

Deployment Guide for Qlik Gold Client 8.7 S4, ECC, CRM, GTS, TM, EWM, EM, SRM, MDG

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Introduction

This document will guide the customer through the Qlik Gold Client deployment process for the following SAP landscapes: S4, ECC, CRM, GTS, TM, EWM, EM, SRM, MDG. The contents of this document are typically reviewed with the Qlik Delivery Manager during a Gold Client Deployment Meeting.

A Gold Client deployment is divided into five phases:

- **Phase 1 Planning** Customer preparation tasks
- Phase 2 Implementation Configuration and data copy process
- **Phase 3 Testing** Data Validation and configuration adjustments
- Phase 4 Training Hands-on training workshops and presentations
- Phase 5 Post-Implementation Review deployment feedback and strategies

Following the process in this guide will ensure a successful Gold Client project.

SAP Component Requirements

The recommended minimum Support Pack information for Qlik Gold Client version 8.7.4 is listed below:

NetWeaver 740

SAP_ABA SAPKA74009 SAP_BASIS SAPKB74009 SAP_APPL SAPKH61707

Any SAP systems below these levels must use Qlik Gold Client version 8.7.0

Phase 1 - Planning

The following steps are part of the planning and preparation process.

1. Define Customer Resource Roles

<u>Project Manager</u> – Primary contact between the Customer and Qlik for the duration of the project. Coordinates schedule for technical and functional resource participation in Gold Client setup and training activities.

<u>Gold Client Technical Lead</u> – Designated Gold Client administrator for the Customer. SAP Basis experience preferred but not required. Will work with Qlik resources during implementation to understand Gold Client architecture and administration functions.

<u>Gold Client Functional Lead</u> - Designated data expert for the Customer. Needs to understand the SAP business processes for the Customer. Will work with the Customer SAP Functional Team to collect data examples to validate the Gold Client configuration during the implementation. Will participate in all Gold Client implementation and training activities.

2. Define SAP Landscape

The following information should be collected to help Qlik Gold Client Team understand the Customer's SAP environment:

- SAP Applications/Versions
- Production Database Size
- Database Type and Version is database compression used?
- Industry Solutions
- Active SAP Modules
- Third Party Add-ons (Vistex, OpenText, Readsoft, etc.)
- SAP Go-Live Year
- Operating System

3. Identify Source System/Client for Implementation

Production or a recent (6 months or less) copy of Production can be used as a source system for Gold Client master and transactional data exports. Exporting data is a read-only process and the Customer can control how many SAP background jobs are used during the export across multiple application servers. Gold Client cannot delete or import data in a Production system.

4. Provide Database Table Size Information

Having a list of SAP tables from the Customer's Production (or recent copy of Production) system with record count and database size information will help identify any custom areas for Qlik to add to the Customer's Gold Client configuration.

If the Customer is running an Oracle, SQL Server, or ECC on HANA, Qlik will provide a SQL script that will output table size information. Please return the generated output files to Qlik for analysis. For S4/HANA systems, SAP transaction SCC_CLIENT_SIZE can be used to collect table size information. (see Appendix for detailed steps)

For other databases, please use transaction DB02 to export a listing of all tables with record count and size information to an Excel spreadsheet; or have a Database Administrator output a listing of all tables with record count and size information to an Excel spreadsheet to send to Qlik for analysis.

5. Identify Target System/Client

Determine which system will be used as a target for the copied data during the Gold Client implementation. Development is typically a system that lacks quality data for adequate testing.

A primary Gold Client use case is to build a new unit test client in the Development system with a subset of Production data. Alternate initial approaches could include creating a new client in a sandbox or training system. Initial setup in a new client allows for an isolated area to configure and test Gold Client without impacting daily user activity.

The target system should be using the same Operating System as the source to avoid any data endian issues. Gold Client cannot copy data between Big-Endian/Little-Endian landscapes.

An existing client can be used but it needs to be deleted of all data before refreshing it with Gold Client. Using an existing client that already has data as an initial target is not recommended or supported because data discrepancies can occur when introducing Production data into this type of client.

Olik Community Article: Target Client Strategies for Gold Client Data Imports

How to Prepare the Target Client

In the Target System:

- a) Create a new client using transaction SCC4 (5 minutes)
 OR
 Delete an existing client using transaction SCC5 (may take several hours depending on database size)
- b) From the select Source Client, use transaction SCC8 to export profile SAP_UCSV (Customizing, User Master Records and User Variants). A transport will be generated that contains all client-dependent SAP configuration and user information. (1 – 2 hours)
- c) After successful Source Client configuration export, import the configuration into the Target Client using transaction STMS (1 3 hours)
- d) After configuration import completion, use transaction **SCC7** in background mode in the Target Client for import post-processing (30 minutes 1 hour)
- e) Assign a Logical System and Default Currency for Target Client in transaction SCC4 (5 minutes)

f) Ensure free database space is available on the Target System. Qlik can provide estimates on space recommendations after analysis of database size information and data volume requirements.

6. Establish a Shared File System

Gold Client copies master and transactional data using compressed files. These files need to be saved and accessed in a directory common to both Source and Target systems. This eliminates the need to copy files manually between systems. The file system needs meet the following requirements:

- File System must be available to both Source and Target Systems (including any attached Application Servers)
- File System must have at least 100 GB of free space. More space may need to be added based on data volumes.
- <SID>adm user must have read/write/delete access to the File System on both Source and Target Systems

7. Install Gold Client Software in Source and Target Systems

Gold Client installation transports can be downloaded from the <u>Qlik Software</u> <u>Download Page</u>. A Support Case assigned to the Customer will contain the instructions to download the correct files.

Import the Gold Client transports in both Source and Target systems. Use Transport Option **Ignore Invalid Component Version** if available. The Gold Client transports only contain objects in Qlik namespace /HTG/ and will not impact any standard SAP objects.

After Gold Client transports are imported successfully, run transaction /HTG/ZGOLD in Source and Target systems to apply the Software Key provided in the Qlik Gold Client Deployment Support Case. The Production SID of the SAP landscape needs to be entered when the Software Key is applied to each source and target system.

8. Assign Logical File Path

Use transaction FILE to assign the Gold Client shared directory in Logical Path /HTG/GC. This assignment will generate a transport request, so it is preferred to execute the FILE transaction in the Customer Development system where change requests are allowed and move the generated transport to the Source and Target systems using STMS. Logical Path /HTG/GCTR should be assigned the SAP transport directory – typically /usr/sap/trans (See the Appendix for detailed steps)

9. Establish Authorization, Network, and System Access

Review the authorizations outlined in the Security section of the Appendix. The Qlik Software Engineer SAP ID should have a standard Basis role to install and configure Gold Client. Key Basis transactions include: ST05, SE11, SE16, SM50, SM51, SM66, SM30 (for /HTG/* tables). Along with Basis access, the SAP ID should have display access to display any transaction that the Customer would like data validated. For example, if validation is required for sales documents, transaction VA03 would be required. (See Appendix for authorization summary)

Network access and Logon ID/password for both Source and Target clients needed. Can Qlik laptops be used to access Customer network or will Customer need to provide laptops? VPN access would allow Qlik Software Engineer remote access to monitor data copy process during implementation and address data issues more efficiently during and after the implementation. Please provide any security forms needed for System Access since Qlik Legal approval is required.

10. Define Data Examples and Transformation Requirements

Customer needs to provide specific document examples from key data areas (FI, SD, MM, etc.) on Source system to copy to Target system with Gold Client for validation by Customer during the implementation. This process will confirm the accuracy of the Gold Client configuration and allow Qlik to make any necessary adjustments before larger volumes of data are copied. Spreadsheets will be provided by Qlik allowing the Customer to define these data examples by module/data area and define data transformation requirements. Completed spreadsheets need to be returned to Qlik before the Gold Client Implementation.

11. Discuss Use Cases and Timelines

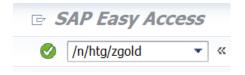
During a Gold Client deployment, the standard use case of building a new target client with a small subset of data will be reviewed and executed. Short-term and long-term goals for incorporating Gold Client into the Customer's data refresh strategy are discussed. Many Customers are interested in a time slice data copy approach, but that objective cannot be achieved until the standard use case is implemented and tested by the Customer with a smaller data sample.

When can the Customer complete all objectives defined in Planning Phase? When is the Customer's technical and functional team able to participate in the Gold Client Implementation and Training phases?

12. Confirm Setup Steps Completed

Once the technical prerequisites are completed, the Customer should execute the following steps on both source and target systems:

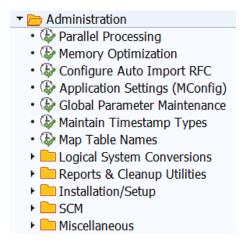
• Run transaction /HTG/ZGOLD



Click Configuration button



Open Administration folder



Open Installation/Setup folder



• Execute Setup Confirmation option

| Configuration checklist | | | | |
|-------------------------|------------|---|--|--|
| Configuration Name | Status | Message | | |
| Consolidation Route | *** | No consolidation route exists. | | |
| Write to File | ○ □ | CONFIG_TEST file was succesfully writen. | | |
| Read From File | | Succesfully read the file. | | |
| Authorization to ZGOLD | ○ □ | Authorization check passed. | | |
| Client Construct Config | ○ □ | Client Construct Config exists in the current system. | | |
| Data Echo Config | | Data Echo Config exists in the current system. | | |

Consolidation Route - Ignore Status - no longer needed in Gold Client 8.7.

• Send a screenshot of the Configuration Checklist output to Qlik for feedback.

13. Schedule Confirmation Meeting

A meeting with Qlik and the Customer to ensure all preparation steps are completed before Implementation activities are scheduled. The following steps are completed during a typical Confirmation Meeting:

- Load Initial Gold Client Configuration
- Execute Setup Confirmation Utility (if needed)
- Check Target Client Setup
- Review Data Examples and Training Schedule

Not being able to complete these items during the meeting could delay the

implementation and training phases.

Phase 2 - Implementation

Qlik Solutions Engineers will conduct a series of workshops with Customer's SAP technical

and functional team to complete Gold Client configuration, data copy process, and team

training activities. It is most effective for these workshops to be delivered onsite but they

can be conducted remotely.

Initial Setup

Qlik Solutions Engineer will configure Gold Client for initial data copy process.

Duration: 1 hour

Master Data Copy

Qlik Solutions Engineer works with Customer to export all SAP Master Data from

source system and import SAP Master Data into new target client.

Duration: varies depending on data volume

Gold Client Administration Overview

While Master Data is being copied, Qlik Solutions Engineer will review the Gold Client

Administration utilities with the Customer Technical team.

Duration: 1 hour

Transactional Data Copy

Qlik Solutions Engineer will use Gold Client Data Echo functionality to copy subsets

of SAP Transactional Data that Customer requested. Qlik will review the process

with Customer Technical team.

Duration: 2 hours

Data Automation Setup

Qlik Solutions Engineer will setup a Gold Client scenario to export deltas of SAP

Master Data on the Source system using Gold Client Data Wave functionality. Master

Data delta exports will be imported into target client at scheduled interval using Gold

Client Auto Import functionality. RFC connections need to be assigned for this

functionality as described on page 20 of the Gold Client Security Guide. Qlik will

review the process with Customer Technical team.

Duration: 2 hours

Security Meeting

Qlik Solutions Engineer will review Gold Client Security Guide with Customer

Technical Team to allow SAP roles to be created for Gold Client Training Workshops.

Duration: 1 hour

Data Volume Initial Setup/Tuning

Qlik Solutions Engineer will build scenarios in Gold Client to export volumes (days,

weeks, months) of SAP data. Job logs and Sizing Reports will be reviewed for Olik to

make optimizations to the Gold Client configuration. SE will review results with

Customer.

Duration: 1 hour

Phase 3 – Testing

After Qlik has copied the SAP Master and Transactional data to the new Target client, the

Customer needs to validate the data to ensure accuracy. Viewing the data through SAP

transactions is preferred over running table record counts. Any test plans used for SAP

upgrades or support packages could be considered for data testing.

Any Data Discrepancies in the target system should be documented and reported to Qlik for

analysis. Qlik has a testing spreadsheet for recording issues.

All SAP data copied during the Implementation needs to be validated by the Customer

before Training sessions can be scheduled. This allows the functional team to focus on

learning the Gold Client data copy processes during the Training Phase instead of validating

data.

Phase 4 - Training

Qlik Solutions Engineers will conduct a series of workshops with Customer's SAP team. It is

most effective for these workshops to be delivered onsite but they can be conducted

remotely. The following workshops are conducted during Training:

Kickoff Meeting/Demo

Qlik Solutions Engineer will introduce Gold Client to the entire SAP team, provide a

demonstration of the data copy process on the Customer's landscape and answer

any questions from the SAP team.

Duration: 2 hours

Number Ranges

Presentation for the Customer's SAP team on how Gold Client manages SAP number

ranges when copying data. A demonstration of Gold Client's Number Range Utility

will be provided and the Qlik Solutions Engineer will answer any questions from the

SAP team. Having this content in a dedicated session avoids repetition in Functional

training sessions.

Duration: 1 hour

Functional Training Sessions

Qlik Solutions Engineer will lead the session with a small group (3 - 5) of SAP

functional users supporting the SAP module/data area. Users will receive hands-on

training in copying data using Data Snap, Import Control and Export Control. Gold

Client Configuration, Intelligent Slice and Gold Client Support Processes will also be

reviewed. Multiple sessions will be provided based on key SAP modules/data areas.

Duration: 3 hours (with 15 min break)

Gold Client Configuration Overview

Review Client Construct and Data Echo Framework management with the Customer's

SAP technical team. Incorporating custom (Y/Z) tables, configuration reports, and

administration tasks will be discussed. An in-depth review of managing the Gold

Client configuration between clients will also be reviewed.

Duration: 3 hours (divided between a one- and two-hour session)

Data Transformation

Review Gold Client Data Transformation functionality with the Customer's SAP Team.

If the Customer has data transformation requirements, the Qlik Solutions Engineer

will guide the Customer's SAP Team through the Gold Client configuration and

testing. If no requirements are provided, basic functionality will be covered.

Duration: 1 hour – could vary due to customer requirements

Best Practices Overview

Review strategies for Gold Client data targets (and strategies to avoid). Do's and

don'ts in using and managing the software are discussed. Accessing Qlik

Documentation and Support is also covered. This session is intended for all Gold

Client users and administrators.

Duration: 1 hour

Recap Meeting

Qlik provides a summary of the Gold Client Implementation and Training Phases.

The Qlik Solutions Engineer will review any data discrepancies found during testing

and their resolutions. Discuss next steps to be successful with Gold Client including

short-term and long-term strategies. Qlik Community and Support sites will also be

reviewed. All team members who participated in other training sessions should

attend this Recap Meeting.

Duration: 1 hour

Phase 5 – Post-Implementation

Qlik Deployment Manager will conduct a series of meetings with the Customer's Gold Client

team:

Post-Implementation Meeting

Qlik Deployment Manager meets with the Customer's Gold Client management team

for feedback on the implementation and training workshops. Will review project

progress, any open items, and ensure a strategy is in place for using Gold Client.

This meeting is typically scheduled a week after the Implementation is completed.

Duration: 30 minutes

Quarterly Check-in Meetings

Qlik Deployment Manager meets with Customer's Gold Client team to review Gold

Client usage and discuss current and new use cases. Review new Gold Client

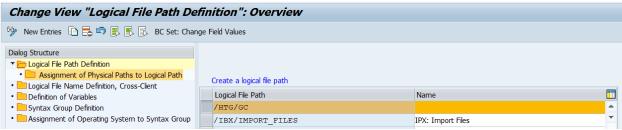
patches/releases and determine if any additional Qlik assistance is needed.

Duration: 30 minutes

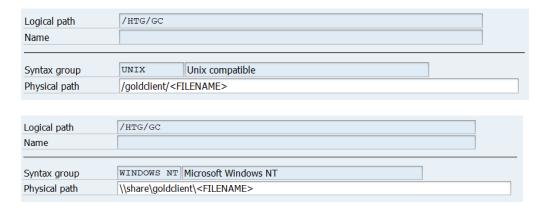
Appendix - Assign Logical File Path

This setup will generate a transport request. Qlik recommends following these steps in a Development client used for configuration transports.

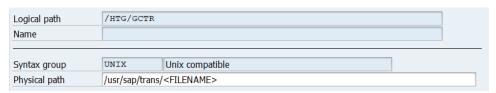
- 1. Execute Transaction FILE
- 2. Click Continue button on Cross-Client Information window
- 3. Highlight /HTG/GC row and double-click Assignment of Physical Paths to Logical Paths menu item



- 4. Select Syntax Group field based on SAP operating system (UNIX, WINDOWS NT)
- 5. Enter actual directory path of Gold Client shared directory with <FILENAME> at the end. No Drive Letters or SAP Parameters are allowed.



- 6. Click Save button
- 7. If a **Choose the Key from the allowed namespace** warning message appears, click the Enter key to continue.
- 8. Enter Transport Request information
- 9. Complete Steps #4 #8 for Logical File Path /HTG/GCTR using the transport directory as the Physical Path



10. Release the transport and import it into all Gold Client Systems

Appendix - S4/HANA SCC_CLIENT_SIZE

- 1. On Source System, execute transaction **SCC_CLIENT_SIZE**
- 2. Set Number of Parallel Processes to 4 or greater
- 3. Click Direct Execution button
- 4. On Size Calculation screen, click Download Log button
- 5. Send zip file to Qlik for analysis

Appendix - Security

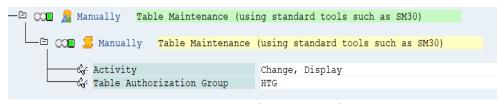
The following SAP authorizations are required on both Source and Target Systems for all Gold Client users (including the Qlik Software Engineer):

S_TCODE Access to run transaction /HTG/ZGOLD



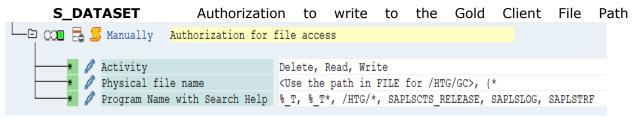
Transaction Code: /HTG/*, ZGOLD

S_TABU_DIS Ability to change and display Gold Client tables; all Gold Client tables are in namespace /HTG/ with authorization HTG



Activity: Change, Display

Authorization group: HTG



Activity: Delete, Read, Write

Physical file name: Use the path defined in FILE for /HTG/GC, {*

Program Name with Search Help: %_T*, /HTG/*, SAPLSTRF, SAPLSCTS_RELEASE,

SAPLSLOG

Program SAPLSTRF is needed for SAP file access
Program SAPLSCTS_RELEASE is needed for Client Exporter to release data transports
Program SAPLSLOG is needed to view data transport logs

The Qlik Software Engineer conducting the Implementation will need access to the following transactions in both Source and Target Systems:

Basis: ST05, SE12, SE16/SE16N, SM50, SM51, SM66, AL11, TAANA, SM37

Display access for transactional data will also be needed to validate copied data. A display role could be used be assigned to the Qlik Software Engineer. Below are several common transaction codes (additional codes may be needed for testing)

FI: FB03

CO: KO03, KSB5

SD: VA03, VF03, VT03N, VA33, VA43, VL03N

MM: ME23N, ME53N, MM03, MIGO

HR: PA20

PP: CO03, IW33, COR3

QM: QM03, LT03

EWM: BP, /SCWM/PRDI, /SCWM/PRDO, /SCWM/MON, /SCWM/WAVE, /SCWM/LS03,

/SCWM/ERP_STOCKCHECK

CRM: BUP3, CRMD_ORDER, COMMPR01, CRM_UI

GTS: /SAPSLL/MENU LEGAL, /SAPSLL/MENU LEGALR3

More information on Gold Client Security can be found in the Gold Client Security Guide