table Name field and click the Active checkbox to activate the configuration (Fig. 57.0).

It is necessary to define the entry in both the **source and target clients**.

Display View "Tables with different layouts from Source to Target"

▼ ■ ■

Tables with different layouts from Source to Target

Table Name

Active

Note: If an import failed because of this issue and the Structural Changes table has been updated in the respective clients, a new data export <u>must</u> be generated to make use of this solution.

### SQL Trace Comparison

The typical use case for this program would be when a user has copied data from the source to the target and has found data to be missing. The next natural step is to adjust the Data Echo framework so that the missing data is included in future copies but, perhaps the user is unsure of what changes to deploy because they do not know where the missing data is stored. Perhaps the best way to locate this information is to run a SQL trace in the source client (where the data is good) and then compare the trace results to the target client to identify the deltas. The user can input the respective trace details in this utility to perform a comparison between the source and target clients (Fig. 58.0).

Please note that to perform the comparison an RFC is required that allows the source client to communicate with the target client. If a relevant RFC does not exist, your Basis team will need to first create one.

The user can also limit the number of trace records to compare by adjusting the 'Max Records' field; in most cases 5,000 should be more than sufficient for most trace comparisons.

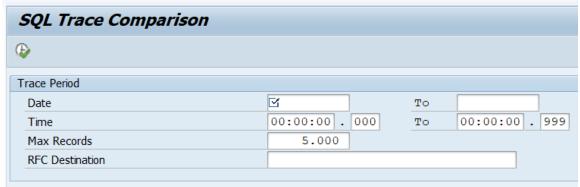
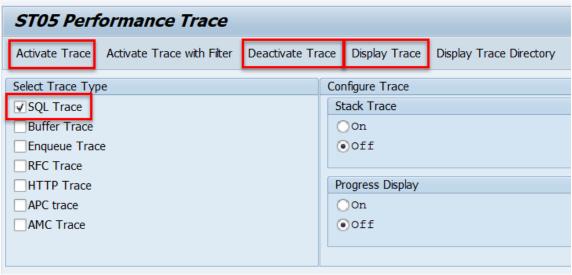


Figure 58.0

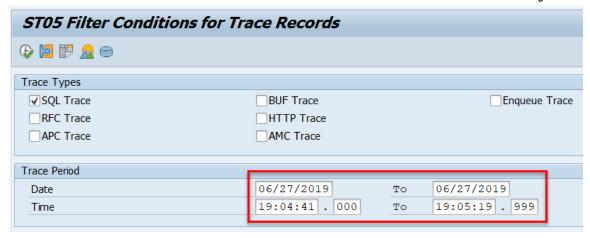
SQL traces can be executed and collected via standard SAP t-code ST05. To collect a trace, it is recommended that you open two SAPGUI sessions. In one session, first activate the SQL trace, and then in the other session run the relevant t-code that displays the relevant data; when finished, return to the ST05 session and deactivate the trace, and finally display the trace (Fig. 58.1). **Note**: the default setting should be trace type 'SQL Trace' but ensure that it is selected; no other trace types are required.

Figure 58.1



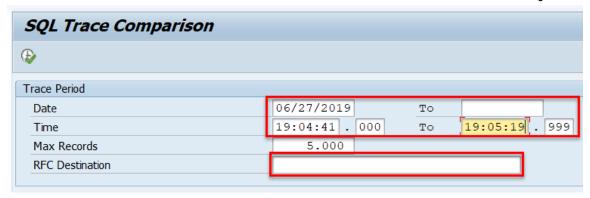
After the trace has been generated, display the filter conditions for it (by selecting 'Display Trace' on the ST05 screen) and make note of the date and time details (Fig. 58.2).

Figure 58.2



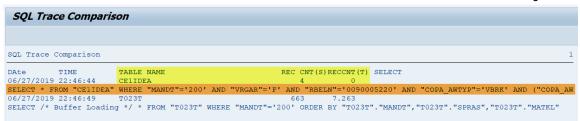
Copy/paste these date and time details into the SQL Trace Comparison screen. Input an RFC destination, and then execute the program (Fig. 58.3).

Figure 58.3



Here is an output example from the execution of this program (Fig. 58.4). The area highlighted in yellow shows the delta that was found where table CE1IDEA finds four records in the source client but zero records in the target client. The area highlighted in orange shows the details that can be used to query the table that is causing the delta. In this example, table CE1IDEA can be queried using the logic where VRGAR = 'F' and RBELN = '0090005220' and COPA\_AWTYP = 'VBRK'. Having this information in hand, the user can hopefully adjust the Gold Client config accordingly in order for this data to be included in subsequent exports.

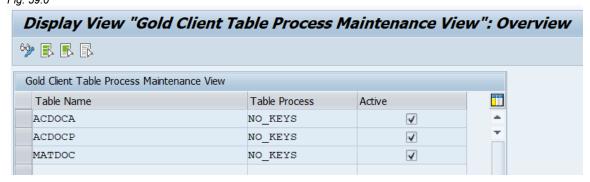
Figure 58.4



Freely reach out to the Qlik support team if assistance with missing data is required. Sharing any trace comparison outputs with Qlik would provide useful insight in order for the team to help resolve the issue.

## Table Process Exception

Exception handling for specific tables during the copy process can be managed in the Table Process Exception screen. The only Table Process available currently is NO\_KEYS. The NO\_KEYS setting allows records from S/4 HANA tables without primary indexes defined at the HANA level (ACDOCA, ACDOCP, MATDOC, etc.) to be imported without creating duplicate records. Review SAP NOTE 2160391 – FAQ SAP HANA Indexes for more information. Fig. 59.0

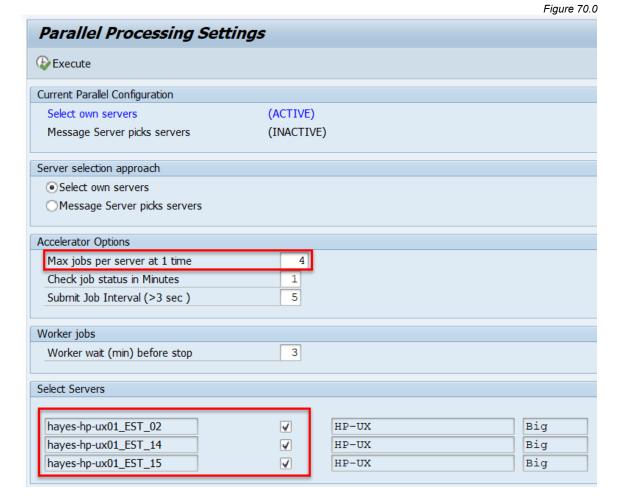


## Administration

## Parallel Processing

This utility establishes important constraints for Gold Client exports and imports which utilize background processing. These settings define the maximum number of processes used and on which servers.

The value entered in the 'Max jobs per server at 1 time' field defines the maximum number of processes per server that Gold Client can use at one time. The 'Select Servers' section provides the flexibility to choose which servers can be used by Gold Client processing. Using this example (Fig. 70.0), Gold Client would be allowed to use up to 12 background processes since the 'Max' has been defined as 4 and all three servers have been selected.



The 'Select Servers' section also provides informational content regarding each server's operating system and Endianess. This may be critical information as Gold Client exports and imports must use the same Endianess. If, for example, an organization uses a mix of Unix and Linux servers, only one type should be used in

both the source and target systems to ensure that data copies will work successfully (Fig. 70.1).

Figure 70.1

Select Servers

hayes-hp-ux01\_EST\_02
hayes-hp-ux01\_EST\_14
hayes-hp-ux01\_EST\_15

HP-UX
Big
Big
Big
Big

Alternatively, it is possible to allow the Message Server to choose the servers instead of selecting them manually. This can be achieved by selecting the 'Message Server picks servers' radio button. The screen will update accordingly with this config setting showing as (ACTIVE) and the 'Select Servers' section being hidden since it is no longer relevant (Fig. 70.2).

Figure 70.2

| Parallel Processing Settings                   |            |  |  |  |  |  |
|--|------------|--|--|--|--|--|
| Execute  |            |  |  |  |  |  |
| Current Parallel Configuration                 |            |  |  |  |  |  |
| Select own servers                             | (INACTIVE) |  |  |  |  |  |
| Message Server picks servers                   | (ACTIVE)   |  |  |  |  |  |
|  |            |  |  |  |  |  |
| Server selection approach                      |            |  |  |  |  |  |
| Select own servers                             |            |  |  |  |  |  |
| <ul><li>Message Server picks servers</li></ul> |            |  |  |  |  |  |
| Accelerator Options                            |            |  |  |  |  |  |
|  |            |  |  |  |  |  |
| Max jobs per Instance                          | 4          |  |  |  |  |  |
| Check job status in Minutes                    | 1          |  |  |  |  |  |
| Submit Job Interval (>3 sec )                  | 4          |  |  |  |  |  |
|  |            |  |  |  |  |  |
| Worker jobs                                    |            |  |  |  |  |  |
| Worker wait (min) before stop                  | 5          |  |  |  |  |  |

## Memory Optimization

This configuration screen controls how the Gold Client export program collects data into memory and writes it out to the file system (Fig. 71.0).

Figure 71.0 Change View "Export Memory Configuration": Overview **Export Memory Configuration** Data Type Coll. per Unit / Wk. Header Tab Pkg.Sz FI - DISPUTE CASE ATTRIBUTES 1.000 20.000 FI - DUNNING DATA 1.000 20.000 FI - DUNNING DATA ACTIVITY LOG 1.000 20.000 FI - EARMARKED FUNDS 1.000 20.000 FI - FINANCE DOCS W/ DISP CASES 1.000 20.000 FI - FINANCE DOCUMENTS 20.000 FI - GL ITEMS (FAGLFLEX) 1.000 20.000 FI - GL SPLIT OPEN ITEMS 1.000 20.000 FI - LOAN REFERENCE CUMULATION 1.000 20.000 20.000 FI - LOAN REFERENCE DISBURSEMENT 1.000 FI - LOANS 20.000 1.000

- Collections per Unit of Work: A performance control to help limit the amount of memory used by the export process. This parameter controls how many collections are processed before being written to file.
- Header Table Package Size: It may be beneficial to process those exports
  that target large volumes of data in smaller packages. Like other technical
  settings, this is designed to reduce the memory consumption on an export.
  This parameter should only be changed in the event of an export failure due
  to a large volume export. There may be times to either increase or decrease
  this value. It is possible that setting this value too low may result in export
  failure. Please contact Qlik for support issues or questions.

## Configure Auto Import RFC

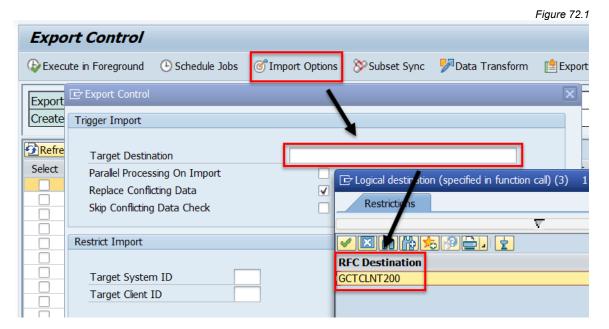
This table is used to administer control over which target clients are available for selection by end-users when using the Import Options feature that is available within the Data Snap and Export Control functions.

Adding an entry to this table means that an end-user can select from this list of destinations so that the import is automatically initiated (via the respective RFC). The entry must be set as 'Active' for it to appear in the selection list; if inactive, it cannot be selected by the end-user (Fig. 72.0).

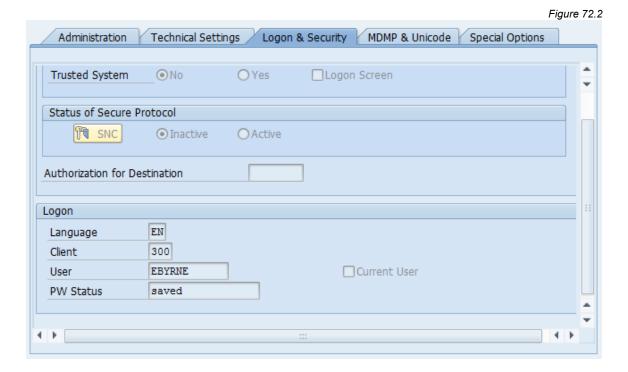
If the auto-import option is not selected by the user at the time of initiating the export, then the import must be performed manually.



In this sequence, the user selects the Import Options function and must then input or select from the lookup function a valid RFC for the 'Target Destination' field (Fig. 72.1). The list of valid values displayed to the end-user is controlled from the entries stored in this configuration table (Fig. 72.0).



**Important Note:** the RFC that is used for Import Options functionality must be setup (in t-code SM59) as a named user. The import options functionality <u>will not work</u> if the RFC is set with 'Current User'. An example of this can be seen where the RFC has an actual user assigned and the 'Current User' checkbox is not set (Fig. 72.2).



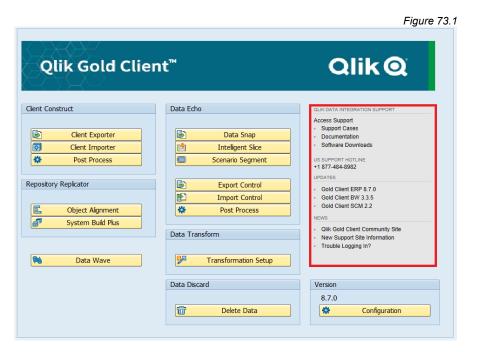
## Application Settings (MConfig)

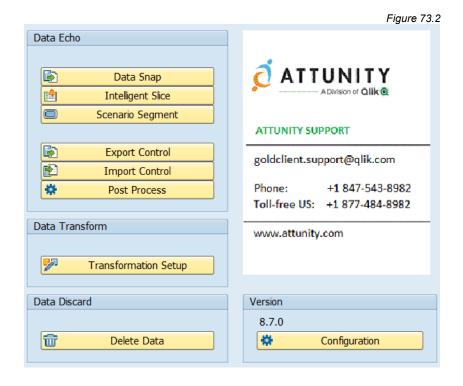
This table controls a number of miscellaneous configuration settings that are available within Gold Client (Fig 73.0). Those functionality items marked as 'Active' are in use. It's suggested that you contact Qlik for support prior to making any changes to these settings.

Display View "Miscellaneous Configuration": Ove 6 R R R Miscellaneous Configuration Functionality Active ACCELERATOR ✓ ALLOW CLASS C TFORM 4 ALLOW CONFLICT DATA CHECK SKIP 4 ALLOW CONV EXIT COMPLEX **V** ALLOW\_CONV\_EXIT\_VARIABLE ALLOW DW EXPORT NONPRD 4 ALLOW\_GROUP\_BY\_TABLES ALLOW RR SUPPORT PACK DIFF ALLOW TRANSPORT OF COPIES CLIENT SPECIFIC TABLENAMES 4 COMPRESSION NEW XML COMPRESSION OLD CONV EXPID FROM 3 TO 4 DATE TIME FILE NAME OPTION DISABLE NEWS WIDGET DISABLE\_VIEWING\_REPORTS DONT VALIDATE OPSYS 4 DONT WRITE FILE BOX ENFORCE DATASNAP MAX JOBS FI RECONCILIATION REPORTS 4 FRAMEWORKLOG 4 FREE MEMORY 4 GEN\_&\_ACTV\_INTEGRATION\_MODEL 4

Figure 73.0

In the Miscellaneous Configuration there's an entry named DISABLE\_NEWS\_WIDGET. If this setting <u>is not</u> marked as 'Active' then Qlik, Inc. is able to deliver information such as new releases, updates, and announcements which are delivered in widget form visible on the main Gold Client page (Fig. 73.1). If this setting <u>is</u> marked as 'Active', then the widget is disabled, and support-related details are provided instead (Fig. 73.2).





## Global Parameter Maintenance

This utility can be used to maintain Gold Client's global level parameters. These settings are provided to the customer with recommended defaults in place and changes to the settings would ideally be provided by the Qlik support team on an asneeded basis (Fig. 74.0).

Figure 74.0

| New Entries    □    □    □    □    □    □    □ |       |  |  |  |  |  |  |
|--|-------|--|--|--|--|--|--|
| Table to maintain Global level parameters      |       |  |  |  |  |  |  |
| Object Va                                      | alue  |  |  |  |  |  |  |
| FILE_TABLENAME_LENGTH 16                       | 6     |  |  |  |  |  |  |
| SPLIT_FILE_RECORD_LIMIT 50                     | 00000 |  |  |  |  |  |  |
| SUBSET_SYNC_SYNCDET_DELETE_CHUNK 50            | 0000  |  |  |  |  |  |  |
| SUBSET_SYNC_SYNCDET_PCKG_SIZE 50               | 0000  |  |  |  |  |  |  |

## Maintain Timestamp Types

This utility can be used to maintain date and timestamp conversion settings when necessary. It is most relevant with respect to the Intelligent Slice function where users typically input a date range and then those date values are saved as selection criteria within Gold Client Scenarios. If the conversion is not completed successfully then the values stored in the selection criteria may be incorrect or invalid and cause less than ideal results when running the export for this Scenario.

Be aware that this issue is not common when using date-related fields which are assigned a DATS data type such as these examples (Fig. 75.0).

|       |       |      |   | Figure 75.0                                    |
|-------|-------|------|---|--|
| BLART | BLAKT | CHAK | 2 | o Document type                                |
| BLDAT | BLDAT | DATS | 8 | 0 Document Date in Document                    |
| BUDAT | BUDAT | DATS | 8 | O Posting Date in the Document                 |
| MONAT | MONAT | NUMC | 2 | <sup>0</sup> Fiscal period                     |
| CPUDT | CPUDT | DATS | 8 | O Day On Which Accounting Document Was Entered |
|       |       |      | _ | o. T   |

Typically, Gold Client users will not know when this table should be populated and instead would be directed here by the Qlik support team.

Populating the table is reasonably simple in that the relevant domain, data type element, or conversion exit is entered in the first column and the conversion type is selected from the available list in the second column. It is also possible to activate or inactivate these entries as needed (Fig. 75.1).

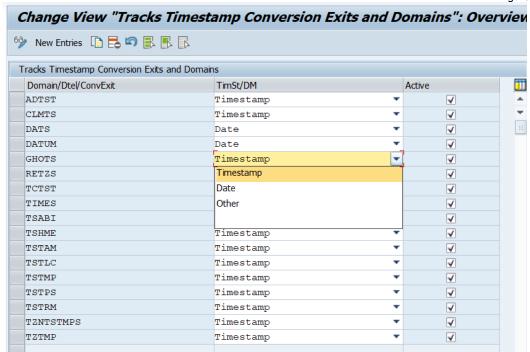


Figure 75.1

## Map Table Names

This utility can be used to maintain Gold Client parameters in those unique instances when the table name between the source system and target system are not identical (Fig. 76.0). This solution originated with the need to copy data in EWM (Extended Warehouse Management) systems where some tables have a client value incorporated into their names. An example of this is table /1DF/FDR### where ### represents the respective client number.

The utility might be a solution outside of EWM systems, but it is advised that customers to do so with the Olik support team's quidance to achieve the desired result.

New Entries: Overview of Added Entries 🧐 🖶 🖫 🖫 Mapping table for swapping target table names Source Table Name Target Table Name EWM Active | Active  $\Box$ 

Figure 76.0

To deploy a solution specifically for EWM systems, input into the 'Source Table Name' column the full table name or it is also acceptable to input a table name prefix. It is not necessary to input a value in the 'Target Table Name' column. Tick both the 'EWM Active' and 'Active' checkboxes. It is necessary to maintain these settings in the <u>Target client</u>.

These settings will force the import to substitute the client number for the last three characters for those table prefixes entered in this table. It will perform the conversion only if the last three characters are numeric.

A sample table entry that would convert the clients for EWM doc flow tables (Fig. 76.1).

Figure 76.1 New Entries: Overview of Added Entries 🧐 🖶 🖫 🖫 Mapping table for swapping target table names Source Table Name Target Table Name EWM Active Active /1DF/ 4 4

# Administration - Logical System Conversions

## Logical System Configuration

During the import of data, Gold Client will change the Logical System name from the Logical System name assigned in the Source to the Logical System name assigned in the Target; an example is visible via t-code SCC4 where the client is defined (Fig. 80.0). Performing this conversion during import replaces the need to run BDLS to convert the Logical System name.

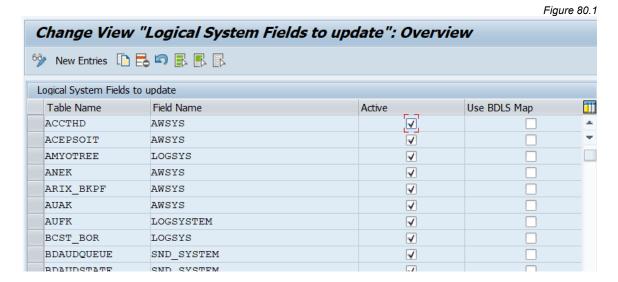
The Qlik team provides this configuration by default but users may freely maintain this table as required to include any tables and fields that need to be converted during import for the various AWSYS or LOGSYS type of fields.



Figure 80.0

Enter the tables to be converted in the Table Name column and in the Field Name column, input the respective field. If the box in the Active column is checked, then the respective table/field will have its Logical System name converted during import; if not checked as Active, then the Logical System name will not be converted (Fig. 80.1).

The Use BDLS Map column can be selected when additional logic is required due to data being replicated to connected systems (CRM, for example). See the next section titled Logical System Mapping for more details.



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## Logical System Mapping

Logical System Mapping allows for the conversion of Logical System values in those environments where multiple SAP solutions are utilized and are connected to each other. In the preceding section titled <u>Logical System Configuration</u>, content is shared that describes how the Logical System value stored in the source will be converted to match the value stored in the target; however, in connected systems like CRM, SRM, GTS, EWM, etc. this simple conversion logic will not necessarily lead to positive results. This is because the Logical System value points to the system from which the data was sourced.

For example, there may be data in CRM such as a Business Partner that was initially created in ECC and then replicated to CRM; the Logical System field in the CRM table(s) will therefore contain the ECC Logical System value even though the data is in CRM.

A simple Logical System conversion would not lead to ideal results because it would convert the value to the **CRM target Logical System** and not the **connected ECC target Logical System**. Thus, the import program will interrogate the entries in this table (as required according to the settings defined in the Logical System Configuration table) and use these "mappings" to determine how to convert the Logical System values.

Add new entries to this table according to the organization's requirements and specific Logical System values. The value in the first Logical System column represents the Source value and the second Logical System column represents the target value (what it needs be converted to). The BDLS App column is just informational but helps provide visibility on where each conversion/mapping is used. In this example, the config is defined in a CRM system where the ECC Logical System values need to be converted from ERPCLNT800 to ERPCLNT200 (Fig. 81.0).

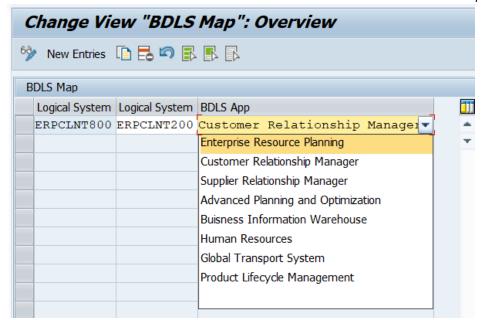


Figure 81.0

# Administration - Reports & Cleanup Utilities

## Activity Log

All exports, imports, and deletions are logged for reference and monitoring purposes, and so this utility can be used to view those details.

The input screen provides the user the flexibility to query this history in numerous ways (Fig. 90.0):

- Export only, import only, or deletion only, or all of them collectively
  - Additionally, the user can choose to query exports just by the Header data type - which is the default setting (Fig. 90.1) - or by all data types. See output examples for each to understand the difference; with default setting (Fig. 90.2) and with this setting off (Fig. 90.3). The Header data type is highlighted just for visibility, and it is possible in this case to see the other five data types that were included in the export.
- User Name, Created on, Data Type, Export ID, and Run time ID

Gold Client Activity Log Report **(** Logging Source Export Import Delete All ✓ Show only Header Export DT's Logging Characteristics User Name to Created on to Data Type to Export ID (relevant 4 Exp) to Run time ID to

Figure 90.1

Figure 90.0

✓ Show only Header Export DT's

Figure 90.2

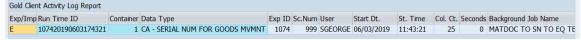
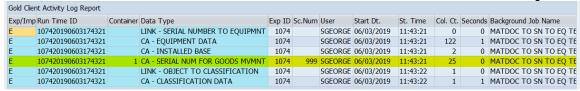


Figure 90.3



The report's output displays the following information:

- Exp/Imp: Identifies the relevant process with 'E' for export, 'I' for import, or 'D' for deletion
- Run Time ID: Unique value assigned to each process execution
- Container: Container number used in the process
  - Displayed only for exports
- Data Type: Data Type used in the process
- Exp ID: The Export ID used in the process
- Sc. Num: Scenario used in the process
  - Displayed only for exports
- User Name: Who executed the process
- Start Dt: Date on which the process was executed
- St. Time: Time on which the process was executed
- Col. Ct: The record count from the Header table in the Data Type that was processed
- Seconds: Number of seconds for the process to be executed
- Background Job Name: Name of background job used during processing

Here is a sample output (Fig 90.4).

Figure 90.4

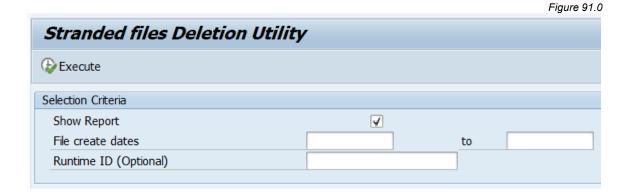


## Stranded Files Cleanup

This function can be used to report on those Gold Client files that were created from failed exports; additionally, this program can purge those files. This can be useful since the files consume space in the directory; however, files from more recent failed exports could still be restarted and so the Qlik team suggests targeting only those files that are at least 30-days old. Of course, each organization can use their own discretion to determine how old files should be prior to purging them.

The selection screen allows the user the ability to input dates or a date range, and/or a Runtime ID. The 'Show Report' option is set by default so that the program will only display the records without purging. This may be useful in case the files displayed in the output need to be reviewed before purging (Fig. 91.0).

If the 'Show Report' option is deselected on the selection screen and the program is executed, the file purging will occur immediately without the opportunity to cancel the process.

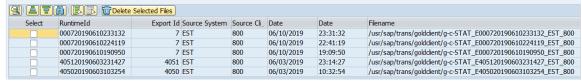


Upon execution, this message should appear (Fig. 91.1). This is to help the user recognize that exports could be in-flight and that this could disrupt those activities. It is best to purge files when export and import processing is minimized or altogether inactive.



Here is an example of the utility's output (Fig. 91.2).

Figure 91.2



From the output, it is possible for the user to select entries and use the Delete Selected Files button to delete files (Fig. 91.3).

Figure 91.3

| [ |        | Delete             | Selected Files     |                    |            |          |  |
|---|--------|--------------------|--------------------|--------------------|------------|----------|--|
| ı | Select | RuntimeId          | Export Id Source S | ystem   Source Cli | Date       | Date     | Filename   |
| ı |        | 000720190610233132 | 7 EST              | 800                | 06/10/2019 | 23:31:32 | /usr/sap/trans/goldclient/g-c-STAT_E000720190610233132_EST_800 |
| ı |        | 000720190610224119 | 7 EST              | 800                | 06/10/2019 | 22:41:19 | /usr/sap/trans/goldclient/g-c-STAT_E000720190610224119_EST_800 |
| ı |        | 000720190610190950 | 7 EST              | 800                | 06/10/2019 | 19:09:50 | /usr/sap/trans/goldclient/g-c-STAT_E000720190610190950_EST_800 |
| ı |        | 405120190603231427 | 4051 EST           | 800                | 06/03/2019 | 23:14:27 | /usr/sap/trans/goldclient/g-c-STAT_E405120190603231427_EST_800 |
| ı |        | 405020190603103254 | 4050 EST           | 800                | 06/03/2019 | 10:32:54 | /usr/sap/trans/goldclient/g-c-STAT_E405020190603103254_EST_800 |

## Table Cleanup Utility

This utility is used to purge entries from the Gold Client tables listed below.

When an export is executed, these tables will be populated while processing but if the export completes successfully, then the records in these tables (for the given export) are automatically deleted; however, for exports which are <u>not</u> successful, the records are left within the tables. As such, executing this program will remove these records.

```
/HTG/GCSWRKRTABL
/HTG/GCSEXPFILES
/HTG/GCS_GETWORK
/HTG/GCSFILETODO
/HTG/GCSFILEPROG
/HTG/GCSFLOWTODO
/HTG/GCS_DERIVET
/HTG/GCS_DERIVEX
/HTG/GLC_TRA_H
/HTG/GLC_SYNCDET
/HTG/GLC_SYNCHD
```

This program contains no input screen so selecting it prompts the user with the question about proceeding or not (Fig. 92.0). If 'Yes' is selected, the program will immediately initiate the purging process in the background. While the process is running, a message should appear at the bottom of the screen (Fig. 92.1).



Figure 92.0

Figure 92.1

Deletion in Progress for table : /htg/gcsexpfiles

When the process is completed the screen will show how many records were deleted per table. (Fig. 92.2).

Figure 92.2

# Clean up Utility Table Name No. of records deleted /HTG/GCSWRKRTABL 79 30.421 /HTG/GCS\_GETWORK 1.601 /HTG/GCSFILETODO 60.221 /HTG/GCSFILEPROG 0 /HTG/GCSFLOWTODO 19.457 /HTG/GCS\_DERIVET 12 /HTG/GCS\_DERIVET 12 /HTG/GCS\_DERIVEX 0 134.374 /HTG/GLC\_SYNCHD 100

## Export ID Manager

The primary purpose of the Export ID Manager utility is to locate and, as needed, delete those Export ID records which are no longer required.

The Export IDs can be found using various inputs: Export ID, Export Type, Data Type, and even the last time the Export ID had been executed. Additionally, the user has the options to choose My Export IDs or All Export IDs in lieu of using any inputs (Fig. 93.0).

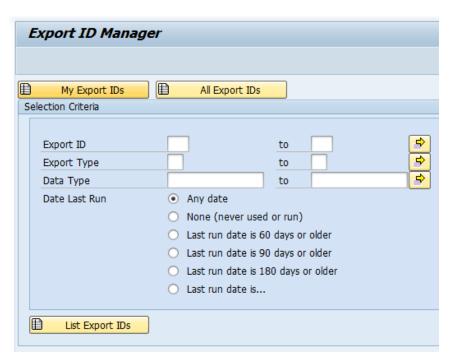
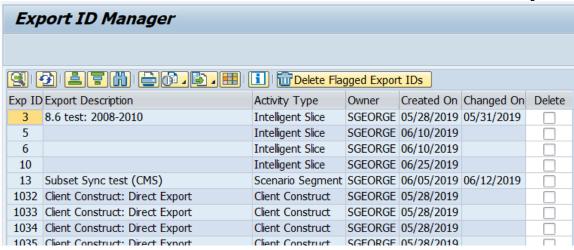


Figure 93.0

Executing this utility generates the output displayed on the Export ID Manager screen. This information consists of Export ID, Export ID description, Activity Type, Owner, Created On, and Changed On (Fig 93.1).

Figure 93.1



The checkboxes in the Delete column can be used to select those Export IDs that are no longer needed. After selecting, choose the 'Delete Flagged Export IDs' button located on the toolbar (Fig. 93.2).

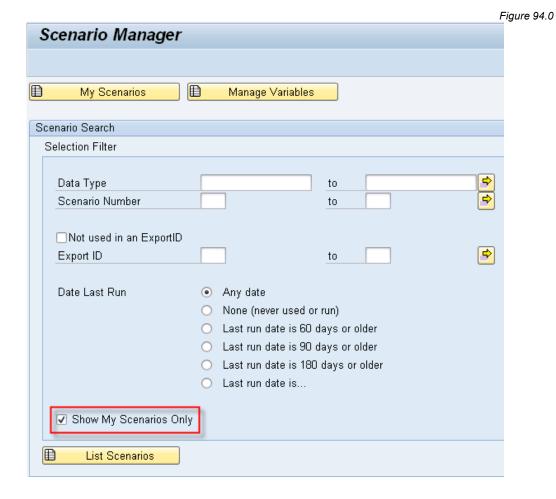
The delete action deletes the Export ID(s) but does <u>not</u> delete the Scenarios which are assigned to the Export ID(s). This deletion activity cannot be undone.

Figure 93.2 Export ID Manager m Delete Flagged Export IDs Exp ID Export Description Activity Type Owner Created On Changed On Delete 8.6 test: 2008-2010 Intelligent Slice SGEORGE 05/28/2019 05/31/2019 5 Intelligent Slice SGEORGE 06/10/2019 6 Intelligent Slice SGEORGE 06/10/2019 10 SGEORGE 06/25/2019 Intelligent Slice 13 Subset Sync test (CMS) Scenario Segment SGEORGE 06/05/2019 06/12/2019 1032 Client Construct: Direct Export Client Construct SGEORGE 05/28/2019 1033 Client Construct: Direct Export Client Construct SGEORGE 05/28/2019 Client Construct SGEORGE 05/28/2019 1034 Client Construct: Direct Export Client Construct SGEORGE 05/28/2019 1035 Client Construct: Direct Evport

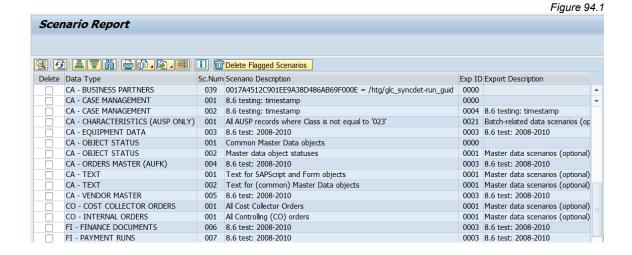
## Scenario Manager

The primary purpose of the Scenario Manager utility is to locate and, as needed, delete those Scenario Segment records which are no longer required. This data can be found using a wide-range of user inputs such as Data Type, Scenario Number, Export ID, or Not used in an Export ID, and even the last time the Scenario Segment had been executed in an export (Fig 94.0).

Perhaps the most important input is the one named 'Show My Scenarios Only'. Deselecting this setting allows the user to report – and possibly delete – Scenario Segments created/owned by other users; however, there is a security activity set specifically for this option. If the user has the authorization, this option can be deselected; however, if the user is not authorized, then this option is suppressed, and it cannot be deselected, and the result is that the user can only see their own data.



Executing this utility generates the output displayed on the Scenario Report screen. This information consists of Data Type, Scenario Number and Description, Export ID and Description, Container, Scenario Owner, and Date (Fig 94.1). It may be necessary to scroll in order to view the various columns.



The checkboxes in the Delete column can be used to select those Scenarios that are no longer needed. After selecting, choose the 'Delete Flagged Scenarios' button located on the toolbar (Fig. 94.2). This action deletes the Scenario itself and it also deletes it from the associated Export ID, if this relation exists. This deletion activity cannot be undone.

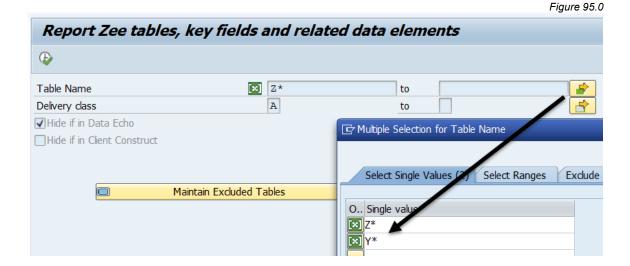


## Custom Table Discovery

This program can be used to try and identify custom tables within a given system that might need to be incorporated into the Gold Client configuration. The primary purpose is to arm users with information about which tables are in a given system that may be relevant for incorporation.

The default inputs are for those tables named Z\* and Y\* and have a delivery class of 'A' (Application Data). The user can add/edit the Table Name and Delivery Class inputs as required (Fig. 95.0).

The 'Hide if in Data Echo' and 'Hide if in Client Construct' options can be used to exclude those custom tables which have already been incorporated into one or both of the Gold Client configurations.



The screen also has an option to maintain a list of tables that should be excluded from the report each time it is executed. Selecting the 'Maintain Excluded Tables' button will launch a new screen where tables can be excluded from the /HTG/ZEE report (Fig. 95.1).



The report output lists the custom Table Name, Delivery Class, Short Description, Table Position, Field Name, Data Element, and Long Field Label (Fig. 95.2). This information may be very useful in identifying where to place the custom tables into the Gold Client configuration.

The output only shows the key fields for each custom table, and skips the displaying of the first key field, MANDT, or the Client field.

Figure 95.2

|   |                                     |                 |               | J                    |  |  |  |  |
|---|-------------------------------------|-----------------|---------------|----------------------|--|--|--|--|
| Report Zee tables, key fields and related data elements |                                     |                 |               |                      |  |  |  |  |
| [] 4 7 7 6  | *1 4 1 1 1                          |                 |               |                      |  |  |  |  |
| Table Name  | D Short Description                 | TabP Field Name | Data element  | Long Field Label     |  |  |  |  |
| ZACT_NAMES  | A IMG activity names                | 2 ACTIVITY      | CUS_IMG_AC    | IMG Activity         |  |  |  |  |
| ZADHOCXPORT   | A Import/Export Structure for ADI-  | IOC E 2 RELID   | INDX_RELID    | Area                 |  |  |  |  |
|   | A                                   | 3 ZPROG         | CPROG         | CALL program         |  |  |  |  |
|   | A                                   | 4 SRTF2         | INDX_SRTF2    | Counter              |  |  |  |  |
| ZAH_DANGER  | A Hazardous material number         | 2 DANGER_NO     | SDANGER_NO    | Haz. material number |  |  |  |  |
| ZAH_MC  | A Table for multiple choice quiz    | 2 COURSE        | ZAH_MC_COURSE | Course               |  |  |  |  |
|   | A                                   | 3 TOPIC         | ZAH_MC_TOPIC  | Topic for question   |  |  |  |  |
|   | A                                   | 4 LANGUAGE      | LANGU         | Language Key         |  |  |  |  |
| ZAH_VOTE  | A                                   | 2 UNAME         | UNAME         | User Name            |  |  |  |  |
| ZAIF_D01_SIDX_01  | A Single index table for DEMO BUF   | A_IN 2 MSGGUID  | GUID_32       | GUID 16              |  |  |  |  |
| ZARIBA_AN_ERPINV  | A Stores invoices created in ERP ar | nd wh 2 BUKRS   | BUKRS         | Company Code         |  |  |  |  |
|   | Α                                   | 3 BELNR         | XBLNR         | Reference            |  |  |  |  |
|   | A                                   | 4 GJAHR         | GJAHR         | Fiscal Year          |  |  |  |  |
|   |                                     |                 |               |                      |  |  |  |  |

## Activity Log Cleanup

This utility will remove logs older than the number of days specified. This is helpful because it will purge logs that are no longer needed and thus clears space within the file system.

By default, 60 days is populated and the report only mode is selected. You can also choose to cleanup log files by adding specific Data Type(s) to the selection screen (Fig. 96.0).

Gold Client - Log Entries Cleanup Utility

Table /HTG/GC\_LOG or /HTG/GC\_LOG2

Data Type

Delete entries NNNN days old

✓Report only (no deletion)

Here is the output when executed with the 'Report only' option (Fig. 96.1). It lists the relevant data type as well as the date and time the log was created.

Gold Client - Log Entries Cleanup Utility

Would be deleted: FI - FINANCE DOCUMENTS 01/25/2017 02:56:49
Would be deleted: HR - PERSONNEL MASTER 01/25/2017 02:51:05
Would be deleted: SD - SALES DOCUMENTS 01/25/2017 02:51:05
Would be deleted: LINK - PERNR TO ORG MANGT 01/25/2017 02:51:09
Would be deleted: FI - FINANCE DOCUMENTS 01/25/2017 02:51:09
Would be deleted: FI - FINANCE DOCUMENTS 01/25/2017 02:51:18
Would be deleted: LINK - FI TO OPERATING CONCERN 01/25/2017 02:51:18
Would be deleted: LINK - FINANCE DOC TO FAGLFLEXA 01/25/2017 02:51:19
Would be deleted: MM - MATERIAL VALUATION 01/25/2017 02:51:19
Would be deleted: SD - DELIVERIES 01/25/2017 02:51:19
Would be deleted: SD - DELIVERIES 01/25/2017 02:51:20

To run the log deletion, remove the checkmark from the 'Report only' option and execute. Here is the output when executed without the 'Report only' option (Fig. 96.2).

Figure 96.2

# Gold Client - Log Entries Cleanup Utility Deleted: FI - FINANCE DOCUMENTS 01/25/2017 02:56:49 Deleted: HR - PERSONNEL MASTER 01/25/2017 02:51:05 Deleted: SD - SALES DOCUMENTS 01/25/2017 02:51:05 Deleted: LINK - PERNR TO ORG MANGT 01/25/2017 02:51:05 Deleted: LINK - PERNR TO ORG MANGT 01/25/2017 02:51:09 Deleted: FI - FINANCE DOCUMENTS 01/25/2017 02:51:18 Deleted: LINK - FI TO OPERATING CONCERN 01/25/2017 02:51:18 Deleted: LINK - FINANCE DOC TO FAGLFLEXA 01/25/2017 02:51:19 Deleted: MM - MATERIAL VALUATION 01/25/2017 02:51:19 Deleted: SD - CUSTOMER MASTER 01/25/2017 02:51:19 Deleted: SD - DELIVERES 01/25/2017 02:51:20 Deleted: SD - DELIVERES 01/25/2017 02:51:20

## Administration - Installation/Setup

## Installation Setup

This is an entry point into the Auto Config utility which is primarily intended for when Gold Client is being initially deployed; however, some programs may provide value beyond the initial deployment which is why they are segregated into two sections, one being for 1-time execution and the other being for periodic execution.

The suite of utilities included here consists of: Configure COPA, Deactivate Linkages, Removing Non-Existent Tables, Initialize /HTG/number ranges, Configure Master Data Tables, and Configure Custom Table. The programs can be executed individually or collectively as required, but from a practicality standpoint, most users would likely favor individual execution.

The content that follows describes each of these programs in greater detail (Fig. 100.0).



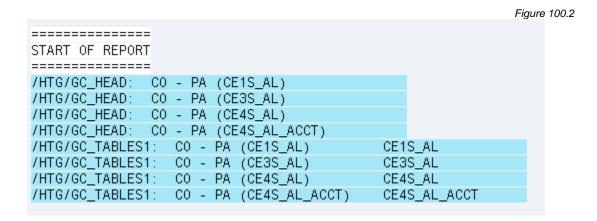
## **Configure COPA**

Since CO-PA (Profitability Analysis) tables are always unique for each customer it is necessary to create the data types within the Data Echo framework so that the data stored in these tables can be successfully copied. If you do not use CO-PA, then this utility is not relevant.

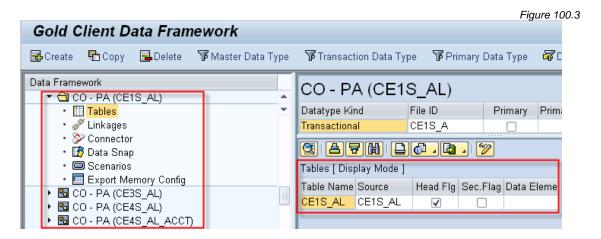
To run this utility, just check the 'Configure COPA' box, input the correct Operating Concern(s), and select 'Execute' (Fig. 100.1).



The tables being updated by this utility all reside within the Gold Client namespace (/HTG/\*). Here is what the output looks like after having executed the Configure COPA utility (Fig. 100.2).



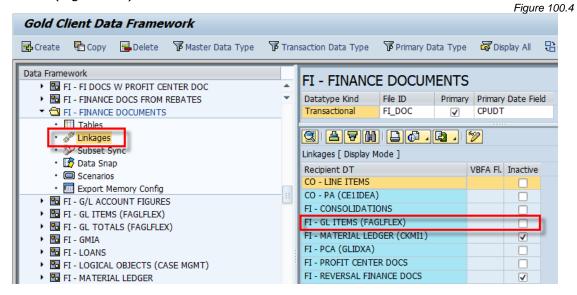
Here is a sample result of executing this utility where the Data Echo data types have been created, including the associated tables and linkages (Fig. 100.3).



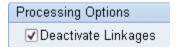
## **Deactivate Linkages**

This utility will set Recipient Data Types which are not relevant to the customer's system as inactive. The benefit here is that it helps optimize the data export process. Alternatively, any Recipient Data Type links can be deactivated manually.

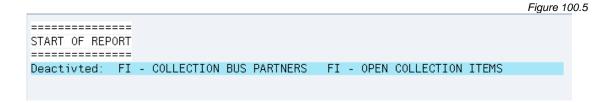
Let's take a hypothetical example that your system is not using the New GL functionality and thus there is no data to copy in those relevant tables. Executing this utility would then set the Recipient Data Type FI – GL ITEMS (FAGLFLEX) to be inactive (Fig. 100.4).



To run this utility, just check the 'Deactivate Linkages' box and select 'Execute'. It is not even necessary to specify which data types to analyze for deactivation; instead, <u>all</u> Recipient Data Types are automatically analyzed.



Here is what the output looks like after having executed the Deactivate Linkages utility (Fig. 100.5).



## **Remove Non-Existent Tables**

Gold Client is delivered with many tables already pre-configured, so this utility is used to remove tables from both the Client Construct and Data Echo frameworks that do not exist within a customer's system. The tables being updated by this utility all reside within the Gold Client namespace (/HTG/\*).

To run this utility, just check the 'Remove Non-Existent Tables' box and select 'Execute'.

▼Remove Non-Existent Tables

Here is an example of what the output looks like after having executed the Remove Non-Existent Tables utility (Fig. 100.6).

Figure 100.6

| Gold Client - Synchronise TABLE                      | S1 and TABLINK entrie                         | es |
|--|---|----|
|  |   |    |
| Gold Client - Synchronise TABLES1 and TAB            | BLINK entries                                 |    |
| START OF REPORT  =================================== | ZPHDEMO_ATTRTAB2<br>ZRPM_STATUS<br>ZAH_DANGER |    |

## Initialize /HTG/ number ranges

To use Gold Client, it requires that a few different number ranges exist. The number range object themselves are delivered as part of the Gold Client code, but the ranges themselves must then be defined in **each client** where Gold Client will be used.

To run this utility, check the 'Initialize /HTG/ number ranges' box and select 'Execute' to reach the subsequent screen.

✓ Initialize /HTG/ number ranges

When displaying the selection screen, the default entry is 'Report Only' which is the same as running the program in test or simulation mode. Select the 'Update Database' option to define the actual number ranges (Fig. 100.7).

Figure 100.7

| Insert /HTG        | /* NRIV entries if not present |
|--------------------|--------------------------------|
| Execute            |                                |
| Processing Options |                                |
| Report Only        |                                |
| O Update Datab     | ase                            |
|                    |                                |

The following outputs will appear based on the various circumstances: if the number ranges have already been defined (Fig. 100.8); if they have not yet been defined (Fig. 100.9); or they are defined when executing the program (Fig. 100.10).

If the ranges already exist and the user selects 'Update Database' no changes will occur since they only need to be defined once.

Figure 100.8

| Object name | Subobj.val | No | Year | From number | To number | Description           |
|-------------|------------|----|------|-------------|-----------|-----------------------|
| /HTG/COUNT  |            | 01 |      | 20000001    | 9999999   | Object already exists |
| /HTG/EXPID  | DS         | 1  |      | 1001        | 9000      | Object already exists |
| /HTG/EXPID  | DW         | 1  |      | 9900        | 9999      | Object already exists |
| /HTG/EXPID  | EC         | 1  |      | 0001        | 0899      | Object already exists |

Figure 100.9

| Object name | Subobj.val | No | Year | From number | To number | Description            |
|-------------|------------|----|------|-------------|-----------|------------------------|
| /HTG/COUNT  |            | 01 |      | 20000001    | 9999999   | Object does not exists |
| /HTG/EXPID  | DS         | 1  |      | 1001        | 9000      | Object does not exists |
| /HTG/EXPID  | DW         | 1  |      | 9900        | 9999      | Object does not exists |
| /HTG/EXPID  | EC         | 1  |      | 0001        | 0899      | Object does not exists |

## Figure 100.10

| Object name | Subobj.va | No Year | From number | To number | Description    |
|-------------|-----------|---------|-------------|-----------|----------------|
| /HTG/COUNT  |           | 01      | 20000001    | 9999999   | Object created |
| /HTG/EXPID  | DS        | 1       | 1001        | 9000      | Object created |
| /HTG/EXPID  | DW        | 1       | 9900        | 9999      | Object created |
| /HTG/EXPID  | EC        | 1       | 0001        | 0899      | Object created |

## **Configure Master Data Tables**

This utility is used to add various Condition tables (pricing, output, KOT\*), HR infotypes, and custom tables to the Client Construct framework so that the master data stored in these tables can be successfully copied. Alternatively, tables can be added to the framework manually.

To run this utility, just check the 'Configure Master Data Tables' box and select 'Execute'.

▼ Configure Master Data Tables

The tables being updated by this utility all reside within the Gold Client namespace (/HTG/\*). Here is an example of what the output looks like after having executed the Configure Master Data Tables utility (Fig. 100.11).

Figure 100.11 ========= START OF REPORT ========== /HTG/ZTABLEMAP: BILLING OUTPUT CONDITIONS B000 BILLING OUTPUT CONDITIONS /HTG/ZTABLEMAP: B001 /HTG/ZTABLEMAP: BILLING OUTPUT CONDITIONS B002 /HTG/ZTABLEMAP: BILLING OUTPUT CONDITIONS B005 /HTG/ZTABLEMAP: BILLING OUTPUT CONDITIONS B006 BILLING OUTPUT CONDITIONS /HTG/ZTABLEMAP: B007 /HTG/ZTABLEMAP: BILLING OUTPUT CONDITIONS B008 /HTG/ZTABLEMAP: BILLING OUTPUT CONDITIONS B009 BILLING OUTPUT CONDITIONS /HTG/ZTABLEMAP: B010

Here is a sample result of executing this utility where the tables have been added to the Client Construct data types (Fig. 100.12).

Figure 100.12



#### **Configure Custom Table**

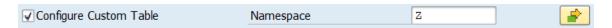
This utility enables customers to easily incorporate custom tables into the Data Echo framework. The end result is typically a joining or mapping between standard SAP tables and custom tables. Once the join is complete, subsets of data stored in these tables can be successfully copied using the Data Echo functionality.

The tables being updated by this utility all reside within the Gold Client namespace (/HTG/\*). Alternatively, custom tables can be added into the Data Echo framework manually.

To run this utility, check the 'Configure Custom Table' box.



Upon doing so, a Namespace field will appear with values 'Z' and 'Y' defaulted. The user can input additional table namespaces if required; for example, an organization may have their own custom namespace that could be added.



Here is an example of what the output looks like after having executed the utility (Fig. 100.13).



Using the output, it's possible to review which custom table could be potentially joined to which SAP standard table based on the utility's comparison of **matching data elements**. An example of this is highlighted (Fig. 100.14) where the link between custom table ZDS400\_POS and standard table EKKO using common fields EBELN to EBELN is proposed.

Figure 100.14



To create the join between the proposed tables, select the relevant entries and then click the 'Accept' button (Fig. 100.15).

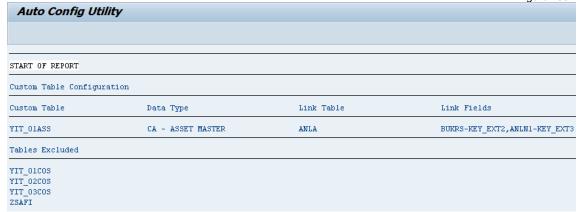
Figure 100.15



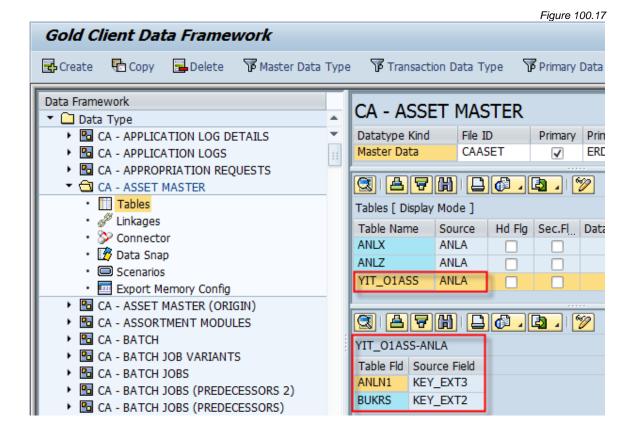
**Caution:** It's important to review each proposed table link critically as linking in custom tables *incorrectly* or *inefficiently* can impact the performance of data exports. If unsure whether to proceed with one or more table links, consider seeking advice from either your team's internal ABAP resources and/or the Qlik support team.

Upon accepting one or more links between custom and standard tables, an output is provided displaying the outcome (Fig. 100.16).

Figure 100.16



The actual result of executing this utility is reflected in this example where custom table YIT\_O1ASS was linked to table ANLA using the proposed common fields within Data Echo data type CA – ASSET MASTER (Fig. 100.17).



There may be table joins that you want to exclude from future executions of the Configure Custom Table utility (for whatever reason). These proposed joins can be eliminated by selecting the appropriate entries and selecting the 'Exclude' button (Fig. 100.18).

Figure 100.18



Some proposed joins may use only a single data element, and these are typically hierarchical objects; Company Code, Plant, and Sales Organization are just a few examples. The Qlik team would never recommend creating a join using just one of these lone fields as it is far too generic and would likely cause Gold Client to export substantial amounts of data from the relevant custom table.

To define a list of lone data elements that the program should exclude, select the 'Field Exceptions' button (Fig. 100.19). In the table that appears on the subsequent

screen, add data elements as required; save changes and exit the table (Fig. 100.20). The report must be executed again for these new entries to be considered.

To be clear, the program does not ignore these data elements entirely, just when they are **the only common data element shared between the two tables**.

Figure 100.19

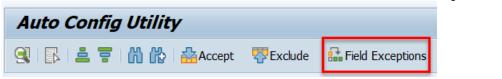
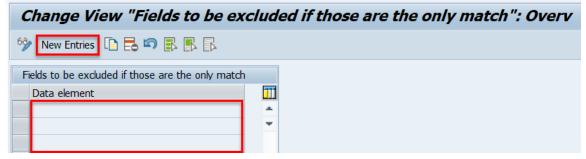


Figure 100.20



### Setup Confirmation

This utility is primarily used by the Qlik team prior to deploying Gold Client in a customer's system to help ensure that the system and related items are ready; however, it may also be useful for customers who want to deploy Gold Client to other systems where it did not exist previously and confirm that everything is setup accordingly.

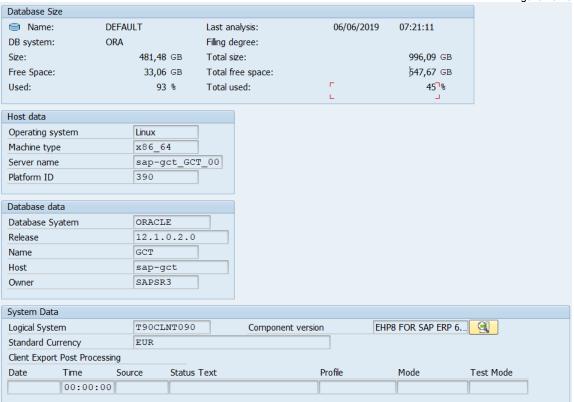
This program does not require any user inputs. Selecting this program triggers its execution immediately. The total runtime should be less than a minute.

Perhaps the most useful part of the report's output is listed at the top (Fig. 101.0). If there were any issues found with the various configuration items, the status would be red. Freely contact Qlik support if assistance is required with any items displaying a red / error status.

Figure 101.0 **Automatic Configuration Confirmation utility** Configuration checklist Configuration Name Status Message Consolidation Route Consolidation routes are configured in the current system. CONFIG\_TEST file was successfully writen. Write to File Read From File Successfully read the file. Authorization check passed. Authorization to ZGOLD Client Construct Config exists in the current system. Client Construct Config Data Echo Config Data Echo Config exists in the current system.

The remaining part of the output is more informational and is useful for the Attunity team prior to deploying Gold Client on the customer's system (Fig. 101.1).

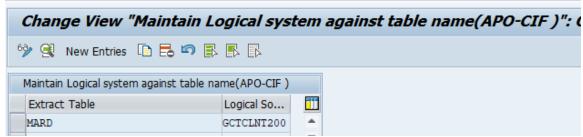
Figure 101.0



## Administration - SCM

## APO-CIF Configuration

Figure 102.0



This utility defines which target APO system is intended to receive APO data through CIF after import of ECC data. This needs to be defined on the target ECC system, with the RFC/logical system of the target SCM/APO system.

The entries are per table, and interfaces with the APO post-import utilities.

## Administration - Miscellaneous

## Change Gold Client File Path

The purpose of the Change Gold Client File Path utility is to change the file directory for <u>existing data files</u> in order to match the value in the Target client in those exceptional cases when the file directory is different from between the Source and Target clients.

Let's hypothesize that the file directory in the **Source** client is named: /usr/sap/trans/goldclient/<FILENAME> and therefore the generated files are named like this:

/usr/sap/trans/goldclient/g-c-E913\_CAADDR\_C0001\_EI4\_800.20121113.132825

However, the file directory for the **Target** client is

/usr/sap/trans/goldclient/EI4/<FILENAME> where "EI4" is part of the directory, and so to be able to import this file, it must be renamed like this: /usr/sap/trans/goldclient/EI4/q-c-E913\_CAADDR\_C0001\_EI4\_800.20121113.132825

Upon selecting this utility, this confirmation message appears (Fig. 103.0). There are no user inputs required as all existing files in the Target will be updated.



### Memory Optimization Upgrade

This utility can be used to quickly update Gold Client's memory parameters. These parameters are typically maintained individually via the Memory Optimization utility, but this utility streamlines the maintenance process when changes need to be applied to all data types. This program's primary use case is for Gold Client customers who are upgrading from a pre-8.5 version to 8.5 or later, but it can also be used at other times when relevant. The key here is understanding that this program's execution will affect all data types.

The user must select either the 'Fixed value' or 'Multiply value' processing option where the fixed option is set by default. Qlik's best practice recommendation is to use fixed values and set 'Collections' as 1,000 and 'Package Size' as 20,000 (Fig. 104.0); however, these values are not set by default and so rely on user input.

If the multiply option is chosen, the screen will refresh accordingly (Fig. 104.1).

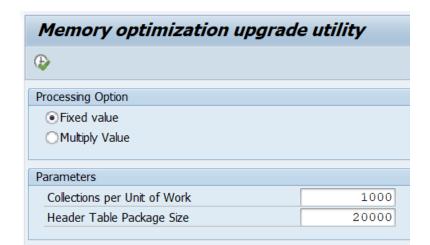


Figure 104.0

Figure 104.1

| Memory optimization upgrade utility |  |
|-------------------------------------|--|
| <b>&amp;</b>                        |  |
| Processing Option                   |  |
| ○Fixed value                        |  |
| Multiply Value                      |  |
| Parameters                          |  |
| Mult. factor for Collections        |  |
| Mult. factor for Package Size       |  |

Based on the chosen processing option, input the relevant parameters and execute the program. The message below should appear.

✓ Collections and package size values are modified

To check if the memory parameters were updated, go to the Configuration menu and select the Memory Optimization utility (Fig. 104.2). The values in this table should be displayed according to the user's inputs (Fig. 104.3).

Figure 104.2

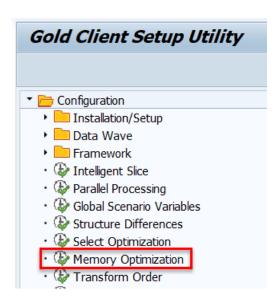
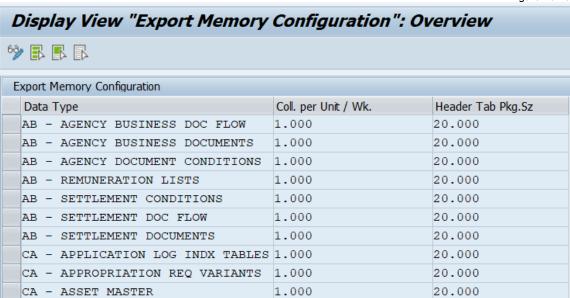


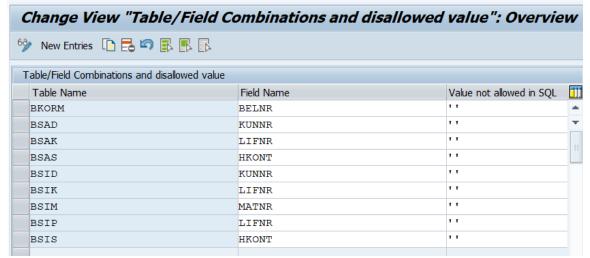
Figure 104.3



### Select Optimization

This table contains table name and field name values and the disallowed values for each combination (Fig. 105.0). This can be useful when a SQL statement would cause slow performance when there are no values to return. An example of this would be for FI documents by vendor. If the vendor field is not always populated, all FI documents would still be part of the search even though they will never be returned by that query. Disallowing a blank value for the vendor field would stop the performance hit.

Figure 105.0



## **Conversion**

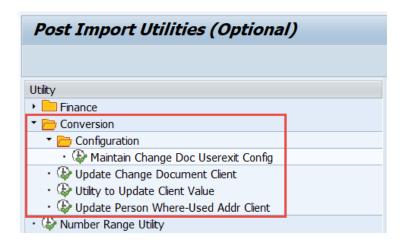
Some data objects are stored in the database with a client value attached. If the client value in the source and targets are different, this data may not display successfully even though the data has been successfully copied to the target. To resolve these various issues, Gold Client has conversion-related utilities that can be used to target each of the areas where these issues reside. The conversion programs that exist currently involve data stored in theses tables: CDHDR and CDPOS (Change docs), STXH and STXL (Text), and ADRV (Address where-used).

This suite of conversion utilities has been moved out of the Configuration menu and is located on the main Gold Client screen under the function named **Post Process** (Fig. 110.0 and 110.1).



Figure 110.0

Figure 110.1



### Update Change Document Client

After data has been imported, the client number in the change document tables (**CDHDR** and **CDPOS**) may need to be updated from the old client number (source) to the new client number (target). Executing this program will perform that conversion.

The user is required to input the old client number and one or more Change Doc objects (the value stored in CDHDR.OBJECTID).

If useful, the program can be executed first in report mode (the default setting) to identify the number of relevant records found. Select the 'Update table entries' radio button to perform the actual conversion. Freely increase the default 'Max records to process' parameter when required (Fig. 111.0).

Update Change Document Client

Description:

Update parameters

Old client

New client

Soo

Object identifying criteria

Change doc. object

Processing options

■ Report on expected ct. only

Update table entries

Max records to process

9.999

Figure 111.0

A sample output that displays after having executed the program (Fig. 111.1).

Figure 111.1

| Update Change Document Client  |            |  |
|--|------------|--|
|  |            |  |
| Update Change Document Client  |            |  |
| CDHDR Records meeting selection criteria:<br>CDPOS Records meeting selection criteria: | 126<br>383 |  |

### Utility to Update Client Value

After data has been imported, the client number in the text tables (**STXH**, **STXL**, and **STXB**) may need to be updated from the old client number (source) to the new client number (target). Executing this program will perform that conversion.

The user is required to input the old client number, one or more Text objects (the value stored in STXH.TDOBJECT), and one or more Text IDs (the value stored in STXH.TDID). **Note**: inputting an asterisk (\*) is an acceptable value in the Object and ID fields.

If useful, the program can be executed first in report mode (the default setting) to identify the number of relevant records found. Select the 'Update Table Entries' radio button to perform the actual conversion. Freely increase the default 'Max records to process' parameter when required (Fig. 112.0).

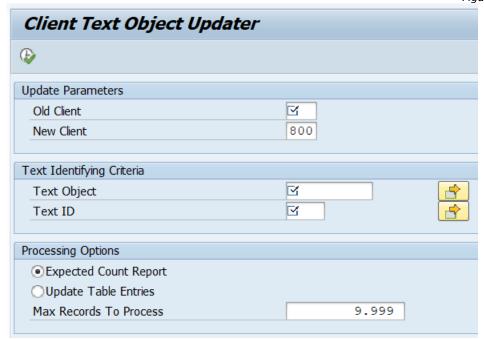
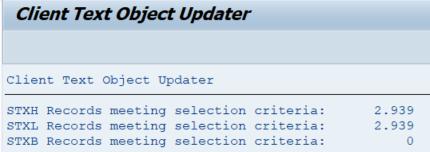


Figure 112.0

A sample output that displays after having executed the program (Fig. 112.1).

Figure 112.1



### Update Person Where-Used Addr Client

After data has been imported, the client number in address table **ADRV** may need to be updated from the old client number (source) to the new client number (target). Executing this program will perform that conversion.

The user is required to input the old client number, one or more Application table names (the value stored in ADRV.APPL\_TABLE), and one or more Application field names (the value stored in ADRV.APPL\_FIELD). **Note**: inputting an asterisk (\*) is an acceptable value in the Application table name and Application field name fields.

If useful, the program can be executed first in report mode (the default setting) to identify the number of relevant records found. Select the 'Update Table Entries' radio button to perform the actual conversion. Freely increase the default 'Max records to process' parameter when required (Fig. 113.0).

Client Person Where-Used Address Updater **(** Update parameters  $\leq$ Old Client 800 New Client Object identifying criteria for table ADRVP Appl. table logical name  $\mathbf{Z}$ 4 Appl. table logical field name Processing options Expected Count Report Update Table Entries Max Records To Process 9.999

Figure 113.0

Figure 113.1

A sample output that displays after having executed the program (Fig. 113.1).

Client Person Where-Used Address Updater

Client Person Where-Used Address Updater

ADRVP Records meeting selection criteria: 14.550

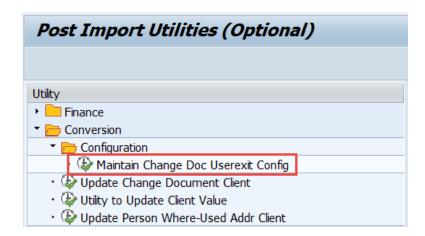
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### Maintain Change Doc Userexit Config

This program is another way of converting client values that are stored in the Change Document (CDHDR and CDPOS) tables but can be thought of as a 2<sup>nd</sup>-generation and more mature solution. It leverages Gold Client's "user exit" functionality so that the client conversion is performed automatically during the data import process.

The scope of the conversion is determined by the values stored within this configuration table which resides in the Post Process menu (Fig. 114.0).

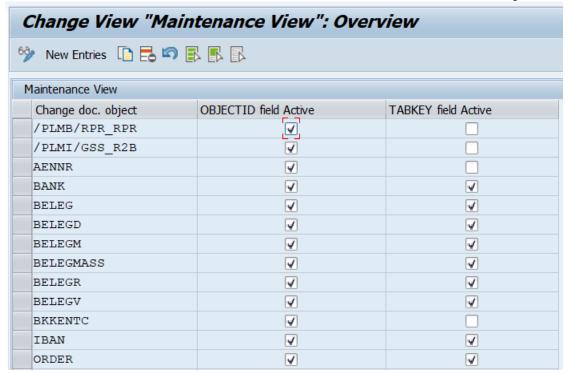
Figure 114.0



The user can freely maintain in this table whatever Change Doc objects require client conversion with respect to the data in their system (Fig. 114.1).

- The 'Change doc. object' column represents the values stored in CDHDR.OBJECTID / CDPOS.OBJECTID
- Selecting the checkbox in the 'OBJECTID field Active' column informs Gold Client to perform the client conversion for values stored in CDHDR.OBJECTID and CDPOS.OBJECTID
- Selecting the checkbox in the 'TABKEY field Active' column informs Gold Client to perform the client conversion for values stored in **CDPOS.TABKEY**

Figure 114.1



For the values in this table to be effective, the Change Doc user exits must be active. This config area can be reached by going to the main Gold Client screen and then selecting the Configuration menu, and then on the following screen by selecting Maintain User Exits.

These respective user exits need to exist in this table and be set as 'Active' for this solution to work. Note that there is entry for CDHDR and another for CDPOS so they can be used indepedently when required (Fig. 114.2).

Figure 114.2



Once the Change Doc configuration table has been populated accordingly, and the user exits configured, this client-conversion activity will occur automatically during the import process.

# 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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